## WorkCentre 7132

Service Documentation

## WorkCentre 7132

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Revision

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## WARNING

This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions documentation, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to subpart B of part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user, at his own expense, will be required to correct the interference

## Introduction



## About this Manual

This Service Manual is part of the multinational documentation system for
WorkCentre 7132. The Service Documentation is used in order to diagnose machine malfunctions, adjust components and has information which is used to maintain the product in superior operating condition. It is the controlling publication for a service call. Information on its use is found in the Introduction of the Service Documentation.

This manual contains information that applies to NASG (XC) and ESG (XE) copiers.

## Service Manual Revision

The Service Manual will be updated as the machine changes or as problem areas are identified.

## Organization

This Service Manual is divided into eight sections. The titles of the sections and a description of the information contained in each section are contained in the following paragraphs:

## Section 1: Service Call Procedures

This section contains procedures that determine what actions are to be taken during a service call on the machine and in what sequence they are to be completed. This is the entry level for all service calls.

## Section 2: Status Indicator RAPs

This section contains the diagnostic aids for troubleshooting the Fault Code and non-Fault Code related faults (with the exception of image quality problems).

## Section 3: Image Quality

This section contains the diagnostic aids for troubleshooting any image quality problems, as well as image quality specifications and image defect samples.

## Section 4: Repairs/Adjustments

This section contains all the Adjustments and Repair procedures.

## Repairs

Repairs include procedures for removal and replacement of parts which have the following special conditions:

When there is a personnel or machine safety issue.
When removal or replacement cannot be determined from the exploded view of the Parts List.
When there is a cleaning or a lubricating activity associated with the procedure.
When the part requires an adjustment after replacement.
When a special tool is required for removal or replacement.
Use the repair procedures for the correct order of removal and replacement, for warnings, cautions, and notes.

## Adjustments

Adjustments include procedures for adjusting the parts that must be within specification for the correct operation of the system.

Use the adjustment procedures for the correct sequence of operation for specifications, warnings, cautions and notes.

## Section 5: Parts Lists

This section contains the Copier/Printer Parts List.

## Section 6: General Procedures/Information

This section contains General Procedures, Diagnostic Programs, and Copier/Printer Information.

## Section 7: Wiring Data

This section contains drawings, lists of plug/jack locations, and diagrams of the power distribution wire networks in the machine. This section also contains the Block Schematic Diagrams.

## Section 8: Options and Accessories

This section contains installation information for option and accessory.

## How to Use this Documentation

The Service Call Procedures in Section 1 describe the sequence of activities used during the service call. The call must be entered using these procedures.

## Use of the Circuit Diagrams

All wirenets are shown on the Circuit Diagrams (CDs). Power distribution wirenets are shown in Section 7 (Wiring Data) of the Service Manual. The power distribution wirenets on the CDs will end at the terminal board for the power being distributed. Find the wirenet for that power and locate the terminal board on the wirenet. Use the wirenet to troubleshoot any power distribution wiring not shown on the CD.

## Use of the Block Schematic Diagrams

Block Schematic Diagrams (BSDs) are included in Section 7 (Wiring Data) of the Service Manual. The BSDs show the functional relationship of the electrical circuitry to any mechanical, or non-mechanical, inputs or outputs throughout the machine. Inputs and outputs such as motor drive, mechanical linkages, operator actions, and air flow are shown. The BSDs will provide an overall view of how the entire subsystem works.

It should be noted that the BSDs no longer contain an Input Power Block referring to Chain 1. It will be necessary to refer to the Wirenets in order to trace a wire back to its source.

## Symbology and Nomenclature

The following reference symbols are used throughout the documentation.

## Warnings, Cautions, and Notes

Warnings, Cautions, and Notes will be found throughout the Service Documentation. The words WARNING or CAUTION may be listed on an illustration when the specific component associated with the potential hazard is pointed out; however, the message of the WARNING or CAUTION is always located in the text. Their definitions are as follows:

## WARNING

A Warning is used whenever an operating or maintenance procedure, a practice, condition, or statement, if not strictly observed, could result in personal injury.

## CAUTION

A Caution is used whenever an operating or maintenance procedure, a practice, condition, or statement, if not strictly observed, could result in damage to the equipment.

NOTE: A Note is used whenever it is necessary to highlight an operating or maintenance procedure, practice, condition, or statement.

## Machine Safety Icons

The following safety icons are displayed on the machine:

## WARNING

This machine contains an invisible laser. There is no visual indication that the laser beam is present. During servicing, the machine is a Class 3B product because of the invisible laser. the laser beam could cause eye damage if looked at directly. Service procedures must be followed exactly as written without change. The service representative must observe the established local laser safety precautions when servicing the machine. Do not place tools with a reflective surface in the area of the ROS opening. Do not look in the area of the ROS window if the power is On and the laser is energized.
The following symbol and statement appear on a label in the machine. The symbol by itself, or the symbol and the statement may also appear in the service documentation and in the training program. When this symbol appears, the service representative is warned that conditions exist that could result in exposure to the laser beam.

## WARNING

Do not try to bypass any laser interlocks for any reason. Permanent eye damage could result if the laser is accidentally directed into your eye.

## CAUTION

The use of controls or adjustments other than those specified in the Laser Safety Training Program may result in an exposure to dangerous laser radiation.
For additional information, review the Laser Safety Training program.
An arrow points to the location to install, to gain access to, or to release an object.


## Figure 2 Customer Access Label

This symbol indicates that a surface can be hot. Use caution when reaching in the machine to avoid touching the hot surfaces.


Figure 3 Heated Surface Label
Danger label indicates where electrical currents exist when the machine is closed and operating. Use caution when reaching in the machine.


## Figure 4 Shock Hazard Label

These symbols indicate components that may be damaged by Electrostatic Discharge (ESD).


700002A-RAP

Laser Hazard Statement
DANGER INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.

## Electrostatic Discharge (ESD) Field Service Kit

The purpose of the ESD Protection Program is to preserve the inherent reliability and quality of electronic components that are handled by the Field Service Personnel. This program is being implemented now as a direct result of advances in microcircuitry technology, as well as a new acknowledgment of the magnitude of the ESD problem in the electronics industry today.

This program will reduce Field Service costs that are charged to PWB failures. Ninety percent of all PWB failures that are ESD related do not occur immediately. Using the ESD Field Service Kit will eliminate these delayed failures and intermittent problems caused by ESD. This will improve product reliability and reduce callbacks.

The ESD Field Service Kit should be used whenever Printed Wiring Boards or ESD sensitive components are being handled. This includes activities like replacing or reseating of circuit boards or connectors. The kit should also be used in order to prevent additional damage when circuit boards are returned for repair.

The instructions for using the ESD Field Service Kit can be found in ESD Field Service Kit Usage in the General Procedures section of the Service Documentation.

## Illustration Symbols

Figure 6 shows symbols and conventions that are commonly used in illustrations.

## REFERENCE SYMBOLOGY

Test data, notes, adjustments, and parts lists are supportive to the BSD and RAP information. This supportive data is referenced, using the symbols shown in the following paragraphs:
test data


This symbol appears on the BSD whenever a test data reference is necessary in order to verify the presence of a signal

## NOTES

This symbol is used to refer to notes The notes normally appear on the same page.

ADJUSTMENTS
This symbol refers to adjustments on the Service Data Section.

## PARTS LISTS

L2-XX

This symbol refers to a parts list on the Service Data Section.
PL indicates that this is a parts list reference and, in this example, the exploded view drawing is on Parts List 2-XX. Parts list reference appear on the BSDs next to all replaceable parts shown on the diagram.

## TEST POINTS

TP1 This symbol is used to identify a test point/test hole available for measuring a signal.

## BSD GRAPHICS




This symbol indicates the continuation of a signal line in a horizontal direction.


This symbol indicates the direction of signal flow.


This sy
signal.

This symbol is used to show a twisted pair of wires.
[ $x-x x x$ ] This symbol placed above a signal name on a BSD indicates the input or output component control code for that signal.
[ $\mathrm{X}-\mathrm{XXX}$ ] [ $\mathrm{X}-\mathrm{XXX}$ ] This symbol placed above a signal name on a BSD indicates that two component control codes (an output and an input) are required to check that signal.
[ $x-x x x / x-x x x$ ] This symbol placed above a signal name on a BSD indicates component control codes for two components, in this example, two Paper Trays The left hand code is for Paper Tray 1, and the right hand code is for Paper Tray 2.

Fault Codes Indicator shown on BSD.

The Flag symbol indicates a reference The Flag symbol indicates a reference
point into a Circuit Diagram from a RAP Instructions will be given to check for an open circuit, a short circuit, or an intermittent condition

## Figure 6 Illustration Symbols

## Signal Nomenclature

Refer to Figure 7 for an example of Signal Nomenclature used in Circuit Diagrams and BSDs.


## DC Voltage Measurements in RAPs

The RAPs have been designed so that when it is required to use the DMM to measure a DC voltage, the first test point listed is the location for the red ( + ) meter lead and the second test point is the location for the black meter lead. For example, the following statement may be found in a RAP:

## There is +5 VDC from TP7 to TP68.

In this example, the red meter lead would be placed on TP7 and the black meter lead on TP68.
Another example of a statement found in a RAP might be:

## There is -15 VDC from TP21 to TP33.

In this example, the red meter lead would be placed on TP21 and the black meter lead would be placed on TP33.

If a second test point is not given, it is assumed that the black meter lead may be attached to the copier frame.

## Voltage Measurement and Specifications

Measurements of DC voltage must be made with reference to the specified DC Common, unless some other point is referenced in a diagnostic procedure. All measurements of AC voltage should be made with respect to the adjacent return or ACN wire.
Table 1 Voltage Measurement and Specifications

| VOLTAGE | SPECIFICATION |
| :--- | :--- |
| INPUT POWER 220 V | 198 VAC TO 242 VAC |
| INPUT POWER 100 V | 90 VAC TO 135 VAC |
| INPUT POWER 120 V | 90 VAC TO 135 VAC |
| +5 VDC | +4.75 VDC TO +5.25 VDC |
| +24 VDC | +23.37 VDC TO +27.06 VDC |

## Logic Voltage Levels

Measurements of logic levels must be made with reference to the specified DC Common, unless some other point is referenced in a diagnostic procedure.
Table 2 Logic Levels

| VOLTAGE | H/L SPECIFICATIONS |
| :--- | :--- |
| +5 VDC | $\mathrm{H}=+3.00$ TO +5.25 VDC <br> $\mathrm{L}=0.0$ TO 0.8 VDC |
| +24 VDC | $\mathrm{H}=+23.37$ TO +27.06 VDC <br> $\mathrm{L}=0.0$ TO 0.8 VDC |

## Translated Warnings

## Introduction

## Symbology and Nomenclature

## WARNING

A Warning is used whenever an operating or maintenance procedure, a practice, condition, or statement, if not strictly observed, could result in personal injury.
DANGER: Une note DANGER est utilisée à chaque fois qu'une procédure de maintenance ou qu'une manipulation présente un risque de blessure si elle n'a pas été strictement observée.

## WARNING

This machine contains an invisible laser. There is no visual indication that the laser beam is present. During servicing, the machine is a Class 3B product because of the invisible laser. the laser beam could cause eye damage if looked at directly. Service procedures must be followed exactly as written without change. The service representative must observe the established local laser safety precautions when servicing the machine. Do not place tools with a reflective surface in the area of the ROS opening. Do not look in the area of the ROS window if the power is On and the laser is energized.
DANGER: L'équipement contient un faisceau laser invisible et aucune indication visible signale la présence du faisceau laser. De ce fait le produit est classé 3B pour tout ce qui concerne la maintenance. L'exposition directe des yeux au faisceau laser peut entraîner des lésions visuelles. Les procédures de maintenance doivent être réalisées sans aucun changement comme indiqué dans la documentation. Le représentant Xerox lors d'interventions sur l'équipement doit respecter les consignes de sécurité locales concernant les faisceaux laser. Ne pas placer d'objet réfléchissant dans la zone du ROS quand il est ouvert. Ne pas regarder dans la zone du ROS lorsque la machine est sous tension et que le laser est en fonctionnement.
The following symbol and statement appear on a label in the machine. The symbol by itself, or the symbol and the statement may also appear in the service documentation and in the training program. When this symbol appears, the service representative is warned that conditions exist that could result in exposure to the laser beam.
DANGER: Les symboles et instructions suivants sont indiqués sur des étiquettes dans la machine et sont identifiés dans la documentation technique et dans le manuel de formation. Quand ces symboles s'affichent le représentant Xerox est prévenu des risques encourus concernant une exposition au rayon laser.

## WARNING

Do not try to bypass any laser interlocks for any reason. Permanent eye damage could result if the laser is accidentally directed into your eye.
DANGER: Ne pas essayer de shunter les contacts laser pour quelques raisons que ce soit. Si le faisceau laser est dirigé accidentellement vers les yeux il peut en résulter des lésions oculaires permanentes.

## 4 Repairs and Adjustments

Drives
REP 1.1.1 Main Drive Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer mainte-
nance ou reglage avec le cordon d'alimentation branche.
Paper Transportation
REP 2.1.1 Feeder 1 Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 2.3.1 Tray Feed/Nudger/Retard Roll

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 2.4.1 Registration Unit

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 2.5.1 Take Away Roll

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 2.6.2 Left Hand (L/H) Upper Cover Unit

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.

## ROS

REP 3.1.1 ROS Unit

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
Xerographics/Development

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 4.1.2 Toner Cartridge

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 4.2.1 Dispense Motor

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.

## Fuser

REP 5.1.1 Fuser Unit

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
Exit
REP 6.1.1 Exit 2 +OCT 2

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.

## MPT

REP 7.1.1 MPT Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 7.2.1 MPT Feed Roll/Retard Pad

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 9.2.1 ESS PWB

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
Covers
REP 10.1.1 Top Cover Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 10.2.1 Rear Lower Cover

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
IIT
REP 11.1.1 Platen Cushion

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 11.1.2 Control Panel
WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 11.3.1 Platen Glass

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 11.3.2 IIT/IPS PWB

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 11.4.1 Lens Kit Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 11.5.1 Carriage Cable

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 11.5.2 Carriage Motor

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 11.6.1 Exposure Lamp

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.

## Tray Module -2T

REP 12.1.1 Tray 3 Feeder

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 12.1.2 Tray 3 Feeder (2TM)

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 12.3.1 Feed/Retard/Nudger Roll

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 12.6.1 2 Tray Module PWB

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
Tray Module -TT
REP 13.1.1 Tray 3 Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 13.1.2 Tray 2 Assembly (2TTM)

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 13.3.1 Front/Rear Tray Cable

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 13.4.1 Tray 3 Feeder (TTM)

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 13.5.1 Tray 3 Feeder

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 13.6.1 Feed/Retard/Nudger Roll

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 13.8.1 Twin Tray Module PWB

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.

## DADF

REP 15.1.1 DADF Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.1.2 DADF Platen Cushion

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.2.1 DADF Document Tray

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.2.2 DADF Feeder Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.2.3 DADF Front Cover

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.2.4 DADF Rear Cover

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.3.1 DADF PWB

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.3.2 Left Counter Balance

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.3.3 Right Counter Balance

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.4.1 Retard Roll

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.4.2 Top Cover

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.6.1 Nudger Roll, Feed Roll

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 15.8.1 Registration Roll

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.

## Finisher

REP 16.1.1 H-Transport Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.3.1 H-Transport Belt

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.1.2 Finisher Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.4.1 Front Cover

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.4.2 Rear Cover

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.5.1 Stack Height Sensor Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.5.2 Eject Roll Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.6.1 Decurler Roll

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.6.2 Finisher Drive Motor

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.7.1 Belt

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.8.1 Rail

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.8.2 Staple Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.9.1 Compiler Tray Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.10.1 Stacker Motor Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer mainte-
nance ou reglage avec le cordon d'alimentation branche.
REP 16.10.2 Elevator Belt Assembly

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.11.1 Paddle Gear Shaft

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.
REP 16.12.1 Finisher PWB

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.

## IIT

ADJ 11.6.1 Full/Half Rate carriage Position Adjustment

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
DANGER: Afin d'eviter des blessures ou des chocs electriques, ne pas effectuer maintenance ou reglage avec le cordon d'alimentation branche.

## 8 Options and Accessories

### 8.1 FAX KIT

## WARNING

Switch off the machine and disconnect the power cord.
DANGER: Mettre la machine sur ARRET et debrancher le cordon dalimentation. 8.2 Foreign Interface

## WARNING

Switch off the machine and disconnect the power cord.
DANGER: Mettre la machine sur ARRET et debrancher le cordon dalimentation.

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## Service Call Procedures

## Service Strategy

The service strategy for the WorkCentre 7132 is to perform any High Frequency Service Item (HFSI) actions before attempting to repair any problems. Some problems will be corrected by this strategy without the need to diagnose them. The Repair Analysis Procedures (RAPs) will be used for any remaining problems.

Problems that occur in the Basic Printer mode will be repaired before problems that occur when using the accessories.

Image Quality problems should be repaired after all other problems are repaired.

## Service Call Procedures

The Service Call Procedures are a guide for performing any service on this machine. The procedures are designed to be used with the Service Manual. Perform each step in order.

## Initial Actions

The Initial Actions gather information about the condition of the machine and the problem that caused the service call.

## Call Flow

Call Flow summarizes the sequence of the Service Call Procedures.

## Detailed Maintenance Activities

Detailed Maintenance Activities section provides the information needed to perform the High Frequency Service Item (HFSI) actions.

## Cleaning Procedures

The Cleaning Procedures list what needs to be cleaned at each service call.

## Final Actions

The Final Actions will test the copier/printer and return it to the customer. Administrative activities are also performed in the Final Actions.

## Initial Actions

## Purpose

The purpose of the Initial Action section of the Service Call Procedures is to determine the reason for the service call and to identify and organize the actions which must be performed.

## Procedure

1. Gather the information about the service call and the condition of the copier/printer.
a. Question the operator(s). Ask about the location of most recent paper jams. Ask about the image quality and the copier/printer performance in general, including any unusual sounds or other indications.
b. After informing the customer, disconnect the machine from the customer's network.
c. Check that the power cords are in good condition, correctly plugged in the power source, and free from any defects that would be a safety hazard. Repair or replace the power cords as required. Check that the circuit breakers are not tripped.
d. Inspect any rejected copies. Inquire as to, or otherwise determine, the paper quality and weight, the specified paper for optimum Image Quality, 24\# Xerox Color Expressions (NASG) or ColorTech+90gsm (ESG). Look for any damage to the copies, oil marks, image quality defects, or other indications of a problem.
e. Record the billing meter readings.
f. Access Diagnostic Routines.
i. Enter UI Diagnostics (Entering UI Diagnostics in UI Diagnostic Mode).
ii. Access Diagnostic Routines (Accessing Diagnostic Routines in UI Diagnostic Mode).
NOTE: If a fault code is displayed while performing a diagnostics procedure, go to that fault code RAP and repair the fault. Return to Diagnostics and continue with the $d C$ procedure that you were performing.
g. Print the HFSI Report and determine what HFSI action is required based on the customer output volume. Refer to the Detailed Maintenance Activities section for the detailed HFSI information. Record any items that require action.
h. Display and record the information in the Jam Counter, Fault Counter, and Shutdown History. Classify this information into categories:

Information that is related to the problem that caused the service call.
Information that is related to secondary problems.
Information that does not require action, such as a single occurrence of a problem.
i. Check the Service Log for any recent activities that are related to the problem that caused the service call or any secondary problem.
2. Perform any required HFSI activities identified above. Refer to the Detailed Maintenance Activities section.
3. Exit diagnostics. Try to duplicate the problem by running the same jobs that the customer was running.
4. Check the Image Quality in the Basic Copier Mode. Select the tray that is loaded with 11 x 17 or A3 paper, if unable to complete tray selection, go to Call Flow.
Set the copier/printer to the following setup:

- Output Color - Auto
- Original Type - Photo and Text Halftone
- R/E - Auto
- Lighter/Darker - Auto Contrast
- Sharpness - Normal
- Preset Color Balance - Normal
- Color Shift - Normal
- Color Saturation - Normal
- Copy Position - No Shift
- Variable Color Balance - Normal

Run four copies of the Color Test Pattern.
Check the Image Quality. If the customer has identified any Image Quality Defects or problems, go to IQ1 IOT Image Quality Entry RAP.
5. Go to Call Flow

## Call Flow

This procedure should be performed at every service call.

## Initial Actions

Ask the operator about the problem. If the problem appears to be related to operator error, or an attempt to perform a job outside of the machine specifications, assist the customer in learning the correct procedure.

## Procedure

If the machine does not power up, Go to Power On RAP.
Ask the operator about the problem.

- If the problem is identified by a fault code (including Paper/Document Jams), refer to Chapter 2 for the procedure and then proceed with servicing.
- If the problem is noise or smell, select a mode (1 Sided/2Sided, Finisher etc.), find the cause of the problem and proceed with servicing.
The operator operated the machine correctly.
Y N
Explain to the operator how to operate the machine correctly.
The UI display is normal.
Y $\quad \mathrm{N}$
Go to OF 6 Dark/Blank Display. Refer to BSDs ( $\mathrm{CH} 2.1-\mathrm{CH} 2.4$ ).
The problem occurs only in Print mode.
$\mathbf{Y} \quad \mathbf{N}$
The problem occurs only in Copy mode.
Y $N$
The problem occurs only in Fax mode.
N
The problem is an accessory or the Foreign Accessory.
Y N
Refer to Table 1 Other Faults and identify the problem and follow the corrective action.

If the cause of the problem is an accessory or the Foreign Interface, check that the machine settings are correct, refer to the appropriate service manual for the procedure and then proceed with servicing.

## The problem occurs only in certain modes such as Broadcast transmission.

Y $N$
Perform a transmission test with the call center or station. The problem reoccurs.
Y N
Ask the customer for permission to establish communications with the remote machine that is causing the problem. Perform a Send transmission test with the remote machine. Transmission was normal.

## Y $N$

Print the protocol trace to identify whether it is the remote machine or the machine that is causing the problem.

- If the problem lies in the machine:

Analyze the protocol trace, refer to Chapter 2 and then proceed with servicing.

- If the problem appears to lie in the remote machine:

Ask the customer to check the status of the remote machine.
There is a problem with Receive transmission test. Perform Receive transmission tests with other stations within the company. Check that there is no problem with the machine and then ask the customer to check the status of the remote machine.

Analyze the protocol trace, refer to Chapter 2 and then proceed with servicing.
Check the machine settings and if necessary, ask the customer for permission to tes the machine in the mode in which the problem occurs.
Analyze the protocol trace when the problem reoccurs, refer to Chapter 2 and then proceed with servicing

## There is an image quality problem

Y N
If there is an alignment problem, obtain separate Platen/DADF output samples, refer to Chapter 4 Adjustments and then proceed with servicing.

Refer to Chapter 3 IQ1 IOT Image Quality Entry RAP and then proceed with servicing.

## There is a problem with the network.

Y
There is a problem with the USB connection.
Y $\quad \mathrm{N}$
There is an image quality problem.
Y $N$
The problem lies in a certain Client PC.
Y $\quad \mathbf{N}$
There is a problem with a certain application or programming language A. Obtain the latest information on restrictions and technical information. Proceed accordingly

Check the settings of that particular Client PC and if necessary ask the user to reinstall the printer driver.

Refer to IQ1 IOT Image Quality Entry RAP and then proceed with servicing If the problem persists, ask the user to reinstall the printer driver.

Check the machine settings and if necessary ask the user to reinstall the printer driver.

If the problem continues, replace the network cable. If the problem persists, replace the USB cable. Check the machine settings and discuss the problem with the customer's network administrator.

| Table 1 Other Faults |  |
| :--- | :--- |
| Problem | Corrective Action |
| Duplexing is not available as a <br> selection on the display. | Ensure the Duplex electrical connector is secure (PL <br> $10.1)$ |
| Copies jam in the Finisher when <br> the output tray is near maximum <br> capacity. | Verify condition of paper. If good, check that part <br> $655 N 128$ can be used to support tray. |
| ADF inoperative after PWB <br> replacement. | Reload Software ADJ 9.3.1. |
| Can not make copies when <br> Auditron is enabled. | Enter UI Diagnostic Mode. Select Copy on screen. <br> Machine will operate without auditron restriction. |
| Loud snapping noise is heard. Enter Component Control [042-003] and press the Start <br> button. If noise is present there is binding in toner auger <br> drive system. Repair as required (PL 1.2) <br> Sets are not offset in Center Tray. Perform Center Tray Offsetting. <br> E-mail icon not visible in display on <br> email enabled machine. Perform E-Mail Icon. <br> Customer wishes to distinguish <br> FAX output from prints or copies. Perform FAX Output Separation. |  |

## Detailed Maintenance Activities (HFSI)

## Procedure

1. Access Diagnostic Routines.
a. Enter UI Diagnostics (Entering UI Diagnostics in UI Diagnostic Mode).
b. Access Diagnostic Routines (Accessing Diagnostic Routines in UI Diagnostic Mode).
2. Select NVM Read/Write
3. Refer to Table 1 and enter a counter number for any High Frequency Service Item (HFSI) counters to be checked. Use the customer's output volume numbers to help determine which HFSI components should be serviced. Consider components near threshold as candidates for service.
4. Refer to Cleaning Procedures for detailed cleaning instructions.

Table 1 High Frequency Service Items

| Counter | Name | Threshold | Service Action to be performed |
| :--- | :--- | :--- | :--- |
| $954-800$ | Tray 1 Feed counter | 300 K | Replace the Feed Roll, Retard Roll, Nudger <br> Roll. |
| $954-801$ | Tray 2 Feed counter | 300 K | Replace the Feed Roll, Retard Roll, Nudger <br> Roll. |
| $954-802$ | Tray 3 Feed counter | 300 K | Replace the Feed Roll, Retard Roll, Nudger <br> Roll. |
| $954-803$ | MSI Feed counter | 50 K | Replace the Feed Roll, Retard Pad. |
| $954-824$ | IBT Belt counter | 480 K | Replace the IBT Assembly. |
| $954-825$ | IBT Cleaner counter | 100 K | Replace the IBT Cleaner. |
| $954-826$ | 2nd BTR Counter | 300 K | Replace the Bias Transfer Roll. |
| $954-830$ | K Developer Counter | 420 K | Replace the K Developer. |
| $954-831$ | Y Developer Counter | 420 K | Replace the Y Developer. |
| $954-832$ | M Developer Counter | 420 K | Replace the M Developer. |
| $954-833$ | C Developer Counter | 420 K | Replace the C Developer. |
| $954-837$ | Xero Drum Counter | 10 M | Replace the Xero Drum Assembly. |
| $954-842$ | Fuser Counter | 10 M | Replace the Fuser Assembly. |
| $956-802$ | Lamp Scan Counter | 6000 K | Replace the Exposure Lamp. |
| $956-803$ | Exposure Lamp Time <br> Counter | 7200 K | Replace the Exposure Lamp. |
| $956-804$ | Exposure Lamp On <br> Counter | 6000 K | Replace the Exposure Lamp. |
| $955-806$ | CVT Feed Counter | 200 K | Replace the Document Nudger Roll, Feed <br> Roll, Retard Roll, Registration Roll. |
| $955-807$ | Simplex Feed Counter | 912 K | Replace the Document Nudger Roll, Feed <br> Roll, Retard Roll, Registration Roll. |
| Platen Interlock | 260 K | Replace the Document Nudger Roll, Feed <br> Roll, Retard Roll, Registration Roll. |  |
| Counter | Replace the Platen Interlock Switch. |  |  |
|  |  | 912 K |  |
| 9508 |  | Feed Counter |  |
| 950 |  |  |  |

## Cleaning Procedures

## Purpose

To provide cleaning procedures to be performed at every service call.

## Procedure

## CAUTION

Do not use any solvents unless directed to do so by the Service Manual.

## General Cleaning

Use a dry lint free cloth or a lint free cloth moistened with water for all cleaning unless directed otherwise by the Service Manual. Wipe with a dry lint free cloth if a moistened cloth is used.

1. Feed Components (Rolls and Pads)

Follow the General Cleaning procedure above.
2. Toner Dispense Units

Vacuum the Toner Dispense units.
3. Jam Sensors

Clean the sensors with a dry cotton swab.
4. Scanner
a. Switch off the power and allow the Exposure Lamp to cool off.
b. Using the optical Cleaning Cloth, clean the front and rear of the Document Glass, Document Cover, White Reference Strip, Reflector, and Mirror.
c. Clean the Exposure Lamp with a clean cloth and Film Remover.
d. Clean the Lens with Lens and Mirror Cleaner and lint free cloth.
5. DADF

Check the paper path for debris or damage. Clean the rolls with a clean cloth and Film Remover as required.
6. Document Glass and Constant Velocity Transport Glass

Follow the General Cleaning procedure above.
7. ROS Window

Remove and reinstall the ROS CLeaning Wand.
8. IBT Belt

Check the Transfer Belt System and wipe with a dry lint free cloth. If the surface is excessively dirty, replace the IBT Belt (PL 6.2)
NOTE: Do not rub the IBT CLeaning Blade. If it is necessary to clean the blade, use a soft brush or dry swab to remove any contamination. Rubbing the blade will remove the protective coating.
9. Finisher

Check the paper path for debris or damage. Clean the Finisher with a dry lint free cloth.

## Final Actions

## Purpose

To provide a guide for procedures to be done at the end of every service call.

## Procedure

1. Ensure that the exterior of the copier/printer and the adjacent area are clean. Use a dry cloth or a cloth moistened with water to clean the copier/printer. Do not use solvents.
2. Check the supply of consumables. Ensure that an adequate supply of consumables is available according to local operating procedures.
3. Complete the Service Log.
4. Perform the following steps to make a copy of the Demonstration Original for the customer:
a. Load Tray 1 with $8.5 \times 11$ inch (A4) or $11 \times 17$ inch paper.
b. Place the Color Test Pattern on the glass with the short edge of the test pattern registered to the left edge of the glass. Select Tray 1 and make a single copy.
c. Print out the Machine Settings (Configuration Report). Store this report with the service log in the Inner Cover.
d. Ask the customer to verify the Print and Scan functions.
e. Present the copies to the customer.
5. Reconnect the machine to the customer network. Verify the function.
6. Issue copy credits as needed.
7. Discuss the service call with the customer to ensure that the customer understands what has been done and is satisfied with the results of the service call.
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## Power On RAP

## BSD-ON:1.1

This procedure is used to determine the reason that the machine will not power up after the Main Power Switch is set to ON. Indications include a blank UI and no machine power up sounds (i.e. motors, relays, solenoids, beeps, etc...).

## Initial Actions

- Ensure that the Customer's circuit breaker is not tripped and that AC power is available at the power outlet that the machine will be using.
- Ensure that the power cord is seated correctly and is not damaged.
- If the machine GFI Circuit Breaker is tripped, try to reset it. If it trips again, switch the power off and unplug the power cord. Refer to wirenet 7.3.1 Wire Net AC POWER (HOT) and check for a short circuit in the AC wiring.


## Procedure

Switch the machine Main Power Switch to ON. There is ACH between J11/T11-1(+) and J12/T12-1(-) at the Power Unit.
$\mathrm{Y}^{\mathrm{J}} \mathrm{N}$
Switch the power off and unplug the power cord. Verify that the power cord it good. If not, replace the power cord.
Refer to BSD Chain 1 Standby Power and check for an open circuit in the wiring between the GFI Breaker and the Power Unit. If the wiring is OK, replace the GFI Breaker (PL 11.1).

## There is ACH between J1-3(+) and T12-1(-) at the Power Unit.

$Y^{Y} \quad N$
Refer to BSD Chain 1 Standby Power and check for an open circuit in the wiring between J11/T11-1 and J1-3 of the Power Unit. If the wiring is OK, replace the Main Power Switch (PL 11.1).
$+24 V$ LED (CR3309) is lit on the ESS PWB.
Y $N$
There is +24 VDC between P/J387-5(+) and P/J387-6(-) of the ESS PWB.
Y $N$
Refer to BSD Chain 1 Standby Power and check for an open circuit in the wiring between the ESS PWB and the Power Unit. If the wiring is OK, replace the Power Unit (PL 11.1).

Replace the ESS PWB (PL 11.2).
+5V LED (CR3306) is lit on the ESS PWB.
Y $N$
There is +5 VDC between P/J387-1(+) and P/J387-3(-) of the ESS PWB.
Y $N$
Refer to BSD Chain 1 Standby Power and check for an open circuit in the wiring between the ESS PWB and the Power Unit. If the wiring is OK, replace the Power Unit (PL 11.1).

## +5 V L'ED (CR3307) is lit on the ESS PWB.

Y $N$
There is +5 VDC between P/J387-2(+) and P/J387-4(-) of the ESS PWB.
$Y \quad N$
Refer to BSD Chain 1 Standby Power and check for an open circuit in the wiring between the ESS PWB and the Power Unit. If the wiring is OK, replace the Power Unit (PL 11.1).

Replace the ESS PWB (PL 11.2).

## 002-770 Job Template Processing - HDD Full RAP

The system aborted a job due to insufficient HDD capacity during Job Template processing.

## Procedure

Ask customer to separate job into smaller parts. Helpful information may be found in User Guide sections Overwrite Hard Disk or Mailbox.

If the problem persist reload Software (ADJ 9.3.1).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

## 003-318 IIT Software RAP

The IIT software is corrupt.

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 003-319 IIT Video Driver Detection RAP

One of the following errors is detected:

- Compression Threshold overflow
- DMA Transfer error
- Other system compression errors


## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 003-320 IISS-ESS Communication 1 RAP

 BSD-ON:3.1/6.2An abnormal parameter is set as the argument for the send function.

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-321 IISS-ESS Communication 2 RAP

BSD-ON:3.1/6.2
The ACK (acknowledgement code) could not be received after 2 resend attempts. (The Sequencing No. of the sent Message Packet is incorrect.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-322 IISS-ESS Communication 3 RAP

 BSD-ON:3.1/6.2The ACK (acknowledgement code) could not be received after 2 resend attempts. (The Packet No. of the sent Message Packet is incorrect.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-323 IISS-ESS Communication 4 RAP

BSD-ON:3.1/6.2
The ACK (acknowledgement code) could not be received after 2 resend attempts. (The Message Length of the sent Message Packet is incorrect.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-324 IISS-ESS Communication 5 RAP

 BSD-ON:3.1/6.2The ACK (acknowledgement code) could not be received after 2 resend attempts. (The Message Length of the sent Message Packet is incorrect.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-325 IISS-ESS Communication 6 RAP

BSD-ON:3.1/6.2
The ACK (acknowledgement code) could not be received after 2 resend attempts. (A parity error was detected by hardware in the IIT/IPS PWB.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-326 IISS-ESS Communication 7 RAP

 BSD-ON:3.1/6.2The ACK (acknowledgement code) could not be received after 2 resend attempts. (Framing error was detected by hardware in the IIT/IPS PWB.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-327 IISS-ESS Communication 8 RAP

BSD-ON:3.1/6.2
The ACK (acknowledgement code) could not be received after 2 resend attempts. (An overrun error was detected by hardware in the IIT/IPS PWB.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-328 IISS-ESS Communication 9 RAP

## BSD-ON:3.1/6.2

The ACK (acknowledgement code) could not be received after 2 resend attempts. (After header recognition, receive interruption was detected by the IIT/IPS PWB.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-329 IISS-ESS Communication 10 RAP

## BSD-ON:3.1/6.2

The NAK that notifies of the occurrence of a transmission failure is received. (The Sequencing No. of the received Message Packet is incorrect.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-330 IISS-ESS Communication 11 RAP

 BSD-ON:3.1/6.2The NAK that notifies of the occurrence of a transmission failure is received. (The Packet No. of the received Message Packet is incorrect.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-331 IISS-ESS Communication 12 RAP

BSD-ON:3.1/6.2
The NAK that notifies of the occurrence of a transmission failure is received. (The Message Length of the received Message Packet is incorrect.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-332 IISS-ESS Communication 13 RAP

## BSD-ON:3.1/6.2

The NAK that notifies of the occurrence of a transmission failure is received. (The Check Code of the received Message Packet is incorrect.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-333 IISS-ESS Communication 14 RAP

BSD-ON:3.1/6.2
The NAK that notifies of the occurrence of a transmission failure is received. (A parity error was detected by hardware of the UART.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-334 IISS-ESS Communication 15 RAP

## BSD-ON:3.1/6.2

The NAK that notifies of the occurrence of a transmission failure is received. (A framing error was detected by hardware of the UART.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-335 IISS-ESS Communication 16 RAP

BSD-ON:3.1/6.2
The NAK that notifies of the occurrence of a transmission failure is received. (An overrun error was detected by hardware of the UART.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-336 IISS-ESS Communication 17 RAP

 BSD-ON:3.1/6.2The NAK that notifies of the occurrence of a transmission failure is received. (After the header was recognized, it was detected that receiving was aborted.)

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-337 IISS-ESS Communication 18 RAP

BSD-ON:3.1/6.2
After restoring from Power Saver mode, there was no response to the Power On command sent to the IIT/IPS PWB within the specified time.

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

003-338 IISS-ESS Communication 19 RAP BSD-ON:3.1/6.2

The driver detected an incorrect send parameter.

## Procedure

Reload Software (ADJ 9.3.1).
Pull out and insert or replace the IIT Cable.

003-339 IISS-ESS Communication 20 RAP BSD-ON:3.1/6.2

The establishment of parameter transmission failed.

## Procedure

Reload Software (ADJ 9.3.1).
Pull out and insert or replace the IIT Cable.

003-340 IISS-ESS Communication 21 RAP BSD-ON:3.1/6.2

A parameter synchronization error during sending occurred.

## Procedure

Reload Software (ADJ 9.3.1).
Pull out and insert or replace the IIT Cable.

003-341 IISS-ESS Communication 22 RAP
BSD-ON:3.1/6.2
A parameter transmission error during sending occurred.

## Procedure

Reload Software (ADJ 9.3.1).
Pull out and insert or replace the IIT Cable.

003-342 IISS-ESS Communication 23 RAP BSD-ON:3.1/6.2

The driver detected an incorrect receive parameter argument from the application.

## Procedure

Reload Software (ADJ 9.3.1).
Pull out and insert or replace the IIT Cable.

003-343 IISS-ESS Communication 24 RAP BSD-ON:3.1/6.2

A parameter synchronization error during receiving occurred.

## Procedure

Pull out and insert or replace the IIT Cable.
Reload Software (ADJ 9.3.1).

## 003-344 Hotline Power On

BSD-ON:3.1/6. 2
There is a communication failure at power on between the controller and the IIT.

## Initial Actions

Power On/Off

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
If the problem persists replace the IIT/IPS PWB (PL 13.3).
If the problem persists replace the ESS PWB (PL 11.2).

## 003-345 PIO Unlatched 1 RAP

## BSD-ON:3.1/6.2

When Job Fail signal was received from the IIT/IPS PWB, a hot line PIO (Programmed Input Output) error was detected.

## Procedure

Disconnect and reconnect the ITT/IPS PWB Harness.
If the problem persists replace the IIT/IPS PWB (PL 13.3).
If the problem persists replace the ESS PWB (PL 11.2).

## 003-346 PIO Unlatched 2 RAP

BSD-ON:3.1/6.2
When IIT image was received from the IIT/IPS PWB, a PIO (Programmed Input/Output) error was detected.

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
If the problem persists replace the IIT/IPS PWB (PL 13.3).
If the problem persists replace the ESS PWB (PL 11.2).

## 003-750 Book Duplex Documents RAP

Book duplex is not set up with the correct number of documents.

## Procedure

Ask customer to check the Book Duplex setup menu.

## 003-751 Panther Capacity RAP

The Panther (continuous data protection protocol or utility) processed data is too small (the specified range for the document is too small).

## Procedure

Ask customer to use a backup page behind the document.

## 003-754 S2X Recovery RAP

There is a recoverable S2X error.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job if the error did not clear after the power off/on.

## 003-755 S2X Command Error RAP

There is an S2X command error.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job if the error did not clear after the power off/on.

## 003-756 Blank Originals RAP

BSD-ON:3.1/6.2
No image data was scanned from the documents.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness
Reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-760 Scan Settings RAP

BSD-ON:3.1/6.2
The job properties are incorrect.

## Procedure

Ask customer to verify the setups.
If the problem persists disconnect and reconnect the IIT/IPS PWB Harness.
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-761 Incorrect Paper Tray Size RAP

The Cover Tray or the Transparency Tray size is incorrect when the Cover Content Tray or Separator $+N$ set Tray is selected in APS.

## Procedure

The paper size in the tray selected by auto tray switching differs from the paper size in the tray selected at the tray selection. Ask customer to either change the paper size for the tray, or change the paper type priority setting.

## 003-763 Adjustment Chart RAP

When Automatic Gradation Correction is performed the patch for position detection on the document is not available.

## Procedure

Place the Automatic Gradation Correction Chart correctly.

## 003-764 Image Overlay RAP

There is an image overlay problem.
Initial Actions
Power Off/On

## Procedure

Ask customer to verify the job setup and rerun the job.

## 003-780 Scanned Image Compression RAP

BSD-ON:3.1/6.2
The compressed data size is larger than 8 times the size of the uncompressed data.

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists disconnect and reconnect the IIT/IPS PWB Harness.
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-795 AMS Limit RAP

## BSD-ON:3.1/6.2

After auto document detection in Auto Reduce/Enlarge, the Reduce/Enlarge ratio did not fall within the specified range ( $25 \% \sim 400 \%$ ).

## Initial Actions

Ask customer to enter the correct R/E ratio or change the paper size.

## Procedure

If the problem persists disconnect and reconnect the IIT/IPS PWB Harness.
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-930 300 DPI Scan RAP

There is a problem scanning 300 DPI .

## Procedure

Verify scan settings are correctly set and menu selections are correctly set.

## 003-931 400 DPI Scan RAP

There is a problem scanning 400 DPI .

## Procedure

Verify scan settings are correctly set and menu selections are correctly set.

003-932 600 DPI Scan RAP
There is a problem scanning 600 DPI .

## Procedure

Verify scan settings are correctly set and menu selections are correctly set.

## 003-933 300 DPI Scan RAP

There is a problem scanning 300 DPI on successive documents.

## Procedure

Verify scan settings are correctly set and menu selections are correctly set.

## 003-934 400 DPI Scan RAP

There is a problem scanning 400 DPI on successive documents.

## Procedure

Verify scan settings are correctly set and menu selections are correctly set.

## 003-935 600 DPI Scan RAP

There is a problem scanning 600 DPI on successive documents.

## Procedure

Verify scan settings are correctly set and menu selections are correctly set.

## 003-940 Memory RAP

A scanner memory limit is reached.

## Procedure

Power Off/On.
If the problem persists replace the IIT/IPS PWB (PL 13.3).

## 003-942 Document Size Auto Detect RAP

The document size cannot be automatically detected.

## Procedure

Ask customer to manually set the document size.

## 003-944 Image Repeat Count RAP

No complete images are output using Automatic Size.

## Procedure

Ask customer to check the job setups and rerun the job.

## 003-946 Image Rotation (Copy APS) RAP

Paper size that does not support rotation was selected even though part of the image will be cut off if it is not rotated.

## Initial Actions

Select a tray with paper that supports rotation and repeat the operation.

## Procedure

Replace the IIT/IPS PWB (PL 13.3).

## 003-947 Return Documents Count RAP

The number of documents returned by the user was less than the number of specified documents.

## Procedure

Check the number of documents and repeat the operation.

## 003-948 Return Documents Mismatch RAP

A document that is different (document size/orientation and Color mode in ACS) from the document before document return was loaded.

## Procedure

Check the document setup and repeat the operation.

## 003-952 Document Color Mismatch RAP

There is a color mismatch among returned documents.

## Procedure

Ask customer to cancel the job, check job settings and rerun the job.
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-955 Documents Size Exchange RAP

When loading a document with Mixed Size Originals prohibited, a document of different size/ orientation from the initial document was detected.

## Initial Actions

Check the document size/orientation and repeat the operation.

## Procedure

Replace the DADF PWB (PL 16.3)
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 003-956 Coping from the Platen Failure RAP

When coping from the Platen a fault occurs. The DADF working OK.

## Procedure

Check the APS Sensor for a bent, bond, or damaged actuator preventing the full range of travel of the APS Sensor Actuator.

If the problem continues, replace the APS Sensor (PL 13.4).
.

## 003-963 APS Object Tray RAP

The correct size is not loaded for APS operation.

## Procedure

Select a tray that supplies the required size paper and repeat the operation.

## 003-965 ATS/APS Paper Detect RAP

The correct size is not loaded for APS operation.

## Procedure

Select a tray that supplies the required size paper and repeat the operation.

## 003-966 ATS/APS Destination (IIT) RAP

The correct size is not loaded for APS operation.

## Procedure

Select a tray that supplies the required size paper and repeat the operation.

## 003-970 Fax Line Memory RAP

BSD-ON:17.1
The number of lines in the Slow Scan Direction exceeds the upper limit during processes such as Fax parallel synthesis or enlargement of long documents.

## Procedure

Perform the following:

- Check the electrical connections on the FCB PWB (PL 11.3)
- Check the memory PWB on the FCB PWB (PL 11.3) If no memory PWB is present the customer may need additional memory.
- If the problem persists replace the FCB PWB (PL 11.3).


## 003-972 Maximum Stored Page RAP

The number of pages stored exceeded the maximum number set in the system data.

## Procedure

Set the number of pages of the document to be within the maximum number of pages that can be stored.

## 003-973 Image Rotation RAP

Image rotation can not prevent image loss with current paper sizes.

## Procedure

Ask customer to verify the image loss and use a larger paper size if available.
Or use reduction to make a smaller document and repeat the operation.

## 003-974 Next Original Specification RAP

Scanning is complete for all loaded documents.

## Procedure

Ask customer to verify that scanning is compete or other documents should be loaded.

003-976 FAX Line Memory Overflow RAP BSD-ON:17.1

The number of lines in the Slow Scan Direction exceeds the upper limit during processes such as Fax parallel synthesis or enlargement of long-sized documents.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
Check the mounting of the memory PWB(s) on the FCB PWB
If the problem persists replace the FCB PWB (PL 11.3).

## 003-977 Document Mismatch (Multiple Scan) RAP

During multiple scan a document was switched during Bound Originals/Booklet Creation/ Poster scanning.

## Procedure

Ask customer to process a job recovery or to cancel the job and rerun the job.

## 003-978 Color Document Miss Match (Multi Scan) RAP

Document Color Mismatch (a change of document in Multi Scan:

1. A change of documents during scanning a Bound Document/As Book/Poster
2. When such an operation occurred during a Platen Multi Scan (Bound Document/As Book/

Poster) job caused the user to reload documents, a different sized document was reloaded, or in ACS the user reloaded different color documents

## Procedure

Reload the appropriate documents and run the job.

## 003-980 Staple Position RAP

Stapling could not be done at the specified position.

## Procedure

Ask customer to correct the job setups and rerun the job.

## 003-981 Staple Size RAP

Stapling could not be done for the selected paper size.

## Procedure

Ask customer to correct the job setups and rerun the job.

## 003-982 IIT HDD Access Error RAP

## BSD-ON:3.1/6.2

There is a problem with IIT accessing the Hard Drive.

## Procedure

Disconnect and reconnect the IIT/IPS PWB Harness.
Check HDD electrical connections (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists perform Hard Disk Diagnostic Program. If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

If the problem persists, replace the IIT/IPS PWB (PL 13.3).

005-110 Belt DADF Regi Sensor On Dynamic Jam RAP BSD-ON:5.4

Registration Sensor does not turn On in specified time from start of original document feed.

## Procedure

When the problem occurs frequently, check if there is any area in document path that interferes with document feed. If OK, check connectors and wiring for damage. If the problem continues, replace Registration Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

005-111 Belt DADF Regi Sensor Off Dynamic Jam RAP BSD-ON:5.4

Registration Sensor does not turn Off in specified time from start of original document feed.

## Procedure

When the problem occurs frequently, check if there is any area in document path that interferes with document feed. If OK, check connectors and wiring for damage. If the problem continues, replace Registration Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-112 Belt DADF Regi Sensor On Dynamic Jam RAP (Document Reverse) <br> BSD-ON:5.4

Registration Sensor does not turn On in specified time from start of original document reverse rotation.

## Procedure

When the problem occurs frequently, check if there is any area in document path that interferes with document feed. If OK, check connectors and wiring for damage. If the problem continues, replace Registration Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

005-113 Belt DADF Regi Sensor Off Dynamic Jam RAP (Document Reverse)
BSD-ON:5. 4
Registration Sensor does not turn Off in specified time from start of original document reverse rotation.

## Procedure

When the problem occurs frequently, check if there is any area in document path that interferes with document feed. If OK, check connectors and wiring for damage. If the problem continues, replace Registration Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-115 Belt DADF Exit Sensor On Dynamic Jam

 BSD-ON:5.4Exit Sensor does not turn On in specified time from start of original document output operation.

## Procedure

When the problem occurs frequently, check if there is any area in document path that interferes with document feed. If OK, check connectors and wiring for damage. If the problem continues, replace Exit Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-116 Belt DADF Exit Sensor Off Dynamic Jam

 BSD-ON:5.4Exit Sensor does not turn Off in specified time from start of original document output operation.

## Procedure

When the problem occurs frequently, check if there is any area in document path that interferes with document feed. If OK, check connectors and wiring for damage. If the problem continues, replace Exit Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-121 CVT Feed Sensor On Jam RAP

## BSD-ON:5.4/5.5

After the first-out feed operation started (Feed Motor On (CW)) in Duplex mode, the DADF Feed Out Sensor did not turn On within the specified time

## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-205]. Actuate the DADF Feed Out Sensor with paper. The display changes.
Y
Check the connections of P/J769 and P/J758. P/J769 and P/J758 are connected correctly.

$$
Y \quad N
$$

Connect P/J769 and P/J758.
Check the wire between J769 and J758 for an open circuit or a short circuit (BSD 5.4 Flag 13/Flag 14). The wire between J769 and J758 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P758-3 (+) and GND (-) (BSD 5.4 Flag 14). The voltage is approx. +5VDC.
$Y^{\mathrm{N}}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P758-2 (+) and GND (-) (BSD 5.4 Flag 13) Actuate the DADF Feed Out Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the DADF Feed Out Sensor (PL 16.9).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-001]. The DADF Feed Motor starts up.
Y N
Check the connections of P/J764 and P/J754. P/J764 and P/J754 are connected correctly.

$$
Y \quad N
$$

Connect P/J764 and P/J754.
Check the wire between J764 and J754 for an open circuit or a short circuit (BSD 5.5 Flag 1). The wire between J764 and J754 is conducting without an open circuit or a short circuit.
N
Repair the open circuit or short circuit.

A B
Measure the voltage between the DADF PWB P754-1 (+) and GND ( - ), and between P754-7 (+) and GND (-) (BSD 5.5 Flag 1). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Feed Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 15.3).

Replace the DADF PWB (PL 16.3).

## 005-122 CVT Simplex/Side1 Pre-Registration On Jam RAP BSD-ON:5.4/5.5

- After the Pre Feed operation started for the first sheet (DADF Feed Motor On (CW)) in Duplex or Simplex mode, the Pre-Registration Sensor did not turn On within the specified time.
- After the Pre Feed operation started for the second sheet onwards (DADF Feed Motor On (CW)) in Duplex mode, the Pre-Registration Sensor did not turn On within the specified time.


## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-206]. Actuate the DADF Pre Registration Sensor with paper. The display changes.
Y $\quad \mathrm{N}$
Check the connections of P/J781 and P/J761. P/J781 and P/J761 are connected correctly.
$\mathbf{N}$
Connect P/J781 and P/J761.

Check the wire between J781 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 3/Flag 4). The wire between J 781 and J 761 is conducting without an open circuit or a short circuit.
Y $\quad \mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-12 (+) and GND (-) (BSD 5.4 Flag 4). The voltage is approx. +5 VDC .

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-11 (+) and GND (-) (BSD 5.4 Flag 3) Actuate the DADF Pre Registration Sensor with paper. The voltage changes.
Y N
Replace the DADF Pre Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-001]. The DADF Feed Motor starts up.
N
Check the connections of P/J764 and P/J754. P/J764 and P/J754 are connected correctly.
Y $\quad$.
Connect P/J764 and P/J754

Check the wire between J764 and J754 for an open circuit or a short circuit (BSD 5.5 Flag 1). The wire between J 764 and J 754 is conducting without an open circuit or a short circuit.

Repair the open circuit or short circuit
Measure the voltage between the DADF PWB P754-1 (+) and GND (-), and between P754-7 (+) and GND (-) (BSD 5.5 Flag 1). The voltage is approx. +24VDC.
Y $N$
Replace the DADF PWB (PL 16.3).
Replace the DADF Feed Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 15.3).

Replace the DADF PWB (PL 16.3).

## 005-123 CVT Simplex/Side1 Registration Jam RAP

 BSD-ON:5.4/5.5After pre-registration started (DADF Feed Motor On (CCW)), the Registration Sensor did not turn On within the specified time.

## Initial Actions

- Power Off and then On


## Procedure

Execute Component Control [005-110]. Actuate the DADF Registration Sensor with paper. The display changes.
$Y \quad \mathbf{N}$
Check the connections of P/J782 and P/J761. P/J782 and P/J761 are connected correctly.
$\mathrm{Y} \quad \mathrm{N}$

Connect P/J782 and P/J761.
Check the wire between /J782 and J761 for an open circuit or a short circuit (BSD 5.5 Flag 1/Flag 2). The wire between /J782 and J761 is conducting without an open circuit or a short circuit.
$Y$ N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-15 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +5 VDC .

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-14 (+) and GND (-) (BSD 5.5 Flag 1). Actuate the DADF Registration Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the DADF Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-001]. The DADF Feed Motor starts up.
$\mathbf{N}$
Check the connections of P/J764 and P/J754. P/J764 and P/J754 are connected correctly.

$$
Y \quad N
$$

Connect P/J764 and P/J754.
Check the wire between J764 and J754 for an open circuit or a short circuit (BSD 5.5 Flag 1). The wire between J764 and J754 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.

A B
Measure the voltage between the DADF PWB P754-1 ( + ) and GND ( - ), and between P754-7 (+) and GND (-) (BSD 5.5 Flag 1). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Feed Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3).

## 005-124 CVT Lead Reg Sensor On Jam

 BSD-ON:5.4Lead Reg Sensor does not turn On in specified time from Scan start (Reg. Motor start).

## Procedure

If the problem occurs frequently, check the following:

1. There is any area in document path that interferes with document feed.
2. Any foreign substance is attached Roll surface.
3. Roll surface has worn abnormally.
4. Reg.Motor rotates normally.
5. Check the connectors and wires for damage.

If all above are OK, replace Lead Reg. Sensor,(PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-125 CVT Registration Sensor Off Jam RAP

## BSD-ON:5.4/5.5

After the Pre Registration Sensor turned Off during the Read operation, the DADF Registration Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-110]. Actuate the DADF Registration Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J782 and P/J761. P/J782 and P/J761 are connected correctly.

Connect P/J782 and P/J761.
Check the wire between J782 and J761 for an open circuit or a short circuit (BSD 5.5 Flag 1/Flag 2). The wire between J782 and J761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-15 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +5 VDC .
$Y \mathrm{~N}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-14 (+) and GND (-) (BSD 5.5 Flag 1). Actuate the DADF Registration Sensor with paper. The voltage changes.
Y $N$
Replace the DADF Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-001]. The DADF Feed Motor starts up.
Y N
Check the connections of P/J764 and P/J754. P/J764 and P/J754 are connected correctly.
Y N
Connect P/J764 and P/J754.
Check the wire between J764 and J754 for an open circuit or a short circuit (BSD 5.5 Flag
1). The wire between J 764 and J 754 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.

A B
Measure the voltage between the DADF PWB P754-1 (+) and GND (-), and between P754-7 (+) and GND (-) (BSD 5.5 Flag 1). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Feed Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 15.3).

Execute Component Control [005-026]. The DADF Registration Motor (PL 16.9starts up.
Y $N$
Check the connections of P/J765 and P/J755. P/J765 and P/J755 are connected correctly.
Y N
Connect P/J765 and P/J755.
Check the wire between J765 and J755 for an open circuit or a short circuit (BSD 5.5 Flag 2). The wire between J 765 and J 755 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P755-1 (+) and GND (-), and between P755-6 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Registration Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 15.3).

Replace the DADF PWB (PL 16.3)

## 005-126 CVT Out Sensor On Jam

## BSD-ON:5.4

Out Sensor does not turn On in specified time from Scan start (Reg. Motor start).

## Procedure

If the problem occurs frequently, check the following:

1. There is any area in document path that interferes with document feed
2. Any foreign substance is attached Roll surface.
3. Roll surface has worn abnormally.
4. Reg.Motor rotates normally.
5. Platen Motor rotates normally.
6. Check the connectors and wires for damage.

If all above are OK, replace Out Sensor (PL 16.9). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-127 CVT Out Sensor Off Jam

 BSD-ON:5. 4Out Sensor does not turn Off in specified time fro Reg.Sensor Off.

## Procedure

If the problem occurs frequently, check the following:

1. There is any area in document path that interferes with document feed.
2. Any foreign substance is attached Roll surface.
3. Roll surface has worn abnormally.
4. Reg.Motor rotates normally.
5. Platen Motor rotates normally.
6. Check the connectors and wires for damage.

If all above are OK, replace Out Sensor (PL 16.9). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-128 CVT Simplex Exit 1 Sensor On Jam

 BSD-ON:5.4Exit 1 Sensor does not turn On in specified time from Out Sensor On in Simplex Mode.

## Procedure

If the problem occurs frequently, check the following:
1.There is any area in document path that interferes with document feed.
2. Any foreign substance is attached to Roll surface.
3. Roll surface has worn abnormally.
4. Simp/Dup Gate is in normal position (Simp/Dup Gate Solenoid operation included.)
5. Platen Motor rotates normally.
6. Exit Motor rotates normally.
7. Check the connectors and wires for damage.

If all above are OK, replace Simplex Exit 1 Sensor (PL 16.7). If the problem continues, replace the Exit 1 Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-129 CVT Simplex Exit 1 Sensor Off Jam BSD-ON:5. 4

Exit 1 Sensor does not turn Off in specified time from Out Sensor Off in Simplex Mode.

## Procedure

If the problem occurs frequently, check the following:

1. There is any area in document path that interferes with document feed.
2. Any foreign substance is attached to Roll surface.
3. Roll surface has worn abnormally.
4. Simp/Dup Gate is in normal position (Simp/Dup Gate Solenoid operation included.)
5. Platen Motor rotates normally
6. Exit Motor rotates normally.
7. Check the connectors and wires for damage.

If all above are OK, replace Exit 1 Sensor (PL 16.7). If the problem continues, replace the Out Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-130 CVT Invert Sensor On Jam

 BSD-ON:5.4Invert Sensor does not turn On in specified time from Out Sensor On in Duplex Mode

## Procedure

If the problem occurs frequently, check the following:

1. There is any area in document path that interferes with document feed.
2. Any foreign substance is attached to Roll surface.
3. Roll surface has worn abnormally.
4. Simp/Dup Gate is in normal position (Simp/Dup Gate Solenoid operation included.)
5. Platen Motor rotates normally.
6. Check the connectors and wires for damage.

If all above are OK, replace Invert Sensor (PL 16.7). If the problem continues, replace the Out Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-131 CVT Invert On Jam RAP

## BSD-ON:5.4/5.5

After the Registration Sensor turned On during Invert operation, the Invert Sensor did not turn On within the specified time.

## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-211]. Actuate the DADF Invert Sensor with paper. The display changes.
$\mathrm{Y} \quad \mathrm{N}$
Check the connections of P/J780 and P/J761. P/J780 and P/J761 are connected correctly.
$Y \quad \mathrm{~N}$
Connect P/J780 and P/J761.
Check the wire between J780 and J761 for an open circuit or a short circuit (BSD 5.4 Flag $5 /$ Flag 6). The wire between J 780 and J 761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-9 (+) and GND (-) (BSD 5.4 Flag 6), The voltage is approx. +5 VDC .
$Y \quad N$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-8 (+) and GND (-) (BSD 5.4 Flag 5). Actuate the DADF Invert Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the DADF Invert Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-026]. The DADF Registration Motor starts up.
N
Check the connections of P/J765 and P/J755. P/J765 and P/J755 are connected correctly.

$$
Y \quad N
$$

Connect P/J765 and P/J755.
Check the wire between J765 and J755 for an open circuit or a short circuit (BSD 5.5 Flag 2). The wire between J 765 and J 755 is conducting without an open circuit or a short circuit.
N
Repair the open circuit or short circuit.

A B
Measure the voltage between the DADF PWB P755-1 (+) and GND ( - ), and between P755-6 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +24VDC.
Y $\mathbf{N}$
Replace the DADF PWB (PL 16.3).
Replace the DADF Registration Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3).

## 005-132 CVT Invert On Jam 2 RAP

## BSD-ON:5.45.5

After the Read Speed Control operation started (Registration Motor On (CCW)), the Invert Sensor did not turn On within the specified time.

## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-211]. Actuate the DADF Invert Sensor with paper. The display changes.
Y N
Check the connections of P/J780 and P/J761. P/J780 and P/J761 are connected correctly.

$$
Y \quad N
$$

Connect P/J780 and P/J761.
Check the wire between J780 and J761 for an open circuit or a short circuit (BSD 5.4 Flag $5 /$ Flag 6). The wire between J 780 and J 761 is conducting without an open circuit or a short circuit.
$Y$ N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-9 (+) and GND (-) (BSD 5.4 Flag 6). The voltage is approx. +5 VDC .
Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-8 (+) and GND (-) (BSD 5.4 Flag 5). Actuate the DADF Invert Sensor with paper. The voltage changes.
Y N
Replace the DADF Invert Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-026]. The DADF Registration Motor starts up.
N
Check the connections of P/J765 and P/J755. P/J765 and P/J755 are connected correctly.

$$
Y \quad N
$$

Connect P/J765 and P/J755.
Check the wire between J765 and J755 for an open circuit or a short circuit (BSD 5.5 Flag 2). The wire between J 765 and J 755 is conducting without an open circuit or a short circuit.
N
Repair the open circuit or short circuit.

A B
Measure the voltage between the DADF PWB P755-1 (+) and GND ( - ), and between P755-6 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +24VDC.
Y $\mathbf{N}$
Replace the DADF PWB (PL 16.3).
Replace the DADF Registration Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3).

## 005-133 CVT Invert Sensor Off Jam

 BSD-ON:5. 4Invert Sensor does not turn Off in specified time from Out Sensor Off in Duplex Mode.

## Procedure

If the problem occurs frequently, check the following:

1. There is any area in document path that interferes with document feed.
2. Any foreign substance is attached to Roll surface.
3. Roll surface has worn abnormally.
4. Simp/Dup Gate is in normal position (Simp/Dup Gate Solenoid operation included.)
5. Platen Motor rotates normally.
6. Feed Motor rotates normally.
7. Invert Roll performs Nip operation normally (Nip Release Solenoid operation included)
8. Check the connectors and wires for damage.

If all above are OK, replace Invert Sensor (PL 16.7). If the problem continues, replace the Out Sensor (PL 16.9) If the problem persists, replace the DADF PWB (PL 16.3).

## 005-134 CVT Invert Sensor Off Jam (Inverter) RAP

## BSD-ON:5.4/5.5

After the Registration Sensor turned Off on inverting at Invert, the Invert Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-211]. Actuate the DADF Invert Sensor with paper. The display changes.
Y N
Check the connections of P/J780 and P/J761. P/J780 and P/J761 are connected correctly.
Y N
Connect P/J780 and P/J761.
Check the wire between J780 and J761 for an open circuit or a short circuit (BSD 5.4 Flag $5 /$ Flag 6). The wire between J780 and J761 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-9 (+) and GND (-) (BSD 5.4 Flag 6). The voltage is approx. +5 VDC .
Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-8 (+) and GND (-) (BSD 5.4 Flag 5). Actuate the DADF Invert Sensor with paper. The voltage changes.
Y N
Replace the DADF Invert Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-026]. The DADF Registration Motor starts up.
Y N
Check the connections of P/J765 and P/J755. P/J765 and P/J755 are connected correctly.
Y N
Connect P/J765 and P/J755.
Check the wire between J765 and J755 for an open circuit or a short circuit (BSD 5.5 Flag 2). The wire between J765 and J755 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.

A B
Measure the voltage between the DADF PWB P755-1 (+) and GND ( - ), and between P755-6 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Registration Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3).

## 005-135 CVT Side2 Pre-Registration On Jam RAP

## BSD-ON:5.4/5.5/5.6

After the Invert operation started (Registration Motor On (CW)) at Invert, the DADF Pre Registration Sensor did not turn On within the specified time.

## Initial Actions

- Power Off than On


## Procedure

Check the installation and operation of the Invert Gate. The Invert Gate is installed and it works.
Y N
Install the Invert Gate correctly.
Execute Component Control[005-206]. Actuate the DADF Pre Registration Sensor with paper. The display changes.
Y N
Check the connections of P/J781 and P/J761. P/J781 and P/J761 are connected correctly.
Y $\mathbf{N}$
Connect P/J781 and P/J761.
Check the wire between J781 andJ761 for an open circuit or a short circuit (BSD 5.4 Flag 3/Flag 4). The wire between J781 and J761 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-12 (+) and GND (-) (BSD 5.4 Flag 4). The voltage is approx. +5 VDC .

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-11 (+) and GND (-) (BSD 5.4 Flag 3). Actuate the DADF Pre Registration Sensor with paper. The voltage changes.
Y N
Replace the DADF Pre Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control[005-026]. The DADF Registration Motor starts up.
Y N
Check the connections of P/J765 and P/J755. P/J765 and P/J755 are connected correctly.

Connect P/J765 and P/J755.

A B
Check the wire between J765 and J755 for an open circuit or a short circuit (BSD 5.5 Flag 2). The wire between J765 and J755 is conducting without an open circuit or a short circuit.

$$
\begin{aligned}
& \mathbf{N} \\
& \text { Repair the open circuit or short circuit. }
\end{aligned}
$$

Measure the voltage between the DADF PWB P755-1 (+) and GND (-), and between P755-6 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Registration Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 16.3).

Execute Component Control [005-072]. The Exit Nip Release Solenoid can be heard.
Y N
Check the connections of P/J766 and P/J756. P/J766 and P/J756 are connected correctly.
Y $N$
Connect P/J766 and P/J756.
Check the wire between P756 and J766 for an open circuit or a short circuit (BSD 5.6 Flag 2). The wire between P756 and J766 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the Exit Nip Release Solenoid (PL 16.4) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3).

## 005-136 CVT Side2 Registration On Jam RAP

BSD-ON:5.4/5.5/5.6
After the DADF Pre Registration Sensor turned On at Invert, the DADF Registration Sensor did not turn On within the specified time.

## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-110]. Actuate the DADF Registration Sensor with paper. The display changes.
Y N
Check the connections of P/J782 and P/J761 P/J782 and P/J761 are connected correctly.
Y $\quad \mathbf{N}$
Connect P/J782 and P/J761.
Check the wire between J782 and J761 for an open circuit or a short circuit (BSD 5.5 Flag 1/Flag 2). The wire between J782 and J761 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-15 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +5 VDC .
$Y \mathrm{~N}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-14 (+) and GND (-) (BSD 5.5 Flag 1). Actuate the DADF Registration Sensor with paper. The voltage changes.
Y N
Replace the DADF Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-001]. The DADF Feed Motor starts up.
$\boldsymbol{Y} \quad \mathbf{N}$
Check the connections of P/J764 and P/J754. P/J765 and P/J754 are connected correctly.
Y N
Connect P/J765 and P/J754.
Check the wire between J765 andJ754 for an open circuit or a short circuit (BSD 5.5 Flag
1). The wire between J 765 and J 754 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.

A B
Measure the voltage between the DADF PWB P754-1 (+) and GND (-), and between P754-7 (+) and GND (-) (BSD 5.5 Flag 1). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Feed Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 15.3).

Execute Component Control [005-072]. The Exit Nip Release Solenoid can be heard.
Y $N$
Check the connections of P/J766 and P/J756. P/J766 and P/J756 are connected correctly.
Y $\quad \mathrm{N}$
Connect P/J766 and P/J756.
Check the wire between P756 and J766 for an open circuit or a short circuit (BSD 5.6 Flag 2). The wire between P756 and J766 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Replace the Exit Nip Release Solenoid (PL 16.7) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3).

## 005-137 CVT Exit 2 Sensor On Jam

## BSD-ON:5.4

Exit 2 Sensor does not turn On in specified time from start of Feed Motor reverse rotation in Reverse Output operation.

## Procedure

If the problem occurs frequently, check the following:

1. There is any area in document path that interferes with document feed.
2. Any foreign substance is attached to Roll surface.
3. Roll surface has worn abnormally.
4. Exit Gate is in normal position (Exit Gate Solenoid operation included.)
5. Feed Motor rotates normally.
6. Invert Roll performs normal Nip operation (Nip Release Solenoid operation included.)
7. Exit Motor rotates normally.
8. Exit Gate, closed, blocks path.
9. Check the connectors and wires for damage.

If all above are OK, replace Exit 2 Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-138 CVT Exit 1 Sensor On Jam (Side 2) BSD-ON:5.4

Exit 1 Sensor does not turn On in specified time from Exit 2 Sensor On in Reverse Output operation.

## Procedure

If the problem occurs frequently, check the following:

1. There is any area in document path that interferes with document feed.
2. Any foreign substance is attached to Roll surface.
3. Roll surface has worn abnormally.
4. Exit Gate is in normal position (Exit Gate Solenoid operation included.)
5. Feed Motor rotates normally.
6. Invert Roll performs normal Nip operation (Nip Release Solenoid operation included.)
7. Exit Motor rotates normally.
8. Exit Gate, closed, blocks path.
9. Check the connectors and wires for damage.

If all above are OK, replace Exit 1 Sensor (PL 16.7). If the problem continues, replace the Exit 2 Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-139 CVT Invert Sensor Off Jam RAP

## BSD-ON:5.4/5.5/5.6

After the Registration Sensor turned Off during the Read operation, the Invert Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off than On


## Procedure

Check the installation and operation of the Invert Gate. The Invert Gate is installed and it works.
Y $\mathbf{N}$
Install the Invert Gate correctly.
Execute Component Control [005-211]. Actuate the DADF Invert Sensor with paper. The display changes.
Y $N$
Check the connections of P/J780 and P/J761. P/J780 and P/J761 are connected correctly.
Y N
Connect P/J780 and P/J761.
Check the wire between J 780 and J 761 for an open circuit or a short circuit (BSD 5.4 Flag $5 /$ Flag 6 ). The wire between J 780 and J 761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-9 (+) and GND (-) (BSD 5.4 Flag 6). The voltage is approx. +5 VDC .
$\mathbf{Y} \quad \mathbf{N}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-8 (+) and GND (-) (BSD 5.4 Flag 5). Actuate the DADF Invert Sensor with paper. The voltage changes.
Y N
Replace the DADF Invert Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-026]. The DADF Registration Motor starts up.
Y N
Check the connections of P/J765 and P/J755. P/J765 and P/J755 are connected correctly.
Y $\quad \mathrm{N}$
Connect P/J765 and P/J755.

A B
Check the wire between J765 and J755 for an open circuit or a short circuit (BSD 5.5 Flag 2). The wire between J765 and J755 is conducting without an open circuit or a short circuit.

## Repair the open circuit or short circuit.

Measure the voltage between the DADF PWB P755-1 (+) and GND (-), and between P755-6 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Registration Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 16.3).

Execute Component Control [005-072]. The Exit Nip Release Solenoid can be heard
Y N
Check the connections of P/J766 and P/J756. P/J766 and P/J756 are connected correctly.
Y N
Connect P/J766 and P/J756.
Check the wire between P756 and J766 for an open circuit or a short circuit (BSD 5.6 Flag 2). The wire between P756 and J766 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the Exit Nip Release Solenoid (PL 16.4) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3)

## 005-141 CVT Feed Sensor Off Jam

## BSD-ON:5.4

Pre-regi Sensor turns Off before Feed Sensor turns Off.

## Procedure

If the problem occurs frequently, check if Multi-feed or Shingling feed/Slip at feed occurs.

1. Check each Roll surface has contamination/foreign substance attached.
2. Check each Roll surface has foreign substance attached.
3. Check Torque Limiter works normally.
4. Check each Motor works normally.
5. Check each Roll feed force is within normal range
6. Check the connectors and wires for damage.

If all above are OK, replace Feed Sensor,(PL 16.9). If the problem continues, replace the Nudger Motor (PL 16.5). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-142 CVT Exit 1 Sensor Off Jam (Side 2)

 BSD-ON:5.4Exit 1 Sensor does not turn Off in specified time from Exit 2 Sensor Off in Reverse Output operation.

## Procedure

If the problem occurs frequently, check the following:

1. There is any area in document path that interferes with document feed.
2. Any foreign substance is attached to Roll surface.
3. Roll surface has worn abnormally.
4. Invert Gate operation is normal.
5. Regi Motor rotates normally.
6. Exit Roll performs normal Nip operation (Nip Release Solenoid operation included.)
7. Check the connectors and wires for damage.

If all above are OK, replace Exit 1 Sensor (PL 16.7). If the problem continues, replace the Exit 2 Sensor (PL 16.7). If the problem persists, replace the DADF PWB (PL 16.3).

## 005-143 CVT Exit 2 Sensor Off Jam

BSD-ON:5.4
Exit 2 Sensor does not turn Off in specified time from Exit 2 Sensor On

## Procedure

If the problem occurs frequently, check the following:

1. Check if there is anything at Exit that prevents the document output.
2. Check if there is any area in the path, from Exit Rolls and output area, that interferes with document feed
3. Exit Motor rotates normally. If something is wrong with rotation such as step-out, check to see if some foreign substance in Exit Motor or any other thing prevents its rotation.

## 005-144 CVT Pre Reg Sensor Jam

 BSD-ON:5. 4Pre Regi Sensor turns ON earlier than the specified timing due to document Skew.

## Procedure

Caused by Big Skew at start of feed. To perform investigation on cause of Skew. Ensure the following:

1. Document Guide is set correctly.
2. Nudger Roll is aligned correctly against Document Tray.
3. Feed Roll and Retard Roll does not contact at some point improperly.
4. Curl is not so big.
5. Size combination is within spec. (Mixed Sizes)

## 005-145 CVT Registration Sensor Off Jam (Invert) RAP

 BSD-ON:5.4/5.5After the DADF Pre Registration Sensor turned Off at Invert, the Registration Sensor did not turn Off within the specified time.

## Initial Actions

- Open the DADF Top Cover and remove the paper.
- Power Off than On


## Procedure

Execute Component Control [005-110]. Actuate the DADF Registration Sensor with paper. The display changes.
Y N
Check the connections of P/J782 and P/J761. P/J782 and P/J761 are connected correctly.
Y N
Connect P/J782 and P/J761.
Check the wire between J782 and J761 for an open circuit or a short circuit (BSD 5.5 Flag 1/Flag 2). The wire between J782 and J761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-15 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +5 VDC .

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-14 (+) and GND (-) (BSD 5.5 Flag 1). Actuate the DADF Registration Sensor with paper. The voltage changes.

Y N
Replace the DADF Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-001]. The DADF Feed Motor starts up.
Y $\mathbf{N}$
Check the connections of P/J764 and P/J754. P/J764 and P/J754 are connected correctly.
Y N
Connect P/J764 and P/J754.
Check the wire between J764 and J754 for an open circuit or a short circuit (BSD 5.5 Flag 1). The wire between J764 and J754 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
A

A B
Measure the voltage between the DADF PWB P754-1 (+) and GND (-), and between P754-7 (+) and GND (-) (BSD 5.5 Flag 1). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Feed Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 16.3).

Execute Component Control [005-026]. The DADF Registration Motor starts up.
Y $N$
Check the connections of P/J765 and P/J755. P/J765 and P/J755 are connected correctly.
Y $N$
Connect P/J765 and P/J755.
Check the wire between J765 and J755 for an open circuit or a short circuit (BSD 5.5 Flag 2). The wire between J 765 and J 755 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P755-1 (+) and GND (-), and between P755-6 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Registration Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3)

## 005-146 CVT Pre Registration Sensor Off Jam RAP

 BSD-ON:5.4/5.5/5. 61. After the DADF Feed Out Sensor turned Off in 1 Sided mode, the DADF Pre Registration Sensor did not turn Off within the specified time.
2. After the DADF Registration Motor turned On in 2 Sided mode, the DADF Pre Registration Sensor did not turn Off within the specified time.

## Initial Actions

Power Off than On

## Procedure

Check the installation and operation of the Invert Gate. The Invert Gate is installed and it works.
Y $\mathbf{N}$
Install the Invert Gate correctly.
Execute Component Control [005-206]. Actuate the DADF Pre Registration Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J781 and P/J761. P/J781 and P/J761 are connected correctly.
Y N
Connect P/J781 and P/J761.
Check the wire between J781 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 3/Flag 4). The wire between J781 and J761 is conducting without an open circuit or a short circuit.

## Y $\mathbf{N}$

Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-12 (+) and GND (-) (BSD 5.4 Flag 4). The voltage is approx. +5 VDC .

Y $N$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-11 (+) and GND (-) (BSD 5.4 Flag 3).Actuate the DADF Pre Registration Sensor with paper. The voltage changes.

Y $N$
Replace the DADF Pre Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-026]. The DADF Registration Motor starts up.
Y N
Check the connections of P/J765 and P/J755. P/J765 and P/J755 are connected correctly.
Y N
Connect P/J765 and P/J755.

A B
Check the wire between J765 and J755 for an open circuit or a short circuit (BSD 5.5 Flag 2). The wire between J765 and J755 is conducting without an open circuit or a short circuit.

$$
\begin{aligned}
& \mathbf{N} \\
& \text { Repair the open circuit or short circuit. }
\end{aligned}
$$

Measure the voltage between the DADF PWB P755-1 (+) and GND (-), and between P755-6 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +24VDC.
Y $N$
Replace the DADF PWB (PL 16.3).
Replace the DADF Registration Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 15.3).

Execute Component Control [005-072]. The Exit Nip Release Solenoid can be heard.
Y N
Check the connections of P/J766 and P/J756. P/J766 and P/J756 are connected correctly. $Y \quad \mathrm{~N}$

Connect P/J766 and P/J756.
Check the wire between P756 and J766 for an open circuit or a short circuit (BSD 5.6 Flag 2). The wire between P756 and J766 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the Exit Nip Release Solenoid (PL 16.4) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3).

## 005-147 CVT Pre Registration Sensor Off Jam (Invert) RAP BSD-ON:5.4/5.5/5.6

After the DADF Registration Motor turned On at Invert, the DADF Pre Registration Sensor did not turn Off within the specified time.

## Initial Actions

Power Off than On

## Procedure

Check the installation and operation of the Invert Gate. The Invert Gate is installed and it works.
Y $\mathbf{N}$
Install the Invert Gate correctly.
Execute Component Control [005-206]. Actuate the DADF Pre Registration Sensor with paper. The display changes.
Y N
Check the connections of P/J781 and P/J761. P/J781 and P/J761 are connected correctly.
Y N
Connect P/J781 and P/J761.
Check the wire between J781 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 3/Flag 4). The wire between J781 and J761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-12 (+) and GND (-) (BSD 5.4 Flag 4). The voltage is approx. +5 VDC .

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-11 (+) and GND (-) (BSD 5.4 Flag 3).Actuate the DADF Pre Registration Sensor with paper. The voltage changes.

Y N
Replace the DADF Pre Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-026]. The DADF Registration Motor starts up.
Y N
Check the connections of P/J765 and P/J755. P/J765 and P/J755 are connected correctly.
Y $\mathbf{N}$
Connect P/J765 and P/J755.

A B
Check the wire between J765 and J755 for an open circuit or a short circuit (BSD 5.5 Flag 2). The wire between $J 765$ and $J 755$ is conducting without an open circuit or a short circuit.
$\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P755-1 (+) and GND (-), and between P755-6 (+) and GND (-) (BSD 5.5 Flag 2). The voltage is approx. +24VDC.
Y $\quad \mathbf{N}$
Replace the DADF PWB (PL 16.3).
Replace the DADF Registration Motor (PL 16.9) If the problem persists, replace the DADF PWB (PL 15.3).

Execute Component Control [005-072]. The Exit Nip Release Solenoid can be heard
Y N
Check the connections of P/J766 and P/J756. P/J766 and P/J756 are connected correctly.

Connect P/J766 and P/J756.
Check the wire between P756 and J766 for an open circuit or a short circuit (BSD 5.6 Flag 2). The wire between P756 and J766 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Replace the Exit Nip Release Solenoid (PL 16.4) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3)

## 005-150 CVT Holed Paper Feed Sensor Off Jam

 BSD-ON:5.4Feed Sensor does not turn Off in specified time from Feed Sensor On in holed document mode.

## Procedure

Ensure that a point on circumference (farthest from trail edge), not a center, of a hole on trail edge side is 19 mm or less from trail edge.

005-151 CVT Holed Paper Pre Reg Sensor Off Jam BSD-ON:5.4

Pre Reg Sensor does not turn Off in specified time from Pre Reg Sensor On in holed document mode.

## Procedure

Ensure that a point on circumference (farthest from trail edge), not a center, of a hole on trail edge side is 19 mm or less from trail edge.

005-152 CVT Holed Paper Reg Sensor Off Jam BSD-ON:5.4

Reg Sensor does not turn Off in specified time from Reg Sensor On in holed document mode.

## Procedure

Ensure that a point on circumference (farthest from trail edge), not a center, of a hole on trail edge side is 19 mm or less from trail edge.

## 005-153 CVT Holed Paper Pre Reg Sensor Off Jam

 BSD-ON:5.4Pre Reg Sensor does not turn Off in specified time from Pre Reg Sensor On in holed document mode.

## Procedure

Ensure that a point on circumference (farthest from trail edge), not a center, of a hole on trail edge side is 19 mm or less from trail edge.

## 005-154 CVT Holed Paper Out Sensor Off Jam

 BSD-ON:5.4Feed Sensor does not turn Off in specified time from Out Sensor On in holed document mode.

## Procedure

Ensure that a point on circumference (farthest from trail edge), not a center, of a hole on trail edge side is 19 mm or less from trail edge.

005-155 CVT Holed Paper Simplex Exit 1 Sensor Off Jam BSD-ON:5.4

Exit 1 Sensor does not turn Off in specified time from Exit 1 Sensor On in holed document mode. (Simplex)

## Procedure

Ensure that a point on circumference (farthest from trail edge), not a center, of a hole on trail edge side is 19 mm or less from trail edge.

005-156 CVT Holed Paper Duplex Exit 1 Sensor Off Jam BSD-ON:5.4

Exit 1 Sensor does not turn Off in specified time from Exit 1 Sensor On in holed document mode. (Duplex)

## Procedure

Ensure that a point on circumference (farthest from trail edge), not a center, of a hole on trail edge side is 19 mm or less from trail edge.

## 005-157 CVT Holed Paper Invert Sensor Off Jam

 BSD-ON:5.4Invert Sensor does not turn Off in specified time from Invert Sensor On in holed document mode.

## Procedure

Ensure that a point on circumference (farthest from trail edge), not a center, of a hole on trail edge side is 19 mm or less from trail edge.

005-158 CVT Holed Paper Exit 2 Sensor Off Jam BSD-ON:5.4

Exit 2 Sensor does not turn Off in specified time from Exit 2 Sensor On in holed document mode.

## Procedure

Ensure that a point on circumference (farthest from trail edge), not a center, of a hole on trail edge side is 19 mm or less from trail edge.

005-160 DADF Tray Lift Up Fail on running (Document Set) BSD-ON:5.4

The following is detected: Level Sensor does not turn On or Bottom Sensor does not turn On in specified time from start of Tray Lift Up when document is set. (Detected during Run, during Stop, or during Purge)

## Procedure

When the document is removed, this fault is released. When this problem occurs frequently, check Level Sensor output/Tray Motor operation/Tray Drive system (Torque Limiter)/Sensor Actuator.

Check the connectors and wires for damage.
If all above are OK, replace the DADF PWB (PL 16.3).

## 005-190 Feed Motor Logic Error Jam

 BSD-ON:5.5Feed Motor, rotating CW, does not start CCW rotation (Invert start) in specified time from Invert Sensor Off (Invert operation)

## Procedure

Follow the instructions displayed on UI

## 005-194 Mixed Size Mismatch RAP

## BSD-ON:5.1

In Mixed Size Originals, it was detected that the Fast Scan Direction size was different from the width of the document guide.

## Initial Actions

Power Off than On
Check the document guide and repeat the operation.
Check the operation of the Tray Side Guide (Front).
Check the operation of the Tray Side Guide (Rear).

## Procedure

Execute Component Control [005-221]. Actuate the DADF Tray Size 1 Sensor with paper. The display changes.

## $Y^{\mathbf{N}}$

Check the connections of P/J771 and P/J759. P/J771 and P/J759 are connected correctly.
Y N
Connect P/J771 and P/J759.
Check the wire between J771 and J759 for an open circuit or a short circuit (BSD 5.1Flag 1/Flag 2). The wire between J771 and J759 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P759-3 (+) and GND (-) (BSD 5.1 Flag 2). The voltage is approx. +5VDC.
Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P759-2 (+) and GND (-) (BSD 5.1 Flag 1).Actuate the DADF Tray Size 1 Sensor with paper. The voltage changes.

Y N
Replace the DADF Tray Size 1 Sensor (PL 16.10).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-222]. Actuate the DADF Tray Size 2 Sensor with paper. The display changes.
$Y^{\mathbf{N}}$
Check the connections of P/J772 and P/J759. P/J772 and P/J759 are connected correctly.
Y N
Connect P/J772 and P/J759.

A B
Check the wire between J772 and J759 for an open circuit or a short circuit (BSD 5.1 Flag 3/Flag 4). The wire between J772 and J759 is conducting without an open circuit or a short circuit.
$\mathrm{Y} \quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P759-6 (+) and GND (-) (BSD 5.1 Flag 4). The voltage is approx. +5 VDC .
$Y^{\mathbf{N}}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P759-5 (+) and GND (-) (BSD 5.1 Flag 3). Actuate the DADF Tray Size 2 Sensor with paper. The voltage changes.
$Y \quad N$
Replace the DADF Tray Size 2 Sensor (PL 16.10).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-195 Size Mismatch Jam

Different size document detected without Document Size Mix mode selected.

## Procedure

Follow the instructions displayed on UI.

## 005-196 CVT Size Mismatch RAP

## BSD-ON:5.1

The second and subsequent documents are different size to the first document.

## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-221]. Actuate the DADF Tray Size 1 Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J771 and P/J759. P/J771 and P/J759 are connected correctly.
Y $N$
Connect P/J771 and P/J759.
Check the wire between J771 and J759 for an open circuit or a short circuit (BSD 5.1 Flag 1/Flag 2). The wire between J771 and J759 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P759-3 (+) and GND (-) (BSD 5.1 Flag 2). The voltage is approx. +5VDC.
Y $N$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P759-2 (+) and GND (-) (BSD 5.1 Flag 1). Actuate the DADF Tray Size 1 Sensor with paper. The voltage changes.
$\mathbf{Y} \quad \mathbf{N}$
Replace the DADF Tray Size 1 Sensor (PL 16.10).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-222]. Actuate the DADF Tray Size 2 Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J772 and P/J759. P/J772 and P/J759 are connected correctly.
Y $N$
Connect P/J772 and P/J759.
Check the wire between J772 and J759 for an open circuit or a short circuit (BSD 5.1 Flag 3/Flag 4). The wire between $\mathbf{J 7 7 2}$ and $\mathbf{J 7 5 9}$ is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.

Measure the voltage between the DADF PWB P759-6 (+) and GND (-) (BSD 5.1 Flag 4) The voltage is approx. +5 VDC .
Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P759-5 (+) and GND (-) (BSD 5.1 Flag 3). Actuate the DADF Tray Size 2 Sensor with paper. The voltage changes.
Y N
Replace the DADF Tray Size 2 Sensor (PL 16.10).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-197 Prohibit Combine Size RAP

## BSD-ON:5.1

A prohibited size combination was detected.

## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-221]. Actuate the DADF Tray Size 1 Sensor with paper. The display changes.
Y N
Check the connections of P/J771 and P/J759. P/J771 and P/J759 are connected correctly.
Y $N$
Connect P/J771 and P/J759.
Check the wire between J771 and J759 for an open circuit or a short circuit (BSD 5.1 Flag 1/Flag 2). The wire between $\mathbf{J 7 7 1}$ and $\mathbf{J} 759$ is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P759-3 (+) and GND (-) (BSD 5.1 Flag 2). The voltage is approx. +5VDC.
Y $N$
Replace the DADF PWB (PL 16.3)
Measure the voltage between the DADF PWB P759-2 (+) and GND (-) (BSD 5.1 Flag 1).Actuate the DADF Tray Size 1 Sensor with paper. The voltage changes.

Y $N$
Replace the DADF Tray Size 1 Sensor (PL 16.10).
Replace the DADF PWB (PL 16.3).

Execute Component Control [005-222]. Actuate the DADF Tray Size 2 Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J772 and P/J759. P/J772 and P/J759 are connected correctly.
Y N
Connect P/J772 and P/J759.

Check the wire between J 772 and J 759 for an open circuit or a short circuit (BSD 5.1 Flag 3/Flag 4). The wire between J 772 and J 759 is conducting without an open circuit or a short circuit.

## Y $\mathbf{N}$

Repair the open circuit or short circuit

Measure the voltage between the DADF PWB P759-6 (+) and GND (-) (BSD 5.1 Flag 4) The voltage is approx. +5 VDC .
Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P759-5 (+) and GND (-) (BSD 5.1 Flag 3). Actuate the DADF Tray Size 2 Sensor with paper. The voltage changes.
Y N
Replace the DADF Tray Size 2 Sensor (PL 16.10).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3)

## 005-198 Document Length RAP

## BSD-ON:5.4

The system detected a document with a length shorter than 115 mm in the Slow Scan Direction.

## Initial Actions

- Power Off than On


## Procedure

Check the document size. The size of the document is within the specification.
Y N
Use a paper size within the specification.
Execute Component Control [005-205]. Actuate the DADF Feed Out Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J769 and P/J758. P/J769 and P/J758 are connected correctly.
Y $N$
Connect P/J769 and P/J758.
Check the wire between J769 and J758 for an open circuit or a short circuit (BSD 5.4 Flag 13/Flag 14). The wire between J 769 and J 758 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P758-3 (+) and GND (-) (BSD 5.4 Flag 14). The voltage is approx. +5 VDC .

Y $\mathbf{N}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P758-2 (+) and GND (-) (BSD 5.4 Flag 13). Actuate the DADF Feed Out Sensor with paper. The voltage changes.
$\mathbf{Y} \quad \mathbf{N}$
Replace the DADF Feed Out Sensor (PL 16.9).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-206]. Actuate the DADF Pre Registration Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J781 and P/J761. P/J781 and P/J761 are connected correctly.
Y $N$
Connect P/J781 and P/J761.
Check the wire between J781 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 3/Flag 4). The wire between J781 and J761 is conducting without an open circuit or a short circuit.
A

Y N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-12 (+) and GND (-) (BSD 5.4 Flag 4). The voltage is approx. +5 VDC .

## Replace the DADF PWB (PL 16.3).

Measure the voltage between the DADF PWB P761-11 (+) and GND (-) (BSD 5.4 Flag 3). Actuate the DADF Pre Registration Sensor with paper. The voltage changes.
Y N
Replace the DADF Pre Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-199 Document Length RAP

## BSD-ON:5.4

The system detected a document with the following length in the Slow Scan Direction:

- Simplex mode: 672.4 mm or longer
- Duplex mode: 480.1 mm or longer


## Initial Actions

- Power Off than On


## Procedure

Check the document size. The size of the document is within the specification.
Y N
Use a paper size within the specification.
Check the Transport Roll for wear and paper powder. The Transport Roll is ok. Y N

Replace the Transport Roll.
Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path. Y N

Clear away the foreign substances and paper powder. Correct the distortion.
Execute Component Control [005-205]. Actuate the DADF Feed Out Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J769 and P/J758. P/J769 and P/J758 are connected correctly.
Y N
Connect P/J769 and P/J758.
Check the wire between J769 and J758 for an open circuit or a short circuit (BSD 5.4 Flag 13/Flag 14). The wire between J 769 and J 758 is conducting without an open circuit or a short circuit.
Y $\quad \mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P758-3 (+) and GND (-) (BSD 5.4 Flag
14). The voltage is approx. +5VDC.
$Y \quad N$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P758-2 (+) and GND (-) (BSD 5.4 Flag 13). Actuate the DADF Feed Out Sensor with paper. The voltage changes.
Y $N$
Replace the DADF Feed Out Sensor (PL 16.9).
Replace the DADF PWB (PL 16.3).

A

A
Execute Component Control[005-206]. Actuate the DADF Pre Registration Sensor with paper. The display changes.
Y N
Check the connections of $P / J 781$ and $P / J 761$. $P / J 781$ and $P / J 761$ are connected correctly.
Y N
Connect P/J781 and P/J761.
Check the wire between J781 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 3/Flag 4). The wire between J781 and J761 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-12 (+) and GND (-) (BSD 5.4 Flag 4). The voltage is approx. +5VDC.

N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-11 (+) and GND (-) (BSD 5.4 Flag 3). Actuate the DADF Pre Registration Sensor with paper. The voltage changes.
N
Replace the DADF Pre Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3)

## 005-210 DADF Download Fail

DADF Download mode detected at IISS start (Power On, Energy Save recovery included).
DADF Download failed. ROM is broken.
Power ON after replacement of ROM by half-burnt ROM in field.

## Procedure

Replace the DADF PWB (PL 16.3).

## 005-274 Original Size Sensor Fail

DADF Document Size Detect Sensor failure detected. (At Power ON or when document setting detected.)

## Procedure

To check Original Size Sensor for paper strip being stuck. Check the connections between the sensor and the DADF PWB. If OK, replace the Original Size Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

005-275 DADF RAM Failure RAP
BSD-ON:3.5
DADF RAM Fail. An error was detected in the DADF PWB RAM. (Checked when power is switched on.).

## Procedure

If switching the Machine OFF then ON does not resolve the problem, replace DADF PWB (PL 16.3).

## 005-280 DADF EEPROM RAP

BSD-ON:3.5
The DADF-EEPROM failed during the Read/Write operation.

## Initial Actions

- Power Off than On


## 005-281 DADF Tray Lift Down Failure

Bottom Sensor does not turn ON in specified time from start of DADF Tray Down.

## Procedure

To check Bottom Sensor output/Tray Motor operation/Tray Drive system (Torque Limiter)/Sensor Actuator. Check the connections between the sensor and the DADF PWB. If OK, replace the Bottom Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## Procedure

Check the connection of each DADF PWB connector. The connectors are securely connected.
Y $\mathbf{N}$
Connect the connectors.
Turn on the power again. [005-280] reoccurs.
N
End
Replace the DADF PWB (PL 16.3).

## 005-282 DADF Tray Lift Up Failure

Bottom Sensor does not turn Off in specified time from start of DADF Tray Up in Initialize operation with no document being set.

## Procedure

To check Bottom Sensor output/Tray Motor operation/Tray Drive system (Torque Limiter)/Sensor Actuator. Check the connections between the sensor and the DADF PWB. If OK, replace the Bottom Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-283 DADF Nudger Sensor RAP

BSD-ON:5.2
After the DADF Nudger Motor turns On, the DADF Nudger Sensor does not turn On.

## Initial Actions

- Power Off than On


## Procedure

Manually operate the Feed Head mechanism. The Feed Head mechanism moves smoothly. Y $\mathbf{N}$

Replace the parts that are interfering with operation.
Execute Component Control [005-225]. Cover the DADF Nudger Sensor receiver with paper. The display changes.
Y N
Check the connections of P/J788 and P/J786. P/J788 and P/J786 are connected correctly.
Y $N$
Connect P/J788 and P/J786.
Check the wire between J788 and J786 for an open circuit or a short circuit (BSD 5.2 Flag 3/Flag 4). The wire between J 788 and J 786 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P786-9 (+) and GND (-) (BSD 5.2 Flag 4). The voltage is approx. +5VDC.
Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P786-8 (+) and GND (-) (BSD 5.2 Flag 3). Cover the DADF Nudger Sensor receiver with paper. The voltage changes.
Y $N$
Replace the DADF Nudger Sensor (PL 16.5).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-090]. The DADF Nudger Motor can be heard.
Y N
Check the connections of P/J787 and P/J786. P/J787 and P/J786 are connected correctly.
Y $N$
Connect P/J787 and P/J786.
Check the wire between J787 and J786 for an open circuit or a short circuit (BSD 5.2 Flag 5). The wire between J 787 and J 786 is conducting without an open circuit or a short circuit.

Y N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB (PL 15.3P786-1 (+) and GND (-) (BSD 5.2 Flag 5). The voltage is approx. +24VDC.
Y $N$
Replace the DADF PWB (PL 16.3).
Replace the DADF Nudger Motor (PL 16.6) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3).

## 005-284 DADF APS Sensor Logic RAP

BSD-ON:5. 4
The combinations of outputs from the DADF APS 1 Sensor, DADF APS 2 Sensor and DADF APS 3 Sensor are abnormal.

## Initial Actions

- Power Off than On


## Procedure

Execute Component Control [005-218]. Actuate the DADF APS 1 Sensor with paper. The display changes.
Y $N$
Check the connections of P/J777 and P/J761. P/J777 and P/J761 are connected correctly.
Y N
Connect P/J777 and P/J761.
Check the wire between J777 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 7/Flag 8). The wire between J 777 and J 761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-6 (+) and GND (-) (BSD 5.4 Flag 8). The voltage is approx. +5VDC.
Y $N$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-5 (+) and GND (-) (BSD 5.4 Flag 7). Actuate the DADF APS 1 Sensor with paper. The voltage changes.
Y N
Replace the DADF APS 1 Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-219]. Actuate the DADF APS 2 Sensor with paper. The display changes.
Y N
Check the connections of P/J778 and P/J761. P/J778 and P/J761 are connected cor-
rectly.
Connect P/J778 and P/J761.
Check the wire between J 778 and J 761 for an open circuit or a short circuit (BSD 5.4 Flag 9/Flag 10). The wire between J 778 and J 761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.

A B
Measure the voltage between the DADF PWB P761-3 (+) and GND (-) (BSD 5.4 Flag 10). The voltage is approx. +5VDC.

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-2 (+) and GND (-) (BSD 5.4 Flag 9). Actuate the DADF APS 2 Sensor with paper. The voltage changes.

```
Y N
    Replace the DADF APS 2 Sensor (PL 16.7).
```

Replace the DADF PWB (PL 16.3).

Execute Component Control [005-220]. Actuate the DADF APS 3 Sensor with paper. The display changes.
Y $N$
Check the connections of P/J779 and P/J785. P/J779 and P/J785 are connected correctly.
Y $N$
Connect P/J779 and P/J785
Check the wire between J 779 and J785 for an open circuit or a short circuit (BSD 5.4 Flag 11/Flag 12). The wire between J779 and J785 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P785-3 (+) and GND (-) (BSD 5.4 Flag 12). The voltage is approx. +5VDC.

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P785-2 (+) and GND (-) (BSD 5.4 Flag 11) Actuate the DADF APS 3 Sensor with paper. The voltage changes.
Y N
Replace the DADF APS 3 Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-285 DADF Nudger Lift Up RAP

## BSD-ON:5.2

After the DADF Nudger Motor started reverse rotation, the DADF Nudger Sensor did not turn On within the specified time.

## Initial Actions

- Power Off than On


## Procedure

Manually operate the Feed Head mechanism. The Feed Head mechanism moves smoothly. Y N

Replace the parts that are interfering with operation
Execute Component Control [005-225]. Actuate the DADF Nudger Sensor with paper. The display changes.
Y N
Check the connections of P/J788 and P/J786. P/J788 and P/J786 are connected correctly.

Connect P/J788 and P/J786.
Check the wire between J 788 and J786 for an open circuit or a short circuit (BSD 5.2 Flag 3/Flag 4). The wire between J788 and J786 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P786-9 (+) and GND (-) (BSD 5.2 Flag 4).
The voltage is approx. +5VDC.
Y $N$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P786-8 (+) and GND (-) (BSD 5.2 Flag 3) Actuate the DADF Nudger Sensor with paper. The voltage changes.
Y $N$
Replace the DADF Nudger Sensor (PL 16.5).
Replace the DADF PWB (PL 16.3).
Execute Component Control[005-090]. The DADF Nudger Motor can be heard.
Y N
Check the connections of P/J787 and P/J786. P/J787 and P/J786 are connected correctly.
Y $N$
Connect P/J787 and P/J786.
Check the wire between J 787 and J 786 for an open circuit or a short circuit (BSD 5.2 Flag
5). The wire between J787 and J786 is conducting without an open circuit or a short circuit.

Y N
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P786-1 (+) and GND (-) (BSD 5.2 Flag 5). The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Nudger Motor (PL 16.6) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3).

## 005-286 DADF Feed Out Sensor RAP

## BSD-ON:5.4

During document transport, before the DADF Feed Out Sensor turned Off, the DADF Pre Registration Sensor turned Off.

## Initial Actions

Power Off than On

## Procedure

Execute Component Control [005-205]. Actuate the DADF Feed Out Sensor with paper. The display changes.
Y N
Check the connections of P/J769 and P/J758. P/J769 and P/J758 are connected correctly.

Connect P/J769 and P/J758.
Check the wire between J769 and J758 for an open circuit or a short circuit (BSD 5.4 Flag $13 /$ Flag 14). The wire between $J 769$ and $J 758$ is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P758-3 (+) and GND (-) (BSD 5.4 Flag 14). The voltage is approx. +5 VDC.
$Y \mathrm{~N}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P758-2 (+) and GND (-) (BSD 5.4 Flag 13).Actuate the DADF Feed Out Sensor with paper. The voltage changes.

Y N
Replace the DADF Feed Out Sensor (PL 16.9).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-206]. Actuate the DADF Pre Registration Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J781 and P/J761. P/J781 and P/J761 are connected correctly.
$\mathrm{Y} \quad \mathrm{N}$
Connect P/J781 and P/J761.
Check the wire between J781 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 3/Flag 4). The wire between J781 and J761 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.

Measure the voltage between the DADF PWB P761-12 (+) and GND (-) (BSD 5.4 Flag 4). The voltage is approx. +5 VDC .

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-11 (+) and GND (-) (BSD 5.4 Flag 3).Actuate the DADF Pre Registration Sensor with paper. The voltage changes.

Y $\mathbf{N}$
Replace the DADF Pre Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-301 DADF Top Cover Open

Detected the DADF Top Cover Opened.

## Procedure

To check the Top Cover is Latched. Check the connections between the Top Cover Interlock Switch and the DADF PWB. If OK, replace the Top Cover Interlock Switch. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-302 CVT Feeder Cover Interlock Open RAP

 BSD-ON:1.3The DADF Interlock is open.

## Initial Actions

- Power Off than On


## Procedure

Check opening/closing of the Feeder Cover. The Feeder Cover can be opened/closed.
Y N
Reinstall the Feeder Cover correctly.
Check installation of the DADF Interlock Switch. The DADF Interlock Switch is installed correctly.
Y N
Install the DADF Interlock Switch correctly.
Execute Component Control [005-212 DADF Interlock Switch]. Open and close the Feeder Cover. The display changes.
Y N
Check the connections of P/J753, F1 and F2. P/J753, F1 and F2 are connected correctly.
Y N
Connect P/J753, F1 and F2.
Check the wire between J753 and F1, and between J753 and F2 for an open circuit or a short circuit (BSD 1.3 Flag 7/Flag 8). The wires between J753 and F1, and between J753 and F2 are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Check the conductivity of the DADF Interlock Switch between J753-2 and J753-1 (BSD 1.3 Flag 7/Flag 8). The wire between $\mathrm{J} 753-2$ and $\mathrm{J} 753-1$ is connecting successfully when the DADF Interlock Switch contact is closed, and is insulated when the contact is opened.
Y N
Replace the DADF Interlock Switch (PL 16.7).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-304 CVT Platen Interlock Open RAP

 BSD-ON:6. 1The Platen Interlock is open.

## Initial Actions

- Power Off than On


## Procedure

Check opening/closing of the Platen Cover. The Platen Cover can be opened/closed.
$\mathbf{Y} \quad \mathbf{N}$
Reinstall the Platen Cover correctly.
Check the installation of the Platen Open Switch. The Platen Open Switch is installed correctly.
Y $N$
Install the Platen Open Switch correctly.
Execute Component Control [062-300 Platen Open Switch]. Open and close the Platen Cover. The display changes.
Y $\quad \mathrm{N}$
Check the connections of P/J727 and P/J722. P/J727 and P/J722 are connected correctly.
Y N
Check the wire between J727 and J722 for an open circuit or a short circuit (BSD 6.1 Flag 3/Flag 4). The wire between J727 and J722 is conducting without an open circuit or a short circuit.

Connect P/J727 and P/J722.
Y N
Repair the open circuit or short circuit.
Check the conductivity of the Platen Open Switch between J722A-10 and J722A-11 (BSD 6.1 Flag 3/Flag 4). The wire between J722A-10 and J722A-11 is connecting successfully when the Platen Open Switch contact is closed, and is insulated when the contact is opened.
Y N
Replace the Platen Open Switch (PL 13.4).
Replace the IIT/IPS PWB (PL 13.3).
Replace the IIT/IPS PWB (PL 13.3).

## 005-305 CVT Feeder Cover Interlock Open (running) RAP

 BSD-ON:1.3The system detected that the DADF Interlock was opened while the DADF was running (RUN/ SUSPEND).

## Initial Actions

- Power Off than On


## Procedure

Check opening/closing of the Feeder Cover. The Feeder Cover can be opened/closed.
Y N
Reinstall the Feeder Cover correctly.
Check installation of the DADF Interlock Switch. The DADF Interlock Switch is installed correctly.
Y N
Install the DADF Interlock Switch correctly.
Execute Component Control [005-212 DADF Interlock Switch]. Open and close the Feeder Cover. The display changes.
Y $\quad \mathrm{N}$
Check the connections of P/J753, F1 and F2. P/J753, F1 and F2 are connected correctly.

Connect P/J753, F1 and F2.
Check the wire between J753 and F1, and between J753 and F2 for an open circuit or a short circuit (BSD 1.3 Flag 7/Flag 8). The wires between J753 and F1, and between J753 and F2 are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Check the conductivity of the DADF Interlock Switch between J753-2 and J753-1 (BSD 1.3 Flag 7/Flag 8). The wire between $\mathrm{J} 753-2$ and $\mathrm{J} 753-1$ is connecting successfully when the DADF Interlock Switch contact is closed, and is insulated when the contact is opened.
Y $\mathbf{N}$
Replace the DADF Interlock Switch (PL 16.7).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-306 Tray Interlock Open while Running

Tray Interlock Open during DADF operation detected.

## Procedure

To ensure that the Tray is Closed. Check the connections between the Tray Interlock Sensor and the DADF PWB. If OK, replace the Tray Interlock Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-307 CVT Platen Interlock Open on Running RAP BSD-ON:6. 1

The Platen Interlock is open while the DADF is running (RUN/SUSPEND).

## Initial Actions

- Power Off than On


## Procedure

Check opening/closing of the Platen Cover. The Platen Cover can be opened/closed.
Y $\mathbf{N}$
Reinstall the Platen Cover correctly.
Check the installation of the Platen Open Switch. The Platen Open Switch is installed correctly.
Y N
Install the Platen Open Switch correctly.
Execute Component Control [062-300 Platen Open Switch]. Open and close the Platen Cover. The display changes.
Y $N$
Check the connections of P/J727 and P/J722. P/J727 and P/J722 are connected correctly.
Y N
Connect P/J727 and P/J722.
Check the wire between J727 and J722 for an open circuit or a short circuit (BSD 6.1 Flag 3/Flag 4). The wire between J 727 and J 722 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Check the conductivity of the Platen Open Switch between J722-A10 and J722-A11 (BSD 6.1 Flag 3/Flag 4). The wire between J722-A10 and J722-A11 is connecting successfully when the Platen Open Switch contact is closed, and is insulated when the contact is opened.
Y $N$
Replace the Platen Open Switch (PL 13.4)
Replace the IIT/IPS PWB (PL 13.3).
Replace the IIT/IPS PWB (PL 13.3).

## 005-906 CVT Feed Sensor RAP

## BsD-ON:5. 4

Paper remains on the DADF Feed Out Sensor.

## Initial Actions

- Remove the paper.
- Power Off than On


## Procedure

Execute Component Control [005-205 DADF Feed Out Sensor]. Actuate the DADF Feed Out Sensor with paper. The display changes.
Y $\quad \mathbf{N}$
Check the connections of P/J769 and P/J758. P/J769 and P/J758 are connected correctly.

Connect P/J769 and P/J758.
Check the wire between J769 and J758 for an open circuit or a short circuit (BSD 5.4 Flag 13/Flag 14). The wire between $\mathbf{J 7 6 9}$ and $\mathbf{J 7 5 8}$ is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P758-3 (+) and GND (-) (BSD 5.4 Flag 14). The voltage is approx. +5VDC.

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P758-2 (+) and GND (-) (BSD 5.4 Flag 13). Actuate the DADF Feed Out Sensor with paper. The voltage changes.
Y N
Replace the DADF Feed Out Sensor (PL 16.9).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-907 CVT Pre-Registration Sensor RAP

 BSD-ON:5. 4Paper remains on the DADF Pre Registration Sensor.

## Initial Actions

- Remove the paper.
- Power Off than On


## Procedure

Execute Component Control [005-206 DADF Pre Registration Sensor]. Actuate the DADF Pre Registration Sensor with paper. The display changes.
$Y \quad N$
Check the connections of P/J781 and P/J761. P/J781 and P/J761 are connected correctly.
Y N
Connect P/J781 and P/J761
Check the wire between J781 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 3/Flag 4). The wire between J781 and J761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-12 (+) and GND (-) (BSD 5.4 Flag 4). The voltage is approx. +5 VDC .

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-11 (+) and GND (-) (BSD 5.4 Flag 3). Actuate the DADF Pre Registration Sensor with paper. The voltage changes.
Y N
Replace the DADF Pre Registration Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-908 CVT Registration Sensor RAP

 BSD-ON:5.4Paper remains on the DADF Registration Sensor.

## Initial Actions

- Remove the paper.
- Power Off than On


## Procedure

Execute Component Control [005-110 DADF Registration Sensor]. Actuate the DADF Registration Sensor with paper. The display changes.
Y $N$
Check the connections of P/J782 and P/J761. P/J782 and P/J761 are connected correctly.
rectly.
Connect P/J782 and P/J761.
Check the wire between J782 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 1/Flag 2). The wire between $\mathbf{J 7 8 2}$ and J 761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-15 (+) and GND (-) (BSD 5.4 Flag 2). The voltage is approx. +5 VDC .

Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-14 (+) and GND (-) (BSD 5.4 Flag 1). Actuate the DADF Registration Sensor with paper. The voltage changes.
Y N Replace the DADF Registration Sensor (PL 16.7).

Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-309 Left Hand Interlock Open while Running

Left Hand Interlock Open during DADF operation detected.

## Procedure

To check the Dynamic Jam occurrence frequency and clear the problem Jam. Check the connections between the L/H Interlock Switch and the DADF PWB. If OK, replace the L/H Interlock Switch. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-900 No Belt DADF Applicable Sensor Static Jam

Interlock Open during DADF operation.

## Procedure

If the problem occurs frequently, to check Top Cover Latch. Check the connections between the Top Cover Interlock Switch and the DADF PWB. If OK, replace the Top Cover Interlock Switch. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-901 Belt DADF Doc Sensor Static Jam

Document at Doc In Sensor at Power ON detected.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on Doc In Sensor. Check the connections between the Doc In Sensor and the DADF PWB. If OK, replace the Doc In Sensor. If the problem persists, replace the DADF PWB (PL 16.3),

## 005-902 Belt DADF Regi Sensor Static Jam

Document at Regi Sensor at Power ON detected.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on Regi Sensor. Check the connections between the Regi Sensor and the DADF PWB. If OK, replace the Regi Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-903 Belt DADF Exit Sensor Static Jam

Document at Exit Sensor at Power ON detected.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on Exit Sensor. Check the connections between the Exit Sensor and the DADF PWB. If OK, replace the Exit Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-904 Belt Dup Sensor Static Jam

Document at Dup Sensor at Power ON detected.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on Dup Sensor. Check the connections between the Dup Sensor and the DADF PWB. If OK, replace the Dup Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-909 DADF Lead Sensor Static Jam

Lead Reg Sensor On detected at the timing below:

1. Power On
2. Feeder Cover Interlock Close
3. Platen Interlock Close.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on Lead Reg Sensor. Check the connections between the Lead Reg Sensor and the DADF PWB. If OK, replace the Lead Reg Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-910 DADF Out Sensor Static Jam

Out Sensor On detected at the timing below:

1. Power On
2. Feeder Cover Interlock Close
3. Platen Interlock Close.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on Out Sensor. Check the connections between the Out Sensor and the DADF PWB. If OK, replace the Out Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-911 DADF Exit 1 Sensor Static Jam

Exit1 Sensor On detected at the timing below:

1. Power On
2. Feeder Cover Interlock Close
3. Platen Interlock Close.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on Exit1 Sensor. Check the connections between the Exit1 Sensor and the DADF PWB. If OK, replace the Exit1 Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-912 DADF Exit 2 Sensor Static Jam

Exit2 Sensor On detected at the timing below:

1. Power On
2. Feeder Cover Interlock Close
3. Platen Interlock Close.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on Exit2 Sensor. Check the connections between the Exit2 Sensor and the DADF PWB. If OK, replace the Exit2 Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-913 CVT Invert Sensor RAP

## BSD-ON:5.4

Paper remains on the DADF Invert Sensor.

## Initial Actions

- Remove the paper
- Power Off than On


## Procedure

Execute Component Control [005-211 DADF Invert Sensor]. Actuate the DADF Invert Sensor with paper. The display changes.
Y $\quad \mathrm{N}$
Check the connections of P/J780 and P/J761. P/J780 and P/J761 are connected correctly.

Connect P/J780 and P/J761

Check the wire between J780 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 5/Flag 6). The wire between $\mathbf{J 7 8 0}$ and $\mathbf{J 7 6 1}$ is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-9 (+) and GND (-) (BSD 5.4 Flag 6). The voltage is approx. +5VDC.
Y N
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-8 (+) and GND (-) (BSD 5.4 Flag 5). Actuate the DADF Invert Sensor with paper. The voltage changes.
Y N
Replace the DADF Invert Sensor (PL 16.7)

Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3)

## 005-914 DADF APS1, 2, 3, Sensor Static Jam

APS1, 2, 3, Sensor On detected at the timing below:

1. Power On
2. Feeder Cover Interlock Close
3. Platen Interlock Close.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on APS1, 2, 3, Sensor. Check the connections between the APS1, 2, 3, Sensor and the DADF PWB. If OK, replace the APS1, 2,3 , Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-915 CVT APS No1 Sensor RAP

## BSD-ON:5. 4

Paper remains on the APS Sensor 1.

## Initial Actions

- Remove the paper.
- Power Off than On


## Procedure

Execute Component Control [005-218 DADF APS 1 Sensor]. Actuate the DADF APS 1 Sensor with paper. The display changes.
$Y \quad N$
Check the connections of P/J777 and P/J761. P/J777 and P/J761 are connected correctly.
$\mathbf{N}$
Connect P/J777 and P/J761
Check the wire between J777 and J761 for an open circuit or a short circuit (BSD 5.4 Flag 7/Flag 8). The wire between J777 and J761 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-6 (+) and GND (-) (BSD 5.4 Flag 8). The voltage is approx. +5 VDC .
Y $\mathbf{N}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-5 (+) and GND (-) (BSD 5.4 Flag 7). Actuate the DADF APS 1 Sensor with paper. The voltage changes.
Y N
Replace the DADF APS 1 Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-916 CVT APS No2 Sensor RAP

## BSD-ON:5.4

Paper remains on the APS Sensor 2.

## Initial Actions

- Remove the paper.
- Power Off than On


## Procedure

Execute Component Control [005-219 DADF APS 2 Sensor]]. Actuate the DADF APS 2 Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J778 and P/J761. P/J778 and P/J761 are connected correctly.
y N
Connect P/J778 and P/J761.
Check the wire between J778 and J761 for an open circuit or a short circuit (BSD 5.4 Flag $9 /$ Flag 10). The wire between J778 and J761 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P761-3 (+) and GND (-) (BSD 5.4 Flag $10)$. The voltage is approx. +5 VDC .
Y $\mathbf{N}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P761-2 (+) and GND (-) (BSD 5.4 Flag 9). Actuate the DADF APS 2 Sensor with paper. The voltage changes.
Y N
Replace the DADF APS 2 Sensor (PL 16.7)
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3).

## 005-917 CVT APS No3 Sensor RAP

## BSD-ON:5.4

Paper remains on the APS Sensor 3.

## Initial Actions

- Remove the paper.
- Power Off than On


## Procedure

Execute Component Control [005-220 DADF APS 3 Sensor]. Actuate the DADF APS 3 Sensor with paper. The display changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of P/J779 and P/J785. P/J779 and P/J785 are connected correctly.
$\mathbf{N}$
Connect P/J779 and P/J785.
Check the wire between J779 and J785 for an open circuit or a short circuit (BSD 5.4 Flag 11/Flag 12). The wire between J779 and J785 is conducting without an open circuit or a short circuit
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P785-3 (+) and GND (-) (BSD 5.4 Flag 12). The voltage is approx. +5 VDC .

Y
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P785-2 (+) and GND (-) (BSD 5.4 Flag 11). Actuate the DADF APS 3 Sensor with paper. The voltage changes.
Y N
Replace the DADF APS 3 Sensor (PL 16.7).
Replace the DADF PWB (PL 16.3).
Replace the DADF PWB (PL 16.3),

## 005-918 CVT Invert Sensor Static Jam

CVT Invert Sensor On detected at the timing below:

1. Power On
2. Feeder Cover Interlock Close
3. Platen Interlock Close.

## Procedure

If the problem occurs frequently, make sure that there is no obstacle blocking the light path on CVT Invert Sensor. Check the connections between the CVT Invert Sensor and the DADF PWB. If OK, replace the CVT Invert Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-919 DADF Tray Lift Up Failure not during Job

The following detected:
With the document being set, Level Sensor does not turn On or Bottom Snr does not turn Off in a specified time from start of Tray Lift Up.

Detected except for During Run, during Stop, or during Purge.

## Procedure

Removal of set document cancels the fault. If it occurs frequently, check the Level Sensor, Tray Motor, Tray Drive Assembly, area for binding, damage, and/or debris. Check the connections between the Level Sensor and the DADF PWB. If OK, replace the Level Sensor. If the problem persists, replace the DADF PWB (PL 16.3).

## 005-940 DADF No Original Failure

Removal of Documents detected.

## Procedure

Follow instructions on the UI Screen

# 005-941 DADF Not Enough Documents Failure 

After all originals returned, shortage of documents detected

## Procedure

Follow instructions on the UI Screen

## 005-942 Document Loading RAP

BSD-ON:5.2
Due to too many document sheets, no documents could not be fed.

## Initial Actions

Reduce the no. of sheets and repeat the operation.
Power Off than On

## Procedure

Manually operate the Feed Head mechanism. The Feed Head mechanism moves smoothly. Y N

Replace the parts that are interfering with operation.
Execute Component Control [005-225 DADF Nudger Sensor]. Actuate the DADF Nudger Sensor with paper. The display changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of P/J788 and P/J786. P/J788 and P/J786 are connected correctly.
Y N
Connect P/J788 and P/J786.
Check the wire between J 788 and J 786 for an open circuit or a short circuit (BSD 5.2 Flag 3/Flag 4). The wire between J 788 and J 786 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P786-9 (+) and GND (-) (BSD 5.2 Flag 4). The voltage is approx. +5 VDC .
$\mathbf{Y} \quad \mathbf{N}$
Replace the DADF PWB (PL 16.3).
Measure the voltage between the DADF PWB P786-8 (+) and GND (-) (BSD 5.2 Flag 3).Actuate the DADF Nudger Sensor with paper. The voltage changes.

Y N
Replace the DADF Nudger Sensor (PL 16.5).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-090]. The DADF Nudger Motor can be heard.
Y N
Check the connections of P/J787 and P/J786. P/J787 and P/J786 are connected correctly.

Connect P/J787 and P/J786.

Check the wire between J787 and J786 for an open circuit or a short circuit (BSD 5.2 Flag 5). The wire between J787 and J786 is conducting without an open circuit or a short circuit.

## $\mathbf{N}$ Repair the open circuit or short circuit.

Measure the voltage between the DADF PWB P786-1 (+) and GND (-) (BSD 5.2 Flag 5), The voltage is approx. +24VDC.
Y $\mathbf{N}$
Replace the DADF PWB (PL 16.3).
Replace the DADF Nudger Motor (PL 16.6) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3),

## 005-943 DADF Tray Lift Up RAP

## BSD-ON:5.2

During document feed, the DADF Nudger Solenoid did not turn On.

## Initial Actions

Reduce the no. of sheets and repeat the operation.
Power Off than On

## Procedure

Manually operate the Feed Head mechanism. The Feed Head mechanism moves smoothly. Y N

Replace the parts that are interfering with operation.
Execute Component Control [005-225 DADF Nudger Sensor]. Actuate the DADF Nudger Sensor with paper. The display changes.
Y $N$
Check the connections of P/J788 and P/J786. P/J788 and P/J786 are connected correctly.
Y N
Connect P/J788 and P/J786.
Check the wire between J788 and J786 for an open circuit or a short circuit (BSD 5.2 Flag 3/Flag 4). The wire between J788 and J786 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P786-9 (+) and GND (-) (BSD 5.2 Flag 4). The voltage is approx. +5 VDC .
Y N
Replace the DADF PWB (PL 15.3).
Measure the voltage between the DADF PWB P786-8 (+) and GND (-) (BSD 5.2 Flag 3).Actuate the DADF Nudger Sensor with paper. The voltage changes.

Y N
Replace the DADF Nudger Sensor (PL 16.5).
Replace the DADF PWB (PL 16.3).
Execute Component Control [005-090 DADF Nudger Motor]. The DADF Nudger Motor can be heard.
Y $N$
Check the connections of P/J787 and P/J786. P/J787 and P/J786 are connected correctly.
Y $N$
Connect P/J787 and P/J786.

A B
Check the wire between J 787 and J 786 for an open circuit or a short circuit (BSD 5.2 Flag
5). The wire between J 787 and J 786 is conducting without an open circuit or a short circuit.
$\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the DADF PWB P786-1 (+) and GND (-) (BSD 5.2 Flag 5) The voltage is approx. +24VDC.
Y N
Replace the DADF PWB (PL 16.3).
Replace the DADF Nudger Motor (PL 16.6) If the problem persists, replace the DADF PWB (PL 16.3).

Replace the DADF PWB (PL 16.3)

## 010-311 Fuser Rear Thermistor Disconnected RAP

## BSD-ON:10.2

- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a spe cific temperature within the specified time.


## Initial Actions

- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)

Check for paper in the Fuser. The Heat roll has no paper wrapped round it.
Y N
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y N
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is $\mathbf{1 0 0}$ ohms or lower.
Y $\mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is $\mathbf{1 0 0}$ ohms or lower.
Y $\mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.

Y N
Replace the Fuser Unit (PL 7.1)

## 010-313 Control (Center) Thermistor RAP

 BSD-ON:10.2The Control (Center) Thermistor has an open circuit.

## Initial Actions

- Power Off/On


## Procedure

Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y N
Install the Fuser Unit securely.
Check the resistance of the Center Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is 3 k ohms or higher.

Y N
Replace the Fuser Unit (PL 7.1).
Check the wire between J422 and P615 for an open circuit or a short circuit (BSD 10.2 Flag 3/ Flag 2). The wire between J422 and P615 conducts as expected.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-314 Rear Thermistor RAP

BSD-ON:10.1
The Rear Thermistor has an open circuit.

## Initial Actions

- Power Off/On


## Procedure

Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y N
Install the Fuser Unit securely.
Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is 3 k ohms or higher.
Y $N$
Replace the Fuser Unit (PL 7.1).
Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3/ Flag 2). The wire between J410 and J615 conducts as expected.
Y N
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-318 Hot-Sagging Recovery RAP

## BSD-ON:4.1/10.2

The Rear Thermistor detected that the machine does not recover from Hot-Sagging in time.

## Initial Actions

- Power Off/On


## Procedure

Check for paper in the Fuser. The Heat Roll has no paper wrapped round it.
Y N
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y N
Install the Fuser Unit securely.
Close the LH Cover and the Front Cover.
Execute Component Control [042-001 Main Motor ON]. The Main Motor can be heard.
Y N
Go to the OF 3 (MAIN DRIVE ASSY RAP).
Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.
Y N
Replace the Fuser Unit (PL 7.1).
Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3/ Flag 2). The wire between J422 and J615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-319 Fuser Center Thermistor Differential Amp RAP BSD-ON:10.2

- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.


## Initial Actions

- Check the voltage supplies to the machine and to and from the LVPS
- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)
Check for paper in the Fuser. The Heat Roll has no paper wrapped round it.
Y N
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y $\quad \mathrm{N}$
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is 100 ohms or lower.
Y $\mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is $\mathbf{1 0 0}$ ohms or lower.
Y $\quad \mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.

Y $N$
Replace the Fuser Unit (PL 7.1)
Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.
Y $N$

```
Replace the Fuser Unit (PL 7.1)
```

Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3 Flag 2). The wire between $\mathbf{J} 422$ and $\mathbf{J} 615$ conducts with less than a few ohms.
Y $\quad \mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J5 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 1). The wire between J5 and J615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Check the wire between J409 and J513 for an open circuit or a short circuit (BSD 10.2 Flag 4) The wire between J422 and J615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-320 Heat Roll Over Temperature RAP <br> BSD-ON:10.2

- The Control (Center) Thermistor detected a temperature higher than the specified value.
- The Rear Thermistor detected a temperature higher than the specified value.


## Initial Actions

Power Off/On

## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)

Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 3/Flag 2). The resistance is 3k Ohms or higher.

Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Rear Thermistor between P615-11 and P615-12 (BSD 10.2 Flag 3/ Flag 2). The resistance is 3 k ohms or higher.
$\mathbf{Y} \quad \mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the wire between J422 and J615 for a short circuit (BSD 10.2 Flag 3/Flag 2). The wire between J422 and J615 conducts with less than a few ohms.

## Y N

Repair the open circuit or short circuit.
Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3Flag 2). The wire between J 409 and J 513 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-327 Fuser On Time RAP

## BSD-ON:10.2

- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.


## Initial Actions

- $\quad$ Check the voltage supplies to the machine and to and from the LVPS
- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)

Check for paper in the Fuser. The Heat Roll has no paper wrapped round it.
Y N
Remove the paper
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y N
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is $\mathbf{1 0 0}$ ohms or lower.
Y $N$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is $\mathbf{1 0 0}$ ohms or lower.
Y $N$
Replace the Fuser Unit (PL 7.1)
Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is 3 k ohms or higher.

Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.

## $\boldsymbol{Y} \quad \mathbf{N}$

Replace the Fuser Unit (PL 7.1).
Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3/ Flag 2). The wire between J422 and J615 conducts with less than a few ohms.

## Y N

Repair the open circuit or short circuit.
Check the wire between J5 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 1). The wire between J5 and J615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Check the wire between J 409 and J 513 for an open circuit or a short circuit (BSD 10.2 Flag 4). The wire between J422 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-328 Fuser Warm-up Time RAP

## BSD-ON:10.2 and 1.1

- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a spe cific temperature within the specified time.


## Initial Actions

- Check Fuse F002 on the Power Unit (PL 11.1) for an open circuit
- Check the voltage supplies to the machine and to and from the LVPS
- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)

Check for paper in the Fuser. The Heat Roll has no paper wrapped round it.
Y N
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y N
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is $\mathbf{1 0 0}$ ohms or lower. Y $\quad \mathrm{N}$

Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is $\mathbf{1 0 0}$ ohms or lower.
Y $\quad \mathbf{N}$
Replace the Fuser Unit (PL 7.1).

## 010-330 Fuser Motor Failure RAP

## BSD-ON:4.1B

The Fuser Motor is not rotating at the specified speed.

## Initial Actions

- Power OFF/ON
- Reload the Xero/Developer Cartridge (PL 4.1) and the Fuser Unit (PL 7.1).


## Procedure

Close the LH Cover and the Front Cover.
Execute Component Control [010-001 Fuser Motor ON]. The Fuser Motor can be heard.
$Y \mathrm{~N}$
Go to the OF 4 (Fuser Drive Assy RAP).
Check the installation of the Fuser Unit (PL 1.1). The Fuser Drive Assembly is installed correctly.
Y N
Install the Main Drive Assembly correctly.
Check the wire between P/J412 and P/J226 for an open circuit or a short circuit (BSD 4.1A) The wires are conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Manually rotate the Fuser Motor rotor. It rotates smoothly.
Y $N$
Check for foreign substances that are interfering with operation or installation failure. Foreign substances or installation failure are found.
$Y \quad \mathrm{~N}$
Replace the Fuser Unit (PL 7.1).
Remove the foreign substances that are interfering with operation and correct the installation failure.

Replace the Fuser Unit (PL 7.1) If the problem persists, replace the MCU PWB (PL 11.1).

## 010-331 Fuser Rear Thermistor Over Temp RAP

## BSD-ON:10.2

- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.


## Initial Actions

- Check the voltage supplies to the machine and to and from the LVPS
- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)
Check for paper in the Fuser. The heat Roll has no paper wrapped round it.
Y N
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y N
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is $\mathbf{1 0 0}$ ohms or lower. Y $\mathbf{N}$

Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is $\mathbf{1 0 0}$ ohms or lower.
$\mathbf{Y} \quad \mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is 3 k ohms or higher.

N
Replace the Fuser Unit (PL 7.1)
Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.
Y $N$

```
Replace the Fuser Unit (PL 7.1).
```

Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3/ Flag 2). The wire between J422 and J615 conducts with less than a few ohms.
$\mathbf{Y} \quad \mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J5 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 1). The wire between J5 and J615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Check the wire between J409 and J513 for an open circuit or a short circuit (BSD 10.2 Flag 4). The wire between J 422 and J 615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-332 Fuser Center Thermistor Disconnected RAP BSD-ON:10.2

- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.


## Initial Actions

- Check the voltage supplies to the machine and to and from the LVPS
- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)
Check for paper in the Fuser. The Heat Roll has no paper wrapped round it.
Y N
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y $\quad \mathbf{N}$
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y $\mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is 100 ohms or lower. $\mathbf{Y} \quad \mathbf{N}$

Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is $\mathbf{1 0 0}$ ohms or lower.
Y $\quad \mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.

```
N
Replace the Fuser Unit (PL 7.1).
```

Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.
$Y \quad \mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3/ Flag 2). The wire between J422 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J5 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 1). The wire between J5 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J409 and J513 for an open circuit or a short circuit (BSD 10.2 Flag 4). The wire between J422 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-333 Fuser Center Thermistor Overtemp RAP BSD-ON:10.2

- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.


## Initial Actions

- Check the voltage supplies to the machine and to and from the LVPS
- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)
Check for paper in the Fuser. The Heat Roll has no paper wrapped round it.
Y $N$
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y $N$
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is $\mathbf{1 0 0}$ ohms or lower. Y $\mathbf{N}$

Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is 100 ohms or lower.
$\mathbf{Y} \quad \mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is 3 k ohms or higher.

```
N
Replace the Fuser Unit (PL 7.1).
```

Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.
$Y \quad \mathbf{N}$

```
Replace the Fuser Unit (PL 7.1).
```

Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3/ Flag 2). The wire between J422 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J 5 and J 615 for an open circuit or a short circuit (BSD 10.2 Flag 1). The wire between J5 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J409 and J513 for an open circuit or a short circuit (BSD 10.2 Flag 4). The wire between J422 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-334 Fuser Center Thermistor Broken RAP

## BSD-ON:10.2

- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.


## Initial Actions

- Check the voltage supplies to the machine and to and from the LVPS
- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)
Check for paper in the Fuser. The Heat Roll has no paper wrapped round it.
Y N
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y $\quad \mathbf{N}$
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is 100 ohms or lower. Y $\mathbf{N}$

Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is 100 ohms or lower.
$\mathbf{Y} \quad \mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is 3 k ohms or higher.
$\boldsymbol{Y}$
Replace the Fuser Unit (PL 7.1)
Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.
Y $\quad N$

```
Replace the Fuser Unit (PL 7.1).
```

Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3/ Flag 2). The wire between J422 and J615 conducts with less than a few ohms.
$\mathbf{Y} \quad \mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J5 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 1). The wire between J5 and J615 conducts with less than a few ohms.
Y $N$
Repair the open circuit or short circuit.
Check the wire between J409 and J513 for an open circuit or a short circuit (BSD 10.2 Flag 4). The wire between J 422 and J 615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-335 Fuser Center Thermistor Out of Range RAP

 BSD-ON:10.2- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.


## Initial Actions

- Check the voltage supplies to the machine and to and from the LVPS
- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)
Check for paper in the Fuser. The Heat Roll has no paper wrapped round it.
Y $\mathbf{N}$
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y $\quad \mathbf{N}$
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y $\mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is $\mathbf{1 0 0}$ ohms or lower. $\mathbf{Y} \quad \mathbf{N}$

Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is $\mathbf{1 0 0}$ ohms or lower.
Y $\quad \mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.

```
N
Replace the Fuser Unit (PL 7.1).
```

Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.
$Y \quad \mathbf{N}$

```
Replace the Fuser Unit (PL 7.1).
```

Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3/ Flag 2). The wire between J422 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J 5 and J 615 for an open circuit or a short circuit (BSD 10.2 Flag 1). The wire between J5 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J 409 and J 513 for an open circuit or a short circuit (BSD 10.2 Flag 4). The wire between J422 and J615 conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-336 Sub Lamp Disconnection Failure RAP BSD-ON:10.2

- After the Main Lamp turned On during warm up, the Control Thermistor did not detect READY temperature within the specified time.
- After the Main Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during standby, the Control Thermistor did not detect a specific temperature within the specified time.
- After the empty rotation started, the Control Thermistor did not detect the empty rotation finishing temperature within the specified time.
- After the Main Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.
- After the Sub Lamp turned On during printing, the Control Thermistor did not detect a specific temperature within the specified time.


## Initial Actions

- Check the voltage supplies to the machine and to and from the LVPS
- Check the Indoor Temperature


## Procedure

NOTE: Ensure that NVM location 744-004 is set to zero (0). If the problem continues, replace the Fuser Unit (PL 7.1)
Check for paper in the Fuser. The Heat Roll has no paper wrapped round it.
Y N
Remove the paper.
Check the installation of the Fuser Unit. The Fuser Unit is securely installed.
Y $N$
Install the Fuser Unit securely.
Remove the Fuser Unit. Check the conductivity of the contact points of the Thermostat. The contact points are connected.
Y N
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Sub Lamp between P615-6 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Sub Lamp is 100 ohms or lower.
Y $\mathbf{N}$
Replace the Fuser Unit (PL 7.1).
Check the resistance of the Main Lamp between P615-3 and P615-2 for an open circuit or a short circuit (BSD 10.2 Flag 1). The resistance of the Main Lamp is $\mathbf{1 0 0}$ ohms or lower. $\mathbf{Y} \quad \mathbf{N}$

Replace the Fuser Unit (PL 7.1).
Check the resistance of the Control (Center) Thermistor between P615-5 and P615-9 (BSD 10.2 Flag 2). The resistance is 3 k ohms or higher.

Y $N$
Replace the Fuser Unit (PL 7.1)
Check the resistance of the Rear Thermistor between P615-12 and P615-11 (BSD 10.2 Flag 3/ Flag 2). The resistance is $\mathbf{3 k}$ ohms or higher.
$Y \quad N$
Replace the Fuser Unit (PL 7.1).
Check the wire between J422 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 3 Flag 2). The wire between J422 and J615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Check the wire between J5 and J615 for an open circuit or a short circuit (BSD 10.2 Flag 1) The wire between J5 and J615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Check the wire between J409 and J513 for an open circuit or a short circuit (BSD 10.2 Flag 4) The wire between J422 and J615 conducts with less than a few ohms.
Y N
Repair the open circuit or short circuit.
Replace the Fuser Unit (PL 7.1). If the problem persists, replace the Power Unit (PL 11.1). If the problem persists, replace the MCU PWB (PL 11.1).

## 010-398 Fuser Lock RAP

## BSD-ON:10.3

The Fuser Fan failed.

## Initial Actions

- Power Off/On


## Procedure

Turn on the power.
Visually check the rotation of the Fuser Fan. The Fuser Fan is rotating.
Y N
Measure the voltage between the MCU PWB J423-1 (+) and J423-4 (-) (BSD 10.3 Flag 1). The voltage is approx. +24VDC.
$\mathbf{Y} \quad \mathbf{N}$
Replace the MCU PWB (PL 11.1).
Check the wires between MCU PWB and the Fuser Fan for an open or a short circuit (BSD 10.3 Flag 1/Flag 3). The wires between MCU PWB and the Fuser Fan conducts with less than a few ohms.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Fuser Fan (PL 11.1).
Measure the voltage between the MCU PWB J423-3 (+) and GND (-) (BSD 10.3 Flag 4). The voltage is approx. OVDC.
Y $N$
Check the wire between J423-3 and the Fuser Fan for an open circuit or a short circuit (BSD 10.3 Flag 4). The wire conducts with less than a few ohms.
$\mathbf{Y} \quad \mathbf{N}$
Repair the open circuit or short circuit.
Replace the Fuser Fan (PL 11.1).
Replace the MCU PWB (PL 11.1).

## 010-420 Fuser Near end of life RAP BSD-ON:10.3

The Fuser is near end of life.

## Initial Actions

- Power Off/On


## Procedure

Turn on the power.
Visually check the rotation of the Fuser Fan. The Fuser Fan is rotating.
Y N
Measure the voltage between the MCU PWB J423-1 (+) and J423-4 (-) (BSD 10.3 Flag 1). The voltage is approx. +24VDC.
$Y \mathrm{~N}$
Replace the MCU PWB (PL 11.1).
Check the wires between MCU PWB and the Fuser Fan for an open or a short circuit (BSD 10.3 Flag 1/Flag 3). The wires between MCU PWB and the Fuser Fan conducts with less than a few ohms.

```
N
Repair the open circuit or short circuit.
Replace the Fuser Fan (PL 11.1).
```

Measure the voltage between the MCU PWB J423-3 (+) and GND (-) (BSD 10.3 Flag 4). The voltage is approx. OVDC.
Y N
Check the wire between J423-3 and the Fuser Fan for an open circuit or a short circuit (BSD 10.3 Flag 4). The wire conducts with less than a few ohms. $\mathbf{Y} \quad \mathbf{N}$

Repair the open circuit or short circuit.
Replace the Fuser Fan (PL 11.1).

Replace the MCU PWB (PL 11.1).

## 010-421 Fuser end of life RAP

BSD-ON:10.3
The Fuser is near end of life.

## Initial Actions

- Power Off/On
- Clear away foreign substances and dust accumulated at the exhaust.


## Procedure

Turn on the power.
Visually check the rotation of the Fuser Fan. The Fuser Fan is rotating.
$\mathbf{Y} \quad \mathbf{N}$
Measure the voltage between the MCU PWB J423-1 (+) and J423-4 (-) (BSD 10.3 Flag
1). The voltage is approx. +24VDC.

Y $\mathbf{N}$
Replace the MCU PWB (PL 11.1).
Check the wires between MCU PWB and the Fuser Fan for an open or a short circuit (BSD 10.3 Flag 1/Flag 3). The wires between MCU PWB and the Fuser Fan conducts with less than a few ohms.
Y $N$
Repair the open circuit or short circuit.
Replace the Fuser Fan (PL 11.1).
Measure the voltage between the MCU PWB J423-3 (+) and GND (-) (BSD 10.3 Flag 4). The voltage is approx. OVDC.
Y $\mathbf{N}$
Check the wire between J423-3 and the Fuser Fan for an open circuit or a short circuit (BSD 10.3 Flag 4). The wire conducts with less than a few ohms.
Y $\quad \mathbf{N}$
Repair the open circuit or short circuit.

Replace the Fuser Fan (PL 11.1).
Replace the MCU PWB (PL 11.1).

## 012-111 Finisher H-Transport Entrance Sensor Off Jam

## RAP

## BSD-ON:12.2

After the H -Transport Entrance Sensor turned On, the H-Transport Entrance Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On


## Procedure

Check the Transport Roll for wear and paper powder. The Transport Roll is ok.
Y $\mathbf{N}$
Replace the Transport Roll.
Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y N
Clear away the foreign substances and paper powder. Correct the distortion.
Execute Component Control [012-190 H-Transport Entrance Sensor]. Actuate the H-Transport Entrance Sensor with paper. The display changes.
V
Check the connections of P/J8380 and P/J8390. P/J8380 and P/J8390 are connected correctly.

## Connect P/J8380 and P/J8390

Check the wire between J8380 and J390 for an open circuit or a short circuit (BSD 12.2 Flag 5/Flag 6). The wire between J8380 and J390 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8390-12 (+) and GND (-) (BSD 12.2 Flag 6). The voltage is approx. +5 VDC .
Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8390-13 (+) and GND (-) (BSD 12.2 Flag 5).Actuate the H -Transport Entrance Sensor with paper. The voltage changes. $Y \quad N$

Replace the H -Transport Entrance Sensor (PL 17.3).
Replace the Finisher PWB (PL 17.12).
Power OFF.
Open the H-Transport Top Cover.
Cheat the H -Transport Interlock Sensor.
Power ON. The H-Transport Belt rotates.

Y N
Check the connections of P/J8379 and P/J8390. P/J8379 and P/J8390 are connected correctly.
Y N
Connect P/J8379 and P/J8390.
Check the wire between J8379 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 7). The wire between J8379 and J8390 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the resistance of the H -Transport Motor between J8379-2/5 (COM) and each point of J8379-1/3/4/6 (BSD 12.2 Flag 7). The resistance is approx. 200hm.
Y N
Replace the H -Transport Motor (PL 17.3).
Measure the voltage between the Finisher PWB P8390-9 (+) and GND (-), and between P8390-10 (+) and GND (-) (BSD 12.2 Flag 7). The voltage is approx. +24VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Replace the H -Transport Motor (PL 17.3). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-112 Finisher H-Transport Entrance Sensor On Jam

## RAP

## BSD-ON:12.2

After the Engine Fuser Exit Sensor turned On, the H-Transport Entrance Sensor did not turn On within the specified time.

## Initial Actions

- Power Off/On


## Procedure

Check the Transport Roll for wear and paper powder. The Transport Roll is ok.
Y $\mathbf{N}$
Replace the Transport Roll.
Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y N
Clear away the foreign substances and paper powder. Correct the distortion.
Execute Component Control [012-190 H-Transport Entrance Sensor]. Actuate the H-Transport Entrance Sensor with paper. The display changes.
Y $N$
Check the connections of P/J8380 and P/J8390. P/J8380 and P/J8390 are connected correctly.
Y $N$
Connect P/J8380 and P/J8390.
Check the wire between J8380 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 5/Flag 6). The wire between J 8380 and J 390 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8390-12 (+) and GND (-) (BSD 12.2 Flag 6). The voltage is approx. +5 VDC .
$Y^{\mathrm{N}}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8390-13 (+) and GND (-) (BSD 12.2 Flag 5).
Actuate the H -Transport Entrance Sensor with paper. The voltage changes.
Y N
Replace the H -Transport Entrance Sensor (PL 17.3).
Replace the Finisher PWB (PL 17.12).

## Power ON. The H-Transport Belt rotates.

Y $N$
Check the connections of P/J8379 and P/J8390. P/J8379 and P/J8390 are connected correctly.
Y N
Connect P/J8379 and P/J8390.
Check the wire between J8379 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 7). The wire between J 8379 and J 8390 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the H -Transport Motor between J8379-2/5 (COM) and each point of J8379-1/3/4/6 (BSD 12.2 Flag 7). The resistance is approx. 200hm.
Y $\mathbf{N}$
Replace the H -Transport Motor (PL 17.3).
Measure the voltage between the Finisher PWB P8390-9 (+) and GND ( - ), and between P8390-10 (+) and GND (-) (BSD 12.2 Flag 7). The voltage is approx. +24VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Replace the H -Transport Motor (PL 17.3). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

Power OFF.
Open the H-Transport Top Cover.
Cheat the H-Transport Interlock Sensor.

## 012-121 H-Transport Exit Sensor Off Jam RAP

## BSD-ON:12.2

After the H-Transport Exit Sensor turned On, the H-Transport Exit Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On


## Procedure

Check the Transport Roll for wear and paper powder. The Transport Roll is ok.
Y N
Replace the Transport Roll.
Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y N
Clear away the foreign substances and paper powder. Correct the distortion.
Execute Component Control [012-191 H-Transport Exit Sensor]. Actuate the H-Transport Exit Sensor with paper. The display changes.
Y $\quad \mathbf{N}$
Check the connections of $P / J 8381$ and $P / J 8390$. $P / J 8381$ and $P / J 8390$ are connected correctly.
Y N
Connect P/J8381 and P/J8390.
Check the wire between J8381 and J390 for an open circuit or a short circuit (BSD 12.2 Flag 3/Flag 4). The wire between J8381 and J390 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8390-6 (+) and GND (-) (BSD 12.2 Flag 4). The voltage is approx. +5VDC.

Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8390-14 (+) and GND (-) (BSD 12.2 Flag 3).
Actuate the H-Transport Exit Sensor with paper. The voltage changes.
$\mathbf{Y} \quad \mathrm{N}$
Replace the H-Transport Exit Sensor (PL 17.3).
Replace the Finisher PWB (PL 17.12).
Power OFF.
Open the H-Transport Top Cover.
Cheat the H-Transport Interlock Sensor.
Power ON. The H-Transport Belt rotates.

Y N
Check the connections of $P / J 8379$ and $P / J 8390$. $P / J 8379$ and $P / J 8390$ are connected correctly.
Y $\mathbf{N}$
Connect P/J8379 and P/J8390
Check the wire between J8379 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 7). The wire between J8379 and J8390 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the H-Transport Motor between J8379-2/5 (COM) and each point of J8379-1/3/4/6 (BSD 12.2 Flag 7). The resistance is approx. 200hm.
$\mathbf{Y} \quad \mathbf{N}$
Replace the H-Transport Motor (PL 17.3).
Measure the voltage between the Finisher PWB P8390-9 (+) and GND (-), and between P8390-10 (+) and GND (-) (BSD 12.2 Flag 7). The voltage is approx. +24VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Replace the H -Transport Motor (PL 17.3). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-126 H-Transport Entrance Sensor OFF Jam B RAP BSD-ON:12.2

After the H -Transport Entrance Sensor turned On, the H-Transport Entrance Sensor did no turn Off within the specified time.

## Initial Actions

- Power Off/On


## Procedure

Check the Transport Roll for wear and paper powder. The Transport Roll is ok.
Y N
Replace the Transport Roll.
Check for foreign substances, distortion and paper powder in the paper transport path. No foreign substances, distortion or paper powder are found in the paper transport path.
Y $N$
Clear away the foreign substances and paper powder. Correct the distortion.
Execute Component Control [012-190 H-Transport Entrance Sensor]. Actuate the H-Transport Entrance Sensor with paper. The display changes.
Y $N$
Check the connections of $P / J 8380$ and $P / J 8390$. $P / J 8380$ and $P / J 8390$ are con nected correctly.
Y $N$
Connect P/J8380 and P/J8390.

Check the wire between J8380 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 5/Flag 6). The wire between J8380 and J8390 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8390-12 (+) and GND (-) (BSD 12.2 Flag 6). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12)
Measure the voltage between the Finisher PWB P8390-13 (+) and GND (-) (BSD 12.2 Flag 5).Actuate the H -Transport Entrance Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the H -Transport Entrance Sensor (PL 17.3).
Replace the Finisher PWB (PL 17.12).

Y N
Check the connections of P/J8379 and P/J8390. P/J8379 and P/J8390 are connected correctly.
Y N
Connect P/J8379 and P/J8390
Check the wire between J8379 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 7). The wire between J8379 and J8390 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the resistance of the H -Transport Motor between J8379-2/5 (COM) and each point of J8379-1/3/4/6 (BSD 12.2 Flag 7). The resistance is approx. 200hm.
Y N
Replace the H -Transport Motor (PL 17.3).
Measure the voltage between the Finisher PWB P8390-9 (+) and GND (-), and between P8390-10 (+) and GND (-) (BSD 12.2 Flag 7). The voltage is approx. +24VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Replace the H -Transport Motor (PL 17.3). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

Power OFF,
Open the H-Transport Top Cover.
Cheat the H-Transport Interlock Sensor.
Power ON. The H-Transport Belt rotates.

## 012-151 Compile Entrance Sensor Off Jam RAP BSD-ON:12.3

After the Compile Entrance Sensor turned On, the Compile Entrance Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On


## Procedure

Check the Transport Roll for wear and paper powder. The Transport Roll is ok.
Y N
Replace the Transport Roll.
Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y N
Clear away the foreign substances and paper powder. Correct the distortion.
Execute Component Control [012-150 Compile Entrance Sensor]. Actuate the Compile Entrance Sensor with paper. The display changes.
Y $N$
Check the connections of P/J8814, P/J8825 and P/J8850. P/J8814, P/J8825 and P/ J8850 are connected correctly.
Y N
Connect P/J8814, P/J8825 and P/J8850.
Check the wire between J8814 and J8850 for an open circuit or a short circuit (BSD 12.3 Flag 1/Flag 2). The wire between J8814 and J8850 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850-B9 (+) and GND (-) (BSD 12.3 Flag 2). The voltage is approx. +5VDC.
$\mathbf{Y} \quad \mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850-B8 (+) and GND (-) (BSD 12.3 Flag 1).Actuate the Compile Entrance Sensor with paper. The voltage changes.
Y N
Replace the Compile Entrance Sensor (PL 17.11).
Replace the Finisher PWB (PL 17.12).
Execute Component Control [012-080 Finisher Drive Motor ON]. The Finisher Drive Motor
(PL 16.6can be heard
Y $\quad \mathrm{N}$
Check the connections of P/J8846 and P/J8800. P/J8846 and P/J8800 are connected correctly.

```
Connect P/J8846 and P/J8800.
```

Check the wire between J8846 and J8800 for an open circuit or a short circuit (BSD 12.3 Flag 3). The wire between J8846 and J8800 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the resistance of the Finisher Drive Motor between J8800-1/6 (COM) and each point of J8800-2/3/4/5 (BSD 12.3 Flag 3). The resistance is approx. 200hm.
Y N
Replace the Finisher Drive Motor (PL 17.6).
Measure the voltage between each point of the Finisher PWB P8846-5/7/9/11 (+) and GND (-) (BSD 12.3 Flag 3). The voltage is approx. +24VDC.
Y $\mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Replace the Finisher Drive Motor (PL 17.6). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12)

## 012-152 Compile Entrance Sensor On Jam RAP

 BSD-ON:12.3After the H-Transport Exit Sensor turned On, the Compile Entrance Sensor did not turn On within the specified time.

## Initial Actions

- Power Off/On


## Procedure

Check the Transport Roll for wear and paper powder. The Transport Roll is ok.
Y N
Replace the Transport Roll.
Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y N
Clear away the foreign substances and paper powder. Correct the distortion.
Execute Component Control [012-150 Compile Entrance Sensor]. Actuate the Compile Entrance Sensor with paper. The display changes.
Y $N$
Check the connections of P/J8814, P/J8825 and P/J8850. P/J8814, P/J8825 and P/ J8850 are connected correctly.
Y N
Connect P/J8814, P/J8825 and P/J8850.
Check the wire between J8814 and J8850 for an open circuit or a short circuit (BSD 12.3 Flag 1/Flag 2). The wire between J8814 and J8850 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850-B9 (+) and GND (-) (BSD 12.3 Flag 2). The voltage is approx. +5VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850-B8 (+) and GND (-) (BSD 12.3 Flag 1).
Actuate the Compile Entrance Sensor with paper. The voltage changes.
Y $N$
Replace the Compile Entrance Sensor (PL 17.11).
Replace the Finisher PWB (PL 17.12).
Execute Component Control [012-080 Finisher Drive Motor ON]. The Finisher Drive Motor can be heard.

Y N
Check the connections of P/J8846 and P/J8800. P/J8846 and P/J8800 are connected correctly.
Y N
Connect P/J8846 and P/J8800.
Check the wire between J8846 and J8800 for an open circuit or a short circuit (BSD 12.3 Flag 3). The wire between J8846 and J8800 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the Finisher Drive Motor between J8800-1/6 (COM) and each point of J8800-2/3/4/5 (BSD 12.3 Flag 3). The resistance is approx. 200hm.
$\mathbf{Y} \quad \mathbf{N}$
Replace the Finisher Drive Motor (PL 17.6).
Measure the voltage between each point of the Finisher PWB P8846-5/7/9/11 (+) and GND (-) (BSD 12.3 Flag 3). The voltage is approx. +24VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Replace the Finisher Drive Motor (PL 17.6). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-161 Finisher Set Eject Jam RAP

## BSD-ON:12.4/12.7

After the Eject Motor turned On, the Compile Paper Sensor (PL 16.9did not turn Off within the specified time.

## Initial Actions

- Power Off/On


## Procedure

Execute Component Control [012-151 Compile Paper Sensor]. Actuate the Compile Paper Sensor with paper. The display changes.

## N

Check the connections of P/J8806 and P/J8848. P/J8806 and P/J8848 are connected correctly.
Y N

Connect P/J8806 and P/J8848.
Check the wire between J8806 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 3/Flag 4). The wire between J8806 and J8848 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A6 (+) and GND (-) (BSD 12.4 Flag 4). The voltage is approx. +5VDC.
$Y \mathrm{~N}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8848-A5 (+) and GND (-) (BSD 12.4 Flag 3). Actuate the Compile Paper Sensor with paper. The voltage changes.
Y N
Replace the Compile Paper Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-081 Eject Motor FORWARD ON] and Component Control [012-082 Eject Motor REVERSE ON]. The Eject Motor starts up.
$Y^{\mathrm{N}}$
Check the connections of P/J8801 and P/J8846. P/J8801 and P/J8846 are connected correctly.
Y N
Connect P/J8801 and P/J8846.
Check the wire between J8801 and J8846 for an open circuit or a short circuit (BSD 12.7 Flag 5). The wire between J8801 and J8846 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.

A B
Measure the resistance of the Eject Motor between J8801-2/5 (COM) and each point of J8801-1/3/4/6 (BSD 12.7 Flag 5). The resistance is approx. 2Ohm.
Y N
Replace the Eject Motor (PL 17.7).
Measure the voltage between the Finisher PWB P8846-6 (+) and GND ( - ), and between P8846-12 (+) and GND (-) (BSD 12.7 Flag 5). The voltage is approx. +24VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Replace the Eject Motor (PL 17.7). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-162 H-Tra EXIT Sensor On Jam RAP

## BSD-ON:12.2

After the H-Transport Entrance Sensor turned On, the H-Transport Exit Sensor did not turn On within the specified time.

## Initial Actions

- Power Off/On


## Procedure

Check the Transport Roll for wear and paper powder. The Transport Roll is ok.
Y N
Replace the Transport Roll.
Check for foreign substances, distortion and paper powder in the paper transport path. No foreign substances, distortion or paper powder are found in the paper transport path.
Y $N$
Clear away the foreign substances and paper powder. Correct the distortion.
Execute Component Control [012-191 H-Transport Exit Sensor]. Actuate the H-Transport Exit Sensor with paper. The display changes.
Y $\quad \mathbf{N}$
Check the connections of $P / J 8381$ and $P / J 8390$. $P / J 8381$ and $P / J 8390$ are connected correctly.
Y N
Connect P/J8381 and P/J8390.
Check the wire between J8381 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 3/Flag 4). The wire between J8381 and J8390 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8390-6 (+) and GND (-) (BSD 12.2 Flag 4). The voltage is approx. +5VDC.

Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8390-14 (+) and GND (-) (BSD 12.2 Flag 3).Actuate the H -Transport Exit Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the H-Transport Exit Sensor (PL 17.3)
Replace the Finisher PWB (PL 17.12).

Y N
Check the connections of $\mathrm{P} / \mathrm{J} 8379$ and $\mathrm{P} / \mathrm{J} 8390$. $\mathrm{P} / \mathrm{J} 8379$ and $\mathrm{P} / \mathrm{J} 8390$ are connected correctly.
Y $\mathbf{N}$
Connect P/J8379 and P/J8390
Check the wire between J8379 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 7). The wire between J8379 and J8390 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the H-Transport Motor between J8379-2/5 (COM) and each point of J8379-1/3/4/6 (BSD 12.2 Flag 7). The resistance is approx. 200hm.
$\mathbf{Y} \quad \mathbf{N}$
Replace the H-Transport Motor (PL 17.3).
Measure the voltage between the Finisher PWB P8390-9 (+) and GND (-), and between P8390-10 (+) and GND (-) (BSD 12.2 Flag 7). The voltage is approx. +24VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Replace the H-Transport Motor (PL 17.3). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

Power OFF.
Open the H-Transport Top Cover.
Cheat the H-Transport Interlock Sensor.
Power ON. The H-Transport Belt rotates.

## 012-211 Stacker Tray RAP

## BSD-ON:12.8

After Stacker Tray started descending, the Stack Height Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On
- Remove obstructions under the tray.
- Check the operation of the Stack Height Sensor actuator.


## Procedure

Execute Component Control [012-267 Stack Height Sensor]. Actuate Stack Height Sensor with paper. The display changes.
Y $\quad \mathbf{N}$
Check the connections of P/J8850, P/J8825 and P/J8815. P/J8850, P/J8825 and P/ J8815 are connected correctly.
Y N
Connect P/J8850, P/J8825 and P/J8815.
Check the wire between J 8850 and J 8815 for an open circuit or a short circuit (BSD 12.8 Flag 1/Flag 2). The wire between J8850 and J8815 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850-B6 (+) and GND (-) (BSD 12.8 Flag 2). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850-B5 (+) and GND (-) (BSD 12.8 Flag 1).
Actuate the Stack Height Sensor with paper. The voltage changes.
Y N
Replace the Stack Height Sensor (PL 17.5).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-060 Stacker Motor up ON] and Component Control [012-061 Stacker Motor down ON]. The Stacker Motor starts up.
Y $\quad N$
Check the connections of $P / J 8847$ and $P / J 8827$. $P / J 8847$ and $P / J 8827$ are connected correctly.

N
Connect P/J8847 and P/J8827.
Check the wire between J8847 and P8827 for an open circuit or a short circuit (BSD 12.8 Flag 5). The wire between J8847 and P8827 is conducting without an open circuit or a short circuit.

## 012-212 Stacker Tray Upper Limit RAP

## BSD-ON:12.8/12.9

After the Stacker Tray started descending, the Stacker Upper Limit Sensor remained ON.

## Initial Actions

- Power Off/On
- Remove obstructions under the tray.


## Procedure

Execute Component Control [012-260 Stacker Upper Limit Sensor]. Actuate the Stacker Upper Limit Sensor with paper. The display changes.
$Y^{\mathbf{N}}$
Check the connections of P/J8850 and P/J8810. P/J8850 and P/J8810 are connected correctly.
Y $\quad \mathbf{N}$
Connect P/J8850 and P/J8810.
Check the wire between J8850 and J8810 for an open circuit or a short circuit (BSD 12.9 Flag 2/Flag 2). The wire between J8850 and J8810 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850-A12 (+) and GND (-) (BSD 12.9 Flag 2). The voltage is approx. +5 VDC .
Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850-A11 (+) and GND (-) (BSD 12.9 Flag 2).
Actuate the Stacker Upper Limit Sensor with paper. The voltage changes.
$\mathbf{N}$
Replace the Stacker Upper Limit Sensor (PL 17.10).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-060 Stacker Motor up ON] and Component Control [012-061 Stacker Motor down ON]. The Stacker Motor starts up.
Y N
Check the connections of P/J8847 and P/J8827. P/J8847 and P/J8827 are connected correctly.
Y N
Connect P/J8847 and P/J8827.
Check the wire between J8847 and J8827 for an open circuit or a short circuit (BSD 12.8 Flag 5). The wire between J8847 and J8827 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
A B-

## 012-221 Front Tamper Home Sensor On RAP BSD-ON:12.4

After the Front Tamper started moving to the home position, the Front Tamper Home Sensor did not turn On within 800 ms .

## Initial Actions

- Power Off/On
- Remove foreign substances in the Compiler Tray.


## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-220 Front Tamper Home Sensor]. Actuate the Front Tamper Home Sensor with paper. The display changes. The display changes.
Y $N$
Check the connections of P/J8807 and P/J8848. P/J8807 and P/J8848 are connected correctly.
Y $N$
Connect P/J8807 and P/J8848.
Check the wire between J8807 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 5/Flag 6). The wire between J8807 and J8848 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A3 (+) and GND (-) (BSD 12.4 Flag 6). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8848-A2 (+) and GND (-) (BSD 12.4 Flag 5).
Actuate the Front Tamper Home Sensor with paper. The voltage changes.
Y N
Replace the Front Tamper Home Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-020 Front Tamper Motor FRONT ON] and Component Control [012-023 Front Tamper Motor REAR ON]. The Front Tamper Motor starts up. Y $N$

Check the connections of $P / J 8823$ and $P / J 8848$. $P / J 8823$ and $P / J 8848$ are connected correctly.

Connect P/J8823 and P/J8848.

## 012-223 Front Tamper Home Sensor Off RAP BSD-ON:12.4

After the Front Tamper started moving away from the home position, the Front Tamper Home Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On
- Remove foreign substances in the Compiler Tray.


## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-220 Front Tamper Home Sensor]. Actuate the Front Tamper Home Sensor with paper. The display changes.
Y $N$
Check the connections of P/J8807 and P/J8848. P/J8807 and P/J8848 are connected correctly.
Y N
Connect P/J8807 and P/J8848.
Check the wire between J8807 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 5/Flag 6). The wire between J8807 and J8848 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A3 (+) and GND (-) (BSD 12.4 Flag 6). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8848-A2 (+) and GND (-) (BSD 12.4 Flag 5).
Actuate the Front Tamper Home Sensor with paper. The voltage changes.
Y N
Replace the Front Tamper Home Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-020 Front Tamper Motor FRONT ON] and Component Control [012-023 Front Tamper Motor REAR ON]. The Front Tamper Motor starts up. Y N

Check the connections of P/J8823 and P/J8848. P/J8823 and P/J8848 are connected correctly.
Y N
Connect P/J8823 and P/J8848.

## 012-224 Rear Tamper Home Sensor Off RAP BSD-ON:12.4

After the Rear Tamper started moving away from the home position, the Rear Tamper Home Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On
- Remove foreign substances in the Compiler Tray.


## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-221 Rear Tamper Home Sensor]. Actuate the Rear Tamper Home Sensor with paper. The display changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of P/J8805 and P/J8848. P/J8805 and P/J8848 are connected correctly.
Y N
Connect P/J8805 and P/J8848.
Check the wire between J8805 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 1/Flag 2). The wire between J8805 and J8848 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A9 (+) and GND (-) (BSD 12.4 Flag 1). The voltage is approx. +5 VDC .
Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8848-A8 (+) and GND (-) (BSD 12.4 Flag 1).
Actuate the Rear Tamper Home Sensor with paper. The voltage changes.
Y N
Replace the Rear Tamper Home Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-026 Rear Tamper Motor FRONT ON] and Component Control [012-029 Rear Tamper Motor REAR ON]. The Rear Tamper Motor starts up. Y N

Check the connections of $P / J 8824$ and $P / J 8848$. $P / J 8824$ and $P / J 8848$ are connected correctly.

Connect P/J8824 and P/J8848.

## 012-260 Eject Clamp Home Sensor ON RAP

## BSD-ON:12.7

After the Eject Clamp started ascending, the Eject Clamp Home Sensor did not turn On within 500 ms .

## Initial Actions

- Power Off/On
- Remove foreign substances in the Eject Clamp mechanism.


## Procedure

Manually operate the Eject Clamp mechanism. The Eject Clamp mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-250 Eject Clamp Home Sensor]. Actuate the Eject Clamp Home Sensor with paper. The display changes.
Y N
Check the connections of $P / J 8803$ and $P / J 8849$. $P / J 8803$ and $P / J 8849$ are connected correctly.

## Y $N$

Connect P/J8803 and P/J8849.
Check the wire between J8803 and J8849 for an open circuit or a short circuit (BSD 12.7 Flag 3/Flag 4). The wire between J8803 and J8849 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8849-6 (+) and GND (-) (BSD 12.7 Flag 4). The voltage is approx. +5VDC.

Y $\quad \mathrm{N}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8849-5 (+) and GND (-) (BSD 12.7 Flag 3).Actuate the Eject Clamp Home Sensor with paper. The voltage changes.

Y $\quad \mathrm{N}$
Replace the Eject Clamp Home Sensor (PL 17.7).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-081 Eject Motor FORWARD ON] and Component Control [012-082 Eject Motor REVERSE ON]. The Eject Motor starts up.
$\mathbf{N}$
Check the connections of $P / J 8801$ and $P / J 8846$. $P / J 8801$ and $P / J 8846$ are connected correctly.
Y $\mathbf{N}$
Connect P/J8801 and P/J8846.

## 012-263 Rear Tamper Home Sensor ON RAP BSD-ON:12.4

After the Rear Tamper started moving to the home position, the Rear Tamper Home Sensor did not turn On within 800 ms

## Initial Actions

- Power Off/On
- Remove foreign substances in the Compiler Tray.


## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-221 Rear Tamper Home Sensor]. Actuate the Rear Tamper Home Sensor with paper. The display changes.
Y N
Check the connections of P/J8805 and P/J8848. P/J8805 and P/J8848 are connected correctly.
Y $N$
Connect P/J8805 and P/J8848.
Check the wire between J8805 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 1/Flag 2). The wire between J8805 and J8848 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A9 (+) and GND (-) (BSD 12.4 Flag 2). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12)
Measure the voltage between the Finisher PWB P8848-A8 (+) and GND (-) (BSD 12.4 Flag 1).Actuate the Rear Tamper Home Sensor with paper. The voltage changes.

```
\[
Y \quad N
\]
Replace the Rear Tamper Home Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
```

Alternately execute Component Control [012-026 Rear Tamper Motor FRONT ON] and Component Control [012-029 Rear Tamper Motor REAR ON]. The Rear Tamper Motor starts up. Y N Check the connections of P/J8824 and P/J8848. P/J8824 and P/J8848 are connected correctly.

## Y $N$

Connect P/J8824 and P/J8848.

A B
Check the wire between J8824 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 8). The wire between J8824 and J8848 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit
Measure the resistance of the Rear Tamper Motor between J8824-2/5 (COM) and each point of J8824-1/3/4/6 (BSD 12.4). The resistance is approx. 7500hm.
Y $\quad \mathbf{N}$
Replace the Rear Tamper Motor (PL 17.9).
Measure the voltage between the Finisher PWB P8848-2 (+) and GND (-), and between P8848-5 (+) and GND (-) (BSD 12.4). The voltage is approx. +24VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Replace the Rear Tamper Motor (PL 17.9). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12)

## 012-282 Eject Clamp Home Sensor Off RAP

## BSD-ON:12.7

After the Eject Clamp started descending, the Eject Clamp Home Sensor did not turn Off within 200 ms .

## Initial Actions

- Power Off/On
- Remove foreign substances in the Eject Clamp mechanism.


## Procedure

Manually operate the Eject Clamp mechanism. The Eject Clamp mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-250 Eject Clamp Home Sensor]. Actuate the Eject Clamp Home Sensor with paper. The display changes.
Y N
Check the connections of $P / J 8803$ and $P / J 8849$. $P / J 8803$ and $P / J 8849$ are connected correctly.
Y $N$

## Connect P/J8803 and P/J8849.

Check the wire between J8803 and J8849 for an open circuit or a short circuit (BSD 12.7 Flag 3/Flag 4). The wire between J8803 and J8849 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8849-6 (+) and GND (-) (BSD 12.7 Flag 4). The voltage is approx. +5VDC.

Y $\quad \mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8849-5 (+) and GND (-) (BSD 12.7 Flag 3).

Actuate the Eject Clamp Home Sensor with paper. The voltage changes.
Y $N$
Replace the Eject Clamp Home Sensor (PL 17.7).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-081 Eject Motor FORWARD ON] and Component Control [012-082 Eject Motor REVERSE ON]. The Eject Motor starts up.
Y $\quad \mathbf{N}$
Check the connections of P/J8801 and P/J8846. P/J8801 and P/J8846 are con nected correctly.
Y N
| $\mathbf{N}$ Connect P/J8801 and P/J8846.
A B

## 012-283 Set Clamp Home Sensor On RAP BSD-ON:12.7

After the Set Clamp started operation, the Set Clamp Home Sensor did not turn On within 200ms

## Initial Actions

- Power Off/On
- Remove foreign substances in the Eject Clamp mechanism.


## Procedure

Manually operate the Eject Clamp mechanism. The Eject Clamp mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-251 Set Clamp Home Sensor]. Actuate the Set Clamp Home Sensor with paper. The display changes.
Y N
Check the connections of P/J8802 and P/J8849. P/J8802 and P/J8849 are connected correctly.
Y N
Connect P/J8802 and P/J8849.
Check the wire between J8802 and J8849 for an open circuit or a short circuit (BSD 12.7 Flag 1/Flag 2). The wire between J8802 and J8849 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8849-9 (+) and GND (-) (BSD 12.7 Flag 2). The voltage is approx. +5VDC.
$\boldsymbol{V}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8849-8 (+) and GND (-) (BSD 12.7 Flag 1).

Actuate the Set Clamp Home Sensor with paper. The voltage changes.
$\mathbf{N}$
Replace the Set Clamp Home Sensor (PL 17.7).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-081 Eject Motor FORWARD ON] and Component Control [012-082 Eject Motor REVERSE ON]. The Eject Motor starts up
 nected correctly.
Y N
Connect P/J8801 and P/J8846.

## 012-284 Set Clamp Home Sensor Off RAP

## BSD-ON:12.7

After the Set Clamp completed operation, the Set Clamp Home Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On
- Remove foreign substances in the Eject Clamp mechanism.


## Procedure

Manually operate the Eject Clamp mechanism. The Eject Clamp mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-251 Set Clamp Home Sensor]. Actuate the Set Clamp Home Sensor with paper. The display changes.
Y N
Check the connections of P/J8802 and P/J8849. P/J8802 and P/J8849 are connected correctly.
Y $N$
Connect P/J8802 and P/J8849.
Check the wire between J8802 and J8849 for an open circuit or a short circuit (BSD 12.7 Flag 1/Flag 2). The wire between J8802 and J8849 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8849-9 (+) and GND (-) (BSD 12.7 Flag 2). The voltage is approx. +5VDC.
$Y \quad N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8849-8 (+) and GND (-) (BSD 12.7 Flag 1).

Actuate the Set Clamp Home Sensor with paper. The voltage changes.
Y $N$
Replace the Set Clamp Home Sensor (PL 17.7).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-081 Eject Motor FORWARD ON] and Component Control [012-082 Eject Motor REVERSE ON]. The Eject Motor starts up.
Y $\quad \mathbf{N}$
Check the connections of $P / J 8801$ and $P / J 8846$. $P / J 8801$ and $P / J 8846$ are connected correctly.
Y N

- Connect P/J8801 and P/J8846.

A B-

## 012-285 Finisher Error

There is a processing error in the Finisher PWB.

## Procedure

Switch off the power. Disconnect and reconnect the P/Js on the Finisher PWB. Switch on the power.

If the problem persists, replace the Finisher PWB (PL 17.12).

## 012-291 Stapler RAP

## BSD-ON:12.6

- After the Stapler Motor turned On (Forward rotation), the system did not detect that the Staple Head Home Sensor switched from Off to On within the specified time.
- After the Stapler Motor turned On (Reverse rotation), the Staple Head Home Sensor did not turn On within the specified time.


## Initial Actions

- Power Off/On


## Procedure

Alternately execute Component Control [012-046 Staple Motor FORWARD ON] and Component Control [012-047 Staple Motor REVERSE ON]. The Stapler Motor can be heard.
Y N
Check the connections of P/J8819 and P/J8847. P/J8819 and P/J8847 are connected correctly.
Y $N$
Connect P/J8819 and P/J8847.
Check the wire between J8819 and J8847 for an open circuit or a short circuit (BSD 12.6 Flag 1). The wire between J8819 and J8847 is conducting without an open circuit or a short circuit.
$\mathbf{Y} \quad \mathbf{N}$
Repair the open circuit or short circuit.
Replace the Staple Assembly (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

Execute Component Control [012-244 Staple Head Home Sensor].
Alternately execute Component Control [012-046 Staple Motor FORWARD ON] and Component Control [012-047 Staple Motor REVERSE ON]. The display changes.
Y N
Check the connections of P/J8818 and P/J8852. P/J8818 and P/J8852 are connected correctly.
Y N
Connect P/J8818 and P/J8852.
Check the wire between J8818 and J8852 for an open circuit or a short circuit (BSD 12.6 Flag 2/Flag 3). The wire between J8818 and J8852 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8852-1 (+) and P8852-5 (-) (BSD 12.6 Flag 2). The voltage is approx. +5 VDC .
$Y \quad N$
Replace the Finisher PWB (PL 17.12).
Replace the Staple Assembly (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

## 012-293 Staple Front Corner Sensor On RAP BSD-ON:12.5

- After the Stapler started moving to the front corner, the Staple Front Corner Sensor did not turn On within 2sec.
- After the Stapler started moving away from the front corner, the Staple Front Corner Sensor remained On.


## Initial Actions

- Power Off/On
- Check the Stapler movement mechanism.


## Procedure

Execute Component Control [012-240 Staple Front Corner Sensor]. Actuate the Staple Front Corner Sensor with paper. The display changes.
Y N
Check the connections of P/J8813 and P/J8850. P/J8813 and P/J8850 are connected correctly.
Y $\mathbf{N}$
Connect P/J8813 and P/J8850.
Check the wire between J8813 and J8850 for an open circuit or a short circuit (BSD 12.5 Flag 3/Flag 4). The wire between J8813 and J8850 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850-A3 (+) and GND (-) (BSD 12.5 Flag 4). The voltage is approx. +5 VDC
Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850-A2 (+) and GND (-) (BSD 12.5 Flag 3).
Actuate the Staple Front Corner Sensor with paper. The voltage changes.
Y N
Replace the Staple Front Corner Sensor (PL 17.8).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-040 Staple Move Motor FRONT ON] and Component Control [012-043 Staple Move Motor REAR ON]. The Stapler Move Motor starts up.
Y N
Check the connections of P/J8820 and P/J8847. P/J8820 and P/J8847 are connected correctly.

N
Connect P/J8820 and P/J8847.

A B
Check the wire between J8820 and J8847 for an open circuit or a short circuit (BSD 12.5 Flag 5). The wire between J8820 and J8847 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the Staple Move Motor between J8820-2 (COM) and each point of J8820-1/3, and between J8820-5 (COM) and J8820-4/6 (BSD 12.5 Flag 5). The resistance is approx. 100 hm .

## Y $N$

Replace the Staple Move Motor (PL 17.8).
Measure the voltage between the Finisher PWB P8847-3 (+) and GND (-), and between P8847-4 (+) and GND (-) (BSD 12.5 Flag 5). The voltage is approx. +24VDC.
Y $\mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Replace the Staple Move Motor (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-294 Staple Front Corner Sensor Off RAP

## BSD-ON:12.5

- After the Stapler completed moving away from the front corner, the Staple Front Corner Sensor did not turn Off.
- After the Stapler started moving away from the front corner, the Staple Front Corner Sensor did not turn Off within 200ms.


## Initial Actions

## - Power Off/On

- Check the Stapler movement mechanism.


## Procedure

Execute Component Control [012-240 Staple Front Corner Sensor]. Actuate the Staple Front Corner Sensor with paper. The display changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of $\mathrm{P} / \mathrm{J} 8813$ and $\mathrm{P} / \mathrm{J} 8850$. $\mathrm{P} / \mathrm{J} 8813$ and $\mathrm{P} / \mathrm{J} 8850$ are connected correctly.
Y $\mathbf{N}$
Connect P/J8813 and P/J8850.
Check the wire between J8813 and J8850 for an open circuit or a short circuit (BSD 12.5 Flag 3/Flag 4). The wire between J8813 and J8850 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850-A3 (+) and GND (-) (BSD 12.5 Flag 4). The voltage is approx. +5VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850-A2 (+) and GND (-) (BSD 12.5 Flag 3).
Actuate the Staple Front Corner Sensor with paper. The voltage changes.
$\mathbf{Y} \quad \mathbf{N}$
Replace the Staple Front Corner Sensor (PL 17.8).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-040 Staple Move Motor FRONT ON] and Component Control [012-043 Staple Move Motor REAR ON]. The Stapler Move Motor starts up.
Y N
Check the connections of P/J8820 and P/J8847. P/J8820 and P/J8847 are connected correctly.
Y $N$
Connect P/J8820 and P/J8847.

A B
Check the wire between J8820 and J8847 for an open circuit or a short circuit (BSD 12.5 Flag 5). The wire between J8820 and J8847 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the Staple Move Motor between J8820-2 (COM) and each point of J8820-1/3, and between J8820-5 (COM) and J8820-4/6 (BSD 12.5 Flag 5). The resistance is approx. 100 hm .

## Y $N$

Replace the Staple Move Motor (PL 17.8).
Measure the voltage between the Finisher PWB P8847-3 (+) and GND (-), and between P8847-4 (+) and GND (-) (BSD 12.5 Flag 5). The voltage is approx. +24VDC.
Y $\mathbf{N}$
Replace the Staple Move Motor (PL 17.8).
Replace the Staple Move Motor (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-295 Staple Move Sensor On RAP

## BSD-ON:12.5

- After the Stapler started moving to the Staple Position and the Staple Move Sensor turned Off, the Staple Move Sensor did not turn On within 2sec.
- After the Stapler completed moving to the Staple Position, the Staple Move Sensor did not turn On.


## Initial Actions

- Power Off/On
- Check the Stapler movement mechanism.


## Procedure

Execute Component Control [012-241 Staple Move Sensor]. Actuate the Staple Move Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8817 and P/J8852. P/J8817 and P/J8852 are connected correctly.
Y N
Connect P/J8817 and P/J8852.
Check the wire between J8817 and J8852 for an open circuit or a short circuit (BSD 12.5 Flag 1/Flag 2). The wire between J8817 and J8852 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8852-8 (+) and GND (-) (BSD 12.5 Flag 2). The voltage is approx. +5 VDC .

Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8852-7 (+) and GND (-) (BSD 12.5 Flag 1).

Actuate the Staple Move Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the Staple Move Sensor (PL 17.8).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-040 Staple Move Motor FRONT ON] and Component Control [012-043 Staple Move Motor REAR ON]. The Stapler Move Motor starts up.
Y $\mathbf{N}$
Check the connections of P/J8820 and P/J8847. P/J8820 and P/J8847 are connected correctly.
Y N
Connect P/J8820 and P/J8847.

A B
Check the wire between J8820 and J8847 for an open circuit or a short circuit (BSD 12.5 Flag 5). The wire between J8820 and J8847 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the Staple Move Motor between J8820-2 (COM) and each point of J8820-1/3, and between J8820-5 (COM) and J8820-4/6 (BSD 12.5 Flag 5). The resistance is approx. 100 hm .

## Y $N$

Replace the Staple Move Motor (PL 17.8).
Measure the voltage between the Finisher PWB P8847-3 (+) and GND (-), and between P8847-4 (+) and GND (-) (BSD 12.5 Flag 5). The voltage is approx. +24VDC.
Y $\mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Replace the Staple Move Motor (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-296 Staple Move Sensor Off RAP

## BSD-ON:12.5

- After the Stapler started moving to the Staple Position and the Staple Move Sensor turned Off, the Staple Move Sensor did not turn Off within 500 ms .
- After the Staple Position had been fixed, the Staple Move Sensor turned Off.
- After the Staple Move Sensor turned On when paper passed through the Dual Staple 1 Position while moving to the Rear Staple Position, the Staple Move Sensor did not turn Off within 500 ms .


## Initial Actions

- Power Off/On
- Check the Stapler movement mechanism.


## Procedure

Execute Component Control [012-240 Staple Move Sensor]. Actuate the Staple Move Sensor with paper. The display changes.
Y N
Check the connections of $\mathrm{P} / \mathrm{J} 8817$ and $\mathrm{P} / \mathrm{J} 8852$. $\mathrm{P} / \mathrm{J} 8817$ and $\mathrm{P} / \mathrm{J} 8852$ are connected correctly.
Y N
Connect P/J8817 and P/J8852.
Check the wire between J8817 and J8852 for an open circuit or a short circuit (BSD 12.5 Flag 1/Flag 2). The wire between J8817 and J8852 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8852-8 (+) and GND (-) (BSD 12.5 Flag 2). The voltage is approx. +5 VDC .
$Y \mathrm{~N}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8852-7 (+) and GND (-) (BSD 12.5 Flag 1).Actuate the Staple Move Sensor with paper. The voltage changes.

Y N
Replace the Staple Move Sensor (PL 17.8).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-040 Staple Move Motor FRONT ON] and Component Control [012-043 Staple Move Motor REAR ON]. The Stapler Move Motor (PL 16.8starts up.

Y N
Check the connections of P/J8820 and P/J8847. P/J8820 and P/J8847 are connected correctly.
Y N
Connect P/J8820 and P/J8847.

A B
Check the wire between J8820 and J8847 for an open circuit or a short circuit (BSD 12.5 Flag 5). The wire between J8820 and J8847 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the Staple Move Motor between J8820-2 (COM) and each point of J8820-1/3, and between J8820-5 (COM) and J8820-4/6 (BSD 12.5 Flag 5). The resistance is approx. 100 hm .

## Y $N$

Replace the Staple Move Motor (PL 17.8).
Measure the voltage between the Finisher PWB P8847-3 (+) and GND (-), and between P8847-4 (+) and GND (-) (BSD 12.5Flag 5). The voltage is approx. +24VDC.

## Y $\quad \mathbf{N}$

Replace the Finisher PWB (PL 17.12).
Replace the Staple Move Motor (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-301 Finisher Top Cover Open RAP

BSD-ON:12.1
The Finisher Top Cover is open.

## Initial Actions

- Power Off/On
- Opening/closing of the Finisher Top Cover.


## Procedure

Check opening/closing of the Finisher Top Cover. The Finisher Top Cover can be opened/ closed.

## Y $\quad \mathrm{N}$

Reinstall the Finisher Top Cover correctly.
Check the installation of the Top Cover Interlock Switch. The Top Cover Interlock Switch is installed correctly.
Y $\quad \mathbf{N}$
Install the Top Cover Interlock Switch correctly.
Execute Component Control [012-301 Top Cover Interlock Switch]. Open/close the Finisher Top Cover. The display changes.
Y N
Check the connections of $P / J 8808$ and $P / J 8851$. $P / J 8808$ and $P / J 8851$ are connected correctly.
Y $N$
Connect P/J8808 and P/J8851.
Check the wire between J8808 and J8851 for an open circuit or a short circuit (BSD 12.1 Flag 3/Flag 4). The wire between J8808 and J8851 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Check the conductivity of the Top Cover Interlock Switch between J8808-3 and J8808-4 (BSD 12.1 Flag 3/Flag 4). The wire between J8808-3 and J8808-4 is connecting successfully when the Top Cover Interlock Switch contact is closed, and is insulated when the contact is opened.
Y $N$
Replace the Top Cover Interlock Switch (PL 17.12).
Replace the Finisher PWB (PL 17.12)
Replace the Finisher PWB (PL 17.12). If the problem persists, replace the MCU PWB (PL 11.1).

## 012-302 Finisher Front Cover Open RAP BSD-ON:12.1

The Finisher Front Cover is open.

## Initial Actions

- Power Off/On
- Opening/closing of the Finisher Front Cover.


## Procedure

Check opening/closing of the Finisher Front Cover. The Finisher Front Cover can be opened/closed.
Y $N$
Reinstall the Finisher Front Cover correctly.
Check the installation of the Front Door Interlock Switch. The Front Door Interlock Switch is installed correctly.
Y N
Install the Front Door Interlock Switch correctly.
Execute Component Control [012-302 Front Door Interlock Switch]. Open/close the Finisher Front Cover. The display changes.
Y N
Check the connections of P/J8809 and P/J8851. P/J8809 and P/J8851 are connected correctly.
Y $N$
Connect P/J8809 and P/J8851.
Check the wire between J8809 and J8851 for an open circuit or a short circuit (BSD 12.1 Flag 1/Flag 2). The wire between J8809 and J8851 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Check the conductivity of the Front Door Interlock Switch between J8809-3 and J8809-4 (BSD 12.1 Flag 1/Flag 2). The wire between J8809-3 and J8809-4 is connecting successfully when the Front Door Interlock Switch contact is closed, and is insulated when the contact is opened.
Y $N$
Replace the Front Door Interlock Switch (PL 17.12).
Replace the Finisher PWB (PL 17.12).
Replace the Finisher PWB (PL 17.12). If the problem persists, replace the MCU PWB (PL 11.1).

## 012-303 Finisher H-Transport Cover Open RAP BSD-ON:12.2

The Finisher H-Transport Cover is open.

## Initial Actions

- Power Off/On
- Opening/closing of the Finisher H-Transport Cover.


## Procedure

Check opening/closing of the Finisher H-Transport Cover. The Finisher H-Transport Cover can be opened/closed.
Y $\quad \mathrm{N}$
Reinstall the Finisher H-Transport Cover correctly.
Check the installation of the H-Transport Interlock Sensor. The H-Transport Interlock Sensor is installed correctly.

## Y N

Install the H-Transport Interlock Sensor correctly.
Execute Component Control [012-303 H-Transport Interlock Sensor]. Open and close the Finisher H -Transport Cover. The display changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of P/J8382 and P/J8390. P/J8382 and P/J8390 are connected correctly.
Y $N$
Connect P/J8382 and P/J8390.
Check the wire between J8382 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 1/Flag 2). The wire between J8382 and J8390 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8390-7 (+) and GND (-) (BSD 12.2 Flag 2). The voltage is approx. +5VDC.

Y $\mathbf{N}$
Replace the H-Transport Interlock Sensor (PL 17.12).
Measure the voltage between the Finisher PWB P8390-8 (+) and GND (-) (BSD 12.2 Flag
1). Open and close the Finisher H -Transport Cover. The voltage changes.

Y $\quad \mathbf{N}$
Replace the H-Transport Interlock Sensor (PL 17.3).
Replace the Finisher PWB (PL 17.12).
Replace the Finisher PWB (PL 17.12). If the problem persists, replace the MCU PWB (PL 11.1).

## 012-310 Front Tamper Home Sensor On Fail RAP BSD-ON:12.4

After the Front Tamper started moving to the home position, the Front Tamper Home Sensor did not turn On within 800 ms .

## Initial Actions

- Power Off/On
- Remove foreign substances in the Compiler Tray.


## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-220 Front Tamper Home Sensor]. Actuate the Front Tamper Home Sensor with paper. The display changes. The display changes.
Y N
Check the connections of P/J8807 and P/J8848. P/J8807 and P/J8848 are connected correctly.
Y $N$
Connect P/J8807 and P/J8848.
Check the wire between J8807 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 5/Flag 6). The wire between J8807 and J8848 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A3 (+) and GND (-) (BSD 12.4 Flag 6). The voltage is approx. +5VDC.
Y N
Replace the Finisher PWB (PL 17.12)
Measure the voltage between the Finisher PWB P8848-A2 (+) and GND (-) (BSD 12.4 Flag 5).
Actuate the Front Tamper Home Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the Front Tamper Home Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-020 Front Tamper Motor FRONT ON] and Component Control [012-023 Front Tamper Motor REAR ON]. The Front Tamper Motor starts up. Y $N$

Check the connections of $P / J 8823$ and $P / J 8848$. $P / J 8823$ and $P / J 8848$ are connected correctly.

Connect P/J8823 and P/J8848.

## 012-311 Front Tamper Home Sensor Off Fail RAP BSD-ON:12.4

After the Front Tamper started moving away from the home position, the Front Tamper Home Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On
- Remove foreign substances in the Compiler Tray.


## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-220 Front Tamper Home Sensor]. Actuate the Front Tamper Home Sensor with paper. The display changes.
Y $N$
Check the connections of P/J8807 and P/J8848. P/J8807 and P/J8848 are connected correctly.
Y N
Connect P/J8807 and P/J8848.
Check the wire between J8807 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 5/Flag 6). The wire between J8807 and J8848 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A3 (+) and GND (-) (BSD 12.4 Flag 6). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8848-A2 (+) and GND (-) (BSD 12.4 Flag 5).
Actuate the Front Tamper Home Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the Front Tamper Home Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-020 Front Tamper Motor FRONT ON] and Component Control [012-023 Front Tamper Motor REAR ON]. The Front Tamper Motor starts up. Y N

Check the connections of P/J8823 and P/J8848. P/J8823 and P/J8848 are connected correctly.
Y N
Connect P/J8823 and P/J8848.

## 012-312 Rear Tamper Home Sensor ON Fail RAP BsD-ON:12.4

After the Rear Tamper started moving away from the home position, the Rear Tamper Home Sensor did not turn ON within 800 ms

## Initial Actions

- Power Off/On
- Remove foreign substances in the Compiler Tray.


## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-221 Rear Tamper Home Sensor]. Actuate the Rear Tamper Home Sensor with paper. The display changes.
Y $N$
Check the connections of P/J8805 and P/J8848. P/J8805 and P/J8848 are connected correctly.
Y $N$
Connect P/J8805 and P/J8848.
Check the wire between J8805 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 1/Flag 2). The wire between J8805 and J8848 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A9 (+) and GND (-) (BSD 12.4 Flag 1). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8848-A8 (+) and GND (-) (BSD 12.4 Flag 1).
Actuate the Rear Tamper Home Sensor with paper. The voltage changes.
Y N
Replace the Rear Tamper Home Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-026 Rear Tamper Motor FRONT ON] and Component Control [012-029 Rear Tamper Motor REAR ON]. The Rear Tamper Motor starts up. Y $N$

Check the connections of $P / J 8824$ and $P / J 8848$. $P / J 8824$ and $P / J 8848$ are connected correctly.
Y N
Connect P/J8824 and P/J8848.

## 012-313 Rear Tamper Home Sensor Off Fail RAP BSD-ON:12.4

After the Rear Tamper started moving away from the home position, the Rear Tamper Home Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On
- Remove foreign substances in the Compiler Tray.


## Procedure

Manually operate the Tamper mechanism. The Tamper mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-221 Rear Tamper Home Sensor]. Actuate the Rear Tamper Home Sensor with paper. The display changes.
Y $\quad N$
Check the connections of $P / J 8805$ and $P / J 8848$. $P / J 8805$ and $P / J 8848$ are connected correctly.
Y N
Connect P/J8805 and P/J8848.
Check the wire between J8805 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 1/Flag 2). The wire between J8805 and J8848 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A9 (+) and GND (-) (BSD 12.4 Flag 1). The voltage is approx. +5 VDC .
Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8848-A8 (+) and GND (-) (BSD 12.4 Flag 1).
Actuate the Rear Tamper Home Sensor with paper. The voltage changes.
Y N
Replace the Rear Tamper Home Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-026 Rear Tamper Motor FRONT ON] and Component Control [012-029 Rear Tamper Motor REAR ON]. The Rear Tamper Motor starts up. Y N

Check the connections of $P / J 8824$ and $P / J 8848$. $P / J 8824$ and $P / J 8848$ are connected correctly.

Connect P/J8824 and P/J8848.

## 012-314 Eject Clamp Home Sensor On Failure RAP BSD-ON:12.7

The Eject Clamp Home Sensor did not turn On within a specific time.

## Initial Actions

- Power Off/On
- Remove foreign substances in the Eject Clamp mechanism.


## Procedure

Manually operate the Eject Clamp mechanism. The Eject Clamp mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-250 Eject Clamp Home Sensor]. Actuate the Eject Clamp Home Sensor. The display changes.

## Y $N$

Check the connections of J8803 and P/J8849. J8803 and P/J8849 are connected correctly.
Y N
Connect P/J8802 and P/J8849
Check the wire between J8803 and J8849 for an open circuit or a short circuit (BSD 12.7 Flag 3/Flag 4). The wire between J8803 and J8849 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8849-6 (+) and GND (-) (BSD 12.7 Flag 4). The voltage is approx. +5VDC.

Y $N$
Replace the Finisher PWB (PL 17.12)
Measure the voltage between the Finisher PWB P8849-5 (+) and GND (-) (BSD 12.7 Flag 3).

Actuate the Eject Clamp Home Sensor with paper. The voltage changes.
N
Replace the Eject Clamp Home Sensor (PL 17.7)
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-081 Eject Motor FORWARD ON] and Component Control [012-082 Eject Motor REVERSE ON]. The Eject Motor starts up.
Y N
Check the connections of $P / J 8801$ and $P / J 8846$. $P / J 8801$ and $P / J 8846$ are connected correctly.

Connect P/J8801 and P/J8846.

A B
Check the wire between J8801 and J8846 for an open circuit or a short circuit (BSD 12.7 Flag 5). The wire between J8801 and J8846 is conducting without an open circuit or a short circuit.
$Y \quad \mathrm{~N}$
Repair the open circuit or short circuit.
Measure the resistance of the Eject Motor between J8801-2/5 (COM) and each point of J8801-1/3/4/6 (BSD 12.7 Flag 5). The resistance is approx. 2Ohm.
Y N
Replace the Eject Motor (PL 17.7).
Measure the voltage between the Finisher PWB P8846-6 (+) and GND (-), and between P8846-12 (+) and GND (-) (BSD 12.7 Flag 5). The voltage is approx. +24VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Replace the Eject Motor (PL 17.7). If the problem persists, replace the Finisher PWB (PL 17.12).

Execute Component Control [012-086 Set Clamp Clutch ON]. The Set Clamp Clutch starts operating
Y N
Check the connections of P/J8822 and P/J8848. P/J8822 and P/J8848 are connected correctly.
Y N
Connect P/J8822 and P/J8848
Check the wire between J8822 and J8848 for an open circuit or a short circuit (BSD 12.7 Flag 6). The wire between J8822 and J8848 is conducting without an open circuit or a short circuit
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A10 (+) and GND (-). The voltage is approx. +24VDC.
$Y \mathrm{~N}$
Replace the Set Clamp Clutch (PL 17.5). If the problem persists, replace the Finisher PWB (PL 17.12),

Replace the Eject Motor (PL 17.7). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-315 Eject Clamp Home Sensor Off Failure RAP BSD-ON:12.7

The Eject Clamp Home Sensor did not turn Off within a specific time.

## Initial Actions

- Power Off/On
- Remove foreign substances in the Eject Clamp mechanism.


## Procedure

Manually operate the Eject Clamp mechanism. The Eject Clamp mechanism moves smoothly.
Y N
Replace the parts that are interfering with operation.
Execute Component Control [012-250 Eject Clamp Home Sensor]. Actuate the Eject Clamp Home Sensor. The display changes.

## Y $N$

Check the connections of J8803 and P/J8849. J8803 and P/J8849 are connected correctly.
Y N
Connect P/J8802 and P/J8849
Check the wire between J8803 and J8849 for an open circuit or a short circuit (BSD 12.7 Flag 3/Flag 4). The wire between J8803 and J8849 is conducting without an open circuit or a short circuit.
Y $\quad \mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8849-6 (+) and GND (-) (BSD 12.7 Flag 4). The voltage is approx. +5VDC.

Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8849-5 (+) and GND (-) (BSD 12.7 Flag 3).

Actuate the Eject Clamp Home Sensor with paper. The voltage changes.
N
Replace the Eject Clamp Home Sensor (PL 17.7).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-081 Eject Motor FORWARD ON] and Component Control [012-082 Eject Motor REVERSE ON]. The Eject Motor starts up.
Y N
Check the connections of $P / J 8801$ and $P / J 8846$. $P / J 8801$ and $P / J 8846$ are connected correctly.

Connect P/J8801 and P/J8846.

A B
Check the wire between J8801 and J8846 for an open circuit or a short circuit (BSD 12.7 Flag 5). The wire between J8801 and J8846 is conducting without an open circuit or a short circuit.
$Y \quad \mathrm{~N}$
Repair the open circuit or short circuit.
Measure the resistance of the Eject Motor between J8801-2/5 (COM) and each point of J8801-1/3/4/6 (BSD 12.7 Flag 5). The resistance is approx. 2Ohm.
Y N
Replace the Eject Motor (PL 17.7).
Measure the voltage between the Finisher PWB P8846-6 (+) and GND (-), and between P8846-12 (+) and GND (-) (BSD 12.7 Flag 5). The voltage is approx. +24VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Replace the Eject Motor (PL 17.7). If the problem persists, replace the Finisher PWB (PL 17.12).

Execute Component Control [012-086 Set Clamp Clutch ON]. The Set Clamp Clutch starts operating
Y $\mathbf{N}$
Check the connections of P/J8822 and P/J8848. P/J8822 and P/J8848 are connected correctly.
Y N
Connect P/J8822 and P/J8848.
Check the wire between J8822 and J8848 for an open circuit or a short circuit (BSD 12.7 Flag 6). The wire between J8822 and J8848 is conducting without an open circuit or a short circuit
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A10 (+) and GND (-). The voltage is approx. +24VDC.
$Y \mathrm{~N}$
Replace the Set Clamp Clutch (PL 17.5). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Eject Motor (PL 17.7). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-316 Stapler Failure RAP

## BSD-ON:12.6

- After the Stapler Motor turned On (Forward rotation), the system did not detect that the Staple Head Home Sensor switched from Off to On within the specified time.
- After the Stapler Motor turned On (Reverse rotation), the Staple Head Home Sensor did not turn On within the specified time.


## Initial Actions

- Power Off/On


## Procedure

Alternately execute Component Control [012-046 Staple Motor FORWARD ON] and Component Control [012-047 Staple Motor REVERSE ON]. The Stapler Motor can be heard.
Y $\quad \mathbf{N}$
Check the connections of $P / J 8819$ and $P / J 8847$. $P / J 8819$ and $P / J 8847$ are connected correctly.
Y $\quad \mathrm{N}$
Connect P/J8819 and P/J8847.
Check the wire between J8819 and J8847 for an open circuit or a short circuit (BSD 12.6 Flag 1). The wire between J8819 and J8847 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the Staple Assembly (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

Execute Component Control [012-244 Staple Head Home Sensor].
Alternately execute Component Control [012-046 Staple Motor FORWARD ON] and Component Control [012-047 Staple Motor REVERSE ON]. The display changes.
Y N
Check the connections of $P / J 8818$ and $P / J 8852$. $P / J 8818$ and $P / J 8852$ are connected correctly.
Y N
Connect P/J8818 and P/J8852.
Check the wire between J8818 and J8852 for an open circuit or a short circuit (BSD 12.6 Flag 2/Flag 3). The wire between J8818 and J8852 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8852-1 (+) and P8852-5 (-) (BSD 12.6 Flag 2). The voltage is approx. +5VDC.
Y $\quad \mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Replace the Staple Assembly (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

## 012-317 Stapler Feed Ready Failure RAP BSD-ON:12.6

The Staple Head did not feed the staple wire to the Staple Ready Sensor in a specific time.

## Initial Actions

- Power Off/On


## Procedure

Execute Component Control [012-043 Staple Ready Sensor]. Select [012-046 Staple Motor] The Stapler Motor can be heard.
Y N
Check the connections of $P / J 8819$ and $P / J 8847$. $P / J 8819$ and $P / J 8847$ are connected correctly.

## Y N

Connect P/J8819 and P/J8847.
Check the wire between J8819 and J8847 for an open circuit or a short circuit (BSD 12.6 Flag 1). The wire between J8819 and J8847 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Staple Assembly (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

Execute Component Control [012-243 Staple Ready Sensor].
Alternately execute Component Control [012-046 Staple Motor FORWARD ON] and Component Control [012-047 Staple Motor REVERSE ON]. The display changes.
Y N
Check the connections of P/J8818 and P/J8852. P/J8818 and P/J8852 are connected correctly.
Y N
Connect P/J8818 and P/J8852.
Check the wire between J8818 and J8852 for an open circuit or a short circuit (BSD 12.6 Flag 2/Flag 3). The wire between J8818 and J8852 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8852-1 (+) and P8852-5 (-) (BSD 12.6 Flag 2). The voltage is approx. +5 VDC .
$Y \quad \mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Replace the Staple Assembly (PL 17.8). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-318 Set Clamp Home Sensor On Failure RAP BSD-ON:12.7

After the Set Clamp started operation, the Set Clamp Home Sensor did not turn On within 200 ms .

## Initial Actions

- Power Off/On
- Remove foreign substances in the Eject Clamp mechanism.


## Procedure

Manually operate the Eject Clamp mechanism. The Eject Clamp mechanism moves smoothly.
Y $\mathbf{N}$
Replace the parts that are interfering with operation.
Execute Component Control [012-251 Set Clamp Home Sensor]. Actuate the Set Clamp Home Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8802 and P/J8849. P/J8802 and P/J8849 are connected correctly.
Y $\quad \mathrm{N}$
Connect P/J8802 and P/J8849.
Check the wire between J8802 and J8849 for an open circuit or a short circuit (BSD 12.7 Flag 1/Flag 2). The wire between J8802 and J8849 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.

Measure the voltage between the Finisher PWB P8849-9 (+) and GND (-) (BSD 12.7 Flag 2). The voltage is approx. +5VDC.

Y $\mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8849-8 (+) and GND (-) (BSD 12.7 Flag 1).

Actuate the Set Clamp Home Sensor with paper. The voltage changes.
$\mathbf{Y} \quad \mathbf{N}$
Replace the Set Clamp Home Sensor (PL 17.7).
Replace the Finisher PWB (PL 17.12)
Alternately execute Component Control [012-081 Eject Motor FORWARD ON] and Component Control [012-082 Eject Motor REVERSE ON]. The Eject Motor starts up.
Y N
Check the connections of P/J8801 and P/J8846. P/J8801 and P/J8846 are connected correctly.
Y $\mathbf{N}$
Connect P/J8801 and P/J8846

A B
Check the wire between J8801 and J8846 for an open circuit or a short circuit (BSD 12.7 Flag 5). The wire between J8801 and J8846 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the Eject Motor between J8801-2/5 (COM) and each point of J8801-1/3/4/6 (BSD 12.7 Flag 5). The resistance is approx. 2Ohm.
Y N
Replace the Eject Motor (PL 17.7).
Measure the voltage between the Finisher PWB P8846-6 (+) and GND (-), and between P8846-12 (+) and GND (-) (BSD 12.7 Flag 5). The voltage is approx. +24VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Replace the Eject Motor (PL 17.7). If the problem persists, replace the Finisher PWB (PL 17.12).

Execute Component Control[012-086 Set Clamp Clutch ON]. The Set Clamp Clutch starts operating.
$\mathbf{N}$
Check the connections of P/J8822 and P/J8848. P/J8822 and P/J8848 are connected correctly.
Y $N$
Connect P/J8822 and P/J8848.
Check the wire between J8822 and J8848 for an open circuit or a short circuit (BSD 12.7 Flag 6). The wire between J8822 and J8848 is conducting without an open circuit or a short circuit.
$\mathrm{Y}^{\mathrm{N}}$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A10 (+) and GND (-). The voltage is approx. +24 VDC .
$Y \quad \mathbf{N}$
Replace the Set Clamp Clutch (PL 17.5). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Eject Motor (PL 17.7). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-319 Set Clamp Home Sensor Off Failure RAP

## BSD-ON:12.7

After the Set Clamp completed operation, the Set Clamp Home Sensor did not turn Off within the specified time.

## Initial Actions

- Power Off/On
- Remove foreign substances in the Eject Clamp mechanism.


## Procedure

Manually operate the Eject Clamp mechanism. The Eject Clamp mechanism moves smoothly.
Y $\mathbf{N}$
Replace the parts that are interfering with operation.
Execute Component Control [012-251 Set Clamp Home Sensor]. Actuate the Set Clamp Home Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8802 and P/J8849. P/J8802 and P/J8849 are connected correctly.
Y $N$
Connect P/J8802 and P/J8849.
Check the wire between J8802 and J8849 for an open circuit or a short circuit (BSD 12.7 Flag 1/Flag 2). The wire between J8802 and J8849 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8849-9 (+) and GND (-) (BSD 12.7 Flag 2). The voltage is approx. +5 VDC .

Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8849-8 (+) and GND (-) (BSD 12.7 Flag 1).

Actuate the Set Clamp Home Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the Set Clamp Home Sensor (PL 17.7).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-081 Eject Motor FORWARD ON] and Component Control [012-082 Eject Motor REVERSE ON]. The Eject Motor starts up.
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of P/J8801 and P/J8846. P/J8801 and P/J8846 are connected correctly.
Y $\mathbf{N}$
| Connect P/J8801 and P/J8846.

Check the wire between J8801 and J8846 for an open circuit or a short circuit (BSD 12.7 Flag 5). The wire between J8801 and J8846 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the resistance of the Eject Motor between J8801-2/5 (COM) and each point of J8801-1/3/4/6 (BSD 12.7 Flag 5). The resistance is approx. 2Ohm.

## Y N

Replace the Eject Motor (PL 17.7).
Measure the voltage between the Finisher PWB P8846-6 (+) and GND (-), and between P8846-12 (+) and GND (-) (BSD 12.7 Flag 5). The voltage is approx. +24VDC. Y N

Replace the Finisher PWB (PL 17.12).
Replace the Eject Motor (PL 17.7). If the problem persists, replace the Finisher PWB (PL 17.12).

Execute Component Control [012-086 Set Clamp Clutch ON]. The Set Clamp Clutch starts operating.
${ }^{\mathrm{Y}} \mathrm{N}$
Check the connections of P/J8822 and P/J8848. P/J8822 and P/J8848 are connected correctly.
Y N
Connect P/J8822 and P/J8848.
Check the wire between J8822 and J8848 for an open circuit or a short circuit (BSD 12.7 Flag 6). The wire between J8822 and J8848 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A10 (+) and GND (-). The voltage is approx. +24 VDC .
$Y \quad \mathbf{N}$
Replace the Set Clamp Clutch (PL 17.5). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Eject Motor (PL 17.7). If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12).

## 012-350 Finisher Communications Failure RAP

There is a communications error in the Finisher PWB.

## Procedure

Switch off the power. Disconnect and reconnect the P/Js on the Finisher PWB. Switch on the power.

If the problem persists, replace the Finisher PWB (PL 17.12).

012-500
BSD-ON:
A description is not available at time of publication.

## Procedure

A procedure is not available at time of publication.

## 012-600 Staple Mode Logic

Stapling cannot be selected for the size of paper in the tray.

## Procedure

Job can be reprogrammed with different staple setting or paper size.
N
Redesign Job.
Reprogram job.

## 012-901 Finisher H-Transport Entrance Sensor RAP

 BSD-ON:12.2Paper remains on the H -Transport Entrance Sensor.

## Initial Actions

- Remove foreign substances on the sensor.
- Power Off/On


## Procedure

Execute Component Control [012-190 H-Transport Entrance Sensor]. Actuate the H-Transport Entrance Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of $P / J 8380$ and $P / J 8390$. $P / J 8380$ and $P / J 8390$ are connected correctly.
Y N
Connect P/J8380 and P/J8390.
Check the wire between J8380 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 5/Flag 6). The wire between J8380 and J8390 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8390-12 (+) and GND (-) (BSD 12.2 Flag 6). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8390-13 (+) and GND (-) (BSD 12.2 Flag 5).
Actuate the H-Transport Entrance Sensor with paper. The voltage changes.
$Y \quad N$
Replace the H-Transport Entrance Sensor (PL 17.3).
Replace the Finisher PWB (PL 17.12).
Replace the Finisher PWB (PL 17.12).

## 012-902 H-Transport Exit Sensor RAP

 BSD-ON:12.2Paper remains on the H -Transport Exit Sensor.

## Initial Actions

- Remove foreign substances on the sensor.
- Power Off/On


## Procedure

Execute Component Control[012-191 H-Transport Exit Sensor]. Actuate the H-Transport Exit Sensor (PL 16.3with paper. The display changes.
$Y \mathrm{~N}$
Check the connections of P/J8381 and P/J8390. P/J8381 and P/J8390 are connected correctly.
Y N
Connect P/J8381 and P/J8390.
Check the wire between J8381 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 3/Flag 4). The wire between J8381 and J8390 is conducting without an open circuit or a short circuit. $Y \quad N$

Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8390-6 (+) and GND (-) (BSD 12.2 Flag 4). The voltage is approx. +5 VDC .

Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8390-14 (+) and GND (-) (BSD 12.2 Flag 3).
Actuate the H -Transport Exit Sensor with paper. The voltage changes.
$\mathbf{N}$
Replace the H-Transport Exit Sensor (PL 17.3).
Replace the Finisher PWB (PL 17.12).
Replace the Finisher PWB (PL 17.12).

## 012-903 Paper Remains at Compiler Entrance Sensor RAP BSD-ON:12.3

Paper remains on the Compiler Entrance Sensor.

## Initial Actions

- Remove foreign substances on the sensor.
- Power Off/On


## Procedure

Execute Component Control [012-150 Compile Entrance Sensor]. Actuate the Compiler Entrance Sensor with paper. The display changes.
Y N
Check the connections of P/J8814, P/J8825 and P/J8850. P/J8814, P/J8825 and P/ J8850 are connected correctly.
Y N
Connect P/J8814, P/J8825 and P/J8850.
Check the wire between J8814 and J8850 for an open circuit or a short circuit (BSD 12.3 Flag 1/Flag 2). The wire between J8814 and J8850 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850-B9 (+) and GND (-) (BSD 12.3 Flag 2). The voltage is approx. +5VDC.
Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850-B8 (+) and GND (-) (BSD 12.3 Flag 1).Actuate the Compiler Entrance Sensor with paper. The voltage changes.
Y N
Replace the Compiler Entrance Sensor (PL 17.11).
Replace the Finisher PWB (PL 17.12).
Replace the Finisher PWB (PL 17.12).

## 012-905 Compile Paper Sensor RAP BSD-ON:12.4

Paper remains on the Compile Paper Sensor.

## Initial Actions

- Remove foreign substances on the sensor.
- Power Off/On


## Procedure

Execute Component Control [012-151 Compile Paper Sensor]. Actuate the Compile Paper Sensor with paper. The display changes.
Y N
Check the connections of $P / J 8806$ and $P / J 8848$. $P / J 8806$ and $P / J 8848$ are connected correctly.
Y N
Connect P/J8806 and P/J8848.
Check the wire between J8806 and J8848 for an open circuit or a short circuit (BSD 12.4 Flag 3/Flag 4). The wire between J8806 and J8848 is conducting without an open circuit or a short circuit. Y $N$

Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8848-A6 (+) and GND (-) (BSD 12.4 Flag 4). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8848-A5 (+) and GND (-) (BSD 12.4 Flag 3).
Actuate the Compile Paper Sensor with paper. The voltage changes.
N
Replace the Compile Paper Sensor (PL 17.9).
Replace the Finisher PWB (PL 17.12).
Replace the Finisher PWB (PL 17.12).

## 012-923 H-Transport Entrance Sensor B RAP BSD-ON:12.2

During standby, paper was detected by the H -Transport Entrance Sensor.

## Initial Actions

- Remove foreign substances on the sensor
- Power Off/On


## Procedure

Execute Component Control [012-190 H-Transport Entrance Sensor]. Actuate the H-Transport Entrance Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of $P / J 8380$ and $P / J 8390$. $P / J 8380$ and $P / J 8390$ are connected correctly.
Y N
Connect P/J8380 and P/J8390.

Check the wire between J8380 and J8390 for an open circuit or a short circuit (BSD 12.2 Flag 5/Flag 6). The wire between J8380 and J8390 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8390-12 (+) and GND (-) (BSD 12.2 Flag 6). The voltage is approx. +5VDC
Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8390-13 (+) and GND (-) (BSD 12.2 Flag 5).Actuate the H -Transport Entrance Sensor with paper. The voltage changes.
Y N
Replace the H -Transport Entrance Sensor (PL 17.3).
Replace the Finisher PWB (PL 17.12)
Replace the Finisher PWB (PL 17.12).

## 012-132 (A-Finisher) Ent Sensor ON Jam

## BSD-ON:CH15.3

Finisher Entrance Sensor does not turn On within a specified time after receiving the Sheet Exit command (the sheet to be ejected has turned ON the IOT Exit Sensor 1).

## Initial Actions

- Check that the Finisher Entrance Sensor is properly installed and free from foreign objects and that the actuator is not broken.
- Power Off/On


## Procedure

Check the specifications of paper. Paper is in spec.
Y N
Replace the paper with new paper that is in spec.
Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent or caught.
Y N
Resolve any problem that causes the paper to be bent or caught.
Check the transport path for a foreign object, deformed part, and paper dust. The transport path is in normal condition.
Y $\quad \mathrm{N}$
Repair the deformed part(s) and remove the foreign object(s) and paper dust.
Check that the Finisher is installed properly. The Finisher is properly installed and properly connected to the IOT.
Y $\quad \mathrm{N}$
Reinstall the Finisher properly.
Enter Component Control [012-140]. Actuate the Finisher Entrance Sensor. The display changes.
Y N
Check the connections of P/J8709 and P/J8729. P/J8709 and P/J8729 are securely connected.
N
Connect P/J8709 and P/J8729 securely.
Check for an open or short circuit between J 8709 and J8729. The wires between J8709 and J8729 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8709-6 (+) and GND (-). The voltage is approx. +5VDC.
Y $N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.

A B
Measure the voltage between Finisher PWB J8709-5 (+) and GND (-). Actuate the Finisher Entrance Sensor. The voltage changes.
Y $\mathbf{N}$
Replace the Finisher Entrance Sensor (PL 22.5).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-151 (A-Finisher) Compiler Exit Sensor OFF Jam

 BSD-ON:CH15.3The Compile Exit Sensor does not turn Off within a specified time after it has turned On.

## Initial Actions

- Check the Compile Exit Sensor is properly installed and free from foreign objects and that the actuator is not binding.
- Power Off/On.


## Procedure

Check the specifications of paper. Paper is in spec.
Y N
Replace the paper with new paper that is in spec.
Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent or caught.
Y N
Resolve any problem that causes the paper to be bent or caught.
Check the transport path for a foreign object, deformed part, and paper dust. The transport path is in normal condition with no foreign object, deformed part and paper dust.
Y $N$
Repair the deformed part(s) and remove the foreign object(s) and paper dust.
Check the Transport Roll for wear, deterioration and paper dust. The Transport Roll is in normal condition, not worn and deteriorated and with no paper dust.
Y N
Remove the paper dust and replace the worn or deteriorated Transport Roll.

Check the drive mechanism to the Transport Roll for a deformed, broken part, and/or belt damage. The drive mechanism is free of defects.
Y $N$
Repair defects or damage to the drive mechanism
Enter Component Control [012-150]. Actuate the Compile Exit Sensor. The display changes. Y $\mathbf{N}$

Check the connections of $P / J 8709$ and $P / J 8728$. $P / J 8709$ and $P / J 8728$ are securely connected.
Y $\quad \mathrm{N}$
Connect P/J8709 and P/J8728 securely.
Check for an open or short circuit between J8709 and J8728. The wire J8709 and J8728 are OK.
Y $N$
Repair the open or short circuit
Measure the voltage between Finisher PWB J8709-3 (+) and GND (-). The voltage is approx. +5VDC.

Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8709-2 (+) and GND (-). Actuate the Compile Exit Sensor. The voltage changes.
Y $N$
Replace the Compile Exit Sensor (PL 22.5).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter Component Control [012-095]. The Finisher Transport Motor rotates.
Y N
Check the connections of P/J8706 and P/J8739. P/J8706 and P/J8739 are securely connected.
Y $\mathbf{N}$
Connect P/J8706 and P/J8739 securely.
Check for an open or short circuit between J8706 and J8736. The wire between J8706 and J8736 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8706-5 (+) and GND (-), and between Finisher PWB J8706-7 (+) and GND ( - ). Each voltage is approx. +24VDC.
Y N
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit.
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher Transport Motor (PL 22.4). If the problem persists, replace the Finisher PWB (PL 22.7).

Enter [012-013]. When the Sub Paddle Solenoid is turned On/Off, the Sub Paddle Shaft Assembly goes down/up.
Y N
Check the Sub Paddle mechanism for a deformed or broken part and not-seated gears. The Sub Paddle mechanism is free from defects and gears are seating properly.
Y N
Repair defeats to the Sub Paddle mechanism.
Check the connections of P/J8705 and P/J8734. P/J8705 and P/J8734 are securely connected.
Y N
Connect P/J8705 and P/J8734 securely.
Check for an open or short circuit between J8705 and J8734. The wires between J8705 and J8734 are OK
Y $N$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8705-1 ( + ) and GND ( - ). The voltage is approx. +24VDC.

Y $\quad \mathbf{N}$
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24 VDC circuit. If the circuit is OK, replace the Finisher PWB (PL 22.7).

Enter [012-013], measure the voltage between Finisher PWB J8705-2 (+) and GND (-). The voltage changes.
Y N
Replace the Finisher PWB (PL 22.7).
Replace the Sub Paddle Solenoid (PL 22.3).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-152 (A-Finisher) Compiler Exit Sensor ON Jam

 BSD-ON:CH15.3The Compile Exit Sensor does not turn On within a specified time after receiving the Sheet Exit command (the paper to be ejected has turned On the IOT Exit Sensor 1).

## Initial Actions

- Check the Compile Exit Sensor is properly installed and free from foreign objects and that the actuator is not broken.
- Power Off/On.


## Procedure

Check the specifications of paper. Paper is in spec.
Y $\mathbf{N}$
Replace the paper with new paper that is ins spec.
Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent or caught.
Y N
Resolve any problem that causes the paper to be bent or caught.
Check the transport path for a foreign object, deformed part, and paper dust. The transport path is in normal condition with no foreign object, deformed part and paper dust. $\mathbf{Y} \quad \mathbf{N}$

Repair the deformed part(s) and remove the foreign object(s) and paper dust.
Check the Transport Roll for wear, deterioration and paper dust. The Transport Roll is in normal condition.
Y $\mathbf{N}$
Remove the paper dust and replace the worn or deteriorated Transport Roll.
Check the drive mechanism to the Transport Roll for a deformed parts, broken parts, and/or belt damage. The drive mechanism free from defects.
Y $N$
Repair defects or damage to the drive mechanism.
Check that the Finisher is installed properly. The Finisher is properly installed and properly connected to the IOT.
Y $\quad \mathrm{N}$
Reinstall the Finisher properly.
Enter Component Control [012-150]. Actuate the Compile Exit Sensor. The display changes. Y $\quad \mathbf{N}$

Check the connections of P/J8709 and P/J8728. P/J8709 and P/J8728 are securely connected.
Y $\quad \mathbf{N}$
Connect P/J8709 and P/J8728 securely.
Check for an open or short circuit between J8709 and J8728. The wires between 8709 and J8728 are OK.

Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8709-3 (+) and GND ( - ). The voltage is approx. +5VDC.
$Y^{\mathrm{N}}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8709-2 (+) and GND (-). Actuate the Compile Exit Sensor. The voltage normally changes.
Y N
Replace the Compile Exit Sensor (PL 22.5).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-095]. The Finisher Transport Motor rotates.
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of P/J8706 and P/J8739. P/J8706 and P/J8739 are securely connected.
Y N
Connect P/J8706 and P/J8739 securely.
Check for an open or short circuit between J8706 and J8739. The wire between J8706 and J8739 are OK.
Y $N$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8706-5 (+) and GND (-), and J8706-7 (+) and GND ( - ). Each voltage is approx. +24VDC.
Y N
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit.
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher Transport Motor (PL 22.4). If the problem persists, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-161 (A-Finisher) Set Eject Jam

## BSD-ON:CH15.6

In the Eject Motor's ejecting operation, Eject Home Sensor ON was detected within a specified time after the start of the reverse operation of the Eject Motor.
(The Eject Motor should have ejected paper, but returned Home earlier than specified.)

## Initial Actions

- Check the Eject Home Sensor is properly installed, not broken, and has no foreign object.
- Power Off/On.


## Procedure

Check the specifications of paper. Paper is in spec.
Y N
Replace the paper with new paper that is in spec.
Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent or caught.
Y $\mathbf{N}$
Resolve any problem that causes the paper to be bent or caught.
Check the Eject mechanism for deformed parts, broken parts, and/or belt damage. The Eject mechanism free from defects.
Y N
Repair the Eject mechanism.
Enter Component Control [012-252]. Block and unblock the Eject Home Sensor with a piece of paper. The display changes.
Y $N$
Check the connections of P/J8700 and P/J8725. P/J8700 and P/J8725 are securely connected.
Y N
Connect P/J8700 and P/J8725 securely.
Check for an open or short circuit between J8700 and J8725. The wires between J8700 and J8725 are OK
Y $N$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8700-9 (+) and GND (-). The voltage is approx. +5VDC.
Y $N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8700-8 (+) and GND (-). Block and unblock the Eject Home Sensor with a piece of paper. The voltage changes.
Y N
Replace the Eject Home Sensor (PL 22.10)

A B
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-054] and [012-056] alternately. The Eject Motor rotates.
$\mathbf{N}$
Check the connections of P/J8706 and P/J8741. P/J8706 and P/J8741 are securely connected.
Y N
Connect P/J8706 and P/J8741 securely.
Check for an open or short circuit between J8706 and J8741. The wires
between J8706 and J8741 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8706-13 (+) and GND (-), and between J8706-15 (+) and GND (-). The voltage is approx. +24VDC.
Y $\quad \mathrm{N}$
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit.
Check the Eject Motor drive mechanism for deformed parts, broken parts, and/or belt damage The drive mechanism free from defects.
Y $\quad \mathbf{N}$
Repair defects or damage to the drive mechanism.
Replace the Eject Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-211 (A-Finisher) Stacker Tray Fail

## BSD-ON:CH15.8

- Within a specified time after the Stacker Tray started lifting up, the Stack Height Sensor did not detect the lifting up of the Stacker Tray.
- Within a specified time after the Stacker Tray started going down at initialization and during a job, the lower position of the tray (Full) could not be detected based on the changes in the Stacker Stack Sensor 1 and the Stacker Stack Sensor 2.


## Initial Actions

- Check the Stack Height Sensor is properly installed, not broken, and has no foreign object.
- Check the Stacker Stack Sensors 1 and 2 are properly installed and have no foreign objects and that their actuators are not broken.
- Power Off/On.


## Procedure

Check the drive mechanism to the Stacker Tray for a deformed or broken part and not-seated gears. The mechanism is free from defects and the gears seat properly.

## N

Repair the mechanism.
Run DC330[012-267].
Enter Component Control [012-267]. Block and unblock the Stack Height Sensor with a piece of paper. The display changes.
Y $\mathbf{N}$
Check the connections of $P / J 8708$ and $P / J 8727$. $P / J 8708$ and $P / J 8727$ are securely connected.
Y $\quad \mathrm{N}$
Connect P/J8708 and P/J8727 securely.
Check for an open or short circuit between J8708 and J8727. The wire between J8708 and J8727 are OK.
Y $N$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8708-3 (+) and GND (-). The voltage is approx. +5VDC.
Y $N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8708-2 (+) and GND (-). Block and unblock the Stack Height Sensor with a piece of paper. The voltage changes.
Y $N$
Replace the Stack Height Sensor (PL 22.10).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-278]. Block and unblock the Stacker Stack Sensor 1 by rotating the actuator. The display changes.
Y N
Check the connections of $P / J 8707$ and $P / J 8722$. $P / J 8707$ and $P / J 8722$ are securely connected
Y $\quad N$
Connect P/J8707 and P/J8722 securely.
Check for an open or short circuit between J 8707 and J8722. The wires between J8707 and J8722 are OK.
Y $N$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8707-6 (+) and GND (-). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8707-5 (+) and (-). Block and unblock the Stacker Stack Sensor 1 by rotating the actuator. The voltage changes.
Y N
Replace the Stacker Stack Sensor 1 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-279]. Block and unblock the Stacker Stack Sensor 2 by rotating the actuator. The display changes.
Y $N$
Check the connections of $P / J 8707$ and $P / J 8721$. P/J8707 and $P / J 8721$ are securely connected.
Y $N$
Connect P/J8707 and P/J8721 securely.
Check for an open or short circuit between J 8707 and J8721. The wires between J8707 and J8721 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8707-3 (+) and GND (-). The voltage is approx. +5VDC.
Y N
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8707-2 (+) and GND (-). Block and unblock the Stacker Stack Sensor 2 by rotating the actuator. The voltage changes.
Y N
Replace the Stacker Stack Sensor 2 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

B
Enter [012-060] and [012-061] alternately. The Stacker Motor rotates.
Y $\mathbf{N}$
Check the connections of P/J8711 and P/J8736. P/J8711 and P/J8736 are securely connected.
Y N
Connect P/J8711 and P/J8736 securely.
Check for an open or short circuit between J8711 and P8736. The wires between J8711 and P8736 are OK
Y N
Repair the open or short circuit.
Enter [012-060], measure the voltage between Finisher PWB J8711-1 (+) and GND (-). The voltage changes.

## N

Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-061], measure the voltage between Finisher PWB J8711-2 (+) and GND (-). The voltage changes.
Y $\mathbf{N}$
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open and short circuit. If the problem continues, replace the Stacker Motor (PL 22.8).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-221 (A-Finisher) Front Tamper Home Sensor ON Fail

 BSD-ON:CH15.4During the moving of the Front Tamper, when the Front Tamper Home Sensor was Off, to the home position, the Front Tamper Home Sensor did not detected turning On within a specified time after the Front Tamper started moving.

## Initial Actions

- Check the Front Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.


## Procedure

Check the Front Tamper for any foreign object, deformation and binding that prevents it from moving. The Front Tamper is defects and binding.
Y $\mathbf{N}$
Repair the deformation and remove the foreign object(s) and the binding.
Check the drive mechanism to the Front Tamper for a deformed or broken part and not-seated gears. The drive mechanism is free from defects and the gears seat properly.
gears.
$\mathbf{Y} \quad \mathbf{N}$
Repair the Front Tamper mechanism.
Run DC330[012-220].
Enter Component Control [012-220]. Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. The display changes.
Y $N$
Check the connections of $P / J 8700$ and $P / J 8724$. P/J8700 and $P / J 8724$ are securely connected.
Y $N$
Connect P/J8700 and P/J8724 securely.
Check for an open or short circuit between J8700 and J8724. The wires between J8700 and J8724 are OK.
Y N
Repair the open wire or short circuit.
Measure the voltage between Finisher PWB J8700-6 (+) and GND (-). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8700-5 (+) and GND (-). Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. The voltage changes.
Y N
Replace the Front Tamper Home Sensor (PL 22.10).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

A
Enter [012-020] and [012-023] alternately. The Front Tamper Motor rotates.
$\mathbf{Y}^{\mathbf{N}}$
Check the connections of P/J8710, P/J8738A and P/J8738B. P/J8710 P/J8738A and P/J8738B are securely connected.
Y N
Connect P/J8710, P/J8738A and P/J8738B securely.
Check for an open or short circuit between J8710, P/J8738A and J8738B. The wires between are OK.
Y $N$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8710-5 (+) and GND (-), and between J8710-7 (+) and GND (-). The voltage is approx. +24VDC.
Y $\quad \mathrm{N}$
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Front Tamper Motor (PL 22.10). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-223 (A-Finisher) Front Tamper Home Sensor OFF Fail

 BSD-ON:CH15.4- At the end of the operation to turn Off the Front Tamper Home Sensor that was On, the Front Tamper Home Sensor was not detected being Off.
- The Front Tamper Home Sensor should have turned Off and then the Front Tamper Motor stopped, but the Front Tamper Home Sensor was On.


## Initial Actions

- Check the Front Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.


## Procedure

Check the Front Tamper for any foreign object, deformation and binding that prevents it from moving. The Front Tamper free from defects and binding.
Y $N$
Repair the deformation and remove the foreign object(s) and the binding.
Check the drive mechanism to the Front Tamper for a deformed or broken part and not-seated gears. The drive mechanism is free from defects and the gears seat properly.
$\mathbf{Y} \quad \mathbf{N}$
Repair the Front Tamper drive mechanism.
Run DC330[012-220].
Enter Component Control [012-220]. Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. The display changes.
Y $N$
Check the connections of $P / J 8700$ and $P / J 8724$. $P / J 8700$ and $P / J 8724$ are securely connected.
Y N
Connect P/J8700 and P/J8724 securely.
Check for an open or short circuit between J8700 and J8724. The wires between J8700 and J8724 are OK.
Y $\quad \mathrm{N}$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8700-6 (+) and GND (-). The voltage is approx. +5VDC.
Y $N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8700-5 (+) and GND (-). Move the Front Tamper by hand to block and unblock the Front Tamper Home Sensor. The voltage changes.

Replace the Front Tamper Home Sensor (PL 22.10).

A B
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-020] and [012-023] alternately. The Front Tamper Motor rotates.
Y N
Check the connections of P/J8710, P/J8738A and P/J8738B. P/J8710, P/J8738A and P/J8738B are securely connected.
Y N
Connect P/J8710, P/J8738A and P/J8738B securely.
Check for an open wire or short circuit between J8710, P/J8738A and J8738B. The wire between J8710, P/J8738A and J8738B are OK.
Y $\mathbf{N}$
Repair the open wire or short circuit.
Measure the voltage between Finisher PWB J8710-5 (+) and GND (-), and between J8710-7 (+) and GND (-). Each voltage is approx. +24VDC.
Y $\quad \mathrm{N}$
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Front Tamper Motor (PL 22.10). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-224 (A-Finisher) Rear Tamper Home Sensor OFF Fail

 BSD-ON:CH15.4- At the end of the operation of trying to turn Off the Rear Tamper Home Sensor that was On, the Rear Tamper Home Sensor was not detected being Off.
- The Rear Tamper Home Sensor should have turned Off and then the Rear Tamper Motor stopped, but the Rear Tamper Home Sensor was On


## Initial Actions

- Check the Rear Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.


## Procedure

Check the Rear Tamper for any foreign object, deformation and binding that prevents it from moving. The Rear Tamper is free from defects and binding.
Y $N$
Repair the deformation and remove the foreign object(s) and the binding.
Check the drive mechanism to the Rear Tamper for a deformed or broken part and not-seated gears. The drive mechanism is in normal condition, not deformed or broken and with no not-seated gears.
Y $N$
Repair the Rear Tamper drive mechanism.
Enter Component Control [012-221]. Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. The display of changes.
Y $\quad \mathbf{N}$
Check the connections of $P / J 8700$ and $P / J 8726$. $P / J 8700$ and $P / J 8726$ are securely connected.

$$
\mathbf{Y} \quad \mathbf{N}
$$

Connect P/J8700 and P/J8726 securely.
Check for an open or short circuit between J8700 and J8726. The wires between J8700 and J8726 are OK.
Y $\mathbf{N}$
Repair the open wire or short circuit.
Measure the voltage between Finisher PWB J8700-12 (+) and GND (-). The voltage is approx. +5VDC.
Y $N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8700-11 (+) and GND (-). Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. The voltage changes.

Replace the Rear Tamper Home Sensor (PL 22.9).

A
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-026] and [012-029] alternately. The Rear Tamper Motor rotates.
Y N
Check the connections of P/J8710, P/J8737A and P/J8737B. P/J8710, P/J8737A and P/J8737B are securely connected.
Y N
Connect P/J8710, P/J8737A and P/J8737B securely
Check for an open wire or short circuit between J8710, P/J8737A and J8737B. The wire between J8710, P/J8737A and J8737B are OK.
Y $\mathbf{N}$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8710-1 (+) and GND (-), and between J8710-3 (+) and GND (-). The voltage is approx. +24VDC.
Y $\quad \mathbf{N}$
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Repair the Rear Tamper Motor (PL 22.10). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-259 (A-Finisher) Eject Home Sensor ON Fail

## BSD-ON:CH15.6

In the Eject Motor's initializing operation and ejecting operation, one of the following is met.

- With the Eject Home Sensor Off, the Eject Motor started rotating in reverse direction. Within a specified time after that, the Eject Home Sensor was not detected turning On.
- With the Eject Home Sensor Off, the Eject Motor started rotating in reverse direction. The Eject Home Sensor should have been detected turning On and then the Eject Motor stopped, but then the Eject Home Sensor was not On.


## Initial Actions

- Check the Eject Home Sensor is properly installed, not broken and has no foreign object.
- Power Off/ON.


## Procedure

Check the Eject mechanism for a deformed or broken part and not-seated belts. The mechanism is free from defects and belt damage.
Y $\mathbf{N}$
Repair the mechanism.
Run DC330[012-252].
Enter Component Control [012-252]. Block and unblock the Eject Home Sensor. The display
changes.
$Y$ N
Check the connections of P/J8700 and P/J8725. P/J8700 and P/J8725 are securely connected.
Y N
Connect P/J8700 and P/J8725 securely.
Check for an open wire or short circuit between J 8700 and J 8725 . The wire between J8700 and J8725 is normally conductive with no open wire or short circuit.
Y N
Repair the open wire or short circuit.
Measure the voltage between Finisher PWB J8700-9 (+) and GND ( - ). The voltage is approx. +5 VDC .
$\mathrm{Y} \quad \mathrm{N}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5 VDC circuit.
Measure the voltage between Finisher PWB J8700-8 (+) and GND (-). Block and unblock the Eject Home Sensor. The voltage changes
Y N
Replace the Eject Home Sensor (PL 22.10).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-054] and [012-056] alternately. The Eject Motor rotates.

Y N
Check the connections of P/J8706 and P/J8741. P/J8706 and P/J8741 are securely connected.
Y N
Connect P/J8706 and P/J8741 securely.
Check for an open or short circuit between J8706 and J8741. The wires between J8706 and J8741 are OK.

## Y N

Repair the open wire or short circuit.
Measure the voltage between Finisher PWB J8706-13 (+) and GND (-), and between J8706-15 (+) and GND (-). Each voltage is approx. +24VDC.
Y N
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Eject Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-263 (A-Finisher) Rear Tamper Home Sensor ON Fail BSD-ON:CH15.4

During the moving of the Rear Tamper from when the Rear Tamper Home Sensor was Off to the home position, the Rear Tamper Home Sensor was not detected turning On within a specified time after the Rear Tamper started moving.

## Initial Actions

- Check the Rear Tamper Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.


## Procedure

Check the Rear Tamper for any foreign object, deformation and binding that prevents it from moving. The Rear Tamper is free from defects and binding.
Y $\mathbf{N}$
Repair the deformation and remove the foreign object(s) and the binding.
Check the drive mechanism to the Rear Tamper for a deformed or broken part and not-seated gears. The drive mechanism is free from defects and gears seat properly.
$\mathbf{Y} \quad \mathbf{N}$
Repair the Rear Tamper drive mechanism.
Enter Component Control [012-221]. Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. The display changes.
$\mathbf{Y}^{\mathbf{N}}$
Check the connections of P/J8700 and P/J8726. P/J8700 and P/J8726 are securely connected.
Y N
Connect P/J8700 and P/J8726 securely.
Check for an open wire or short circuit between J8700 and J8726. The wire between J8700 and J8726 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8700-12 (+) and GND ( - ). The voltage is approx. +5 VDC .
$Y^{N}$
Go to Wirenet 7.2.36 A-Finisher +5 VDC and check the +5 VDC circuit.
Measure the voltage between Finisher PWB J8700-11 (+) and GND ( - ). Move the Rear Tamper by hand to block and unblock the Rear Tamper Home Sensor. The voltage changes.
Y $N$
Replace the Rear Tamper Home Sensor (PL 22.9).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-026] and [012-029] alternately. The Rear Tamper Motor rotates. Y N

Check the connections of P/J8710, P/J8737A and P/J8737B. P/J8710, P/J8737A and P/J8737B are securely connected.
Y N
Connect P/J8710, P/J8737A and P/J8737B securely.
Check for an open or short circuit between J8710, P/J8737A and J8737B. The wires between J8710, P/J8737A and J8737B are OK.
Y $N$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8710-1 (+) and GND (-), and between J8710-3 (+) and GND (-). Each voltage is approx. +24VDC.
Y N
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Rear Tamper Motor (PL 22.10). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-280 (A-Finisher) Eject Home Sensor OFF Fail

## BSD-ON:CH15.6

In the Eject Motor's initializing operation and ejecting operation, the Eject Motor had rotated forward for a time corresponding to a specified qty of pulses since the Eject Home Sensor was On, and then the motor stopped, but then the Eject Home Sensor was not detected turning Off.

## Initial Actions

- Check the Eject Home Sensor is properly installed, not broken and has no foreign object.
- Power Off/ON.


## Procedure

Check the Eject mechanism for a deformed or broken part and not-seated belts. The mechanism is free from defects and belt damage.
$\mathbf{Y} \quad \mathbf{N}$
Repair the mechanism.
Enter Component Control [012-252]. Block and unblock the Eject Home Sensor with a piece of paper. The display changes.
$\mathrm{Y} \quad \mathrm{N}$
Check the connections of P/J8700 and P/J8725. P/J8700 and P/J8725 are securely connected.

Connect P/J8700 and P/J8725 securely.
Check for an open or short circuit between J8700 and J8725. The wires between J8700 and J8725 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8700-9 (+) and GND (-). The voltage is approx. +5 VDC .
Y $N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5 VDC circuit.
Measure the voltage between Finisher PWB J8700-8 (+) and GND (-). Block and unblock the Eject Home Sensor with a piece of paper. The voltage changes. Y N

Replace the Eject Home Sensor (PL 22.10).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-054] and [012-056] alternately. The Eject Motor rotates.
Y
Check the connections of P/J8706 and P/J8741. P/J8706 and P/J8741 are securely connected.

Connect P/J8706 and P/J8741 securely.

A B

## 012-283 (A-Finisher) Set Clamp Home Sensor ON Fail BSD-on:CH15.7

In the initialize operations each at Power On, when Interlock closed and at the start of a job and in the Set Clamp Motor's ejecting operation, the Set Clamp Home Sensor was not detected turning On within a specified time after the start of the Set Clamp Motor operation.

## Initial Actions

- Check the Set Clamp Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.


## Procedure

Check the Set Clamp mechanism for a deformed or broken part and not-seated belts. The mechanism is free from defects and belt damage.

```
Y N
    Repair the Set Clamp mechanism.
```

Enter Component Control [012-251]. Rotate the Set Clamp Shaft by hand to block and unblock
the Set Clamp Home Sensor. The display changes.
Y $N$
Check the connections of P/J8707, P/J8742B, P/J8742A and P/J8723. P/J8707, P/
J8742B, P/J8742A and P/J8723 are securely connected.
Y N
Connect P/J8707, P/J8742B, P/J8742A and P/J8723 securely.
Check for an open or short circuit between J8707 and J8742B, and between J8742A and
J8723. The wires between J8707 and J8742B and between J8742A and J8723 are
OK.
$Y^{\mathbf{Y}} \mathrm{N}$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8707-9 (+) and GND ( - ). The voltage is
approx. +5 VDC .
$\mathrm{Y} \quad \mathrm{N}$
Go to Wirenet 7.2.36 A-Finisher +5 VDC and check the +5 VDC circuit.
Measure the voltage between Finisher PWB J8707-8 (+) and GND ( - ). Rotate the Set
Clamp Shaft by hand to block and unblock the Set Clamp Home Sensor. The voltage
changes.
$\mathrm{Y} \quad \mathrm{N}$
Replace the Set Clamp Home Sensor (PL 22.4).
Check the wires and connectors for an intermittent open or short circuit. If the problem
continues, replace the Finisher PWB (PL 22.7).
Enter [012-017]. The Set Clamp Motor rotates.
Y $\mathbf{N}$
Check the connections of P/J8706 and P/J8740. P/J8706 and P/J8740 are securely
connected.

Y $N$
Connect P/J8706 and P/J8740 securely.
Check for an open or short circuit between J8706 and J8740. The wires between J8706 and J8740 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8706-9 (+) and GND (-), and between J8706-11 (+) and GND ( - ). Each voltage is approx. +24VDC.
Y $N$
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Set Clamp Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-284 (A-Finisher) Set Clamp Home Sensor OFF Fail

 BSD-ON:CH15.7In the initialize operations each at Power On, when Interlock closed and at the start of a job, and in the Set Clamp Motor's ejecting operation, the Set Clamp Home Sensor was not detected turning Off within a specified time after the start of the Set Clamp Motor operation.

## Initial Actions

- Check the Set Clamp Home Sensor is properly installed and has no foreign object and that the actuator is not broken.
- Power Off/ON.


## Procedure

Check the Set Clamp mechanism for a deformed or broken part and not-seated belts. The mechanism is free from defects and belt damage.

```
Y N
    Repair the Set CLamp mechanism.
```

Enter Component Control [012-251]. Rotate the Set Clamp Shaft by hand to block and unblock the Set Clamp Home Sensor. The display changes.
Y $N$
Check the connections of P/J8707, P/J8742B, P/J8742A and P/J8723. P/J8707, P/ J8742B, P/J8742A and P/J8723 are securely connected.
Y $N$
Connect P/J8707, P/J8742B, P/J8742A and P/J8723 securely.
Check for an open or short circuit between J8707 and J8742B, and between J8742A and J8723. The wires between J8707 andJ8742B and between J8742A and J8723 are OK.
$Y^{\mathbf{Y}}$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8707-9 (+) and GND ( - ). The voltage is approx. +5 VDC .
$\mathrm{Y} \quad \mathrm{N}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8707-8 (+) and GND ( - ). Rotate the Set Clamp Shaft by hand to block and unblock the acceptance surface of the Set Clamp Home Sensor. The voltage changes normally.
Y N
Replace the Set Clamp Home Sensor (PL 22.4).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-017]. The Set Clamp Motor rotates.
Y $\mathbf{N}$
Check the connections of P/J8706 and P/J8740. P/J8706 and P/J8740 are securely connected.

Y N
Connect P/J8706 and P/J8740 securely.
Check for an open or short circuit between J8706 and J8740. The wires
between J8706 andJ8740 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8706-9 (+) and GND ( - ), and between J8706-11 (+) and GND ( - ). Each voltage is approx. +24VDC.
Y N
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Set Clamp Motor (PL 22.9). If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-291 (A-Finisher) Stapler Fail

## BSD-ON:CH15.5

Within a specified time after the Staple Motor started rotating in reverse direction, the Staple Head Home Sensor was never detected turning On.

## Initial Actions

- Check that the Staple Assembly and the Cartridge are properly installed, not broken and include no foreign objects.
- Power Off/ON


## Procedure

Enter Component Control [012-046] and [012-047] alternately. The Staple Motor rotates.
Y $\mathbf{N}$
Check the connections of P/J8705 and P/J8735. P/J8705 and P/J8735 are securely connected.
Y N
Connect P/J8705 and P/J8735 securely.
Check for an open or short circuit between J8705 and J8735. The wires between J8705 and J8735 are OK.
Y N
Repair the open wire or short circuit.
Enter [012-046] and [012-047] alternately. Measure the voltages between Finisher PWB J8705-3, 4, 5, 6 (+) and GND (-). Each voltage changes.
Y N
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7)

Replace the Staple Assembly (PL 22.4).
Enter [012-046] and [012-047] alternately. The display changes.
Y N
Check the connections of P/J8701 and P/J8731. P/J8701 and P/J8731 are securely connected.

N
Connect P/J8701 and P/J8731 securely.
Check for an open or short circuit between J8701 and J8731. The wires between J8701 and J8731 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8701-4 (+) and GND ( - ). The voltage is approx. +5 VDC .
$Y^{N}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.

A B
Measure the voltage between Finisher PWB P/J8701-5 ( + ) and GND ( - ). Enter [012-046] and [012-047] alternately. The voltage changes.
Y N
Replace the Staple Assembly (PL 22.4).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-301 (A-Finisher) Top Cover Interlock OPEN

## BSD-ON:CH15.1

The Top Cover Interlock Open was detected.

## Initial Actions

- Check that the Top Cover can be opened and closed.
- Check the Finisher Top Cover Interlock Sensor and the Finisher Top Cover Interlock +24V Switch are properly installed, not broken, and have no foreign objects
- Power Off/ON.


## Procedure

Check the following;

- Top Cover installation
- Finisher Top Cover Interlock Sensor for damage
- Finisher Top Cover Interlock +24 V Switch actuator for any damage


## These parts are in normal condition.

$Y^{Y} \quad \mathbf{N}$
Repair or replace any of the parts that has a defect.
Enter Component Control [012-300]. Open and close the Top Cover to block and unblock the Finisher Top Cover Interlock Sensor. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8701 and P/J8730. P/J8701 and P/J8730 are securely connected.
Y N
Connect P/J8701 and P/J8730 securely.
Check for an open or short circuit between J8701 and J8730. The wires between J8701 and J8730 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8701-3 (+) and GND ( - ). The voltage is approx. +5 VDC .
Y N
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between Finisher PWB J8701-2 (+) and GND (-). Open and close the Top Cover to block and unblock the Finisher Top Cover Interlock Sensor. The voltage changes.
Y $N$
Replace the Finisher Top Cover Interlock Sensor (PL 22.3).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Measure the voltage between Finisher PWB J8702-1 (+) and GND (-). The voltage is approx. +24VDC.

Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-302 (A-Finisher) Front Cover Interlock OPEN

 BSD-ON:CH15.1The Front Cover Interlock Open was detected.

## Initial Actions

- Check that the Top Cover can be opened and closed
- Check that the Finisher Front Interlock Switch is properly installed, not broken, and has no foreign object.
- Power Off/ON.


## Procedure

Check the following;

- Front Cover installation
- hinges for any damage
- Finisher Top Cover Interlock Sensor for any damage


## Thee above parts are OK.

Y $N$
Repair or replace any of the parts that are defected.
Enter Component Control [012-302]. Open and close the Front Cover to turn On and Off the Finisher Front Interlock Switch. The display changes.
Y $\mathbf{N}$
Connect the connections of P/J8702 and P/J8733. P/J8702 and P/J8733 are securely connected.
Y N
Connect P/J8702 and P/J8733 securely.
Check for an open or short circuit between J8702 and J8733. The wires between J8702 and J8733 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8702-4 (+) and GND (-). Open and close the Front Cover to turn On and Off the Finisher Front Interlock Switch. The voltage changes.
Y $N$
Replace the Finisher Front Interlock Switch (PL 22.7).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Measure the voltage between Finisher PWB J8702-1 (+) and ( - ). The voltage is approx. +24VDC.
Y N
Go to Wirenet 7.2.38 A-Finisher +24VDC and check the +24VDC circuit.

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-903 (A-Finisher) Paper Remains at Compiler Exit Sensor <br> BSD-ON:CH15.3

- At Power On, the Compile Exit Sensor detected paper.
- While the Main Motor was operating at initialization at Power On, the Compile Exit Sensor detected paper.
- When the Cycle down operation at the end of a job was complete, the Compile Exit Sensor was On.


## Initial Actions

- Check the power supply voltage at the customer site for a drop.
- Check the Compile Exit Sensor is properly installed and free from foreign objects and that the actuator is not binding.
- Power Off/ON.


## Procedure

Check for paper remaining on the Compile Exit Sensor and how it is installed. The sensor is properly installed with no paper left there.
Y $N$
Remove the remaining paper and reinstall the sensor properly.
Run DC330[012-150].
Enter Component Control [012-150]. Actuate the Compile Exit Sensor. The display changes. Y $\quad \mathbf{N}$

Check the connections of P/J8709 and P/J8728. P/J8709 and P/J8728 are securely connected.
Y N
Connect P/J8709 and P/J8728.
Check for an open or short circuit between J8709 and J8728. The wires between J8709 and J8728 are OK.
Y $N$
Repair the open or short circuit.
Measure the voltage between Finisher PWB J8709-3 (+) and GND (-). The voltage is approx.+5VDC.

## N

Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit
Measure the voltage between Finisher PWB J8702-2 (+) and GND (-). Actuate the Compile Exit Sensor. The voltage changes.
Y N
Replace the Compile Exit Sensor (PL 22.5).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 012-935 (A-Finisher) Paper Remains at Ent Sensor

## BSD-ON:CH15.3

- At Power On the Finisher Entrance Sensor detected paper.
- While the Main Motor was operating at initialization at Power On, the Finisher Entrance Sensor detected paper.
- When the Cycle down operation at the end of a job was complete, the Finisher Entrance Sensor was On.


## Initial Actions

- Check the power supply voltage at the customer site for a drop.
- Check the Finisher Entrance Sensor is properly installed and free from foreign objects and that the actuator is not binding.
- Power Off/ON.


## Procedure

Check for paper remaining on the Finisher Entrance Sensor and how it is installed. The sensor is properly installed and free from paper.
Y $N$
Remove the remaining paper and reinstall the sensor properly.
Enter Component Control [012-140]. Move the Finisher Entrance Sensor actuator by hand or with a piece of paper. The display changes.

N
Check the connections of P/J8709 and P/J8729. P/J8709 and P/J8729 are securely connected.
Y N
Connect P/J8709 and P/J8729 securely.
Check for an open or short circuit between J8709 and J8729. The wire between J8709 and J8729 are OK.
Y $N$
Repair the open or short circuit.
Measure the voltage between J8709-6 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
$\mathbf{Y} \quad \mathbf{N}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between J8709-5 (+) on the Finisher PWB and GND (-). Actuate the Finisher Entrance Sensor. The voltage changes.
Y N
Replace the Finisher Entrance Sensor (PL 22.5).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 016-210 Software Option (HDD Error) RAP

One of the Software option functions cannot be executed due to a HDD error or the HDD is not installed.

## Initial Actions

Power Off/On

## Procedure

Check HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists, replace the HDD (PL 11.2).

## 016-211 Software Option (System Memory Low) RAP

One of the Software option functions cannot be executed due to insufficient System Memory capacity.

## Initial Actions

Power Off/On

## Procedure

Refer customer to following User Guide headings to check memory usage:

- Allocate Memory
- Memory Settings
- Covers
- Mailbox Screen
- Properties
- Properties Features
- Data Encryption
- Memory Full Procedure
- Maximum Stored Pages


## 016-212 Software Option (Page Memory Low) RAP

One of the Software option functions cannot be executed due to insufficient Page Memory capacity.

Initial Actions
Power Off/On

## Procedure

Refer customer to following User Guide headings to check memory usage:

- Allocate Memory
- Memory Settings
- Properties
- Properties Features
- Maximum Stored Pages
- Mailbox Screen
- Data Encryption
- Memory Full Procedure
- Covers


## 016-213 Software Option (Printer PWB) RAP

BSD-ON:16.1
One of the Software option functions cannot be executed due to a PRT_CARD error or PRT_CARD not installed.

## Procedure

Check installation of the Printer PWB (PL 11.2)

016-214 Serial Number Mismatch RAP
The Serial Numbers are not in sync.
Initial Actions
Power Off/On

## Procedure

Go to GP 4.

## 016-215 Software Option RAP

## BSD-ON:16.1/17.1

Functions such as scanner cannot be executed due to an option PWB error.

## Initial Actions

Power Off/On

## Procedure

Check installation and electrical connections of PWBs on PL 11.1 and PL 11.2.

## 016-216 Software Option RAP

BsD-on:16.1/17.1
Functions such as scanner cannot be executed due to an option PWB error.
Initial Actions
Power Off/On

## Procedure

Check installation and electrical connections of PWBs on PL 11.1 and PL 11.2.

## 016-217 Software Option RAP

BSD-ON:16.1/17.1
Functions such as scanner cannot be executed due to an option PWB error.

## Initial Actions

Power Off/On

## Procedure

Check installation and electrical connections of PWBs on PL 11.1 and PL 11.2.

## 016-219 Software Option RAP

## BSD-ON:16.1/17.1

Functions such as scanner cannot be executed due to an option PWB error.

## Initial Actions

Power Off/On

## Procedure

Check installation and electrical connections of PWBs on PL 11.1 and PL 11.2.

## 016-311 Scanner Install RAP

## BSD-ON:6.2

The system detected that the scanner is not installed.

## Procedure

Check the electrical connections between the IIT and the ESS.
Ensure ribbon cable is connected to P/J 320 on ESS PWB (PL 11.2)
NOTE: FAX may be removed for access (PL 11.3)
If the problem persists, check the connections on the IIT/IPS PWB (PL 13.3)

## 016-315 IIT Interface RAP

BSD-ON:6.2

An error was detected in the IF between the IIT and the IOT.

## Procedure

Check the connection of each connector between the IIT and the IOT.
Replace the IIT/IPS PWB (PL 13.3) If the problem persists, replace the MCU PWB (PL 11.1).

## 016-316 Page Memory Not Detected RAP

The system detected that the Page Memory (Standard) of the scanner was not installed.

## Initial Actions

Power Off/On

## Procedure

Ensure P/J's on the ESS PWB (PL 11.2) and the IIT/IPS PWB (PL 13.3) are securely connected.

Check the installation of the Printer PWB if present.

## 016-317 Page Memory Error- Standard RAP

 BSD-ON:16.1The system detected an error in the Page Memory (Standard) of the scanner.

## Initial Actions

Power Off/On

## Procedure

Ensure P/J's on the ESS PWB (PL 11.2) and the IIT/IPS PWB (PL 13.3) are securely connected.

Check the installation of the Printer PWB if present.

## 016-318 Page Memory Error- Option RAP

BSD-ON:16.1
The system detected an error in the Page Memory (Option) of the scanner.

## Initial Actions

Power Off/On

## Procedure

Check the installation of the Printer PWB if present.
Refer customer to following User Guide headings to check memory usage:

- Allocate Memory
- Memory Settings
- Properties
- Properties Features
- Maximum Stored Pages
- Mailbox Screen
- Data Encryption
- Memory Full Procedure
- Covers


## 016-321 Fax Module RAP

BSD-ON:16.1/17.1
An error was detected at System Check Fax.

## Initial Actions

Power Off/On

## Procedure

Check the installation of the FAX PWB.
Check that P/Js on FAX PWB are securely connected.

## 016-322 JBA Account Full RAP

## BSD-ON:16.1

The accumulated accounting data in Job Based Accounting reached the specified value.

## Procedure

Switch the power off then on 2 minutes after the job is attempted (after an external Accounting Server has read the accounting data).

016-323 B Formatter RAP
An internal formatting error occurred.
Initial Actions
Power Off/On

## Procedure

If the problem persists, replace the ESS PWB (PL 11.2).

## 016-450 SMB Host Name Duplicated RAP

A PC of the same host name exists on the network.

## Initial Actions

Power Off/On

## Procedure

Refer customer to Systems Administrator Guide headings:

- Information Checklist
- Changing the Settings
- Setting Format of config.txt


## 016-454 DNS Dynamic Update RAP

Unable to retrieve the IP address from DNS.

## Initial Actions

Power Off/On

## Procedure

Check the DNS confutation and IP address of the retrieve setting.

## 016-455 SMTP Server Time-out RAP

There is no response from the SMTP server within the specified time ( 60 sec ).

## Initial Actions

Power Off/On

## Procedure

If the time on the machine is incorrect, User Guide heading Changing the Default Time Settings procedure resets the time. Or follow procedure below.

1. Press the Log In/Out button on the control panel.
2. Enter the Key Operator ID using the numeric keypad on the control panel. Select Confirm on the System Administrator Login screen.
NOTE: The default Key Operator ID is (five one's) "11111". If the Authentication feature is enabled, you may be required to enter a password. The default password is "x-admin".
3. Select System Settings on the System Administrator Menu screen.
4. Select System Settings on the System Settings screen.
5. Select Common Settings on the System Settings screen.
6. Select Machine Clock/Timers on the Common Settings screen.
7. Select the required option.
8. Select Change Settings.
9. Change the value using the scroll buttons or select required options.
10. Select Save
11. Return to main menu.

## 016-456 SMTP time asynchronous RAP

A standard time synchronized source message and an asynchronous message was received from the SMTP server.

## Initial Actions

Power Off/On

## Procedure

If the time on the machine is incorrect, User Guide heading Changing the Default Time Set tings procedure resets the time. Or follow procedure below.

1. Press the Log In/Out button on the control panel.
2. Enter the Key Operator ID using the numeric keypad on the control panel. Select Confirm on the System Administrator Login screen.

NOTE: The default Key Operator ID is (five one's) "11111". If the Authentication feature is enabled, you may be required to enter a password. The default password is "x-admin".
3. Select System Settings on the System Administrator Menu screen.
4. Select System Settings on the System Settings screen.
5. Select Common Settings on the System Settings screen.
6. Select Machine Clock/Timers on the Common Settings screen.
7. Select the required option.
8. Select Change Settings.
9. Change the value using the scroll buttons or select required options.
10. Select Save.
11. Return to main menu.

## 016-461 TBD RAP

A definition is not available at time of publication.

## Procedure

A procedure is not available at time of publication.

## 016-500 DIMM RAP

A definition is not available at time of publication.

## Procedure

A procedure is not available at time of publication.

## 016-501 S2X RAP

A definition is not available at time of publication.

## Procedure

A procedure is not available at time of publication.

## 016-502 ROM Write RAP

There is a ROM writing failure in the Controller.
Initial Actions
Power Off/On

## Procedure

Remove and replace the DIMM (PL 11.2)
If the problem persists, disconnect and reconnect the electrical connections on the HDD (PL 11.2)

If the problem persists, reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 016-503 SMTP Redirector RAP

The Redirector cannot resolve the SMTP (Simple Mail Transfer Protocol) Server address.

## Initial Actions

Power Off/On

## Procedure

Refer customer to System Administrator Guide headings

- E-mail
- Information Checklist


## 016-504 Redirector POP Server RAP

The Redirector cannot resolve the POP (Post Office Protocol) Server address.

## Initial Actions

Power Off/On

## Procedure

Specify the correct POP Server name or specify the IP address.
Refer customer to System Administrator Guide headings

- E-mail
- E-mail Environments
- E-mail Setting Setup
- POP3 Server Settings
- Test Mail


## 016-505 Redirector POP Authentication RAP

The Redirector cannot pass POP (Post Office Protocol) authentication.

## Initial Actions

Power Off/On

## Procedure

Check that the login name and password for the POP Server are correct.
Refer customer to System Administrator Guide headings

- E-mail
- E-mail Environments
- E-mail Setting Setup
- POP3 Server Settings
- Test Mail


## 016-506 Image Log RAP

The Image Log in the HDD is full.

## Initial Actions

Power Off/On

## Procedure

Switch off the power and disconnect and reconnect the electrical connectors in the ESS and HD. Switch on the power.

If the problem persists perform Hard Disk Diagnostic Program. If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

If the problem persists, replace the HDD (PL 11.2)

## 016-507 Image Log Send RAP

The Image Log send command 1 in the HDD failed.

## Initial Actions

Power Off/On

## Procedure

Switch off the power and disconnect and reconnect the electrical connectors in the ESS and HD. Switch on the power.

If the problem persists perform Hard Disk Diagnostic Program. If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

If the problem persists, replace the HDD (PL 11.2)

## 016-508 Image Log RAP

The Image Log send command 2 in the HDD failed.

## Initial Actions

Power Off/On

## Procedure

Switch off the power and disconnect and reconnect the electrical connectors in the ESS and HD. Switch on the power.

If the problem persists perform Hard Disk Diagnostic Program. If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

If the problem persists, replace the HDD (PL 11.2)

## 016-509 Image Log RAP

The Image Log block send command 1 in the HDD failed.

## Initial Actions

Power Off/On

## Procedure

Switch off the power and disconnect and reconnect the electrical connectors in the ESS and HD. Switch on the power.

If the problem persists perform Hard Disk Diagnostic Program. If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

If the problem persists, replace the HDD (PL 11.2)

## 016-510 Image Log RAP

The Image Log block send command 2 in the HDD failed.

## Initial Actions

Power Off/On

## Procedure

Switch off the power and disconnect and reconnect the electrical connectors in the ESS and HD. Switch on the power.

If the problem persists perform Hard Disk Diagnostic Program. If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

If the problem persists, replace the HDD (PL 11.2)

## 016-511 Image Log RAP

The Image Log invalid send rule 1 executed in the HD.

## Initial Actions

Power Off/On

## Procedure

Switch off the power and disconnect and reconnect the electrical connectors in the ESS and HD. Switch on the power.

If the problem persists perform Hard Disk Diagnostic Program. If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

If the problem persists, replace the HDD (PL 11.2)

## 016-512 Image Log RAP

The Image Log invalid send rule 2 executed in the HD.

## Initial Actions

Power Off/On

## Procedure

Switch off the power and disconnect and reconnect the electrical connectors in the ESS and HDD. Switch on the power.

If the problem persists perform Hard Disk Diagnostic Program. If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

If the problem persists, replace the HDD (PL 11.2).

## 016-522 LDAP RAP

There is a LDAP (Lightweight Directory Access Protocol) server SSL (Secure Socket Layer) authentication error. An SSL Client Certificate could not be acquired.

The LDAP server requires an SSL Client Certificate.

## Initial Actions

Power Off/On

## Procedure

Set the SSL Client Certificate on the machine.

## 016-523 LDAP RAP

There is a LDAP (Lightweight Directory Access Protocol) server SSL (Secure Socket Layer) authentication error. The server certificate data was incorrect.

The machine does not trust the LDAP server's SSL certificate.

## Initial Actions

Power Off/On

## Procedure

Register the root certificate of the LDAP server SSL Certificate on the machine.

## 016-524 LDAP RAP

There was a LDAP server SSL authentication error. The server certificate is not yet valid.

## Initial Actions

Power Off/On

## Procedure

Change to a valid LDAP server SSL certificate. The [Authentication with SSL] setting in [LDAP Server/Directory Service can be set to [Disabled] to avoid an error, but the connected LDAP server security is not guaranteed.

## 016-525 LDAP RAP

There was a LDAP server SSL authentication error. The server certificate has expired.

## Initial Actions

Power Off/On

## Procedure

Change to a valid LDAP server SSL certificate. The [Authentication with SSL] setting in [LDAP Server/Directory Service can be set to [Disabled] to avoid an error, but the connected LDAP server security is not guaranteed.

## 016-526 LDAP RAP

There was a LDAP server SSL authentication error. The server name does not match the certificate.

## Initial Actions

Power Off/On

## Procedure

Set the LDAP server address on the machine to match the address on the LDAP server SSL certificate. The [Authentication with SSL] setting in [LDAP Server/Directory Service can be set to [Disable] to avoid an error, but the connected LDAP server security is not guaranteed.

## 016-527 LDAP RAP

There was a LDAP server SSL authentication error. There was an SSL authentication internal error.

## Initial Actions

Power Off/On

## Procedure

This error was generated by the software.

## 016-533 LDAP RAP

There was a Kerberos server authentication protocol error. The machine and the Kerberos server clocks have a time difference that exceeds the Kerberos server clock skew value.

## Initial Actions

Power Off/On

## Procedure

Check that the machine and the Kerberos server clocks have the correct time.

## 016-534 LDAP RAP

There was a Kerberos server authentication protocol error. The realm assigned to the machine does not exist on the Kerberos server or the machine is not connecting to the Kerberos server address.

## Initial Actions

Power Off/On

## Procedure

Check that the realm name and Kerberos server address settings on the machine are correct. If connected with Windows 2000 or Windows 2003 Server, make sure the realm name is in upper case characters.

## 016-539 LDAP RAP

There was a Kerberos server authentication protocol error.

## Initial Actions

Power Off/On

## Procedure

This error was generated by the software.

## 016-539 LDAP RAP

There was a Kerberos server authentication protocol error.
Initial Actions
Power Off/On

## Procedure

This error was generated by the software.

## 016-543 Attestation Agent error 543 (REALM_UNKNOWN)

 RAPThe specified realm/domain has disappeared from the ApeosWare Authentication Agent.(The domain was manually deleted at the ApeosWare Authentication Agent after obtaining the realm name list from the device.)

## Procedure

Either update the realm list using the Realm Update button of the device or add the domain into the ApeosWare Authentication Agent.

## 016-545 Attestation Agent error 545 (CLOCKSKEW_ERR)

## RAP

A Clock skew error has occurred in attestation.

The time of ApeosWare Authentication Agent and ActiveDirectory is out of sync with the upper limit of the Kerberos ClockSkew set in the ActiveDirectory.

## Procedure

Match the time of the PC where the ApeosWare Authentication agent is installed in with the time of the PC where the ActiveDirectory is.

Furthermore, if the Windows Time Service in the PC where the ApeosWare Authentication Agent is installed is stopped, start it up.

Refer to the ApeosWare Authentication agent User Guide for solutions.

## 016-546 Attestation Agent error 546 RAP

A general user tried to obtain the information of another user.

## Procedure

Contact our Customer Support Center.

## 016-548 Attestation Agent error 548

 (UNREGISTERED_DEVICE) RAPThe information of the machine that is performing the authentication operation is not in the database (GetUserInformation method only).

The device is not registered in the ApeosWare Authentication Agent.

## Procedure

Register the device in the ApeosWare Authentication Agent. Refer to the ApeosWare Authentication Agent User Guide for solutions. Match the time of the PC where the ApeosWare Authentication agent is installed in with the time of the PC where the ActiveDirectory is.

## 016-553 Attestation Agent error 553 (VERSION_MISMATCH) RAP

The version information written in the SOAP Header cannot be understood. The ApeosWare Authentication Agent does not support the version of the device interface.

## Procedure

The version of the ApeosWare Authentication Agent needs to be upgraded.
Check that the machine is a product that is supported by the upgraded version of the ApeosWare Authentication Agent.

## 016-554 Attestation Agent error 554

## (CONFIGRATION_ERROR) RAP

The existence check for the specified user in the event of an authentication error has failed.
The domain user reference login name or the reference password of the ApeosWare Authentication Agent domain is incorrect.

## Procedure

Set the domain user reference login name or the reference password of the ApeosWare
Authentication Agent domain to the correct items.

## 016-555 Attestation Agent error 555

## (SERVICE_ISNOT_WORKING) RAP

Timed out when connecting to the authentication server.
The ApeosWare Authentication Agent cannot connect to the database or the Active Directory.

## Procedure

Check that the ApeosWare Authentication Agent can connect to the database or the Active Directory.

Refer to the ApeosWare Authentication Agent User Guide for solutions

## 016-556 Attestation Agent error 556

## (SERVICE_IS_PROCESSING) RAP

## Timeout during database processing.

Error has occurred in the database that the ApeosWare Authentication Agent is connected to due to overloading.

## Procedure

Wait for a while before authenticating again as the service is overloaded.
If that did not solve the problem, check the ApeosWare Authentication Agent.
Refer to the ApeosWare Authentication Agent User Guide for solutions.

016-557 Attestation Agent error 557 (INTERNAL_ERROR) RAP
Another error has occurred in attestation.
An internal error has occurred in the ApeosWare Authentication Agent.

## Procedure

Check the ApeosWare Authentication Agent.
Refer to the ApeosWare Authentication Agent User Guide for solutions.

## 016-558 Attestation Agent error 558 (MISC_ERR) RAP

The machine has received an unknown error from the ApeosWare Authentication Agent.

## Procedure

Turn the power OFF then ON.

## 016-560 Attestation Agent error 560 RAP

A communication error has occurred between the ApeosWare Authentication Agent and the machine

## Procedure

Check that the network cable is connected and check the settings of the Authentication Agent function.

If DNS address of the Server is set as the Server name/IP address of the ApeosWare Authentication Agent in the printer function settings list, check that DNS is enabled

## 016-562 Attestation Agent error 562 RAP

Attestation Agent Error
*ICCG External Attestation agent detected a duplicated ID

## Procedure

Correct a temporary user entered into ActiveDirectory or Attestation Agent so that it does not have the same IC card info as any other user.

## 016-569 Attestation Agent error 569 RAP

Errors related to the functions of the Authentication Agent other than listed previously Attestation Agent Error

## Procedure

Turn the power OFF then ON

## 016-574 Host Name Error RAP

A failure in resolving a problem with a host name in FTP scan

## Procedure

Check the connection to DNS.
Or check that the destination server name is entered on DNS.

016-575 DNS Server Error in FTP RAP
In FTP scan, the server was not found on DNS.

## Procedure

Set DNS address.
Or set the destination server address, using IP address.

## 016-576 Server Connection Error in FTP RAP

In FTP scan, there is a problem with the connection to the server.

## Procedure

Check that the destination FTP server and this machine are set up so that they can communicate with each other on the network. For example, check the following:

- The IP address of the server is correct
- The network cable is connected


## 016-577 FTP Service RAP

FTP Service has a problem.

## Procedure

Check the following:

- FTP Service is activated
- Port No. used for FTP Service is correct


## 016-578 Login/Password Error RAP

A login name or password error in FTP scan.

## Procedure

Check the login name (user name) and password are correct.

## 016-579 Scanning Picture Error RAP

There is a problem with the place to save images scanned in FTP scan.

## Procedure

Check that the scanned-images saving place on the FTP scan server is correct.

## 016-580 File Name Acquisition Failure RAP

A failure in acquiring a file name/folder on the FTP scan server.

## Procedure

Check the right to access the FTP scan server.

## 016-581 File Name Suffix Limit Error RAP

The suffix of a FTP scan file name/folder name exceeds the limit.

## Procedure

Change the file name/destination folder, or move or delete the file in the destination folder.

## 016-582 File Creation Failure RAP

A failure in creating a FTP scan file.

## Procedure

Check the following:

- That the specified name is a file name that can be created in the storage place.
- That the storage place has some space available.


## 016-583 Lock Folder Creation Failure RAP

A failure in creating a FTP scan lock folder

## Procedure

Check the following:

- If the existing lock directory (*.LCK) is left on the destination, manually delete it and retry the job.
- That the specified name is a folder name that can be created in the storage place.
- That there is no folder with the same name as the specified one.
- That the storage place has some space available.


## 016-584 Folder Creation Failure RAP

A failure in creating a FTP scan folder

## Procedure

Check the following:

- That the specified name is a folder name that can be created in the storage place.
- That there is no folder with the same name as the specified one.
- That the storage place has some space available.


## 016-585 File Delete Failure RAP

A failure in deleting a FTP scan file.Check the right to access the server.

## Procedure

Check the right to access the server.

## 016-586 Lock Folder Delete Failure RAP

A failure in deleting a FTP scan lock folder

## Procedure

Check the following:

- The right to access the server.
- If the existing lock directory (*.LCK) is left on the destination, manually delete it and retry the job.


## 016-587 Folder Delete Failure RAP

A failure in deleting a FTP scan folder

## Procedure

Check the right to access the server

## 016-588 Data Write-in Failure RAP

A failure in writing data onto the FTP scan server

## Procedure

Check that the storage place has some space available.

## 016-589 Data Read Failure RAP

A failure in reading data from the FTP scan server

## Procedure

Check that the user has the [right to read data from] folder on the server.

## 016-590 Data Reading Failure RAP

[Overwrite prohibited] is selected as action to be taken when a duplicated FTP scan file name is detected.

## Procedure

Select any option other than [Overwrite prohibited]

## 016-591 Scan Filing Policy Injustice RAP

FTP scan filing policy is illegal (when Add selected).

## Procedure

If [Add] is selected as action to be taken when a duplicated file name is detected, check that the file format is not a multi-page one.

## 016-592 NEXTNAME.DAT file access error RAP

NEXTNAME.DAT file access error in FTP scan

## Procedure

If [Add] is selected as action to be taken when a duplicated file name is detected, check that NEXTNAME.DAT file is correct.

## 016-593 Internal Scan Error RAP

An internal error occurred in FTP scan.

## Procedure

If the same operation causes this to reoccur, contact our Custom Support Center.

## 016-594 TYPE Command Failure RAP

In FTP scan, a TYPE command failed. (network error)

## Procedure

If the same operation causes this to reoccur, contact our Custom Support Center.

## 016-595 Port Command Failure RAP

In FTP scan, a Port command failed. (network error)

## Procedure

If the same operation causes this to reoccur, contact our Custom Support Center.

## 016-596 CDUP Command Failure RAP

In FTP scan, a CDUP command failed. (network error)

## Procedure

If the same operation causes this to reoccur, contact our Custom Support Center.

## 016-597 Same Name File Exists RAP

FTP scanning stopped because another file (folder) with the same name existed. (CreditMutuel specification)

## Procedure

Check the following:

- With multiple machines not accessing the same folder on the same server, repeat the same operation.
- If this still reoccurs, contact our Custom Support Center.


## 016-600 Key Operator Authentication Locked RAP

The number of incorrect Key Operator log in attempts reached the limit.

## Procedure

NOTE: Default is 5 events. Chain 700-xxx Common [700-563] can be set between 1 to 10 events.
With this feature enabled, the machine denies access when an incorrect System Administrator
ID is entered the selected number of times.
If required, refer to GP 3 to reset password to (five one's) 11111 default if the System Adminis trator ID is unavailable.

## 016-601 Illegal Access Detection RAP

The number of incorrect authentication log in attempts reached the limit.

## Procedure

NOTE: Default is 10 users. Chain 700-xxx Common [700-564] can be set 1 to 600 users. If required, refer to GP 3 to reset password to (five one's) 11111 default if the System Administrator ID is unavailable.

## 016-701 ART EX Memory Expended RAP

Insufficient memory was detected while using the ART EX.

## Initial Actions

Power Off/On

## Procedure

Decrease the resolution setting.

## 016-702 Out of Page Buffer RAP

Insufficient Print Page Buffer is detected.

## Initial Actions

Power Off/On

## Procedure

Requires Print Page buffer memory expansion, a decrease of resolution, or set to Print Guarantee mode (Print Guarantee mode is only for PLW). For PCL, set the PCL Heap Memory/ Band Buffer Ratio to above 1:2.

Refer customer to System Administrator Guide headings

- When printing fails
- Setting Format of config.txt


## 016-703 E-mail To Invalid Box RAP

The system detected an unopened or invalid mailbox and aborted a job when receiving an Email.

## Initial Actions

Power Off/On

## Procedure

Send the E-mail to a valid mailbox destination or set up the appropriate mailbox.
Refer customer to Mailbox section in User Guide

## 016-704 Mailbox Full RAP

When accessing the HD, the control logic detected that the mailbox was full (it exceeded the maximum number of documents per box) and aborted the job.

## Initial Actions

Power Off/On

## Procedure

Delete unnecessary documents and then repeat the operation.
Refer customer to Mailbox section in User Guide.

## 016-705 Secure Print RAP

Registration for Secure Print failed because Security Storage cannot be done without a HD.

## Initial Actions

Power Off/On

## Procedure

Check HDD electrical connections (PL 9.2).
If the problem occurred at installation, check whether the operations for Secure Print are correct.

Refer customer to User Guide headings:

## 016-706 Maximum Users Exceeded RAP

When accessing the HD, the system detected that the job exceeded the maximum number for users for Proof Prints and aborted the job.

## Initial Actions

Power Off/On

## Procedure

Delete unnecessary documents/users and print again.
Refer customer to User Guide headings Maximum Stored Pages,
Create/Check User Accounts

## 016-707 Sample Print RAP

Proof Print Registration failed because it cannot be stored without a HD

## Initial Actions

Power Off/On

## Procedure

Check HDD electrical connections (PL 11.2).
If the problem occurred at installation, check whether the operations for Proof Print are correct.

## 016-708 HDD Full Annotation/Watermark RAP

When an Annotation/Watermark image was to be stored in the HDD, the Full status was detected and the job was aborted.

## Initial Actions

Power Off/On

## Procedure

Check HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists, replace the HDD (PL 9.2).

## 016-709 ART EX Command RAP

An ART EX command error occurred during PLW processing.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-710 Delayed Print RAP

- A Delay Print Job was received from the machine that has no HDD installed.
- The number of jobs that can be simultaneously received (100 jobs) was exceeded.


## Initial Actions

Power Off/On

## Procedure

Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists, replace the HDD (PL 11.2).

## 016-711 E-mail Transmission Size Limit RAP

The send module (redirector) attempted to send data exceeding the system data size limit for Scan to E-mail.

## Initial Actions

Power Off/On

## Procedure

Decrease the send parameter for resolution (send image quality) and resend.
Reduce the image using the send parameter and resend (e.g. A3 to A4).
Change the [Upper Limit of Data Size] setting in the Specifications Settings Screen on the UI Panel (default 2MB recommended).

## 016-712 Panther Capacity (I-Formatted) RAP

The processed data is too small (the specified range for the document is too small).

## nitial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-713 Security Box Password RAP

There is a password error in the security box.
Initial Actions
Power Off/On

## Procedure

A procedure is not available at time of publication.

## 016-714 Security Box Enable RAP

The security box is not enabled.
Initial Actions
Power Off/On

## Procedure

A procedure is not available at time of publication.

## 016-716 TIFF Data Overflow RAP

There is a spooling problem with TIFF (Tagged Image File Format) data.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists perform GP 6 Special Boot Modes Spool Initialization.
If the problem persists remove and replace the DIMM (PL 11.2)
If the problem persists, disconnect and reconnect HDD electrical connections (PL 11.2)

## 016-718 PCL6 Memory RAP

Insufficient memory was detected while performing Printer COntrol Language functions.

## Initial Actions

Power Off/On

## Procedure

Cancel the job, reduce resolution, and rerun the job.

## 016-719 Out of PCL Memory RAP

Insufficient memory is detected while using PCL.

## Initial Actions

Power Off/On

## Procedure

The print job exceeded the memory capacity of the print control language driver. Ask customer to break up the print job into smaller parts.

## 016-720 PCL Command RAP

A PCL command error occurred during PCL processing
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-721 Other Errors RAP

The Auto Tray Switching feature was enabled when Auto Paper Off is selected for all paper trays on the Paper Type Priority screen.

## Procedure

Inform customer that when Auto Tray Switching feature is enabled, select a paper type other than Auto Paper Off option on the Paper Type Priority screen.

## 016-722 Staple Position RAP

The job was cancelled when the Staple Position could not be determined.

## Initial Actions

Ensure the staple position selection matches the available staple position in the finisher.

## Procedure

Refer customer to following User Guide headings:

- [Image Rotation] - [Rotation Direction Screen]


## 016-724 Staple Position RAP

The staple selection and hole punch selection is not compatible.

## Initial Actions

Ensure the staple position selection and hole punch position selection is compatible (no holes will be punched on staples or staples located in holes)

## Procedure

Refer customer to following User Guide headings:

- [Image Rotation] - [Rotation Direction Screen]


## 016-725 B-Formatter Image RAP

There is a B -Formatter Library image conversion error.
Initial Actions
Power Off/On

## Procedure

If the problem persists, replace the ESS PWB (PL 11.2).

016-726 PDL Auto Switch RAP
The Page Description Language failed to change.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-727 Printer Request

The result of a print request is a zero-page document that cannot be stored in a mailbox, and the job is canceled.

## Initial Actions

Power Off/On

## Procedure

Set the print option to print blank pages, and reprint to confirm if the output is not blank. Add text if the output is blank, and try printing again.

## 016-728 TIFF Data Unsupported RAP

The TIFF (Tagged Image File Format) data contains a tag that is not set in the Image File Expansion Library.

## Initial Actions

Power Off/On

## Procedure

Refer customer to following User Guide headings:

- TIFF-S, TIFF-S, and TIFF-J in Internet iFax Profile
- Job Templates - Network Scanning
- File Format
- Properties


## 016-729 TIFF Data Size RAP

The specified TIFF (Tagged Image File Format) settings exceed the upper limit of the valid number of colors and pixels.

## Initial Actions

Power Off/On

## Procedure

Refer customer to following User Guide headings:

- TIFF-S, TIFF-S, and TIFF-J in Internet Fax Profile
- Job Templates - Network Scanning
- File Format
- Properties


## 016-730 ART Command Unsupported RAP

A command not supported by the ART was detected.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-731 TIFF Data Invalid RAP

The TIFF (Tagged Image File Format) data is corrupt
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists, refer customer to following User Guide headings:

- TIFF-S, TIFF-S, and TIFF-J in Internet iFax Profile
- Job Templates - Network Scanning
- File Format
- Properties

016-733 Destination Address RAP
There is an error in the destination address.
Initial Actions
Power Off/On

## Procedure

Verify the address is correct.

## 016-734 Transmission Report RAP

There is a simple transmission report error.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-735 Updating Job Template RAP

The system attempted to output the Job Template List while the Job Template was being updated.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-736 Remote Directory Lock RAP

There is a lock error in the remote directory

## Initial Actions

Power Off/On

## Procedure

Ask the customer to check the directory that is locked and clear that directory.

016-737 Remote Directory Removal RAP
There is a lock removal error in the remote directory.
Initial Actions
Power Off/On

## 016-741 Downloading Mode RAP

Unable to select the downloading mode.

## Procedure

Enter Tools and enable download mode.

## Procedure

A procedure is not available at time of publication.

016-742 TBD RAP
A definition is not available at time of publication.

## Procedure

A procedure is not available at time of publication.

## 016-743 TBD RAP

A definition is not available at time of publication.

## Procedure

A procedure is not available at time of publication.

## 016-744 TBD RAP

A definition is not available at time of publication.

## Procedure

A procedure is not available at time of publication.

## 016-745 TBD RAP

A definition is not available at time of publication.

## Procedure

A procedure is not available at time of publication.

## 016-746 Unsupported PDF File RAP

There was transparency or JBIG2 in a PDF version 1.3 file.

## Procedure

Ask customer to print using the driver from Acrobat Reader.

## 016-747 Insufficient Memory

An error occurred while processing the annotation image data due to insufficient memory.

## Procedure

Take one of the following actions:

- Increase the annotation image memory size
- Reduce the number of the images in [Repeat Image]
- If the problem persists, Power Off/On the machine


## 016-748 HDD Full RAP

HDD Full status was detected and the job was aborted when accessing a mailbox.

## Initial Actions

Power Off/On

## Procedure

Refer customer to check Mailbox section in User Guide to make available more HDD space.
If the problem persists check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program. If the problem persists perform GP 6 Special Boot Modes HDD Initialization.

## 016-749 Post Script Font RAP

The specified font is not found in the ROM or the HDD.

## Initial Actions

Power Off/On

## Procedure

Refer customer to User Guide index on Change Print Settings or Print Mode Settings.

## 016-750 Print Job RAP

The control logic detected an error in the print job ticket

## Initial Actions

Power Off/On

## Procedure

Refer customer to User Guide section Change Print Settings or Print Mode Settings.

## 016-751 PDF RAP

One of the following errors occurred while performing PDF Bridge processing

- Syntax error
- Use of undefined commands
- Parameter error
- Broken PDF file
- Internal error

Initial Actions
Power Off/On

## Procedure

Ask customer to print using the driver from Acrobat Reader

## 016-752 PDF Memory Limit RAP

Insufficient memory was detected during PDF Bridge processing.
Initial Actions
Power Off/On

## Procedure

Ask customer to check print settings. When the Print mode is set to [High Quality], if the setting for [Standard] is set to [Normal], change the setting to [High Speed].

## 016-753 PDF Password Mismatch RAP

## BSD-ON:16.1

When processing a PDF file that is protected by a password, the password in the UI panel settings and the password specified using XPJL (set in the Contents Bridge Utility) do not match.

## Procedure

Specify the correct password using the UI or the Contents Bridge.

016-754 PDF LZW Not Installed RAP BSD-ON:16.1

The PDF Bridge tried to process the PDF file compressed in LZW without the [Contents Bridge Expansion Kit] installed.

## Procedure

Install the [Contents Bridge Expansion Kit].
Print using the driver from Acrobat Reader.

016-755 PDF Print Prohibited RAP
BSD-ON:16.1
The system processed a print prohibited PDF file.

## Procedure

Use Adobe Reader to clear the print prohibition setting and print the PDF file.

## 016-756 Auditron - Prohibit Service RAP

The service is prohibited.

## Procedure

Ask the key operator or system or account administrator to enable usage of the machine.

## 016-757 Auditron - Invalid User RAP

The account is not registered.

## Procedure

Ask key operator or system or account administrator to set up the account or check the users password.

## 016-758 Auditron - Disabled Function RAP

An illegal account was detected.

## Procedure

Ask the key operator or system or account administrator to add the account rights.

## 016-759 Auditron - Reached Limit RAP

The number of pages reached the maximum number of pages for this service.

## Procedure

Ask the key operator or system or account administrator to raise the page limit.

## 016-760 PostScript Decompose RAP

An error occurred in PostScript Decompose processing.

## Procedure

Resend the job. If the problem persists, refer customer to User Guide headings:

- PostScript Memory
- CentreWare Internet Services properties
- Memory Settings
- Allocate Memory
- When printing fails
- Setting Format of config.txt


## 016-761 FIFO Empty RAP

There is a FIFO (first in first out) image enlargement error.

## Procedure

Print in Fast Print mode.
Set the [Print Mode] to [Normal] and rerun. If the problem continues, set [Page Print Mode] to [On].

## 016-762 Print Language RAP

The specified print language is not installed

## Procedure

In [Specify Print Mode] under [Port Settings], specify another print language.

016-764 SMTP Server Connection RAP
SMTP server response code errors.

## Procedure

Repeat the operation.

## 016-765 SMTP Server HDD Full RAP

Unable to send e-mail due to the Hard Drive on the SMTP server is full.

## Procedure

Retrieve E-mail in the Server HDD. Reconsider the Server capacity.

## 016-766 SMTP Server File System RAP

SMTP server response code error.

## Procedure

Contact the SMTP Server Administrator and ask the administrator to reconsider the Server capacity limit.

016-767 Invalid E-mail Address RAP
Unable to send e-mail due to an incorrect address.

## Procedure

Check the destination of the E-mail.

## 016-768 Invalid Sender Address RAP

Unable to connect to the SMTP server due to the machines incorrect mail address.

## Procedure

Check whether the E-mail address is valid within the domain and check the setting of the Email address of the machine.

016-769 SMTP Server Unsupported DSN RAP
SMTP server does not support conformation of mail distribution (DSN)

## Procedure

Enable the most appropriate ESMTP function in the SMTP Server. Or, send the E-mail with sent confirmation turned off.

A
016-770 FAX Function Cancelled RAP
The direct fax function is disabled.

## Procedure

Check with the System Administrator whether the function is enabled.

016-771 JBIG Parameter RAP
There is a JBIG (Joint Bi-level Image Experts Group) parameter error.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job

## 016-772 JBIG Parameter RAP

There is a JBIG (Joint Bi-level Image Experts Group) parameter error.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

A B
016-773 JBIG Parameter RAP
There is a JBIG (Joint Bi-level Image Experts Group) parameter error
Initial Actions
power Off/Pn
Procedure
Ask customer to cancel and rerun the job.

A B

## 016-774 JBIG Parameter RAP

There is a JBIG (Joint Bi-level Image Experts Group) parameter error.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-775 JBIG Parameter RAP

There is a JBIG (Joint Bi-level Image Experts Group) parameter error.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-776 JBIG Parameter RAP

There is a JBIG (Joint Bi-level Image Experts Group) parameter error.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-777 JBIG Parameter RAP

There is a JBIG (Joint Bi-level Image Experts Group) parameter error.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-778 JBIG Parameter RAP

There is a JBIG (Joint Bi-level Image Experts Group) parameter error.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 016-779 Scanned Image Conversion Error RAP

An error occurred due to causes other than HDD access during scanned image conversion processing in I-Formatted.

## Procedure

Repeat the operation.

## 016-780 Attached Document TIFF RAP

There is a TIFF (Tagged Image File Format) error in the attached document.

## Procedure

Ask customer to cancel and rerun the job.

## 016-781 Scan Server Connect Error RAP

This fault can occur in the following circumstances:.

- The machine was unable to establish a connection to the Scan Server during the Network Scanning file transfer operation
- The machine was either unable to establish a connection to the Email (SMTP) server or was unable to authenticate (log in) to the Email server during the Scan to Email or Internet Fax file transfer operation.


## Procedure

The customer can print to the machine through the Ethernet port on the machine.
Y N
Confirm that the Ethernet network drop cable is securely connected to the machine and the wall port. The recessed green LED next to the Ethernet port on the machine should be lit if the machine is connected to a live Ethernet drop. The green LED is lit. Y $\mathbf{N}$

Connect another Ethernet straight through cable between the machine and the wall port and have the customer confirm that the wall port is live.
If the LED is still off, replace the Printer PWB in the machine.
Verify that the machine has the correct TCP/IP settings with the customer. The cause of the printing problem is likely to be the cause for the Scanning failure as well.

## For Scan to Email or Internet Fax failures, perform the following

1. Print a Print Mode System Settings list report.
2. Check the SMB section on page 5 of the report for the following:

- The Host Name setting must have no spaces in the name and no periods (.), slashes (/ or $\backslash$ ) or star symbols (*) in the name. If the Host Name has a space in it or has any of these characters, have the customer change the Host Name to eliminate these characters. If the problem continues, proceed to step 3.

3. Have the customer confirm that the Email / Internet Fax Settings section on page 5 the report contain the correct settings for their network

- The Send Email setting must be set to Enabled.
- The Server Name / IP Address setting under the sub-header SMTP Server mus either be set with the IP address or Host Name of the customer's SMTP E-mai server.

NOTE: If the Host Name of the SMTP Server is entered into the machine, then the machine must be configured with the customer's DNS settings (listed on page 3 of the report).
The Machine's E-mail Address setting must contain an email address with the customer's domain name and the address must be entered in the proper syntax (i.e.: wc7132@company.com)

- The E-mail Send Authentication setting will be set in one of the following ways:
- $\quad$ Set to OFF if the customer's SMTP E-mail server does not require the machine to authenticate or log in prior to sending the e-mail message.
- Set to SMTP AUTH if the customer's SMTP E-mail server requires that the machine authenticate or log in to the server using an SMTP log in name and password prior to sending the e-mail message.
- If the E-mail Send Authentication setting is set to SMTP AUTH, then an additional setting labeled SMTP AUTH Login Name will appear on page 5 of the report along with the Log in name that the machine will use. The customer must verify the Log in name listed on the report. A Password may also have been entered into the machine, however, it will not be listed on the report.
_ $\quad$ Set to POP3 AUTH if the customer wants the machine to authenticate or log in to their POP3 server using a POP3 log in name and password prior to sending the e-mail message.
- If the E-mail Send Authentication setting is set to POP3 AUTH, then have the customer verify the Login Name that is listed under the header POP3 Server on page 5 on the report. A POP3 Password may also have been entered into the machine, however, it will not be listed on the report.


## The customer confirmed that the Email / Internet Fax settings are correct.

Y $\mathbf{N}$
If the customer is not available or has confirmed that the settings are not correct, then they must confirm that the settings are correct or they must enter the correct settings into the machine before any further troubleshooting can be done.

Escalate to your next level of support.

## For Network Scanning failures, perform the following:

Use the procedure in GP 14 to configure your PWS as a "scan server" and then use the Network Scanning feature on the machine to scan a document into your PWS.

## The fault 16-781 is displayed when scanning using GP 14.

## Y N

The cause for the fault is either on the customer's network or with the settings in the machine. Press the [All Services] button on the machine Control Panel, then select the [Network Scanning] button on the Touch screen. There is at least one Template listed. Y N

Have the customer demonstrate how they are scanning and how they get the fault to occur. The customer is selecting the [Scan to FTP/SMB] button after pressing the [All Services] button.
Y N
Have the customer contact the Customer Support Center for help with properly configuring their machine for Network Scanning.

The Scan to FTP/SMB feature allows the customer to manually enter the destination server settings at the machine UI prior to scanning a document rather than using a previously created Template. If a fault is occurring when they use this feature, then they are either entering the wrong IP address or Host Name of their destination server or the server is not capable of accepting a connection from the machine. Refer the customer to the WC7132 User Guide for details on using this feature and to ensure that they are entering their settings correctly.

Select each one of the listed Templates and press the <Start> button to determine if the fault only occurs when certain Templates are used.

NOTE: Templates that prompt for a password were created as "Private" Templates, which require that a password be entered at the machine UI before the scanning job will start.

The fault occurs with at least one of the listed Templates

Y N
Have the customer demonstrate how they get the fault to occur.
Templates are created using one of two methods: Templates with the @ sign to the left of their name were created using the machine's CentreWare Internet Services web interface; Templates that have no @ sign in their name were created using the Smart Send software. The next step is to determine if the Templates that create the fault are of the same type. The fault occurs when selecting Templates with the @ symbol to the left of the Template name.
Y $\quad \mathbf{N}$
Templates that do not have the @ sign in their name were created using the Smar Send software. Escalate to your next level of support for help with this type of Template.

The top of the machine's Touch screen will display previously programmed settings for each highlighted Template including an IP address or Host name followed by a colon (: and either number 21 or 139 . Highlight one of the Templates that generate the fault and look at the "Job Template" settings associated with the Template. The "Job Template" setting contains an IP address or Host name followed by:21 or:139.
Y N
Refer the customer to the section titled "CentreWare Internet Services" in the WC7132 User Guide for information on properly configuring the machine's Reposi tory settings or have the customer contact the Customer Support Center to get help.

Perform each of the following steps in order:

1. Print a Print Mode System Settings list report.
2. Check the SMB section on page 5 of the report for the following:

- The Host Name setting must have no spaces in the name and no periods (.), slashes (/ or <br>) or star symbols (*) in the name. If the Host Name has a space in it or has any of these symbols, have the customer change the Host Name to eliminate these items.

3. Have the customer confirm that the Default File Destination section and all Alternate File Destination sections listed on page 5 of the report contain the correct settings for their network, including:

- The Protocol setting must be set to either FTP or SMB.
- The Server setting must contain either the IP address or SMB Host Name of the destination Scan server.

NOTE: If the Host Name of the Scan server is entered into the machine, then the machine must be configured with the customer's DNS settings (listed on page 3 of the report).

## The customer confirmed that the File Destination settings are correct.

Y N
The customer must enter the correct File Destination settings into the machine using the machine's Centreware Internet Services Web Interface. Refer the customer to the section titled "CentreWare Internet Services" in the WC7132 User Guide for details.

Have the customer create a new Template and associate the Template with the Defaul File Destination. The same fault is displayed when the new Template is used.

Y N
The same fault is displayed when the new Template is used
Escalate to your next level of support.
There is a machine problem. Perform the following:

- Reload the system software
- Refer to GP 13 to delete all Templates and Repository settings. Then, refer the customer to the section titled "CentreWare Internet Services" in the WC7132 User Guide for details on how to recreate the Templates and re-enter the Repository settings
- Re initialize the NVM by selecting the SYS-SYSTEM and SYS-USER NVM platforms.


## 016-782 Scan Server Login Error RAP

The machine was unable to log in successfully to the Scan Server during the Network Scanning file transfer operation.

## Procedure

The customer can print to the machine through the Ethernet port on the machine.
Y $\quad \mathrm{N}$
Confirm that the Ethernet network drop cable is securely connected to the machine and the wall port. The recessed green LED next to the Ethernet port on the machine should be lit if the machine is connected to a live Ethernet drop. The green LED is lit.
Y $\quad \mathbf{N}$
Connect another Ethernet straight through cable between the machine and the wall port and have the customer confirm that the wall port is live.
If the port is live, connect the CSE PWS to the Ethernet port using an Ethernet crossover cable to see if the green LED will light up with the machine and PWS fully booted up.
If the LED is still off, replace the Printer PWB in the machine.
Verify that the machine has the correct TCP/IP settings with the customer. The cause of the printing problem is likely to be the cause for the Scanning failure as well.

Press the [All Services] button on the machine Control Panel, then select the [Network Scanning] button on the Touch screen. There is at least one Template listed.
Y $\mathbf{N}$
Have the customer demonstrate how they are scanning and how they get the fault to occur. The customer is selecting the [Scan to FTP/SMB] button after pressing the [All Services] button.
Y $\mathbf{N}$
Have the customer contact the Customer Support Center for help with properly configuring their machine for Network Scanning.

The Scan to FTP/SMB feature allows the customer to manually enter the destination server settings at the machine UI prior to scanning a document rather than using a previously created Template. If a fault is occurring when they use this feature, then they are either entering the wrong IP address or Host Name of their destination server or the server is not capable of accepting a connection from the machine. Refer the customer to the WC7132 User Guide for details on using this feature and to ensure that they are entering their settings correctly.

Disconnect the Ethernet network cable from the machine. Select one of the Templates and scan a document with the network cable disconnected. The same fault (16-782) is displayed.
$\mathbf{Y} \quad \mathrm{N}$
Use the procedure in GP 14 to configure your PWS as a "scan server" and then use the Network Scanning feature on the machine to scan a document into your PWS. The fault $\mathbf{1 6 - 7 8 2}$ is displayed when scanning to your PWS.
Y $\quad \mathrm{N}$
The cause for the customer's problem is either on the customer's network or with the settings in the machine.
Reconnect the customer's network cable to the machine. Select each one of the listed Templates and press the [Start] button.

NOTE: Templates that prompt for a password were created as "Private" Templates, which require that a password be entered at the machine UI before the scanning job will start.

## The fault occurs with at least one of the listed Templates.

## Y N

Have the customer demonstrate how they get the fault to occur.
Templates are created using one of two methods: Templates with the @ sign to the left of their name were created using the machine's CentreWare Internet Services web interface; Templates that have no @ sign in their name were created using the Smart Send software. The next step is to determine if the Templates that create the fault are of the same type. The fault occurs when selecting Templates with the @ symbol to the left of the Template name.
Y N
Templates that do not have the @ sign in their name were created using the Smart Send software. Escalate to your next level of support for help with this type of Template.

Highlight one of the Templates that generate the fault and select the Output Format tab on the Touch screen. This will display the Log In name associated with the Template as well as a Password field that will either have a string of stars in it that represent the password or will show [Not Set].
Select the [Log In] button, remove the existing Log In name, type in the name anonymous and select the [Save] button. Then select the [Password] button, remove all stars so that the password is blank and select the [Save] button. Press the <Start> button to attempt a Network Scanning job. The job is successfully transferred to the server.
Y $N$
A person with knowledge of the customer's network is available.
Y $N$
Escalate to your next level of support.
Press the <Clear All> button to restore the original Log In name and Password. Highlight the Template and select the Output Format tab on the Touch screen. Have the network person type in the correct Log In name and either type in the correct Password or remove the Password that is displayed. Then press the <Start> button to attempt a Network Scanning job. The job is successfully transferred to the server.
Y N
Escalate to you next level of support.
The Log In Name and/or Password that are set in the selected Template are incorrect. Refer the customer to the WC7132 User Guide for details on editing the Repository settings of the selected Template to enter the correct Log In Name and/or Password.

The Log In Name and/or Password that are set in the selected Template are incorrect. Refer the customer to the WC7132 User Guide for details on editing the Repository settings of the selected Template to enter the correct Log In Name and/or Password.

If the 16-782 fault does not occur when disconnecting the customer's network cable and attempting a scan job but the 16-782 fault does occur when the machine is connected to the PWS, then there is likely a set up problem when using the GP 14 procedure. Escalate to your next level of support.

There is a machine problem. Perform the following steps, in order:

- Reload the system software
- Refer to GP 13 to delete all Templates and Repository settings. Then, refer the customer to the section titled "CentreWare Internet Services" in the WC7132 User Guide for details on how to recreate the Templates and re-enter the Repository settings.
- Re initialize the NVM by selecting the SYS-SYSTEM and SYS-USER NVM platforms.


## 016-783 Invalid Server Path RAP

The specified path cannot be found during Scan to Server file transfer.

## Procedure

Check the server path name specified in the job template.
If this code appears while using CentreWare Scan Service, refer to the 'CentreWare Scan Service Installation Guide'.

## 016-784 Server Write Error RAP

The Server cannot be written to during Scan to Server file transfer.

## Procedure

Check that "Write Authorization" is established in the Server directory.
Free up space on the Server disk.
If this code appears while using CentreWare Scan Service, refer to the 'CentreWare Scan Service Installation Guide'.

## 016-785 Server HD Full RAP

The Server File System became full during Scan to Server file transfer.

## Procedure

Check that "Write Authorization" is established in the Server directory.
Remove unnecessary data from the server hard drive to free up space on the Server disk.
If this code appears while using CentreWare Scan Service, refer to the 'CentreWare Scan Service Installation Guide'.

## 016-786 HD Full-Scan Write Error RAP

A temporary file in Scan to Server file transfer cannot be written to the internal HDD.

## Procedure

The HDD may be temporarily full with print jobs. Wait and retry.
Format the HDD.
Replace the HDD (PL 11.2).

## 016-788 Retrieve to Browser RAP

Failed to retrieve a file from the Web browser.

## Procedure

Take one of the following actions, and try again.

- Reload the browser page.
- Restart the browser.
- Power Off/On.


## 016-789 HD Full - Job Memory RAP

During iFax or sending mail designated for forwarding, the send module (Redirector) attempted to send data exceeding the System Data [Upper Limit of Data Size for Scan to E-mail] to the internet.

## Procedure

Decrease the send parameter for resolution (send image quality) and resend.
Reduce the image using the send parameter and resend (e.g. A3 to A4).
Change the [Upper Limit of Data Size] setting in the Specifications Settings Screen on the UI Panel (default 2MB recommended).

## 016-790 Stapling Cancelled RAP

Stapling is cancelled

## Procedure

No action required. Stapling is cancelled by the customer.

## 016-791 File Retrieve RAP

Failed to access the forwarding destination or the job template save location with [Scan to FTP/SMB] or [Job Template].

## Procedure

Check whether you can access the server specified by the forwarding destination.

## 016-792 Specified Job RAP

Failed to get the job history report specified in [Job Counter Report].

## Procedure

The specified job history does not exist.

## 016-793 MF I/O HD Full RAP

Free space is insufficient on the hard disk.

## Procedure

Either remove unnecessary data from the hard disk to increase free disk space, or initialize the hard disk.

016-798 No Trust Marking Option RAP
Unable to print the document because a HDD is disconnected.

## Procedure

Install/reattach the HDD (PL 11.2) and print again.

## 016-799 PLW Print Instruction RAP

An invalid print parameter is included.

## Procedure

Check the print data and options, and print again.

## 016-981 HDD access error RAP

HDD Full was detected because Mailbox Scan, Fax Scan, Secure Print, Delay Print, Sample Print, or Scheduled Print was specified when the HDD partition/ide0c capacity is small.

Print Job only prints the jobs stored in the HD, so this Fault does not occur for [Job Fail 016748].

## Procedure

1. Split the job into pages in order to prevent FULL state. Reduce the resolution if possible.
2. Delete documents that are no longer needed, such as: Mailbox documents, FAX Send Wait documents, Secure Print documents and Delayed Print documents. Make sure that there is space in the HDD before re-scanning and re-printing.

When the procedures above did not work, expand the HDD partition size for the corresponding service that needs it.

## 016-982 HDD access error 2 RAP

HDD was determined to be Full due to collate, stored or interrupted jobs.

## Procedure

Process or delete the jobs (documents) stored in the same HDD partition, and repeat the operation.

If the above procedures do not resolve the problem, expand the HDD partition size of the relevant service.

## 016-983 Log Image Storage Area on Disk Full RAP

This is prepared for the user to interfere and cancel a copy/scan job when the log image storage area on the disk becomes full with the level of ensuring creation set to [High].

## Procedure

Press the Cancel Job button to cancel the job.

## Rerun the job.

If the situation is the same despite some re-attempts, delete unnecessary documents saved in the device or change the level of ensuring creation (to Low). However, if the level is set to Low, log image creation cannot be ensured.

## 016-985 Data size overflow (Scan to E-mail) RAP

Due to data size exceeding the upper limit for Scan to E-mail, data could not be sent.

## Procedure

Take one of the following actions, and try again:

- Reduce the number of document pages.
- Reduce the resolution in [Scan Resolution].
- Decrease the ratio in [Reduce/Enlarge].
- For multivalued scanning, increase the ratio in [Image Compression].
- Ask the System Administrator to increase the value for [Maximum E-mail Size].


## 018-505 SMB-DOS protocol error RAP

Unable to authenticate due to an incorrect user name or password.SMB

## Procedure

Check the user name and password with the system administrator.
Note: The password cannot be verified. If you have forgotten the password, reset the password.

018-543 Shared name error in SMB server RAP
A shared name on the SMB scan server is wrong.

## Procedure

Check what the specified shared name is and enter the correct one.

## 018-547 Number restriction over of SMB scan users RAP

The limited number of SMB scan users is exceeded.

## Procedure

1. Check what the limited number of users that can connect to a shared folder is.
2. Check that the number of users that use the server simultaneously is not over max.

## 018-595 LDAP protocol error RAP

Attestation Server detected a duplicated user. (LDAP)

## Procedure

Correct the user entered in database on the LDAP server so that it does not have the same IC card info as any other user.

## 018-701 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-702 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-703 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $N$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-704 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-705 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-706 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-707 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-708 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-710 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-711 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-712 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-713 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-714 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-716 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-717 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-718 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-719 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-720 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-721 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are present. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-732 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-733 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-734 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-735 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-736 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-748 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-749 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-750 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-751 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-752 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-753 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-754 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-764 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-765 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-766 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-767 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-768 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-769 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-770 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-771 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $N$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-780 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-781 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-782 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-783 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $N$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-784 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-785 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-786 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-787 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
${ }^{Y} \quad \mathrm{~N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-788 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-789 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-790 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-791 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-792 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-793 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-794 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-795 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y N
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-796 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
Y $\mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 018-797 LDAP RAP

There is an error in the Lightweight Directory Access Protocol.

## Procedure

Verify that print jobs are printing or print a Configuration Report and verify that network setup settings are indicated. The printer is operational or the Config Report indicates valid network settings.
$\mathbf{Y} \quad \mathbf{N}$
Check for damage with the network connection. If there is no damage then there is a problem with the network. Tell the customer that the network requires service.

There is a problem with the LDAP setups on the machine or with the remote LDAP server. Ask the customer to verify the machine LDAP setups. If OK then there is a problem with the remote LDAP server.

## 021-360 EP Accessory Failure RAP

An error occurred in the connection to the EP accessory. The accessory that was supposed to be installed is not present

## Procedure

Check the connections and P/Js on the ESS PWB (PL 11.2) and check that any accessory PWB's are installed securely.

If the problem persists, reload Software (ADJ 9.3.1).

## 021-361 EP Accessory Kind Configuration Error RAP

The System Data 850-007 is set to 0 (Off) during connection to conventional countdown EP related accessories.

## Procedure

Check that the System Data 850-007 is set correctly
If it is set correctly, perform the following
Reload Software (ADJ 9.3.1).

If the problem persists, pull out and insert the EPSV board and check the P/Js.

If the problem persists, replace the ESS PWB (PL 11.2).

## 021-731 EP Accessory - Function Disabled RAP

When MDSS is connected and color copying is prohibited using the Coin Kit, a color copy job was requested.

## Procedure

Check the settings

021-732 EP Accessory - Service Canceled By Disable RAP
With an accessory installed, there was a missing card, insufficient fee paid or a shortage of card value.

Initial Actions
Power OFF/ON

## Procedure

Insert a Xerox card, copy card or cash into the accessory and ensure that there are sufficient fees or card value.

021-733 EP Accessory - Service Canceled By Color Mode Restriction RAP
With an accessory installed, there was Color Mode Restriction or the upper limit was reached.

## Initial Actions

Power OFF/ON

## Procedure

Operate the Color Mode Restriction Key SW to enable Color mode. Or, replace the card with another card that does not reach the upper limit in Color mode.

## 021-750 Used Parts Request Failure (EP-SV) RAP

When the Used Parts Collection Order was processed, an error was notified by the EP-SV.

## Initial Actions

Power OFF/ON

## Procedure

Contact the Service Center.

021-751 Maintenance Request Failure (EP-SV) RAP
When an Inspection/Repair/Preliminary Diagnostic Request was processed, an error was notified by the EP-SV.

Initial Actions
Power OFF/ON

## Procedure

Check that the telephone line is connected. Wait and send the request again.

## 021-770 Used Parts Request Failure (EP-DX) RAP

The Used Parts Collection Order could not be processed due to a busy line

## Initial Actions

Power OFF/ON

## Procedure

Contact the call center.

021-771 Maintenance Request Failure (EP-DX) RAP
The Inspection/Repair/Preliminary Diagnostics Request could not be processed due to a busy line.

Initial Actions
Power OFF/ON

## Procedure

Check that the telephone line is connected. Wait and send the request again.

021-772 EP-DX - Installation/Removal Failure RAP
Installation and removal could not be executed due to a busy line.
Initial Actions
Power OFF/ON

## Procedure

Ask for the connection to be made idle.

## 021-941 EP - Scan Service Paused By Disable RAP

With an accessory installed, there was a missing card, insufficient fee paid or a shortage of card value.

Initial Actions
Power OFF/ON

## Procedure

Insert a Xerox card, copy card or cash into the accessory and ensure that there are sufficient fees or card value.

## 021-942 EP - Scan Service Paused By Color Mode RAP

With an accessory installed, there was Color Mode Restriction or the upper limit was reached.

## nitial Actions

Power OFF/ON

## Procedure

Operate the Color Mode Restriction Key SW to enable Color mode. Or, replace the card with another card that does not reach the upper limit in Color mode.

## 021-943 EP - Print Service Paused By Disable RAP

With an accessory installed, there was a missing card, insufficient fee paid or a shortage of card value.

Initial Actions
Power OFF/ON

## Procedure

Insert a Xerox card, copy card or cash into the accessory and ensure that there are sufficient fees or card value.

## 021-944 EP - Print Service Paused By Color Mode RAP

With an accessory installed, there was Color Mode Restriction or the upper limit was reached.

## nitial Actions

Power OFF/ON

## Procedure

Operate the Color Mode Restriction Key SW to enable Color mode. Or, replace the card with another card that does not reach the upper limit in Color mode.

## 021-945 EP - Service Paused By Disable RAP

With an accessory installed, there was a missing card, insufficient fee paid or a shortage of card value.

Initial Actions
Power OFF/ON

## Procedure

Insert a Xerox card, copy card or cash into the accessory and ensure that there are sufficient fees or card value.

## 021-946 EP - Service Paused By Color Mode RAP

With an accessory installed, there was Color Mode Restriction or the upper limit was reached.

## nitial Actions

Power OFF/ON

## Procedure

Operate the Color Mode Restriction Key SW to enable Color mode. Or, replace the card with another card that does not reach the upper limit in Color mode.

## 024-340 IOT-ESS Communication 1 RAP

 BSD-ON:3.1/16.1An abnormal parameter is set for the send function.

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists, reload Software (ADJ 9.3.1).

## 024-341 IOT-ESS Communication 2 RAP

## BSD-ON:3.1/16.1

A transmission failure occurred, the Sequencing number of the sent Message Packet is incorrect.

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the MCU PWB (PL 11.1).

## 024-342 IOT-ESS Communication 3 RAP

 BSD-ON:3.1A transmission failure occurred, the Packet number of the sent Message Packet is incorrect.

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-343 IOT-ESS Communication 4 RAP

## BSD-ON:3.1

A transmission failure occurred, the Message Length of the sent Message Packet is incorrect.
Initial Actions
Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-345 IOT-ESS Communication 5 RAP

 BSD-ON:3. 1A transmission failure occurred when the Check Code of the sent Message Packet is incorrect.

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

024-346 IOT-ESS Communication 6 RAP BSD-ON:3.1

A transmission failure occurred, a parity error was detected by hardware in the IOT.
Initial Actions
Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-347 IOT-ESS Communication 7 RAP

 BSD-ON:3.1/16.1The ESS PWB detected a communication error between the IOT and the ESS.

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-348 IOT-ESS Communication 8 RAP

## BSD-ON:3.1/16.1

The ESS PWB detected a communication error between the IOT and the ESS.

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-349 IOT-ESS Communication 9 RAP

 BSD-ON:3.1A transmission failure occurred as the acknowledgement could not be received after 2 resend attempts. (After header recognition, receive interruption was detected by the IOT.)

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-350 IOT-ESS Communication 10 RAP

## BSD-ON:3.1

The NAK that notifies of the occurrence of a transmission failure is received. (The Sequencing number of the received Message Packet is incorrect.)

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-351 IOT-ESS Communication 11 RAP

 BSD-ON:3.1The NAK that notifies of the occurrence of a transmission failure is received. (The Packet number of the received Message Packet is incorrect.)

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-354 IOT-ESS Communication 14 RAP

BSD-ON:3.1
The NAK that notifies of the occurrence of a transmission failure is received. (A parity error was detected by hardware of the UART.)

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.
If the problem persists reload Software (ADJ 9.3.1).

## 024-356 IOT-ESS Communication 16 RAP

 BSD-ON:3.1/16.1A transmission failure is received, an overrun error was detected by hardware of the UART.

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-360 IOT-ESS Initialization RAP

## BSD-ON:

The IOT and ESS failed to initialize

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-362 Page Sync Start RAP

## BSD-ON:3.1/16.1

During IOT output, before the output data was written to FIFO Full (first in first out), Page Sync activated.

## Initial Actions

Power Off/On

## Procedure

Electrical noise on the power circuit for the machine may be excessive. Verify the ground connections on the ESS Chassis.

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-363 Page Sync Stop RAP

## BSD-ON:3.1/16.

During IOT output, before output in the specified size, Page Sync was disabled.

## Initial Actions

Move away machines that are noisy.

## Procedure

Electrical noise on the power circuit for the machine may be excessive. Verify the ground connections on the ESS Chassis.

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists reload Software (ADJ 9.3.1).

## 024-364 DMA Transfer RAP

Reduction/enlargement failed to access the data in Direct Memory Access.

## Procedure

NOTE: There is a high probability that the cause is faulty firmware or data corruption (DIMM or HDD).
Reload Software (ADJ 9.3.1).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists, replace the DIMM (PL 11.2).
If the problem persists, replace the HDD (PL 11.2).

## 024-367 Decompression Synchronization RAP

## BSD-ON:3.1/16.1

Incorrect line synchronization was detected.

## Initial Actions

Power Off/On

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists, reload Software (ADJ 9.3.1).
If the problem persists, replace the DIMM (PL 11.2).
If the problem persists, replace the HDD (PL 11.2).
If the problem persists, replace the ESS PWB (PL 11.2).

## 024-368 PCI RAP

## BSD-ON:3.1/16.1

PCl access error occurred due to a faulty PCl bus.

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists, reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 024-370 Marker Code Detection RAP

## BSD-ON:3.1/16.1

During Enlarge, when the file was enlarged only by the specified size, the end code (FF02) cannot be found in the compressed data.

## Procedure

The problem occurs only for specific documents.
Y $N$
Perform following as required:

1. Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.
2. Replace the DIMM (PL 11.2).
3. Perform Hard Disk Diagnostic Program. If the problem persists, replace the HDD (PL 11.2)
4. Replace the ESS PWB (PL 11.2).

Perform following as required:

1. Reload Software (ADJ 9.3.1).
2. Change the Print mode (Norma//High Quality/High Resolution).
3. Change the port settings or the Receive Buffer size.)

## 024-371 IOT-ESS Communication 21 RAP

 BSD-ON:3.1/16.1When the Controller and IOT are turned On, a response from the IOT to a request to establish communications was not detected within the specified time.

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists, reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).
If the problem persists, replace the MCU PWB (PL 11.1).

## 024-372 IOT-ESS Communication 22 RAP

## BSD-ON:3.1/16.1

An illegal instruction for IOT Port number or time-out timing or the pointer or transfer size was detected.

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists, reload Software (ADJ 9.3.1).
If the problem persists, replace the MCU PWB (PL 11.1) If the problem persists, replace the ESS PWB (PL 11.2).

## 024-373 IOT-ESS Communication 23 RAP

 BSD-ON:3.1/16.1In response to a message packet from the Controller, the acknowledgement packet was not received within the specified time even after the specified number of attempts.

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists, reload Software (ADJ 9.3.1).
If the problem persists, replace the MCU PWB (PL 11.1) If the problem persists, replace the ESS PWB (PL 11.2).

## 024-375 IOT-ESS Communication 24 RAP

## BSD-ON:3.1/16.1

An illegal instruction for IOT Port number or time-out timing or for the pointer or for transfer size was detected.

## Procedure

Check that P/Js 402 on the MCU PWB (PL 11.1) and P/J 310 on the ESS PWB (PL 11.2) are securely connected.

If the problem persists, reload Software (ADJ 9.3.1).

## 024-600 Billing Master Counter RAP

 BSD-ON:There is a billing master counter error RAP

## Procedure

Perform GP 4 Replacing Billing PWBs.

## 024-601 Billing Backup Counter 1 RAP

 BSD-ON:There is a billing backup counter error RAP

## Procedure

Perform GP 4 Replacing Billing PWBs.

024-602 Billing Backup Counter 2 RAP BSD-ON:

There is a billing backup counter error RAP

## Procedure

Perform GP 4 Replacing Billing PWBs.

## 024-603 Software Key Master Counter RAP

 BSD-ON:There is a software key master counter error RAP

## Procedure

A procedure is not available at time of publication.

024-604 Software Key Backup Counter 1 RAP BSD-ON:

There is a software key backup counter 1 error RAP

## Procedure

A procedure is not available at time of publication.

024-605 Software Key Backup Counter 2 RAP BSD-ON:

There is a software key backup counter 2 error RAP

## Procedure

A procedure is not available at time of publication.

## 024-747 Print Instruction RAP

Error in the combination of print parameters (stored file size, paper size, source paper tray duplexing, output destination).

## Procedure

The center tray will not receive output, and output goes to Finisher (if Finisher is available).
$Y^{\mathbf{N}}$
Go to Service Call Procedures.
Key operator is available to change settings.
N
NOTE: Service procedure to restore output capability to center tray on Top Cover (PL 10.1).

1. Access Diagnostic Routines.
a. Enter UI Diagnostics (Entering UI Diagnostics).
b. Access Diagnostic Routines (Accessing Diagnostic routines).
2. Select NVM Read/Write.
3. Enter Chain-Link 742-261
4. Select Confirm.

NOTE: Display now shows Current Value (Zero)
5. To enter new value (one), press 1 on the numeric keypad, then Select Save NOTE: The Current Value now reads 1.
6. Select Close.
7. Select Close again. Power off and on if the setting is not active.

NOTE: Customer procedure to restore output capability to center tray on Top Cover (PL 10.1)

1. Press the Log In / Out Button on the Control Panel and enter (five one's) 11111 using the number keypad and select Confirm.
2. Select System Settings.
3. Select System Settings again.
4. Select Common Settings.
5. Select Other Settings.
6. Select Change Setting.
7. Select Offset Stacking Module.
8. Select Save.
9. Select Close
10. Select Close again.
11. Select Close again.
12. Select Exit. Power off and on if the setting is not active.

## 024-910 Tray 1 size mismatch RAP

## BSD-ON:8.7

After feeding from Tray 1, the lengths detected by the Registration Sensor and the Tray 1 Size Switch did not match

## Initial Actions

- Reload the tray.


## Procedure

Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y $N$
Clear away the foreign substances and paper powder. Correct the distortion.
Feed paper from another tray. The problem occurs when paper is fed from another tray.
Y $\mathbf{N}$
Check the guide. The guide is set correctly.
Y $\mathbf{N}$
Set the guide correctly.
Check the operation of the Guide Actuator. The Guide Actuator works.
Y $N$
Set the guide correctly.
Check the installation of the Tray 1 Paper Size Switch. The Tray 1 Paper Size Switch is installed correctly.
Y N
Install the Tray 1 Paper Size Switch (PL 2.1) correctly.
Go to the OF 2 (SIZE SWITCH ASSY RAP).
Execute Component Control [089-100 Registration Sensor]. Manually activate the actuator of the Registration Sensor (PL 2.5). The display changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the connection of P/J106. P/J106 is connected correctly.
Y N
Connect P/J106.
Check the wire between J106 and J405 for an open circuit or a short circuit (BSD 8.7 Flag 1/Flag 2). The wire between J106 and J405 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P405A-8 (+) and GND (-) (BSD 8.7 Flag 2). The voltage is approx. +5 VDC .
$Y \quad N$
Replace the MCU PWB (PL 11.1)

A B
Measure the voltage between the MCU PWB P405A-7 (+) and GND (-) (BSD 8.7 Flag 1). Actuate the Registration Sensor with paper. The voltage changes.
Y N
Replace the Registration Sensor (PL 2.5).
Replace the MCU PWB (PL 11.1)
Replace the MCU PWB (PL 11.1).

## 024-911 Tray 2 size mismatch RAP

## BSD-ON:8.7

After feeding from Tray 2, the lengths detected by the Registration Sensor and the Tray 2 Size Switch did not match

## Initial Actions

- Reload the tray.


## Procedure

Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y $N$
Clear away the foreign substances and paper powder. Correct the distortion.
Feed paper from another tray. The problem occurs when paper is fed from another tray.
Y $\mathbf{N}$
Check the guide. The guide is set correctly.
Y $N$
Set the guide correctly.
Check the operation of the Guide Actuator. The Guide Actuator works.
Y $N$
Set the guide correctly.
Check the installation of the Tray 2 Paper Size Switch. The Tray 2 Paper Size Switch is installed correctly.
Y N
Install the Tray 2 Paper Size Switch (PL 14.1) correctly.
Go to the OF 2 (SIZE SWITCH ASSY RAP).
Execute Component Control [089-100 Registration Sensor]. Manually activate the actuator of the Registration Sensor (PL 2.5). The display changes.
Y $\mathbf{N}$
Check the connection of P/J106. P/J106 is connected correctly.
Y N
Connect P/J106.
Check the wire between J106 and J405 for an open circuit or a short circuit (BSD 8.7 Flag 1/Flag 2). The wire between J104 and J403 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P405A-8 (+) and GND (-) (BSD 8.7 Flag 2). The voltage is approx. +5 VDC .
$Y \quad N$
Replace the MCU PWB (PL 11.1).

A B
Measure the voltage between the MCU PWB P405A-7 (+) and GND (-) (BSD 8.7 Flag 1). Actuate the Registration Sensor with paper. The voltage changes.
Y N
Replace the Registration Sensor (PL 2.5).
Replace the MCU PWB (PL 11.1)
Replace the MCU PWB (PL 11.1).

## 024-912 Tray 3 size mismatch RAP

## BSD-ON:8.7

After feeding from Tray 3, the lengths detected by the Registration Sensor and the Tray 3 Size Switch did not match

## Initial Actions

- Reload the tray.


## Procedure

Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y $N$
Clear away the foreign substances and paper powder. Correct the distortion.Clear away the foreign substances and paper powder. Correct the distortion.

Feed paper from another tray. The problem occurs when paper is fed from another tray. $Y \quad N$

```
Check
```

N
Set the guide correctly.
Check the operation of the Guide Actuator. The Guide Actuator works.
Y N
Set the guide correctly.
Check the installation of the Tray 3 Paper Size Switch. The Tray 3 Paper Size Switch is installed correctly.
Y N
Install the Tray 3 Paper Size Switch (PL 14.1) correctly.
Go to the OF 2 (SIZE SWITCH ASSY RAP).
Execute Component Control [089-100 Registration Sensor]. Manually activate the actuator of the Registration Sensor (PL 2.5). The display changes.
Y $\mathbf{N}$
Check the connection of P/J106. P/J106 is connected correctly.
N
Connect P/J106.
Check the wire between J106 and J405 for an open circuit or a short circuit (BSD 8.7 Flag 1/Flag 2). The wire between J106 and J405 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P405A-8 (+) and GND (-) (BSD 8.7 Flag 2). The voltage is approx. +5VDC.
Y N
Replace the MCU PWB (PL 11.1).
A B

## 024-916 Mix Full Stack RAP

## BSD-ON:12.8

The output paper stacked on the Finisher Stacker Tray reaches capacity (for the same paper size only).

## Initial Actions

- Power Off/On


## Procedure

Check the tray raise/lower mechanism for foreign substances and distortion. No distortion or foreign substances are found in the tray raise/lower mechanism.
Y N
$\mathbf{N}$
Clear away the foreign substances. Correct the distortion.

Execute Component Control [012-267 Stack Height Sensor]. Actuate the Stack Height Sensor with paper. The display changes.
Y $\quad \mathbf{N}$
Check the connections of P/J8815, P/J8825 and P/J8850. P/J8815, P/J8825 and P/ J8850 are connected correctly.
Y N
Connect P/J8815, P/J8825 and P/J8850.
Check the wire between J 8815 and J 8850 for an open circuit or a short circuit (BSD 12.8 Flag 1/Flag 2). The wire between J8815 and J8850 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850B-6 (+) and GND (-) (BSD 12.8 Flag 2). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850B-5 (+) and GND (-) (BSD 12.8 Flag 2).
Actuate the Stack Height Sensor with paper. The voltage changes.
N
Replace the Stack Height Sensor (PL 17.5).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-060 Stacker Motor up ON] and Component Control [012-061 Stacker Motor down ON]. The Stacker Motor starts up.
Y N
Check the connections of $P / J 8847$ and $P / J 8827$. $P / J 8847$ and $P / J 8827$ are connected correctly.

## Y $N$

Connect P/J8847 and P/J8827.

A B
Check the wire between J8847 and P8827 for an open circuit or a short circuit (BSD 12.8 Flag 5). The wire between J8847 and P8827 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the Stacker Motor (PL 17.10) If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12) If the problem persists, replace the MCU PWB (PL 11.1).

## 024-917 Stacker Tray Staple Set Over Count RAP

 BSD-ON:12.9The number of stapled copies exceeded the capacity of the Stacker Tray.

## Initial Actions

- Power Off/On


## Procedure

Check the connection of each Finisher PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Turn on the power again. [024-917] reoccurs.
N
Return to Service Call Procedures.
Replace the Finisher PWB (PL 17.12) If the problem persists, replace the MCU PWB (PL 11.1),

## 024-919 Face UP Tray Close RAP

When output was sent to the Face Up Tray, the Face Up Tray was detected as closed.

## Initial Actions

Open the Face Up Tray.

## Procedure

Check that the P/Js on the MCU PWB (PL 11.1) are securely connected.

## 024-920 Face Down Tray 1 Paper Full RAP

 BSD-ON:There is no description available at time of publication.

## Procedure

There is no procedure available at time of publication.

024-922 Face Down Tray 1 Paper Full RAP BSD-ON:

There is no description available at time of publication.

## Procedure

There is no procedure available at time of publication.

## 024-923 Y Toner Empty

Y Toner Cartridge is Empty.

## Initial Actions

Check the following:

- Replace the $Y$ Toner Cartridge if empty (PL 5.2)
- Ensure that the Y Toner Cartridge is inserted properly
- For $Y$ Toner spills in the machine


## Procedure

Check for Image Quality Defects. An Image Quality Defect is present
Y $\mathbf{N}$
Run ProCon On (ADJ 9.1.10) and follow the Corrective Actions.
The Defect is Low Image Density or Uneven Density.
Y N
The Defect is Background.
Y N
Run ProCon On (ADJ 9.1.10) and follow the Corrective Actions.
Go to IQ6 and troubleshoot IOT Background.
Go to IQ3 and troubleshoot Low Image Density or Uneven Density.

## 024-924 M Toner Empty

M Toner Cartridge is Empty.

## Initial Actions

Check the following:

- Replace the M Toner Cartridge if empty (PL 5.2)
- Ensure that the M Toner Cartridge is inserted properly
- For M Toner spills in the machine


## Procedure

Check for Image Quality Defects. An Image Quality Defect is present.
Y $N$
Run ProCon On (ADJ 9.1.10) and follow the Corrective Actions.
The Defect is Low Image Density or Uneven Density.
Y N
The Defect is Background.
Y $N$
Run ProCon On (ADJ 9.1.10) and follow the Corrective Actions.
Go to IQ6 and troubleshoot IOT Background.
Go to IQ3 and troubleshoot Low Image Density or Uneven Density.

## 024-925 C Toner Empty

C Toner Cartridge is Empty.

## Initial Actions

Check the following:

- Replace the C Toner Cartridge if empty (PL 5.2)
- Ensure that the C Toner Cartridge is inserted properly
- For C Toner spills in the machine


## Procedure

Check for Image Quality Defects. An Image Quality Defect is present.
Y $\mathbf{N}$
Run ProCon On (ADJ 9.1.10) and follow the Corrective Actions.
The Defect is Low Image Density or Uneven Density.
$Y$ N
The Defect is Background.
Y N
Run ProCon On (ADJ 9.1.10) and follow the Corrective Actions
Go to IQ6 and troubleshoot IOT Background.
Go to IQ3 and troubleshoot Low Image Density or Uneven Density.

## 024-928 Scratch Sheet Compile RAP

Defective paper (Scratch Sheet), which is informed by IOT with Sheet Exit command, is output to Complier.

## Procedure

Check that the Top Cover Interlock is closed.

## 024-930 Stacker Tray Full RAP

## BSD-ON:12.8

The output paper stacked on the Finisher Stacker Tray reaches capacity (for mixed paper size)

## Initial Actions

- Power Off/On


## Procedure

Check the tray raise/lower mechanism for foreign substances and distortion. No distortion or foreign substances are found in the tray raise/lower mechanism.
Y N
Clear away the foreign substances. Correct the distortion.
Execute Component Control [012-267 Stack Height Sensor]. Actuate the Stack Height Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8815, P/J8825 and P/J8850. P/J8815, P/J8825 and P/ J8850 are connected correctly.
Y N
Connect P/J8815, P/J8825 and P/J8850.
Check the wire between J8815 and J8850 for an open circuit or a short circuit (BSD 12.8 Flag 1/Flag 2). The wire between J8815 and J8850 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850B-6 (+) and GND (-) (BSD 12.8 Flag 2). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850B-5 (+) and GND (-) (BSD 12.8 Flag 2).
Actuate the Stack Height Sensor with paper. The voltage changes.
Y N
Replace the Stack Height Sensor (PL 17.5).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-060 Stacker Motor up ON] and Component Control [012-061 Stacker Motor down ON]. The Stacker Motor (PL 16.10starts up.
Y $\quad N$
Check the connections of $P / J 8847$ and $P / J 8827$. $P / J 8847$ and $P / J 8827$ are connected correctly.
Y N
Connect P/J8847 and P/J8827.

A B
Check the wire between J8847 and P8827 for an open circuit or a short circuit (BSD 12.8 Flag 5). The wire between J8847 and P8827 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the Stacker Motor (PL 16.10) If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12) If the problem persists, replace the MCU PWB (PL 11.1).

## 024-934 Paper Type Mismatch RAP

## BSD-ON:

There is no description available at time of publication.

## Procedure

There is no procedure available at time of publication.

## 024-946 Tray 1 Position RAP

## BSD-ON:7. 1

The Tray 1 Paper Size Switch detected no tray.

## Initial Actions

- Reload the tray correctly.
- Check the operation of the tray actuator.


## Procedure

(TM)
Remove Trays 1 and 2. Replace Tray 1 with Tray 2. [024-946] occurs.
Y $N$
Replace the faulty part of the Tray 1 Actuator.
Check the installation of the Tray 1 Paper Size Switch. The Tray 1 Paper Size Switch is installed correctly.
Y N
Install the Tray 1 Paper Size Switch correctly.
Go to the OF 2 (SIZE SWITCH ASSY RAP).

## 024-947 2TM Tray 2 Position RAP

 BSD-ON:7.3The Tray 2 Paper Size Switch detected no tray.

## Initial Actions

- Install the tray correctly.
- Check the operation of the tray actuator.


## Procedure

Check the installation of the Tray 2 Paper Size Switch. The Tray 2 Paper Size Switch is installed correctly.
Y $N$
Install the Tray 2 Paper Size Switch correctly.
Check the connections of $\mathrm{P} / \mathrm{J} 820$ and $\mathrm{P} / \mathrm{J} 548$ (BSD 7.3). Connectors are connected correctly.
Y $N$
Connect P/J820 and P/J548.
Check the wire between J820 and J548 for an open circuit or a short circuit (BSD 7.3). The wire between J820 and J548 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P548-14 (+) and GND (-) (BSD 7.3). The voltage is approx. +3.3VDC.
Y $\mathbf{N}$
Replace the Tray Module PWB (PL 14.7).
Measure the voltage between the Tray Module PWB P548-13 (+) and GND (-) (BSD 7.3). Move the actuator of the Tray 2 No Paper Sensor. The voltage changes.
Y N
Replace the Tray 2 No Paper Sensor (PL 14.1).
Replace the Tray Module PWB (PL 14.7).

## 024-947 TTM Tray 2 Position RAP

## BSD-ON:7.5

The Tray 2 Paper Size Switch detected no tray.

## Initial Actions

- Install the tray correctly.
- Check the operation of the tray actuator.


## Procedure

Check the installation of the Tray 2 Paper Size Switch. The Tray 2 Paper Size Switch is installed correctly.
Y N
Install the Tray 2 Paper Size Switch correctly.
Check the connections of P/J820 and P/J548 (BSD 7.3). Connectors are connected correctly.
Y $N$
Connect P/J820 and P/J548.
Check the wire between J820 and J548 for an open circuit or a short circuit (BSD 7.5). The wire between J820 and J548 is conducting without an open circuit or a short circuit. Y N

Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P548-14 (+) and GND (-) (BSD 7.5). The voltage is approx. +3.3 VDC .
Y N
Replace the Tray Module PWB (PL 15.9).
Measure the voltage between the Tray Module PWB P548-13 (+) and GND (-) (BSD 7.3). Move the actuator of the Tray 2 No Paper Sensor. The voltage changes.
Y N
Replace the Tray 2 No Paper Sensor (PL 15.1).
Replace the Tray Module PWB (PL 15.9).

## 024-948 2TM Tray 3 Position RAP

 BSD-ON:7.5The Tray 3 Paper Size Switch detected no tray.

## Initial Actions

- Install the tray correctly.
- Check the operation of the tray actuator.


## Procedure

Check the installation of the Tray 3 Paper Size Switch. The Tray 3 Paper Size Switch is installed correctly.
Y $N$
Install the Tray 3 Paper Size Switch correctly.
Check the connections of P/J824 and P/J548 (BSD 7.4). Connectors are connected correctly.
Y $N$
Connect P/J824 and P/J548.
Check the wire between J824 and J548 for an open circuit or a short circuit (BSD 7.4). The wire between J824 and J548 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P548-7 (+) and GND (-) (BSD 7.4). The voltage is approx. +3.3VDC.
Y $\mathbf{N}$
Replace the Tray Module PWB (PL 14.7).
Measure the voltage between the Tray Module PWB P548-6 (+) and GND (-) (BSD 7.4). Move the actuator of the Tray 3 No Paper Sensor. The voltage changes.
Y N
Replace the Tray 3 No Paper Sensor (PL 14.1).
Replace the Tray Module PWB (PL 14.7).

## 024-948 TTM Tray 3 Position RAP

## BSD-ON:7.5

The Tray 3 Paper Size Switch detected no tray.

## Initial Actions

- Install the tray correctly.
- Check the operation of the tray actuator.


## Procedure

Check the installation of the Tray 3 Paper Size Switch. The Tray 3 Paper Size Switch is installed correctly.
Y N
Install the Tray 3 Paper Size Switch correctly.
Check the connections of P/J824 and P/J548 (BSD 7.6). Connectors are connected correctly.
Y $N$
Connect P/J824 and P/J548.
Check the wire between J824 and J548 for an open circuit or a short circuit (BSD 7.6). The wire between J824 and J548 is conducting without an open circuit or a short circuit. Y N

Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P548-7 (+) and GND (-) (BSD 7.6). The voltage is approx. +3.3VDC.
Y N
Replace the Tray Module PWB (PL 15.9).
Measure the voltage between the Tray Module PWB P548-6 (+) and GND (-) (BSD 7.6). Move the actuator of the Tray 3 No Paper Sensor. The voltage changes.
Y N
Replace the Tray 3 No Paper Sensor (PL 15.1).
Replace the Tray Module PWB (PL 15.9).

## 024-950 Tray 1 Empty RAP

BSD-ON:7.7
Tray 1 is out of paper.

## Initial Actions

- Power Off/On


## Procedure

Check the installation of the Tray 1 No Paper Sensor (PL 2.3) and the operation of the actuator. The Tray 1 Level Sensor is installed correctly and the actuator works.
Y $N$
Reinstall the Tray 1 Level Sensor.
Execute Component Control [071-101 Tray 1 No Paper Sensor]. Manually activate the Tray 1 No Paper Sensor (PL 2.3). The display changes.
Y N
Check the connections of P/J101, P/J611 and P/J424. Connectors are connected correctly.

Connect P/J101, P/J611 and P/J424.
Check the wire between J101 and J424 for an open circuit or a short circuit (BSD 7.7 Flag 4/Flag 5). The wire between J 101 and J 409 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P424A-10 (+) and GND (-) (BSD 7.7 Flag $5)$. The voltage is approx. +5VDC.
Y $\quad \mathrm{N}$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P424A-12 (+) and GND (-) (BSD 7.7 Flag 4). Activate the actuator of the Tray 1 No Paper Sensor (PL 2.3). The voltage changes. Y N

Replace the Tray 1 No Paper Sensor (PL 2.3).
Replace the MCU PWB (PL 11.1).
Replace the MCU PWB (PL 11.1).

## 024-951 2TM Tray 2 Empty RAP

## BSD-ON:7.9

Tray 2 is out of paper.

## Initial Actions

- Power Off/On


## Procedure

Check the installation of the Tray 2 No Paper Sensor (PL 14.3) and the operation of the actuator. The Tray 2 Level Sensor is installed correctly and the actuator works.
Y N
Reinstall the Tray 2 Level Sensor.
Execute Component Control [072-102 Tray 2 No Paper Sensor]. Manually activate the Tray 2 No Paper Sensor (PL 14.3). The display changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of P/J102B, P/J661B and P/J549. Connectors are connected correctly.
Y N
Connect P/J102B, P/J661B and P/J549.
Check the wire between J102B and J549 for an open circuit or a short circuit (BSD 7.9 Flag 5/Flag 4). The wire between J102B and J549 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P549-25 (+) and GND (-) (BSD 7.9 Flag 5). The voltage is approx. +5VDC.
Y $N$
Replace the Tray Module PWB (PL 14.7).
Measure the voltage between the Tray Module PWB P549-27 (+) and GND (-) (BSD 7.9 Flag 4).
Activate the actuator of the Tray 2 No Paper Sensor (PL 14.3). The voltage changes.
Y N
Replace the Tray 2 No Paper Sensor (PL 14.3).
Replace the Tray Module PWB (PL 14.7).
Replace the Tray Module PWB (PL 14.7).

## 024-951 TTM Tray 2 Empty RAP

 BSD-ON:7.11Tray 2 is out of paper.

## Initial Actions

- Power Off/On


## Procedure

Check the installation of the Tray 2 No Paper Sensor (PL 15.6) and the operation of the actuator. The Tray 2 Level Sensor is installed correctly and the actuator works.
Y $N$
Reinstall the Tray 2 Level Sensor.
Execute Component Control [072-102 Tray 2 No Paper Sensor]. Manually activate the Tray 2 No Paper Sensor (PL 15.6). The display changes.
Y N
Check the connections of P/J102B, P/J661B and P/J549. Connectors are connected correctly.
Y N
Connect P/J102B, P/J661B and P/J549.
Check the wire between J102B and J549 for an open circuit or a short circuit (BSD 7.11 Flag 5/Flag 4). The wire between J102B and J549 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P549-25 (+) and GND (-) (BSD 7.11 Flag 5). The voltage is approx. +5VDC.
Y $N$
Replace the Tray Module PWB (PL 15.9).
Measure the voltage between the Tray Module PWB P549-27 (+) and GND (-) (BSD 7.11 Flag 4).
Activate the actuator of the Tray 2 No Paper Sensor (PL 15.6). The voltage changes.
Y $\mathbf{N}$
Replace the Tray 2 No Paper Sensor (PL 15.6)
Replace the Tray Module PWB (PL 15.9)
Replace the Tray Module PWB (PL 15.9)

## 024-952 2TM Tray 3 Empty RAP

## BSD-ON:7.10

Tray 3 is out of paper.

## Initial Actions

- Power Off/On


## Procedure

Check the installation of the Tray 3 No Paper Sensor (PL 14.3) and the operation of the actuator. The Tray 3 Level Sensor is installed correctly and the actuator works.
Y N
Reinstall the Tray 3 Level Sensor.
Execute Component Control [073-101 Tray 3 No Paper Sensor]. Manually activate the Tray 3 No Paper Sensor (PL 14.3). The display changes.
Y $\mathbf{N}$
Check the connections of P/J102A, P/J661A and P/J549. Connectors are connected correctly.
Y N
Connect P/J102A, P/J661B and P/J549.
Check the wire between J102A and J549 for an open circuit or a short circuit (BSD 7.10 Flag 4/Flag 5). The wire between J102A and J549 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P549-10 (+) and GND (-) (BSD 7.10 Flag 5). The voltage is approx. +5 VDC .
Y $N$
Replace the Tray Module PWB (PL 14.7).
Measure the voltage between the Tray Module PWB P549-12 (+) and GND (-) (BSD 7.10 Flag 4).
Activate the actuator of the Tray 3 No Paper Sensor (PL 14.3). The voltage changes.
Y N
Replace the Tray 3 No Paper Sensor (PL 14.3).
Replace the Tray Module PWB (PL 14.7).
Replace the Tray Module PWB (PL 14.7).

## 024-952 TTM Tray 3 Empty RAP

## BSD-ON:7.12

Tray 3 is out of paper.

## Initial Actions

- Power Off/On


## Procedure

Check the installation of the Tray 3 No Paper Sensor (PL 15.6) and the operation of the actuator. The Tray 3 Level Sensor is installed correctly and the actuator works.
Y $N$
Reinstall the Tray 3 Level Sensor.
Execute Component Control [073-101 Tray 3 No Paper Sensor]. Manually activate the Tray 3 No Paper Sensor (PL 15.6). The display changes.
Y N
Check the connections of P/J102A, P/J661A and P/J549. Connectors are connected correctly.
Y N
Connect P/J102A, P/J661B and P/J549
Check the wire between J102A and J549 for an open circuit or a short circuit (BSD 7.12 Flag 4/Flag 5). The wire between J102A and J549 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P549-10 (+) and GND (-) (BSD 7.12 Flag 5). The voltage is approx. +5VDC.
Y $N$
Replace the Tray Module PWB (PL 15.9).
Measure the voltage between the Tray Module PWB P549-12 (+) and GND (-) (BSD 7.12 Flag 4).
Activate the actuator of the Tray 3 No Paper Sensor (PL 15.6). The voltage changes.
Y $\mathbf{N}$
Replace the Tray 3 No Paper Sensor (PL 15.6)
Replace the Tray Module PWB (PL 15.9)
Replace the Tray Module PWB (PL 15.9)

## 024-954 MSI Empty RAP

## BSD-ON:7.13

The MSI is out of paper.

## Initial Actions

- Power Off/On


## Procedure

Check the installation of the MSI No Paper Sensor (PL 7.1) and the operation of the actuator. The MSI No Paper Sensor is installed correctly and the actuator works.
Y $\mathbf{N}$
Reinstall the MSI No Paper Sensor.
Execute Component Control [075-100 MSI No Paper Sensor]. Manually activate the MSI No Paper Sensor (PL 9.1). The display changes.
Y N
Check the connections of $\mathrm{P} / \mathrm{J} 108, \mathrm{P} / \mathrm{J} 610$ and $\mathrm{P} / \mathrm{J} 424$. Connectors are connected correctly.

Connect $\mathrm{P} / \mathrm{J} 108, \mathrm{P} / \mathrm{J} 610$ and $\mathrm{P} / \mathrm{J} 424$.
Check the wire between J 108 and J 424 for an open circuit or a short circuit (BSD 7.13 Flag 3/Flag 4). The wire between J108 and J424 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P424-6 (+) and GND (-) (BSD 7.13 Flag 4).
The voltage is approx. +5 VDC .
Y $N$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P424-8 (+) and GND (-) (BSD 7.13 Flag 3) Activate the actuator of the MSI No Paper Sensor (PL 9.1). The voltage changes.
Y $N$
Replace the MSI No Paper Sensor (PL 9.1).
Replace the MCU PWB (PL 11.1)
Replace the MCU PWB (PL 11.1).

## 024-958 MSI Size RAP

## BSD-ON:7.13

The MSI is unable to detect the paper size.

## Initial Actions

- Power Off/On
- Check the operation of the MSI Guide.


## Procedure

Check the installation and operation of the MSI Guide. The MSI Guide is installed correctly and the actuator works.
$Y \quad \mathbf{N}$
Reinstall the MSI Guide.
Measure the voltage between the MCU PWB P424-3 (+) and GND (-) (BSD 7.13 Flag 1).
Manually operate the MSI Guide. As the MSI Guide moves, the voltage changes accordingly.
Y N
Check the connections of $\mathrm{P} / \mathrm{J} 107, \mathrm{P} / \mathrm{J} 609, \mathrm{P} / \mathrm{J} 610$ and $\mathrm{P} / \mathrm{J} 424$. Connectors are connected correctly.
Y $N$
Connect P/J107, P/J609, P/J611 and P/J424.
Check the wire between J107 and J424 for an open circuit or a short circuit (BSD 7.13 Flag 2). The wire between J107 and J424 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P454-1 (+) and GND (-) (BSD 7.13 Flag 2). The voltage is approx. +5 VDC .
Y N
Replace the MCU PWB (PL 11.1).
Replace the MSI Paper Size Sensor (PL 9.1).
Replace the MCU PWB (PL 11.1).

## 024-959 Tray 1 Paper Size RAP

## BSD-ON:7.1

There is a Tray 1 paper size error.

## Procedure

Check the condition of the Tray 1 Paper Size Switch assembly (PL 2.1). Repair as required.
If the switch is in good condition go to the OF 2 Size Switch Assembly RAP.

## 024-960 Tray 2 Paper Size RAP

BSD-ON:7.3/7.5
There is a Tray 2 paper size error.

## Procedure

Check the condition of the Tray 2 Paper Size Switch assembly (PL 14.1/PL 15.1). Repair as required.

If the switch is in good condition go to the OF 2 Size Switch Assembly RAP.

## 024-961 Tray 3 Paper Size RAP

BSD-ON:7.4/7.6
There is a Tray 3 paper size error.

## Procedure

Check the condition of the Tray 3 Paper Size Switch assembly (PL 14.1/PL 15.1). Repair as required.

If the switch is in good condition go to the OF 2 Size Switch Assembly RAP.

## 024-965 ATS/APS Paper (IOT detect) RAP

## BSD-ON:7.7/7.8/7.9/7.10/7.11/7.12

No paper is loaded in the tray.

## Initial Actions

- Power Off/On
- Reload the relevant tray.

Replace the relevant No Paper Sensor (PL 2.3, PL 14.3).
Replace the relevant PWB (MCU PWB (PL 11.1) or Tray Module PWB (PL 14.7).
For Tray 1, replace the MCU PWB (PL 11.1).
For Tray 2, or Tray 3 replace the Tray Module PWB (PL 14.7)

## Procedure

Check the actuator of the relevant No Paper Sensor. The actuator is not distorted or damaged.
Y $\mathbf{N}$
Replace the actuator.
Actuate the actuator of the relevant No Paper Sensor.
Tray 1: Component Control [071-101 Tray 1 No Paper Sensor]
Tray 2: Component Control [072-102 Tray 2 No Paper Sensor]
Tray 3: Component Control [073-101 Tray 3 No Paper Sensor]
The display changes.
Y N
Check the connections of the following connectors:
Tray 1: P/J101, P/J611, P/J424
Tray 2: P/J102B, P/J661B, P/J549
Tray 3: P/J102A, P/J661A, P/J549
The connectors are securely connected
Y $\mathbf{N}$
Connect the connectors.
Check the following harnesses for an open circuit or a short circuit.
Tray 1: Between J101 and J424 (BSD 7.7 Flag 4/Flag 5)
Tray 2: Between J102B and J549 (BSD 7.8 Flag 4/Flag 5)
Tray 3: Between J102B and J549 (BSD 7.10 Flag 4/Flag 5)
The relevant harnesses are conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the following points $(+)$ and GND (-).
Tray 1: MCU PWB P424-A10 (BSD 7.7 Flag 5)
Tray 2: MCU PWB P549-25 (BSD 7.8 Flag 5)
Tray 3: TM PWB P549-10 (BSD 7.10 Flag 5)
The voltage is approx. +5VDC.
Y $N$
Replace the relevant PWB (MCU PWB (PL 11.1) or the Tray Module PWB (PL 14.7)
Measure the voltage between the MCU PWB P409A-12 (+) and GND (-).
Tray 1: MCU PWB P409A-12 (BSD 7.7 Flag 4)
Tray 2: MCU PWB P409B-12 (BSD 7.8 Flag 4)
Tray 3: TM PWB P549-A12 (BSD 7.10 Flag 4)

## 024-966 ATS/APS Destination RAP

## BSD-ON:7.1-7.6

APS/ATS is unable to detect the paper size.

## Initial Actions

- Refer to BSD 7.1-7.6.
- Reload the tray.


## Procedure

Check the installation of the relevant Size Sensor. The relevant Size Sensor is installed correctly.
$Y \quad N$
Install the relevant Size Sensor correctly.
Go to the OF 2 (SIZE SWITCH ASSY RAP).

## 024-967 Mixed Width Paper (Staple Job) RAP

## BSD-ON:3.4

Paper Width Mix was detected during stapling.

## Initial Actions

- Power Off/On


## Procedure

Check the connection of each MCU PWB connector. The connectors are securely connected.
Y $\quad \mathrm{N}$
Connect the connectors.
Check the connection of each Finisher PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Check the wire between J416 and J8843 for an open circuit or a short circuit (BSD 3.4 Flag 2/ Flag 1). The wire between J 416 and J 8843 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB J416-A3 (+) and GND (-) (BSD 3.4 Flag 2). The voltage is approx. +5 VDC .
Y $N$
Replace the MCU PWB (PL 11.1).
Replace the Finisher PWB (PL 17.12) If the problem persists, replace the MCU PWB (PL 11.1).

## 024-976 Staple Status Failed RAP

 BSD-ON:12.6- After the Stapler Motor turned On (Forward rotation), the system did not detect that the Staple Head Home Sensor switched from Off to On within the specified time.
- After the Stapler Motor turned On (Reverse rotation), the Staple Head Home Sensor did not turn On within the specified time.


## Initial Actions

## - Power Off/On

## Procedure

Alternately execute Component Control [012-046 Staple Motor FORWARD ON] and Component Control [012-047 Staple Motor REVERSE ON]. The Stapler Motor can be heard.
Y $N$
Check the connections of $P / J 8819$ and $P / J 8847$. $P / J 8819$ and $P / J 8847$ are connected correctly.

## Y $N$

Connect P/J8819 and P/J8847.
Check the wire between J 8819 and J 8847 for an open circuit or a short circuit (BSD 12.6 Flag 1). The wire between J8819 and J8847 is conducting without an open circuit or a short circuit.

## Y $N$

Repair the open circuit or short circuit.
Replace the Staple Assembly (PL 17.8) If the problem persists, replace the Finisher PWB (PL 17.12).

Execute Component Control [012-244 Staple Head Home Sensor].Alternately execute Component Control [012-046 Staple Motor FORWARD ON] and Component Control [012-047 Staple Motor REVERSE ON]. The display changes.
Y $\mathbf{N}$
Check the connections of $P / J 8818$ and $P / J 8852$. $P / J 8818$ and $P / J 8852$ are connected correctly.
Y N
Connect P/J8818 and P/J8852.
Check the wire between J8818 and J8852 for an open circuit or a short circuit (BSD 12.6 Flag 2/Flag 3). The wire between J8818 and J8852 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8852-1 (+) and GND (-) (BSD 12.6 Flag 2). The voltage is approx. +5 VDC .

Y $N$
Replace the Finisher PWB (PL 17.12).
Replace the Staple Assembly (PL 17.8) If the problem persists, replace the Finisher PWB (PL 17.12).

## 024-977 Stapler Feed Ready RAP

 BSD-ON:12.6When starting Staple, Staple Ready Sensor Off was detected.
Empty stapling was within 13 times.

## Initial Actions

- Power Off/On
- Reload the Staple Cartridge.


## Procedure

Execute Component Control [012-243 Staple Ready Sensor]. Install and remove the Staple Cartridge. The display changes.
Y N
Check the Staple Cartridge for failure or foreign substances. There are no foreign substances and nothing has failed.

## Y $\quad \mathrm{N}$

Repair the failure and remove the foreign substances.
Check the connections of $P / J 8818$ and $P / J 8852$. $P / J 8818$ and $P / J 8852$ are connected correctly.

Connect P/J8818 and P/J8852.
Check the wire between J8818 and J8852 for an open circuit or a short circuit (BSD 12.6 Flag 3). The wire between J8818 and J8852 is conducting without an open circuit or a short circuit.
N
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8852-1 (+) and GND (-) (BSD 12.6 Flag 2). The voltage is approx. +5VDC.

Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8852-3 (+) and GND (-) (BSD 12.6 Flag 3). Install and remove the Staple Cartridge. The voltage changes.
$\boldsymbol{Y} \quad \mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Replace the Staple Assembly (PL 17.8) If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12) If the problem persists, replace the MCU PWB (PL 11.1).

## 024-979 Stapler Near Empty RAP

## BSD-ON:12.6

- The Staple Pin is nearly empty.
- The cartridge has not been installed.


## Initial Actions

- Power Off/On


## Procedure

Execute Component Control [012-242 Low Staple Sensor]. Install and remove the Staple Pin Cartridge. The display changes.
Y $\quad \mathbf{N}$
Check the Staple Pin Cartridge for failure or foreign substances. There are no foreign substances and nothing has failed.
Y $N$
Repair the failure and remove the foreign substances.
Check the connections of P/J8818 and P/J8852. P/J8818 and P/J8852 are connected correctly.
Y $N$
Connect P/J8818 and P/J8852.
Check the wire between J8818 and J8852 for an open circuit or a short circuit (BSD 12.6 Flag 2/Flag 3). The wire between J8818 and J8852 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8852-1 (+) and GND (-) (BSD 12.6 Flag 2). The voltage is approx. +5VDC.

Y N
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8852-4 (+) and GND (-) (BSD 12.6 Flag
3). Install and remove the Staple Pin Cartridge. The voltage changes.

Y $N$
Replace the Finisher PWB (PL 17.12).
Replace the Staple Assembly (PL 17.8) If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12) If the problem persists, replace the MCU PWB (PL 11.1).

## 024-980 Stacker Tray Full RAP

## BSD-ON:12.8

The output paper stacked on the Finisher Stacker Tray reaches capacity (for mixed paper size)

## Initial Actions

- Power Off/On


## Procedure

Check the tray raise/lower mechanism for foreign substances and distortion. No distortion or foreign substances are found in the tray raise/lower mechanism.
Y N
Clear away the foreign substances. Correct the distortion.
Execute Component Control [012-267 Stack Height Sensor]. Actuate the Stack Height Sensor with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8815, P/J8825 and P/J8850. P/J8815, P/J8825 and P/ J8850 are connected correctly.
Y N
Connect P/J8815, P/J8825 and P/J8850.
Check the wire between J8815 and J8850 for an open circuit or a short circuit (BSD 12.8 Flag 1/Flag 2). The wire between J8815 and J8850 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850B-6 (+) and GND (-) (BSD 12.8 Flag 2). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850B-5 (+) and GND (-) (BSD 12.8 Flag 2).
Actuate the Stack Height Sensor with paper. The voltage changes.
Y N
Replace the Stack Height Sensor (PL 17.5).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-060 Stacker Motor up ON] and Component Control [012-061 Stacker Motor down ON]. The Stacker Motor (PL 16.10starts up.
Y $\quad N$
Check the connections of $P / J 8847$ and $P / J 8827$. $P / J 8847$ and $P / J 8827$ are connected correctly.
Y N
Connect P/J8847 and P/J8827.

A B
Check the wire between J8847 and P8827 for an open circuit or a short circuit (BSD 12.8 Flag 5). The wire between J8847 and P8827 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the Stacker Motor (PL 16.10) If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12) If the problem persists, replace the MCU PWB (PL 11.1).

## 024-982 Stacker Lower Safety Warning RAP

## BSD-ON:12.8

- After the Stacker Motor turned On (descending), the Stack Height Sensor did not turn On within the specified time.
- After the Stacker Motor turned On (descending), the Stack Height Sensor did not turn Off within the specified time.


## Initial Actions

- Power Off/On


## Procedure

Check the tray raise/lower mechanism for foreign substances and distortion. No distortion or foreign substances are found in the tray raise/lower mechanism.
Y N
Clear away the foreign substances. Correct the distortion.
Execute Component Control [012-267 Stack Height Sensor]. Actuate the Stack Height Sensor with paper. The display changes.
Y N
Check the connections of P/J8815, P/J8825 and P/J8850. P/J8815, P/J8825 and P/ J8850 are connected correctly.

Connect P/J8815, P/J8825 and P/J8850.
Check the wire between J8815 and J8850 for an open circuit or a short circuit (BSD 12.8 Flag 1/Flag 2). The wire between J8815 and J8850 is conducting without an open circuit or a short circuit.
$\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P8850B-6 (+) and GND (-) (BSD 12.8 Flag 2). The voltage is approx. +5VDC.
Y $N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P8850B-5 (+) and GND (-) (BSD 12.8 Flag 2).
Actuate the Stack Height Sensor with paper. The voltage changes.
Y $\mathbf{N}$
Replace the Stack Height Sensor (PL 17.5).
Replace the Finisher PWB (PL 17.12).
Alternately execute Component Control [012-060 Stacker Motor up ON] and Component Control [012-061 Stacker Motor down ON]. The Stacker Motor (PL 16.10starts up.
Y $\quad \mathbf{N}$
Check the connections of P/J8847 and P/J8827. P/J8847 and P/J8827 are connected correctly.
Y N
Connect P/J8847 and P/J8827.
A B

## 024-985 MSI Feed RAP

## BSD-ON:7.13/8.1

The job was aborted during MSI feed.

## Initial Actions

- Power Off/On


## Procedure

Check the document size. The size of the document is within the specification.
Y N
Use a paper size within the specification.
Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y N
Clear away the foreign substances and paper powder. Correct the distortion.

Check the installation and operation of the MSI Guide. The MSI Guide is installed correctly and the actuator works.
Y $N$
Reinstall the MSI Guide
Measure the voltage between the MCU PWB P424-3 (+) and GND (-) (BSD 7.13 Flag 1).
Manually operate the MSI Guide. As the MSI Guide moves, the voltage changes accordingly.
Y $N$
Check the connections of P/J107, P/J609, P/J605 and P/J424. Connectors are connected correctly.
Y N
Connect P/J107, P/J609, P/J605 and P/J424.
Check the wire between J107 and J424 for an open circuit or a short circuit (BSD 7.13 Flag 1/Flag 2). The wire between J 107 and J 424 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P424-1 (+) and GND (-) (BSD 7.13 Flag 2). The voltage is approx. +5VDC.
Y $N$
Replace the MCU PWB (PL 11.1).
Replace the MSI Paper Size Sensor (PL 9.3).
Replace the MCU PWB (PL 11.1).

## 024-916 (A-Finisher) Mix Stack Full

## BSD-ON:CH15.2, CH15.8

In detection of Half Position (Mix Full position), one of the following is met:

- Paper in the job is larger (longer in either lead/trail edge or side edge) than the last paper of the previous job.
- The width of the last paper of the previous job is less than 279.4 mm and a change is made to Staple Mode.
- The size of the last paper of the previous job is "unknown."


## Initial Actions

- Check that the Stack Height Sensor is properly installed, not broken and has no foreign objects.
- Check Stacker Stack Sensors 1 and 2 are properly installed and free from foreign objects and that their actuators are not broken.
- Power Off/On.


## Procedure

Check the paper size of the job. The paper of the job is equal in size to or smaller than (in either lead/trail edge or side edge) the last paper of the previous job.
Y N
Load paper of the appropriate size.
Check the settings of the Staple Mode for the current job. The settings are the same as the ones for the previous job.
Y $N$
Return the Staple Mode settings to the previous ones.
Check for paper and/or foreign objects on the Stacker Tray. The Stacker Tray is in normal condition with no paper or foreign object left there.

## Y N

Remove the remaining paper and/or foreign object(s).
Check the drive mechanism to the Stacker Tray for a deformed or broken part and not-seated gears. The drive mechanism is free of defects and gears seat properly.
Y N
Repair the Stacker Tray mechanism.
Enter Component Control [012-267]. Block and unblock the Stack Height Sensor with a piece of paper. The display changes.
Y $N$
Check the connections of P/J8708 and P/J8727. P/J8708 and P/J8727 are securely connected.

Connect P/J8708 and P/J8727 securely.
Check for an open or short circuit between J8708 and J8727. The wires between J8708 and J8727 are OK.
$Y \quad N$
Repair the open or short circuit.
Measure the voltage between J8708-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
$Y \quad N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between J8708-2 (+) on the Finisher PWB and GND (-). Block and unblock the Stack Height Sensor. The voltage changes.
Y N
Replace the Stack Height Sensor (PL 22.10).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-278]. Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The display changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of P/J8707 and P/J8722. P/J8707 and P/J8722 are securely connected.
Y N
Connect P/J8707 and P/J8722 securely.
Check for an open or short circuit between J8707 and J8722. The wires between J8707 and J8722 are OK
Y N
Repair the open or short circuit.
Measure the voltage between J8707-6 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC.
$Y \mathrm{~N}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between J8707-5 (+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The voltage changes.
Y N
Replace the Stacker Stack Sensor 1 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-279]. Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the sensor. The display changes.
Y N
Check the connections of P/J8707 and P/J8721. P/J8707 and P/J8721 are securely connected.
Y N
Connect P/J8707 and P/J8721 securely.

Check for an open or short circuit between J8707 and J8721. The wires between J8707 and J8721 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between J8707-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5VDC.
$Y \quad N$
Using Chapter 7 Wirenets, check the +5VDC circuit to J8707-3 on the Finisher PWB.
Measure the voltage between J8707-2 (+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the sensor. The voltage changes.
Y N
Replace the Stacker Stack Sensor 2 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-060] and [012-061] alternately. The Stacker Motor rotates.
Y N
Check the connections of P/J8711 and P/J8736. P/J8711 and P/J8736 are securely connected.

Connect P/J8711 and P/J8736 securely
Check for an open or short circuit between J8711 and P8736. The wires between J8711 and P8736 are OK.
Y N
Repair the open or short circuit

Enter [012-060], measure the voltage between J8711-1 (+) on the Finisher PWB and GND (-). The voltage changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-061], measure the voltage between J8711-2 (+) on the Finisher PWB and GND (-). The voltage changes.
$\mathbf{Y} \quad \mathbf{N}$
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Stacker Motor (PL 22.8)
Check the connections of the connectors between the Finisher and the IOT. The connectors are securely connected.
Y $N$
Connect the connectors securely.
If the problem continues, replace the Finisher PWB (PL 22.7).

## 024-917 (A-Finisher) Stacker Tray Staple Set Over Count

 BSD-ON:CH15.2, CH15.8While sets of stapled sheets of paper are being ejected, the Staple Set Count for the Stacker Tray exceeded 30.

## Initial Actions

- Check that the Stack Height Sensor is properly installed, not broken and has no foreign objects.
- Check Stacker Stack Sensors 1 and 2 are properly installed and free from foreign objects and that their actuators are not broken.
- Power Off/On.


## Procedure

Check for remaining paper and foreign objects on the Stacker Tray. The Stacker Tray is in normal condition with no paper or foreign object left there.

## Y N

Remove the remaining paper and/or foreign object(s)
Check the drive mechanism to the Stacker Tray for a deformed or broken part and not-seated gears. The drive mechanism is free of defects and gears seat properly.
Y $\mathbf{N}$
Repair the Stacker Tray mechanism.
Enter Component Control [012-267]. Block and unblock the Stack Height Sensor with a piece of paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8708 and P/J8727. P/J8708 and P/J8727 are securely connected.
Y N
Connect P/J8708 and P/J8727.
Check for an open or short circuit between J8708 and J8727. The wires between J8708 and J8727 are OK.
Y N
Repair the open wire or short circuit.

Measure the voltage between J8708-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5VDC.
Y $\quad N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit

Measure the voltage between J8708-2 (+) on the Finisher PWB and GND (-). Block and unblock the Stack Height Sensor with a piece of paper. The voltage changes.
Y $\mathbf{N}$
Replace the Stack Height Sensor (PL 22.10).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-330]. Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The display changes.
Y N
Check the connections of P/J8707 and P/J8722. P/J8707 and P/J8722 are securely connected.
Y N
Connect P/J8707 and P/J8722 securely.
Check for an open or short circuit between J8707 and J8722. The wires between J8707 and J8722 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between J8707-6 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
$Y \quad N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5 VDC circuit.
Measure the voltage between J8707-5 (+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The voltage changes.
Y N
Replace the Stacker Stack Sensor 1 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-279]. Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the acceptance surface. The display of DC330[012-279] changes.
$Y$ N
Check the connections of P/J8707 and P/J8721. P/J8707 and P/J8721 are securely connected.
Y N
Connect P/J8707 and P/J8721 securely.
Check for an open wire or short circuit between J8707 and J8721. The wire between J8707 and J8721 is normally conductive with no open wire or short circuit.
Y
Repair the open wire or short circuit.
Measure the voltage between J8707-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
Y N
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between J8707-2 (+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the sensor. The voltage changes.

Replace the Stacker Stack Sensor 2 (PL 22.8).

B C
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-060] and [012-061] alternately. The Stacker Motor rotates.
Y N
Check the connections of P/J8711 and P/J8736. P/J8711 and P/J8736 are securely connected.
Y $\mathbf{N}$
Connect P/J8711 and P/J8736 securely.
Check for an open or short circuit between J8711 and P8736. The wires between J8711 and P8736 are OK.
Y N
Repair the open or short circuit.
Enter [012-060], measure the voltage between J8711-1 (+) on the Finisher PWB and GND (-). The voltage changes.
Y N
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-061], measure the voltage between J8711-2 (+) on the Finisher PWB and GND ( - ). The voltage changes.
Y N
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Stacker Motor (PL 22.8).
Check the connections of the connectors between the Finisher and the IOT. The connectors are securely connected.
Y $N$
Connect the connectors securely.
If the problem continues, replace the Finisher PWB (PL 22.7).

## 024-928 (A-Finisher) Scratch Sheet Compile

 BSD-ON:CH15.2Sheet Information command made abnormal paper (scratched paper) reported by the IOT ejected into the compiler.

NOTE: This Fail Code is an operation message. If this fail code is frequently declared, perform the procedure below.

## Initial Actions

- Check that the Top Cover can be opened and closed.
- Power Off/On.


## Procedure

Check the specifications of paper. The paper is in spec.
Y $\mathbf{N}$
Replace the paper with new paper that is in spec.
Check the condition of the paper. The paper is in normal condition without any problem that causes the paper to be bent or caught.
Y $N$
Resolve any problem that causes the paper to be bent or caught.
Check for a Fail Code. Another Fail Code is displayed.
Y N
If the problem continues, replace the Finisher PWB (PL 22.7).
Go to the appropriate Fault Code.

## 024-930 (A-Finisher) Stacker Tray Full Stack

 BSD-ON:CH15.8
## One of the following

- At Power On, the Stack Height Sensor detected the height and the Full position.
- During the operation of adjusting (lowering) the height of the Stacker Tray for small paper to be ejected, the Full position was detected.
- During the operation of adjusting (lowering) the height of the Stacker Tray for large paper to be ejected, the Half position (Full-of-Large-Sheets position) was detected.
- With the Half position (Full-of-Large-Sheets position) already detected, paper (large paper) a stack of which is limited to the Half position was ejected.


## Initial Actions

- Check that the Stack Height Sensor is properly installed, not broken and has no foreign objects.
- Check Stacker Stack Sensors 1 and 2 are properly installed and free from foreign objects and that their actuators are not broken.
- Power Off/On.


## Procedure

Check for remaining paper and foreign objects on the Stacker Tray. The Stacker Tray is free of paper or foreign objects.
$\mathbf{Y} \quad \mathbf{N}$
Remove the remaining paper and/or foreign object(s).
Check the drive mechanism to the Stacker Tray for a deformed or broken part and not-seated gears. The drive mechanism is in normal condition, not deformed or broken and with no not-seated gears.
Y N
Repair the Stacker Tray mechanism.
Enter Component Control [012-267]. Block and unblock the Stack Height Sensor with a piece of paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8708 and P/J8727. P/J8708 and P/J8727 are securely connected.
Y N
Connect P/J8708 and P/J8727 securely.
Check for an open or short circuit between J8708 and J8727. The wires between J8708 and J8727 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between J8708-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
Y $N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5 VDC circuit.

A B
Measure the voltage between J8708-2 (+) on the Finisher PWB and GND (-). Block and unblock the Stack Height Sensor with a piece of paper. The voltage changes.
Y N
Replace the Stack Height Sensor (PL 22.10).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Run DC330[012-278].
Enter [012-278]. Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The display changes.
Y $\mathbf{N}$
Check the connections of $P / J 8707$ and $P / J 8722$. $P / J 8707$ and $P / J 8722$ are securely connected.
Y N
Connect P/J8707 and P/J8722 securely.
Check for an open or short circuit between J8707 and J8722. The wires between J8707 and J8722 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between J8707-6 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC . $\mathbf{Y} \quad \mathbf{N}$

Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between J8707-5 (+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The voltage changes.
Y N
Replace the Stacker Stack Sensor 1 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-279]. Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the sensor. The display changes.
Y $N$
Check the connections of $P / J 8707$ and $P / J 8721$. $P / J 8707$ and $P / J 8721$ are securely connected.
Y $\quad \mathrm{N}$
Connect P/J8707 and P/J8721 securely.
Check for an open or short circuit between J 8707 and J8721. The wires between J8707 and J8721 are OK.
Y $N$
Repair the open or short circuit.
Measure the voltage between J8707-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5VDC.

C
$Y^{\mathbf{N}}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between J8707-2 (+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the sensor. The voltage changes.
Y $N$
Replace the Stacker Stack Sensor 2 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-060] and [012-061] alternately. The Stacker Motor rotates.
Y $\mathbf{N}$
Check the connections of P/J8711 and P/J8736. P/J8711 and P/J8736 are securely connected.
Y $\quad \mathrm{N}$
Connect P/J8711 and P/J8736 securely.
Check for an open or short circuit between J8711 and P8736. The wires between J8711 and P8736 are OK.
Y $N$
Repair the open or short circuit.
Enter [012-060], measure the voltage between J8711-1 (+) on the Finisher PWB and GND (-). The voltage changes.
Y $N$
Replace the Finisher PWB (PL 22.7).
Enter [012-061], measure the voltage between J8711-2 (+) on the Finisher PWB and GND (-). The voltage changes.
Y $\quad \mathbf{N}$
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Stacker Motor (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 024-976 (A-Finisher) Staple NG

## BSD-ON:CH15.5

As Staple Head Home Sensor On was not detected within 450 msec after the start of the operation of closing the Stapler Head, the reverse rotation started. After that, Staple Head Home Sensor On was detected.

## Initial Actions

- Check that the Top Cover and the Front Cover can be opened and closed.
- Check that the Staple Assembly and the Cartridge are properly installed, not broken and include no foreign objects.
- Power Off/On.


## Procedure

Check for remaining paper and foreign objects on the Compile Tray. The Compile Tray is free of paper and/or foreign objects.
$Y \quad \mathbf{N}$
Remove the remaining paper and/or foreign object(s).
Enter Component Control [012-046] and [012-047] alternately. The Staple Motor rotates.
${ }^{Y} \mathrm{~N}$
Check the connections of P/J8705 and P/J8735. P/J8705 and P/J8735 are securely connected.
Y N
Connect P/J8705 and P/J8735 securely.
Check for an open or short circuit between J8705 and J8735. The wires between J8705 and J8735 are OK.
Y N
Repair the open or short circuit.
Measure the voltages between J8705-3 to $6(+)$ on the Finisher PWB and GND ( - ). Enter [012-046] and [012-047] alternately. Each voltage changes.
Y N
Replace the Finisher PWB (PL 22.7).
Replace the Staple Assembly (PL 22.4).
Enter [012-046] and [012-047] alternately. The display changes.
Y N
Check the connections of P/J8701 and P/J8731. P/J8701 and P/J8731 are securely connected.

Connect P/J8701 and P/J8731 securely.
Check for an open or short circuit between J8701 and J8731. The wires between J8701 and J8731 are OK.
Y N
Repair the open or short circuit.

A B
Measure the voltage between J8701-4 (+) on the Finisher PWB and GND ( - ). The voltage is approx. +5 VDC .
$Y \mathrm{~N}$
Go to Wirenet 7.2.36 A-Finisher +5 VDC and check the +5 VDC circuit.
Measure the voltage between J8701-5 (+) on the Finisher PWB and GND ( - ). Enter [012046 ] and [012-047] alternately. The voltage changes.
Y N
Replace the Staple Assembly (PL 22.4).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 024-977 (A-Finisher) Stapler Feed Ready Fail

 BSD-ON:CH15.5- In the operation of getting the Stapler head ready at initialization, Stapler Ready Sensor ON was not detected until a specified number (13) of Head idle-stapling operations.
- Immediately before stapling, the Stapler Ready Sensor was Off.


## Initial Actions

- Check that the Staple Assembly and the Cartridge are properly installed, not broken and include no foreign objects.
- Power Off/On.


## Procedure

Enter Component Control [012-243]. Remove and reinstall the Cartridge from/in the Staple Assembly. The display changes.
$Y^{\mathbf{N}}$
Check the connections of P/J8701 and P/J8731. P/J8701 and P/J8731 are securely connected.
Y N
Connect P/J8701 and P/J8731 securely.
Check for an open or short circuit between J8701 and J8731. The wires between J8701 and J8731 are OK.
Y $N$
Repair the open or short circuit.
Measure the voltage between J8701-4 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
Y N
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between J8701-6 ( + ) on the Finisher PWB and GND ( - ). Remove and reinstall the Cartridge from/in the Staple Assembly. The voltage changes.
Y $N$
Replace the Staple Assembly (PL 22.4).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 024-979 (A-Finisher) Stapler Near Empty

## BSD-ON:CH15.5

One of the following:

- At Power On, Low Staple Sensor ON was detected.
- Immediately before the start of the operation of closing the Stapler Head, Low Staple Sensor ON was detected.


## Initial Actions

- Check that the Front Cover can be opened and closed.
- Check that the Staple Assembly and the Cartridge are properly installed, not broken and include no foreign objects.
- Power Off/On.


## Procedure

Check what amount of staples remain in the Cartridge. The is enough staples remaining run the stapler.
Y N
Replace the Cartridge.
Run DC330[012-242].
Enter Component Control [012-252]. Remove and reinstall the Cartridge from/in the Staple Assembly. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8701 and P/J8731. P/J8701 and P/J8731 are securely connected.
Y $\quad \mathrm{N}$
Connect P/J8701 and P/J8731 securely.
Check for an open or short circuit between J8701 and J8731. The wires between J8701 and J8731 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between J8701-4 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
Y $\mathbf{N}$
Go to Wirenet 7.2.36 A-Finisher +5 VDC and check the +5 VDC circuit.
Measure the voltage between J8701-7 (+) on the Finisher PWB and GND (-). Remove and reinstall the Cartridge from/in the Staple Assembly. The voltage changes.
Y N
Replace the Staple Assembly (PL 22.4).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 024-980 (A-Finisher) Stacker Tray Full Stack

## BSD-ON:CH15.8

One of the following:

- At Power On, the Stack Height Sensor detected the height and the Full position.
- During the operation of adjusting (lowering) the height of the Stacker Tray for small paper to be ejected, the Full position was detected.
- During the operation of adjusting (lowering) the height of the Stacker Tray for large paper to be ejected, the Half position (Full-of-Large-Sheets position) was detected.
- With the Half position (Full-of-Large-Sheets position) already detected, paper (large paper) a stack of which is limited to the Half position was ejected.


## Initial Actions

- Check that the Stack Height Sensor is properly installed, not broken and has no foreign objects.
- Check Stacker Stack Sensors 1 and 2 are properly installed and free from foreign objects and that their actuators are not broken.
- Power Off/On


## Procedure

Check for remaining paper and foreign objects on the Stacker Tray. The Stacker Tray is free of paper and/or foreign objects.
Y $\mathbf{N}$
Remove the remaining paper and/or foreign object(s).
Check the drive mechanism to the Stacker Tray for a deformed or broken part and not-seated gears. The drive mechanism is free of defects and the gears seat properly.
Y $\quad \mathbf{N}$
Repair the Stacker Tray mechanism
Enter COmponent Control [012-267]. Block and unblock the Stack Height Sensor with a piece of paper. The display changes.
$Y \quad N$
Check the connections of P/J8708 and P/J8727. P/J8708 and P/J8727 are securely connected.
Y $\mathbf{N}$
Connect P/J8708 and P/J8727 securely.
Check for an open or short circuit between J8708 and J8727. The wires between J8708 and J8727 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between J8708-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5VDC.
Y $N$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.

Measure the voltage between J8708-2 (+) on the Finisher PWB and GND (-). Block and unblock the Stack Height Sensor with a piece of paper. The voltage changes.
Y N
Replace the Stack Height Sensor (PL 22.10).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Run DC330[012-278].
Enter [012-278]. Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8707 and P/J8722. P/J8707 and P/J8722 are securely connected.
Y N
Connect P/J8707 and P/J8722 securely.
Check for an open or short circuit between J 8707 and J8722. The wires between J8707 and J8722 are OK.
Y N
Repair the open wire or short circuit.
Measure the voltage between J8707-6 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
$\mathrm{Y} \quad \mathrm{N}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5 VDC circuit.
Measure the voltage between J8707-5 (+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The voltage changes.
Y N
Replace the Stacker Stack Sensor 1(PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Run DC330[012-279].
Enter [012-279]. Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the sensor. The display changes.

Check the connections of P/J8707 and P/J8721. P/J8707 and P/J8721 are securely connected.
Y $\mathbf{N}$
Connect P/J8707 and P/J8721 securely.
Check for an open or short circuit between J8707 and J8721. The wires between J8707 and J8721 are OK
Y N
Repair the open or short circuit.
Measure the voltage between J8707-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
$Y^{\mathbf{N}}$
Go to Wirenet 7.2.36 A-Finisher +5VDC and check the +5VDC circuit.
Measure the voltage between J8707-2 (+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the sensor. The voltage changes.

Replace the Stacker Stack Sensor 2 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-060] and [012-061] alternately. The Stacker Motor rotates.
Y N
Check the connections of P/J8711 and P/J8736. P/J8711 and P/J8736 are securely connected.
Y $\quad \mathbf{N}$
Connect P/J8711 and P/J8736 securely
Check for an open or short circuit between J8711 and P8736. The wires between J8711 and P8736 are OK.
Y N
Repair the open or short circuit.
Enter [012-060], measure the voltage between J8711-1 (+) on the Finisher PWB and GND (-). The voltage changes.
Y N
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-061], measure the voltage between J8711-2 (+) on the Finisher PWB and GND (-). The voltage changes.
Y N
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Replace the Stacker Motor (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 024-982 (A-Finisher) Stacker Lower Safety Warning

 BSD-ON:CH15.8The condition below occurred four consecutive times.

- In the operation of adjusting the height of the Stacker Tray (lowering the tray) for paper to be ejected during a job, the height of it cannot be adjusted within a specified time.


## Initial Actions

- Check the Stack Height Sensor is properly installed, not broken, and has no foreign object.
- Check the Stacker Stack Sensors 1 and 2 are properly installed and have no foreign objects and that their actuators are not broken.
- Power Off/On.


## Procedure

Check for remaining paper and foreign objects on the Stacker Tray. The Stacker Tray is free from paper and/or foreign objects.
Y N
Remove the remaining paper and/or foreign object(s).
Check the drive mechanism to the Stacker Tray for a deformed or broken part and not-seated gears. The drive mechanism is free of defects and gears seat properly.

## Y $\mathbf{N}$

Repair the Stacker Tray mechanism.
Run DC330[012-267].
Enter Component Control [012-267]. Block and unblock the acceptance surface of the Stack Height Sensor with a piece of paper. The display changes.
Y N
Check the connections of P/J8708 and P/J8727. P/J8708 and P/J8727 are securely connected.
Y N
P/J8708 and P/J8727 are securely connected.
Check for an open or short circuit between J8708 and J8727. The wires between J8708 and J8727 are OK.

## Y N

Repair the open or short circuit.
Measure the voltage between J8708-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC .
Y N
Go to Wirenet 7.2.36 A-Finisher +5 VDC and check the +5 VDC circuit.
Measure the voltage between J8708-2 (+) on the Finisher PWB and GND (-). Block and unblock the Stack Height Sensor with a piece of paper. The voltage changes.
Y N
Replace the Stack Height Sensor (PL 22.10).

A B
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Run DC330[012-278].
Enter [012-278]. Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The display changes.
Y $\mathbf{N}$
Check the connections of P/J8707 and P/J8722. P/J8707 and P/J8722 are securely connected.
$Y^{\mathbf{N}}$
Connect P/J8707 and P/J8722 securely.
Check for an open or short circuit between J8707 and J8722. The wires between J8707 and J8722 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between J8707-6 (+) on the Finisher PWB and GND ( - ). The voltage is approx. +5 VDC .
Y $N$
Go to Wirenet 7.2.36 A-Finisher +5 VDC and check the +5 VDC circuit.
Measure the voltage between J8707-5 (+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 1 actuator by hand to block and unblock the sensor. The voltage changes.
N
Replace the Stacker Stack Sensor 1 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Run DC330[012-279].
Enter [012-279]. Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the sensor. The display changes.
$Y^{\mathbf{N}}$
Check the connections of P/J8707 and P/J8721. P/J8707 and P/J8721 are securely connected.
$\mathbf{Y} \quad \mathbf{N}$
Connect P/J8707 and P/J8721 securely.
Check for an open or short circuit between J8707 and J8721. The wires between J8707 and J8721 are OK.
Y N
Repair the open or short circuit.
Measure the voltage between J8707-3 (+) on the Finisher PWB and GND (-). The voltage is approx. +5 VDC.
$Y \quad \mathrm{~N}$
Go to Wirenet 7.2.36 A-Finisher +5 VDC and check the +5 VDC circuit.

C D
Measure the voltage between J8707-2(+) on the Finisher PWB and GND (-). Rotate the Stacker Stack Sensor 2 actuator by hand to block and unblock the sensor. The voltage changes.

N
Replace the Stacker Stack Sensor 2 (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-060] and [012-061] alternately. The Stacker Motor rotates.
Y N
Check the connections of P/J8711 and P/J8736. P/J8711 and P/J8736 are securely connected.
Y N
Connect P/J8711 and P/J8736 securely.
Check for an open or short circuit between J8711 and P8736. The wires between J8711 and P8736 are OK.
Y N
Repair the open or short circuit.
Enter [012-060], measure the voltage between J8711-1 (+) on the Finisher PWB and GND ( - ). The voltage changes.
Y N
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

Enter [012-061], measure the voltage between J8711-2 (+) on the Finisher PWB and GND (-). The voltage changes.
Y $\mathbf{N}$
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).v

Replace the Stacker Motor (PL 22.8).
Check the wires and connectors for an intermittent open or short circuit. If the problem continues, replace the Finisher PWB (PL 22.7).

## 025-596 Diagnostic HDD Maintenance RAP

 BSD-ON:16.1A error is declared when the HDD Fail Forecast occurred.

## Initial Actions

Power Off/On

## Procedure

Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 025-597 Diagnostic HDD Initialize RAP

## BSD-ON:16.1

An error is declared when the HDD Initialization Diagnostic was executed.

## Initial Actions

Power Off/On

## Procedure

Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 026-700 LDAP Protocol Max Error RAP

In handling Address Book, an out-of-spec LDAP protocol is detected.

## Procedure

The server uses the out-of-spec LDAP protocol not supported by this machine. If trying to reproduce this, contact our Custom Support Center.

## 026-701 Address Book Request Overflow RAP

Overflowing with inquiries for Address Book

## Procedure

If multiple input devices including the machine Panel and Web-Ul make simultaneous inquiries for this machine Address Book, lengthen the intervals between inquiries.

## 026-702 Address Book Directory Service Overflow RAP

Address Book Directory Service is overflown.

## Procedure

Software internal to this machine is defective.

## 027-452 Duplicate IP Address RAP

BSD-ON:16.1
A PC with the same IP address exists on the network.

## Initial Actions

Change the IP address.

## Procedure

If the problem persists, replace the ESS PWB (PL 11.2).

## 027-501 POP Server RAP

The Mail I/O cannot resolve the POP (Post Office Protocol) Server address.

## Initial Actions

Power Off/On

## Procedure

Specify the correct POP (Post Office Protocol) Server name or specify the IP address.

## 027-502 POP Authentication RAP

The Mail I/O cannot pass POP (Post Office Protocol) authentication.

## nitial Actions

Power Off/On

## Procedure

Check that the login name and password for the POP (Post Office Protocol) Server are correct.

## 027-513 SMB Scan Client RAP

A SMB scan client does not have the right to access. (Win9x series)
Initial Actions
Power Off/On

## Procedure

Check if the specified user is allowed to read/write a file in storage place on the SMB server. If not, make the setting that allows the user to access.

## 027-514 Host Name Solution Error RAP

A failure in resolving a problem with a host name in SMB scan

## Initial Actions

Power Off/On

## Procedure

Check the connection to DNS. Or check that the destination server name is entered on DNS.

## 027-515 DNS Server Error in SMB RAP

In SMB scan, the server was not found on DNS.

## Procedure

Set DNS address.
Or set the destination server address, using IP address.

## 027-516 Server Connection Error in SMB RAP

In SBM scan, there is a problem with the connection to the server.

## Procedure

Check that the destination SMB server and this machine are set up so that they can communicate with each other on the network. For example, check the following:

- Network Cable for connection
- TCP/IP Setup
- Communication through Port 137 (UDP), Port 138 (UDP) and Port 139 (TCP)
- If any communication is conducted beyond subnet, check WINS Server settings and check that any problem with server name address can be resolved properly


## 027-518 Login/Password Error RAP

A login name or password error in SMB scan.

## Procedure

Check the login name (user name) and password are correct.

## 027-519 Scanning Picture Error RAP

There is a problem with the scanned images saving place SBM scan server.

## Procedure

Check the following:

- That the storage place is correct.
- That the specified storage place is not linked to another server for DFS setting. Directly specify the server to link to, shared name and storage place.


## 027-520 File Name Acquisition Failure RAP

A failure in acquiring a file name/folder on the SMB scan server.

## Procedure

Check the right to access the SMB scan server.

## 027-521 File Name Suffix Limit Error RAP

The suffix of a SMB scan file name/folder name exceeds the limit.

## Procedure

Change the file name/destination folder, or move or delete the file in the destination folder.

## 027-522 File Creation Failure RAP

A failure in creating a SMB scan file.

## Procedure

Check the following:

- That the specified name is a file name that can be created in the storage place.
- That the specified file name is not used by another user.
- That there is no file or folder with the same name as the specified file name.


## 027-523 Lock Folder Creation Failure RAP

A failure in creating a SMB scan lock folder

## Procedure

Check the following:

- If the existing lock directory (*.LCK) is left on the destination, manually delete it and retry the job.
- That the specified name is a folder name that can be created in the storage place.
- That there is no folder with the same name as the specified one.
- That the storage place has some space available.


## 027-524 Folder Creation Failure RAP

A failure in creating a SMB scan folder

## Procedure

Check the following:

- That the specified name is a folder name that can be created in the storage place.
- That there is no folder with the same name as the specified one
- That the storage place has some space available.


## 027-525 File Delete Failure RAP

A failure in deleting a SMB scan file.

## Procedure

Check that another user does not handle the file in the specified storage place.

## 027-526 Lock Folder Delete Failure RAP

A failure in deleting a SMB scan lock folder

## Procedure

If the existing lock directory (*.LCK) is left on the destination, manually delete it and retry the job.

## 027-527 Folder Delete Failure RAP

A failure in deleting a FTP scan folder

## Procedure

Check that another user does not handle the file in the specified storage place.

## 027-528 Data Write-in Failure RAP

No space available in the specified storage place on the SMB scan data server.

## Procedure

Check that the storage place has some space available.

## 027-529 Data Read Failure RAP

An error internal to SMB Library occurred.

## Procedure

Do the same operation again. If this does not resolve the problem, contact our Customer Support Center.

## 027-530 Data Reading Failure RAP

[Overwrite prohibited] is selected as action to be taken when a duplicated SMB scan file name is detected.

## Procedure

Select any option other than [Overwrite prohibited].

## 027-531 Scan Filing Policy Injustice RAP

SMB scan filing policy is illegal (when Add selected).

## Procedure

If [Add] is selected as action to be taken when a duplicated file name is detected, check that the file format is not a multi-page one.

## 027-532 NEXTNAME.DAT file access error RAP

NEXTNAME.DAT file access error in SMB scan

## Procedure

If [Add] is selected as action to be taken when a duplicated file name is detected, check that NEXTNAME.DAT file is correct.

## 027-533 Internal Scan Error RAP

An internal error occurred in SMB scan.

## Procedure

If the same operation causes this to reoccur, contact our Custom Support Center.

## 027-543 Server Name Specification Error RAP

A specified SMB server (NetBIOS) name is wrong.

## Procedure

Check that the SMB server name is correct.

## 027-547 SMB Protocol error 4-007 RAP

SMB protocol error. An invalid character was detected in the specified domain name.

## Procedure

Check with the network administrator for the domain name.
Also, check if the domain name set on the machine is correct, using the following procedure:
1.Enter the System Administration mode, and select [System Settings] > [System Settings] > [Network Settings] > [Remote Authentication Server/Directory Service] > [SMB Server Settings].
2.Select the SMB server to check the domain name.

## 027-548 SMB Protocol error 4-008 RAP

SMB protocol error. An invalid character was detected in the specified domain name.

## Procedure

Check with the network administrator for the domain name.

027-549 SMB Protocol error 4-009 RAP
SMB protocol error.

## Procedure

Try again. If the problem persists, contact our Customer Support Center.

## 027-564 SMB Protocol error 4-024 RAP

SMB protocol error. The SMB server was not found.

## Procedure

Check if the connection between the authentication server and the machine has been established via a network. For example, check the following points:
-Network cable connection TCP/IP settings
-Connection via Port 137 (UDP)/Port 138 (UDP)/Port 139 (TCP)

027-565 SMB Protocol error 4-025 RAP
SMB protocol error.

## Procedure

Try again. If the problem persists, contact our Customer Support Center.

## 027-566 SMB Protocol error 4-026 RAP

SMB protocol error. SMB (TCP/IP) is not active.

## Procedure

Check on CentreWare Internet Services that SMB (TCP/IP) is active on the [Port Status] screen of the [Properties] tab.

## 027-569 SMB (TCP/IP) is not Started RAP

SMB (TCP/IP) has not been started.

## Procedure

Check on CentreWare Internet Services that SMB (TCP/IP) is active on the [Port Status] screen of the [Properties] tab.

027-572 SMB Protocol error 4-032 RAP
SMB protocol error.

## Procedure

Try again. If the problem persists, contact our Customer Support Center.

027-573 SMB Protocol error 4-033 RAP
SMB protocol error.

## Procedure

Try again. If the problem persists, contact our Customer Support Center.

## 027-574 SMB Protocol error 4-034 RAP

SMB protocol error.

## Procedure

Try again. If the problem persists, contact our Customer Support Center.

027-576 SMB Protocol error 4-036 RAP
SMB protocol error.

## Procedure

Try again. If the problem persists, contact our Customer Support Center.

## 027-578 SMB Protocol error 4-038 RAP

SMB protocol error.

## Procedure

Try again. If the problem persists, contact our Customer Support Center.

## 027-584 SMB Protocol error 4-044 RAP

SMB protocol error. The SMB server is in shared security mode

## Procedure

The SMB server may be on Windows 95, Windows 98, or Windows Me OS. Set the SMB server on an OS other than Windows 95, Windows 98, or Windows Me OS.

027-585 SMB Protocol error 4-045 RAP
SMB protocol error. Login disabled period.

## Procedure

Check with the system administrator for the login-permitted period.

027-586 SMB Protocol error 4-046 RAP
SMB protocol error. The password has expired.

## Procedure

Obtain a valid password from the system administrator.

## 027-587 SMB Protocol error 4-047 RAP

SMB protocol error. The password must be changed.

## Procedure

Log in to Windows, and change the password. Ask the system administrator to change the setting so that you do not need to change the login password next time.

027-588 SMB Protocol error 4-048 RAP
SMB protocol error. The user is invalid.

## Procedure

Ask the system administrator for validating the user.

## 027-589 SMB Protocol error 4-049 RAP

SMB protocol error. The user was locked out.

## Procedure

Ask the system administrator for canceling the lockout status.

027-590 SMB Protocol error 4-050 RAP
SMB protocol error. The user was locked out.

## Procedure

Obtain a valid user account from the system administrator. Or, ask the system administrator to extend the account expiration date.

## 027-591 SMB Protocol error 4-051 RAP

SMB protocol error. Users are restricted. A blank password is invalid.

## Procedure

Set the password for the user.

027-599 SMB Protocol error 4-other codes RAP
SMB library internal error other than 27-547 to 27-579 has occurred

## Procedure

Operate again.

027-599 SMB Protocol error 4-other codes RAP
SMB library internal error other than 27-547 to 27-579 has occurred.

## Procedure

Operate again.

027-706 Certificate RAP
The authentication certificate is not available.

## Procedure

Obtain an authentication certificate.

## 027-707 Certificate Expired RAP

The authentication certificate expired.

## Procedure

Obtain new authentication certificate.

027-708 Certificate Valid RAP
The authentication certificate is not credible.

## Procedure

Check the authentication certificate information and retry.

## 027-709 Certificate Revoked RAP

The authentication certificate is revoked.

## Procedure

Reestablish authentication certificate or obtain a new authentication certificate.

## 027-710 Invalid S/MIME Mail RAP

The Mail I/O received S/MIME (Secure/Multipurpose Internet Mail Extensions) mail even though S/MIME was set to [Off].

## Procedure

Enable S/MIME as required.

## 027-711 S/MIME Mail Certificate RAP

The Mail I/O received the S/MIME (Secure/Multipurpose Internet Mail Extensions) signature mail but could not obtain the sender certificate.

## Procedure

Request for the mail to be resent. Check the setting of the S/MIME device as required.

## 027-712 S/MIME Mail Certificate RAP

The Mail I/O received the S/MIME (Secure/Multipurpose Internet Mail Extensions) signature mail with valid sender certificate but a signature verification error is detected.

## Procedure

Request that mail to be resent with a valid sender certificate.

## 027-713 S/MIME Mail Altered RAP

The Mail I/O received the S/MIME (Secure/Multipurpose Internet Mail Extensions) signature mail but corrupted mail is detected.

## Procedure

Check the sender as required.

## 027-714 S/MIME Mail Invalid RAP

The Mail I/O received the S/MIME (Secure/Multipurpose Internet Mail Extensions) signature mail with different sender mail address and signature mail address.

## Procedure

Check the sender as required.

## 027-715 S/MIME Mail Certificate Registration RAP

The certificate supported by S/MIME (Secure/Multipurpose Internet Mail Extensions) encrypted mail is not registered in the device.

## Procedure

Check that the certificate of the destination is registered in the certificate store of the device

## 027-716 Email Signature RAP

The system detected that prohibited E-mails without a signature were received.

## Procedure

Check the E-mail signatures and retry.

## 027-720 Extension Server Host RAP

Either the specified Server for the application interface cannot be found or the DNS could not be resolved.

## Procedure

Check the connection to the destination Server for the application interface. Set the destination Server address for the application interface using IP address as required.

## 027-721 Extension Server RAP

The system attempted to connect to the application interface but the host replied that the application cannot be found.

## Procedure

Check the host and then repeat the operation

## 027-722 Extension Server Time-out RAP

The system attempted to connect to the application interface but failed due to a time-out.

## Procedure

Check the host and then repeat the operation.

## 027-723 Extension Server Authentication RAP

The system attempted to connect to the application interface but authentication failed.

## Procedure

Check the host and then repeat the operation.

## 027-724 Extension Server Access RAP

The application interface failed (for all causes other than service could not be found, time-out or authentication failure).

## Procedure

Check the host and then repeat the operation.

## 027-725 Extension Server Operation RAP

Job operation of the application interface failed.

## Procedure

Check the destination host of the application interface and then repeat the operation.

## 027-726 Extension Server State RAP

The status of the destination of the application interface is unknown.

## Procedure

Check the destination host of the application interface and then repeat the operation.

027-727 Extension Server Parameters RAP
The parameter used for the application interface is incorrect.

## Procedure

Check the destination host of the application interface and then repeat the operation.

## 027-728 Extension Server File RAP

The file used for the application interface is incorrect.

## Procedure

Check the destination host of the application interface and then repeat the operation.

## 027-737 Template Server Read RAP

An error was received from the server for one of the following FTP commands: [TYPE A], [LIST] and [RETR] when reading from the Job Template Pool Server.

## Procedure

Check that [Read Authorization] is established for the storage destination server directory set as a resource.

## 027-739 Invalid Template Server Path RAP

An error was received from the Server for the FTP command [CWD] and the specified path of the Job Template Pool Server cannot be found.

## Procedure

Set the resource of the storage destination path from the client PC using CentreWare.

## 027-740 Template Server Login RAP

Login to the FTP Server failed.

## Procedure

Set the login name and password in the Job Template file storage destination
From another PC connected to the network, check that login to the above account is possible.
From a client PC, set a login name and password as a resource using CenterWare.

## 027-741 Template Server Connect RAP

The system failed in obtaining data connection or list data while connecting to the Job Template Pool Server using the FTP command [LIST].

## Procedure

Connect the network cable from the machine correctly.
From the destination server, use [ping] to check that the machine can be [seen]
Perform the [ping] test on the destination server from the PSW.
From a client PC, check that FTP connection to the destination server is possible.

## 027-742 HDD File System RAP

BSD-ON:16.1
The HDD is full when writing to a local HDD Job Template or when writing temporary work files

## Initial Actions

Power Off/On

## Procedure

Replace the HDD (PL 11.2).

## 027-743 Template Server Install RAP

The address format of the Job Template Pool Server is incorrect.

## Procedure

Set the parameters related to the Job Template Pool Server.

## 027-744 Template Address RAP

An error occurred while recalling the DNS Resolution Library

## Procedure

Check the connection to the DNS (Domain Name System). Check that the Job Template Pool Server domain name is registered in the DNS.

## 027-745 Template Address Server RAP

The DNS Server address is not set during address resolution.
Initial Actions
Power Off/On

## Procedure

Set the DNS address. Check the Job Template Pool Server address using IP address.

## 027-746 Job Template Pool Server RAP

The port of the protocol specified in Job Template Pool Server settings is not running.

## Procedure

Start up the port of the protocol (FTP client or SMB) specified in Job Template Pool Server settings.

## 027-750 Fax Document Inhibited RAP

iFAX Document E-mail and iFAX Transfer instructions were received when iFAX Document Email and IFAX Transfer is prohibited.

## Procedure

Change the transfer setting to receive iFAX.

027-751 Job Template Analysis RAP
An error is detected when analyzing the given instruction.

## Procedure

Verify the job set up selections.

## 027-752 Required User Entry Not Entered RAP

The instruction to start the job is issued but the required user entry not entered.

## Procedure

Do not link the entry box to instructions that require user entry.
Set preset values for the items in the instruction requiring user entry.

## 027-753 Job Flow Service Disabled RAP

The system attempted to create a job to recall an external service while the Job Flow Service is invalid.

## Procedure

Ask customer to enable the Job Flow Service

027-754 Job Flow Service File Signature Mismatch RAP
Job flow service File signature setting mismatch.

## Procedure

A mismatch of file signatures set by instructions

## 027-796 E-mail Not Printed RAP

 BSD-ON:16.1E-mails without attachments were received when the settings were set to [Do not print header and content].

## Procedure

Ask customer to change the settings and repeat the operation.
Ask customer to check the remote machine.
If the problem continues, replace the FCB PWB (PL 11.3)
If the problem persists, replace the EMB PWB (PL 11.3)
If the problem persists, replace the ESS PWB (PL 11.1).

## 027-797 Invalid Output Destination RAP

BSD-ON:16.1
E-mail was received with E-mail to Box and E-mail to Fax not selected.

## Procedure

Change the settings and repeat the operation.
If the problem persists check the remote machine.
Replace the FCB PWB (PL 11.3)
If the problem persists, replace the EMB PWB (PL 11.3)
If the problem persists, replace the ESS PWB (PL 11.2).

## 033-363 Fax Control RAP

## BSD-ON:16.1/17.1

There was an ESS reset when the FCB PWB did not respond.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the FCB PWB.
If the problem persists replace the FCB PWB (PL 11.3),

## 033-710 Fax Control RAP

## BSD-ON:16.1/17.1

The specified document does not exist.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel the job and resend.

033-712 Fax Control RAP
BSD-ON:16.1
Memory is at maximum limit.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel the job and resend.

033-713 Fax Control RAP
BSD-ON:16.1
The Chain-Link does not exist.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel the job and resend.

## 033-715 Fax Control RAP

BSD-ON:16.1
The job cannot be processed with the host in the current status.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel the job and resend.

## 033-716 Fax Control RAP

BSD-ON:16.1
The specified mailbox does not exist.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel the job and resend.

## 033-717 Fax Control RAP

## BSD-ON:16.1/17.1

Verification of the specified password failed.

## Procedure

Perform following as required

1. Verify machine is connected to dedicated analog line (not ISDN).
2. Verify that no password is set.

Customer can perform following steps if system admin is accessible with code (five one's) 11111, or code is available.
a. Press the Log In / Out Button on the Control Panel and enter (five one's) 11111 using the number keypad and select Confirm.
b. Select System Settings.
c. Select System Settings again.
d. Select FAX Mode Settings.
e. Select Local Terminal Settings.
f. Check that 3. Machine Password is (not set). If it is (not set), select close/exit as required. Go to step 3. If a password is set, go to step g.
g. Select 3. Machine Password and select Change Settings.
h. Select Backspace as required to delete the password.
i. Select Save.
j. Select Close/Exit as required.
k. Select Close again.
l. Select Close again.
m . Power machine off and on to verify setting change.
3. Initialize NVM.

## 033-718 Fax Control RAP

## BSD-ON:16.1/17.1

The document does not exist in the Polling Send box or the specified mailbox.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel the job and resend.

## 033-719 Fax Control RAP

BSD-ON:16.1/17.1
The document does not exist in the Polling Send box or the specified mailbox.

## Procedure

Ask customer to cancel the job and resend.
If the problem persists check the Fax line connection (telephone line).
If the problem persists check the electrical connections on the FCB PWB.
If the problem persists replace the FCB PWB (PL 11.3).
If the problem persists perform GP 2 Fax Checkout.

## 033-721 Fax Control RAP

## BSD-ON:16.1/17.1

The specified page cannot be created.

## Procedure

Ask customer to cancel the job and resend.

033-722 Fax Control RAP
BSD-ON:16.1/17.1
A stored Fax job is cancelled.

## Procedure

Ask customer to resend.

## 033-724 Fax Control RAP

## BSD-ON:16.1/17.1

The upper limit for image data in a single transmission was exceeded.

## Procedure

Ask customer to cancel the job and resend in smaller parts.
If the problem persists refer customer to User Guide to find information on lowering memory usage.

## 033-725 Fax Control RAP

BSD-ON:16.1/17.1
The HDD was full during Fax Receive, Format or report creation.

## Initial Actions

Power Off/On

## Procedure

Ask customer to request a re-resend.

## 033-726 Fax Control RAP

## BSD-ON:16.1/17.1

Two-sided printing is not available when receiving Fax (mixed-size originals for fax).

## Procedure

Ask customer to verify that two-sided printing is not available.

## 033-727 Fax Control RAP

BSD-ON:16.1/17.1
Rotation is not available when receiving Fax (insufficient memory).

## Initial Actions

Power off/on

## Procedure

Ask customer to request a re-resend.

## 033-728 Fax Control RAP

## BSD-ON:16.1/17.1

Formatting for Fax Auto Printing was aborted because the instruction for Fax Manual Printing was given during the operation.

## Procedure

Ask customer to cancel the job and resend.

## 033-731 Fax Control RAP

BSD-ON:16.1/17.1
When the system was waiting to receive a Fax job, a simultaneous request from the user to stop the job was received.

## Procedure

Ask customer to request a re-resend.

## 033-732 Fax Control RAP

## BSD-ON:16.1/17.1

Stored jobs are deleted in Forced Polling. As there was a print job during Forced Polling, the job was canceled.

## Procedure

Ask customer to request a re-resend.

## 033-733 Fax Control RAP

BSD-ON:16.1/17.1
The job document number related to the job could not be obtained

## Procedure

Ask customer to cancel the job and resend.

## 033-734 Fax Control RAP

## BSD-ON:16.1/17.1

Fax Print and Fax Auto Report were started at the same time.

## Procedure

Ask customer to cancel the job and resend.

## 033-735 Fax Control RAP

## BSD-ON:16.1/17.1

An error occurred in reserving fax receive memory.

## Procedure

Ask customer to request a re-resend

## 033-736 Fax Control RAP

## BSD-ON:16.1/17.1

Fax was not transferred as the data capacity exceeded the threshold value while the Fax Transfer Prohibition Function was activated, based on the data capacity of the Internet Fax Off Ramp.

## Procedure

Ask customer to cancel the job and resend

## 033-737 Fax Control RAP

BSD-ON:16.1/17.1
The Fax Controller detected a failure and could not continue processing the job.

## Initial Actions

Power off/on

## Procedure

Ask customer to cancel the job and resend.

## 033-740 Fax Control RAP

BSD-ON:16.1/17.1
The user canceled immediate printing upon receiving.

## Procedure

Ask customer to request a re-resend.

## 033-741 Fax Control RAP

## BSD-ON:16.1/17.1

When transferring image data to the FCB PWB, the conditions for sending the response to the FCB PWB did not match

## Procedure

Ask customer to request a re-resend.

## 033-742 Fax Control RAP

BSD-ON:16.1/17.1
When transferring image data to the FCB PWB, the conditions for sending the response to the FCB PWB did not match.

## Procedure

Ask customer to request a re-resend.

## 033-743 Fax Control RAP

BSD-ON:16.1/17.1
When transferring image data to the FCB PWB, the conditions for sending the response to the FCB PWB did not match.

## Procedure

Ask customer to request a re-resend.

## 033-744 Fax Control RAP

BSD-ON:16.1/17.1
When transferring image data to the FCB PWB, the conditions for sending the response to the FCB PWB did not match.

## Procedure

Ask customer to request a re-resend.

## 033-745 Fax Control RAP

BSD-ON:16.1/17.1
When transferring image data to the FCB PWB, the conditions for sending the response to the FCB PWB did not match.

## Procedure

Ask customer to request a re-resend.

## 033-746 Fax Control RAP

BSD-ON:16.1/17.1
When transferring image data to the FCB PWB, the conditions for sending the response to the FCB PWB did not match.

## Procedure

Ask customer to request a re-resend.

## 033-747 Fax Control RAP

BSD-ON:16.1/17.1
When requesting to start the service from the FCB PWB, the job could not be created due to causes such as job number overflow.

## Procedure

Ask customer to request a re-resend.

## 033-749 Fax Control RAP

BSD-ON:16.1/17.1
During Fax formatting, the enlarged image data is larger than the reserved memory.

## Initial Actions

Power off/on

## Procedure

Ask customer to cancel the job and resend.

## 033-750 Fax Control RAP

## BSD-ON:16.1/17.1

Enlargement of error free image data failed when image data was retrieved from the FCB PWB.

## Procedure

Ask customer to cancel the job and resend.

## 033-751 Activity Report suspended RAP

When a communication management report occurred at a print prohibited time period, the machine just goes into sleep mode and the report output is postponed.

## Procedure

No action is necessary as it will automatically restart after exiting the print prohibited time period.

## 033-755 Fax printing is canceled Fax RAP

Because Fax Service did not work, printing a fax document was cancelled.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the FCB PWB.
If the problem persists replace the FCB PWB (PL 11.3)

## 033-790 Fax Control RAP

## BSD-ON:16.1/17.1

The FCB PWB Re-dial Wait Status was set without calculating the number of re-dial attempts.

## Procedure

Ask customer to cancel the job and resend.

## 033-755 Fax Control RAP

## BSD-ON:16.1/17.1

Fax printing is cancelled by the defect of the Fax Card.

## Procedure

Ask customer to cancel the job and resend. If the problem continues, replace the Fax PWB (PL 11.3).

033-792 Fax Control RAP
BSD-ON:16.1/17.1
The RCC Service was immediately terminated.

## Procedure

Ask customer to cancel the job and resend.

## 034-211 Fax Communication RAP

 BSD-ON:16.1/17.1Failure was detected on the Fax Option Slot 1 PWB.

## Procedure

Check the installation of the PWB in Slot 1 on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-212 Fax Communication RAP

## BSD-ON:16.1/17.1

Failure was detected on the Fax Option Slot 2 PWB.

## Procedure

Check the installation of the PWB in Slot 2 on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-500 Fax Communication RAP

There is incorrect information in the dial data (Recipient telephone number).

## Procedure

Ask customer to verify the Fax number and resend.

## 034-501 Fax Communication RAP

## BSD-ON:16.1/17.1

The specified channel is not installed.

## Procedure

Ask customer to verify that the specified channel is installed.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-505 Fax Communication RAP

Transmission exceeded memory capacity.

## Procedure

Ask customer to cancel the job and resend.

## 034-506 Fax Communication RAP

A send error is detected in the Recipients Print Sets function when the receiving Fax does not support remote collating and copying.

## Procedure

Ask customer to reconfigure the job and resend

## 034-507 Fax Communication RAP

One of the following occurred.

- The password is incorrect.
- An error in the mailbox number is detected.
- No documents for polling are found.


## Procedure

Ask customer to check if the password, mailbox number or document for valid polling

Ask customer to cancel the job and then resend

## 034-508 Fax Communication RAP

The Fax controller sent a reject command signal and stopped the transmission.

## Procedure

Check the Fax line connection (telephone line).
Ask customer to allow a 5 minute recovery time and then resend.

## 034-509 Fax Communication RAP

The Fax controller stopped the transmission after receiving the invalid procedure signal from the receiving Fax.

## Procedure

Check the Fax line connection (telephone line).
Ask customer to cancel the job and then resend.

## 034-510 Fax Communication RAP

The Fax controller stopped the transmission after receiving the reject command signal from the receiving Fax.

## Procedure

Check the Fax line connection (telephone line).
Ask customer to allow a 5 minute recovery time and then resend.
Ask customer to cancel the job and then resend.

## 034-511 Fax Communication RAP

The receiving Fax is unable to send.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and then resend.

## 034-512 Fax Communication RAP

An infinite loop was detected at the receiving Fax relay broadcast.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and then resend.

## 034-513 Fax Communication RAP

The Fax controller received an illegal command from the receiving Fax during remote maintenance.

## Procedure

Check the Fax line connection (telephone line).
Ask customer to cancel the job and then resend.

## 034-514 Fax Communication RAP

The Fax controller received a remote maintenance request from the receiving Fax but the Fax controller does not support this function.

## Procedure

Check Fax setup
Ask customer to cancel the job and then resend

## 034-515 Fax Communication RAP

## BSD-ON:16.1/17.1

The Fax controller received a DIS signal from the receiving Fax.
A DCS signal is received when this function is not supported.
An illegal command was received.

## Procedure

Check the Fax line connection (telephone line).
Ask customer to cancel the job and then resend.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-520 Fax Communication RAP

The number of services exceeded the limit.

## Procedure

Ask customer to reduce the number of selections and then resend.

## 034-522 Fax Communication RAP

## BSD-ON:16.1/17.1

There is no phone line available for manual transmission when manual transmission is disabled.

## Procedure

Ask customer to allow a 5 minute recovery time and then resend.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-523 Fax Communication RAP

The Fax controller was unable to accept the service when it is in a prohibited state.

## Procedure

Ask customer to allow a 5 minute recovery time and then resend.

034-528 Fax Communication RAP
A manual transmission was requested during dialing.

## Procedure

Ask customer to resend.

## 034-529 Fax Communication RAP

## BSD-ON:16.1/17.1

When confirming and receiving print jobs, the jobs cannot be printed when the document size does not match the paper size.

## Procedure

Ask customer to check if the paper tray guides are set correctly.
Ask customer to check the size of the paper loaded in the tray
If the problem persists perform GP 2 Fax Checkout.

## 034-530 Fax Communication RAP

## BSD-ON:16.1/17.1

DTMF I/F Time-out is detected when an operation did not occur within the specified time.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-550 Write to FaxCard-ROM error detection RAP

An error has occurred during the process of writing data to the FaxCard-ROM. (During DLD method).

## Procedure

Retry job. If retry failed, replace the FaxCard-ROM and perform VerUP operation on the DLD method again

## 034-702 Fax Communication RAP

## BSD-ON:16.1/17.1

Unable the to initiate the call without the address specified, no destination specified.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-703 Fax Communication RAP

 BSD-ON:16.1/17.1The D Channel was deleted from the network.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-704 Fax Communication RAP

## BSD-ON:16.1/17.1

There is a ISDN D Channel error.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-705 Fax Communication RAP

## BSD-ON:16.1/17.

Layer 1 is deactivated with the power on.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-706 Fax Communication RAP

## BSD-ON:16.1/17.1

Layer 1 is deactivated with the power off.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-707 Fax Communication RAP

## BSD-ON:16.1/17.1

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-708 Fax Communication RAP

## BSD-ON:16.1/17.1

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-709 Fax Communication RAP

## BSD-ON:16.1/17.1

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-710 Fax Communication RAP

## BSD-ON:16.1/17.1

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-711 Fax Communication RAP

## BSD-ON:16.1/17.1

Fax controller is waiting for a data link time-out.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

034-713 Fax Communication RAP
There is a transmission time-out.

## Procedure

Ask customer to cancel the job and resend.

034-714 Fax Communication RAP
There is a wait release time-out.

## Procedure

Ask customer to cancel the job and resend.

## 034-715 Fax Communication RAP

There is a wait release complete time-out.

## Procedure

Ask customer to cancel the job and resend.

034-716 Fax Communication RAP
There is a connection time-out.

## Procedure

Ask customer to cancel the job and resend

## 034-717 Fax Communication RAP

## BSD-ON:16.1/17.1

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-718 Fax Communication RAP

## BSD-ON:16.1/17.1

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-719 Fax Communication RAP

## BSD-ON:16.1/17.1

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-722 Fax Communication RAP

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Ask customer to cancel the job and resend.

## 034-724 Fax Communication RAP

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Ask customer to cancel the job and resend.

## 034-725 Fax Communication RAP

There is an internal fax communication error during preparation to transmit the fax.

## Procedure

Ask customer to cancel the job and resend.

## 034-726 Fax Communication RAP

The I/F buffer is busy.

## Procedure

Ask customer to allow a 5 minute recovery time and then resend.

## 034-729 Fax Communication RAP

The line was cut off when sending In-Channel PB.

## Procedure

Ask customer to cancel the job and resend.

## 034-730 Fax Communication RAP

## BSD-ON:16.1/17/1

There is a conflict between incoming and outgoing calls

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-731 Fax Communication RAP

BSD-ON:16.1/17/1
The network cutoff the Fax setup.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-732 Fax Communication RAP

## BSD-ON:16.1/17/1

The network cutoff the Fax setup after a time-out.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-733 Fax Communication RAP

BSD-ON:16.1/17/1
There is a sequence error or message incompatibility.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-736 Fax Communication RAP

The Fax network sent the wrong notice.

## Procedure

Ask customer to cancel the job and resend.

034-737 Fax Communication RAP

## BSD-ON:16.1/17.1

The control failed during call response.

## Procedure

Replace the FCB PWB (PL 11.3)
If the problem persists replace the ESS PWB (PL 11.2)

## 034-738 Fax Communication RAP

## BSD-ON:16.1/17.1

There is a Layer 1 start up or activation error.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-739 Fax Communication RAP

## BSD-ON:16.1/17.1

Layer 1 synchronization is lost.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-740 Fax Communication RAP

## BSD-ON:16.1/17.1

There is a frame transmission error.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-741 Fax Communication RAP

## BSD-ON:16.1/17.1

There is a frame send error.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-742 Fax Communication RAP

BSD-ON:16.1/17.1
A frame send error is detected.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-743 Fax Communication RAP

## BSD-ON:16.1/17.1

When sending frames, the DMA (Dynamic Memory Access) was abnormally terminated.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-744 Fax Communication RAP

An incorrect channel was terminated

## Procedure

Ask customer to cancel the job and resend.

## 034-745 Fax Communication RAP

## BSD-ON:16.1/17.1

A call is initiated to the configured channel.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-746 Fax Communication RAP

BSD-ON:16.1/17.1
There are no usable lines.

## Procedure

Ask customer to cancel the job and resend.
Check the Fax line connection (telephone line).
If the problem persists perform GP 2 Fax Checkout.
If the problem persists check the connections on the FCB PWB.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-747 Fax Communication RAP

## BSD-ON:16.1/17.1

The network switching equipment is busy.

## Procedure

Ask customer to cancel the job and resend.
Check the Fax line connection (telephone line).
If the problem persists perform GP 2 Fax Checkout.
If the problem persists check the connections on the FCB PWB.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-748 Fax Communication RAP

The specified line can not be used.

## Procedure

Ask customer to cancel the job and resend.

034-749 Fax Communication RAP
There is a network busy error.

## Procedure

Ask customer to cancel the job and resend.

034-750 Fax Communication RAP
There is an error on the network.

## Procedure

Ask customer to cancel the job and resend.

034-751 Fax Communication RAP
There is a temporary error on the network.

## Procedure

Ask customer to cancel the job and resend

## 034-752 Fax Communication RAP

The receiving Fax is busy.

## Procedure

Ask customer to cancel the job and resend.

034-753 Fax Communication RAP
The receiving Fax is not responding.

## Procedure

Ask customer to cancel the job and resend.

## 034-754 Fax Communication RAP

The receiving Fax is not responding.

## Procedure

Ask customer to cancel the job and resend.

034-755 Fax Communication RAP
The receiving Fax refused the call.

## Procedure

Ask customer to cancel the job and resend.

## 034-756 Fax Communication RAP

There is a fault at the receiving Fax.

## Procedure

Ask customer to cancel the job and resend.

034-757 Fax Communication RAP
There is a fault at the receiving Fax.

## Procedure

Ask customer to cancel the job and resend.

## 034-758 Fax Communication RAP

The destination Fax number is invalid or incorrect.

## Procedure

Ask customer verify the Fax number and resend.

034-759 Fax Communication RAP
There is a network error.

## Procedure

Ask customer to cancel the job and resend.

## 034-760 Fax Communication RAP

There is no line or route to the destination.

## Procedure

Ask customer to cancel the job and resend.

034-761 Fax Communication RAP
The Fax number format is invalid.

## Procedure

Ask customer verify the Fax number and resend.

## 034-762 Fax Communication RAP

There is a problem with the destination.

## Procedure

Ask customer to cancel the job and resend.

## 034-763 Fax Communication RAP

Fax communication with the receiving Fax is not authorized.

## Procedure

Ask customer to verify the Fax number and resend.

## 034-764 Fax Communication RAP

## BSD-ON:16.117.1

Communication capability is not configured.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-765 Fax Communication RAP

## BSD-ON:16.1/17.1

There is a feature limit error.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-766 Fax Communication RAP

BSD-ON:16.1/17.1
The selected communication is not implemented.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-767 Fax Communication RAP

## BSD-ON:16.1/17.1

The selected mode is not implemented.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-768 Fax Communication RAP

 BSD-ON:16.1/17.1Restricted digital information is insufficient for Fax operation.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-769 Fax Communication RAP

## BSD-ON:16.1/17.1

There is a feature error.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-770 Fax Communication RAP

## BSD-ON:16.1/17.1

There is a reply and response to status query.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-771 Fax Communication RAP

## BSD-ON:16.1/17.1

Access information was discarded.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-772 Fax Communication RAP

There is an internal connection error.

## Procedure

Ask customer to cancel the job and resend.

## 034-773 Fax Communication RAP

## BSD-ON:16.1/17.1

An invalid Fax number was dialed.

## Procedure

Ask customer to verify the Fax number and resend.

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.

If the problem persists replace the FCB PWB (PL 11.3).

## 034-774 Fax Communication RAP

BSD-ON:16.1/17.1

An invalid line or channel was specified.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3)

## 034-776 Fax Communication RAP

A required information element is missing.

## Procedure

Ask customer to cancel the job and resend.

034-777 Fax Communication RAP
An undefined type of message was received.

## Procedure

Ask customer to cancel the job and resend.

## 034-778 Fax Communication RAP

An incorrect message was received.

## Procedure

Ask customer to cancel the job and resend.

## 034-779 Fax Communication RAP

No information was received, or the information is not defined.

## Procedure

Ask customer to cancel the job and resend

## 034-780 Fax Communication RAP

Invalid information was received.

## Procedure

Ask customer to cancel the job and resend.

## 034-781 Fax Communication RAP

A received message is not compatible with the call status.

## Procedure

Ask customer to cancel the job and resend

## 034-782 Fax Communication RAP

An error cleared due to time-out.

## Procedure

Ask customer to cancel the job and resend.

## 034-783 Fax Communication RAP

An unspecified protocol error occurred.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-784 Fax Communication RAP

The destination Fax number changed

## Procedure

Ask customer to verify the Fax number and resend.

## 034-785 Fax Communication RAP

An incompatible destination error was received.

## Procedure

Ask customer to verify the Fax number and resend.

## 034-786 Fax Communication RAP

BSD-ON:16.1/17.1
The call identity is not in use.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-787 Fax Communication RAP

## BSD-ON:16.1/17.1

The call identity is in use.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-788 Fax Communication RAP

## BSD-ON:16.1/17.1

The cause for a Fax failure is not identified.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-789 Fax Communication RAP

## BSD-ON:16.1/17.1

There is a presentation of an illegal event.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-790 Fax Communication Channel 0 RAP

 BSD-ON:16.1/17.1Channel 0 outside line is not connected.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3),

## 034-791 Fax Communication Channel 1 RAP

 BSD-ON:16.1/17.1Channel 1 outside line is not connected.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

034-792 Fax Communication Channel 2 RAP BSD-ON:16.1/17.1

Channel 2 outside line is not connected.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-793 Fax Communication Channel 3 RAP

 BSD-ON:16.1/17.1Channel 3 outside line is not connected.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

034-794 Fax Communication Channel 4 RAP BSD-ON:16.1/17.1

Channel 4 outside line is not connected.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 034-795 Fax Communication Channel 5 RAP

 BSD-ON:16.1/17.1Channel 5 outside line is not connected.

## Procedure

Check the Fax line connection (telephone line).
If the problem persists check the connections on the FCB PWB.
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

034-796 Fax Communication Channel RAP
Incorrect information in the dial data (Recipient Telephone Number).
Procedure
Ask customer to verify the Fax number and resend.

## 035-500 Fax Protocol RAP

There is an internal fax protocol error during preparation to transmit the fax.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 035-550 Write to FaxG3-ROM error detection RAP

An error has occurred during the process of writing data to the FaxG3-ROM. (During DLD method).

## Procedure

Retry job. If retry failed, replace the FaxG3-ROM and perform VerUP operation on the DLD method again.

## 035-700 Fax Protocol RAP

BSD-ON:16.1/17.1
A modem error occurred.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists perform GP 2 Fax Checkout.
If the problem persists replace the FCB PWB (PL 11.3).

## 035-701 Fax Protocol RAP

## BSD-ON:16.1/17.1

The disconnect signal was not received from the receiving Fax after transmission was not established, or there is a time-out.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-702 Fax Protocol RAP

## BSD-ON:16.1/17.1

For the NSS/DTC (Non-Standard Setup/Digital Transmit Command) signal sent from the Fax controller, the DCN (Disconnect) signal was received from the receiving Fax, or transmission was rejected by the Select Receive function on the receiving Fax.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.
Check the connections on the FCB PWB (PL 11.3).

## 035-703 Fax Protocol RAP

## BSD-ON:16.1/17.1

DCN (Distributed Computer Network) signal was received from the receiving Fax when sending in Phase-B (pre-message processing).

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-704 Fax Protocol RAP

## BSD-ON:16.1/17.1

Polling could not be done because the receiving Fax does not support Polling Send function, or the stored document/original was not set.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-705 Fax Protocol RAP

## BSD-ON:16.1/17.1

The NSS (Non-Standard Facilities Set-up) signal was sent out three times but there was no response from the receiving Fax, or the DCN (Disconnect) signal was received.

Resending of DCS/NSS (Digital Command Signal/Non-Standard Facilities Set-up) signal exceeded the limit.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-706 Fax Protocol RAP

## BSD-ON:16.1/17.1

When sending the NSS (Non-Standard Facilities Set-up) signal, fall back could not be done or a fall back error occurred (In User/Auto Resend Standby).

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-707 Fax Protocol RAP

## BSD-ON:16.1/17.1

The password does not exist or it was inconsistent.
Transmission was received from another party other than the selected party for transmission.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-708 Fax Protocol RAP

## BSD-ON:16.1/17.1

The post command was sent out three times but there was no response from the receiving Fax, or a DCN (Disconnect) signal was received.

Post messages resend over the limit.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-709 Fax Protocol RAP

## BSD-ON:16.1/17.1

The Fax controller received a RTN (Retrain Negative) signal from the receiving Fax.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.
If the problem persists reduce the send speed and then repeat the operation.

## 035-710 Fax Protocol RAP

## BSD-ON:16.1/17.1

The Fax controller received a PIN (Procedure Interrupt Negative) signal from the receiving Fax.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

035-711 Fax Protocol RAP
BSD-ON:16.1/17.1
DCN (Disconnect) signal or an invalid command was received from the receiving Fax when sending in Phase-D.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-712 Fax Protocol RAP

## BSD-ON:16.1/17.1

A NSC (Non-Standard Facilities Command) signal resulted in one of the following:

- The password was incorrect.
- Stored documents/originals for polling was not set on the receiving Fax.
- Document jam on the receiving Fax.


## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-713 Fax Protocol RAP

## BSD-ON:16.1/17.1

No response signal was returned from the receiving Fax after the FTT (Failure To Train) signal was sent.

## Procedure

Fax phone line may also carry a DSL (Digital Subscriber Line) internet signal, but this is not supported by the hardware. Fax requires an analog only phone line (can be used for voice only).

## 035-714 Fax Protocol RAP

## BSD-ON:16.1/17.1

A DCN (Disconnect) signal was returned from the receiving Fax to the NSC/DTC (Non-Standard Facilities Command/Digital Transmit Command) signal sent from the Fax controller for one of the following:

- Incorrect password

035-715 Fax Protocol RAP

## BSD-ON:16.1/17.1

A password mismatch interrupted polling.

## Procedure

Ask customer to cancel the job, verify any passwords, and resend.

- No originals for polling
- Paper jam on the receiving Fax

Procedure
There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-716 Fax Protocol RAP

## BSD-ON:16.1/17.1

There is a time out or there is no post message.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-717 Fax Protocol RAP

## BSD-ON:16.1/17.1

An RTN (Retrain Negative) signal was sent to the receiving Fax.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.
If the problem persists reduce the send speed and then repeat the operation.

## 035-718 Fax Protocol RAP

## BSD-ON:16.1/17.1

When no data was sent from the receiving Fax, or after receiving more than 1 page manually, the receiving Fax changed the resolution or the document size and the Fax controller returned to Phase-B (pre-message processing), but no data was sent from the receiving Fax.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-719 Fax Protocol RAP

## BSD-ON:16.1/17.1

A busy tone was detected in receive Phase-B (pre-message processing).

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-720 Fax Protocol RAP

## BSD-ON:16.1/17.1

The receiving Fax has one of the following problems:

- A compatibility problem
- Can not receive the DIS/NSF/NSC/DTC (DIgital Identification/Non-Standard Facilities/ Non-Standard Facilities Command/Digital Transmit Command) signals
- Memory is full


## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-721 Fax Protocol RAP

## BSD-ON:16.1/17.1

DCN (Disconnect) signal was received from the receiving Fax when receiving in Phase-B (premessage processing).

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-722 Fax Protocol RAP

## BSD-ON:16.1/17.1

The frame length exceeded 3.45 sec in 300 bps command/response.

## Procedure

Ask customer to cancel the job and resend.

## 035-723 Fax Protocol RAP

## BSD-ON:16.1/17.1

The Fax controller could not receive the CD (Collision Detection) signal within 3mins after receiving the signal from the receiving Fax.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-724 Fax Protocol RAP

## BSD-ON:16.1/17.1

The Fax controller sent a FTT (Failure To Train) signal after receiving a DCN (Disconnect) signal from the receiving Fax.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-725 Fax Protocol RAP

## BSD-ON:16.1/17.1

The receiving Fax does not support the relay broadcast and mailbox functions.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend. If the resend fails Fax transmission cannot be used and another method of transmitting the data is required.

## 035-726 Fax Protocol RAP

BSD-ON:16.1/17.1
The Fax controller did not receive the TRN (Train) signal within 10 seconds after Phase-C (message transmission).

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-727 Fax Protocol RAP

## BSD-ON:16.1/17.1

More than $50 \%$ of decoding errors were detected when 148 mm of G3 image information was received in Phase-C (message transmission).

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-728 Fax Protocol RAP

## BSD-ON:16.1/17.1

One of the following occurred:

- The Fax controller did not detect a normal line within 1 minute after it had begun to receive G3 image information.
- The Fax controller did not detect the EOL (End of Line) signal within 13sec (default) when receiving.
- The Fax controller could not receive the EOL (End of Line) signal within 10sec in Phase-C (message transmission).


## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-729 Fax Protocol RAP

## BSD-ON:16.1/17.1

There is a time-out drop-out when receiving the image information.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-730 Fax Protocol RAP

## BSD-ON:16.1/17.1

During training or when sending a command in high speed in Phase-C (message transmission), an error is detected when the modem is not turned on when a HDLC (High Level Data Link Control) signal was sent.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-731 Fax Protocol RAP

## BSD-ON:16.1/17.1

An error was detected during V. 8 internal Fax attributes selections.

## Procedure

Ask customer to cancel the job and resend.

## 035-732 Fax Protocol RAP

## BSD-ON:16.1/17.1

The V. 34 CD (Collision Detection) is off.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-733 Fax Protocol RAP

## BSD-ON:16.1/17.1

There is an error in V. 34 mode ( 33.6 KBPS rate).

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-734 Fax Protocol RAP

## BSD-ON:16.1/17.1

During Polling Receive, there was no stored documents/originals for polling, or the polling operation/settings were missed during V. 8 internal Fax attributes selections.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-735 Fax Protocol RAP

## BSD-ON:16.1/17.1

During Polling Send, there was no stored documents/originals for polling or the polling operation/settings was missed on the Fax controller during V. 8 internal Fax attributes selections.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-736 Fax Protocol RAP

## BSD-ON:16.1/17.1

The Fax controller received the DCN (Disconnect) signal from the receiving Fax, or no response was returned from the receiving Fax to the CTC (Continue To Correct) signal sent by the Fax controller.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-737 Fax Protocol RAP

## BSD-ON:16.1/17.1

The Fax controller received the DCN (Disconnect) signal, or no response was returned from the receiving Fax to the EOR (End Of Retransmission) signal sent by the Fax controller.

Resending of CTC/EOR (Continue To Correct/End Of Retransmission) signal exceeded the limit.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-738 Fax Protocol RAP

## BSD-ON:16.1/17.1

The Fax controller received the DCN (Disconnect) signal from the receiving Fax, or no response was returned from the receiving Fax to the RR (Receive Ready) signal sent by the Fax controller.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-739 Fax Protocol RAP

## BSD-ON:16.1/17.1

There is a time-out after initial 2 way transmissions are established.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-740 Fax Protocol RAP

BSD-ON:16.1/17.1
After the EOR (End Of Re-transmission) signal was sent, transmission stopped or the EORQuit signal was sent from the Fax controller.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-741 Fax Protocol RAP

## BSD-ON:16.1/17.1

There is a time-out during Phase-C (message transmission).

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-742 Fax Protocol RAP

## BSD-ON:16.1/17.1

After the EOR (End of Re-transmission) signal was sent, the ERR (Response For End Of Transmission) signal was returned, or the EOR-Q (End Of Re-transmission-Quit) signal was received by the Fax controller.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-743 Fax Protocol RAP

## BSD-ON:16.1/17.1

The receiving Fax can not receive a SUB (Sub-Address).

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-744 Fax Protocol RAP

BSD-ON:16.1/17.1
The receiving Fax can not receive a password.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-745 Fax Protocol RAP

## BSD-ON:16.1/17.1

The receiving Fax does not support the SEP (Separator) function.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-746 Fax Protocol RAP

## BSD-ON:16.1/17.1

The Fax controller detected one of the following:

- No DT1 signal before dialing.
- A BT1/BT2 signal before dialing.
- A CT1 signal before dialing (a state in which PBX is busy).
- A CT2 signal before dialing.
- No DT1 signal during dialing (This could happen when an outside line was used without any signal sending from the PBX).
- A BT1/BT2 signal during dialing.
- A CT1/CT2 signal during dialing.
- No 2nd DT2 signal during dialing.
- A BT1/BT2 signal during dialing.
- $\mathrm{ACT} 1 / \mathrm{CT} 2$ signal during dialing.
- No third DT3 signal during dialing.
- A BT1/BT2 signal during dialing.
- $A C T 1 / C T 2$ signal during dialing.
- A BT1/BT2 signal after dialing.
- A CT1/CT2 signal after dialing.
- No DT signal from the PBX before dialing.
- A BT signal from the PBX before dialing.
- $A C T$ signal from the $P B X$ before dialing.
- A BT signal from the PBX after dialing.
- A CT signal from the PBX after dialing.


## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists perform GP 2 Fax Checkout.
If the connections are good then there is a problem with the customers PBX (Private Branch Exchange) line or the receiving fax.

## 035-747 Fax Protocol RAP

## BSD-ON:16.1/17.1

The operation was stopped during dialing by using the Stop button.

## Procedure

The customer terminated the transmission. Ask customer to resend the job.

## 035-748 Fax Protocol RAP

## BSD-ON:16.1/17.1

The operation was stopped during transmission by using the Stop button.

## Procedure

The customer terminated the transmission. Ask customer to resend the job.

## 035-749 Fax Protocol RAP

## BSD-ON:16.1/17.1

After dialing, the Fax controller did not receive the CED/DIS (Called Station Identification/Digital Identification Signal) from the receiving Fax, causing a transmission error or re-dial to exceed the limit.

## Procedure

There is a problem with the receiving Fax. Ask customer to cancel the job and resend.

## 035-750 Fax Protocol RAP

## BSD-ON:16.1/17.1

The machine power failed during transmission, causing an error.

## Procedure

Ask customer to cancel the job and resend.

## 035-751 Fax Protocol RAP

## BSD-ON:16.1/17.1

The operation was stopped during document sending by using the Stop button.

## Procedure

Ask customer to cancel the job and resend.

## 035-752 Fax Protocol RAP

## BSD-ON:16.1/17.1

The number of jobs exceeded the limit.

## Procedure

Ask customer to cancel the job and resend in separate parts.

## 035-762 Fax Protocol RAP

## BSD-ON:16.1/17.1

There was a break in the ISDN (Integrated Services Digital Network) transmission.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3).
Ask customer to cancel the job and resend

## 036-500 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-501 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-502 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-503 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-504 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-505 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-506 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-507 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-508 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-509 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-510 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-511 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-512 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-513 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-514 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-515 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-516 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-517 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-518 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-519 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-520 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-521 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-522 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-523 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-524 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-525 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-526 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-527 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-528 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-529 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-530 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-531 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-532 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-533 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-534 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-535 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-536 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-537 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-538 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-539 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-540 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-541 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-542 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-550 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## Procedure

Perform GP 2 Fax Checkout.

## 036-700 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-701 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-702 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-703 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-704 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-705 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-706 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-707 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-708 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-709 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-710 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-711 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-712 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-713 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-714 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-715 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-716 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-717 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-718 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-719 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-720 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-721 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-722 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-723 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-724 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-725 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-726 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-727 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-728 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-729 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-730 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-731 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-732 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-733 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-734 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-735 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-736 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-737 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-738 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-739 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-740 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-741 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-742 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-743 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-744 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-745 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-746 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-747 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-748 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-749 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-750 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-751 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-752 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-753 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-754 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-755 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-756 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-757 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-758 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-759 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-760 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-761 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-762 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-763 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-764 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-765 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-766 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-767 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-768 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-769 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-770 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-771 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-772 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-773 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-774 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-775 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-776 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-777 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-778 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-779 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-780 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-781 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-782 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-783 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-784 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-785 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-786 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-787 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-788 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-789 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-790 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-791 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-792 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-793 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-794 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-795 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-796 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-797 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-798 Fax Parameter RAP

BSD-ON:17.1
There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 036-799 Fax Parameter RAP

## BSD-ON:17.1

There is a fax error with either the Fax controller or the receiving fax.

## Procedure

Perform GP 2 Fax Checkout.
If the checkout is good then there is a problem with the receiving fax. Ask customer to cancel the job and resend.

## 041-310 IM Logic Failure

There is an IOT Manager controller software error.

## Procedure

Ensure that the MCU PWB E-PROM is secure on the MCU PWB (PL 11.1). Check the connection of each MCU PWB electrical connector. The connectors are connected correctly.
Y $\mathbf{N}$

## Secure the connectors.

Turn on the power again. [041-310] persists.
Y N
Return to Service Call Procedures.
Perform GP 10 Loading and Upgrading Software for the IOT. [041-310] persists.
N
Return to Service Call Procedures.
Replace the MCU PWB (PL 11.1).

## 041-311 MCU PWB Fuse F2

Fuse F2 on the MCU PWB has an open circuit failure.

## Procedure

Perform the following:

- Check the connection of each MCU PWB electrical connector.
- If any service was performed immediately before the fuse failure check that no wire damage was caused in the areas that were serviced.
- Check the harness wires for damage on BSD's 1.2A, 6.5 and 7.9.
- If no problems are found replace the MCU PWB (PL 11.1).


## 041-312 MCU PWB Fuse F1

Fuse F1 on the MCU PWB has an open circuit failure.

## Procedure

Perform the following:

- Check the connection of each MCU PWB electrical connector.
- If any service was performed immediately before the fuse failure check that no wire damage was caused in the areas that were serviced.
- Check the harness wires for damage on the following BSD's; 1.2A, 7.7, 8.1, 8.2, 8.7, 9.4B, 9.6, 10.3, 10.5, 10.7 .
- If no problems are found replace the MCU PWB (PL 11.1).


## 041-314 MCU PWB Fuse FA

Fuse FA on the MCU PWB has an open circuit failure.

## Procedure

Perform the following:

- Check the connection of each MCU PWB electrical connector.
- If any service was performed immediately before the fuse failure check that no wire damage was caused in the areas that were serviced.
- Check the harness wires for damage on the following BSD's; 1.2A and related BSD's for +24 VDC distribution and Wire Net +24VDC-1 to Wire Net +24VDC-6.
- If no problems are found replace the MCU PWB (PL 11.1).


## 041-319 MCU PWB Interlock Fuse F4

Fuse F4 on the MCU PWB has an open circuit failure.

## Procedure

Perform the following:

- Check the connection of each MCU PWB electrical connector.
- If any service was performed immediately before the fuse failure check that no wire damage was caused in the areas that were serviced
- Check the harness wires for damage on BSD's 1.2A, 9.2, 9.4A, 9.5, 9.7, 4.1A.
- If no problems are found replace the MCU PWB (PL 11.1).


## 041-320 MCU PWB Interlock Fuse F3

Fuse F3 on the MCU PWB has an open circuit failure.

## Procedure

Perform the following:

- Check the connection of each MCU PWB electrical connector.
- If any service was performed immediately before the fuse failure check that no wire damage was caused in the areas that were serviced.
- Check the harness wires for damage on BSD 1.2A, and 9.3.
- If no problems are found replace the MCU PWB (PL 11.1).


## 041-323 MCU PWB Fuse F5

Fuse F5 on the MCU PWB has an open circuit failure.

## Procedure

Perform the following:

- Check the connection of each MCU PWB electrical connector.
- If any service was performed immediately before the fuse failure check that no wire damage was caused in the areas that were serviced.
- Check the harness wires for damage on the following BSD's; 1.2A, 4.1A, 6.5, 7.7, 7.9, 8.1, 8.2, 8.7, 9.2, 9.3, 9.4A, 9.4B, 9.5, 9.6, 10.3, 10.5, 10.7.
- If no problems are found replace the MCU PWB (PL 11.1).


## 041-340 MCU PWB Data RAP

BSD-ON:3.1
There is a MCU PWB Data failure. Data storage address corruption occurred.

## Initial Actions

Ensure that the MCU PWB E-PROM is secure on the MCU PWB (PL 11.1).
Ensure that the last software has been loaded.

## Procedure

Check the connection of each MCU PWB electrical connector. The connectors are connected correctly.

## Y N

Secure the connectors.
Turn on the power again. [041-340] persists.
Y N
Return to Service Call Procedures.
Initialize NVM. [041-340] persists.
Y $\mathbf{N}$
Return to Service Call Procedures.
Reload software. If the problem persists, replace the MCU PWB (PL 11.1).

## 041-341 MCU PWB Access RAP

## BSD-ON:3.1

There is a MCU PWB Access failure. Read check values do not match write check values.

## Initial Actions

Ensure that the MCU PWB E-PROM is secure on the MCU PWB.

## Procedure

Check the connection of each MCU PWB connector. The connectors are connected correctly.
Y N
Secure the connectors.
Turn on the power again. [041-341] persists.
Y N
Return to Service Call Procedures.
Initialize NVM. [041-341] persists
Y N
Return to Service Call Procedures.
Replace the MCU PWB (PL 11.1).

## 041-342 MCU PWB Buffer RAP

BSD-ON:3.1
There is a MCU PWB Buffer full or overflow problem.

## Initial Actions

Ensure that the MCU PWB E-PROM is secure on the MCU PWB (PL 11.1).

## Procedure

Check the connection of each MCU PWB connector. The connectors are connected correctly.
Y N
Secure the connectors.
Turn on the power again. [041-342] persists.
Y N
Return to Service Call Procedures.
Replace the MCU PWB (PL 11.1).

041-500
IIOT Memory (DDR DIMM) Fault

## Procedure

Ensure that the DIMM's are installed correctly.
If the problem continues, replace the DIMM's (PL 11.2),
If the problem persists, replace the ESS PWB (PL 11.2)

## 041-501

IOT NVM Memory (DDR DIMM) Fault.

## Procedure

Ensure that the DIMM's are installed correctly.
If the problem continues, replace the DIMM's (PL 11.2).
If the problem persists, replace the ESS PWB (PL 11.2)

## 042-311 Auger Motor Failure RAP BSD-ON:4.1B

The Auger Motor is not rotating at the specified speed.

## Initial Actions

- Power OFF/ON


## Procedure

Close the LH Cover and the Front Cover.
Execute Component Control [042-003 Auger Motor ON]. The Auger Motor can be heard.
Y N
Go to the BSD 4.2B and troubleshoot the circuit.
Check the installation of the Drum Drive Assembly (PL 1.1). The Drum Drive Assembly is installed correctly.
Y N
Install the Drum Drive Assembly correctly.
Check the wire between J410 and J215 for an open circuit or a short circuit (BSD 4.2B). The wires are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Manually rotate the Auger Motor rotor. It rotates smoothly.
Y N
Check for foreign substances that are interfering with operation or installation failure. Foreign substances or installation failure are found.
Y N
Replace the Drum Drive Assembly (PL 1.1).
Remove the foreign substances that are interfering with operation and correct the installation failure.

Replace the Drum Drive Assembly (PL 1.1) If the problem persists, replace the MCU PWB (PL 11.1).

## 042-313 Rear Cooling Fan Failure RAP

BSD-ON:13.1
The Rear Cooling Fan Failed.

## Procedure

Execute Component Control [042-006 Rear Fan ON]. The Rear Fan rotates.
Y N
Check connectors J 409 on the MCU PWB and J 224 on the Rear Fan (PL 11.1). The connector or connected.
Y N
Connect connector.
Check the wires between J 409 on the MCU PWB and J 224 on the Rear Fan for an open or shot circuit. The wires are OK.
Y N
Repair or replace as needed.
Check J 409-15A (+) and J 409-18A (-) for +24VDC +24VDC is present.
Y N
Troubleshoot the +24 VDC circuit (BSD 1.2).
Replace the Rear Fan (PL 11.1).
Check for obstructions in the area of the Rear Fan (PL 11.1).

## 042-324 Drum Motor Drive Failure RAP BSD-ON:4.2A

The Drum Motor is not rotating at the specified speed.

## Initial Actions

- Power OFF/ON
- Replace the Xero/Developer Cartridge (PL 4.1) and the Fuser Unit (PL 7.1)


## Procedure

Close the LH Cover and the Front Cover.
Execute Component Control [091-004 Drum Motor ON]. The Drum Motor can be heard.
Y N
Go to the OF 3 (MAIN DRIVE ASSY RAP).
Check the installation of the Main Drive Assembly (PL 1.1). The Main Drive Assembly is installed correctly.
Y $N$
Install the Main Drive Assembly (PL 1.1) correctly.
Check the wire between J409 and J211 for an open circuit or a short circuit (BSD 4.2A). The wires are conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.

Manually rotate the Main Motor rotor. It rotates smoothly.
Y N
Check for foreign substances that are interfering with operation or installation failure Foreign substances or installation failure are found. Y $\mathbf{N}$

Replace the Main Drive Assembly (PL 1.1).

Remove the foreign substances that are interfering with operation and correct the installaion failure.

Replace the Main Drive Assembly (PL 1.1) If the problem persists, replace the MCU PWB (PL 11.1).

## 042-325 Main Motor Failure RAP

BSD-ON:4.1B
The Main Motor is not rotating at the specified speed.

## Initial Actions

- Power OFF/ON
- Reload the Xero/Developer Cartridge (PL 4.1) and the Fuser Unit (PL 7.1).


## Procedure

Close the LH Cover and the Front Cover.
Execute Component Control [042-001 Main Motor ON]. The Main Motor can be heard.
Y $\quad \mathbf{N}$
Go to the OF 3 (MAIN DRIVE ASSY RAP).
Check the installation of the Main Drive Assembly (PL 1.1). The Main Drive Assembly is installed correctly.
Y $N$
Install the Main Drive Assembly correctly.
Check the wire between J 410 and J 214 for an open circuit or a short circuit (BSD 4.1B). The wires are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Manually rotate the Main Motor rotor. It rotates smoothly.
Y $\mathbf{N}$
Check for foreign substances that are interfering with operation or installation failure Foreign substances or installation failure are found.
Y $N$
Replace the Main Drive Assembly (PL 1.1).
Remove the foreign substances that are interfering with operation and correct the installation failure.

Replace the Main Drive Assembly (PL 1.1) If the problem persists, replace the MCU PWB (PL 11.1).

## 042-400 Filter Life RAP

The Filter Failed.

## Procedure

Replace the Filter (PL 12.2).

## 045-310 Image RAP

BSD-ON:6.2
The IIT image is not ready for transfer.

## Procedure

Check the connectors and cables between the IIT/IPS PWB, CCD PWB, and the ESS PWB. The connectors and cables are OK.
Y $N$
Repair or replace as required (PL 13.3, PL 13.4, PL 11.2)
Power OFF and then ON. The problem continues.
N
Rerun the job.
Replace the IIT/IPS PWB (PL 13.3).

## 045-311 Controller Communications RAP

 BSD-ON:6.2There is a Controller communications fault.

## Procedure

Check the following PWBs for loose connections and/or defective cables:

- Printer PWB (PL 11.2)
- ESS PWB (PL 11.2).
- MCU PWB (PL 11.1).

Repair and/or replace as required.

## 045-321 Marking Panel RAP

BSD-ON:6.2
There is an internal marking panel control error.

## Procedure

Check the connectors and cables between the IIT/IPS PWB, CCD PWB, and the ESS PWB. The connectors and cables are OK.
Y N
Repair or replace as required (PL 13.3, PL 13.4, PL 11.2)
Power OFF and then ON. The problem continues.
$\mathbf{N}$
Rerun the job.
Replace the IIT/IPS PWB (PL 13.3). If the problem continues, replace the ROS (PL 3.1).

## 045-322 Marking Pitch RAP

## BSD-ON:6.4/6.5

There is an internal marking pitch control error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y $N$
Repair replace as required (PL 11.1, PL 3.1).
Replace the ROS Unit (PL 3.1). If the problem continues, replace the MCU PWB (PL 11.1).

## 045-323 Marking Y RAP

## BSD-ON:6.4/6.5

There is a marking Y plate control error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y N
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-324 Marking M RAP

## BSD-ON:6.4/6.5

There is a marking M plate control error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y $\quad \mathbf{N}$
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-325 Marking C RAP

## BSD-ON:6.4/6.5

There is a marking C plate control error

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y N
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-326 Marking K RAP

## BSD-ON:6.4/6.5

There is a marking K plate control error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.

## Y $\mathbf{N}$

Repair replace as required (PL 11.1, PL 3.1)
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-327 Marking Y RAP

## BSD-ON:6.4/6.5

There is a marking Y plate error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y N
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-328 Marking M RAP

## BSD-ON:6.4/6.5

There is a marking M plate error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y $\quad \mathrm{N}$
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-329 Marking C RAP

## BSD-ON:6.4/6.5

There is a marking C plate error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y N
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-330 Marking K RAP

## BSD-ON:6.4/6.5

There is a marking K plate error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y $\quad \mathbf{N}$
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-331 Marking Reject RAP

## BSD-ON:6.4/6.5

There is a marking reject control error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y N
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-332 Marking Reject RAP

## BSD-ON:6.4/6.5

There is a marking reject control error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y $\quad \mathrm{N}$
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-333 Marking Communication RAP

 BSD-ON:6.4/6.5There is a marking module communication error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y N
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-334 Marking Drive Communication RAP

## BSD-ON:6.4/6.5

There is a marking/drive communication error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y $\quad \mathrm{N}$
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-335 Marking Fuser Communication RAP

 BSD-ON:There is a marking/fuser communication error.

## Procedure

Check the connections and wiring between the MCU PWB and the Fuser. The connections and wiring are OK.
$Y^{\mathrm{N}}$
Repair replace as required (PL 11.1, PL 3.1).
Replace the Fuser (PL 5.1). If the problem continues, replace the MCU PWB (PL 11.1).

## 045-336 Marking ROS Communication RAP

BSD-ON:6.4/6.5
There is a marking/ROS communication ROS error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y $\quad \mathrm{N}$
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 045-337 Marking Imaging Communication RAP

## BSD-ON:6.4/6.5

There is a marking/imaging communication error.

## Procedure

Check the connections and wiring between the MCU PWB and the ROS Unit. The connections and wiring are OK.
Y $N$
Repair replace as required (PL 11.1, PL 3.1).
Replace the MCU PWB (PL 11.1). If the problem continues, replace the ROS Unit (PL 3.1).

## 047-211 OCT 2 RAP

## BSD-ON:10.7

the OCT Home Sensor 2 did not actuate in time after the OCT2 Motor energized.

## Procedure

Manually operate the offset mechanism. The offset mechanism moves smoothly.
Y $\quad \mathbf{N}$
Replace the parts that are interfering with operation (PL 8.4).
Execute Component Control [077-103 OCT Home Sensor 2]. Actuate the OCT Home Sensor 2 with paper. The display changes.
Y $\quad \mathrm{N}$
Check the connections of J111, P/J606, J422. Connections are connected correctly. Y N

Connect connectors
Check the wire between J 111 and J 422 for an open circuit or a short circuit (BSD 10.7 Flag 1/Flag 2). The wires are conducting without an open circuit or a short circuit. Y $\mathbf{N}$

Repair the open circuit or short circuit.
Replace the OCT Home Sensor 2 (PL 8.4).
Alternately execute Component Control [077-011 Offset Motor 2 (CW)] and Component Control [077-012 Offset Motor 2 (CCW)]. The Offset Motor 2 energizes.
Y N
Check the connections of P/J207, P/J606 and J/421. Connections are connected correctly. Y N

Connect connectors
Check the wire between J421 and P207 for an open circuit or a short circuit (BSD 10.7 Flag 3). The wires are conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the Offset Motor 2 between J207-1 (COM) and each point of J207-2/3/4/5 (BSD 10.7 Flag 3). The resistance is approx. 1000hm.
Y N
Replace the Offset Motor 2 (PL 8.4).
Measure the voltage between the Exit PWB P421-1 (+) and GND (-) (BSD 10.7 Flag 3). The voltage is approx. +24VDC.
$\mathbf{Y} \quad \mathbf{N}$
Go to BSD 1.2 and troubleshoot the +24 VDC circuit.
Replace the Offset Motor 2 (PL 8.4) If the problem persists, replace the MCU PWB (PL 11.1).

Replace the MCUPWB (PL 11.1)

## 047-214 MCU Duplex Module RAP

## BSD-ON:1.2/3.2

Communication error occurred between the MCU PWB and the Duplex Module.

## Initial Actions

Power OFF the machine. Disconnect the Tray Module and the Finisher (if the machine has one). Power ON the machine. If the problem is resolved, go to RAP 077-131 or 077-307 and troubleshoot the Duplex Module.

## Procedure

Check the connection of each MCU PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Check the connection of each Duplex Module PWB connector. The connectors are securely connected.
Y $\quad \mathbf{N}$
Connect the connectors.
Check the wire between J417 and J540 for an open circuit or a short circuit (BSD 1.2 Flag 2 / BSD 3.3 Flag 3/Flag 4). The wire between J 417 and J 540 is conducting without an open circuit or a short circuit.
Y $\quad \mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P417-A1 (+) and GND (-) (BSD 1.2 Flag 2). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Replace the MCU PWB (PL 11.1).
Replace the Duplex PWB (PL 10.1) If the problem persists, replace the MCU PWB (PL 11.1).

## 047-216 MCU Finisher Communication RAP

BSD-ON:3. 4
A communication error occurred between the MCU PWB and the Finisher.

## Initial Actions

Check the Finisher harness connections to the IOT

## Procedure

Check the connection of each MCU PWB connector. The connectors are securely connected.
Y N

```
Connect the connectors.
```

Check the connection of each Finisher PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Check the wire between J416 and J8843 for an open circuit or a short circuit (BSD 3.4 Flag 1/ Flag 2). The wire between J 416 and J 8843 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the Finisher PWB (PL 17.12) If the problem persists, replace the MCU PWB (PL 11.1).

## 061-320 ROS Motor RAP

## BSD-ON: 6.4/6.5

- The ROS Motor rotation speed does not reach the specified value within the specified time after the ROS Motor started rotating.
- The light intensity of the LD1 does not reach the specified value.


## Procedure

Check the connections of P/J401 on the MCU PWB and P/J140 on the ROS Unit. Connections are connected correctly.
Y $\mathbf{N}$
Connect P/J401 and P/J140.
Check the connections of P/J219 and P/J618. P/J219 and P/J618 are connected correctly.
$Y \quad N$

```
Connect P/J219 and P/J618
```

Check the wire between J401 and J140 for an open circuit or a short circuit (BSD 6.4 Flag 1 Flag 2). The wire between J401 and J140 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Check the wire between J401 and J130 for an open circuit or a short circuit (BSD 6.5 Flag 1). The wire between J401 and J130 is conducting without an open circuit or a short circuit. Y $\mathbf{N}$

Repair the open circuit or short circuit.
Execute Component Control[061-200 ROS MOTOR ON]. The ROS Motor can be heard.
Y $N$
Measure the voltage between the MCU PWB P401-B7 (+) and GND (-) (BSD 6.5 Flag 2). The voltage is +24 VDC .
$Y \quad \mathbf{N}$
Measure the voltage between the MCU PWB P400-1 (+) and GND (-) (BSD 1.2 Flag
1). The voltage is +24 VDC .
$Y^{\mathrm{N}}$
Measure the voltage between the Power Unit P526-4 (+) and GND (-) (BSD 1.2 Flag 1). The voltage is $\mathbf{+ 2 4 V D C}$.
Y $\mathbf{N}$
Replace the Power Unit (PL 11.1).
Repair the open circuit between J526 and J400.
Replace the MCU PWB (PL 11.1).
Replace the ROS Unit (PL 3.1) If the problem persists, replace the MCU PWB (PL 11.1).
Install the Xero/Developer Cartridge securely.
Measure the voltage between the MCU PWB P401-B2 (+) and GND (-) (BSD 6.4). The voltage is +5 VDC .

Y N
Replace the MCU PWB (PL 11.1).
Replace the ROS Unit (PL 3.1) If the problem persists, replace the MCU PWB (PL 11.1).

## 061-325 SOS RAP

## BSD-ON: 6.4

The light intensity of the LD2 does not reach the specified value.

## Procedure

Check the connections of P/J401 on the MCU PWB and P/J140 on the ROS Unit. Connections are connected correctly.
Y N
Connect P/J401 and P/J140.
Check the wires between J401 and J140 for an open circuit or a short circuit (BSD 6.4 Flag 1/ Flag 2). The wires are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the ROS Unit (PL 3.1)
If the problem persists, replace the MCU PWB (PL 11.1).

## 061-333 ROS Fan defect RAP

## BSD-ON: 6.5

ROS Fan rotation failure.

## Initial Actions

Clean the fan.

## Procedure

Execute Component Control[061-002 ROS FAN ON].Check for noise in the rotation of the ROS Fan (PL 3.1). The ROS Fan is rotating.
Y N
Measure the voltage between the MCU PWB J401-A9 (+) and GND (-) (BSD 6.5 Flag 3). The voltage is approx. +24VDC.
$Y \quad N$
Replace the MCU PWB (PL 11.1).
Check the wire between J401 and J219 for an open circuit or a short circuit (BSD 6.5 Flag 3/Flag 4). The wire between J401 and J219 is conducting without an open circuit or a short circuit.
$\mathbf{Y} \quad \mathbf{N}$
Repair the open circuit or short circuit.
Replace the ROS Fan (PL 3.1).
Replace the MCU PWB (PL 11.1).

## 061-344 Video Processor RAP

## BSD-ON:6.4

There is a failure in the video processor.

## Procedure

Replace the ROS (PL 3.1).

061-345 +5 VDC Interlock RAP
BSD-ON:1.3/1.4
There is a failure in the +5 VDC interlock circuit.

## Procedure

Go to BSDs 1.3 and/or 1.4 to troubleshoot the +5VDC Interlock circuit. Repair as required.

## 062-210 IIT Hot Line RAP

 BSD-ON: 3.1There is an open circuit in the cable between the IIT/IPS PWB and the ESS PWB.

## Procedure

Check the connection of each IIT/IPS PWB connector. The connectors are securely connected.
Y $N$
Connect the connectors.
Check the connection of each ESS PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Check the wire between J720 and J320 for an open circuit or a short circuit (BSD 3.1 Flag 3/ Flag 4). The wire between J 720 and J 320 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the IIT/IPS PWB (PL 13.3)
If the problem persists, replace the ESS PWB (PL 11.2).

## 062-211 IIT/IPS PWB EEPROM RAP

## BSD-ON: 3.1

The IPS EEPROM failed during the Read/Write operation.

## Procedure

Check the connection of each IIT/IPS PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Switch on the power. The problem persists.
N
Return to Service Call Procedures
Replace the IIT/IPS PWB (PL 13.3).

## 062-220 IIT/IPS PWB to ESS PWB RAP

## BSD-ON:

Communication between the IIT/IPS PWB and ESS PWB failed.

## Procedure

Switch off the power. Access the IIT/IPS PWB (PL 13.3) Disconnect and reconnect the ESS PWB (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).
If the problem persists replace the IIT/IPS PWB (PL 13.3),

## 062-277 IIT/IPS PWB DADF PWB Communication RAP

 BSD-ON: 3.5Transmission error occurred between the IIT/IPS PWB and the DADF PWB.

## Procedure

Check the connection of each IIT/IPS PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Check the connection of each DADF PWB connector. The connectors are securely connected.
Y $\mathbf{N}$
Connect the connectors.
Check the wire between J751 and J750, and between J752 and J750 for an open circuit or a short circuit (BSD 3.5 Flag 1). The wires between J751 and J750, and between J752 and J750 are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.

Replace the IIT/IPS PWB (PL 13.3).
If the problem persists, replace the DADF PWB (PL 16.3).

## 062-278 IIT/IPS PWB RAP

## BSD-ON: 6.2

Communication between the IIT/IPS PWB and ESS PWB failed.

## Procedure

Switch off the power. Access the IIT/IPS PWB (PL 13.3) Disconnect and reconnect the IIT/IPS PWB.
If the problem persists replace the ESS PWB (PL 11.2).

## 062-300 Platen Interlock Open RAP

## BSD-ON: 6.1

The Platen Interlock is open.

## Procedure

Check opening/closing of the Platen Cover. The Platen Cover can be opened/closed.
Y N
Reinstall the Platen Cover correctly.
Check the installation of the Platen Angle Sensor. The Platen Angle Sensor is installed correctly.

N
Install the Platen Angle Sensor correctly
Execute Component Control[062-301]. Open and close the Platen Cover. The display changes.
Y N
Check the connections of P/J725 and P/J722. P/J725 and P/J722 are connected correctly.
Y N
Connect P/J725 and P/J722.
Check the wire between J725 and J722 for an open circuit or a short circuit (BSD 6.1 Flag 3/Flag 6). The wire between J725 and J722 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the IIT/IPS PWB P722-B1 (+) and GND (-) (BSD 6.1 Flag 6 ). The voltage is approx. +5 VDC .
Y N
Replace the IIT/IPS PWB (PL 13.3).
Measure the voltage between the IIT/IPS PWB P722-B2 (+) and GND (-) (BSD 6.1 Flag 5).

Actuate the Platen Angle Sensor with paper. The voltage changes.
Y $N$
Replace the Platen Angle Sensor (PL 13.4).
Replace the Platen Angle Sensor (PL 13.4).
Replace the IIT/IPS PWB (PL 13.3).

## 062-310 IIT/IPS PWB Controller Communication RAP

 BSD-ON: 3.1Transmission error occurred between the IIT/IPS PWB and the ESS PWB.

## Procedure

Check the connection of each IIT/IPS PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Check the connection of each ESS PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Check the wire between J720 and J320 for an open circuit or a short circuit (BSD 3.1 Flag 3/ Flag 4). The wire between J720 and J320 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the IIT/IPS PWB (PL 13.3).
If the problem persists, replace the ESS PWB (PL 11.2).

## 062-311 IIT/IPS Software RAP

## BSD-ON: 6.2

A software error was detected by the IIT/IPS PWB.

## Procedure

Perform GP 8 Firmware version. The firmware is the latest version.
Y $N$
Reload Software (ADJ 9.3.1)
Replace the IIT/IPS PWB (PL 13.3),

## 062-345 IIT/IPS Subsystem RAP

 BSD-ON: 3.1The IPS EEPROM failed during a read/write operation.

## Procedure

Check the connection of each IIT/IPS PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Switch on the power. The problem persists.
Y $\mathbf{N}$
Return to Service Call Procedures.
Replace the IIT/IPS PWB (PL 13.3).

## 062-357 CCD Fan Failure RAP

CCD Fan Failure

## Initial Actions

- Check the vent has no foreign object and is not clogged.
- Check there is no dust on the Fan Blade.


## Procedure

Remove the Platen Glass. Execute Component Control [062-017 CCD Fan]. The CCD Fan operates.
Y N
Replace the CCD FAn (PL 8.4).
Check CCD Fan connections and wiring for damage.

## 062-360 Carriage Position RAP

## BSD-ON: 6.3

- An error occurred while counting the pulses of the Carriage Motor.
- After the Carriage Motor turned On, the IIT Registration Sensor did not turn On within the specified time.


## Procedure

Check the Carriage Rail for dirt or contamination or distortion. Dirt or contamination or distortion is found in the Carriage Rail.
Y $N$
Clean the rails or correct the distortion (PL 11.4)
Execute Component Control [062-212 IIT Registration Sensor]. Actuate the IIT Registration Sensor with paper. The display changes.
Y $\quad \mathbf{N}$
Check the connections of P/J728 and P/J722. P/J728 and P/J722 are connected correctly.
Y N
Connect P/J728 and P/J722.
Check the wire between J728 and J722 for an open circuit or a short circuit (BSD 6.3 Flag 2/Flag 3). The wire between J728 and J722 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the IIT/IPS PWB P722-A7 (+) and GND (-) (BSD 6.3 Flag 2/ Flag 3). The voltage is approx. +5VDC.
Y N
Replace the IIT/IPS PWB (PL 13.3).
Measure the voltage between the IIT/IPS PWB P722-A9 (+) and GND (-) (BSD 6.3 Flag 2).

Actuate the IIT Registration Sensor (PL 13.4) with paper. The voltage changes.
Y N
Replace the IIT Registration Sensor (PL 13.4).
Replace the IIT/IPS PWB (PL 13.3).
Alternately execute Component Control[062-005 Carriage Motor SCAN ON] and Component Control[062-006 Carriage Motor RETURN ON]. The Carriage Motor starts up.
Y N
Check the connections of $P / J 722$ and $P / J 721$. P/J722 and P/J721 are connected correctly.
Y $\quad \mathbf{N}$
Connect P/J722 and P/J721.
Check the wire between J722 and J721 for an open circuit or a short circuit (BSD 6.3 Flag 1). The wire between J722 and J721 is conducting without an open circuit or a short circuit.

Y N
Repair the open circuit or short circuit.
Measure the resistance of the Carriage Motor (PL 13.5). The resistance between J721$5 / 6$ and $\mathrm{J} 721-1 / 2 / 3 / 4$ is approx. 10 hm .
Y N
Replace the Carriage Motor (PL 13.5).
Measure the voltage between the IIT/IPS PWB (PL 13.3) P722-B10 (+) and GND (-), and between P722-B11 (+) and GND (-) (BSD 6.3 Flag 1). The voltage is approx. +24VDC. Y N

Replace the IIT/IPS PWB (PL 13.3).
Replace the Carriage Motor (PL 13.5)
If the problem persists, replace the IIT/IPS PWB (PL 13.3).
Replace the IIT/IPS PWB (PL 13.3),

## 062-362 IIT/IPS PWB RAP

## BSD-ON:6.3

Control Logic detected a failure in the IIT/IPS PWB.

## Procedure

Switch off the power. Access the IIT/IPS PWB (PL 13.3) Disconnect and reconnect the IIT/IPS PWB connectors
If the problem persists reload Software (ADJ 9.3.1)
If the problem persists replace the IIT/IPS PWB (PL 13.3).

## 062-371 Lamp Illumination RAP

## BSD-ON: 6.3

The amount of light from Exposure Lamp is inadequate which gets incident on CCD at the start of scan or at the initialization of IIT after power on.

## Procedure

Check the lamp, lens, mirror and the white correcting plate for abnormalities such as contamination and deterioration. Abnormality such as contamination or deterioration of the lamp, lens, mirror or the white correcting plate is found.
Y N
Replace the lamp, lens, mirror or the white correcting plate.
Ex
Execute Component Control [062-002 IIT Exposure Lamp]. The Exposure Lamp lights up.
Y N
Check the connections of P/J703, P/J702 and P/J723. P/J703, P/J702 and P/J723 are connected correctly.
Y N
Connect P/J703, P/J702 and P/J723.
Check the wire between J702 and J723 for an open circuit or a short circuit. The wire between J702 and J723 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Replace the Lamp Wire Harness (PL 13.6).
Measure the voltage between the IIT/IPS PWB (PL 13.3) P723-1 (+) and GND (-), and between P723-2 (+) and GND (-) (BSD 6.3 Flag 4). The voltage is approx. +24VDC.
Y N
Replace the IIT/IPS PWB (PL 13.3).
Replace the Exposure Lamp (PL 13.6)
If the problem persists, replace the Lamp Ballast PWB (PL 13.6)
If the problem persists, replace the IIT/IPS PWB (PL 13.3).
Check the connections of P/J700 and P/J710. P/J700 and P/J710 are connected correctly.
Y N
Connect P/J700 and P/J710.
Replace the Lens Kit Assembly (PL 11.4)
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 062-380 Platen AGC CH1 RAP

## BSD-ON: 6.3

At the adjustment of CCD output after power on, CCD does not make a correct output which it should when it receives a specified amount of light.

## Procedure

Check the lamp, lens, mirror and the white correcting plate for abnormalities such as contamination and deterioration. Abnormality such as contamination or deterioration of the lamp, lens, mirror or the white correcting plate is found.
Y N
Replace the lamp, lens, mirror or the white correcting plate.
Execute Component Control[062-002 IIT Exposure Lamp]. The Exposure Lamp lights up. $\mathbf{Y} \quad \mathbf{N}$

Check the connections of P/J703, P/J702 and P/J723. P/J703, P/J702 and P/J723 are connected correctly.
Y $\mathbf{N}$
Connect P/J703, P/J702 and P/J723.
Check the wire between J702 and J723 for an open circuit or a short circuit (BSD 6.3 Flag 4). The wire between $J 702$ and $J 723$ is conducting without an open circuit or a short circuit.
Y N
Replace the Lamp Wire Harness (PL 13.6).
Measure the voltage between the IIT/IPS PWB (PL 13.3) P723-1 (+) and GND (-), and between P723-2 (+) and GND (-) (BSD 6.3 Flag 4). The voltage is approx. +24VDC. $\mathbf{Y} \quad \mathbf{N}$

Replace the IIT/IPS PWB (PL 13.3).
Replace the Exposure Lamp (PL 13.6)
If the problem persists, replace the Lamp Ballast PWB (PL 13.6) If the problem persists, replace the IIT/IPS PWB (PL 13.3).

Check the connections of $P / J 700$ and $P / J 710$. $P / J 700$ and $P / J 710$ are connected correctly.

N
Connect P/J700 and P/J710
Replace the Lens Kit Assembly (PL 13.4)
If the problem persists, replace the IIT/IPS PWB (PL 13.3).


## 062-386 Platen AOC CH1 RAP

BSD-PN: 6.2
At the adjustment of CCD output after power on, CCD does not make a correct output which it should when no light is incident on it.

## Procedure

Check the connection of each IIT/IPS PWB connector. The connectors are securely connected.
Y $N$
Connect the connectors.
Switch
Switch on the power. The problem persists.
$Y \quad N$
Return to Service Call Procedures
Replace the Lens Kit Assembly (PL 13.4)
If the problem persists, replace the IIT/IPS PWB (PL 13.3).

## 062-389 Carriage Over Run RAP

## BSD-ON: 3.1

The carriage scanned beyond safe limits.

## Procedure

Check the connection of each IIT/IPS PWB connector. The connectors are securely connected.
Y $\quad \mathbf{N}$
Connect the connectors.
Switch on the power. The problem persists.
Y $\quad \mathbf{N}$
Return to Service Call Procedures
Replace the IIT/IPS PWB (PL 13.3).

## 062-392 IIT/IPS PWB Memory Failure-1 RAP

## BSD-ON: 3.1

- The IIT/IPS PWB RAM failed during the Read/Write operation.
- The Shading Memory failed during the Read/Write operation.
- The Gap Memory failed during the Read/Write operation.
- The ASIC (Application Specific Integrated Circuit) failed.


## Procedure

Check the connection of each IIT/IPS PWB connector. The connectors are securely connected.
Y N
Connect the connectors
Switch on the power. The problem persists.
Y $\mathbf{N}$
Return to Service Call Procedures
Replace the IIT/IPS PWB (PL 13.3).


## 062-393 IIT/IPS PWB RAM RAP

## BSD-ON: 6.2

An internal processing error occurred in the IIT/IPS PWB.

## Procedure

Check the connection of each IIT/IPS PWB (PL 13.3) connector. The securely connected.
Y $\mathbf{N}$
Connect the connectors.

## \$witch on the power.

If the problem persists replace the IIT/IPS PWB (PL 13.3).
If the problem persists, replace the Lens Kit Assembly (PL 13.4).

## 062-500 IISS ROM RAP

## BSD-ON: 6.2

IISS ROM Failure.

## Procedure

Check the connections on the IIT/IPS PWS (PL 13.3).
Check that the prom on the IIT/IPS PWB is seated properly
If the above checks are OK, replace the IIT/IPS PWB (PL 13.3).
Perform Max Setup (ADJ 9.1.2) if the IIT/IPS PWB was replaced.
Perform DADF Registration Setup (ADJ 15.1.4).

## 062-790 Prohibited Document Detection RAP

## BSD-ON: 6.2

Control logic detects a prohibited document.

## Procedure

Ask the customer to verify that the document is not a prohibited document. Refer to Prohibited Documents in SGS 12.

If the document is not prohibited, replace the IIT/IPS PWB (PL 13.3).

## 063-210 Extension EPROM RAP

There is a failure in the EPROM on the Extension PWB.

## Procedure

Replace the Extension PWB (PL 9.2),

## 063-220 IIT/IPS PWB Extension PWB Sync RAP

The IIT/IPS PWB failed to synchronize with the Extension PWB.

## Procedure

Disconnect and reconnect the Extension PWB.
If the problem persists, replace the Extension PWB (PL 9.2).
If the problem persists, replace the IIT/IPS PWB (PL 11.3).

## 063-230 Extension PWB DIMM RAP

The DIMM failed on the Extension PWB.

## Procedure

Disconnect and reconnect the DIMM on the Extension PWB
If the problem persists, replace the DIMM (PL 11.3).
If the problem persists, replace the Extension PWB (PL 9.2).

## 063-240 Extension PWB Processing RAP

The Extension PWB failed to process image parameters.

## Procedure

Disconnect and reconnect the Extension PWB.
If the problem persists, replace the Extension PWB (PL 9.2).

## 063-500 IISS Extension ROM RAP

IISS Extension ROM Failure.

## Procedure

Check the connections on the IIT/IPS PWS (PL 13.3).
Check that the prom on the IIT/IPS PWB is seated properly.
If the above checks are OK, replace the IIT/IPS PWB (PL 13.3).
Perform Max Setup (ADJ 9.1.2) if the IIT/IPS PWB was replaced
Perform DADF Registration Setup (ADJ 15.1.4).

## 065-210 Extension PWB DIMM RAP

The DIMM failed on the Extension PWB.

## Procedure

Check the connections on the IIT/IPS PWS (PL 13.3).
Check that the prom on the IIT/IPS PWB is seated properly.
If the above checks are OK, replace the ITT/IPS PWB (PL 13.3).
Perform Max Setup (ADJ 9.1.2) if the IIT/IPS PWB was replaced.
Perform DADF Registration Setup (ADJ 15.1.4).

065-212 CIS Shading RAP
BSD-ON:
There is a shading failure on the CIS.

## Procedure

Clean the white reference strip.

## 065-213 CIS Light RAP

## BSD-ON:

There is a light level failure in the CIS.

## Procedure

Clean the white reference strip.
If the problem persists check electrical connections between IIT and DADF.

## 065-215 Extension PWB DIMM 2 RAP

 BSD-ON:The DIMM 2 failed on the Extension PWB.

## Procedure

Disconnect and reconnect the DIMM 2 on the Extension PWB.

## 065-216 Extension PWB DIMM 3 RAP

 BSD-ON:The DIMM 3 failed on the Extension PWB.

## Procedure

Disconnect and reconnect the DIMM 3 on the Extension PWB.

## 065-219 CIS Black/White RAP

There is a black/white level failure on the CIS.

## Procedure

Check electrical connections between IIT and DADF. Disconnect and reconnect CIS and Extension PWB.

## 071-100 Tray 1 Pre Feed RAP

BSD-ON:7.7, 8.1
A sheet did not actuate the Tray 1 Pre Feed Sensor in time.

## Initial Actions

Check that the paper path is free of foreign substances and sensors are free of paper dust.

## Procedure

Run the machine to create the fault. Check if paper is partially fed from the tray. Paper is partially fed from the tray (top sheet is shingled or moved slightly from stack).
Y N
There is a drives problem. Enter Component Control [071-001 Tray 1 Feed/Lift Motor ON]. The Tray 1 Feed/Lift Motor (PL 2.3) energizes).
Y $N$
Check the connections of P/J201, P/J611 and P/J424. P/J201, P/J611 and P/ J424 are connected correctly.
Y $N$
Connect P/J201, P/J611 and P/J424.
Remove the Tray 1 Feed/Lift Motor (PL 2.3 and the Tray 2 Feed/Lift Motor (PL 14.3/ PL 15.6).
Replace the Tray 1 Feed/Lift Motor with the Tray 2 Feed/Lift Motor.
Enter Component Control [071-002 Tray 1 Feed/Lift Motor ON]. The Tray 1 (2) Feed/Lift Motor can be heard (the lifted paper plate drops when the tray is opened).
Y $N$
Return the Tray 2 Feed/Lift Motor to its original position.
Check the wires between P/J201 and P/J424 for an open circuit or a short circuit (BSD 7.7 Flag 1). The circuit between J201 and J409 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the MCU PWB (PL 11.1).
Return the Tray 2 Feed/Lift Motor to its original position.
Replace the Tray 1 Feed/Lift Motor (PL 2.3).
Repeat the code and check that the Feed Rolls are rotating. Repair the drives as required (PL 2.3, PL 2.4).

There is a sensing problem. Enter Component Control [071-100 Tray 1 Pre Feed Sensor]. Actuate the Tray 1 Pre Feed Sensor (PL 2.3) with paper. The display changes.
$\mathbf{N}$
Check the Connection of P/J133, P/J611 and P/J424. P/J133, P/J611 and P/J424 are connected correctly.

## Y $N$

Connect P/J133, P/J611 and P/J424.

A B
Check the wires between P/J133 and P/J424 for open circuit (BSD 8.1 Flag 2/Flag 3). The circuit between P/J133 and P/J424 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between MCU PWB P/J424-A15 (+) and P/J424-A13(-) (BSD 8.1 Flag 3). The voltage is approx. +5VDC.
Y $N$
Replace the MCU PWB (PL 11.1).
Measure the voltage between MCU PWB P/J424-A14 (+) and GND (-) (BSD 8.1 Flag 2). Actuate the Tray 1 Pre Feed Sensor with paper. The voltage changes.
Y N
Replace the Tray 1 Pre Feed Sensor (PL 2.3).
Replace the MCU PWB (PL 11.1).
Check the installation of the sensor and associated components (PL 2.3, PL 2.4)

## 071-101 Tray 1 Misfeed RAP

bsD-on:8. 2
A sheet did not actuate the Tray 1 Feed Out Sensor in time.

## Initial Actions

Check that the paper path is free of foreign substances and sensors are free of paper dust.

## Procedure

Execute Component Control [077-101 Takeaway Roll Clutch ON]. The Takeaway Roll Clutch (PL 2.4) energizes.
$Y \mathrm{~N}$
Check the connections of P/J218 and P/J424. Connectors are connected correctly. N Connect P/J218 and P/J424.

Measure the resistance of the Takeaway Roll Clutch (PL 2.4 BSD 8.2 Flag 3). (Between $\mathrm{P} / \mathrm{J} 218-1$ and $\mathrm{P} / \mathrm{J} 218-2$ ) The resistance is approx. 250~1000hm.
Y N
Replace the Takeaway Roll Clutch (PL 2.4).
Check the wires between P/J218 and P/J424 for an open circuit or a short circuit (BSD 8.2 Flag 4). The circuit between P/J218 and P/J424 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the MCU PWB (PL 11.1).
Enter Component Control [071-100 Takeaway Sensor]. Actuate the Tray 1 Pre Feed Sensor (PL 2.3) with paper. The display changes.
Y N
Check the Connection of P/J133, P/J611 and P/J424. P/J133, P/J611 and P/J424 are connected correctly.
Y N
Connect P/J133, P/J611 and P/J424.
Check the wires between P/J133 and P/J424 for open circuit (BSD 8.1 Flag 2/Flag 3). The circuit between P/J133 and P/J424 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between MCU PWB P/J424-A15 (+) and P/J424-A13(-) (BSD 8.1 Flag 3). The voltage is approx. +5VDC. Y $N$

Replace the MCU PWB (PL 11.1).
Measure the voltage between MCU PWB P/J424-A14 (+) and GND (-) (BSD 8.1 Flag 2). Actuate the Tray 1 Pre Feed Sensor with paper. The voltage changes.

## 071-105 Registration Sensor RAP

## BSD-ON: 8.7

A sheet did not actuate the Registration Sensor in time.

## Procedure

Execute Component Control [089-100 Registration Sensor]. Manually activate the actuator of the Registration Sensor (PL 2.5). The display changes.
Y $N$
Check the wires between P/J106 and P/J405 for an open circuit or a short circuit (BSD 8.7 Flag 1/Flag 2). The circuit between P/J106 and P/J405 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P/J405-8A (+) and P/J405-6A (-) (BSD 8.7 Flag 2). The voltage is approx. +5VDC.
$\boldsymbol{Y} \quad \mathbf{N}$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P/J405-A7 (+) and GND (-) (BSD 8.7 Flag 1). Actuate the Registration Sensor with paper. The voltage changes.

N
Replace the Registration Sensor (PL 2.5).
Replace the MCU PWB (PL 11.1).
Check the paper transport drives and repair as required (PL 1.1, PL 2.5).

## 071-211 Tray 1 RAP

BSD-ON:7.1
The Tray 1 Paper Size Switch failed.

## Initial Actions

Ensure the tray is set up and loaded correctly.

## Procedure

Remove Tray 1. Check the condition of the Tray 1 Paper Size Switch and actuators. The Tray 1 Paper Size Switch and actuators appear to be free of damage.
Y N

## Replace the Tray 1 Paper Size Switch (PL 2.1).

Check the Tray 1 actuator on the back of Tray 1. The actuator is good.
N
Repair as required (PL 2.1)
Go to the OF 2 Size Switch Assy RAP.

## 071-212 Tray 1 Ready RAP

## BSD-ON:7.7

There is a Tray 1 ready failure.

## Procedure

Switch the power off then on. If the problem continues disconnect and reconnect P/J424 on the MCU PWB.

## 071-210 Tray 1 Lift Up RAP

## BSD-ON:7.7

The Tray 1 Level Sensor did not actuate in time after the Tray 1 Feed/Lift Motor energized.

## Initial Actions

Ensure the tray is set up and loaded correctly.

## Procedure

Enter Component Control [071-002 Tray 1 Feed/Lift Motor ON]. The Tray 1 Feed/Lift Motor (PL 2.3) can be heard (the lifted paper plate drops when the tray is opened).
$Y \quad N$
Check the connections of P/J201, P/J611 and P/J424. P/J201, P/J611 and P/J424 are connected correctly.
Y $\mathbf{N}$
Connect P/J201, P/J611 and P/J424.
Remove the Tray 1 Feed/Lift Motor (PL 2.3 and the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).

Replace the Tray 1 Feed/Lift Motor with the Tray 2 Feed/Lift Motor.
Enter Component Control [071-002 Tray 1 Feed/Lift Motor ON]. The Tray 1 (2) Feed/Lift Motor can be heard (the lifted paper plate drops when the tray is opened).

## $Y \quad N$

Return the Tray 2 Feed/Lift Motor to its original position.
Check the wires between P/J201 and P/J424 for an open circuit or a short circuit (BSD 7.7 Flag 1). The circuit between J201 and J409 is conducting without an open circuit or a short circuit.
Y $\quad N$
Repair the open circuit or short circuit.
Replace the MCU PWB (PL 11.1).
Return the Tray 2 Feed/Lift Motor to its original position.
Replace the Tray 1 Feed/Lift Motor (PL 2.3).
Check the installation of the Tray 1 Level Sensor (PL 2.3 and the operation of the actuator. The Tray 1 Level Sensor is installed correctly and the actuator works.
Y $\mathbf{N}$
Repair the Tray 1 Level Sensor (PL 2.3).
Enter Component Control [071-102 Tray 1 Level Sensor]. Manually activate the Tray 1 Level Sensor (PL 2.3). The display changes.
Y $\mathbf{N}$
Check the connections of P/J100, P/J611 and P/J424. P/J100, P/J611 and P/J424 are connected correctly.
Y N
Connect P/J100, P/J611 and P/J424.

A B
Check the wires between P/J100 and P/J424 for an open circuit or a short circuit (BSD 7.7 Flag 2/Flag 3). The circuit between J100 and J409 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit
Measure the voltage between the MCU PWB P/J424-A7 (+) and P/J424-A8 (-) (BSD 7.7 Flag 3). The voltage is approx. +5VDC.
Y $N$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P/J424-A9 (+) and GND (-) (BSD 7.7 Flag 2).

Activate the actuator of the Tray 1 Level Sensor (PL 2.3). The voltage changes.
Y $N$
Replace the Tray 1 Level Sensor (PL 2.3).
Replace the MCU PWB (PL 11.1).
Repair the tray lift drives as required (PL 2.3).

## 071-401 Tray 1 Feed Roll Life RAP

## BSD-ON:8. 1

The Tray 1 Feed Rolls are near end of life.

## Procedure

NOTE: Replace the feed rolls now if the next service call is likely to occur after the rolls reach end of life (PL 2.4).

## 071-402 Tray 1 Feed Roll Replacement RAP

BSD-ON:8.1
The Tray 1 Feed Rolls reached end of life.

## Procedure

Replace the Tray 1 Feed Rolls (PL 2.4).

## 071-900 Tray 1 Feed Out Sensor RAP

Paper remains on the Tray 1 Feed Out Sensor.

## Procedure

Check the following:

- Check that no paper is at the Tray 1 Feed Out Sensor (PL 14.3 Reflection Sensor)
- Check that the sensor is clean and free of paper dust.
- Check that the wires between the Tray 1 Feed Out Sensor and P/J548


## 071-940 Tray 1 Lift Up RAP

## BSD-ON:7.7

The Tray 1 Level Sensor did not actuate in time after the Tray 1 Feed/Lift Motor energized.

## Initial Actions

Ensure the tray is set up and loaded correctly.

## Procedure

Enter Component Control [071-002 Tray 1 Feed/Lift Motor ON]. The Tray 1 Feed/Lift Motor (PL 2.3) can be heard (the lifted paper plate drops when the tray is opened).
$Y \quad N$
Check the connections of P/J201, P/J611 and P/J424. P/J201, P/J611 and P/J424 are connected correctly.
Y N
Connect P/J201, P/J611 and P/J424.
Remove the Tray 1 Feed/Lift Motor (PL 2.3 and the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).

Replace the Tray 1 Feed/Lift Motor with the Tray 2 Feed/Lift Motor.
Enter Component Control [071-002 Tray 1 Feed/Lift Motor ON]. The Tray 1 (2) Feed/Lift Motor can be heard (the lifted paper plate drops when the tray is opened).

## Y $N$

Return the Tray 2 Feed/Lift Motor to its original position.
Check the wires between P/J201 and P/J424 for an open circuit or a short circuit (BSD 7.7 Flag 1). The circuit between J201 and J409 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the MCU PWB (PL 11.1).
Return the Tray 2 Feed/Lift Motor to its original position.
Replace the Tray 1 Feed/Lift Motor (PL 2.3).
Check the installation of the Tray 1 Level Sensor (PL 2.3 and the operation of the actuator. The Tray 1 Level Sensor is installed correctly and the actuator works.
Y $\mathbf{N}$
Repair the Tray 1 Level Sensor (PL 2.3).
Enter Component Control [071-102 Tray 1 Level Sensor]. Manually activate the Tray 1 Level Sensor (PL 2.3). The display changes.
Y $\mathbf{N}$
Check the connections of P/J100, P/J611 and P/J424. P/J100, P/J611 and P/J424 are connected correctly.
Y N
Connect P/J100, P/J611 and P/J424.

A B
Check the wires between P/J100 and P/J424 for an open circuit or a short circuit (BSD 7.7 Flag 2/Flag 3). The circuit between J100 and J409 is conducting without an open circuit or a short circuit.
Y $\quad \mathrm{N}$
Repair the open circuit or short circuit
Measure the voltage between the MCU PWB P/J424-A7 (+) and P/J424-A8 (-) (BSD 7.7 Flag 3). The voltage is approx. +5VDC.
Y $N$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P/J424-A9 (+) and GND (-) (BSD 7.7 Flag 2).

Activate the actuator of the Tray 1 Level Sensor (PL 2.3). The voltage changes.
Y $N$
Replace the Tray 1 Level Sensor (PL 2.3).
Replace the MCU PWB (PL 11.1).
Repair the tray lift drives as required (PL 2.3).

## 072-100 Tray 2 Pre Feed RAP

## BSD-ON:7.9, 7.11, 8.1

A sheet did not actuate the Tray 2 Pre Feed Sensor in time.

## Initial Actions

Check that the paper path is free of foreign substances and sensors are free of paper dust.

## Procedure

Run the machine to create the fault. Check if paper is partially fed from the tray. Paper is partially fed from the tray (top sheet is shingled or moved slightly from stack).
Y $N$
There is a drives problem.
Enter Component Control [072-002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/Lift Motor (PL 2.3) can be heard (the lifted paper plate drops when the tray is opened). Y $\mathbf{N}$

Check the connections of P/J220B, P/J661B and P/J549. P/J220B, P/J661B and P/J549 are connected correctly.

## Y $\quad \mathbf{N}$

Connect P/J220B, P/J661B and P/J549.
Remove the Tray 1 Feed/Lift Motor (PL 2.3 and the Tray 2 Feed/Lift Motor (PL 14.3/ PL 15.6).
Replace the Tray 2 Feed/Lift Motor with the Tray 1 Feed/Lift Motor.
Execute Component Control [071-001/002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/Lift Motor can be heard (the lifted paper plate drops when the tray is opened).
Y $\mathbf{N}$
Return the Tray 1 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.9 Flag 1/7.11 Flag 1). The circuit between P/J220B and P/ J 549 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Return the Tray 1 Feed/Lift Motor to its original position.
Replace the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).
Repeat the code and check that the Feed Rolls are rotating. Repair the drives as required (PL 14.1, PL 14.2, PL 15.6 PL 15.7).

There is a sensing problem. Enter Component Control [072-100 Tray 2 Pre Feed Sensor]. Actuate the Tray 2 Pre Feed Sensor (PL 14.3/PL 15.6) with paper. The display changes.
Y N
Check the Connection of P/J103B, and P/J549. P/J103B, and P/J549 are connected correctly.
Y N
Connect P/J103B, and P/J549.
A B-

Return the Tray 1 Feed/Lift Motor to its original position
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.9 Flag 1/7.11 Flag 1). The circuit between P/J220B and P/J549 is conducting without an open circuit or a short circuit.
$\mathrm{Y}^{\mathrm{N}}$
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Return the Tray 1 Feed/Lift Motor to its original position.
Replace the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).
Enter Component Control [072-100 Tray 2 Pre Feed Sensor]. Actuate the Tray 2 Pre Feed Sensor (PL 14.3/PL 15.6) with paper. The display changes.
Y N
Check the Connection of P/J103B, and P/J549. P/J103B, and P/J549 are connected correctly.
Y N
Connect P/J103B, and P/J549.
Check the wires between P/J103B and P/J549 for open circuit (BSD 8.1 Flag 7/Flag 6). The circuit between P/J103B and P/J549 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between Tray Module PWB P/J549-30 (+) and P/J549-28 (-) (BSD 8.1 Flag 7). The voltage is approx. +5 VDC .

Y N
Replace the Tray Module PWB (PL 14.3/PL 15.6).
Measure the voltage between Tray Module PWB P/J549-29 (+) and GND (-) (BSD 8.1 Flag 6). Actuate the Tray 2 Pre Feed Sensor (PL 14.3/PL 15.6) with paper. The voltage changes.
Y N
Replace the Tray 2 Pre Feed Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.3/PL 15.6)
Enter Component Control [072-002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/Lift Motor (PL 2.3) can be heard (the lifted paper plate drops when the tray is opened).
$Y \quad N$
Check the connections of P/J220B, P/J661B and P/J549. P/J220B, P/J661B and P/ J549 are connected correctly.
Y N
Connect P/J220B, P/J661B and P/J549.
Remove the Tray 1 Feed/Lift Motor (PL 2.3 and the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).

Replace the Tray 2 Feed/Lift Motor with the Tray 1 Feed/Lift Motor.
Execute Component Control [071-001/002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/ Lift Motor can be heard (the lifted paper plate drops when the tray is opened).

072-102 Tray 2 Feed Out Sensor On Jam (Tray 3 Feed) RAP BSD-ON:8.3/8.4
The Tray 2 Feed Out Sensor did not actuate in time after the Tray 3 Feed Out Sensor actuated

## Initial Actions

Check that the paper path is free of foreign material and paper dust.

## Procedure

Enter Component Control [072-103 Tray 2 Feed Out Sensor]. Actuate the Tray 2 Feed Out Sensor (PL 14.3/PL 15.6) with paper. The display changes.
$Y \quad N$
Check the connections of P/J821, P/J841 and P/J548. P/J821, P/J841 and P/J548 are connected correctly.
Y N
Connect P/J821, P/J841 and P/J548.
Check the wires between P/J821 and P/J548 for an open circuit or a short circuit (BSD 8.3 Flag 1/Flag 2/Flag 3). The wires between P/J821 and P/J548 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J548-8 (+) and P/J548-9 (-) (BSD 8.3 Flag $2 /$ Flag 3 ). The voltage is approx. +5 VDC .

Y N
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module PWB P/J548-10 (+) and GND (-) (BSD 8.2 Flag 1). Actuate the Tray 2 Feed Out Sensor (PL 14.3/PL 15.6) with paper. The voltage changes. $Y \quad \mathrm{~N}$

Replace the Tray 2 Feed Out Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Enter Component Control [077-022 2TM/TTM Takeaway Motor ON]. The 2TM/TTM Takeaway
Motor (PL 14.7/PL 15.9) can be heard.
$Y^{\mathbf{Y}} \quad \mathbf{N}$
Check the connections of P/J826 and P/J552. P/J826 and P/J552 are connected correctly.
$Y \quad N$
Connect P/J826 and P/J552.
Check the wires between P/J826 and P/J552 for an open circuit or a short circuit (BSD 8.4 Flag 1 / BSD 8.6 Flag 1). The wires between J826 and J552 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.

A B

## 072-105 Tray 2 Registration Sensor On Jam RAP BSD-ON:8.7/8.2

The Registration Sensor did not actuate in time after the Tray 2 Feed Out Sensor actuated.

## Initial Actions

Check that the paper path is free of foreign material and paper dust.

## Procedure

Check the Transport Roll for wear and paper dust. The Transport Roll is ok.
Y $\mathbf{N}$
Replace the Transport Roll (PL 15.5).
Execute Component Control [089-100 Registration Sensor]. Manually activate the actuator of the Registration Sensor (PL 2.5). The display changes.
Y $\mathbf{N}$
Check the wires between P/J106 and P/J405 for an open circuit or a short circuit (BSD 8.7 Flag 1/Flag 2). The circuit between P/J106 and P/J405 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P/J405-8A (+) and P/J405-6A (-) (BSD 8.7 Flag 2). The voltage is approx. +5 VDC .
Y $N$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P/J405-A7 (+) and GND (-) (BSD 8.7 Flag 1). Actuate the Registration Sensor with paper. The voltage changes.

Y N
Replace the Registration Sensor (PL 2.5).
Replace the MCU PWB (PL 11.1).
Execute Component Control [077-001 Takeaway Roll Clutch ON]. The Takeaway Roll Clutch (PL 2.4) energizes.
Y $N$
Check the connections of P/J218 and P/J424. Connections are connected correctly. $\mathbf{Y}^{\mathrm{N}}$

Connect P/J218 and P/J424.
Measure the resistance of the Takeaway Roll Clutch (PL 2.4 BSD 8.2 Flag 3). (Between P/J218-1 and P/J218-2) The resistance is approx. 250~1000hm.

## Y N

Replace the Takeaway Roll Clutch (PL 2.4).
Check the wires between P/J218 and P/J424 for an open circuit or a short circuit (BSD 8.2 Flag 4). The circuit between P/J218 and P/J424 is conducting without an open circuit or a short circuit.

Repair the open circuit or short circuit.
Replace the MCU PWB (PL 11.1).
Enter Component Control [077-022 Takeaway Motor ON]. Takeaway Motor (PL 14.7/PL 15.9) can be heard.

Y N
Check the Connection of P/J552 and P/J826. P/J826 and P/J552 are connected correctly.
Y $N$
Connect P/J552 and P/J826.
Measure the voltage between Tray Module PWB P/J552-2 (+) and GND (-), and P/J552$5(+)$ and GND(-) (BSD 8.2 Flag 1). The voltage is approx. +24VDC.
Y $\mathbf{N}$
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Replace the Takeaway Motor (PL 14.7/PL 15.9).
Check the paper transport drives and repair as required (PL 2.4, PL 14.7, PL 15.9).

## 072-210 Tray 2 Lift Up RAP

## BSD-ON:7.9/7.11

The Tray 2 Level Sensor did not actuate in time after the Tray 2 Feed/Lift Motor energized.

## Initial Actions

Ensure the tray is set up and loaded correctly.

## Procedure

Remove the tray and reinstall. The Tray 2 Feed/Lift Motor can be heard (the lifted paper plate drops when the tray is opened).
Y N
Execute Component Control [071-001/002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/ Lift Motor (PL 14.3/PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
Y $\mathbf{N}$
Check the connections of P/J220B, P/J661B and P/J549. P/J220B, P/J661B and P/J549 are connected correctly.

## Y $\mathbf{N}$

Connect P/J220B, P/J661B and P/J549.
Remove the Tray 1 Feed/Lift Motor (PL 2.3 and the Tray 2 Feed/Lift Motor (PL 14.3) PL 15.6).
Replace the Tray 2 Feed/Lift Motor with the Tray 1 Feed/Lift Motor
Execute Component Control [071-001/002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/Lift Motor can be heard (the lifted paper plate drops when the tray is opened).
Y $\mathbf{N}$
Return the Tray 1 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.9 Flag 1/7.11 Flag 1). The circuit between P/J220B and P/ J549 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.

Replace the Tray Module PWB (PL 14.7/PL 15.9)
Return the Tray 1 Feed/Lift Motor to its original position. Replace the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).

Go to the OF 2 (SIZE SWITCH ASSY RAP).
Check the installation of the Tray 2 Level Sensor (PL 14.3/PL 15.6) and the operation of the actuator. The Tray 2 Level Sensor is installed correctly and the actuator works.
Y $N$
Reinstall the Tray 2 Level Sensor (PL 14.3/PL 15.6).
Execute Component Control [072-102 Tray 2 Level Sensor]. Manually activate the Tray 2 Level Sensor (PL 14.3/PL 15.6). The display changes.

Y N
Check the connections of P/J101B, P/J661B and P/J549. Connectors are connected correctly.
Y N
Connect P/J101B, P/J661B and P/J549.
Check the wires between P/J101B and P/J549 for an open circuit or a short circuit (BSD 7.9 Flag 2 Flag 3/7.11 Flag 2 Flag 3). The wires between P/J101B and P/J549 are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J549-22 (+) and P/J549-23 (-) (BSD 7.9 Flag 3/7.11 Flag 3). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module PWB P/J549-24 (+) and GND (-) (BSD 7.9 Flag 2/7.11 Flag 2).
Activate the actuator of the Tray 2 Level Sensor (PL 2.3). The voltage changes.
Y N
Replace the Tray 2 Level Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Check the paper transport drives and repair as required (PL 2.3, PL 14.7, PL 15.9).

## 072-211 Tray 2 RAP

BSD-ON:7.2
The Tray 2 Paper Size Switch failed.

## Initial Actions

Ensure the tray is set up and loaded correctly.

## Procedure

Remove Tray 2. Check the condition of the Tray 2 Paper Size Switch and actuators. The Tray 2 Paper Size Switch and actuators appear to be free of damage.
Y $N$
Replace the Tray 2 Paper Size Switch (PL 14.1).
Check the Tray 2 actuator on the back of Tray 2. The actuator is good.
N
Repair as required (PL 14.1)
Go to the OF 2 Size Switch Assy RAP.

## 072-212 Tray 2 Ready RAP

## BSD-ON:3.3

There is a Tray 2 ready failure.

## Procedure

Check the circuits between P/J413 on the MCU PWB and P/J541 (2TM) or P/J541 (TTM) on the Tray Module PWB (Flag 5, Flag 6) for an open circuit or short circuit failure. Repair as required.

If the problem persists disconnect and reconnect P/J541 on the Tray Module PWB.

## 072-401 Tray 2 Feed Roll Life RAP

## BSD-ON:8. 1

The Tray 2 Feed Rolls are near end of life.

## Procedure

NOTE: Replace the feed rolls now if the next service call is likely to occur after the rolls reach end of life (PL 14.4/PL 15.3).

## 072-402 Tray 2 Feed Roll Replacement RAP

BSD-ON:8.1
The Tray 2 Feed Rolls reached end of life.

## Procedure

Replace the Tray 2 Feed Rolls (PL 14.4/PL 15.6).

## 072-900 Tray 2 Feed Out Sensor Jam RAP

## BSD-ON:8.3/8.4

IOT Static Jam at Tray 2 Feed Out Sensor.

## Initial Actions

Check that the paper path is free of foreign material and paper dust.

## Procedure

Enter Component Control [072-103 Tray 2 Feed Out Sensor]. Actuate the Tray 2 Feed Out Sensor (PL 14.3/PL 15.6) with paper. The display changes.
Y $\mathbf{N}$
Check the connections of P/J821, P/J841 and P/J548. P/J821, P/J841 and P/J548 are connected correctly.
Y N
Connect P/J821, P/J841 and P/J548.
Check the wires between P/J821 and P/J548 for an open circuit or a short circuit (BSD 8.3 Flag 1/Flag 2/Flag 3). The wires between P/J821 and P/J548 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J548-8 (+) and P/J548-9 (-) (BSD 8.3 Flag $2 /$ Flag 3). The voltage is approx. +5 VDC .

Y N
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module PWB P/J548-10 (+) and GND (-) (BSD 8.2 Flag 1). Actuate the Tray 2 Feed Out Sensor (PL 14.3/PL 15.6) with paper. The voltage changes.
$\mathbf{Y} \quad \mathbf{N}$
Replace the Tray 2 Feed Out Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Enter Component Control [077-022 2TM/TTM Takeaway Motor ON]. The 2TM/TTM Takeaway
Motor (PL 14.7/PL 15.9) can be heard.
Y $\mathbf{N}$
Check the connections of P/J826 and P/J552. P/J826 and P/J552 are connected correctly. Y $\quad \mathbf{N}$

Connect P/J826 and P/J552.
Check the wires between P/J826 and P/J552 for an open circuit or a short circuit (BSD 8.4 Flag 1 / BSD 8.6 Flag 1). The wires between J826 and J552 is conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.

Check the paper transport drives and repair as required (PL 14.5, PL 14.7/PL 15.8, PL 15.9).

## 072-940 Tray 2/TTM 2 Lift Up RAP

## BSD-ON:7.9/7.11

The Tray 2/TTM 2 Level Sensor did not actuate in time after the Tray 2 Feed/Lift Motor energized.

## Initial Actions

Ensure the tray is set up and loaded correctly.

## Procedure

Remove the tray and reinstall. The Tray 2 Feed/Lift Motor can be heard (the lifted paper plate drops when the tray is opened).
Y N
Execute Component Control [071-001/002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/ Lift Motor (PL 14.3/PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
$Y$ N
Check the connections of P/J220B, P/J661B and P/J549. P/J220B, P/J661B and P/J549 are connected correctly.

## Y N

Connect P/J220B, P/J661B and P/J549.
Remove the Tray 1 Feed/Lift Motor (PL 2.3 and the Tray 2 Feed/Lift Motor (PL 14.3/ PL 15.6).
Replace the Tray 2 Feed/Lift Motor with the Tray 1 Feed/Lift Motor.
Execute Component Control [071-001/002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/Lift Motor can be heard (the lifted paper plate drops when the tray is opened).
Y $N$
Return the Tray 1 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.9 Flag 1/7.11 Flag 1). The circuit between P/J220B and P/ J549 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Return the Tray 1 Feed/Lift Motor to its original position.
Replace the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).
Go to the OF 2 (SIZE SWITCH ASSY RAP).
Check the installation of the Tray 2 Level Sensor (PL 14.3/PL 15.6) and the operation of the actuator. The Tray 2 Level Sensor is installed correctly and the actuator works.
Y $\mathbf{N}$
Reinstall the Tray 2 Level Sensor (PL 14.3/PL 15.6).
Execute Component Control [072-102 Tray 2 Level Sensor]. Manually activate the Tray 2 Level Sensor (PL 14.3/PL 15.6). The display changes.

Y N
Check the connections of P/J101B, P/J661B and P/J549. Connectors are connected correctly.
Y N
Connect P/J101B, P/J661B and P/J549.
Check the wires between P/J101B and P/J549 for an open circuit or a short circuit (BSD 7.9 Flag 2 Flag 3/7.11 Flag 2 Flag 3). The wires between P/J101B and P/J549 are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J549-22 (+) and P/J549-23 (-) (BSD 7.9 Flag 3/7.11 Flag 3). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module PWB P/J549-24 (+) and GND (-) (BSD 7.9 Flag 2/7.11 Flag 2).
Activate the actuator of the Tray 2 Level Sensor (PL 2.3). The voltage changes.
Y N
Replace the Tray 2 Level Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Check the paper transport drives and repair as required (PL 2.3, PL 14.7, PL 15.9).

## 073-100 Tray 3 Pre Feed RAP

## BSD-ON:7.9, 7.11, 8.1

A sheet did not actuate the Tray 2 Pre Feed Sensor in time.

## Initial Actions

Check that the paper path is free of foreign substances and sensors are free of paper dust.

## Procedure

Run the machine to create the fault. Check if paper is partially fed from the tray. Paper is partially fed from the tray (top sheet is shingled or moved slightly from stack).
Y $N$
There is a drives problem.
Enter Component Control [073-002 Tray 3 Feed/Lift Motor ON]. The Tray 3 Feed/Lift Motor (PL 14.3/PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
Y N
Check the connections of P/J220B, P/J661B, P/J549. P/J220B, P/J661B, P/ J549 are connected correctly.

## Y N

Connect P/J220B, P/J661B, P/J549
Remove the Tray 3 Feed/Lift Motor (PL 14.3/PL 15.6 and the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).
Replace the Tray 3 Feed/Lift Motor with the Tray 2 Feed/Lift Motor.
Enter Component Control [073-002 Tray 3 Feed/Lift Motor ON]. The Tray 3 (2) Feed/Lift Motor (PL 14.3/PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
Y $N$
Return the Tray 2 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.10 Flag 1 / BSD 7.12 Flag 1). The circuit between J220B and J549 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Return the Tray 2 Feed/Lift Motor to its original position.
Replace the Tray 3 Feed/Lift Motor (PL 14.3/PL 15.6).
Repeat the code and check that the Feed Rolls are rotating. Repair the drives as required (PL 14.1, PL 14.2, PL 15.6 PL 15.7).

Enter Component Control [073-100 Tray 3 Pre Feed Sensor]. Actuate the Tray 3 Pre Feed Sensor (PL 14.3/PL 15.6) with paper. The display changes.

N
Check the Connection of P/J103B, P/J661B and P/J549. P/J103B, P/J661B and P/ J549 are connected correctly.

N
Connect P/J103B, P/J661B and P/J549.
Check the wires between P/J103B and P/J549 for open circuit (BSD8.1 Flag 6/Flag 7). The circuit between P/J103B and P/J549 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between Tray Module PWB P/J549-30 (+) and P/J549-28 (-) (BSD8.1 Flag 7). The voltage is approx. +5 VDC .
Y N
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between Tray Module PWB P/J549-29 (+) and GND(-) (BSD8. 1 Flag 6). Actuate the Tray 3 Pre Feed Sensor (PL 14.3/PL 15.6) with paper. The voltage changes.
Y N
Replace the Tray 3 Pre Feed Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.7/PL 15.9)
Check the installation of the sensor and associated components (PL 14.1, PL 14.2, PL 15.6 PL 15.7)

## 073-101 Tray 3 Misfeed Jam RAP

## BSD-ON:3.3/7.10/8.3

The Tray 3 Feed Out Sensor did not actuate in time after the Tray 3 Feed/Lift Motor energized.

## Initial Actions

Check that the paper path is free of foreign material and paper dust.

## Procedure

Check the Transport Roll for wear and paper dust. The Transport Roll is good.
Y $\mathbf{N}$
Replace the Transport Roll (PL 15.5).
Enter Component Control [073-103 Tray 3 Feed Out Sensor]. Actuate the Tray 3 Feed Out Sensor (PL 14.6/PL 15.5) with paper. The display changes.
Y $N$
Check the connections of P/J821, P/J841, P/J548. P/J821, P/J841 P/J548 are connected correctly.

## Y N

Connect P/J821, P/J841, P/J548.

Check the wires between J821 and J548 for an open circuit or a short circuit (BSD 8.3 Flag 1/Flag 2/Flag 3 / BSD 8.5 Flag 1/Flag 2/Flag 3). The circuit between J821 and J548 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J548-8 (+) and P/J548-9 (-) (BSD 8.3 Flag 2 / BSD 8.5 Flag 2). The voltage is approx. +5 VDC .

Y $N$
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module PWB P548-10 (+) and GND (-) (BSD 8.3 Flag 1 / BSD 8.5 Flag 1).
Actuate the Tray 3 Feed Out Sensor (PL 14.6/PL 15.5) with paper. The voltage changes.
Y N
Replace the Tray 3 Feed Out Sensor (PL 14.6/PL 15.5).
Check the wires between J541-10 and J413-B4 for an open circuit or a short circuit (BSD 3.3 Flag 1). The circuit between J541-10 and J413-B4 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P413-B4 (+) and GND (-) (BSD 3.3 Flag 1). Actuate the Tray 3 Feed Out Sensor (PL 14.3/PL 13.5) with paper. The voltage changes.
Y N
Replace the Tray Module PWB (PL 14.7/PL 15.9).
A B

## Replace the Tray 3 Pre Feed Sensor (PL 14.3/PL 15.6).

Replace the Tray Module PWB (PL 14.7/PL 15.9).
Check the paper transport drives and repair as required (PL 14.3, PL 14.6/PL 15.4, PL 15.5,
PL 15.6)

## 073-102 Tray 3 Feed Out Sensor On Jam RAP

## BSD-ON:8.3/8.4/8.5/8.6

The Tray 3 Feed Out Sensor did not actuate in the specified time.

## Initial Actions

- If a grinding noise was reported or is heard with the 073-102 code, there may be incorrect gear mesh between TTM Takeaway Clutch (PL 2.6) and it's drive gear, located to the right. Loosen the bracket fixing screws and reposition bracket for best gear mesh without binding.
- Check that the paper path is free of foreign material and paper dust.


## Procedure

Check the Transport Roll for wear and paper dust. The Transport Roll is ok.
Y $\mathbf{N}$
Replace the Transport Roll (PL 15.5).
Enter Component Control [073-103 Tray 3 Feed Out Sensor]. Actuate the Tray 3 Feed Out Sensor (PL 14.3/PL 15.6) with paper. The display changes.

N
Check the connections of P/J825, P/J842 and P/J548. P/J825, P/J842 and P/J548 are connected correctly.

```
Connect P/J825, P/J842 and P/J548.
```

Check the wires between P/J825 and P/J548 for an open circuit or a short circuit (BSD 8.5 Flag 4/Flag 5/Flag 6). The wires between P/J825 and P/J548 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J548-1 (+) and P/J548-2 (-) (BSD 8.5 Flag 5/Flag 6). The voltage is approx. +5VDC.

Y N
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module PWB P/J548-3 (+) and GND (-) (BSD 8.5 Flag 4. Actuate the Tray 3 Feed Out Sensor (PL 14.3/PL 15.6) with paper. The voltage changes.
Y N
Replace the Tray 3 Feed Out Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Enter Component Control [077-022 2TM/TTM Takeaway Motor ON]. The 2TM/TTM Takeaway

## Motor (PL 14.7/PL 15.9) can be heard.

Y $\quad \mathbf{N}$
Check the connections of P/J826 and P/J552. P/J826 and P/J552 are connected correctly.

```
Connect P/J826 and P/J552.
```

Check the wires between P/J826 and P/J552 for an open circuit or a short circuit (BSD 8.4 Flag 1 / BSD 8.6 Flag 1). The wires between J826 and J552 is conducting without an open circuit or a short circuit.
$\mathbf{Y} \quad \mathbf{N}$
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 14.7/PL 15.9)
Check the paper transport drives and repair as required (PL 14.7/PL 15.9).

## 073-105 Tray 3 Registration Sensor On Jam RAP

 BSD-ON:8.7/8.2/8.4The Registration Sensor did not actuate in time after the Tray 3 Feed Out Sensor actuated.

## Initial Actions

Check that the paper path is free of foreign material and paper dust.

## Procedure

Check the Transport Roll for wear and paper dust. The Transport Roll is ok.
Y N
Replace the Transport Roll (PL 15.5).
Enter Component Control [089-100 Registration Sensor]. Manually activate the actuator of the Registration Sensor (PL 2.5). The display changes.
Y $\mathbf{N}$
Check the wires between P/J106 and P/J405 for an open circuit or a short circuit (BSD 8.7 Flag 1/Flag 2). The wires between P/J106 and P/J405 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P/J405-8A (+) and P/J405-6A (-) (BSD 8.7 Flag 2). The voltage is approx. +5VDC.
Y N
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P/J405-A7 (+) and GND (-) (BSD 8.7 Flag 1). Actuate the Registration Sensor with paper. The voltage changes.

Y $N$
Replace the Registration Sensor (PL 2.5).
Replace the MCU PWB (PL 11.1).
Enter Component Control [077-001 Takeaway Roll Clutch ON]. The Takeaway Roll Clutch (PL 2.4) actuates.
Y $N$
Check the connections of P/J218 and P/J424. P/J218 and P/J424 are connected correctly.
Y N
Connect P/J218 and P/J424.
Measure the resistance of the Takeaway Roll Clutch (PL 2.6) (BSD 8.2 Flag 3). (Between P218-1 and P218-4) The resistance is approx. 250~1000hm.
Y $\mathbf{N}$
Replace the Takeaway Roll Clutch (PL 2.4).
Check the wires between P/J218 and P/J424 for an open circuit or a short circuit (BSD 8.2 Flag 4). The circuit between $\mathrm{P} / \mathrm{J} 218$ and $\mathrm{P} / \mathrm{J} 424$ is conducting without an open circuit or a short circuit.

Enter Component Control [077-022 2TM/TTM Takeaway Motor ON]. The 2TM/TTM Takeaway Motor (PL 14.7/PL 15.9) energizes.
Y $\mathbf{N}$
Check the connections of P/J826 and P/J552. P/J826 and P/J552 are connected correctly.
Y N
Connect P/J826 and P/J552.
Check the wires between P/J826 and P/J552 for an open circuit or a short circuit (BSD 8.4 Flag 1/ BSD 8.6 Flag 1). The circuit between J826 and J552 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the MCU PWB (PL 11.1)
Check the paper transport drives and repair as required (PL 2.4, PL 2.5, PL 14.7, PL 15.5, PL 15.9).

## 073-210 Tray 3 Lift Up RAP

## BSD-ON:7.10/7.12

- The 2TM-Tray 3 Level Sensor did not actuate in time after the 2TM-Tray 3 Feed/Lift Motor energized.
- The TTM-Tray 3 Level Sensor did not actuate in time after the TTM-Tray 3 Feed/Lift Motor energized.


## Initial Actions

- Reload paper in the tray correctly.
- Remove foreign substances in the tray.


## Procedure

Enter Component Control [073-002 Tray 3 Feed/Lift Motor ON]. The Tray 3 Feed/Lift Motor (PL 14.3/PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
$Y \quad N$
Check the connections of P/J220B, P/J661B, P/J549. P/J220B, P/J661B, P/J549 are connected correctly.
Y N
Connect P/J220B, P/J661B, P/J549
Remove the Tray 3 Feed/Lift Motor (PL 14.3/PL 15.6 and the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).

Replace the Tray 3 Feed/Lift Motor with the Tray 2 Feed/Lift Motor.
Enter Component Control [073-002 Tray 3 Feed/Lift Motor ON]. The Tray 3 (2) Feed/Lift Motor (PL 14.3/PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).

N
Return the Tray 2 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.10 Flag 1 / BSD 7.12 Flag 1). The circuit between J220B and J549 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Return the Tray 2 Feed/Lift Motor to its original position.
Replace the Tray 3 Feed/Lift Motor (PL 14.3/PL 15.6).
Check the installation of the Tray 3 Level Sensor (PL 14.3/PL 15.6and the operation of the actuator. The Tray 3 Level Sensor is installed correctly and the actuator works.
Y N
Reinstall the Tray 3 Level Sensor.
Enter Component Control [073-102 Tray 3 Level Sensor]. Manually activate the Tray 3 Level Sensor (PL 14.3/PL 15.6). The display changes.

N
Check the connections of P/J101B, P/J661B and P/J549. P/J101B, P/J661B and P/ J549 are connected correctly.

N
Connect P/J101B, P/J661B and P/J549
Check the wires between P/J101B and P/J549 for an open circuit or a short circuit (BSD 7.10 Flag 2/Flag 3 / BSD 7.12 Flag 2/Flag 3). The circuit between J101B and J549 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J549-7 (+) and P/J549-8 (-) (BSD 7.10 Flag 3 / BSD 7.12 Flag 3). The voltage is approx. +5VDC.

Y N
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module PWB P/J549-9 (+) and GND (-) (BSD 7.10 Flag 2 / BSD 7.12 Flag 2).

Activate the actuator of the Tray 3 Level Sensor (PL 14.3/PL 15.6). The

## changes.

Y N
Replace the Tray 3 Level Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.7/PL 15.9),
Check the paper transport drives and repair as required (PL 14.3, PL 14.7/PL 15.9).

## 073-211 Tray 3 RAP

## BSD-ON:7.4/7.6

The Tray 3 Paper Size Switch failed.

## Initial Actions

Ensure the tray is set up and loaded correctly.

## Procedure

Remove Tray 3. Check the condition of the Tray 3 Paper Size Switch and actuators. The Tray 3 Paper Size Switch and actuators appear to be free of damage.
Y $N$
Replace the Tray 3 Paper Size Switch (PL 14.1)
Check the Tray 3 actuator on the back of Tray 3. The actuator is good.
N
Repair as required (PL 14.1)
Go to the OF 2 Size Switch Assy RAP.

## 073-212 Tray 3 Ready RAP

## BSD-ON:3.3

There is a Tray 3 ready failure.

## Procedure

Check the circuits between P/J413 on the MCU PWB and P/J541 (2TM) or P/J541 (TTM) on the Tray Module PWB (Flag 5, Flag 6) for an open circuit or short circuit failure. Repair as required.

If the problem persists disconnect and reconnect P/J541 on the Tray Module PWB.

## 073-401 Tray 3 Feed Roll Life RAP

## BSD-ON:8.1

The Tray 3 Feed Rolls are near end of life.

## Procedure

NOTE: Replace the feed rolls now if the next service call is likely to occur after the rolls reach end of life (PL 14.4/PL 15.3).

## 073-402 Tray 3 Feed Roll Replacement RAP

BSD-ON:8.1
The Tray 3 Feed Rolls reached end of life.

## Procedure

Replace the Tray 3 Feed Rolls (PL 14.4/PL 15.6).

## 073-900 Tray 3 Feed Out Sensor On Jam RAP

## BSD-ON:8.3/8.4/8.5/8.6

IOT Static Jam at Tray 3 Feed Out Sensor.

## Initial Actions

- If a grinding noise was reported or is heard with the 073-102 code, there may be incorrect gear mesh between TTM Takeaway Clutch (PL 2.6) and it's drive gear, located to the right. Loosen the bracket fixing screws and reposition bracket for best gear mesh without binding.
- Check that the paper path is free of foreign material and paper dust.


## Procedure

Check the Transport Roll for wear and paper dust. The Transport Roll is ok.
Y N
Replace the Transport Roll (PL 15.5).
Enter Component Control [073-103 Tray 3 Feed Out Sensor]. Actuate the Tray 3 Feed Out Sensor (PL 14.3/PL 15.6) with paper. The display changes.
N
Check the connections of P/J825, P/J842 and P/J548. P/J825, P/J842 and P/J548 are connected correctly.

```
Connect P/J825, P/J842 and P/J548.
```

Check the wires between P/J825 and P/J548 for an open circuit or a short circuit (BSD 8.5 Flag 4/Flag 5/Flag 6). The wires between P/J825 and P/J548 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J548-1 (+) and P/J548-2 (-) (BSD 8.5 Flag $5 /$ Flag 6 ). The voltage is approx. +5 VDC.

Y N
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module PWB P/J548-3 (+) and GND (-) (BSD 8.5 Flag 4. Actuate the Tray 3 Feed Out Sensor (PL 14.3/PL 15.6) with paper. The voltage changes.
Y N
Replace the Tray 3 Feed Out Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Enter Component Control [077-022 2TM/TTM Takeaway Motor ON]. The 2TM/TTM Takeaway

## Motor (PL 14.7/PL 15.9) can be heard

$Y \quad N$
Check the connections of P/J826 and P/J552. P/J826 and P/J552 are connected correctly.

```
Connect P/J826 and P/J552.
```

Check the wires between P/J826 and P/J552 for an open circuit or a short circuit (BSD 8.4 Flag 1 / BSD 8.6 Flag 1). The wires between J826 and J552 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 14.7/PL 15.9)
Check the paper transport drives and repair as required (PL 14.7/PL 15.9).

## 073-940 Tray 3/TTM 3 Lift Up RAP

## BSD-ON:7.10/7.12

- The 2TM-Tray 3 Level Sensor did not actuate in time after the 2TM-Tray 3 Feed/Lift Motor energized.
- The TTM-Tray 3 Level Sensor did not actuate in time after the TTM-Tray 3 Feed/Lift Motor energized.


## Initial Actions

- Reload paper in the tray correctly.
- Remove foreign substances in the tray.


## Procedure

Enter Component Control [073-002 Tray 3 Feed/Lift Motor ON]. The Tray 3 Feed/Lift Motor (PL 14.3/PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
${ }^{Y} \quad \mathrm{~N}$
Check the connections of P/J220B, P/J661B, P/J549. P/J220B, P/J661B, P/J549 are connected correctly.
Y $\mathbf{N}$
Connect P/J220B, P/J661B, P/J549.
Remove the Tray 3 Feed/Lift Motor (PL 14.3/PL 15.6 and the Tray 2 Feed/Lift Motor (PL 14.3/PL 15.6).

Replace the Tray 3 Feed/Lift Motor with the Tray 2 Feed/Lift Motor.
Enter Component Control [073-002 Tray 3 Feed/Lift Motor ON]. The Tray 3 (2) Feed/Lift Motor (PL 14.3/PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).

N
Return the Tray 2 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.10 Flag 1 / BSD 7.12 Flag 1). The circuit between J220B and J549 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Return the Tray 2 Feed/Lift Motor to its original position.
Replace the Tray 3 Feed/Lift Motor (PL 14.3/PL 15.6).
Check the installation of the Tray 3 Level Sensor (PL 14.3/PL 15.6and the operation of the actuator. The Tray 3 Level Sensor is installed correctly and the actuator works.
Y N
Reinstall the Tray 3 Level Sensor.
Enter Component Control [073-102 Tray 3 Level Sensor]. Manually activate the Tray 3 Level Sensor (PL 14.3/PL 15.6). The display changes.
N
Check the connections of P/J101B, P/J661B and P/J549. P/J101B, P/J661B and P/ J549 are connected correctly.

N
Connect P/J101B, P/J661B and P/J549
Check the wires between P/J101B and P/J549 for an open circuit or a short circuit (BSD 7.10 Flag 2/Flag 3 / BSD 7.12 Flag 2/Flag 3). The circuit between J101B and J549 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J549-7 (+) and P/J549-8 (-) (BSD 7.10 Flag 3 / BSD 7.12 Flag 3). The voltage is approx. +5VDC.

Y N
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module PWB P/J549-9 (+) and GND (-) (BSD 7.10 Flag 2 / BSD 7.12 Flag 2).

Activate the actuator of the Tray 3 Level Sensor (PL 14.3/PL 15.6). The

## changes.

Y N
Replace the Tray 3 Level Sensor (PL 14.3/PL 15.6).
Replace the Tray Module PWB (PL 14.7/PL 15.9),
Check the paper transport drives and repair as required (PL 14.3, PL 14.7/PL 15.9).

## 075-135 MSI Registration Sensor On Jam RAP

 BSD-ON:8.1, 8.7The Registration Sensor did not actuate in time after the MSI Feed Solenoid energized.

## Initial Actions

Ensure the tray guides are correctly adjusted.
Check that the MSI paper path is free of foreign substances and sensors are free of paper dust

## Procedure

Check the installation of the MSI (REP 7.1.1). The MSI is installed correctly.
Y $N$
Install the MPT correctly.
Enter Component Control [089-100 Registration Sensor]. Manually activate the actuator of the Registration Sensor (PL 2.5). The display changes.
$Y^{\mathbf{N}}$
Check the wires between P/J106 and P/J405 for an open circuit or a short circuit (BSD 8.7 Flag $1 /$ Flag 2). The circuit between P/J106 and P/J405 is conducting without an open circuit or a short circuit.
$\mathbf{Y} \quad \mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P/J405-8A (+) and P/J405-6A (-) (BSD 8.7 Flag 2). The voltage is approx. +5 VDC .

## $Y \quad N$

Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P/J405-A7 (+) and GND (-) (BSD 8.7 Flag 1). Actuate the Registration Sensor with paper. The voltage changes.
Y N
Replace the Registration Sensor (PL 2.5).
Replace the MCU PWB (PL 11.1).
Execute Component Control [042-001 Main Motor On]. The Main Motor in the Main Drive Assembly starts rotating and the Fuser starts up.

## Y $N$

Go to the OF 3 Main Drive Assembly RAP.
Execute Component Control [075-001 MSI Feed Solenoid ON]. The MSI Feed Solenoid (PL 9.2) actuates.

Y
Check the connections of P/J205, P/J610, and P/J424. P/J205, P/J610, and P/J424 are connected correctly.
Y N
Connect P/J205, P/J610, and P/J424.

A B
Measure the resistance of the MSI Feed Solenoid (PL 9.2) (BSD 8.1 Flag 1). (Between P205-1 and P205-2). The resistance is approx. 900hm.
Y N
Replace the MSI Feed Solenoid (PL 7.2).
Check the wire between P205 and J411 for an open circuit or a short circuit (BSD 8.1 Flag 1). The wire between P205 and J411 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the MCU PWB (PL 11.1).
Check the paper transport drives and repair as required (PL 2.5, PL 9.1).

## 075-401 MSI Feed Roll Life RAP

BSD-ON:8.1
The MSI Feed Rolls are near end of life.

## Procedure

NOTE: On the next service call it may be time to replace the Feed Rolls (PL 9.1)

## 075-402 MSI Feed Roll Replacement RAP

BSD-ON:8.1
The MSI Feed Rolls must be replaced.

## Procedure

Replace the MSI Feed Rolls (PL 9.1).

## 077-101 Registration Sensor Off Jam RAP

 BSD-ON:8.7After the Registration Clutch turned On, the Registration Sensor did not turn Off within the specified time.

## Initial Actions

Check for torn paper, components out of position, or paper dust in the paper transport path. circuit.

## Y N <br> Repair the open circuit or short circuit

Replace the MCU PWB (PL 11.1).
Check the paper transport drives and repair as required (PL 2.5).

## Procedure

Check the Transport Roll for wear and paper dust. The Transport Roll is ok.
Y N
Replace the Transport Roll (PL 15.5).
Execute Component Control [089-100 Registration Sensor]. Manually activate the actuator of the Registration Sensor (PL 2.4). The display changes.
Y $\mathbf{N}$
Check the connection of P/J605. P/J605 is connected correctly.
Y N
Connect P/J605.
Check the wire between J104 and J403 for an open circuit or a short circuit (BSD 8.7 Flag 1/Flag 2). The wire between J104 and J403 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P403-B13 (+) and GND (-) (BSD 8.7 Flag 2). The voltage is approx. +5VDC.

Y N
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P403-B8 (+) and GND (-) (BSD 8.7 Flag 1). Actuate the Registration Sensor with paper. The voltage changes.
$Y \quad \mathrm{~N}$
Replace the Registration Sensor (PL 2.4).
Replace the MCU PWB (PL 11.1).
Execute Component Control [089-002 Registration Clutch ON]. The Registration Clutch (PL 2.5) energized.

Y N
Check the connection of P/J215. P/J215 is connected correctly.
Y N
Connect P/J215.
Measure the resistance of the Registration Clutch (PL 2.5) between P215-1 and P215-2 (BSD 8.7 Flag 3). The resistance is approx. 240 Ohm.
Y N
Replace the Registration Clutch (PL 2.5).
A B

## 077-103 Exit Sensor 1 Off Jam (too long) RAP BSD-ON:10.3

After the Fuser Exit Sensor turned On, the Fuser Exit Sensor did not turn Off within the specified time.

## Initial Actions

Check for torn paper, components out of position, or paper dust in the paper transport path.

## Procedure

Check the installation of the Fuser. The Fuser is installed correctly.
Y N
Install the Fuser correctly.
Open Left Upper Cover Assembly and verify that Exit 1 Gate (PL 8.4) is free to move. Exit 1 Gate is free to move.
Y $N$
Repair as required (PL 8.4).
Execute Component Control [077-105 Fuser Exit Sensor]. Manually activate the actuator of the Fuser Exit Sensor (PL 7.1). The display changes.
$Y \quad N$
Check the connections of P/J120 and P/J422. Connections are connected correctly. Y $\mathbf{N}$

Connect P/J120 and P/J422.
Check the wire between P/J120 and P/J422 for an open circuit or a short circuit (BSD 10.2 Flag 5/Flag 6). The wire are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P422-9 (+) and GND (-) (BSD 10.2 Flag 6). The voltage is approx. +5 VDC .
Y N
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P422-11 (+) and GND (-) (BSD 10.2 Flag 5). Actuate the Fuser Exit Sensor with paper. The voltage changes.

Y N
Replace the Fuser Exit Sensor (PL 7.1).
Replace the MCU PWB (PL 11.1).
Execute Component Control [042-001 Main Motor ON]. The Main Motor in the Main Drive Assembly starts rotating and the Fuser starts up.

## Y N <br> Go to the OF 3 (MAIN DRIVE ASSY RAP).

Check the paper transport drives and repair as required (PL 11.1).

## 077-104 Exit Sensor 1 Off Jam (too short) RAP BSD-ON:10.3

After the Fuser Exit Sensor turned On, the Fuser Exit Sensor turns Off before the specified time.

## Initial Actions

Check for torn paper, components out of position, or paper dust in the paper transport path.

## Procedure

Check the installation of the Fuser. The Fuser is installed correctly.
Y N
Install the Fuser correctly.
Open Left Upper Cover Assembly and verify that Exit 1 Gate (PL 8.4) is free to move. Exit 1 Gate is free to move.
Y N
Repair as required (PL 8.4).
Execute Component Control [077-105 Fuser Exit Sensor]. Manually activate the actuator of the Fuser Exit Sensor (PL 7.1). The display changes.
Y $N$
Check the connections of P/J120 and P/J422. Connections are connected correctly. Y N

Connect P/J120 and P/J422.
Check the wire between P/J120 and P/J422 for an open circuit or a short circuit (BSD 10.2 Flag 5/Flag 6). The wire are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P422-9 (+) and GND (-) (BSD 10.2 Flag 6).
The voltage is approx. +5 VDC .
Y N
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P422-11 (+) and GND (-) (BSD 10.2 Flag 5).Actuate the Fuser Exit Sensor with paper. The voltage changes.

Y N
Replace the Fuser Exit Sensor (PL 7.1).
Replace the MCU PWB (PL 11.1).
Execute Component Control [042-001 Main Motor ON]. The Main Motor in the Main Drive Assembly starts rotating and the Fuser starts up.
$\mathrm{Y} \quad \mathrm{N}$
Go to the OF 3 (MAIN DRIVE ASSY RAP).
Check the paper transport drives and repair as required (PL 11.1).

## 077-105 Exit Sensor 2 Off Jam RAP

BSD-ON:10.4, 10.5
The paper did not deactuate the Exit Sensor 2 sensor after actuating the sensor

## Procedure

Check the paper transport drives for interference, components out of position, or faulty drives and repair as required (PL 8.4).

## 077-106 Exit Sensor 1 On Jam RAP BSD-ON:9.410.2

After the Registration Clutch turned On, the Fuser Exit Sensor did not turn On within the specified time.

## Initial Actions

Check for torn paper, components out of position or paper dust in the paper transport path.

## Procedure

Check the installation of the Fuser. The Fuser is installed correctly.
Y N
Install the Fuser correctly.
Execute Component Control [077-105 Fuser Exit Sensor]. Manually activate the actuator of the Fuser Exit Sensor (PL 7.1). The display changes.
Y N
Check the connections of P/J120 and P/J422. Connections are connected correctly. Y $N$

Connect P/J120 and P/J422.
Check the wire between P/J120 and P/J422 for an open circuit or a short circuit (BSD 10.2 Flag 5/Flag 6). The wire are conducting without an open circuit or a short circuit.
$\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P422-9 (+) and GND (-) (BSD 10.2 Flag 6). The voltage is approx. +5VDC.
Y $N$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P422-11 (+) and GND (-) (BSD 10.2 Flag 5).Actuate the Fuser Exit Sensor with paper. The voltage changes.
$\boldsymbol{Y}$
Replace the Fuser Exit Sensor (PL 7.1).
Replace the MCU PWB (PL 11.1).
Execute Component Control [042-001 Main Motor ON]. The Main Motor in the Main Drive Assembly starts rotating and the Fuser starts up.
Y $N$
Go to the OF 3 (MAIN DRIVE ASSY RAP).
Check the paper transport drives and repair as required (PL 8.1, PL 8.2, PL 17.11, PL 1.1).

## 077-108 Exit Gate Jam RAP

## bSD-ON:10.4, 10.5

A sheet jammed at the Exit Gate

## Procedure

Check the paper transport drives and repair as required (PL 8.3, PL 8.4).

## 077-109 IOT Exit Sensor 2 On Jam RAP

## BSD-ON:10.3/10.4

After the Fuser Exit Sensor turned On, the Exit 2 Sensor did not turn On within the specified time.

## Initial Actions

Check for torn paper, components out of position, or paper dust in the paper transport path.

## Procedure

Check the installation of the Exit 2 Module. The Exit 2 Module is installed correctly.
Y N
Install the Exit 2 Module correctly.
Check the Transport Roll for wear and paper dust. The Transport Roll is ok.
Y $\mathbf{N}$
Replace the Transport Roll (PL 15.5).
Open Left Upper Cover Assembly and verify that Exit 1 Gate (PL 8.2) is free to move. Exit 1 Gate is free to move.
Y $\quad N$
Repair as required.
Check the clearance between the Diverter Gate and the Fixed Guide on the left hand door. PL
8.3) Operation is satisfactory.
$\mathbf{Y} \quad \mathbf{N}$
Repair as required (PL 8.3)
Execute Component Control [071-102 Exit 2 Sensor]. Actuate the Exit 2 Sensor (PL 8.4) with paper. The display changes.
Y $N$
Check the wire between J 112 and J 434 for an open circuit or a short circuit (BSD 10.3 Flag 1/Flag 2). The wire between J 112 and J 434 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the Exit 2 Sensor (PL 8.4).
Execute Component Control [047-023 Exit 2 Motor ON]. The Exit 2 Motor (PL 8.4) ener-
gized.
$\mathbf{Y} \quad \mathrm{N}$
Check the wire between J208 and J433 for an open circuit or a short circuit (BSD 10.4 Flag 1). The wire between J208 and J433 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the Exit 2 Motor (PL 8.4) between J208-1 (COM) and each point of $\mathrm{J} 208-2 / 3 / 4 / 5$ (BSD 10.4 Flag 2). The resistance is approx. 100hm.

Execute Component Control [047-024 Exit Gate Solenoid ON]. The Exit Gate Solenoid (PL 8.4) starts up and the gates start switching.

Y N
Check the wire between J209 and J433 for an open circuit or a short circuit (BSD 10.4 Flag 3). The wire between J209 and J433 is conducting without an open circuit or a short circuit.
Y $\quad \mathbf{N}$
Repair the open circuit or short circuit.
Measure the resistance of the Exit Gate Solenoid (PL 8.4) between J209-1 and J209-2 (BSD 10.4 Flag 4). The resistance is approx. 1600hm.
Y $N$
Replace the Exit 2 Motor (PL 8.4).
Replace the Exit Gate Solenoid (PL 8.4).
Replace the Exit PWB (PL 11.1).

## 077-110 POB Sensor On Jam RAP

## BSD-ON:10.1

The POB sensor senses paper at the wrong time.

## Procedure

Check the condition of the POB Sensor (PL 10.1) (BSD 10.1).
Check the condition of the Registration Clutch (PL 2.5) (BSD 8.7).

## 077-123 Registration Sensor On Jam RAP

BSD-ON:8.7, 10.4, 10.6
Paper is late to the Registration Sensor during a Duplex job.

## Procedure

Check the paper transport sensors and drives and repair as required (PL 2.5, PL 10.1).

## 077-130 Duplex Out Sensor On Jam RAP

## BSD-ON:8.7/9.3/10.5

In the case where there is non-stop Duplex feed, the Registration Sensor did not turn On within the specified time after the Duplex Sensor turned On.

## Initial Actions

Check for torn paper, components out of position, or paper dust in the paper transport path.

## Procedure

Check the installation of the DUP Module. The DUP Module is installed correctly.
Y N
Install the DUP Module correctly.
Check the Transport Roll for wear and paper dust. The Transport Roll is ok.
Y $\mathbf{N}$
Replace the Transport Roll (PL 15.5).
Execute Component Control [089-100 Registration Sensor]. Manually activate the actuator of the Registration Sensor (PL 2.4). The display changes.
Y $N$
Check the connection of P/J605. P/J605 is connected correctly.
Y N
Connect P/J605.
Check the wire between J104 and J403 for an open circuit or a short circuit (BSD 8.7 Flag 1/Flag 2). The wire between J 104 and J 403 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P403-B13 (+) and GND (-) (BSD 8.7 Flag 2). The voltage is approx. +5VDC.
$\boldsymbol{N}$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P403-B8 (+) and GND (-) (BSD 8.7 Flag 1). Actuate the Registration Sensor with paper. The voltage changes.
Y N
Replace the Registration Sensor (PL 2.5).
Replace the MCU PWB (PL 11.1).
Execute Component Control [071-105 Duplex Sensor]. Actuate the Duplex Sensor (PL 10.1) with paper. The display changes.
Y $\mathbf{N}$
Check the wire between J 123 and J 541 for an open circuit or a short circuit (BSD 10.5 Flag 1/Flag 2). The wire between J123 and J541 is conducting without an open circuit or a short circuit.

Repair the open circuit or short circuit.
Replace the Duplex Sensor (PL 10.1) If the problem persists, replace the Duplex PWB (PL 10.1).

Execute Component Control [077-006 Duplex Motor ON]. The Duplex Motor energized.
Y $\mathbf{N}$
Check the wire between J 212 and J 542 for an open circuit or a short circuit (BSD 10.5 Flag 3). The wire between J212 and J542 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Duplex Motor (PL 10.1) If the problem persists, replace the Duplex PWB (PL 10.1).

Replace the Duplex PWB (PL 10.1).

## 077-131 Duplex Wait Sensor On Jam RAP

## BSD-ON:10.4/10.5

After the Exit 2 Motor turned On, the Duplex Sensor does not turn On within the specified time.

## Initial Actions

Check for torn paper, components out of position, or paper dust in the paper transport path.

## Procedure

Check the installation of the Duplex Module. The Duplex Module is installed correctly.
Y N
Install the Duplex Module correctly.
Check the Transport Roll for wear and paper dust. The Transport Roll is ok.
Y N
Replace the Transport Roll (PL 15.5).
Execute Component Control [077-106 Duplex Sensor]. Actuate the Duplex Sensor (PL 10.1) with paper. The display changes.
Y $\quad \mathbf{N}$
Check the wire between J 123 and J 541 for an open circuit or a short circuit (BSD 10.5 Flag 1/Flag 2). The wire between J 123 and J 541 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the Duplex Sensor (PL 10.1) If the problem persists, replace the Duplex PWB (PL 8.1).

Execute Component Control [077-006 Duplex Motor ON]. The Duplex Motor energized.
Y N
Check the wire between J212 and J542 for an open circuit or a short circuit (BSD 10.5 Flag 3). The wire between J212 and J542 is conducting without an open circuit or a short circuit.
Y $\quad N$
Repair the open circuit or short circuit.
Replace the Duplex Motor (PL 10.1) If the problem persists, replace the Duplex PWB (PL 8.1).

Execute Component Control [077-007 Exit 2 Motor ON]. The Exit 2 Motor energized.
Y $\quad \mathbf{N}$
Check the wire between J 208 and J 433 for an open circuit or a short circuit (BSD 10.4 Flag 1). The wire between J208 and J433 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the resistance of the Exit 2 Motor (PL 8.4) between J208-1 (COM) and each point of $\mathrm{J} 208-2 / 3 / 4 / 5$ (BSD 10.4 Flag 2). The resistance is approx. 100hm.

## 077-215 Tray Module Communication RAP

BSD-ON:3.3
There is a Tray Module communication failure.

## Procedure

Check the circuits between P/J413 on the MCU PWB and P/J541 (2TM) or P/J541 (TTM) on the Tray Module PWB (Flag 5, Flag 6) for an open circuit or short circuit failure. Repair as required.

## 077-300 IOT Front Cover Open RAP <br> \section*{BSD-ON:1.3}

The IOT Front Cover is open.

## Procedure

Check the opening/closing of the IOT Front Cover. The Front Cover can be opened/closed.
Y N
Reinstall the Front Cover.
Check the installation of the Front Cover Interlock Switch. The Front Cover Interlock Switch is installed correctly.
$Y \quad N$
Install the Front Cover Interlock Switch correctly.
Execute Component Control [077-303 Front Cover Interlock Switch]. Open/close the IOT Front Cover. The display changes.
Y $\mathbf{N}$
Check the connections between the Front Cover, Relay PWB, and the MCU PWB (BSD 1.3). Connections are connected correctly.
$\mathbf{Y}^{\mathrm{N}}$
Connect the connectors.
Check the wire between the Front Cover, Relay PWB, and the MCU PWB (BSD 1.3 for an open circuit or a short circuit (BSD 1.3 Flag 5/Flag 6). The wire are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Check the conductivity of the Front Cover Interlock Switch (PL 12.1) between J141 and J410 (BSD 1.3). The wire are connecting successfully when the Front Cover is closed.

N
Replace the Front Cover Interlock Switch (PL 12.1).
Replace the MCU PWB (PL 11.1).
Check the paper transport drives and repair as required.

## 077-301 Left Hand Interlock Open RAP

## BSD-ON:1.3/1.4

The L/H Cover Assembly is open.

## Procedure

Check opening/closing of the L/H Cover Assembly. The L/H Cover Assembly can be opened/closed.
$Y^{\mathrm{N}}$
Reinstall the L/H Cover Assembly (PL 2.6).
Check the installation of the L/H Cover Interlock Switch. The L/H Cover Interlock Switch is installed correctly.

## Y N

Install the L/H Cover Interlock Switch correctly.
Execute Component Control [077-300 L/H Cover Interlock Switch]. Open and close the L/H Cover Assembly. The display changes.
Y N
Check the connections between the MCU PWB and the L.H. Cover Interlock (BSD 1.3), Connectors are connected correctly.

## Y N

Connect the connectors
Check the wire between P/J420 on the MCU PWB and the P/J135 on the L.H. Cover Interlock for an open circuit or a short circuit (BSD 1.3). The wire are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Check the conductivity of the L/H Cover Interlock Switch (PL 2.7) between P/J135 and P/J420 (BSD 1.3). The wire are connecting successfully when the L/H Cover Assembly is closed.

## 

Replace the L/H Cover Interlock Switch (PL 2.7).
Measure the voltage between the MCU PWB P/J420-1 (+) and GND (-) (BSD 1.3). The voltage is approx. +24VDC.
$Y \quad N$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the L/H Cover Interlock Switch P/J135-A2 (+) and GND (-) (BSD 1.3). The voltage is approx. +24VDC.
Y N
Check the wire between P/J135 and P/J420 for an open circuit or a short circuit (BSD 1.3). Repair or replace as required.

Measure the voltage between the L/H Cover Interlock Switch P/J135-B2 (+) and GND (-) (BSD 1.3). The voltage is approx. +24VDC.

Check the wire between P/J135 and P/J420 for an open circuit or a short circuit (BSD 1.3). Repair or replace as required.

Replace the L/H Cover Interlock Switch (PL 2.7).
Check the paper transport drives and repair as required.

## 077-305 Tray Module Left Hand Cover Interlock Open RAP BSD-ON:1.4

- The 2TM Cover is open.
- The TTM Cover is open.


## Procedure

Check opening/closing of the Left Cover of the 2TM or TTM. The Left Cover of the 2TM or TTM can be opened/closed.
Y $N$
Reinstall the Left Cover of the 2TM or TTM (PL 14.5/PL 15.8).

Check the installation of the Tray Module Left Cover Interlock Switch. The Tray Module Left Cover Interlock Switch is installed correctly.
$Y \quad N$
Install the Tray Module Left Cover Interlock Switch correctly (PL 14.5/PL 15.8).
Execute Component Control [077-306 Tray Module Left Cover Interlock Switch]. Open and close the Left Cover of the 2TM or TTM. The display changes.
Y $N$
Check the connections between the Tray Module PWB and the Tray Module Interlock (BSD 1.4). Connectors are connected correctly.
Y $N$
Connect the connectors
Check the wire between J554 on the Tray Module PWB and the FS812 on the Tray Module Interlock for an open circuit or a short circuit (BSD 1.4). The wire are conducting without an open circuit or a short circuit.

## Y N

Repair the open circuit or short circuit.
Check the conductivity of the Tray Module Switch between J554 and FS812 (BSD 1.4) The wire are connecting successfully when the Tray Module is closed.
Y N
Replace the Tray Module Switch (PL 14.5/PL 15.8).
Measure the voltage between the Tray Module PWB J554-2 (+) and GND (-) (BSD 1.4) The voltage is approx. +24VDC.
$Y \quad \mathbf{N}$
Replace the Tray Module PWB (PL 14.7/PL 15.9).
Measure the voltage between the Tray Module SwitchFS812 (+) and GND (-) (BSD 1.4), The voltage is approx. +24VDC.
Y N
Check the wire between J554 and FS812 for an open circuit or a short circuit (BSD 1.4). Repair or replace as required.

Measure the voltage between the Tray Module SwitchFS813-B2 (+) and GND (-) (BSD 1.4). The voltage is approx. +24 VDC .

Check the wire between FS813 and J554 for an open circuit or a short circuit (BSD 1.4). Repair or replace as required.

Replace the Tray Module Interlock Switch (PL 14.5/PL 15.8).
Replace the Tray Module PWB (PL 14.7/PL 15.9).

## 077-307 DUP Cover Open RAP

BSD-ON:1.4
The DUP Cover is open.

## Procedure

Check opening/closing of the DUP Cover. The DUP Cover can be opened/closed.
Y N
Reinstall the DUP Cover.
Check the installation of the Duplex Open Switch (PL 10.1). The Duplex Open Switch is installed correctly.
Y N
Install the Duplex Open Switch correctly.
Execute Component Control [077-305 Duplex Open Switch]. Open and close the DUP Cover. The display changes.
Y $\mathbf{N}$
Check the connections between the Duplex PWB and the Duplex Open Interlock (BSD 1.4). Connectors are connected correctly.
$\mathrm{Y} \quad \mathrm{N}$
Connect the connectors
Check the wire between J541 on the Duplex PWB and the J124 on the Duplex Open Switch for an open circuit or a short circuit (BSD 1.4). The wire are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Check the conductivity of the Duplex Open Switch between J124 and J541 (BSD 1.4). The wire are connecting successfully when the Duplex Module is closed.
Y N
Replace the Duplex Open Switch (PL 10.1).
Measure the voltage between the Duplex PWB J541-5 (+) and GND (-) (BSD 1.4). The voltage is approx. +24VDC.
$Y \quad \mathrm{~N}$
Replace the Duplex PWB (PL 10.1).
Measure the voltage between the Duplex Open Switch J124-1 (+) and GND (-) (BSD 1.4). The voltage is approx. +24 VDC .
$\mathrm{Y} \quad \mathrm{N}$
Check the wire between J541 and J124 for an open circuit or a short circuit (BSD 1.4). Repair or replace as required.

Measure the voltage between the Duplex Open Switch J124-2 (+) and GND (-) (BSD 1.4). The voltage is approx. +24 VDC .

## Y N

Check the wire between J124 and J541 for an open circuit or a short circuit (BSD 1.4). Repair or replace as required.

## 077-308 Left Hand High Interlock Open RAP

## BSD-ON:1.4

The L/H-H Cover is open.

## Procedure

Check opening/closing of the IOT L/H-H Cover. The IOT L/H-H Cover can be opened/ closed.
Y N
Reinstall the IOT L/H-H Cover.
Check the installation of the Exit 2 Interlock Switch. The Exit 2 Interlock Switch is installed correctly
Y N
Install the Exit 2 Interlock Switch correctly.
Execute Component Control [077-302 LHH Interlock Switch]. Open/close the IOT L/H-H Cover. The display changes.
Y N
Check the connections between the MCU PWB and the LHH Interlock (BSD 1.4). Con nectors are connected correctly.
Y $N$
Connect the connectors
Check the wire between J422B on the MCU PWB and the J116 on the LHH Interlock Switch for an open circuit or a short circuit (BSD 1.4). The wire are conducting without an open circuit or a short circuit.
Y $\quad \mathbf{N}$
Repair the open circuit or short circuit.
Check the conductivity of the LHH Interlock Switch (PL 8.4) between J116 and J442B (BSD 1.4). The wire are connecting successfully when the LHH Interlock Switch is closed.
Y N
Replace the LHH Interlock Switch (PL 8.4)
Measure the voltage between the MCU PWBJ422B-8 (+) and GND (-) (BSD 1.4). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the LHH Interlock Switch J116-1 (+) and GND (-) (BSD 1.4). The voltage is approx. +5VDC.

Y N
Check the wire between J422B and J116 Terminal Block P/J606 for an open circuit or a short circuit (BSD 1.4). Repair or replace as required.

Measure the voltage between the LHH Interlock Switch J116-2 (+) and GND (-) (BSD 1.4). The voltage is approx. +5VDC.

Y N
Replace the LHH Interlock Switch (PL 8.4)

A B
Measure the voltage between the DET Face Up Tray Switch J115-2 (+) and GND (-) (BSD 1.4). The voltage is approx. +5VDC.

Y $\mathbf{N}$
Check the wire between J115 and J116 and the Terminal Block for an open circuit or a short circuit (BSD 1.4). Repair or replace as required.

Measure the voltage between the DET Face Up Tray Switch J115-1 (+) and GND (-) (BSD 1.4). The voltage is approx. +5VDC.

Y $\mathbf{N}$
Replace the DET Face Up Tray Switch (PL 8.4).
Measure the voltage between the MCU PWB J422B-6 (+) and GND (-) (BSD 1.4). The voltage is approx. +5VDC.
Y $\quad \mathbf{N}$
Check the wire between J116 and J422B-6 and the Terminal Block for an open circuit or a short circuit (BSD 1.4). Repair or replace as required.

Check for an intermittent Interlock Switch (BSD 1.4)
Check the paper transport drives and repair as required.

## 077-309 Left Hand Low Interlock Open RAP BSD-ON:1.4

The L/H Lower Cover is open.

## Procedure

Check opening/closing of the Left Lower Back Cover. The Cover can be opened/closed.
Y N
Reinstall the Left Lower Back Cover (PL 2.6).
Check the installation of the LHL Switch. The LHL Lower Cover Interlock Switch is installed correctly.
Y $N$
Install the LHL Lower Cover Interlock Switch correctly.
Execute Component Control [077-301 LHL Lower Cover Interlock Switch]. Open/close the L/H Lower Cover. The display changes.
Y N
Check the connections between the MCU PWB and the LHL Interlock Switch (BSD 1.4), Connectors are connected correctly.
Y N
Connect the connectors
Check the wire between J424B on the MCU PWB and the J119 on the LHL Interlock Switch for an open circuit or a short circuit (BSD 1.4). The wire are conducting without an open circuit or a short circuit.
$Y \quad N$
Repair the open circuit or short circuit.
Check the conductivity of the LHL Interlock Switch (PL 2.6) between J119 and J424B (BSD 1.4). The wire are connecting successfully when the LHH Interlock Switch is closed.
N
Replace the LHH Interlock Switch (PL 8.4).
Measure the voltage between the MCU PWBJ422B-10 (+) and GND (-) (BSD 1.4). The voltage is approx. +24VDC.
Y N
Replace the MCU PWB (PL 11.1).
Measure the voltage between the LHL Interlock Switch J119-2 (+) and GND (-) (BSD 1.4). The voltage is approx. +24 VDC .
$Y \mathrm{~N}$
Check the wire between J422B and J119 Terminal Block P/J606 for an open circuit or a short circuit (BSD 1.4). Repair or replace as required.

Measure the voltage between the LHL Interlock Switch J119-1 (+) and GND (-) (BSD 1.4). The voltage is approx. +24VDC.

Y N
Replace the LHL Interlock Switch (PL 8.4).

A B
Measure the voltage between the MCU PWB J422B-9 (+) and GND (-) (BSD 1.4). The voltage is approx. +24VDC.
Y $N$
Check the wire between J119 and J422B and the Terminal Block for an open circuit or a short circuit (BSD 1.4). Repair or replace as required.

Check for an intermittent Interlock Switch (BSD 1.4).
Check the paper transport drives and repair as required.

## 077-314 Tray Module Logic RAP

 BSD-ON:3.3There is a Tray Module logic failure.

## Procedure

Perform the following

- Switch the power off, disconnect and reconnect P/J541 on the Tray Module PWB, then on the power.
- Check the circuits between P/J125 on the MCU PWB and P/J541 (2TM) or P/J541 (TTM) on the Tray Module PWB (Flag 5, Flag 6) for an open circuit or short circuit failure. Repair as required.
- Perform ADJ 9.3.1 Software Loading and Upgrading.


## 077-602 OHP Sensor RAP

BSD-ON:8.7
A description is not available at time of publication

## Procedure

A procedure is not available at time of publication.

## 077-900 Tray/Registration Sensor Jam RAP

BSD-ON:8.3, 8.7
Paper remains on the Registration Sensor.

## Procedure

Enter Component Control [077-100 Registration Sensor]. Actuate the Registration Sensor (PL 2.5). The display changes.

Y N
Check the wires between P/J106 and P/J405 for an open circuit or a short circuit (BSD 8.7 Flag 1/Flag 2). The circuit between P/J106 and P/J405 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P/J405-8A (+) and P/J405-6A (-) (BSD 8.7 Flag 2). The voltage is approx. +5VDC.
Y N
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P/J405-A7 (+) and GND (-) (BSD 8.7 Flag 1).

Actuate the Registration Sensor with paper. The voltage changes.
Y N
Replace the Registration Sensor (PL 2.5).
Replace the MCU PWB (PL 11.1).
Replace the MCU PWB (PL 11.1)

## 077-901 Fuser Exit Sensor Jam RAP

## BSD-ON:10.2

Paper remains on the Fuser Exit Sensor.

## Procedure

Execute Component Control [077-105 Fuser Exit Sensor]. Manually activate the actuator of the Fuser Exit Sensor (PL 7.1). The display changes.
Y $N$
Check the connections of P/J125 and P/J410. Connectors are connected correctly.
Y N
Connect P/J125 and P/J410.
Check the wire between J125 and J410 for an open circuit or a short circuit (BSD 10.2 Flag $5 /$ Flag 6 ). The wire is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB P410-7 (+) and GND (-) (BSD 10.2 Flag 6). The voltage is approx. +5VDC.
Y $\mathbf{N}$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the MCU PWB P410-9 (+) and GND (-) (BSD 10.2 Flag 5). Actuate the Fuser Exit Sensor with paper. The voltage changes.
Y $\quad \mathrm{N}$
Replace the Fuser Exit Sensor (PL 7.1).
Replace the MCU PWB (PL 11.1).
Replace the MCU PWB (PL 11.1).

## 077-902 Exit Sensor 2 On Jam RAP

## BSD-ON:10.3

Paper remains on the Exit 2 Sensor.

## Procedure

Execute Component Control [077-102 Exit 2 Sensor]. Actuate the Exit 2 Sensor (PL 8.4) with paper. The display changes to $L$.
$\boldsymbol{Y} \quad \mathbf{N}$
Check the wire between J112 and J434 for an open circuit or a short circuit (BSD 10.3 Flag 1/Flag 2). The wire between J112 and J434 is conducting without an open circuit or a short circuit
Y N
Repair the open circuit or short circuit.
Replace the Exit 2 Sensor (PL 8.4) (PL 9.1).
Replace the Exit PWB (PL 9.1).

## 077-903 POB Sensor JAM RAP

## BSD-ON:10.1

The POB Sensor is actuated.

## Procedure

Check the circuit of the POB Sensor (BSD 10.1) and repair as required (PL 7.2).

## 077-907 Duplex Wait Sensor RAP

## BSD-ON:10.6

Paper remains on the Duplex Sensor.

## Procedure

Execute Component Control [077-104 Duplex Sensor]. Actuate the Duplex Sensor (PL 10.1) with paper. The display changes to L .
$Y \quad \mathbf{N}$
Check the wire between J123 and J541 for an open circuit or a short circuit (BSD 10.6 Flag 1/Flag 2). The wire between J123 and J541 is conducting without an open circuit or a short circuit.

## Y $\quad \mathrm{N}$

Repair the open circuit or short circuit.
Replace the Duplex Sensor (PL 10.1) If the problem persists, replace the Duplex PWB (PL 10.1).

Replace the Duplex PWB (PL 10.1).

## 077-967 Paper Kind Mismatch RAP

The specified paper type and the paper type being used are different.

## Initial Actions

Perform the following:

- Switch the power off then on.
- Check if the Regi Sensor actuator is operating properly.
- Check the paper type.
- Check the paper type settings.


## Procedure

Load the paper type selected. If problem still exists, replace the MCU PWB (PL 11.1).

## 077-968 Paper Type Changed RAP

The type of paper in the tray was changed.
Initial Actions
Perform the following:

- Switch the power off then on.
- Check if the Regi Sensor actuator is operating properly
- Check the paper type.
- Check the paper type settings.


## Procedure

Load the paper type selected. If problem still exists, replace the MCU PWB (PL 11.1),

## 078-210 TTM Tray 2 Lift RAP

## BSD-ON:7.11

The Tray 2 Level Sensor did not actuate in time after the Tray 2 Feed/Lift Motor energized.

## Initial Actions

Ensure the tray is set up and loaded correctly.

## Procedure

Execute Component Control [072-001 or 002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/ Lift Motor /PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
Y $N$
Check the connections of P/J220B, P/J661B and P/J549. P/J220B, P/J661B and P/ J549 are connected correctly.

## Y $\mathbf{N}$

Connect P/J220B, P/J661B and P/J549.
Remove the Tray 1 Feed/Lift Motor (PL 2.3) and the Tray 2 Feed/Lift Motor (PL 15.6). Replace the Tray 2 Feed/Lift Motor with the Tray 1 Feed/Lift Motor. Execute Component Control [072-001/002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/ Lift Motor can be heard (the lifted paper plate drops when the tray is opened).

## Y N

Return the Tray 1 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.11 Flag 1). The circuit between $P / J 220 B$ and $P / J 549$ is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 15.9)
Return the Tray 1 Feed/Lift Motor to its original position.
Replace the Tray 2 Feed/Lift Motor (PL 15.6).
Check the installation of the Tray 2 Level Sensor (PL 15.6) and the operation of the actuator. The Tray 2 Level Sensor is installed correctly and the actuator works.
Y N
Reinstall the Tray 2 Level Sensor (PL 15.6).
Execute Component Control [072-103 Tray 2 Level Sensor]. Manually activate the Tray 2 Level Sensor (PL 15.6). The display changes.

N
Check the connections of P/J101B, P/J611 and P/J549. P/J102A, P/J611 and P/J409 are connected correctly.
Y N
Connect P/J101B, P/J611 and P/J549.
Check the wires between P/J101B and P/J549 for an open circuit or a short circuit (BSD 7.11 Flag 2 Flag 3 ). The wires between $\mathrm{P} / \mathrm{J} 101 \mathrm{~B}$ and $\mathrm{P} / \mathrm{J} 549$ are conducting without an open circuit or a short circuit.
$\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J549-22 (+) and P/J549-23 (-) (BSD 7.11 Flag 3). The voltage is approx. +5VDC.
Y $\quad \mathrm{N}$
Replace the Tray Module PWB (PL 15.9).
Measure the voltage between the Tray Module PWB P/J549-24 (+) and GND (-) (BSD 7.11 Flag 2).

Activate the actuator of the Tray 2 Level Sensor (PL 2.3). The voltage changes.
Y N
Replace the Tray 2 Level Sensor (PL 15.6).
Replace the Tray Module PWB (PL 15.9).
Check the paper transport drives and repair as required (PL 2.3, PL 15.9).

## 078-211 TTM Tray 3 Lift RAP

## BSD-ON:7.12

The TTM-Tray 3 Level Sensor did not actuate in time after the TTM-Tray 3 Feed/Lift Motor energized.

## Initial Actions

Reload paper in the tray correctly.

## Procedure

Enter Component Control [073-001 or 002 Tray 3 Feed/Lift Motor ON]. The Tray 3 Feed/Lift Motor (PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
$\mathbf{Y} \quad \mathbf{N}$
Check the connections of P/J220B, P/J661B, P/J549. P/J220B, P/J661B, P/J549 are connected correctly.
Y N
Connect P/J220B, P/J661B, P/J549.
Remove the Tray 3 Feed/Lift Motor (PL 15.6) and the Tray 2 Feed/Lift Motor (PL 15.6). Replace the Tray 3 Feed/Lift Motor with the Tray 2 Feed/Lift Motor.
Enter Component Control [073-001 or 002 Tray 3 Feed/Lift Motor ON]. The Tray 3 (2) Feed/Lift Motor (PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
$Y$ N
Return the Tray 2 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.12 Flag 1). The circuit between J220B and J549 is conducting without an open circuit or a short circuit.

## Y N

Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 15.9).
Return the Tray 2 Feed/Lift Motor to its original position.
Replace the Tray 3 Feed/Lift Motor (PL 15.6).
Check the installation of the Tray 3 Level Sensor (PL 15.6) and the operation of the actuator. The Tray 3 Level Sensor is installed correctly and the actuator works.
Y $N$
Reinstall the Tray 3 Level Sensor.
Enter Component Control [073-102 Tray 3 Level Sensor]. Manually activate the Tray 3 Level Sensor (PL 15.6). The display changes.
$Y \quad \mathbf{N}$
Check the connections of P/J101B, P/J661B and P/J549. P/J101B, P/J661B and P/ J549 are connected correctly.
N
Connect P/J101B, P/J661B and P/J549.

A B
Check the wires between P/J101B and P/J549 for an open circuit or a short circuit (BSD BSD 7.12 Flag 2/Flag 3). The circuit between J101B and J549 is conducting without an open circuit or a short circuit.
$\mathrm{Y} \quad \mathrm{N}$
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J549-7 (+) and P/J549-8 (-) (BSD BSD 7.12 Flag 3). The voltage is approx. +5 VDC .
Y N
Replace the Tray Module PWB (PL 15.9)
Measure the voltage between the Tray Module PWB P/J549-9 (+) and GND (-) (BSD 7.12 Flag 2).

Activate the actuator of the Tray 3 Level Sensor (PL 15.6). The voltage changes.
Y N
Replace the Tray 3 Level Sensor (PL 15.6).
Replace the Tray Module PWB (PL 15.9).
Check the paper transport drives and repair as required (PL 14.3, PL 15.9).

## 078-500 Write to HCF-ROM error detection (During DLD method)

An error has occurred during the process of writing data to the HCF-ROM. (During DLD method)

## Procedure

Retry job. If retry failed, replace the HCF-ROM and perform VerUP operation on the DLD method again.

## 078-940 Tray Lift RAP

BSD-ON:7.11
There is a problem with one of the following:

- TTM Tray 2 Lift
- 2TM Tray 1, Tray 2, or Tray 3 Lift


## Procedure

The machine is equipped with a TTM tray module.
Y N
Tray 1 is the problem.
Y $N$
Tray 2 is the problem
N
Go to the 073-210 Tray 3 Lift Up RAP.
Go to the 072-210 Tray 2 Lift Up RAP
Go to the 071-210 Tray 1 Lift Up RAP.
Enter Component Control [072-001 or 002 Tray 2 Feed/Lift Motor ON]. The Tray 2 Feed/Lift Motor (PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
Y N
Check the connections of P/J220B, P/J661B and P/J549. P/J220B, P/J661B and P/ J549 are connected correctly.
Y $N$
Connect P/J220B, P/J661B and P/J549.
Remove the Tray 1 Feed/Lift Motor (PL 2.3) and the Tray 2 Feed/Lift Motor (PL 15.6).
Replace the Tray 2 Feed/Lift Motor with the Tray 1 Feed/Lift Motor.
Execute Component Control [072-001 or 002 Tray 2 Feed/Lift Motor ON]. The Tray 2
Feed/Lift Motor can be heard (the lifted paper plate drops when the tray is opened).
Y $N$
Return the Tray 1 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.11 Flag 1). The circuit between $P / J 220 B$ and $P / J 549$ is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 15.9).
Return the Tray 1 Feed/Lift Motor to its original position.
Replace the Tray 2 Feed/Lift Motor (PL 15.6).
Execute Component Control [072-103 Tray 2 Level Sensor]. Manually activate the Tray 2 Level Sensor (PL 15.6). The display changes.

## N

Check the connections of P/J101B, P/J661B and P/J549. P/J102A, P/J661B and P/ J409 are connected correctly.

```
N
Connect P/J101B, P/J661B and P/J549.
```

Check the wires between P/J101B and P/J549 for an open circuit or a short circuit (BSD 7.11 Flag 2 Flag 3). The wires between P/J101B and P/J549 are conducting without an open circuit or a short circuit.
$Y \quad \mathrm{~N}$
Repair the open circuit or short circuit.
Measure the voltage between the Tray Module PWB P/J549-22 (+) and P/J549-23 (-) (BSD 7.11 Flag 3). The voltage is approx. +5 VDC.

N
Replace the Tray Module PWB (PL 15.9).
Measure the voltage between the Tray Module PWB P/J549-24 (+) and GND (-) (BSD 7.9 Flag 2/7.11 Flag 2).
Activate the actuator of the Tray 2 Level Sensor (PL 2.3). The voltage changes.
N
Replace the Tray 2 Level Sensor (PL 15.6).
Replace the Tray Module PWB (PL 15.9).
Check the TTM paper lift components and repair as required (PL 15.3, PL 15.6, PL 15.9).

## 078-941 TTM Tray 3 Lift RAP

## BSD-ON:7.11

There is a problem with the TTM Tray 3 Lift.

## Procedure

Enter Component Control [073-001 or 002 Tray 3 Feed/Lift Motor ON]. The Tray 3 Feed/Lift Motor (PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).
$Y \quad \mathbf{N}$
Check the connections of P/J220B, P/J661B, P/J549. P/J220B, P/J661B, P/J549 are connected correctly.
Y N
Connect P/J220B, P/J661B, P/J549.
Remove the Tray 3 Feed/Lift Motor (PL 15.6) and the Tray 2 Feed/Lift Motor (PL 15.6).
Replace the Tray 3 Feed/Lift Motor with the Tray 2 Feed/Lift Motor.
Enter Component Control [073-001 or 002 Tray 3 Feed/Lift Motor ON]. The Tray 3 (2) Feed/Lift Motor (PL 15.6) can be heard (the lifted paper plate drops when the tray is opened).

N
Return the Tray 2 Feed/Lift Motor to its original position.
Check the wires between P/J220B and P/J549 for an open circuit or a short circuit (BSD 7.12 Flag 1). The circuit between J220B and J549 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Replace the Tray Module PWB (PL 15.9).
Return the Tray 2 Feed/Lift Motor to its original position.
Replace the Tray 3 Feed/Lift Motor (PL 15.6).
Check the installation of the Tray 3 Level Sensor (PL 15.6) and the operation of the actuator. The Tray 3 Level Sensor is installed correctly and the actuator works.
$Y$ N
Reinstall the Tray 3 Level Sensor (PL 15.6).
Enter Component Control [073-102 Tray 3 Level Sensor]. Manually actuate the Tray 3 Level Sensor (PL 15.6). The display changes.
Y N
Check the connections of P/J101B, P/J661B and P/J549. P/J101B, P/J661B and P/ J549 are connected correctly.
Y $N$
Connect P/J101B, P/J661B and P/J549.
Check the wires between P/J101B and P/J549 for an open circuit or a short circuit (BSD 7.12 Flag 2/Flag 3). The circuit between J101B and J549 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.

A B
Measure the voltage between the Tray Module PWB P/J549-7 (+) and P/J549-8 (-) (BSD 7.12 Flag 3). The voltage is approx. +5 VDC .

Y N
Replace the Tray Module PWB (PL 15.9).
Measure the voltage between the Tray Module PWB P/J549-9 (+) and GND (-) (BSD 7.12 Flag 2).

Activate the actuator of the Tray 3 Level Sensor (PL 15.6). The voltage changes.
Y $N$
Replace the Tray 3 Level Sensor (PL 15.6).
Replace the Tray Module PWB (PL 15.9).
Check the TTM paper lift components and repair as required (PL 15.3, PL 15.6, PL 15.9).

## 081-799 Registered Destination RAP

BSD-ON:17.1
The Fax Send destination telephone number is not registered in the Address Book.

## Initial Actions

Check the entries in the Address Book.
Check the Send destination telephone number and repeat the operation.

## Procedure

Pull out and insert the FCB PWB (PL 9.3) Switch on the power. The problem persists The problem persists.
Y N
Return to Service Call Procedures.
Check the connection of each FCB PWB (PL 9.3connector. The connectors are securely connected.
Y $N$
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Replace the FCB PWB (PL 9.3).

## 089-311 IOT Belt Home RAP

## BSD-ON:9.2

IBT Belt Home failed too long.

## Procedure

Check the IBT Belt Patch for scratches. The Patch is OK.
$\mathbf{Y} \quad \mathbf{N}$
Replace the IBT Belt (PL 6.2)
If the problem continues, replace the IBT Assembly (PL 6.1).

## 089-312 IOT Belt Home RAP

BSD-ON:9.2
IBT Belt Home failed too short.

## Procedure

Check the IBT Belt Patch for contamination. The Patch is OK.
Y N
Clean the Patch. If the problem continues, replace the IBT Belt (PL 6.2)
If the problem continues, replace the IBT Assembly (PL 6.1).

## 089-630 IOT Belt Speed RAP

IBT Belt speed failure.

## Procedure

Check the following for binding:

- Fuser/ Main Drive (BSD 4.1A, 4.1B)
- Drum/IBT Auger Drives (BSD 4.2A, 4.2B)
- Developer Drive (BSD 4.3A)
- Registration (BSD 8.7)
- 1st BTR (BSD 9.5)
- 2BTR (BSD 9.7)
- IBT Belt and Cleaning (BSD 9.8)
- Fuser (BSD 10.3)
- Exit Transportation (BSD 10.4)
- Duplexing (BSD 10.6)


## 089-631 Belt Slip RAP

BSD-ON:9.8
IBT Belt slippage.

## Initial Actions

Ensure that the IBT Belt tensioner is engaged.

## Procedure

Execute Component Control [042-001 Main Motor]. Check the IBT Belt for slipping. The IBT Belt is OK.
Y N
Check the IBT Belt Assemblies for contamination, binding, and/or wear. IBT Belt Assembly is OK.
$\mathbf{Y} \quad \mathrm{N}$
Replace the IBT Belt Assembly (PL 6.1).
Replace the IBT Belt (PL 6.2).
If the problem continues, replace the IBT Belt (PL 6.2). If the problem persists, replace the IBT Belt Assembly (PL 6.1).

## 089-632 IBT Belt Cleaner RAP

## BSD-ON:9.8/9.9

IBT Belt Cleaner Impact Failure.

## Procedure

Remove the IBT Cleaner Assembly and check the cleaner blade and auger area for impacted toner. The IBT Belt Cleaner is free of toner.
Y $\quad \mathbf{N}$
Clean the IBT Belt Cleaner Assembly. If the problem continues, replace the IBT Belt Cleaner (PL 6.1).

Check the Toner Waste area for impacted toner. The Waste Toner area is free of tone
Y N
Replace the Waste Toner Bottle (PL 4.1).
Check the Front Auger for impacted toner. Clean or replace as required (PL 6.1).

## 089-633 2nd BTR RAP

## BSD-ON:9.7

The 2nd BTR impacted Failure

## Procedure

Check the 2nd BTR, Backup Roll, and the Detact Saw for impacted toner. The 2nt BTR area is free of toner.

## Y $N$

Clean and/or replace the 2nd BTR Assembly (PL 2.7).
Check the 2nd BTR area for contamination, binding or wear. Repair or replace the 2nd BTR Assembly (PL 2.7).

## 091-313 Xero CRUM Communication RAP

 BSD-ON:9.1There is a failure within the Xero CRUM Control Logic on the MCU PWB.

## Procedure

Pull out and reinstall all the Drum Cartridge. The problem persists.
Y $N$
Return to Service Call Procedures
Replace the MCU PWB (PL 11.1).

## 091-400 Waste Toner Near Full RAP

BSD-ON:9.9
The Waste Toner Bottle is near full.

## Procedure

Check the contents level of the Waste Toner Bottle. The Waste Toner Bottle near full indication is correct.

## $Y \quad \mathrm{~N}$

Verify the condition of the circuit (BSD9.9) between the Waste Toner Bottle Full Sensor and MCU PWB. The circuit is free of damage.
Y N
Repair the circuit as required.
Ensure the Waste Toner Bottle is installed correctly. Then check Waste Toner Bottle Full Sensor operating voltage and output. The signal level voltage indicates the Waste Toner Bottle is near full.
Y N
Replace the MCU PWB (PL 11.1).
There is a problem with the sensor. Repair or replace the Waste Toner Full Sensor (PL 4.2).

There is no need for service at this time. Return to Service Call Procedures.

## 091-402 Drum Life Over RAP

The Drum Cartridge must be replaced.

## Procedure

Check the HSFI counter. The usage is correct for the life expectancy of the drum.
Y $\mathbf{N}$
There is no need for service at this time. Return to Service Call Procedures.
Replace the Drum Cartridge (PL 4.1).

## 091-441 Drum Life Near End of Life RAP

The Drum Cartridge must be replaced soon.

## Procedure

Check the HSFI counter. The usage is correct for the life expectancy of the drum.
Y N
There is no need for service at this time. Return to Service Call Procedures.
Replace the Drum Cartridge (PL 4.1).

## 091-910 Waste Toner Bottle Position RAP

 BSD-ON:9.9The Waste Toner Bottle is not in the correct position.

## Procedure

Check the installation of the Waste Toner Bottle. Waste Toner Bottle installation is correct.
Y $N$
Correct the installation problem by checking for damaged mounting points.
Verify the condition of the circuit, BSD9.9, between the Waste Toner Position Sensor and MCU PWB. The circuit is free of damage.
Y N
Repair the circuit as required.
Ensure the Waste Toner Bottle is installed correctly. Then check Waste Toner Bottle sensor operating voltage and output. The signal level voltage indicates the Waste Toner Bottle is correctly installed.
Y N
There is a problem with the sensor. Repair or replace the Waste Toner Position Sensor (PL 4.2).

Replace the MCU PWB (PL 11.1).

## 091-911 Waste Toner Full RAP

## BSD-ON:9.9

The Waste Toner Bottle is full.

## Procedure

Check the contents level of the Waste Toner Bottle. The Waste Toner Bottle is full. Y $\mathbf{N}$

Verify the condition of the circuit, BSD9.9, between the Waste Toner Bottle Sensor and MCU PWB. The circuit is free of damage.
Y N
Repair the circuit as required.
Ensure the Waste Toner Bottle is installed correctly. Then check Waste Toner Bottle Full Sensor operating voltage and output. The signal level voltage indicates the Waste Toner Bottle is full.
Y N
Replace the MCU PWB (PL 11.1).
There is a problem with the sensor. Repair or replace the Waste Toner Full Sensor (PL 4.2).

Replace the Waste Toner Bottle. If the problem persists, return to the beginning of the RAP.

## 091-912 Xerographics Drum Module Installation RAP

 BSD-ON:9.1/4.1The Xerographics Drum is not installed.

## Procedure

Check the installation of the Drum Cartridge (PL 4.1). The Drum Cartridge installation is correct.
Y $N$
Correct the installation (PL 4.1).
Verify the condition of the circuit between the Drum Cartridge Position Sensor and MCU PWB. The circuit is free of damage.
Y N
Repair the circuit as required.
Replace the MCU PWB (PL 11.1).

## 091-914 Xero CRUM Comm RAP

## BSD-ON:9.1

There is a failure with communication between the Xero CRUM and MCU PWB.

## Procedure

Pull out and reinstall the Xerographics Drum Module. The problem persists.
Y N
Return to Service Call Procedures.
Verify the connections and condition of the circuit between Xero CRUM and MCU PWB. The circuit is free of damage and the connections are good.

## Y N

Repair the damage as required
Check CRUM operating voltage. The operating voltage is correct.
Y $\mathbf{N}$
Check the circuit for damage. If the circuit is free of damage replace the MCU PWB (PL 11.1).

Enter diagnostics and verify NVM value for Xero CRUM data, location [751-010]. If NVM value indicates failure replace Xerographics Drum Module (PL 4.1) If NVM value indicates no failure, replace the MCU PWB (PL 11.1).

## 091-915 Xero CRUM Data RAP

BSD-ON:9.1
The Control Logic detected incorrect data on the Xero CRUM.

## Initial Actions

Check NVM location 740-047, for Geographic area:

- $\mathrm{NA} / \mathrm{EU}=3$
- DMO-E/W = 12
- All the World $=512$

Check NVM location 740-049, for Contact Type:

- $\quad$ Metered $=3$
- Sold = 2
- Neutral = 31


## Procedure

Pull out and reinstall the Xerographics Drum Module. The problem persists.
Y N
Return to Service Call Procedures.
An incorrect Xerographics Drum Module was just installed. Install the correct Xerographics Drum Module.

## 091-916 Xero CRUM Match RAP

## BSD-ON:9.1

The Control Logic detected mismatched data on the Xero CRUM.

## Initial Actions

Check NVM location 740-047, for Geographic area:

- $\mathrm{NA} / E \mathrm{E}=3$
- DMO-E/W = 12
- All the World = 512

Check NVM location 740-049, for Contact Type:

- Metered $=3$
- Sold = 2
- Neutral = 31


## Procedure

Pull out and reinstall the Xerographics Drum Module. The problem persists.
Y N
Return to Service Call Procedures.
An incorrect Xerographics Drum Module was installed. Verify the position of the Xerographics Drum Module. Install the correct Xerographics Drum Module.

## 091-921 Xerographics Drum Module Installation RAP BSD-ON:9.1/1.4

The Xerographics Drum Module is not correctly installed.

## Procedure

Check the installation of the Xerographics Drum Module (PL 4.1). The Xerographics Drum Module installation is correct.
Y $N$
Correct the installation problem by checking for damaged mounting points or similar problems (PL 4.1)

Verify the condition of the circuit between the Xero Interlock Switch and MCU PWB. The circuit is free of damage
Y N
Repair the circuit as required.

Replace the MCU PWB (PL 11.1).

## 091-935 Xero Drum Cartridge End of Life RAP

 BSD-ON:9.1It is time to replace the Xero Drum Cartridge.

## Initial Actions

- Power Off/On
- Reload the Xero Drum Cartridge.


## Procedure

Check the Xero Drum Cartridge for failure or foreign substances. There are no foreign substances and nothing has failed.

## Y $N$

Repair the failure and remove the foreign substances
Check the installation of the XERO CRUM PWB. The XERO CRUM PWB is installed correctly.
Y $N$
Install the XERO CRUM PWB correctly (PL 4.1).
Check the connection of the MCU PWB P/J407. P/J407 is connected correctly.
Y N
Connect P/J407.
Check the connection of the XERO CRUM PWB P/J142. P/J142 is connected correctly. Y N

Connect P/J142.
Check the wire between J407 and P142 for an open circuit or a short circuit (BSD 9.1). The wire is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between the MCU PWB J407-1 (+) and GND (-) (BSD 9.1). The voltage is approx. +5 VDC .
Y N
Replace the MCU PWB (PL 11.1).
Replace the Xero Drum Cartridge (PL 4.1) If the problem persists, replace the XERO CRUM PWB (PL 4.1) If the problem persists, replace the MCU PWB (PL 11.1).

## 092-310 ADC Sensor RAP

## BSD-ON:9.4B

There is a failure in the ADC Sensor circuit.

## Initial Actions

Replace the Black (K), Yellow (Y), Magenta (M), and/or Cyan (C) toner if empty (PL 5.2).
When NVM 752-094 is set to " 1 ", the NVM 752-121 needs to be cleared to " 0 ". When, NVM $752-121$ is cleared to " 0 ", NVM $752-094$ will be automatically cleared to " 0 ". Then, the fault code 092-310 can be cleared. For more information, go to GP 15.

## Procedure

Check for an Image Quality Defect. An Image Quality Defect is present.
Y N
Verify the condition of the circuit between the ADC Sensor and MCU PWB. The circuit is free of damage.
$Y \quad N$
Repair the circuit as required
Check the operating voltages between the ADC Sensor and the MCU PWB. The voltages are correct.
$Y \quad N$
Replace the MCU PWB (PL 11.1).
Replace the Sensor Bar Assembly (PL 11.1).
The defect is Low Image Density or Uneven Density.
Y $N$
The defect is Background
Y $N$
Verify the condition of the circuit between the ADC Sensor and MCU PWB. The circuit is free of damage.
Y $\mathbf{N}$
Repair the circuit as required.
Check the operating voltages between the ADC Sensor and the MCU PWB. The voltages are correct.
Y N
Replace the MCU PWB (PL 11.1).
Replace the Sensor Bar Assembly (PL 11.1).
Go to IQ 6 to troubleshoot IOT background.
Go to IQ 3 to troubleshoot Low Image Density or Uneven Density.

## 092-934 Print Count RAP

A run control error occurred counting prints.

## Procedure

If several 092-934 faults are logged, replace the MCU PWB (PL 11.1).

## 092-649 ADC Shutter Open RAP

BSD-ON:9.4A
The ADC Shutter failed to open.

## Procedure

Remove the Sensor Bar Assembly (PL 11.1). Check the operation of the shutter. If the shutter cannot be repaired, replace the Sensor Bar Assembly (PL 11.1).

092-650 ADC Shutter Close RAP
BSD-ON:9.4A
The ADC Shutter failed to close.

## Procedure

Remove the Sensor Bar Assembly (PL 11.1). Check the operation of the shutter. If the shutter cannot be repaired, replace the Sensor Bar Assembly (PL 11.1).

## 092-651 ADC Shutter Clean RAP

## BSD-ON:9.4A

There is an ADC Sensor Voltage level failure.

## Procedure

Remove the Sensor Bar Assembly (PL 11.1). Check the condition of the Sensor Bar Assembly. The ADC Assembly is free of damage.
Y N
Replace the Sensor Bar Assembly (PL 11.1).
Check the operating voltages between the ADC Sensor and the MCU PWB. The voltages are correct.
$\mathbf{Y} \quad \mathbf{N}$
Replace the MCU PWB (PL 11.1).
Replace the Sensor Bar Assembly (PL 11.1).

## 092-661 Temperature Sensor RAP

## BSD-ON:9.4A

There is a temperature sensor failure.

## Procedure

Check the operating voltages between the Temperature/Humidity Sensor and the MCU PWB. The voltages are correct.
Y $N$
Verify that the circuit is not damaged. If no damage is found, replace the MCU PWB (PL 11.1).

Replace the Temperature/Humidity Sensor (PL 11.1).

## 092-662 Humidity Sensor RAP

BSD-ON:9.4A
There is a humidity sensor failure.

## Procedure

Check the operating voltages between the Temperature/Humidity Sensor and the MCU PWB The voltages are correct.
$Y^{\mathrm{N}}$
Verify that the circuit is not damaged. If no damage is found, replace the MCU PWB (PL 11.1).

Replace the Temperature/Humidity Sensor (PL 11.1).

## 093-310 Rotary Position Failure

## BSD-ON: 9.3

The Rotary Assembly failed to stop at the predetermined position.

## Initial Actions

- Power OFF/ON


## Procedure

Manually move the Rotary Assembly (PL 5.1). Open the Front Cover (PL 12.1). Open the Toner Cartridge Door (PL 5.1). Engage the Rotary Shaft Lock (PL 5.1) manually move the Rotary Assembly in a clockwise direction. The Rotary Assembly moves in the clockwise direction.
Y $N$
Check the Rotary Assembly area for binding.
Enter Component Control [093-200] Rotary Home Position Sensor. Manually move the Rotary Assembly in a clockwise direction. The Display changes.
Y $N$
Measure the voltage between $\mathrm{P} / \mathrm{J} 409$ pins A 3 and A 1 . The voltage is approx. +5 VDC . Y N

Go to BSD 1.2A and troubleshoot the +5 VDC circuit.
Check the wiring of the Rotary Home Position Sensor. If the wiring is OK, replace the Rotary Home Position Sensor (PL 5.1). If the problem continues, replace the MCU PWB (PL 11.1).

Measure the voltage between the MCU PWB P/J411-5 (+) and GND (-) (BSD 9.3). The voltage is approx. +24VDC.
$Y \quad N$
Verify that fuse F3 on the MCU PWB is good (BSD 1.2A). Fuse F3 is good.
Y $\mathbf{N}$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the Power Unit P/J510-2 $(+)$ and GND (-) (BSD 1.2A). The voltage is approx. +24VDC.
$Y \quad \mathrm{~N}$
Replace the Power Unit (PL 11.1).
Check the +24 V wiring between P/J510 on the Power Unit and P/J400 on the MCU PWB for an open circuit or a short circuit. (BSD 1.2A). The wires are conducting without an open circuit or a short circuit.

## N

Repair the open circuit or short circuit.
Replace the MCU PWB (PL 11.1).
Replace the Rotary Motor (PL 5.1).

## 093-311 Rotary Assembly Failure

## BSD-ON: 9.3

The Rotary Assembly failed to start.

## Initial Actions

- Power OFF/ON


## Procedure

Manually move the Rotary Assembly (PL 5.1). Open the Front Cover (PL 12.1). Open the Toner Cartridge Door (PL 5.1). Engage the Rotary Shaft Lock (PL 5.1) manually move the Rotary Assembly in a clockwise direction. The Rotary Assembly moves in the clockwise direction.
Y N
Check the Rotary Assembly area for binding.
Enter Component Control [093-200] Rotary Home Position Sensor. Manually move the Rotary Assembly in a clockwise direction. The Display changes.
Y $\mathbf{N}$
Measure the voltage between P/J409 pins A3 and A1. The voltage is approx. +5VDC. Y N

Go to BSD 1.2A and troubleshoot the +5 VDC circuit.
Check the wiring of the Rotary Home Position Sensor. If the wiring is OK, replace the Rotary Home Position Sensor (PL 5.1). If the problem continues, replace the MCU PWB (PL 11.1).

Measure the voltage between the MCU PWB P/J411-5 (+) and GND (-) (BSD 9.3). The voltage is approx. +24VDC.
$\mathbf{Y} \quad \mathbf{N}$
Verify that fuse F3 on the MCU PWB is good (BSD 1.2A). Fuse F3 is good.
Y $N$
Replace the MCU PWB (PL 11.1).
Measure the voltage between the Power Unit P/J510-2 (+) and GND (-) (BSD 1.2A). The voltage is approx. +24VDC.
Y N
Replace the Power Unit (PL 11.1).
Check the +24 V wiring between P/J510 on the Power Unit and P/J400 on the MCU PWB for an open circuit or a short circuit. (BSD 1.2A). The wires are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Replace the MCU PWB (PL 11.1).
Replace the Rotary Motor (PL 5.1).

## 093-320 Developer Motor Failure RAP

 BSD-ON:4.3AThe Developer Motor is not rotating at the specified speed.

## Initial Actions

- Power OFF/ON
- Reload the Xero/Developer Cartridge (PL 4.1)


## Procedure

Execute Component Control [042-004 Developer Motor ON]. The Developer Motor can be heard.
$Y \quad N$
Go to the OF 5 (Developer Drive ASSY RAP).
Check the installation of the Developer Drive Assembly (PL 1.1). The Developer Drive Assembly is installed correctly.
Y N
Install the Developer Drive Assembly correctly.
Check the wire between P/J409 and P/J213 for an open circuit or a short circuit (BSD 4.3A). The wires are conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Manually rotate the Developer Motor rotor. It rotates smoothly.
Y N
Check for foreign substances that are interfering with operation or installation failure. Foreign substances or installation failure are found.
$Y \quad \mathrm{~N}$
Replace the Developer Drive Assembly (PL 1.1).
Remove the foreign substances that are interfering with operation and correct the installation failure.

Replace the Developer Drive Assembly (PL 1.1) If the problem persists, replace the MCU PWB (PL 11.1).

## 093-400 Black Toner Near Empty

Black Toner Cartridge is near empty

## Procedure

Check the following:

- Replace the Black Toner Cartridge if empty (PL 5.2)
- That the Black Toner Cartridge is inserted properly
- For Black Toner spills in the machine


## 093-406 Black Toner Pre-Near Empty

Black Toner Cartridge is Pre-near empty

## Procedure

Check the following:

- Replace the Black Toner Cartridge if empty (PL 5.2)
- That the Black Toner Cartridge is inserted properly
- For Black Toner spills in the machine


## 093-407 Y Toner Pre-Near Empty

Yellow Toner Cartridge is Pre-near empty

## Procedure

Check the following:

- Replace the Yellow Toner Cartridge if empty (PL 5.2)
- That the Yellow Toner Cartridge is inserted properly
- For Yellow Toner spills in the machine


## 093-408 M Toner Pre-Near Empty

Magenta Toner Cartridge is Pre-near empty

## Procedure

Check the following:

- Replace the Magenta Toner Cartridge if empty (PL 5.2)
- That the Magenta Toner Cartridge is inserted properly
- For Magenta Toner spills in the machine


## 093-409 C Toner Pre-Near Empty

Cyan Toner Cartridge is Pre-near empty

## Procedure

Check the following:

- Replace the Cyan Toner Cartridge if empty (PL 5.2)
- That the Cyan Toner Cartridge is inserted properly
- For Cyan Toner spills in the machine


## 093-414 Y Developer Housing is near End of Life

Y Developer Housing is near end of life.

## Procedure

Replace the Yellow Developer Housing (PL 5.1) (REP 4.1.1).
Go to Detailed Maintenance Activities and reset the Yellow Developer HFSI (954-831).

## 093-415 M Developer Housing is near End of Life

M Developer Housing is near end of life.

## Procedure

Replace the Magenta Developer Housing (PL 5.1) (REP 4.1.1).
Go to Detailed Maintenance Activities and reset the Magenta Developer HFSI (954-832).

## 093-416 C Developer Housing is near End of Life

C Developer Housing is near end of life.

## Procedure

Replace the Cyan Developer Housing (PL 5.1) (REP 4.1.1).
Go to Detailed Maintenance Activities and reset the Cyan Developer HFSI (954-833).

## 093-417 K Developer Housing is near End of Life

K Developer Housing is near end of life.

## Procedure

Replace the Black Developer Housing (PL 5.1) (REP 4.1.1).
Go to Detailed Maintenance Activities and reset the Black Developer HFSI (954-830).

## 093-418 Y Developer Housing is Over End of Life

Y Developer Housing is over end of life.

## Procedure

Replace the Yellow Developer Housing (PL 5.1) (REP 4.1.1).
Go to Detailed Maintenance Activities and reset the Yellow Developer HFSI (954-831).

## 093-419 M Developer Housing is Over End of Life

M Developer Housing is over end of life.

## Procedure

Replace the Magenta Developer Housing (PL 5.1) (REP 4.1.1).
Go to Detailed Maintenance Activities and reset the Magenta Developer HFSI (954-832).

## 093-420 C Developer Housing is Over End of Life

C Developer Housing is over end of life.

## Procedure

Replace the Cyan Developer Housing (PL 5.1) (REP 4.1.1).
Go to Detailed Maintenance Activities and reset the Cyan Developer HFSI (954-833).

## 093-421 K Developer Housing is Over End of Life

K Developer Housing is over end of life.

## Procedure

Replace the Black Developer Housing (PL 5.1) (REP 4.1.1).
Go to Detailed Maintenance Activities and reset the Black Developer HFSI (954-830).

## 093-423 Y Toner Near Empty

Yellow Toner Cartridge is near empty

## Procedure

Check the following:

- Replace the Yellow Toner Cartridge if empty (PL 5.2)
- That the Yellow Toner Cartridge is inserted properly
- For Yellow Toner spills in the machine


## 093-424 M Toner Near Empty

Magenta Toner Cartridge is near empty

## Procedure

Check the following:

- Replace the Magenta Toner Cartridge if empty (PL 5.2)
- That the Magenta Toner Cartridge is inserted properly
- For Magenta Toner spills in the machine


## 093-425 C Toner Near Empty

Cyan Toner Cartridge is near empty

## Procedure

Check the following:

- Replace the Cyan Toner Cartridge if empty (PL 5.2)
- That the Cyan Toner Cartridge is inserted properly
- For Cyan Toner spills in the machine


## 093-912 Black Toner Empty

Black Toner Cartridge is Empty.

## Initial Actions

Check the following:

- Replace the Black Toner Cartridge if empty (PL 5.2)
- Ensure that the Black Toner Cartridge is inserted properly
- For Black Toner spills in the machine


## Procedure

Check for Image Quality Defects. An Image Quality Defect is present.
Y N
Run ProCon On (ADJ 9.1.10) and follow the Corrective Actions.
The Defect is Low Image Density or Uneven Density.
Y N
The Defect is Background.
Y N
Run ProCon On (ADJ 9.1.10) and follow the Corrective Actions.
Go to IQ6 and troubleshoot IOT Background.
Go to IQ3 and troubleshoot Low Image Density or Uneven Density.

## 093-916 Toner K CRUM not in position Failure

 BSD-ON:9.1K Toner CRUM not in position Failure.

## Initial Actions

- Ensure that the Black Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-970 (Y), 093-971 (M), and 093-972 (C) are also present on the UI.
Y N
Replace the Black Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1),
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-924 Toner K Crum Communication Failure

## BSD-ON:9.1

K Toner CRUM Comm Failure.

## Initial Actions

- Ensure that the Black Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-940 (Y), 093-941 (M), and 093-942 (C) are also present on the UI.
Y N
Replace the Black Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-925 Toner K Crum Data Broken Failure

 BSD-ON:9.1
## Initial Actions

- Ensure that the Black Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-950 (Y), 093-951 (M), and 093-952 (C) are also present on the UI.
Y N
Replace the Black Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1),
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-926 Toner K Crum Data Mismatch Failure

BSD-ON:9.1

## Initial Actions

- Ensure a Black Toner Cartridge is installed in the Black position in the Rotary
- Ensure the correct toner cartridge for this product is installed
- Ensure that the Black Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-960 (Y), 093-961 (M), and 093-962 (C) are also present on the UI.
Y N
Replace the Black Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-940 Toner Y CRUM Communication Failure

 BSD-ON:9.1Y Toner CRUM Comm Failure.

## Initial Actions

- Ensure that the Yellow Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-924 (K), 093-941 (M), and 093-942 (C) are also present on the UI.
Y N
Replace the Yellow Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1),
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-941 Toner M CRUM Communication Failure

 BSD-ON:9.1M Toner CRUM Comm Failure.

## Initial Actions

- Ensure that the Magenta Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-924 (K), 093-940 (Y), and 093-942 (C) are also present on the UI. Y N

Replace the Magenta Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-942 Toner C CRUM Communication Failure

 BSD-ON:9.1C Toner CRUM Comm Failure.

## Initial Actions

- Ensure that the Cyan Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-924 (K), 093-940 (Y), and 093-941 (M) are also present on the UI.
Y N
Replace the Cyan Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1),
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-950 Toner Y CRUM Data Broken Failure

## BSD-ON:9.1

Y Toner CRUM Data Broken Failure.

## Initial Actions

- Ensure that the Yellow Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-925 (K), 093-951 (M), and 093-952 (C) are also present on the UI. Y N

Replace the Yellow Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-951 Toner M CRUM Data Broken Failure

BSD-ON:9.1
M Toner CRUM Data Broken Failure.

## Initial Actions

- Ensure that the Magenta Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-925 (K), 093-950 (Y), and 093-952 (C) are also present on the UI.
Y $\mathbf{N}$
Replace the Magenta Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1),
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-952 Toner C CRUM Data Broken Failure

## BSD-ON:9.1

C Toner CRUM Data Broken Failure.

## Initial Actions

- Ensure that the Cyan Toner Cartridge is seated correctly
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-925 (K), 093-950 (Y), and 093-951 (M) are also present on the UI.
Y N
Replace the Cyan Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-960 Toner Y CRUM Data Mismatch Failure

 BSD-ON:9.1Y Toner CRUM Data Mismatch Failure.

## Initial Actions

- Ensure a Yellow Toner Cartridge is installed in the Yellow position in the Rotary
- Ensure the correct toner cartridge for this product is installed
- Ensure that the Yellow Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-926 (K), 093-961 (M), and 093-962 (C) are also present on the UI.
Y N
Replace the Yellow Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-961 Toner M CRUM Data Mismatch Failure

## BSD-ON:9.1

M Toner CRUM Data Mismatch Failure.

## Initial Actions

- Ensure a Magenta Toner Cartridge is installed in the Magenta position in the Rotary
- Ensure the correct toner cartridge for this product is installed
- Ensure that the Magenta Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-926 (K), 093-960 (Y), and 093-962 (C) are also present on the UI. Y $\mathbf{N}$

Replace the Magenta Toner Cartridge (PL 5.2)
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-962 Toner C CRUM Data Mismatch Failure

 BSD-ON:9.1C Toner CRUM Data Mismatch Failure.

## Initial Actions

- Ensure a Cyan Toner Cartridge is installed in the Cyan position in the Rotary
- Ensure the correct toner cartridge for this product is installed
- Ensure that the Cyan Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-926 (K), 093-960 (Y), and 093-961 (M) are also present on the UI.
Y N
Replace the Cyan Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-970 Toner Y CRUM not in position Failure

 BSD-ON:9.1Y Toner CRUM not in position Failure.

## Initial Actions

- Ensure that the Yellow Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-916 (K), 093-971 (M), and 093-972 (C) are also present on the UI.
Y N
Replace the Yellow Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-971 Toner M CRUM not in position Failure

 BSD-ON:9.1M Toner CRUM not in position Failure.

## Initial Actions

- Ensure that the Magenta Toner Cartridge is seated correctly.
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-916 (K), 093-970 (Y), and 093-972 (C) are also present on the UI.
Y N
Replace the Magenta Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1),
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 093-972 Toner C CRUM not in position Failure

 BSD-ON:9.1C Toner CRUM not in position Failure.

## Initial Actions

- Ensure that the Cyan Toner Cartridge is seated correctly
- Ensure that the Toner Cartridge Door is closed.


## Procedure

Fault codes 093-916 (K), 093-970 (Y), and 093-971 (M) are also present on the UI. Y N

Replace the Cyan Toner Cartridge (PL 5.2).
Replace the Toner CRUM (Toner Cartridge Door) (PL 5.1).
If the fault codes are still present, replace the MCU PWB (PL 11.1).

## 094-320 2nd BTR Retract RAP

BSD-ON:9.7
There is a 2nd BTR retract failure.

## Procedure

Open the Left Hand Cover. Check that the Contact Arms (PL 6.2) are in the correct position. Verify the 2nd BTR is free to move (PL 2.7). Repair as required (PL 2.7).

## 094-321 2nd BTR Contact RAP

BSD-ON:9.7
There is a 2nd BTR contact failure.

## Procedure

Open the Left Hand Cover. Check that the Contact Arms (PL 6.2) are in the correct position. Verify the 2nd BTR is free to move (PL 2.7). Repair as required (PL 2.7).

## 094-322 2nd BTR Retract RAP

BSD-ON:9.7
There is a 2nd BTR retract failure.

## Procedure

Open the Left Hand Cover. Check that the Contact Arms (PL 6.2) are in the correct position. Verify the 2nd BTR is free to move (PL 2.7). Repair as required (PL 2.7).
Check the circuit of the 2nd BTR (BSD9.7). Repair as required (PL 2.7).

## 094-323 2nd BTR Contact RAP

BSD-ON:9.7
There is a 2nd BTR contact failure.

## Procedure

Open the Left Hand Cover. Check that the Contact Arms (PL 6.2) are in the correct position. Verify the 2nd BTR is free to move (PL 2.7). Repair as required (PL 2.7).
Check the circuit of the 2nd BTR (BSD9.7). Repair as required (PL 2.7).

## 094-417 IBT Near End of Life RAP

The IBT is near end of life.

## Procedure

Verify that the IBT is near end of life (Detailed Maintenance Activities). The IBT is near end of life.

## Replace the MCU PWB (PL 11.1).

There is no need for service at this time. Return to Service Call Procedures.

## 094-418 IBT Cleaner Near End of Life RAP

The IBT Cleaner is near end of life.

## Procedure

Verify that the IBT Cleaner is near end of life (Detailed Maintenance Activities). The

Y N
Replace the MCU PWB (PL 11.1)
There is no need for service at this time. Return to Service Call Procedures

## 094-419 2nd BTR Near End of Life RAP

The 2nd BTR is near end of life.

## Procedure

Verify that the 2nd BTR is near end of life (Detailed Maintenance Activities). The 2nd BTR is near end of life.
Y $\mathbf{N}$
Replace the MCU PWB (PL 11.1).
There is no need for service at this time. Return to Service Call Procedures.

## 094-420 IBT End of Life RAP

The IBT reached end of life.

## Procedure

Verify that the IBT Belt Assembly is at end of life (Detailed Maintenance Activities). The IBT Belt Assembly is at end of life.
Y N
Replace the MCU PWB (PL 11.1).
Replace the IBT Belt Assembly (PL 6.2).

## 094-421 IBT Cleaner End of Life RAP

The IBT Cleaner reached end of life.
Initial Actions
Replace the IBT Belt Assembly (PL 6.1)

## Procedure

Verify that the IBT Cleaner is at end of life (Detailed Maintenance Activities). The IBT Cleaner is at end of life.
$Y \quad N$
Replace the MCU PWB (PL 11.1).
Replace the IBT Cleaner (PL 6.2).

## 094-422 2nd BTR End of Life RAP

The 2nd BTR reached end of life.

## Initial Actions

Replace the IBT Belt Assembly (PL 6.1)

## Procedure

Verify that the 2nd BTR is at end of life (Detailed Maintenance Activities). The 2nd BTR is at end of life.
Y N
Replace the MCU PWB (PL 11.1).
Replace the 2nd BTR (PL 2.7).

## 102-356 Controller Software RAP

## BSD-ON:16.1

An internal Controller error shut down the processor.

## Procedure

Check the installation of the P-Kit/HDD-Kit/RAM boards.
Reload Software (ADJ 9.3.1).
Replace the ESS PWB (PL 11.2).

102-380 UI Control RAP

## BSD-ON:16.1

An internal UI controller error shut down the processor.
Initial Actions
Power Off/On

## Procedure

Reload Software (ADJ 9.3.1)
Replace the ESS PWB (PL 11.2).

## 102-381 UI Data Link RAP

BSD-ON:16.1
During transmission between the ESS and the UI an initialization send error or a retrieve error for receiving data was detected by the ESS

## Initial Actions

Power Off/On

## Procedure

Check the connection between the ESS and the UI.
Pull out and insert or replace the DIMM (PL 11.2).
Reload Software (ADJ 9.3.1).
Replace the ESS PWB (PL 11.2) If the problem persists, replace the Control Panel UI PWB (PL 13.2).

## 102-382 Application Layer Command RAP

 BSD-ON:16.1- The required parameters were not sent by the UI.
- A length error was detected in the variable length parameter.
- A confirmation message was not received within the specified time when a request message was sent to the UI.


## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
Reload Software (ADJ 9.3.1).
Replace the ESS PWB (PL 11.2).

116-220
A description is not available at time of publication.

## Procedure

A procedure is not available at time of publication.

## 116-310 ESS Font DIMM \#2 RAP

An error is detected in the ESS Font ROM DIMM \#2.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert the FCB PWB and the DIMM (PL 11.3).
If the problem persists replace the DIMM \#2 (PL 11.2).

## 116-311 ESS Font DIMM \#3 RAP

An error is detected in the ESS Font ROM DIMM \#3.
Initial Actions
Power Off/On

## Procedure

Pull out and insert the FCB PWB and the DIMM (PL 11.3),
If the problem persists replace the DIMM \#2 (PL 11.2).

## 116-312 HDD Encrypt Key RAP

An error in the HDD encryption key is detected during boot.

## Initial Actions

Power Off/On

## Procedure

Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-313 HDD Encrypt Setup RAP

The encryption key is set up but the HDD is not encrypted.

## Procedure

Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-314 Ethernet Address RAP

An Ethernet address error is detected.

## Initial Actions

Power Off/On

## Procedure

Check the EPROM on the ESS.
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-315 ESS DDR DIMM \#1 R/W Check RAP

An error is detected during the Read/Write operation of the ESS DDR DIMM \#1.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert the ESS DDR DIMM \#1.
If the problem persists, replace the ESS DDR DIMM \#1 (PL 11.2).

## 116-316 ESS DDR DIMM \#2 R/W Check RAP

An error is detected during the Read/Write operation of the ESS DDR DIMM \#2.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert the ESS DDR DIMM \#2.
If the problem persists, replace the ESS DDR DIMM \#2 (PL 11.2).

116-317 ESS ROM DIMM \#1 Check RAP
An error is detected when the standard ROM DIMM was checked.
Initial Actions
Power Off/On

## Procedure

Pull out and insert DIMM (PL 11.2).
If the problem persists replace the DIMM (PL 11.2).

## 116-318 ESS ROM DIMM \#2 Check RAP

An error is detected when the option ROM DIMM was checked.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert the DIMM (PL 11.2).
If the problem persists, replace DIMM (PL 11.2).

## 116-319 Controller UI Configuration

There is a configuration mismatch between the Controller ROM and the UI.

## Procedure

If the Controller or UI was just serviced, check the electrical connections.
If the problem occurred during customer usage, replace the Controller ROM.
If the problem persists, replace the UI PWB (PL 13.2).

## 116-321 System Software RAP

An internal controller error shut down the processor.

## Initial Actions

Power Off/On

## Procedure

Check the installation of the DDR DIMM.
Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-322 WebDAV S/W Fail RAP

Due to an error in software processing, subsequent processes cannot be performed.

## Procedure

Power Off/On

## 116-323 ESS NVRAM R/W Check RAP

An error is detected during the ESS PWB NVM Read/Write Check

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-324 System Controller RAP

An exceptional Controller error shut down the processor.

## Initial Actions

Power Off/On
116-325 ESS Fan RAP
The ESS fan failed.

## Procedure

Replace the ESS fan (PL 11.2).

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists, replace the ESS PWB (PL 11.2)

116-328 Controller Cache RAP
A cache failure is detected in the Controller.
Initial Actions
Power Off/On

## Procedure

Replace the ESS PWB (PL 11.2).

## 116-329 Serial Software RAP

A system call error is detected.
Initial Actions
Power Off/On

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-330 HDD File System RAP

The HDD Check detected an error during power on or the HDD is not formatted.
Initial Actions
Power Off/On

## Procedure

Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-331 Invalid Log Information RAP

A log error is detected.

## Initial Actions

Power Off/On

## Procedure

Remove the HD , switch off the power, reinstall the HD , and switch on the power.
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).
If the problem persists, replace the ESS PWB (PL 11.2).

116-332 ESS ROM RAP
An error is detected in the ESS ROM.
Initial Actions
Power Off/On

## Procedure

Reinstall or replace the DIMM (PL 11.2).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-333 LocalTalk Software RAP

A LocalTalk system call error caused a shutdown.

## Initial Actions

Power Off/On

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-334 ESS NVRAM Data Compare Fail RAP

System Cont detects [ESS-NVRAM with factory settings is installed] or [lllegal ESSNVRAM data is occurring].

## Initial Actions

Power Off/On

## Procedure

As powering OFF then ON after a detection of 116-334 will presumably cause other errors 124 $3 x x$ that indicate various data mismatches between the three locations, resolve one(s) following the corrective actions for the relevant Fault Code(s).

If 116-334 reoccurs despite powering OFF/ON, disconnect and reconnect the NV-RAM Board, then turn ON the power.

If the problem persists, replace the NV-RAM Board.
If the problem still persists, replace the mercury battery

## 116-335 HDD RAP

The control logic detected that the HDD failed.

## Initial Actions

Power Off/On

## Procedure

Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-336 HDD Access RAP

A failure is detected during HDD access
Initial Actions
Power Off/On

## Procedure

Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-337 SNTP Software RAP

An error in SNTP (Simple Network Transfer Processing) caused in internal shutdown.

## Initial Actions

Power Off/On

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-338 JBA RAP

A JBA (Job Based Accounting) processing error caused in internal shutdown.
Initial Actions
Power Off/On

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-340 Memory RAP

The DDR DIMM, Entry Buffer, and Work Area are insufficient.
Initial Actions
Power Off/On

## Procedure

Add memory (PL 11.2).
Disable the PostScript option.

## 116-341 ROM Version RAP

- Multiple incorrect versions of the ROM DIMM are installed.
- An invalid combination of ROM DIMMs are installed.


## Initial Actions

Power Off/On

## Procedure

NOTE: When installing multiple ROM DIMMs, it is necessary to match both the major versions and the minor versions.

Check the version of the ROM DIMM and if necessary, replace it with the correct version of the DIMM (PL 11.2).

## 116-342 Network Manager RAP

An internal shutdown occurred due to an error in processing SNMP (Simple Network Management Protocol).

## Initial Actions

Power Off/On

## Procedure

Reload Software (ADJ 9.3.1).

## 116-343 Main PWB IC RAP

An error is detected in the IC in the ESS PWB.

## Initial Actions

Power Off/On

## Procedure

Check the connection of each ESS PWB connector. The connectors are securely connected.
Y
Connect the connectors.
Switch on the power again. The problem persists.
$\mathbf{N}$
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2).

## 116-346 Formatter RAP

Errors are detected by the Formatter.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-348 Redirector RAP

A system function recall error is detected by the Redirector.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-349 SIF RAP

An error occurred using the SIF (Source Input Format) function.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-350 AppleTalk Software RAP

An internal shutdown occurred after an AppleTalk processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-351 Ether Talk Software RAP

An internal shutdown occurred after an Ether Talk processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-352 NetWare Software RAP

An internal shutdown occurred after a NetWare processing error

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-353 HDD Mechanical RAP

A mechanical error occurred in the HDD

## Initial Actions

Power Off/On

## Procedure

Check the connection of each ESS PWB connector. The connectors are correctly connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
$\mathbf{Y} \quad \mathbf{N}$
Return to Service Call Procedures.
Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-354 HDD Product RAP

An error occurred in the HDD.

## Initial Actions

Power Off/On

## Procedure

Check the connection of each ESS PWB connector. The connectors are correctly connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-355 Agent Software RAP

An internal shutdown occurred after an SNMP (Simple Network Management Protocol) processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-356 HDD Format RAP

HDD formatting failed.

## Initial Actions

Power Off/On

## Procedure

Check the connection of each ESS PWB connector. The connectors are correctly connected.
$\mathbf{Y}^{\mathbf{N}}$
Connect the connectors.
Turn on the power again. The problem persists.
N
Return to Service Call Procedures.
Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-357 PostScript RAP

An internal shutdown occurred after a processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-358 Salutation Software RAP

An internal shutdown occurred after a Salutation processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-359 Software RAP

An internal shutdown occurred after a processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-360 SMB Software RAP

An internal shutdown occurred after a SMB (Server Message Block) processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-361 Spool HDD RAP

The controller spool detected an error during HDD access.

## Initial Actions

Power Off/On

## Procedure

Check the HDD electrical connections (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 9.2).

## 116-362 SSDP Software RAP

An internal shutdown occurred after an SSDP (Simple Service Discovery Protocol) processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-363 Print Service Software RAP

An internal shutdown occurred after an SNMP processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-364 Timer RAP

A timer failure is detected in the ESS PWB.

## Initial Actions

Power Off/On

## Procedure

Check the connection of each ESS PWB connector. The connectors are correctly connected.
Y $N$
Connect the connectors.
Turn on the power again. The problem persists.
N
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2).

## 116-365 Spool RAP

An internal shutdown occurred after an SPL processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-366 Software Report RAP

An internal shutdown occurred after a reporting error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1)
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-367 Parallel Software RAP

An internal shutdown occurred after a processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-368 Dump Print RAP

An internal shutdown occurred after a processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1)
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-370 XJCL RAP

An internal shutdown occurred after a XJCL (X Job Control Language) processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-371 PCL Decomposer Software RAP

An internal shutdown occurred after a PCL (Printer Command Language) processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-372 Formatter RAP

An internal shutdown occurred after a processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-373 Dynamic DNS Software RAP

An internal shutdown occurred after a DDNS (Dynamic Domain Name System) processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2)

## 116-374 Auto Switch RAP

An internal shutdown occurred after a processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-375 Formatter RAP

A response such as system function recall error is detected.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1)
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-376 Port 9100 Software RAP

An internal shutdown occurred after a processing error.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-377 Video DMA RAP

A Video DMA (Direct Memory Access) failure is detected.

## Initial Actions

Power Off/On

## Procedure

Reinstall or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-378 Controller Software RAP

An internal shutdown occurred after a processing error.

## Initial Actions

Power Off/On

## Procedure

Reinstall or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-379 Controller Software RAP

An internal shutdown occurred after an MCC processing error.

## Initial Actions

Power Off/On

## Procedure

Reinstall or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-380 ESS Font ROM DIMM \#1 RAP

An error is detected when the Font ROM DIMM \#1 was checked.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert the Printer PWB (PL 11.2) and the PS DIMM (PL 11.2) Switch on the power. The problem persists.
Y $\quad \mathbf{N}$
Return to Service Call Procedures.
Check the connection of each ESS PWB connector. The connectors are correctly connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
Y $\mathbf{N}$
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2)
If the problem persists, replace the Printer PWB (PL 11.2)
If the problem persists, replace the PS DIMM (PL 11.2).

## 116-381 ABL Initialize RAP

Corrupted data is detected in the ABL (Address Book Library).

## Initial Actions

Power Off/On

## Procedure

Check the connection of each ESS PWB connector. The connectors are correctly connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
$Y \quad \mathbf{N}$
Return to Service Call Procedures.
Clear the ESS NVM. (Perform this only after explaining to the user the purpose of clearing recipient information.)
If the problem persists replace the ESS PWB (PL 11.2).

## 116-382 ABL Initialize RAP

HDD access by the ABL (Address Book Library) failed.

## Initial Actions

Power Off/On

## Procedure

Check the connection of each ESS PWB connector. The connectors are securely connected.
Y N
Connect the connectors.
Switch on the power again. The problem persists.
Y $N$
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2)
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-383 PIT Lib Failure RAP

(1) It was detected that the Image Extension Kit (Ama + toto board) was not installed on the controller board during job execution.
(2) An Ama + toto board failure was detected during job execution.
(3) An HDD access error was detected during job execution.

* Note that although 016-231 is detected during power ON, this fail is a "job execution detection" and has a different timing.


## Procedure

(1) (2) After turning the power OFF then ON, check the panel top right display to see whether 016-231 has occurred, without this error $(=116-383)$ occurring.

If 016-231 has occurred, perform the corrective actions for 016-231.
If the error does not occur, proceed to (3) for the HDD access error.

## 116-385 IDC Software RAP

An internal shutdown occurred after an IDC (scripting language) processing error.

## Initial Actions

Power Off/On

## Procedure

Reinstall or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-388 MCC RAP

The control logic detected that the HDD is not installed during an MCC operation (Mail Contents Creator).

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the HDD (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-389 RAM Install RAP

The control logic detected that the required RAM capacity is not installed or available.

## Initial Actions

Power Off/On

## Procedure

Reinstall or replace the DIMM (PL 11.2).
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-390 ROM NVM Mismatch RAP

Incompatible versions of the standard ROM and NVM are detected.

## Procedure

If instructions are listed on the UI perform them.
If no instructions are listed on the UI Follow the LCD display and initialize the NVM.

## 116-391 Country Code RAP

An illegal country code is set.

## Procedure

Perform GP 7 Country Code Setting.

## 116-395 USB Software RAP

There is an internal shutdown due to a USB (Universal Serial Bus) related error.
Initial Actions
Power Off/On

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-399 Initialization RAP

Initialization exceeded 10 minutes.

## Initial Actions

Power Off/On

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists, replace the ESS PWB (PL 11.2).

## 116-701 Memory Duplex RAP

2 Sided printing requires more memory.
Initial Actions
Power Off/On

## Procedure

If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-702 Substitute Font RAP

The print function is using a substitute font.
Initial Actions
Power Off/On

## Procedure

No action necessary.

## 116-703 PostScript Language RAP

There is an error in PostScript grammar interpretation or language interpretation.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 116-710 HP-GL/2 Memory Overflow RAP

There is a memory overflow in the HP-GL/2 (Hewlett Packard printer control language)

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the HDD (PL 11.2).
Ask customer to cancel and rerun the job.

## 116-711 Size/Orientation Mismatch RAP

In overlay mode the PLW form is different from the size/orientation of the paper.

## Procedure

Ask customer to check setups so that the paper is the same size and orientation as the overlay.

## 116-712 Form Registration RAP

Form/logo data registration is not possible due to insufficient RAM disk or HDD capacity.

## Initial Actions

Power Off/On

## Procedure

Ask customer to delete unused or unnecessary forms.
Perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-713 HDD Job Full RAP

The job output was split into batches when HDD capacity was reached.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job
Perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-714 HP-GL/2 Command RAP

There is a command error in the HP-GL/2 (Hewlett Packard printer control language)

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists check the electrical connections on the HDD (PL 11.2).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-715 Max Form to PLW Registered RAP

PLW form data registration was not possible because of the restriction on the number of forms
Initial Actions
Power Off/On

## Procedure

Ask customer to check the registered forms using the UI utility and delete the forms that are unnecessary.

If the problem persists delete forms that are not required by the print command.

## 116-718 Selected PLW Form Not Registered RAP

The specified form is not registered.

## nitial Actions

Power Off/On

## Procedure

Use a registered form or register the required form.

## 116-720 PCL Memory RAP

The PCL Printer Control Language) Memory capacity is insufficient.
Initial Actions
Power Off/On

## Procedure

Do not start up the ports that are unnecessary. Adjust the various Buffer Memory sizes. Add additional memory.

## 116-725 The log image storage area full RAP

With the system data "Level of Ensuring Log Image Creation" set to "Low," the log image storage area on the disk is full.

## Procedure

Rerun the job.
If the situation is the same despite some re-attempts, delete unnecessary documents saved in the device.

## 116-737 Registration RAP

Registration of user defined data (external characters, patterns, etc.) lacks RAM capacity.

## Initial Actions

Power Off/On

## 116-738 Overlay Size Orientation RAP

The drawing size/orientation of the form is different from the size/orientation of the paper.

## Procedure

Ask customer to check setups so that the paper is the same size and orientation as the overlay.

## Procedure

Refer customer to User Guide heading Data Encryption. Deleting registered user defined data will make additional memory available.

## 116-739 Form/Logo Capacity RAP

Form/logo registration was not possible because of insufficient RAM disk or HDD capacity.

## Initial Actions

Power Off/On

## Procedure

Ask customer to check the registered forms/logos using the Operation Panel utility, delete the forms/logos that are unnecessary.

Refer customer to User Guide heading Data Encryption to check RAM usage.
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the HDD (PL 11.2).

## 116-740 Arithmetic RAP

The number calculated in the interpreter exceeded the limit value.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 116-741 Maximum Forms Data Register RAP

The large quantity of forms put a limit on form data registration.

## Initial Actions

Power Off/On

## Procedure

Ask customer to check the registered forms using the UI utility and delete the forms that are unnecessary.

If the problem persists Ask customer to delete forms that are not required by the print command.

## 116-742 Max Logo Registered RAP

The number of logo data registrations is exceeded.

## Procedure

Ask customer to check the registered logos using the UI utility and delete any unused logos.
If the problem persists delete logos that are not required by the print job.

## 116-743 Form/Logo Size Overflow RAP

The received data (form/logo) exceeds the registered buffer size
Initial Actions
Power Off/On

## Procedure

Ask customer to increase the size of the Form Registration Area using the UI.
If the problem persists install the HDD (PL 11.2).

## 116-745 ART Command RAP

The decompressor detected grammar or other errors when comparing check values.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 116-746 Selected Form RAP

The selected form is not registered.

## Procedure

Ask customer to use a registered form or register the required form.

## 116-747 Invalid Page Margin RAP

Subtracting the paper margin from the valid coordinate area results in a negative value.

## Procedure

Ask customer to reset the margins setup.

116-748 Page Image Data RAP
Drawing data does not exist in the page data.
Initial Actions
Power Off/On

## Procedure

Ask customer to cancel and rerun the job.

## 116-749 PostScript Font RAP

The specified font is not found in the ROM or the HDD.
Initial Actions
Power Off/On

## Procedure

The font name specified in JIS is set.

116-752 Print Job Ticket Description Warning RAP
PDF Print Job Ticket description warning.

## Procedure

Ask customer to cancel and rerun the job.

116-771 Invalid JBIG Parameter DL Fixed RAP
An incorrect JBIG parameter DL was automatically corrected.
Initial Actions
Power Off/On

## Procedure

No action necessary.

116-772 Invalid JBIG Parameter D Fixed RAP
An incorrect JBIG parameter D was automatically corrected
Initial Actions
Power Off/On

## Procedure

No action necessary.

116-773 Invalid JBIG Parameter P Fixed RAP
An incorrect JBIG parameter $P$ was automatically corrected.
Initial Actions
Power Off/On

## Procedure

No action necessary.

116-774 Invalid JBIG Parameter YD Fixed RAP
An incorrect JBIG parameter YD was automatically corrected.
Initial Actions
Power Off/On

## Procedure

No action necessary.

116-775 Invalid JBIG Parameter LO Fixed RAP
An incorrect JBIG parameter LO was automatically corrected.
Initial Actions
Power Off/On

## Procedure

No action necessary.

116-776 Invalid JBIG Parameter MX Fixed RAP
An incorrect JBIG parameter MX was automatically corrected.
Initial Actions
Power Off/On

## Procedure

No action necessary.

116-777 Invalid JBIG Parameter MY Fixed RAP
An incorrect JBIG parameter MY was automatically corrected.

## Initial Actions

Power Off/On

## Procedure

No action necessary.

116-778 Invalid JBIG Par VLength Fixed RAP
An incorrect JBIG parameter VLENGTH was automatically corrected.
Initial Actions
Power Off/On

## Procedure

No action necessary.

## 116-780 Attached Document RAP

There was an error in the document attached to the E-mail to XXX.

## Initial Actions

Power Off/On

## Procedure

No action necessary.

## 116-790 Stapling Canceled RAP

BSD-ON:12.6
When Staple was specified, there were no staples.

## Initial Actions

Power Off/On

## Procedure

Execute Component Control [012-242 Low Staple Sensor]. Install and remove the Staple Pin Cartridge. The display changes.
Y N
Check the Staple Pin Cartridge for failure or foreign substances. There are no foreign substances and nothing has failed.

## Y N

Repair the failure and remove the foreign substances.
Check the connections of $P / J 8818$ and $P / J 8852$. $P / J 8818$ and $P / J 8852$ are connected correctly.
Y N
Connect P/J8818 and P/J8852.
Check the wire between J 8818 and J 8852 for an open circuit or a short circuit (BSD 12.6). The wire between J8818 and J8852 is conducting without an open circuit or a short circuit.
Y $N$
Repair the open circuit or short circuit.
Measure the voltage between the Finisher PWB P/J8852-1 (+) and GND (-) (BSD 12.6 Flag 2). The voltage is approx. +5VDC.
$Y \quad N$
Replace the Finisher PWB (PL 17.12).
Measure the voltage between the Finisher PWB P/J8852-4 (+) and GND (-) (BSD 12.6 Flag 3). Install and remove the Staple Pin Cartridge. The voltage changes.
Y $\mathbf{N}$
Replace the Finisher PWB (PL 17.12).
Replace the Staple Assembly (PL 17.8) If the problem persists, replace the Finisher PWB (PL 17.12).

Replace the Finisher PWB (PL 17.12) If the problem persists, replace the MCU PWB (PL 11.1).

## 121-310 EPSV-Accessory Communication HDD RAP

Transmission between the EP-SV and the accessories failed.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connectors on the HDD (PL 11.2)
If the problem persists perform Hard Disk Diagnostic Program If the problem persists replace the EP-SV.
If the problem persists install or replace the EPSV-IF board (PL 11.2).
If the problem persists replace the EP accessory.

## 121-333 EPSV-EP M/C Communication HDD RAP

Transmission between the EP-SV and the machine failed.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connectors on the HDD (PL 11.2)
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists reinstall or replace the EPSV-IF board (PL 11.2).
If the problem persists replace the EP accessory.
If the problem persists replace the EP-SV.

## 121-334 EPSV Login HDD RAP

Verification of the login information in WAKE UP ANSWER resulted in an error.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connectors on the HDD (PL 11.2)
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists reload Firmware (ADJ 9.3.1).
If the problem persists reinstall or replace the EPSV-IF board (PL 11.2).
If the problem persists pull out and insert or replace the DDR DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).
If the problem persists replace the EP-SV.

## 121-335 EPSV Wake Up Answer HDD RAP

The WAKE UP ANSWER cannot be received.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connectors on the HDD (PL 11.2)
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists pull out and insert or replace the DDR DIMM (PL 11.2).
If the problem persists reinstall or replace the EPSV-IF board (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).
If the problem persists replace the EP-SV.

121-336 Unknown EP Accessory RAP
The EP related accessory type was unknown in WAKE UP ANSWER
Initial Actions
Power Off/On

## Procedure

Replace the EP accessory.

## 121-337 EP Accessory Self Diagnostic HDD RAP

Self-diagnostic of the EP related accessories in WAKE UP ANSWER resulted in an error.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the HDD (PL 11.2)
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the EP accessory.

## 121-338 EPSV Answer Time Out RAP

Answers other than wake up answer from the EP-SV cannot be received.

## Initial Actions

Power Off/On

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists pull out and insert or replace the DDR DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 121-339 Changed Price Table RAP

With the machine turned on, unit price information was changed.

## nitial Actions

Power Off/On

## Procedure

Ask customer to verify the pricing information.

## 121-340 EP Accessory Mismatch RAP

The combination of accessories that are installed does not match the specifications.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the HDD (PL 11.2)
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists reinstall or replace the EPSV-IF board (PL 11.2).
If the problem persists pull out and insert or replace the DDR DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 121-350 EPSV Logic HDD RAP

A fatal error was detected.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the HDD (PL 11.2) If the problem persists reload Software (ADJ 9.3.1).
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists reinstall or replace the EPSV-IF board (PL 11.2).
If the problem persists pull out and insert or replace the DDR DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

121-370 EP-DX RAP
An error was detected.
Initial Actions
Power Off/On

## Procedure

Replace the ESS PWB (PL 11.2)

## 123-203 UI Controller RAP

The send request queue is full.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-207 Communication Manager Target RAP

A mailbox operations value is incorrect.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-209 Controller UI Communication RAP

An incorrect check value is received during Controller UI Communications.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-310 Send Queue RAP

The upper limit of the processing capability for sending data from the UI to the Controller was exceeded.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-311 Receive Queue RAP

The data received from the Controller exceeded the upper limit of the processing capability in the UI.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-317 Receive Message Queue RAP

The data received from the Controller exceeded the upper limit of the processing capability in the UI.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-318 Receive Finish Queue RAP

The data received from the Controller exceeded the upper limit of the processing capability in the UI.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1)
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-322 UI Target RAP

Serial transmission failed.

## nitial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-323 UI Address RAP

Serial transmission failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-325 Object Creation RAP

The specified object could not be created due to UI software failure and a setting or specification error.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-326 Memory Overflow RAP

The UI software failed and memory capacity is exceeded.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-327 Button Overflow RAP

The UI software failed and memory requirements exceeded the upper limit.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-328 UI Internal Range RAP

UI software failure and a coordinate value outside the range of the display screen is detected.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-329 UI Coordinates RAP

UI software failure and a coordinate value that cannot be displayed is detected.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2)

## 123-332 Interface Parameter RAP

The UI software failed and an incorrect parameter was received by the DM-CP driver interface.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-333 Interface Communication RAP

The system detected that transmission with the Control Panel could not be established
The H/W connection in the UI is faulty and the internal connection isn't detected.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-337 Frame Data RAP

The UI software failed and an incorrect data type value is detected.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-341 Event Queue RAP

The UI software failed with a full event queue.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-342 Event Queue RAP

The UI software failed with an empty queue

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-343 Invalid Class RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-344 Invalid Type RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-345 Timer Queue Full RAP

## The UI software failed an event timer.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-346 Invalid Timer Number RAP

The UI software failed a timer routine.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-350 Privilege Command RAP

The UI software failed a privilege commend.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-362 Object RAP

The UI software failed with no object definition.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-368 UI Memory RAP

There is insufficient memory or the connection failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-369 Interface Value RAP

The UI software failed with an invalid interface value.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-370 Interface Length RAP

There is an error in the parameter sent from the Controller.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-371 Interface Parameter RAP

There is an error in the parameter sent from the Controller.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-372 Interface Sequence RAP

The initialization command from the Controller was not sent within the specified time.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-373 Channel RAP

There is an error in the channel sent from the Controller.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-374 User Job ID RAP

There is an error in the Job ID parameter sent from the Controller.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-375 Internal Resource RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-376 Internal Memory RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-377 UI Timer RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-378 Interface Format RAP

There is an error in the data format sent from the Controller.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-379 Dispatch RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-380 Copy Interface RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-381 Fax Interface RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-382 Scanner Interface RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-383 Report Interface RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-384 Server Access RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-385 Service Object RAP

There is an invalid service object overflow failure.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-386 Service Object RAP

There is an invalid service object attribute failure.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-387 Service Object RAP

There is an invalid service object attribute failure.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-388 Attribute RAP

The UI software failed attribute control.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-389 UI Comparator RAP

The UI software failed comparator management.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-390 Job Parameter RAP

The Ul software failed job parameter control.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-391 Job Parameter RAP

The UI software failed job parameter control

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-392 Auditron RAP

The UI software failed auditron control.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-393 UI Compiling RAP

The UI software failed a compiler function.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-394 File Access RAP

The UI software failed a file access routine.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-395 UI NVM RAP

The UI software failed an NVM access routine

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-396 UI Software RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-397 UI Manager RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-398 Release Queue RAP

The UI software failed a full queue release.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-399 UI Internal RAP

The UI software failed.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 123-400 Internal Interface RAP

There is insufficient memory capacity or an internal error or invalid interface sequencing or a corrupt parameter was entered.

## Initial Actions

Power Off/On

## Procedure

Disconnect and reconnect the electrical connections on the UI PWB (PL 13.2) and P/J388 on the ESS PWB (PL 11.2)

If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the UI PWB (PL 13.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 124-310 Product Designation RAP

 BSD-ON:3.6There is an error in the product designation nomenclature.

## Procedure

Perform GP 4 Replacing Billing PWBs.

124-311 Product Serial Number RAP BSD-ON:3.6

There is an error in the product serial number.

## Procedure

Perform GP 4 Replacing Billing PWBs.

124-312 Machine Codes Mismatch RAP BSD-ON:3.6

The machine codes do not match.

## Procedure

Perform GP 4 Replacing Billing PWBs.

124-313 Serial Number RAP
BSD-ON:3.6
The serial numbers did not match.

## Procedure

Perform GP 4 Replacing Billing PWBs.

## 124-314 IOT Speed RAP

The IOT is not running at the correct speed.

## Procedure

Check the following for binding:

- Fuser/ Main Drive Controls: BSD 4.1, 4.1B
- Registration: BSD 8.7
- Xerographics: BSD 9.3, 9.7, 9.8
- Fusing and Transportation: BSD 10.1, 10.5,10.6


## 124-315 Serial Number Mismatch RAP

The Serial Numbers are not in sync.

## Initial Actions

Power Off/On

## Procedure

Go to GP 4.

## 124-316 Product Mode RAP

## BSD-ON:3. 6

There is an error in product mode of operation.

## Procedure

Perform GP 4 Replacing Billing PWBs.
If the problem persists replace the MCU PWB (PL 11.1)
If the problem persists replace the ESS PWB (PL 11.2).

## 124-317 All Product Mode RAP

 BSD-ON:3.6There is an error in all modes of product operation.

## Procedure

Perform GP 4 Replacing Billing PWBs.
If the problem persists replace the MCU PWB (PL 11.1)
If the problem persists replace the ESS PWB (PL 11.2).

## 124-318 Product Type Software Key RAP

 BSD-ON:3.6There is a mismatch between the software key and the type of product.

## Procedure

Perform GP 4 Replacing Billing PWBs.
If the problem persists replace the MCU PWB (PL 11.1)
If the problem persists replace the ESS PWB (PL 11.2).

## 124-319 All Product Types Software Key RAP

 BSD-ON:3.6There is a mismatch between the software key and any type of product.

## Procedure

Perform GP 4 Replacing Billing PWBs.
If the problem persists replace the MCU PWB (PL 11.1)
If the problem persists replace the ESS PWB (PL 11.2).

## 124-320 EPROM RAP

BSD-ON:16.1
A write error occurred in the ESS PWB SEEPROM.

## Procedure

Replace the ESS PWB (PL 11.2).

## 124-321 Backup SRAM RAP

## BSD-ON:3.6

A failure occurred when setting the $M / C$ serial number.

## Procedure

Check the connection of each ESS PWB (PL 11.2) and FCB PWB (PL 11.3) connector. The connectors are securely connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
$\mathbf{Y} \quad \mathbf{N}$
Return to Service Call Procedures.
Perform GP 4 Replacing Billing PWBs.
If the problem persists replace the ESS PWB (PL 11.2)
If the problem persists replace the FCB PWB (PL 11.3).

124-322 Software Key RAP BSD-ON:16.1

There is a software key mismatch.

## Procedure

Perform GP 4 Replacing Billing PWBs.
If the problem persists replace the ESS PWB (PL 11.2).

124-323 Software Key Registration RAP BSD-ON:16.1

There is a software key registration failure.

## Procedure

Perform GP 4 Replacing Billing PWBs.
If the problem persists replace the ESS PWB (PL 11.2).

## 124-324 All Billings Mismatch RAP

 BSD-ON:16.1The billing counters in multiple locations are all different.

## Procedure

Power OFF/ON. If the problem persists, perform the following:
Replace the MCU PWB (PL 11.1).
If the problem persists replace the ESS PWB (PL 11.2).

## 124-325 Billing Restoration RAP

## BSD-ON:3.6

Billing counter auto repair failed.

## Procedure

Execute Serial Number/Billing Meter Data [Billing Data Matching \& Serial No Setting]. Compare the 3 serial numbers The 3 serial numbers match.
Y $\quad \mathbf{N}$
Perform GP 4 Replacing Billing PWBs.
Replace the MCU PWB (PL 11.1)
If the problem persists replace the ESS PWB (PL 11.2).

## 124-333 ASIC RAP

## BSD-ON:16.1

A decompression error occurred in an ESS ASIC (Application Specific Integrated Circuit).

## Initial Actions

Power Off/On

## Procedure

Pull out and insert the DIMM (PL 11.1) Switch on the power. The problem persists.
Y N
Return to Service Call Procedures.
Check the connection of each ESS PWB connector. The connectors are securely connected.

Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2)
If the problem persists replace the DDR DIMM (PL 11.2).

124-334 Standard Font ROM RAP BSD-ON:16.1

An error was detected in the standard Built-In Font ROM.

## Procedure

Replace the PS DIMM (PL 11.2)

## 124-335 Font ROM RAP

## BSD-ON:16.1

The Font ROM could not be detected.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert the Printer PWB (PL 11.1) and the DIMM (PL 11.2) Switch on the power. The problem persists.
$Y \mathrm{~N}$
Return to Service Call Procedures.
Check the connection of each ESS PWB connector. The connectors are securely connected.
Y $\mathbf{N}$
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures
Replace the PS DIMM (PL 11.2).
If the problem persists replace the Printer PWB (PL 11.2)
$f$ the problem persists replace the ESS PWB (PL 11.2)

## 124-337 ESS Standard RAM RAP

## BSD-ON:16.1

An error was detected in the ESS Built-In Standard RAM

## Procedure

Reinstall or replace the DDR DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 124-338 Duplicate Font ROMs RAP

 BSD-ON:16.1The system detected that a duplicate Font ROM is installed.

## Procedure

Pull out and insert or replace the PS DIMM (PL 11.2).

124-339 ROM DIMM Mismatch RAP BSD-ON:16.1

The system detected that an incorrect ROM DIMM is installed.

## Procedure

Check that the prescribed DDR DIMM (PL 11.2) is installed.

## 124-340 CRUM Market RAP

## BSD-ON:16.1

There is a general CRUM control failure.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors securely connected.
Y $\quad \mathbf{N}$
Connect the connectors.
Turn on the power again. The problem persists.
Y $N$
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2)
If the problem persists replace the MCU PWB (PL 11.1)

## 124-341 CRUM Market MCU RAP

CRUM control failed on the MCU.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors ar securely connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Perform GP 4, repair the problem by master SYS1.
If the problem persists, replace the MCU PWB (PL 11.1).

## 124-342 CRUM Market System 1 RAP

CRUM control failed in system 1.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The securely connected.
$Y \quad \mathbf{N}$
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Perform GP 4, repair the problem by master MCU.
If the problem persists. replace the ESS PWB (PL 11.2).

## 124-343 CRUM Market System 2 RAP

CRUM control failed in system 2.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors ar securely connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Perform GP 4, repair the problem by master SYS2.
If the problem persists, replace the ESS PWB (PL 11.2).

## 124-350 CRUM OEM RAP

OEM (Original Equipment Manufacturer) CRUM control failed.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The securely connected.
$Y \quad \mathbf{N}$
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2)
If the problem persists replace the MCU PWB (PL 11.1).

## 124-351 CRUM OEM MCU RAP

OEM (Original Equipment Manufacturer) CRUM control failed on the MCU.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors are securely connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Perform GP 4, repair the problem by master SYS1.
If the problem persists, replace the MCU PWB (PL 11.1).

## 124-352 CRUM OEM System 1 RAP

OEM (Original Equipment Manufacturer) CRUM control failed in system 1

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The securely connected.
Y $N$
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures
Perform GP 4, repair the problem by master MCU.
If the problem persists. replace the ESS PWB (PL 11.2).

## 124-353 CRUM OEM System 2 RAP

OEM (Original Equipment Manufacturer) CRUM control failed in system 2.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors ar securely connected.
Y $\mathbf{N}$
Connect the connectors
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.

Perform GP 4, repair the problem by master SYS2.
If the problem persists, replace the ESS PWB (PL 11.2).

## 124-360 CRUM Validation RAP

CRUM control failed validation.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The securely connected.
Y $\mathbf{N}$

## Connect the connectors.

Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2)
If the problem persists replace the MCU PWB (PL 11.1).

## 124-361 CRUM Validation MCU RAP

## CRUM control failed validation on the MCU

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors are securely connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
Y $N$
Return to Service Call Procedures.
Perform GP 4, repair the problem by master SYS1.
If the problem persists, replace the MCU PWB (PL 11.1).

## 124-362 CRUM Validation System 1 RAP

CRUM control failed in system 1.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors are securely connected.
Y $N$
Connect the connectors.
Turn on the power again. The problem persists.
Y $\mathbf{N}$
Return to Service Call Procedures
Perform GP 4, repair the problem by master MCU.
If the problem persists. replace the ESS PWB (PL 11.2)

## 124-363 CRUM validation System 2 RAP

CRUM control failed in system 2.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors are securely connected.

## Y $N$

Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Perform GP 4, repair the problem by master SYS2.
If the problem persists, replace the ESS PWB (PL 11.2).

## 124-372 IOT Controller Software RAP

Due to an error in the software of the IOT Controller, subsequent processes cannot be performed.

## Procedure

Reload Software (ADJ 9.3.1).
Reinstall or replace the DDR DIMM (PL 11.2).
Replace the ESS PWB (PL 11.2).

## 124-373 IOT Manager Software RAP

## BSD-ON:16.1

Due to an error in the software of the IOT Manager, subsequent processes cannot be performed.

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists reinstall or replace the DDR DIMM (PL 11.2).
If the problem persists reinstall or replace the ESS PWB (PL 11.2).

## 124-374 IOT IM Device Driver Software RAP

 BSD-ON:16.1Due to an error in the software of the IOT IM Device Driver, subsequent processes cannot be performed.

## Procedure

Reload Software (ADJ 9.3.1).
If the problem persists reinstall or replace the DDR DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 124-380 CRUM Market (2)

There is a general CRUM control failure.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors a securely connected.
Y $N$
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2)
If the problem persists replace the MCU PWB (PL 11.1).

## 124-381 CRUM Market MCU (2)

CRUM control failed on the MCU.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The securely connected.
Y $\mathbf{N}$
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Perform GP 4, repair the problem by master SYS1.
If the problem persists, replace the MCU PWB (PL 11.1).

## 124-382 CRUM Market System 1 (2)

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors are securely connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
Y $N$
Return to Service Call Procedures.
Perform GP 4, repair the problem by master MCU.
If the problem persists. replace the ESS PWB (PL 11.2).

## 124-383 CRUM Market System 2 (2)

CRUM control failed in system 2.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The securely connected.
Y $\mathbf{N}$
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Perform GP 4, repair the problem by master SYS2.
If the problem persists, replace the ESS PWB (PL 11.2).

## 124-390 OEM Market (2)

OEM (Original Equipment Manufacturer) CRUM control failed.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors ar securely connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Replace the ESS PWB (PL 11.2)
If the problem persists replace the MCU PWB (PL 11.1).

## 124-391 CRU OEM MCU (2)

OEM (Original Equipment Manufacturer) CRUM control failed on the MCU

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The securely connected.
Y $\mathbf{N}$

## Connect the connectors.

Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.

Perform GP 4, repair the problem by master SYS1.
If the problem persists, replace the MCU PWB (PL 11.1).

## 124-392 CRU OEM System 1 (2)

OEM (Original Equipment Manufacturer) CRUM control failed in system 1.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The connectors are securely connected.

## Y N

Connect the connectors.
Turn on the power again. The problem persists.
Y N
Return to Service Call Procedures.
Perform GP 4, repair the problem by master MCU.
If the problem persists. replace the ESS PWB (PL 11.2).

## 124-393 CRU OEM System 2 (2)

OEM (Original Equipment Manufacturer) CRUM control failed in system 2.

## Procedure

Check the electrical connections on the ESS PWB and MCU PWB. The securely connected.
Y $\mathbf{N}$
Connect the connectors.
Turn on the power again. The problem persists.
N
Return to Service Call Procedures.
Perform GP 4, repair the problem by master SYS2
If the problem persists, replace the ESS PWB (PL 11.2).

## 124-702 Finisher Tray to Center Tray RAP

The output destination was changed by the customer from the Finisher Tray to the Center Tray

## Procedure

No action necessary.

## 124-709 Side Tray to Center Tray RAP

The sheets entering the stapler exceeded the maximum.

## Procedure

Ask customer to check the job setup.

## 125-311 PSW Unexpected Fail RAP

PSW Cont Software Failure
Due to an error in software processing, subsequent processes cannot be performed.

## Procedure

Power OFF/ON.
Check that the latest version of software is installed.
Check connections on the ESS PWB.
Check the wiring to the ESS PWB.
If the above checks are OK, replace the ESS PWB (PL 11.2).

## 127-310 ESR Task RAP

## BSD-ON:16.1

A fatal error occurred in an ESR (External Server Request) Task.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists pull out and insert or replace the DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 127-337 Job Template HDD Write RAP

## BSD-ON:16.1

There was a file access failure during internal polling or an error occurred when writing to the HDD Job Template sector.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists perform Hard Disk Diagnostic Program.
If the problem persists replace the DIMM (PL 11.2).
If the problem persists replace the HDD (PL 11.2).
If the problem persists replace the Printer PWB (PL 11.2).

## 127-342 Job Template Monitor RAP

 BSD-ON:16.1A system function recall error is detected.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists pull out and insert or replace the DIMM (PL 11.2).
If the problem persists replace the Printer PWB (PL 11.2).

## 127-353 LPD Software RAP

## BSD-ON:16.1

Due to a fatal error that occurred in processing related to the LPD, subsequent processes cannot be performed.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists pull out and insert or replace the DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 127-354 FTP Server Software RAP

 BSD-ON:There is a FTP Server software failure.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists reload Software (ADJ 9.3.1).

## 127-396 Mail I/O Software RAP

## BSD-ON:16.1

There is an error in Mail I/O processing.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists pull out and insert or replace the DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 127-398 IPP Software RAP

## BSD-ON:16.1

There is an IPP (Internet Printing Protocol) error.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists pull out and insert or replace the DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 127-399 JME Software RAP

## BSD-ON:16.1

Due to a fatal error that occurred in processing related to the JME, subsequent processes cannot be performed.

## Initial Actions

Power Off/On

## Procedure

Ask customer to cancel and rerun the job.
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists pull out and insert or replace the DIMM (PL 11.2).
If the problem persists replace the ESS PWB (PL 11.2).

## 133-210 Fax Parameter RAP

BSD-ON:17.1
The parameter value is incorrect due to reasons such as excessive length.
The required parameter is not sent.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists replace the FCB PWB (PL 11.3).

## 133-211 Fax Parameter Value Invalid RAP

## BSD-ON:17.1

A parameter value exceeds the range or the required parameter is not sent.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists replace the FCB PWB (PL 11.3).

133-212 Fax Read Error- No Data RAP BSD-ON:17.1

The specified data does not exist (incorrect number or channel).

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists replace the FCB PWB (PL 11.3).

133-213 Fax Read Error- Invalid Data RAP BSD-ON:17.1

Corrupted data interrupted a read on the specified data.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists replace the FCB PWB (PL 11.3).

133-214 Fax USB Initializing RAP BSD-ON:17.1

Fax failed initialization.

## Procedure

Check the USB connection. If OK then replace the USB cable (PL 11.3).
If the problem persists replace the FCB PWB (PL 11.3),

## 133-215 Fax USB Device RAP

## BSD-ON:17.1

There is an error in the Fax USB interface.

## Procedure

Check the USB connection. If OK then replace the USB cable (PL 11.3).
If the problem persists replace the FCB PWB (PL 11.3)

133-216 Fax USB Host Fatal RAP
BSD-ON:17.1
There is a Fax/USB processing error.

## Procedure

Check the USB connection. If OK then replace the USB cable (PL 11.3),
If the problem persists replace the FCB PWB (PL 11.3),

## 133-217 Fax Manager Short of Memory RAP

There is a Fax/USB processing error.

## Procedure

Turn the power Off/On.

133-218 Fax Card Message Library Short of Memory RAP
There is a Fax/USB processing error.

## Procedure

Turn the power Off/On.

## 133-219 Fax Work Memory RAP

Memory capacity reached during Fax processing.

## Procedure

Turn the power Off/On.

## 133-220 Fax Control Task RAP

BSD-ON:17.1
An error during Fax Controller software processing caused a Fax shutdown.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists reload Software (ADJ 9.3.1)

## 133-221 Fax Card Boot RAP

## BSD-ON:17.1

The FCB PWB did not respond within the specified time to boot.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists reload Software (ADJ 9.3.1).

133-222 Fax Card does not respond intervalley RAP BSD-ON:17.1

The FCB PWB did not respond within the specified time.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists reload Software (ADJ 9.3.1).

133-223 Fax Card Reset RAP

## BSD-ON:17.1

The controller reset when the FCB PWB did not respond.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists reload Software (ADJ 9.3.1).

133-224 Controller ROM Fax Card ROM RAP BSD-ON:17.1

The Controller detected a version mismatch.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists reload Software (ADJ 9.3.1)

## 133-280 Fax Option Slot 1 Board RAP

## BSD-ON:17.1

Failure was detected on the Fax Option Slot 1 board.

## Procedure

Pull out and insert the FCB PWB (PL 11.3) Switch on the power. The problem persists.
Y $N$
Service Call Procedures.
Check the connection of each FCB PWB (PL 11.3) connector. The connectors are securely connected.
Y $\quad \mathrm{N}$
Connect the connectors.
Turn on the power again. The problem persists.
N
Service Call Procedures.
Replace the FCB PWB (PL 11.3).

## 133-281 Received unknown message RAP

## BSD-ON:17.1

A message not specified in I/F settings was received from the Fax Card.

## Procedure

Pull out and insert the FCB PWB (PL 11.3) Switch on the power. The problem persists.
Y N
Service Call Procedures.
Check the connection of each FCB PWB (PL 11.3) connector. The connectors are securely connected.
Y N
Connect the connectors.
Turn on the power again. The problem persists.
Y $N$
Service Call Procedures.
Replace the FCB PWB (PL 11.3).

## 133-282 Fax Card Download RAP

## BSD-ON:17.1

An FCB PWB download could not be completed when either a FCB PWB or Fax Controller software failure occurred.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists reload Software (ADJ 9.3.1).
If the problem continues, replace the FCB PWB (PL 11.3).

## 133-283 Fax Report Mailbox RAP

## BSD-ON:17.1

The Fax Report mailbox did not open.

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3)
If the problem persists reload Software (ADJ 9.3.1).
If the problem persists replace the FCB PWB (PL 11.3).

## 134-210 Fax Controller Parameter RAP

## BSD-ON:17.1

The parameter value is incorrect or the required parameter is not sent.

## Initial Actions

Power Off/On

## Procedure

Pull out and insert the FCB PWB (PL 11.3). The problem persists.
Y N
Return to Service Call Procedures.
Check the electrical connections on the FCB PWB (PL 11.3). The connectors are securely connected.
N
Connect the connectors.
Switch on the power. The problem persists.
N
Return to Service Call Procedures
Replace the FCB PWB (PL 11.3)

## 134-211 FCB PWB RAP

## BSD-ON:17.1

A failure is detected on the FCB PWB.

## Initial Actions

Power Off/On

## Procedure

Check the electrical connections on the FCB PWB (PL 11.3).
If the problem persists replace the FCB PWB (PL 11.3).

## 202-399 Internal Timer RAP

An internal error was detected in the machine timer.
Initial Actions
Power Off/On

## Procedure

Reload Software (ADJ 9.3.1).

## OF 1 Paper Size Mismatch In Width RAP

The width of the paper size is incorrect.

## Initial Actions

- Power OFF/ON
- Reload the tray.


## Procedure

Check for foreign substances, distortion and paper powder in the paper transport path. No distortion, foreign substances, or paper powder are found in the paper transport path.
Y $N$
Clear away the foreign substances and paper powder. Correct the distortion.
Feed paper from another tray. The problem occurs when paper is fed from another tray.
Y $N$
Check the guide. The guide is set correctly.
Y N
Set the guide correctly.
Check the operation of the Guide Actuator. The Guide Actuator works.
Y N
Set the guide correctly.
Check the installation of the relevant Paper Size Switch. The relevant Paper Size Switch is installed correctly.
Y $N$
Install the relevant Paper Size Switch correctly.
Go to the OF 2 (SIZE SWITCH ASSY RAP).
Replace the MCU PWB (PL 11.1).

## OF 2 Size Switch Assy RAP

## Procedure

Manually activate the switches of the relevant Size Sensor. The relevant switches move smoothly.
Y N
Replace the relevant Size Sensor.
Execute the following Diag.: Activate the relevant Size Sensor
Tray 1: Component Control [071-103 Tray 1 Size Switch]
Tray 2: Component Control [072-104 Tray 2 Size Switch]
Tray 3: Component Control [073-104 Tray 3 Size Switch]
The display changes.
$Y \mathrm{~N}$
Check the connections of the following connectors:
Tray 1: P/J127
Tray 2: P/J820
Tray 3: P/J824
The connectors are connected correctly.
Y N
Connect the connectors.
Check the following harnesses for an open circuit or a short circuit.
Tray 1: P/J127, P/J401
Tray 2: P/J820, P/J548
Tray 3: P/J824, P/J548
The relevant harnesses are conducting without an open circuit or a short circuit. Y N

Repair the open circuit or short circuit.
Measure the voltage between the following points (+) and GND (-).
Tray 1: MCU PWB P401-6
Tray 2: TM PWB P548-13
Tray 3: TM PWB P548-8

## The voltage is the specified value (MCU PWB: approx. +5 VDC).

Y N
Replace the relevant PWB (MCU PWB (PL 11.1) or Tray Module PWB (PL 14.7).
Measure the voltage between the following points (+) and GND (-).
Tray 1: MCU PWB P412-1
Tray 2: MCU PWB P412-6
Tray 3: TM PWB P548-11
Activate SW5 of the relevant Size Sensor. The voltage changes.
$Y \mathrm{~N}$
Replace the relevant PWB (MCU PWB (PL 11.1or the Tray Module PWB (PL 14.7).
Replace the relevant Size Sensor.

## The connectors are connected correctly.

Connect the connectors.
Check the following harnesses for an open circuit or a short circuit
Tray 1: Between J109 and J412
Tray 2: Between J110 and J412
Tray 3: Between J820 and J548
The relevant harnesses are conducting without an open circuit or a short circuit.
Repair the open circuit or short circuit.
Measure the voltage between the following points (+) and GND (-).
Tray 1: MCU PWB P412-4
Tray 2: MCU PWB P412-9
Tray 3: TM PWB P548-14
The voltage is the specified value (MCU PWB: approx. +5 VDC).
Y N
Replace the relevant PWB (MCU PWB (PL 11.1) or Tray Module PWB (PL 14.7).
Measure the voltage between the following points (+) and GND (-)
Tray 1: MCU PWB P412-3
Tray 2: MCU PWB P412-8
Tray 3: TM PWB P548-13
Activate SW1 to SW4 of the relevant Size Sensor in sequence. The voltage changes. N
Replace the relevant Size Sensor.

Replace the relevant PWB (MCU PWB (PL 11.1) or Tray Module PWB (PL 14.7).

Check the connections of the following connectors:
Tray 1: P/J127, P/J401
Tray 2: P/J820, P/J548
Tray 3: P/J824, P/J548

## OF 3 Main Drive Assy RAP

## Procedure

Execute Component Control [042-001 Main Motor ON]. The Main Motor can be heard.
Y $\quad \mathbf{N}$
Check the connections of P/J410 and P/J214. P/J410 and P/J214 are connected correctly.

## Y $N$

Connect P/J410 and P/J214.
Check the wire between J 410 and J 214 for an open circuit or a short circuit (BSD 4.1B) The wire between J 410 and J 214 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between P/J214-1 and P/J214-2 on the Main Motor. The voltage is approx. +24VDC.
Y $N$
Measure the voltage between the Relay PWB P/J451-5 (+) and P/J451-6 (-) (BSD 4.1B). The voltage is approx. +24 VDC .

Y N
Measure the voltage between the P/J450-4 (+) and P/J450-2 (-) on the Relay PWB, (BSD 1.2B). The voltage is approx. +24VDC.
Y $\mathbf{N}$
Go to 7.3.27 Wire Net +24VDC-6. Troubleshoot the circuit between P/ J510-3 and P/J450-4 for +24VDC.

Replace the Relay PWB (PL 11.1).
Check the wiring connectors between P/J451 pins 5 and 6 and P/J214 pins 1 and 2 for an open or short circuit. The wiring and connectors are OK.
Y $N$
Repair or replace as required.
Replace the Main Motor (PL 1.1).
Measure the voltage between the MCU PWB P/J410-A5 (+) and GND (-) (BSD 4.1B). The voltage is approx. +5VDC.
Y $N$
Go to BSDs 1.2A and 1.2B and check the +5VDC distribution. +5VDC distribution is OK.
Y $N$
Repair or replace as required.
Replace the MCU PWB (PL 11.1).
Replace the Main Drive Assembly (PL 1.1) If the problem persists, replace the MCU PWB (PL 11.1).

Check the following wires for an intermittent circuit:

- Between J410-A1 and J214-10 (BSD 4.1B)


## OF 4 Fuser Drive Assy RAP

## Procedure

Execute Component Control [010-001 Fuser Motor ON]. The Fuser Motor can be heard.
Y $N$
Check the connections of P/J412 and P/J226. P/J412 and P/J226 are connected correctly.
Y N
Connect P/J412 and P/J226.
Check the wire between J412 and J226 for an open circuit or a short circuit (BSD 4.1A) The wire between J412 and J226 is conducting without an open circuit or a short circuit.
Y N
Repair the open circuit or short circuit.
Measure the voltage between P/J226-1 (+) and P/J226-2 (-) on the Fuser Motor. (BSD4.1A) The voltage is approx. +24VDC.
Y $N$
Measure the voltage between P/J425-1 (+) and P/J425-2 (-) on the MCU PWB (BSD $4.1 \mathrm{~A})$. The voltage is approx. +24VDC.
Y N
Measure the voltage between P/J426-1 (+) and P/J426-2 (-) on the MCU PWB (BSD 1.2A). The voltage is approx. +24VDC.

N
Measure the voltage between the P/J510-3 (+) and P/J510-7 (-) at the Power Unit, (BSD 1.2A). The voltage is approx. +24VDC.
Y $N$
Replace the Power Unit (PL 11.1).
Measure the voltage between P/J450-1 and P/J450-3 on the Relay PWB. The voltage is approx. +24VDC.
Y $\mathbf{N}$
Measure the voltage between P/J450-6 and P/J450-2 on the Relay PWB. The voltage is approx. +24VDC.
$\mathbf{Y} \quad \mathbf{N}$
Check the wires and connectors between J510 and J450 for an open or short circuit.

Replace the Relay PWB (PL 11.1).
Check the wires and connectors between J426 on the MCU PWB and J450 on the Relay PWB.

Replace the MCU PWB (PL 11.1).
Check the wires and connectors between J425 and J226 for an open or short circuit.
Measure the voltage between the MCU PWB P/J412-2 (+) and GND (-) (BSD 4.1A). The voltage is approx. +5 VDC .
$Y \quad N$
Go to BSDs 1.1A and 1.2A and check the +5VDC distribution. +5VDC distribution is OK .
$\mathbf{N}$
Repair or replace as required.
Replace the MCU PWB (PL 11.1).
Replace the Fuser Drive Assembly (PL 1.1) If the problem persists, replace the MCU PWB (PL 11.1).

Check the following wires for an intermittent circuit:

- Between J412-7 and J226-10 (BSD 4.1A)
- Between J412-6 and J226-9 (BSD 4.1A)
- Between J412-5 and J226-8 (BSD 4.1A)
- Between J412-4 and J226-7 (BSD 4.1A)
- Between J412-3 and J226-5 (BSD 4.1A)

If the problem continues, replace the Fuser Drive Assembly (PL 1.1) If the problem persists, replace the MCU PWB (PL 11.1).

## OF 5 Developer Motor RAP

## Initial Actions

Ensure that the Front Interlock 1 Switch is actuated

## Procedure

Execute Component Control [042-004 Developer Motor ON]. The Developer Motor can be heard.
Y $N$
Check the connections of P/J409 and P/J213. P/J409 and P/J213 are connected correctly.

Connect P/J409 and P/J213.
Check the wire between P/J409 and P/J213 for an open circuit or a short circuit (BSD 4.3A) The wire between J 409 and J 213 is conducting without an open circuit or a short circuit.
Y $\mathbf{N}$
Repair the open circuit or short circuit.
Measure the voltage between $\mathrm{P} / \mathrm{J} 213-1(+)$ and $\mathrm{P} / \mathrm{J} 213-2(-)$ on the Developer Motor (BSD 4.3A). The voltage is approx. +24VDC.
Y $\quad \mathrm{N}$
Measure the voltage between P/J451-3 (+) and P/J451-4 (-) on the Relay PWB (BSD 1.2A). The voltage is approx. +24VDC.
Y $N$
Measure the voltage between the P/J450-4 (+) and P/J450-2 (-) on the Relay PWB, (BSD 1.2B). The voltage is approx. +24VDC.
Y $\quad \mathrm{N}$
Go to 7.3.27 Wire Net +24VDC-6. Troubleshoot the circuit between $P$ J510-3 and P/J450-4 for +24VDC.

Replace the Relay PWB (PL 11.1).
Check the wiring connectors between P/J451 pins 3 and 4 and P/J213 pins 1 and 2 for an open or short circuit. The wiring and connectors are OK.
Y $\mathbf{N}$
Repair or replace as required.
Replace the Developer Motor (PL 1.1)
Measure the voltage between the MCU PWB P/J409-B12 (+) and GND (-) (BSD 4.3A). The voltage is approx. +5VDC.
Y $\quad \mathrm{N}$
Go to BSDs 1.1A and 1.2A and check the +5VDC distribution. +5VDC distribution is OK.
Y $N$
Repair or replace as required.
Replace the MCU PWB (PL 11.1).

A B
Replace the Developer Motor (PL 1.1) If the problem persists, replace the MCU PWB (PL 11.1).

Check the following wires an intermittent circuit.

- Between J409-B9 and J213-10 (BSD 4.3A)
- Between J409-B10 and J213-9 (BSD 4.3A)
- Between J409-B11 and J213-8 (BSD 4.3A)

If the problem continues, replace the Fuser Drive Assembly (PL 1.1) If the problem persists, replace the MCU PWB (PL 11.1).

## OF 6 Dark / Blank Display RAP

Touch Screen is dark with minimal legibility, or no text or graphics are visible, or text or graphics are distorted, or indicator LED's are not lit.

## Initial Actions

Ensure all external cables and power cords are connected.

## Procedure

NOTE: If a Status Code is displayed, go to the appropriate status code RAP.

## There is some luminance in the UI display.

Y $N$
Switch off the power. Listen to the cooling fans on the right side and at the rear of the machine and switch on the power. Cooling fans are audible either momentarily or continuously.
Y N
There is a +5 VDC failure. Go to BSD 1.1 and check 5VDC standby voltages.
+24 VDC is measured between P/J1 pin 40 and ground on Control Panel (BSD 2.3).
Y N
+24 VDC is measured between P/J388 pin 40 and pins 25 , 26 on the ESS (BSD 2.3).
$Y^{\mathrm{N}}$
+24 VDC is measured between P/J387 pin 5 and ground on the ESS (BSD 1.1).
$Y$ N
+24 VDC is measured between P/J510 pin 1 and ground on Power Unit (BSD 1.1).
Y $\quad \mathrm{N}$
AC voltage is measured between J11 pin 1 and J12 pin 1 on the Power unit (BSD 1.1).
Y $\mathbf{N}$
AC voltage is measured at wall outlet.
Y N
Contact key operator to resolve power problem.
GFI Breaker is tripped.
Y N
Replace GFI Breaker (PL 11.1).
Reset GFI Breaker.
AC voltage is measured at J 1 pin 3 and ground (BSD 1.1).
Y N
Replace Main Power Switch (PL 11.1).
Replace Power Unit (PL 11.1)
Go to BSD 1.1 and check circuit between P/J510 on Power Unit and P/ J387 on ESS PWB.

A
C
C'heck Fuse 2 on the ESS PWB. If OK then replace ESS PWB (PL 11.2).
Go to BSD 2.3 and check circuit between P/J1 on Control Panel and P/J388 on ESS PWB.

Replace Control Panel (PL 13.1).
Check the Touch screen for one of the following:

- Distortion
- Misplaced characters
- Lines or spots
- Non-responsive icons
- Some illumination in the Touch Screen

The Touch Screen exhibits one of the above characteristics.
Y N
Characters are visible when shining flashlight onto display.
Y $\quad \mathrm{N}$
Replace Display PWB (PL 13.2). If problem persists replace Control Panel (PL 13.1) Replace UI PWB (PL 13.2).

Replace Display PWB (PL 13.2). If problem persists replace Control Panel (PL 13.1).
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## IQ1 IOT Image Quality Entry RAP

The purpose of this RAP is to serve as the entrance vehicle into the Image Quality RAPs sec tion. All Image Quality RAPs must be accessed through this RAP.

The RAP will have you evaluate the copies made during the Call Flow procedure for image quality defects. It will refer you to the Image Quality Analysis RAPs, the Image Quality Defec section in order to diagnose and repair any image quality problems

## Initial Actions

Check for the presence of the defect in Copy mode and in Print mode. If the problem occurs in Copy mode only, go to the IQ2 RAP.

NOTE: MAX setup (ADJ 9.1.2), (refer to User Guide) is a color calibration for the copier and printer. A Calibration Adjustment compensates for differences between the actual and the expected (target) toner densities for each color. A Calibration Adjustment should be performed whenever there is a noticeable change in the appearance (quality) of the output, particularly changes in color tones or densities. Performing a Calibration Adjustment on a regular basis will help to maintain consistent color quality over time. Since a Calibration Adjustment can affect all jobs for all users, it is recommended that this procedure be performed only by the Machine Administrator
Perform the Calibration Adjustment if any of the following problems are reported:

- Incorrect colors
- Poor gray balance
- Colors have shifted over time
- Color densities too high or low

Continue with the procedure if the problem remains.

## Procedure

Go to Table 1. Examine the prints for any of the listed defects. Perform the corrective action that is listed.

Table 1 Image Quality Defects

| Defect - green indicates hotlink to image samples | Description | Corrective Action |
| :---: | :---: | :---: |
| Background | Undesirable toner deposits on the copy or print. The toner deposits can be localized or may cover the entire copy or print. Depending on the density of the background, it is referred to as low, medium, high, or very high background. It may occur in all colors, single colors, or any combination of single colors. | Go to the IQ6 RAP |
| Color Misregistration | Multi-colored images that should be superimposed are offset. This offset may be in the process direction or perpendicular to process direction. | Go to the IQ8 RAP |
| Deletions <br> - Debris-Centered Deletions <br> - Streak Deletion in Process Direction | The undesirable absence of toner from the copy or print. May show as white, light, or untrue colored areas. The most common causes are "tenting" of paper from mishandling or moisture, or defects in the Transfer Belt. <br> - Debris-Centered: Deletions in the areas surrounding toner agglomerates. <br> - Process Direction Streak: A deletion in the form of a single streak that runs from the lead edge to the trail edge of the copy. | Go to the IQ7 RAP <br> (for process direction streak deletion, go to the IQ12 RAP |
| Fuser Offset | Areas of poorly-fused toner are lifted from one area of a print and deposited on a different area, or onto a subsequent print. | Go to the IQ13 RAP |
| High Frequency Bands | Repeating interval bands that are most noticeable in low density (20-30\%) halftone areas of the copy. These bands run perpendicular to process direction. | Go to the IQ14 RAP |
| Irregular Process Direction Streak | Streaks: Usually medium-width streaks of (or shifts in) color most noticeable in low density 20-30\%) halftone areas of the copy. <br> A deletion in the form of a single streak that runs from the lead edge to the trail edge of the copy. | Go to the IQ12 RAP |
| Lead Edge Toner Smear (fused) | Smears of fused toner on the lead edge of prints | Go to the IQ12 RAP |
| Lead Edge Toner Smear (unfused) | Smears of unfused toner on the lead edge of prints | Go to the IQ13 RAP |
| Low Image Density | A condition that results when too little toner of a single color or combination of colors is developed on the copy or print. This results in lighter copies or prints for the single-color toner or the color that results from the combination of color toners. | Go to the IQ3 RAP |
| Misregistration/Skew | The position and/or alignment of the image relative to the top edge and side edge of the paper is not within specification. | Go to the IQ9 RAP |

Table 1 Image Quality Defects

| Defect - green indicates hotlink to <br> image samples |  | Description | Corrective Action |
| :--- | :--- | :--- | :--- |
| Missing Colors | One or more of the primary colors are missing from the image. | Go to the IQ17 RAP |  |
| Mottle | Areas of solid, or high density coverage that are reproduced with a blotchy, non-uniform appearance. | Go to the IQ15 RAP |  |
| Regular (Repeating) Bands, Streaks, <br> Spots, or Smears | A defect that repeats at an interval from14 to 264 mm, is most noticeable in low density (20-40\%) halftone areas of the <br> copy, and runs perpendicular to process direction. <br> Lines and bands are generally uniform in shape from one end to the other. <br> Streaks are generally shorter than lines and are of nonuniform width along their length. They may have a more ragged or <br> fuzzy appearance than lines. | Go to the IQ14 RAP |  |
| Residual Image | A toner image that remains on the photoreceptor or Transfer Belt after cleaning. The next image is placed on top of the <br> residual image and both images are transferred to the next copy. | Go to the IQ5 RAP |  |
| Spots | Generally circular in shape, these defects can be caused by an absence of toner in a desired area, or a deposit of toner in in <br> an undesired area | Go to the IQ16 RAP |  |
| Unfused prints | Image can be rubbed off with little or no pressure | Go to the IQ13 RAP |  |
| Wrinkled Image | Areas of 11x17 in./A3 prints have distinctive "worm track" patterns, and/or wrinkles in the paper itself | Go to the IQ4 RAP |  |

## IQ2 IIT Image Quality Entry RAP

This RAP is for troubleshooting IIT (Scanner/ADF) problems only. Before proceeding, verify that the defect is present in Copy mode only. If the defect is present in Print mode, go to the IQ1 RAP.

## Initial Actions

Clean the Lens, the top and bottom surface of the Platen Glass, and all Mirrors with Lens and Mirror Cleaner and a soft, lint-free cloth.

## Procedure

Compare the defective copies with the descriptions listed in Table 1. Perform the corrective action listed for that defect.

Table 1

| Defect |  |
| :--- | :--- |
| Background | Clean the Platen Belt. <br> Calibrate the IIT (ADJ 9.1.8). |
| Blurred or Streaked Copy | Ensure that the Platen Glass is installed correctly. <br> Check/adjust the carriage alignment (ADJ 11.6.1). |
| Deletions | Clean the Lens, the top and bottom surface of the Platen Glass, and all Mirrors with Lens and Mirror Cleaner and a soft, lint-free cloth. <br> If the problem persists, replace the Lens Kit (PL 13.4). |
| Misregistration/Skew | Go to the IQ9 RAP. |
| Moire <br> Patterns in the image areas of the print that have the <br> appearance of a screen or grid overlaying the <br> image. The pattern may be uniform or nonuniform in <br> area or shape. | - Switch between photo modes and, if necessary, original types, to determine which mode minimizes the defect. <br> Decrease the Sharpness level. <br> Reduce or enlarge the copy slightly. <br> Rotate the original on the platen by 90 degrees. |
| Newton Rings <br> Repetitive, irregular-shaped marks that occur when <br> making copies of glossy photographs. These marks <br> are most noticeable in large low-density or highlight <br> areas. | Clean the Document Glass <br> Place a transparency between the document and the glass |

## IQ3 Low Image Density/Nearly Blank/Uneven Density RAP

This RAP troubleshoots the causes of output images are completely blank or has extremely low density

## Initial Actions

- Clean the ROS window
- Replace the paper in use with fresh, dry paper of the correct specification
- Determine if the Drum Cartridge or any of the Toner Cartridges are approaching end-oflife. Replace if necessary.
- Check the Contact Arms are in the proper position (PL 6.2).
- Perform Max Setup (ADJ 9.1.2). If this does not resolve the problem, continue with this RAP.


## Procedure

Print Test pattern 59 for each color (C,M, Y, K) at 40\%. The defect involves a single color.
Y N
Panic stop the machine by removing the IBT Cleaner Assembly (PL 6.1). Print Test pattern 59 using Cyan $40 \%$. Open the Front Door in the middle of the print job (approximately 7 seconds after selecting Start). Remove the Fuser. Remove the paper. There is a good toner image on the Transfer Belt at the 2nd BTR/Back Up Roll nip.
Y $\quad \mathrm{N}$
Go to the IQ21 RAP to check the Developer 1st BTR. If this does not resolve the problem, go to BSD 9.5 and check the circuit.
If the problem continues, check the ROS for contamination of the window
Check the Contact Arms (PL 6.2) are in the proper position.
Check the 2nd BTR for damage or incorrect installation. If the problem continues, replace 2nd BTR Assembly (PL 2.7). If this does not resolve the problem, replace the IBT Belt (PL 6.2).

Replace the Developer Housing (PL 5.2) and material for the problem color.

## IQ4 Wrinkled Image RAP

Areas of $11 \times 17 \mathrm{in}$./A3 prints have distinctive "worm track" patterns in the image, and/or wrinkles
in the paper itself.

## Initial Actions

NOTE: The following factors will increase the likelihood of this problem:

- Lighter weight papers.
- Larger papers.
- Short-grain 11x17 in / A3 papers.
- Old (not freshly opened) paper.
- 2 sided printing
- Fuser with 1100 or more hours of operating life.

Make the following modifications to the copy/print jobs if possible:

- Ensure that the paper is dry and fresh.
- Use heavier weight paper
- Use long-grain paper.


## Procedure

If the problem persists after performing the Initial Actions, replace the Fuser (PL 7.1).

## IQ5 Residual Image (Ghosting) RAP

## Initial Actions

- Check the end-of-life counter for the Drum Cartridge. If the unit is at or near end-of-life, replace the Drum Cartridge (PL 4.1).
NOTE: Some ghosting on transparencies is unavoidable.
- If the problem occurs only with certain types of media, ensure that the media in use is within specification, and that the customer is aware of correct operation of print driver.
- If the distance between the intended image and the residual image has a fixed rate of repetition, go to the IQ14 RAP. Return to this procedure if the problem persists.


## Procedure

The Erase lamp is lit.
Y N
Go to BSD 9.6. Check for an open circuit. If the wires are OK, replace the Erase Lamp (PL 4.1). If the problem continues, replace the MCU PWB (PL 11.1).

Remove the Fuser. Examine the Heat Roll and Pressure Roll for evidence of toner offsetting. There is Toner adhering to the Heat Roll.
Y $N$
Check for a residual image on the Transfer Belt. Repair or replace the IBT Cleaner (PL 6.1).

Check the 2nd BTR for contamination. Clean/replace as required
Clean the Heat Roll. If the problem continues, replace the Fuser (PL 7.1). If the problem persists, go to the IQ21 RAP. Check for a short circuit in the Developer bias circuit of the affected color.

## IQ6 IOT Background RAP

This RAP is used when the output image shows background greater than the specification.

## Initial Actions

NOTE: Some background is unavoidable on certain media, such as heavyweight paper and transparencies. Ensure that the customer selects the correct settings on the UI and print driver. Check access mode to make sure all density settings are set to normal settings.
Perform Max Setup (ADJ 9.1.2). If this does not resolve the problem, continue with this RAP.
NOTE: After replacing the developer material, clean the ADC Sensor and reset the Developer NVM's (REP 4.2.7).

## Procedure

Print Test Pattern 54 or 53. Background is present.
Y N
Go to Final Actions.
Background is present in all four colors.
Y N
Replace the Developer Material for the faulty color. If the problem continues, replace the Developer Housing for the faulty color.

Go to IQ21 Developer Bias/1st BTR RAP. The RAP fixes the problem.
Y N
Replace the Developer HVPS (PL 11.1)
Go to Final Actions.

## IQ7 Deletions RAP

## Initial Actions

Reload with fresh, dry paper of the correct specifications. If the problem occurs with heavyweight paper, ensure that the correct selections are being made on the print driver and/or UI. If the problem is not resolved, continue with this RAP.

NOTE: Small white deletions with a sharp edge are usually caused by Fuser offsetting. Go to the IQ16 Spots RAP.

## Procedure

The problem is Debris-Centered Deletions.
Y $N$
Print Test Pattern 59 at $50 \%$ coverage for each color. The defect is present for all colors.
Y $N$
Make several prints of the Test Pattern in the affected color. The defect is present in approximately the same location on all letter-size prints. Y $\quad \mathrm{N}$

Remove the Drum cartridge. Check for light from the Erase Lamp along the mounting left side The Erase lamp is lit.
Y $\quad \mathbf{N}$
Replace the Drum Cartridge.
Go to BSD 9.6. Check for an open circuit. If the wires are OK, replace the Erase Lamp (PL 4.1). If the problem continues, replace the MCU PWB (PL 11.1).

Remove the ROS. Examine the ROS windows for dirt or damage. Clean or replace as required (PL 3.1).

Examine the surface of the Drum Cartridge. Check for dents, scratches, or contamination such as fingerprints, etc. The drum is free from damage.
Y N
Clean or replace the Drum Cartridge.
Check the IBT Belt (PL 6.2) for dirt, damage, or contamination. Clean/replace as required. Check the 2nd BTR (PL 2.7) for damage or wear. Clean or replace if required.

Examine the spot in the center of the DCD. Replace the Developer (PL 5.1) and Toner Cartridge for the affected color. If the problem persists, replace the Developer Housing for the affected color (PL 5.2).

## IQ8 Color-to-Color Misregistration RAP

## Procedure

## The problem involves a single color.

Y N
Check that the ROS is securely mounted and that the ROS window is not dirty or damaged. If the problem persists, replace the ROS (PL 3.1).

Check the mounting of the Developer Housing for the affected color. Ensure that it is installed correctly and that it is free from damage. Repair or replace as required (PL 5.2).

## IQ9 Skew/Misregistration RAP

This RAP is used when Skew, System Registration, or Magnification are out of specification. For Color-to-Color-Misregistration, go to the IQ8 RAP

## Initial Actions

Load some new, dry 24 lb . 11X17/A3 Xerox COLOR Xpressions (USSG), or 90 GSM Colortech + (ESG) into each paper tray (use 8.5X11/A4 in Tray 1). Make 3 full color copies from each paper tray. Mark the appropriate paper tray on these copies.

## Procedure

The problem is still present when using the proper paper.
Y N
Explain to the customer that new, dry, 24 lb . Xerox COLOR Xpressions (USSG), or 90 GSM Colortech + (ESG) paper is specified for is machine.

## The problem occurs only in the printer mode.

Y N
The defect occurs when the document is manually registered on the platen glass.
Y $\quad \mathbf{N}$
Ensure that the Document Transport Belt is clean. Check the Document Handler Adjustments (ADJ 15.1.1 through ADJ 15.1.6). If the problem continues, check the DADF drive rolls and pinch rolls for wear or glossing.

## The problem is Skew

Y $\quad \mathbf{N}$
The problem is Misregistration
Y N
Adjust the IIT Lead Edge/Side Edge Registration (ADJ 11.1.1) and the IOT Lead Edge/Side Edge Registration (ADJ 9.1.1).

## Print Pattern 58. Misregistration is present on the copy

Y N
Adjust the IOT Lead Edge/Side Edge Registration (ADJ 9.1.1), then the IIT
Lead Edge and Side Edge Registration (ADJ 11.1.1).

## The defect occurred on copies from all five paper trays.

Y N
Check the IOT Lead Edge/Side Edge Registration (ADJ 9.1.1) for that tray
Check the feeder for the affected tray for wear, slipping, damage, or contami
nation.

- Tray 1 Feeder (PL 14.3)
- Tray 2 Feeder (PL 14.3
- Tray 3 Feeder (PL 14.1)
- MSI Feed Assembly (PL 9.2)


## Registration varies from copy to copy

Y $\mathbf{N}$
Go to ADJ 9.1.1, Lead/Side Edge Adjustment.

## IQ12 Process Direction Bands, Streaks, and Smears RAP

## Initial Actions

- Clean the IBT Cleaner. Check for wear or damage
- Check the stripper baffle in the Fuser for contamination
- Check the 2nd BTR and the Detack Sawtooth for Toner contamination.


## Procedure

NOTE: The repetition rate for Transfer Belt defects varies considerably, depending on paper size and mode of operation. The defect may appear every sheet, or may occur every other sheet.

## The defect occurs in approximately the same position on multiple prints.

Y N
If the defect occurs intermittently, examine the Developer Housings for evidence of toner clumping. If clumping is found, replace the Developer (PL 5.2). if this does not resolve the problem

The defect is a full-width (LE - TE) Streak Deletion in Process Direction.
Y N
Remove the Fuser Assembly. Examine the Heat Roll for damage or contamination. Clean or replace as required (PL 7.1).
Check the IBT Cleaner (PL 6.1). Ensure that the blade and the Mylar backing are free from damage. Check that the auger turns freely. Clean repair or replace as required
Check the Developer Housing (PL 5.2). Repair or replace as required.
Check the Drum Cartridge for defects, nicks, sport and/or contamination.
If the problem is related to a single color, replace the Drum Cartridge (PL 4.1)
Print Test Pattern 59 at $20 \%$ coverage pattern for all colors. The defect is present for all colors.
Y N

- Go to BSD 9.5 to check the 1st BTR bias circuit
- Replace the Developer Housing (PL 5.2) for the affected color. Check the housing for damage or toner clumping
- If the problem continues, replace the HVPS (PL 11.1).

Check the ROS window for damage or contamination. Clean or replace as required.
Remove the IBT Cleaner (PL 6.1). Inspect the cleaning blade and Mylar seal for damage
Clean or replace as required.
If the IBT Cleaner is OK, check the IBT Belt (PL 6.2) for damage or contamination. Ensure that there is no debris or loose wiring, etc. in contact with the belt. Clean or replace as required.

## IQ13 Unfused Copy/Toner Offset RAP

## Initial Actions

- Replace the paper in use with fresh, dry paper of the correct specification.
- Check the post-Fuser transport areas for dirt.
- Ensure that the media being used matches the settings on the UI screen or print driver Using the next heavier setting may resolve the problem.
- If the Key Operator/Administrator has configured certain trays for a specific type of media, ensure that the specified media is actually loaded in those trays.


## Procedure

Check the following:

- Check the Fuser (PL 7.1) for damage, toner offsetting, paper wrap, or incorrect installation. Clean or replace as required.
After resolving the problem, make 10 blank copies (letter size, Black mode) to cleaner residual toner from the Fuser Heat Roll and Fuser Pressure Belt. If the problem persists, replace the Fuser (PL 7.1).


## IQ14 Repeating Bands, Streaks, Spots, and Smears RAP

## Procedure

Measure the distance between the repeating defects. Locate the distance on the table below Perform the indicated repair actions

| Table 1 Repeating Defects |  |  |
| :--- | :--- | :--- |
| Repetition <br> spacing | Component(s) | Repair Actions |
| $<4 \mathrm{~mm}$ | High Frequency Band- <br> ing | Replace the ROS (PL 3.1). |
| 27 mm | Developer Mag Roll | Check Developer roll bias for floating or shorting out. <br> Replace Developer Housing (PL 5.2) if required. |
| 148 mm | Drum Cartridge | Replace the Drum Cartridge(PL 4.1). |
| 83 mm | Fuser Heat Roll | Remove the Fuser Assembly. Check the Heat Roll for <br> damage (nicks, wear, or cuts) or contamination. Clean <br> or replace as required (PL 7.1). |
| 88 mm | Backup Roll <br> BTR 2 Roll | Check the 2nd BTR Assembly for damage or contami- <br> nation. Clean, repair or replace as required (PL 6.1). <br> Replace the IBT Belt (PL 6.2). |
| 94 mm | Drum Cartridge <br> Fuser Belt | All Colors - Remove the Fuser Assembly. Check the <br> Heat Roll for damage (nicks, wear, or cuts) or contami- <br> nation. Clean or replace as required (PL 7.1). |
| 59 mm | 1st BTR | Developer Drive Com- <br> ponents |
| 74 mm | Replace the Developer Motor (PL 5.1). |  |
| 44 mm | BCR | BCR Cleaner |

## IQ15 Mottle RAP

This RAP troubleshoots the causes of output images showing image density that varies from inboard to outboard edges, or randomly throughout the print.

## Initial Actions

- Replace the paper in use with fresh, dry paper of the correct specification. Ensure that the loaded media matches the UI or print driver settings
- Determine if the Drum Cartridge or any of the Toner Cartridges are approaching end-ofife. Replace if necessary
- Perform Max Setup (ADJ 9.1.2). If this does not resolve the problem, continue with this RAP.


## Procedure

Print Test Pattern 54. The defect involves a single color
Y N
Make a print of the Test Pattern 53. Open the Front Door when the lead edge of the print begins to protrude from the Fuser Exit nip. Open the Fuser and examine the partially fused sheet. The defect is present in both the fused and unfused portion of the sheet.

Clean or replace the Fuser (PL 7.1).

Print Test Pattern 53. As the print is being processed, open the Front Door. Examine the image on the Transfer Belt. The image on the belt has acceptable density.
$\boldsymbol{V}$
Replace the IBT Belt (PL 6.1). If the problem continues, replace the Drum Cartridge (PL 4.1)

Clean/replace the 2nd BTR Assembly (PL 6.1).
If the problem continues, replace the IBT Belt (PL 6.1).
Check the following:

- Clean the HV contact for the developer in question
- Replace the Toner Cartridge if not done previously
- Replace the Developer (PL 5.2). Examine the housing for damage, wear, or contamina tion


## IQ16 Spots RAP

## Initial Actions

Ensure that the paper in use is fresh, dry, and within specification for weight and quality.
Check print driver and copier control panel settings to ensure the media is being run in the proper mode.

Compare the spots against the samples in the Image Quality Defects supplement. If the defect matches the Debris Centered Deletions sample, go to the IQ7 RAP.

## Procedure

The defect occurs in Copy mode only.
Y $N$
The spots occur at a fixed interval on each print.

NOTE: The repetition rate for Transfer Belt defects varies considerably, depending on paper size and mode of operation. The defect may appear on every sheet, or may occur on every other sheet.

## The defect occurs in approximately the same position on multiple prints.

Y N
The problem is Fuser offset and/or lead edge smears or spots.
$Y \quad N$

## CAUTION

Do not use a vacuum cleaner or any solvents in the following step. Damage to the Belt Cleaner will result.
Remove the IBT Cleaner (REP 4.2.4). Carefully clean the cleaning blade and the Mylar shield with a soft brush or a lint free cloth. Brush away any accumulation of toner on the foam seal and the outside surfaces. Wipe the surface of the Transfer Belt with a lint free cloth. If the problem continues, replace the IBT Cleaner (PL 6.1).

Go to the IQ13 RAP
Check the IBT Belt (PL 6.1) for dirt or damage. Clean or replace as required.
Go to the IQ14 RAP.
Ensure that the original is free from the defect.
Clean the Platen Glass and Lens.

## IQ17 Missing Colors RAP

One or more of the primary (YMCK) colors is missing from the image.

## Procedure

Go to the IQ21 Developer Bias RAP to check the developer bias circuit.
If the circuits are OK, ROS for damage or contamination. Clean, repair or replace as required (PL 3.1).

Check the Developer Drive Assembly and Clutch Assembly for damage, slippage, and/or binding, replace as required (PL 1.1).

Check the gears of the Developer Housings for damage, slippage, and/or binding, replace as required (PL 5.2).

## IQ21 Developer Bias/1st BTR RAP

BSD-ON:9.5

## Procedure

## WARNING

## HIGH VOLTAGE!

## Exercise caution when performing the voltage checks in this procedure.

There should be approximately -520 to -580 VDC (+/-10\%) present. Check the Developer Bias VDC on the front of the machine. The voltages are within range.
Y N
+24 VDC is measured between pins 17, 16 and pin 15, 14, 9 of J500 on the HVPS.
Y $N$
+24 VDC is measured between pins 1,2 and pin 3, 4, 9 of J406 on the MCU PWB.
Y $N$
Go the BSD 1.2 DC Power Distribution and check the wiring between the MCU PWB and the Power Unit. The wiring is OK.
Y $N$
Repair or replace as required.
Replace the MCU PWB (PL 11.1).
Check the wires between $\mathrm{P} / \mathrm{J} 406$ and $\mathrm{P} / \mathrm{J} 500$ for an open circuit.
Check for Developer Bias VDC on the red wire at the front of the machine. The
Bias voltage is present.
Y $N$
Check the red wire for an open circuit, if the wire is OK, replace the HVPS (PL 11.1).
Replace the Drum Cartridge (PL 5.1).
Check for +24 VDC between $\mathrm{P} / \mathrm{J} 500-16,17(+)$ and $14,15(-)$ on the HVPS. +24VDC is measured.
Y $N$
Go to BSD 9.5. Check for +24VDC between P/J406-1, 2 (+) and 3, 4(-) on the MCU PWB. +24VDC is measured.
Y $\quad \mathrm{N}$
Go to BSD 1.3 and check the interlock circuit for an open.
Check the connectors and wiring between P/J406 and P/J500 for an open circuit.
Check the 1st BTR Monitor Voltage on the HVPS between P/J500-13(+) and GND. The voltage is $O K$.
Y N
Check the 1st BTR Monitor Voltage between P/J406-5(+) and GND. The voltage is OK.
$\boldsymbol{\gamma} \quad \mathrm{N}$
Replace the MCU PWB (PL 11.1).
Check the connectors and wiring between P/J406 and P/J500 for an open circuit.

If the problem continues, replace the HVPS (PL 11.1). If the problem persists, replace the 1 st BTR (IBT Belt Assembly) (PL 6.2).

## Image Quality Specifications

The following steps are used to set up the machine for the purpose of making test pattern copies to judge output image color density, balance, and registration.

1. Set the following Customer Mode Settings to the positions listed:
a. Output Color - Full Color
b. Original Type - Photo \& Text / Halttone
c. Lighter/Darker - Auto Contrast
d. Variable Color Balance - Normal
e. Color Saturation - Normal
f. Sharpness - Normal
2. Place the Color Test Pattern, 82E13120, on the platen. Load $11^{\prime \prime} \mathrm{X} 17$ or A3 paper into Tray 1. Make a copy of the test pattern.
3. Compare the copy to the test pattern. Refer to Figure 2 and Table 1 for this evaluation.

Table 1 Color Specifications Check Locations

| AREA <br> (Fig. 1) | Check for the Following Results |
| :--- | :--- |
| A | Text Reproduction. Each of the seven sentences in this area are fully repro- <br> duced with no missing letters or portions of letters. The sentences are repro- <br> duced in Black, Cyan, Magenta, Yellow, Red, Green and Blue. |
| B | Color Registration. The patterns in location B should be properly registered to <br> provide Black, Red, Green and Blue lines. |
| C | Front to Rear Density. The density of both the low density and high density <br> bands should be uniform from front to rear. This can be tested by folding the <br> copy in the center and comparing the front side of the copy to the rear side of <br> the copy at location C. Both the high density and low density locations should <br> exhibit even front to rear density. |
| D | Color Gradation. This area should exhibit a decreasing density of each of the <br> colors from 100\% density to 5\% density. In a properly adjusted machine, the <br> 10\% patches should be visible and the 5\% patches should be barely visible or <br> not visible on the test pattern copy (except for the bottom row). |
| E | Routine Color. Location E represents three general tests for the machine to <br> reproduce colors common to customer originals. <br> Location A is a general skin tone test. <br> Location B represents the color of grass or other common foliage. <br> Location C represents the color of the sky. |
| F | Photo Gradation. Location F is not used for any copy quality evaluation on <br> this product. |
| G | IIT Calibration Patches. These patches are scanned for IIT Calibration during <br> the IIT Calibration portion of Max Setup. |
| H | 100 Lines/Inch Image. A Moire defect will show on this image. Moire on a 100 <br> Line/Inch image is within specification. |
| 175 Lines/Inch Image. This image is used to test for Moire. Depending on the <br> degree of the defect, moire seen on this image should be considered out of <br> specification. |  |

Registration and border deletions are checked using the Step Scales on the Geometric Test Pattern, 82E8220, an example of which is shown in Figure 1. All of the scales are 20 mm in height, and are made up of four 5 mm steps. Step 1 will be described as at the top of the Step Scale, and Step 4 will be described as at the bottom.


## Figure 1 Step Scales

Each Step Scale is positioned for a particular paper size and orientation. Table 2 indicates the appropriate Step Scales to use for the various paper sizes, orientations and measurement locations.

Table 2 Geometric Checkout - Step Scale Data.

| Paper <br> Size | Orientation | To check: | Step Scales to use (refer to Figure 2) |
| :--- | :--- | :--- | :--- |
| $11 \times 17$ | SEF | Lead Edge <br> Side Edge <br> Trail Edge | LE1 through LE3 <br> SE1 through SE4 (top); SE5 and SE8 (bottom) <br> TE3 |
| A3 | SEF | Lead Edge <br> Side Edge <br> Trail Edge | LE 1 through LE3 <br> SE1 through SE4 (top); SE6 and SE7 (bottom) <br> TE4 |
| $8.5 \times 11$ | SEF | Lead Edge <br> Side Edge <br> Trail Edge | LE 1 and LE2 <br> SE1 through SE3 (top); SE9 (bottom) <br> TE5 |
| A4 | LSEF | Lead Edge <br> Side Edge <br> Trail Edge | LE 1 and LE2 <br> SE1 through SE3 (top); SE10 (bottom) <br> TE6 |
| $8.5 \times 11$ | LEF | Lead Edge <br> Side Edge <br> Trail Edge | LE1 through SE3 <br> SE1 and 2 (bottom) SE6 and SE7 (top) <br> TE 2 |
| A4 | LEF | Lead Edge <br> Side Edge <br> Trail Edge | LE1 through SE3 <br> SE5 (top); SE1 and SE2 (bottom) <br> TE1 |

1. Set the following Customer Mode Settings to the positions listed:

- Output Color - Black
- Original Type - Text
- Lighter/Darker - Auto Contrast
- Color Saturation - Normal
- Variable Color Balance - Normal
- Sharpness - Normal

2. Place Test Pattern 82E8220 on the platen and 24\# Xerox Color Xpressions $11 \times 17$ (USSG), or 90 GSM Colotech A3 (XL) paper in Tray 1. Make a copy of the test pattern.
3. Follow the directions in Table 3 to determine if the machine registration is within specification.

Table 3 Test Pattern Image Data Locations for Geometric Specifications

| GEOMETRIC AREA | CHECK PERFORMED |
| :---: | :---: |
| Magnification | Locate the 300 mm line running from near LE1 to the trail edge of the 1.8 lp ladder. Locate the 200 mm line running from near LE1 to near LE3. Make a copy. The measurements should be:. <br> - Left to Right.: $300 \mathrm{~mm} \pm 1.8 \mathrm{~mm}$ <br> - Front to Rear: $200 \mathrm{~mm} \pm 1.2 \mathrm{~mm}$ |
| Resolution | Observing the targets on the test pattern copy at locations R1 through R8, the line pairs specified below are clearly visible for the magnification value indicated: <br> - $70 \%: 3.0 \mathrm{lp} / \mathrm{mm}$ <br> - $100 \%$ through $400 \%: 4.3 \mathrm{lp} / \mathrm{mm}$ |
| Lead Edge <br> Registration | Measure from the lead edge of the paper to the top of Step 3 on the LE2 Step Scale. The measurement should be: <br> - Trays 1 through 4 : $10 \mathrm{~mm} \pm 1.5 \mathrm{~mm}$ ( $\pm 1.9 \mathrm{~mm}$ for 2 nd side of duplex job) <br> - Tray $5: 10 \mathrm{~mm} \pm 2.2 \mathrm{~mm}$ |
| Side Edge <br> Registration | Measure from the side edge of the paper to the top of Step 3 on the SE2 and SE3 Step Scales. The distance should be within the following tolerance: <br> - Trays 1 through $4: 10 \mathrm{~mm} \pm 2.0 \mathrm{~mm}$ ( $\pm 2.4 \mathrm{~mm}$ for 2 nd side of duplex job) <br> - Tray $5: 10 \mathrm{~mm} \pm 2.4 \mathrm{~mm}$ |
| $\begin{aligned} & \hline \text { Lead Edge } \\ & \text { Skew } \end{aligned}$ | For skew from front to rear, the distance from the lead edge of the paper to the targets at LE1 and LE3 are measured. The measurements must match each other to within the tolerance below. <br> - Trays 1 through 4 : within $\pm 1.5 \mathrm{~mm}$ ( $\pm 2.0 \mathrm{~mm}$ for 2 nd side of duplex job) <br> - Tray 5: within $\pm 2.0 \mathrm{~mm}$ |
| $\begin{aligned} & \begin{array}{l} \text { Side Edge } \\ \text { Skew } \end{array} \end{aligned}$ | For skew from left to right, the distance from the side edge of the paper to the targets at SE1 and SE4 are measured. They must match each other to within the tolerance below: <br> - Trays 1 through 4 : within $\pm 3.0 \mathrm{~mm}$ ( $\pm 4.0 \mathrm{~mm}$ for 2 nd side of duplex job) <br> - Tray 5 : within $\pm 4.0 \mathrm{~mm}$ |
| Line Density | This parameter is measured on the two 0.7G Text Blocks on the test pattern copy. The machine should reproduce all of the characters shown in the block on the output copy. |
| Solid Reproduction | This specifies the desired standard for reproduction of solid gray images at 1.0 K. The 1.0 K blocks on the output copy should reproduce with minimal mottle or graininess. |

Table 3 Test Pattern Image Data Locations for Geometric Specifications

| GEOMETRIC AREA | CHECK PERFORMED |
| :---: | :---: |
| Low Contrast Reproduction | This specifies the desired standard for reproduction of low density images. The machine should reproduce all of the text in the 0.2 G Text Blocks on the output copy. |
| ROS Borders (Image Loss) | Measure from the lead edge of the paper at LE2, the side edge of the paper at SE2 and SE7, and the trail edge at TE4, to the top edge of the step scales in those locations. The measurements should conform to the following specifications: <br> - Lead Edge $4 \mathrm{~mm} \pm 1 \mathrm{~mm}$ <br> - Side Edges $2 \mathrm{~mm} \pm 1 \mathrm{~mm}$ <br> - Trail Edge $2 \mathrm{~mm} \pm 1 \mathrm{~mm}$ |



Figure 2 Color and Geometric Test Patterns

## Image Defect Samples

The following figures contain examples of defects and their possible causes.

- Background
- Color Misregistration
- Debris-Centered Deletions
- Deletions
- High Frequency Bands
- Irregular Process Direction Streak
- Low Image Density
- Moire
- Mottle
- Newton Rings
- Regular (Repeating) Bands, Streaks, Spots, or Smears
- Residual Image
- Streak Deletion in Process Direction
- Wrinkled Image
- Worm Defect
- Auger Marks Defect (Black)
- Auger Marks Defect (Magenta)
- 59 mm Pitch Density Non-Uniformity Defect
- 201 mm Streaks from the lead edge Defect
- M, C, K Banding Defect
- 103 mm Streaks from the lead edge Defect
- Scratches on Transparency Defect
- Toner Soft Blocking Defect
- Toner Dam Ghosting Defect


## Background



Figure 1 Background Defect Sample

## Cause

Incorrect Electrostatics, high TC, faulty ADC Sensor

## Corrective Action

Go to the IQ6 RAP.

## Color Misregistration



Figure 1 Color Misregistration Defect Sample

## Cause

Failure of the ROS or IBT "walking" from rear to front or front to rear.
Mechanical problem in the IBT Assembly.

## Corrective Action

Go to the IQ8 RAP.

Debris-Centered Deletions


Figure 1 DCD Defect Sample

## Cause

Toner agglomerates cause deletions in the areas surrounding them during transfer.

## Corrective Action

Go to the IQ7 RAP.

Deletions


Figure 1 Deletions Defect Sample

## Cause

Defective IBT Belt, damp paper, uneven charge.

## Corrective Action

Go to the IQ7 RAP.

High Frequency Bands


Figure 1 High Freq. Bands Defect Sample

## Cause

Faulty ROS Assembly or Photoreceptor/Developer Housing gear or bearing problem.

## Corrective Action

Go to the IQ14 RAP.

## Irregular Process Direction Streak



Figure 1 Streak Defect Sample

## Cause

Clog in Developer Housing Trim Bar, malfunction of Belt Cleaner, contaminated ROS window.

## Corrective Action

Go to the IQ12 RAP.

## Low Image Density



Figure 1 Low Density Defect Sample

## Cause

Incorrect electrostatics, defective ADC Sensor, low toner concentration or out-of-specification paper (especially low quality or heavy weight paper).

## Corrective Action

Go to the IQ3 RAP.

## Moire



Figure 1 Moire Defect Sample

## Cause

The halftone screen used on the original interferes with the halftone screen used by the copier.

## Corrective Action

Go to the IQ2 RAP.

Mottle


Figure 1 Mottle Defect Sample

## Cause

Damp or low quality paper, aged developer, low toner concentration

## Corrective Action

Go to the IQ15 RAP.

Newton Rings


Figure 1 Newton Rings Defect Sample

## Cause

Highly reflective surfaces on a glossy photograph.

## Corrective Action

Perform the following:

- Clean the Document Glass
- Place a transparency between the document and the glass

Regular (Repeating) Bands, Streaks, Spots, or Smears


Figure 1 Repeating Defects Sample Image

## Cause

Damage, density variation, or deletions caused by rotating component. Spacing equal to effective circumference of part.

Corrective Action
Go to the IQ14 RAP.

Residual Image


Figure 1 Residual Image Defect Sample

## Cause

Improper IBT cleaning and/or defective IBT Belt.

## Corrective Action

Go to the IQ5 RAP.

Streak Deletion in Process Direction


Figure 1 Streak Deletion Defect Sample

## Cause

Contamination of ROS window, damage to or contact with Transfer Belt or Drum Cartridge

## Corrective Action

Go to the IQ12 RAP.

Wrinkled Image


Worm Defect


Figure 1 Worm Image Defect Sample (VA-001)
Cause
Worm may appear in the process direction feeding from the MSI Tray.

## Corrective Action

Feed from a different tray to eliminate the worm problem.

## Auger Marks Defect (Black)



Figure 1 Auger Marks Image Defect Sample (VA-002)

## Cause

Auger marks may appear on the prints when the amount of toner becomes low in the Developer Unit.

The following conditions increase the defect:

- Monotone image over the whole print with coverage between 40 and $60 \%$.
- High temperature and high humidity.


## Corrective Action

If the defect is worse than the defect sample, replace the Developer Unit (PL 5.2).

## Auger Marks Defect (Magenta)



Figure 1 Auger Marks Image Defect Sample (VA-003)

## Cause

Auger marks may appear on the prints when the amount of toner becomes low in the Developer Unit.

The following conditions increase the defect:

- Monotone image over the whole print with coverage between 40 and $60 \%$.
- High temperature and high humidity.


## Corrective Action

If the defect is worse than the defect sample, replace the Developer Unit (PL 5.2).

## 59mm Pitch Density Non-Uniformity Defect



Figure 1 59mm Pitch Density Non-Uniformity Defect Sample (VA-004)

## Cause

The 59 mm Pitch Density Non-Uniformity is on printed sheets printed in the Half-Tone image of the secondary color. The defect is more visible on the first print job when the machine is left in a high temperature and high humidity environment overnight or longer.

## Corrective Action

If the defect is worse than the defect sample, replace the Developer Unit (PL 5.2).

201mm Streaks from the lead edge Defect


## Cause

The 201 mm streaks appear in the same position of the black images, 201 mm from the lead edge.

## Corrective Action

Replace the 2nd BTR (PL 2.7).

## M, C, K Banding Defect

## , ,

## Cause

This defect is caused by one of several components:

- Developer Assembly
- IBT Assembly
- Fuser Assembly
- ROS Assembly


## Corrective Action

.Replace the above components in order, one at a time.


Figure 1 M, C, K Banding Defect Sample (VA-006)

103 mm Streaks from the lead edge Defect


## Cause

The 103 mm streaks appear in the same position of the black images, 201 mm from the lead edge.

## Corrective Action

Replace the 2nd BTR (PL 2.7).

Figure 1 103mm Streaks Defect Sample (VA-008)

## Scratches on Transparency Defect



Figure 1 Scratches on Transparency Defect Sample (VA-009)

## Cause

Minor scratches run along the process direction on $8.5 \times 11$ LEF or A4 LEF of the transparency.

## Corrective Action

Replace the Fuser (PL 7.1).

## Toner Soft Blocking Defect



Figure 1 Toner Soft Blocking Defect Sample (VA-0010)

## Cause

Toner soft blocking appears as streaks in the process direction.

## Corrective Action

Shake the toner Cartridge. If the problem continues, replace the Toner Cartridge (PL 5.2).

## Toner Dam Ghosting Defect

Toner Dam Ghosting


NG

2. Check whether white spots or streaks appear in the Magenta halftone on the $2 n d$ and latter outputs.
3. Tone Down the Developer ADJ 9.1.0, if the BKG or high solid density occurs. (Use Test Pattern 52)
4. Check NVM $753-552$. The stored value is $0-9$. (Table 1 )
Table 1

| NVM value stored in <br> 753-552 | NVM address to <br> access | Default Value | Limited <br> Value |
| :---: | :---: | :---: | :---: |
| 0 | $153-542$ | 0 | -20 |
| 1 | $153-543$ | -20 | -40 |
| 2 | $153-544$ | -20 | -40 |
| 3 | $153-545$ | -10 | -30 |
| 4 | $153-546$ | 0 | -20 |
| 5 | $153-547$ | 0 | -20 |
| 6 | $153-548$ | 0 | -20 |
| 7 | $153-549$ | 0 | -20 |
| 8 | $153-550$ | 0 | -20 |
| 9 | $153-551$ | 0 | -20 |

5. Change NVM Values by increments of -5 . (ex. In the case $753-552$ is 5 , change $753-547$ from 0 to -5 first)
6. Check the print image. If the defect is still present, increment the NVM value again.

## CAUTION

Never increment more than the value listed in the Limited Value column in Table 1.

Figure 1 Toner Dam Ghosting Defect Sample (VA-0011)

## Cause

Toner dam ghosting appears as white streaks 105 mm from the lead edge. The white streak is more visible in magenta.

## Corrective Action

1. Print Test Pattern $59,40 \%$ coverage, Magenta, output 2 or more $11 \times 17$ sheets.
2. Drives
REP 1.1.1 Main Drive Assembly ..... 4-3
REP 1.1.2 Drum Drive Assembly ..... 4-10
3. Paper Transportation
REP 2.1.1 Tray 1 Feeder ..... 4-13 ..... 4-15REP 2.3.1 Tray 1 Feed/Nudger/Retard Roll.
REP 2.4.1 Registration Unit ..... 4-17
REP 2.5.1 Takeaway Roll4-18
REP 2.6.2 L/H Upper Cover Unit ..... $4-20$
4. ROS
REP 3.1.1 ROS Unit ..... 4-21
5. Xerographics/Development
REP 4.1.1 Developer Housing ..... 4-23
REP 4.1.2 Toner Cartridge ..... 4-26
REP 4.1.3 Developer Bias Brush ..... -27REP 4.1.4 Waste Toner Auger.
REP 4.2.1 Developer Motor Assembly.......................................................................REP 4.2.2 IBT Module
REP 4.2.3 Print Drum.
REP 4.2.4 IBT Cleaner


REP 4.2.5 IBT Belt
REP 4.2.6 Rotary Drive MotorREP 4.2.7 Developer Material
REP 4.2.8 2nd BTR Contact Arms

$\qquad$REP 4.3.1 Sensor Bar4-284-304-314-314-354-364-37-434-444-484-50
5. FuserREP 5.1.1 Fuser Unit4-53
6. ExitREP 6.1.1 Exit2 + OCT24-55
7. MPT
REP 7.1.1 MSI Assembly ..... 4-57
REP 72.1 MSI Feed Roll/Retard Pad ..... 4-59
9. Electrical Components
REP 9.1.1 MCU PWB ..... 4-61
REP 9.1.2 MCU PWB EPROM ..... 4-63
REP 9.2.1 ESS PWB ..... -64
REP 9.2.2 ESS PWB EPROM
REP 9.2.3 Power Supply PWB ..... 4-694-69
10. Covers
REP 10.1.1 Top Cover Assembly
REP 10.2.1 Rear Lower Covers ..... 4-71 ..... 4-71
REP 10.2 2 Front Inner Cover ..... 4-72
REP 10.2.3 Right Side Cover ..... 4-74 ..... 4-75
REP 10.3.1 Rear Fan. ..... 4-76
REP 11.1.1 Platen Cushion ..... 4-77
REP 11.1.2 Control Panel Assembly ..... 4-78
REP 11.3.1 Platen Glass ..... 4-78
REP 11.3.2 IIT/IPS PWB ..... 4-79
REP 11.4.1 Lens Kit Assembly ..... 4-84
REP 11.5.1 Carriage Cable ..... 4-86
REP 11.5.2 Carriage Motor Assembly ..... 4-92
REP 11.6.1 Exposure Lamp ..... 4-96
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## REP 1.1.1 Main Drive Assembly

Parts List on PL 1.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Switch off the power and disconnect the Power Cord.

NOTE: Do not cut cable ties to remove. Cable ties are designed to be disconnected from the frame and reinstalled.
2. Remove the Rear Lower Covers. (REP 10.2.1)
3. Remove the MCU PWB Chassis (REP 9.1.1)
4. Remove the support bracket. (Figure 1)


Figure 1 Removing the support bracket
5. Disconnect the connectors on the Main Drive Assembly and the Drum Drive Assembly (Figure 2)


Figure 2 Disconnecting the connectors (4)
6. Remove the cable harnesses from the harness clamps and remove the cable ties from the frame. (Figure 3)


Figure 3 Disconnecting the cable ties and opening cable clamps
7. Remove the lower support bracket. (Figure 4)


Figure 4 Removing the lower bracket
8. Open the Left Side Upper Cover and remove the Fuser Assembly. (Figure 5)


Figure 5 Removing the Fuser Assembly
9. Remove the Drive Belt from the Pulley. (Figure 6)


Figure 6 Disengaging the Drive Belt
10. Move the bracket to the left. (Figure 7)


Figure 7 Moving the bracket to the left
11. Remove the side support bracket. (Figure 8)

12. Remove the Clutch bracket. (Figure 9)

NOTE: When removing the Clutch Bracket, be careful to recover the washer from between the Clutch Bracket and the Clutch shaft.


Figure 9 Removing the Clutch bracket

NOTE: Removing the (6) screws is shown in two steps in the following two figures.


Figure 10 Removing the screws (4) first
13. Remove the screw (6) from the Main Drive Assembly. (Figure 10, Figure 11)


Figure 11 Removing the remaining (2) screws
14. Rotate the Clutch clockwise to position the Clutch away from the Main Drive Assembly (Figure 12)


Figure 12 Preparing to remove the Main Drive Assembly
15. Remove the Main Drive Assembly. (Figure 13)


Figure 13 Removing the Main Drive Assembly


Figure 14 Installing the Clutch Bracket

## Replacement

1. To install, carry out the removal steps in reverse order.
2. During installation of the Clutch Bracket, ensure that the bracket finger engages the Clutch dog. (Figure 14)

## REP 1.1.2 Drum Drive Assembly

## Parts List on PL 1.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Switch off the power and disconnect the power cord.
2. Remove the ESS PWB Cover (PL 12.2) the MCU PWB Cover (PL 11.2).
3. Remove the MCU PWB Chassis (REP 9.1.1)
4. Remove the ESS PWB Assembly. (REP 9.2.1)
5. Remove the screws (2) and remove the support bracket. (Figure 1)


Figure 1 Removing the support bracket
6. Disconnect the connectors (7) from the Drum Drive Assembly. (Figure 2)


Figure 2 Disconnect the connectors (7)
7. Disconnect the cable from the cable clamps or remove the cable ties from the Drum Drive Assembly. (Figure 3)


Figure 3 Disconnecting cable clamps or removing cable ties
8. Remove the screws (3) and remove the lower support bracket. (Figure 4)


Figure 4 Removing the lower bracket
9. Remove the screws (5). (Figure 5)


Figure 5 Preparing to remove the Drum Drive Assembly
10. Remove the Drum Drive Assembly.

## REP 2.1.1 Tray 1 Feeder

Parts List on PL 2.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

CAUTION
Check that "Ready to Copy" is displayed on the Control Panel display.

1. Switch off the power and disconnect the power cord.
2. Remove the MSI Assembly. (REP 7.1.1)
3. Remove the L/H Upper Cover Unit. (REP 2.6.2)
4. Pull out Tray 1.
5. Open the left side Tray 1 Vertical Transport door.
6. Disconnect the connector (1) and remove the wires from the wire clamps (2). (Figure 1)


Figure 1 Disconnecting the connector
7. Remove the screw from the sensor bracket and move the sensor bracket aside. (Figure 2)


Figure 2 Moving the Sensor Bracket
8. Preparing to remove the Tray 1 Feeder.
a. Remove the screws (2). (Figure 3)


Figure 3 Preparing to remove the Tray 1 Feeder
9. Move the outboard end of the Tray 1 Feeder toward the left of the machine. Remove the Tray 1 Feeder from the machine. (Figure 4)


Figure 4 Removing the Tray 1 Feeder

## Replacement

When installing the sensor bracket, be sure to insert the bracket tab into the cut out in the frame before installing the screw. (Figure 5


Figure 5 Installing the sensor bracket

## REP 2.3.1 Tray 1 Feed/Nudger/Retard Roll

Parts List on PL 2.3
Removal
NOTE: Only the replacement procedure for the Tray 1 Feed/Nudger/Retard Roll is described here.
NOTE: When replacing the Tray 1 Feed/Nudger/Retard Roll, enter Diag. mode and clear the counter for the Tray 1 Feed counter.

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.
NOTE: The Feed, Nudger and Retard Roll must be replaced at the same time.

1. Remove Tray 1.
2. Slide the guide toward the front. (Figure 1)
3. Slide the guide.


Figure 1 Sliding the guide to the front
3. Remove the Feed/Nudger/Retard Roll. (Figure 2)

1. Rotate the Feed/Nudge/Retard Roll clockwise to access the locking tab. Release the lock and remove the Feed/Nudger/Retard Roll.


Figure 2 Removing the Feed/Nudger/Retard Roll

## REP 2.4.1 Registration Unit

Parts List on PL 2.5

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the L/H Upper Cover Unit. (REP 2.6.2)
2. Remove the MSI Unit. (REP 7.1.1)
3. Disconnect the connector. (Figure 1)


Figure 1 Disconnecting the connector (1)
4. Remove the screws (2). (Figure 2)


Figure 2 Removing the screws (2)
5. Pull the outboard end of the Registration Unit toward the left of the machine and remove the Unit. (Figure 3)


Figure 3 Removing the Registration Unit

## Replacement

NOTE: When reinstalling the Registration Unit, it might be necessary to rotate the Registration Drive gears in order for the gears to be aligned properly.

## REP 2.5.1 Takeaway Roll

## Parts List on PL 2.6

Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Switch off the power and disconnect the power cord.
2. Remove the MSI Assembly. (REP 7.1.1)
3. Remove the L/H Lower Cover.
4. Remove the Chute. (Figure 1)
5. Remove the screws (2).
6. Release the hook.
7. Remove the Chute


## REP 2.6.2 L/H Upper Cover Unit

Parts List on PL 2.7

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Switch off the power and disconnect the connector.
2. Open the L/H Upper Cover
3. Release the Cover Support while holding the L/H Upper Cover. (Figure 1)
4. Release the Cover Support.



Figure 2 Removing the L/H Upper Cover Unit
4. Remove the L/H Upper Cover Unit. (Figure 2)

NOTE: If Duplex Module is present, disconnect the connector.

1. Open the L/H Upper Cover Unit until it becomes horizontal.
2. Lift up the unit and remove it.

## REP 3.1.1 ROS Unit

Parts List on PL 3.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Switch off the power and disconnect the Power Cord.
2. Remove the Right Side Cover. (REP 10.2.3)
3. Remove the Power Supply. (REP 9.2.3)
4. Remove the ROS Cooling Fan bracket. (Figure 1)


Figure 1 Removing the ROS Cooling Fan Bracket
5. Preparing to remove the ROS Assembly. (Figure 2)


Figure 3 Removing the ROS Assembly

## Replacement

NOTE: When the ROS Unit has been installed, read the warning label on top of the ROS unit carefully before turning on the power and performing replacement.

1. Installing the ROS Assembly. (Figure 3)
a. To install, push the ROS Assembly into the machine.
b. Be sure that the locating pins (2) on the ROS is engaged into the machine frame.
c. Install the screws (2).
d. Connect the connectors (3).
2. Perform the remainder of the replacement procedure in the reverse order or the removal.

## REP 4.1.1 Developer Housing

## Parts List on PL 5.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Ensure that the "Ready to Copy" is displayed on the Control Panel display.
2. Switch off the power and disconnect the Power Cable.
3. Remove the Toner Cartridge of the Developer Housing to be removed.
4. Remove the Front Cover. (REP 10.2.2)
5. Remove the Low Voltage Power Supply. (REP 9.2.3)
6. Prepare to remove the Rotary Cover. (Figure 1)


Figure 1 Preparing to remove the Rotary Cover


Figure 2 Removing the Rotary Cover
8. Open the Toner/Developer Access Door.
9. Prepare to remove the Developer Housing. (Figure 3)

1. Push in and hold the Rotary Release Knob.
2. Manually rotate the Rotary until the Developer Housing to be removed is in position then release the rotary Release Knob
3. Remove the screw (1).


Figure 3 Preparing to remove the Developer Housing
4. Move the Developer Housing toward the front then remove the Developer Housing. (Figure 4)


Figure 4 Removing the Developer Housing

## Replacement

1. When reinstalling the Developer Housing, ensure that the Spring, located on the outboard end of each Developer Housing, is straight as it is pressed against the turret of the Rotor frame. This Spring must be present, and properly installed. (Figure 5)

NOTE: If this Spring is not straight when the Developer Housing is in place, Color-toColor registration will be out of alignment.


Figure 5 Location of Spring

## CAUTION

When installing the Rotary Cover, ensure that the three Rotary Cover tabs are properly inserted into the frame before installing the screws. An improperly installed Rotary Cover may cause a developer dump during machine operation. (Figure 6)
2. Install the Rotary Cover. (Figure 6)


Figure 6 Inserting the Rotary Cover tabs
3. Perform the remainder of the replacement in reverse order of removal.
4. Enter UI Diagnostic Mode, select Adjustment / Others button, then select Initialize HFSI Counter and Reset Current Value.

- 954-830 = Black
- 954-831 = Yellow
- $954-832=$ Magenta
- 954-833 = Cyan

5. Enter UI Diagnostic Mode, and select NVM Read/Write and reset the following NVM locations to zero.

- 752-941 = Yellow
- 752-942 = Magenta
- 752-943 = Cyan
- 752-944 = Black

6. Perform Max Setup. (ADJ 9.1.2)

## REP 4.1.2 Toner Cartridge

Parts List on PL 5.2

## Removal

## CAUTION

## FAX Models

Check the Job Status button to ensure that there are no jobs in progress.
Check that "Ready to Copy" is displayed on the Control Panel display.

1. With the machine in Ready to Copy mode, press the Machine Status button.
2. On the Machine Status Screen select the Supplies tab.
3. Select on the UI screen, the color toner cartridge to be removed.
4. Select Replace Cartridge on the screen

NOTE: This will rotate the Toner/Developer Rotary to the color Toner Cartridge selected.
5. Open the Front Door.
6. Open the Toner/Developer Access Door by releasing the latch. (Figure 1)


Figure 1 Opening the Access Door


Figure 2 Removing the Toner Cartridge

## Replacement

1. After replacing the Toner Cartridge, close the Toner/Developer Access Door.
2. Close the Front Door.

NOTE: The control logic will detect the Toner Cartridge and return to the Supplies menu.
7. Remove the Toner Cartridge. (Figure 2)

## REP 4.1.3 Developer Bias Brush

Parts List on PL 5.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Switch off the power and disconnect the power cord.
2. Remove the Finisher if present.
3. Remove the Black (K) Developer Housing. (REP 4.1.1)

NOTE: Be sure to cover the Drum Module to prevent light shock.
4. Remove the Drum Module and store it in a black bag.
5. Rotate the Developer Rotary Assembly by pushing in the lock knob and rotate the Rotary until it is in the position shown. (Figure 1)


Figure 1 Positioning the Developer Rotary Assembly
6. Remove the Waste Toner Auger. (REP 4.1.4)
7. Remove the screws (2) and disconnect the High Voltage lead. (Figure 2)


Figure 2 Removing the screws (2) and disconnecting the High Voltage Lead
8. Remove the Developer Bias Brush. (Figure 3)


Figure 3 Removing the Developer Bias Brush

## REP 4.1.4 Waste Toner Auger

Parts List on PL 6.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Switch off the power and disconnect the power cord.
2. Remove the Waste Auger drive shaft bushing. (Figure 1)


Figure 1 Removing the Waste Auger drive shaft bushing
NOTE: In the next step, place a sheet of paper under the opening in the Waste Auger when removing it from the frame.
3. Remove the Waste Auger. (Figure 2)


Figure 2 Removing the Waste Auger

## REP 4.2.1 Developer Motor Assembly

## Parts List on PL 1.1

Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Switch off the power and disconnect the power cord.
2. Remove the Rear Lower Cover, the ESS Cover, and the MCU Cover. (REP 10.2.1)
3. Remove the MCU PWB chassis. (REP 9.1.1)
4. Remove the ESS PWB chassis. (REP 9.2.1)
5. Disconnect the connectors (2). (Figure 1)


Figure 1 Disconnecting the connectors (2)
6. Remove the Developer Motor Assembly. (Figure 2)


Figure 2 Removing the Developer Drive Assembly

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 4.2.2 IBT Module

## Parts List on PL 6.1

## Removal

1. Switch off the power and disconnect the power cord.
2. Remove the Front Cover. (REP 10.2.2)
3. Remove the Print Drum. (REP 4.2.3)

NOTE: Do not allow the Print Drum to be exposed to light for more than 30 seconds.
4. Store the Print Drum out of the way on a level surface and cover with paper to prevent light shock.

NOTE: The IBT Module should be removed with the IBT Cleaner attached, especially if the IBT Belt is to be reused.
5. Remove the Waste Toner Bottle, (Figure 1)


Figure 1 Removing the Waste Toner Bottle
6. Remove the Xerographic Drum CRUM Bracket. (Figure 2)


Figure 2 Removing the CRUM Bracket
7. Remove the Waste Auger drive gear. (Figure 3)


Figure 3 Removing the Waste Auger C-clip and drive gear
8. Remove the Waste Auger drive shaft bushing. (Figure 4)


Figure 4 Removing the Waste Auger drive shaft bushing
NOTE: In the next step, place a sheet of paper under the opening in the Waste Auger when removing it from the frame.
9. Remove the Waste Auger. (Figure 5)


Figure 5 Removing the Waste Auger
10. Open the left side door and position the levers (2) to the up or retract position. (Figure 6)

11. Place the IBT Belt Tension Handle on the shaft and rotate the Handle counter clockwise to the down position put tension on the IBT Belt. (Figure 7)


Figure 7 Re-tension the IBT Belt
12. Remove the screws (4) and the Tension Handle. (Figure 8)


Figure 8 Preparing to removing the IBT Module

## CAUTION

Do not touch the surface of the IBT Belt with hands. Print quality can be affected by belt surface residue and marks.
13. Pull the IBT Module out of the machine. (Figure 9)


Figure 9 Removing the IBT Module from the machine
14. Place the IBT Module on a clean work surface.

NOTE: If the IBT Belt is to be removed, proceed to the IBT Belt procedure. (REP 4.2.5)

## Replacement

1. Rotate the couplings to fully extent the two BTR2 levers.
2. With the two BTR2 levers fully extend, manually position them behind the IBT Module frame. This will allow the IBT Module to be inserted into the opening in the machine.
3. When the IBT Module is in the machine, then move the two BTR2 levers away from the IBT Module frame. This will allow the levers to capture the BTR2 when the left side door is closed.
4. Install the IBT Module in reverse order of removal.

## REP 4.2.3 Print Drum

Parts List on PL 4.1

## Removal

1. Open the Front Door.
2. Preparing to remove the Print Drum. (Figure 1)


Figure 1 Preparing to remove the Print Drum
3. Removing the Print Drum from the machine. (Figure 2)

## REP 4.2.4 IBT Cleaner

Parts List on PL 6.1

## Removal

1. Open the Front door.
2. Prepare to remove the IBT Cleaner. (Figure 1)


Figure 2 Removing the IBT Cleaner

## REP 4.2.5 IBT Belt

## Parts List on PL 6.2

## Removal

1. Switch off the power and disconnect the Power Cord.
2. Remove the IBT Module. (REP 4.2.2)
3. Place the IBT Module on a flat work surface.
4. Remove the IBT Cleaner from the IBT Module. (REP 4.2.4)
5. Remove the outboard frame (Figure 1)


## Figure 1 Removing the outboard frame

6. Remove the cross bar from the IBT Module. (Figure 2)


## Figure 2 Removing the cross bar

NOTE: Note the orientation of the frame cross brace. Be sure to reinstall the frame cross brace in the same manner which it was removed.
7. Remove the cross brace. (Figure 3)


Figure 3 Removing the cross brace.
8. Use the cross bar as a foot by inserting it through the holes in the IBT Module frame and stand the Module on its end as shown. (Figure 4)


Figure 4 Using the cross bar as a foot
9. Remove the inner bracket. (Figure 5)


Figure 5 Removing the inner bracket
10. Release the tension of the Belt. (Figure 6)


Figure 6 Releasing the Belt tension
11. Remove the follower lever. (Figure 7)


Figure 7 Removing the follower lever
12. Remove the bushing and E-ring. (Figure 8)


Figure 8 Removing the bushing and E-ring
13. Remove the Backup Roll bracket. (Figure 9)


Figure 9 Removing the Backup Roll bracket
14. Remove the Backup Roll. (Figure 10)


Figure 10 Removing the Backup Roll
15. Carefully remove the IBT Belt from the IBT Module. (Figure 11)

NOTE: Note that the Belt Sensor reflector is located toward the outboard end of the IBT Module. Be sure to install the IBT Belt in this orientation.


Figure 11 Removing the Belt

## Replacement

1. Reassemble the IBT Module in reverse order of removal.

## REP 4.2.6 Rotary Drive Motor

## Parts List on PL 5.1

## Removal

1. Switch off the power and disconnect the power cord.
2. Remove the Upper Rear Cover.
3. Remove the Lower Rear Cover.
4. Disconnect the Motor connector and wire harness clamps. (Figure 1)


Figure 1 Disconnecting the connector and harness
5. Remove the screws (4) and remove the Rotary Motor. (Figure 2)


Figure 2 Removing the Rotary Motor

## REP 4.2.7 Developer Material

## Parts List on PL 5.1

## Removal

1. Remove the Developer Housing. (REP 4.1.1)
2. Place several sheets of paper on a work surface and place the Developer Housing on the paper.

## CAUTION

Be careful to avoid getting Developer Material on the Developer Housing drive gears. If some developer does contaminate the gears, clean the gears and make sure that the gears rotates smoothly.
3. Remove the screw from the cover on the Developer Housing. (Figure 1)


Figure 1 Removing the screw from the Developer Housing Cover
4. Unlatch the tabs on the Developer Housing Cover. (Figure 2)


Figure 2 Removing the Developer Housing Cover
5. Remove the Developer Housing Cover. (Figure 3)


Figure 3 Removing the Developer Housing Cover
6. Remove the plastic bag from the new Developer Material package.
7. Place the Developer Housing up side down inside the plastic bag and turn the Mag Roll Gear on the end of the Cartridge to pour out the old Developer Material. (Figure 4)


Figure 4 Dumping the Developer Material
8. Vacuum the augers, mag roll and inner surfaces of the Developer Housing. (Figure 5)


Figure 5 Vacuuming the Developer Housing
9. Pour the new Developer Material into the Developer Housing using a back and forward motion while rotating the Mag Roll. (Figure 6)


Figure 6 Adding the new Developer Material
10. Prepare to reinstall the Developer Housing cover. (Figure 7)


Figure 7 Preparing to reinstall the Developer Housing Cover
11. Press the Cover tabs to lock the Developer Housing Cover. (Figure 8)


Figure 8 Locking the Cover tabs
12. Install the screw (1). (Figure 9)


## Figure 9 Install the screw (1)

13. Reinstall the Developer Housing into the machine. (REP 4.1.1)
14. Enter UI Diagnostic Mode and select NVM Read/Write and reset the following NVM locations to zero.

- 752-086 = Yellow
- 752-087 = Magenta
- 752-088 = Cyan
- 752-089 = Black

15. Perform Max Setup. (ADJ 9.1.2)

## REP 4.2.8 2nd BTR Contact Arms

## Parts List on PL PL 6.2

## Removal

1. Switch off the power and disconnect the Power Cord.
2. Prepare to remove the IBT Module, (REP 4.2.2).
3. To replace the outboard 2nd BTR Contact Arm, perform the following:
a. Slide the IBT Module part way out of the machine.
b. Remove the E-ring, washer and Contact Arm.


Figure 1 Removing the outboard Contact Arm


Figure 2 Removing the inboard Contact Arm

## Replacement

1. Be sure that the plastic spacer on the Contact Arm shaft is properly seated as the Contact Arm is installed.


Figure 3 Properly seat plastic spacer
2. Install the 2nd BTR Contact Arm behind the cam follower on the IBT Module.


Figure 4 Placing Contact Arm behind cam follower
3. Be sure the brass bushing is installed in the Contact Arm.
4. Install the washer and E-ring.
5. Retract the Contact Arms and slide the IBT Module into the machine.
6. After the IBT Module is installed and secured with the screws (4), be sure to extend the 2nd BTR Contact Arms.

## REP 4.3.1 Sensor Bar

Parts List on PL 11.1

## Removal

1. Switch off the power and disconnect the Power Cord
2. Remove the IBT Module. (REP 4.2.2)
3. Prepare to remove the Sensor Bar.
a. Release the harness clamps (2).
b. Disconnect the connectors (2).
c. Remove the screw (1).


Figure 1 Preparing to remove the Sensor Bar
4. Remove the Sensor Bar (PL 11.1).

## REP 5.1.1 Fuser Unit

Parts List on PL 7.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check the Job Status to ensure that there are no jobs in progress.
CAUTION
Do not start servicing until the Fuser has cooled down.

1. Switch off the power.
2. Open the L/H Upper Cover Assembly. (PL 2.6).
3. Remove the Fuser Unit. (Figure 1)
4. Loosen the knobs (2).
5. Pull the Fuser by the handles (2).


## Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing the Fuser;
a. Press the Machine status button.
b. Select Supplies.

## REP 6.1.1 Exit2 + OCT2

Parts List on PL 8.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Open the L/H Upper Cover.
2. Remove the Exit2 + OCT2. (Figure 1)
3. Lift up the front and rear levers and remove the Exit2 + OCT2.


Figure 1 Removing the Exit2+OCT2 (j0tp40601)

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 7.1.1 MSI Assembly

Parts List on PL 9.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the MSI Rear Cover. (Figure 1)
2. Remove the screw.
3. Remove the MSI Rear Cover.

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Figure 1 Removing the MSI Rear Cover
2. Disconnect the connector. (Figure 2)

1. Release the Wire Harness from the clamp
2. Release the Wire Harness from the clamp.
3. Disconnect the connector.


Figure 2 Disconnecting the connector
3. Remove the MSI Assembly. (Figure 3)

1. Remove the screws (2).
2. Remove the MSI Assembly.


Figure 3 Removing the MSI Assembly

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 7.2.1 MSI Feed Roll/Retard Pad

## Parts List on PL 9.2

## Removal

NOTE: When replacing the MSI Feed Roll/Retard Pad, enter the Diag. mode and clear the counter for MSI Feed.

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.
NOTE: The MSI Feed Roll and MSI Retard Pad must both be replaced at the same time.

1. Remove the MSI Assembly. (REP 7.1.1)
2. Remove the plate. (Figure 1)
3. Remove the screws (2).
4. Remove the plate.


Figure 1 Removing the plate
3. Remove the MSI Feed Roll. (Figure 2)

1. Remove the ends of the roll and slide them out.
2. Remove the ends of the roll and slide them out.
3. Slide the MSI Feed Roll to the front and remove it.


Figure 2 Removing the MSI Feed Roll
4. Remove the MSI Retard Pad. (Figure 3)

1. Remove the springs (2).
2. Remove the MSI Retard Pad.
3. Pull out the shaft.


Figure 3 Removing the MSI Retard Pad

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 9.1.1 MCU PWB

Parts List on PL 11.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Static electricity may damage electrical parts.
Always wear a wrist strap to protect electrical parts from static damage. If a wrist strap is not available, touch some metallic parts before servicing to discharge the static electricity.

## CAUTION

Perform GP 4 Part 2 after each PWB is replaced. To maintain the integrity of the serial number and billing data NEVER replace all of the PWBs at once. Replacing all three PWBs at once will cause unrecoverable NVM corruption. If a PWB needs replacing, only replace ONE AT A TIME and perform this procedure after each one is replaced. If the problem is not resolved, reinstall the original PWB and re-enter the serial number (if necessary) before attempting to replace a different PWB.

1. Whenever the MCU PWB is being replaced, go to GP 4 Replacing Billing PWBs and perform PART 1 to document Customer Settings and Machine Settings.
2. Switch off the power and disconnect the power cord.
3. Remove the ESS Cover, the MCU Cover and the Rear Lower Cover. (REP 10.2.1)
4. Disconnect the connectors from the MCU PWB. (Figure 1, Figure 2)


Figure 1 Disconnecting 13 of the connectors on the MCU PWB


Figure 2 Disconnecting the remaining 8 connectors on the MCU PWB
5. Loosen the screws (5) on the MCU PWB and slide the MCU to the right to disconnect the P 389 connector. (Figure 3)


Figure 3 Disconnecting the P 389 connector on the MCU PWB
6. Remove the MCU PWB.

## CAUTION

Pin breakage occurs if the EPROM is carelessly removed.
NOTE: Be sure to notice the orientation of the EPROM in the connector on the PWB. Be sure to install the EPROM in the same orientation
7. If a new MCU PWB will be installed, remove EPROM from old MCU PWB and save for installation on new MCU PWB. (Figure 4)


Figure 4 MCU PWB EPROM Location

## Replacement

1. If installing the same MCU PWB that was just removed, use the reverse of the removal procedure to install.
2. If replacing the MCU PWB with a new MCU PWB continue with these steps.

## CAUTION

Pin breakage occurs if the EPROM is carelessly replaced.
3. Install the EPROM from the old MCU PWB on the new MCU PWB. (Figure 5)


Figure 5 MCU PWB EPROM Location
4. Install the MCU PWB and connect P/Js.
5. Switch on the machine power.
6. If a 041-340 Fault occurs, continue with the following step.
7. Load the current IOT software level on to the MCU PWB and use the Single File down load.
8. Perform PART 2 of GP 4 Replacing Billing PWBs.

## REP 9.1.2 MCU PWB EPROM

## Removal

## CAUTION

A disabled machine with loss of serialization and billing data occurs if both the ESS PWB with EPROM and the MCU PWB with EPROM are replaced at the same time.

NOTE: Refer to REP 9.1.1 to remove or replace the MCU PWB EPROM (Figure 1).


Figure 1 MCU PWB EPROM Location

REP 9.2.1 ESS PWB
Parts List on PL 11.2

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Static electricity may damage electrical parts.
Always wear a wrist strap to protect electrical parts from static damage. If a wrist strap is not available, touch some metallic parts before servicing to discharge the static electricity.

## CAUTION

Perform GP 4 Part 2 after each PWB is replaced. To maintain the integrity of the serial number and billing data NEVER replace all of the PWBs at once. Replacing all three PWBs at once will cause unrecoverable NVM corruption. If a PWB needs replacing, only replace ONE AT A TIME and perform this procedure after each one is replaced. If the problem is not resolved, reinstall the original PWB and re-enter the serial number (if necessary) before attempting to replace a different PWB.

1. Go to GP 4 Replacing Billing PWBs and perform PART 1 to document Customer Settings and Machine Settings.
2. Switch off the power and disconnect the power cord.
3. Remove the ESS Cover, the MCU Cover and the Rear Lower Cover. (REP 10.2.1)
4. Disconnect all the connectors (5) on the ESS PWB. (Figure 1)


Figure 1 Disconnecting the connectors on the ESS PWB
5. Disconnect the connectors from the MCU PWB. (Figure 2, Figure 3)


Figure 2 Disconnecting 13 of the connectors on the MCU PWB


Figure 3 Disconnecting the remaining 8 connectors on the MCU PWB
6. Loosen the screws (5) on the MCU PWB and slide the MCU to the right to disconnect the P 389 connector. (Figure 4)


Figure 4 Disconnecting the P 389 connector on the MCU PWB
7. Remove the Rear Top Cover. (Figure 5)


Figure 5 Remove the Rear Top Cover
8. Remove the Right Rear Side Panel. (Figure 6)


Figure 6 Removing the Right Rear Side Panel
9. Loosen the upper screws (2) from the ESS PWB Chassis. (Figure 7)


Figure 7 Loosen the upper screws (2) from the ESS PWB Chassis
10. Loosen the Lower screws (2) from the ESS PWB Chassis. (Figure 8)


Figure 8 Loosen the screws (2) from the ESS PWB Chassis
11. Lift up the ESS PWB Chassis and remove it from the machine.
12. If present, remove the Printer PWB from the ESS Chassis. (REP 9.2.4) (PL 11.2).
a. Loosen thumbscrews and pullout Printer PWB to disconnect it from the ESS PWB.
13. Remove the ESS Panel. (PL 11.2)
14. Remove the HDD Base Chassis. (PL 11.2)
15. Remove the screws and remove ESS PWB.

## CAUTION

Pin breakage occurs if the EPROM is carelessly removed.
NOTE: Be sure to notice the orientation of the EPROM in the connector on the PWB. Be sure to install the EPROM in the same orientation.
16. If a new ESS PWB will be installed, remove the DDR DIMM (2), the PC133 DIMM (1) and the EPROM from the old ESS PWB and save for installation on new ESS PWB. (Figure 9)


Figure 9 DDR DIMM, PC133 DIMM and ESS PWB EPROM Location

## Replacement

1. If installing the same ESS PWB that was just removed, use the reverse of the removal procedure to install.
2. If replacing the ESS PWB with a new ESS PWB, continue with the following steps CAUTION
Pin breakage occurs if the EPROM is carelessly replaced.
3. Install the DDR DIMM, PC133 DIMM and EPROM from the old ESS PWB on to the new ESS PWB. (Figure 10)


Figure 10 ESS PWB EPROM Location
4. Install the ESS PWB and Panel into the Chassis.
5. Install the Base Chassis and then the HDD PWB and tighten the thumbscrews.
6. If present, install the Printer PWB.
a. Install Printer PWB while connecting it to ESS PWB and tighten thumbscrews.
7. Install the ESS PWB Chassis into the machine and connect all the connectors.
8. Slide the MCU PWB into position and tighten the screws.
9. Connect all the connectors to the MCU PWB.
10. Switch on the power.
11. If a fault occurs (116-334) switch off then switch on the power.
12. If a Serial Number, Billing Meter Mismatch fault (Speed Mismatch fault) occurs (124-315), disregard and continue.
13. Perform PART 2 of GP 4 Replacing Billing PWBs.
14. Reinstall the Customer Settings. (Sys User settings will be affected).

## REP 9.2.2 ESS PWB EPROM

Parts List on PL 11.2

## Removal

## CAUTION

A disabled machine with loss of serialization and billing data occurs if both the ESS PWB with EPROM and the MCU PWB with EPROM are replaced at the same time.

NOTE: Refer to REP 9.2.1 ESS PWB to remove or reinstall the ESS PWB EPROM (Figure 1).


Figure 1 ESS PWB EPROM Location

## REP 9.2.3 Power Supply PWB

## Parts List on PL 9.1

## Removal

1. Switch off the power and disconnect the Power Cord.
2. Remove the Right Side Cover. (REP 10.2.3)
3. Remove the Power Supply PWB. (Figure 1)
a. Disconnect the connectors (9).


Figure 1 Removing the Power Supply PWB
b. Loosen the screws (4). (Figure 2)
c. Lift the Power Supply PWB up and remove it.


Figure 2 Removing the Power Supply PWB

## REP 9.2.4 Print Chassis Assembly

## Parts List on PL 11.2

## Removal

1. Disconnect the Ethernet cable.
2. Switch off the power and disconnect the power cord.
3. Remove the ESS Cover. (REP 10.2.1)
4. Remove the Printer Chassis Assembly by loosening the thumb screws (3). (PL 11.2)

## Replacement

1. Install the Printer Chassis Assembly in reverse order of removal.
2. Connect the power cord and switch on the power.
3. Verify that the machine has the correct level of ESS Controller software. If necessary, upgrade the software to the correct version.

## REP 9.2.5 PS DIMM

## Parts List on PL 11.2

## Removal

1. Disconnect the Ethernet cable.
2. Switch off the power and disconnect the power cord.
3. Remove the ESS Cover. (REP 10.2.1)
4. Remove the PS DIMM by gently releasing the 2 plastic clips that hold the DIMM in place

When released, the DIMM will 'pop up' at an angle to the print controller PWBA. (PL 11.2)

## Replacement

NOTE: Ensure that the PS DIMM is seated properly and that the 2 clips engage the edge of the DIMM.

1. Install the PS DIMM in reverse order of removal.
2. Connect the power cord and switch on the power.
3. Verify that the machine has the correct level of ESS Controller software. If necessary, upgrade the software to the correct version.

## REP 10.1.1 Top Cover Assembly

## Parts List on PL 12.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the Toner Cartridge. (REP 4.1.2)
2. Remove the Front Left Cover. (Figure 1)
3. Remove the screw.
4. Remove the Front Left Cover.

5. Remove the Paper Weight Assembly. (Figure 2)
6. Remove the Paper Weight Assembly.


## Figure 2 Removing the Paper Weight Assembly

4. Remove the Top Cover Assembly. (Figure 3)
5. Remove the screws (x2).
6. Remove the Top Cover Assembly.

Figure 1 Removing the Front Left Cover


Figure 3 Removing the Top Cover Assembly

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 10.2.1 Rear Lower Covers

## Parts List on PL 11.3, PL 12.2

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the ESS Cover Assembly. (Figure 1)
2. Loosen the screws (2).
3. Remove the ESS Cover Assembly.

j0st41005
Figure 1 Removing the ESS Cover Assembly
4. Remove the Rear Middle Cover. (Figure 2)
5. Remove the screws (2)
6. Remove the Rear Middle Cover.


Figure 2 Removing the Rear Middle Cover

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## Figure 3 Removing the cover

4. Remove the Rear Lower Cover. (Figure 4)
5. Remove the screws (4).
6. Remove the Rear Lower Cover.


Figure 4 Removing the Rear Lower Cover

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 10.2.2 Front Inner Cover

## Parts List on PL 12.1

## Removal

1. Open the Front Door.
2. Remove the Print Drum Latch Handle. (Figure 1)
a. Rotate handle to the unlatch position.
b. Remove the screw (1).
c. Remove the Print Drum Latch Handle.

3. Remove the Front Cover. (Figure 2)


Figure 2 Remove the Front Cover

## REP 10.2.3 Right Side Cover

## Parts List on PL 12.2

Removal

1. Open the Front Door.
2. Remove the Right Side Cover. (Figure 1)
a. Remove the screws (2).
b. Push down on the Right Side Cover and remove it from the machine.


Figure 1 Removing the Right Side Cover

## REP 10.3.1 Rear Fan

Parts List on PL 11.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Switch off the power and disconnect the power cord.
2. Remove the ESS PWB (REP 9.2.1).
3. Remove the screw (A).
4. Unplug connector (B).
5. Remove the Rear Fan (Figure 1).


Figure 1 Rear Fan

## Replacement

To install, carry out the removal steps in reverse order.

## REP 11.1.1 Platen Cushion

## Parts List on PL 13.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the Platen Cushion. (Figure 1)
2. Remove the Platen Cushion.


## Replacement

NOTE: Remove all remaining tapes on the Platen Cover after the Platen Cushion has been removed

1. Install the Platen Cushion. (Figure 2)
2. Remove the seal.
3. Press gently in the direction of the arrow.
4. Slowly lower the Platen Cover pressing on the Platen Cushion.


Figure 1 Removing the Platen Cushion

## REP 11.1.2 Control Panel Assembly

Parts List on PL 13.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine

1. Remove the Control Panel Assembly. (Figure 1)
2. Remove the screws (2).
3. Remove the screws (2).
4. Slide the Control Panel Assembly to front a little.
5. Release the connector.
6. Release the wire harness from the frame.
7. Remove the Control Panel Assembly.


Figure 1 Removing the Control Panel Assembly

## Replacement

## CAUTION

Do not pinch the wire harness upon installation.

1. To install, carry out the removal steps in reverse order.

## REP 11.3.1 Platen Glass

## Parts List on PL 13.3

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the Platen Glass. (Figure 1)
2. Remove the screws (x2).
3. Remove the plate.
4. Remove the Platen Glass.


Figure 1 Removing the Platen Glass

## Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: To install the Platen Glass, push the Platen Glass in the direction of arrow $A$ and the plate in the direction of arrow B. (Figure 2)


Figure 2 Installing the Platen Glass

## REP 11.3.2 IIT/IPS PWB

## Parts List on PL 13.3

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Switch off the power and disconnect the power cord.
2. Remove the Platen Glass (REP 11.3.1)
3. Disconnect the connector and remove the connector screws (2). (Figure 1)


Figure 1 Disconnect the connector and remove the screws (2)
4. Remove the ESS PWB cover and the Top Rear Cover. (Figure 2)


Figure 2 Removing the ESS Cover and the Top Rear Cover
5. Disconnect the connector from the left rear IIT/IPS PWB and remove the screw. (Figure 3)


Figure 3 Disconnect the connector and remove the screw (1)
6. Remove the Lens Cover. (Figure 4)


Figure 4 Removing Lens Cover


Figure 5 Removing the IPS Cover
8. Disconnect the connectors (3). (Figure 6)


Figure 6 Disconnecting the connectors (4)


Figure 7 Disconnecting the large ribbon cable
10. Remove the IIT/IPS PWB. (Figure 8)
9. Disconnect the large ribbon cable on the IIT/IPS PWB. (Figure 7)


Figure 8 Removing the screws (7)
11. Remove the IIT/IPS PWB.
12. When replacing the IIT/IPS PWB, remove the EPROM from the old IIT/IPS PWB to install it on the new IIT/IPS PWB. (Figure 9)


Figure 9 Removal and replacing the IIT EPROM

## Replacement

1. When replacing the IIT/IPS PWB, install the EPROM from the old ITT/IPS PWB onto the new IIT/IPS PWB. (Figure 10)


Figure 10 Removal and replacing the IIT EPROM
2. To install, carry out the removal steps in reverse order.
3. Check the software level of the new IIT/IPS PWB to ensure that it is current with the machine software. If the software level is different, upgrade the software on the PWB.

## REP 11.4.1 Lens Kit Assembly

## Parts List on PL 13.4

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the Platen Glass. (REP 11.3.1)
2. Remove the Lens Cover. (Figure 1)


Figure 1 Removing Lens Cover
3. Remove the APS Sensor. (Figure 2)

1. Remove the Screw.
2. Release the wire harness from the clamp.
3. Remove the APS Sensor


Figure 2 Removing the APS Sensor
4. Disconnect the CCD Flat Cable. (Figure 3)

1. Take off the hook
2. Disconnect the CCD Flat Cable.


Figure 3 Disconnecting the FFC CCD Cable
5. Replace the Lens Kit Assembly. (Figure 4)

1. Remove the screws (4).
2. Remove the Lens Kit Assembly.
3. Observe the orientation of the Lens Kit Assembly


Figure 4 Removing the Lens Kit Assembly

## Replacement

1. Install the Lens Kit Assembly.
2. Connect the CCD Flat Cable and install the Lens Cover.
3. Install the Platen Glass. (No need to install the Glass Press Guide.)
4. Switch on the power.
5. Perform the Optical Axis Adjustment ADJ 9.1.9.

## REP 11.5.1 Carriage Cable

## Parts List on PL 13.5

## Removal

NOTE: Only the replacement procedure for the Rear Carriage Cable is described here. The replacement procedure for the Front Carriage Cable is the same as for the Rear Carriage Cable.

NOTE: The Front and Rear Carriage Cables must be replaced separately.

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. For the Platen models, remove the Platen Cover. (Figure 1)
2. Remove the Platen Cover.


Figure 1 Removing the Platen Cover
2. Remove the following parts:

- Platen Glass (REP 11.3.1)
- Control Panel (REP 11.1.2)
- DADF Assembly (REP 15.1.1)

3. Remove the DADF Platen Glass. (Figure 2)
4. Remove the screw (1).
5. Remove the Front Support Bracket.
6. Remove the DADF Platen Glass.


Figure 2 Removing the Left Side Platen
4. Unfasten the Full Rate Carriage from the Carriage Cable. (Figure 3)

1. Move the Full Rate Carriage to the frame cutouts.
2. Remove the screws (1).


Figure 4 Removing the spring


Figure 5 Winding the Carriage Cable around the pulley. 1/3

## Replacement

1. Wind the Carriage Cable around the pulley. (Figure 5, Figure 6, Figure 7)
2. Insert the Carriage Cable ball into the ditch of the pulley.
3. Wind the spring end of the cable around the pulley for 1.5 rounds.
4. Fix the cable at the spring end on the frame with tape.
5. Wind the cable at the ball end around the pulley for 2 rounds.
6. Fix the cable on the pulley with tape to prevent it from moving.


Figure 6 Winding the Carriage Cable around the pulley. 2/3

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Figure 7 Winding the Carriage Cable around the pulley. 3/3

NOTE: Indicates the number of coils made by the Carriage Cable at the front and rear. (Figure 8)


Figure 8 The number of coils made by Carriage Cable at the front and rear
2. Install the ball end of the Carriage Cable. (Figure 9)

1. Route the Carriage Cable on the pulley in front of it.
2. Hang the ball on the notch of the frame.


## Figure 9 Installing the Carriage Cable

3. Install the spring end of the Carriage Cable. (Figure 10)
4. Remove the tape securing the Carriage Cable
5. Route the spring end of the Carriage cable along the frame and on the pulley.
6. Route the cable on the pulley at the rear of the Half Rate Carriage.
7. Attach the spring to the Carriage Cable and route the cable along the frame as indicated.

8. Temporarily attach the Full Rate Carriage on the Carriage Cable. (Figure 11)
9. Remove the tape.
10. Move the Full Rate Carriage to the Frame cutout position
11. Temporarily attach the Full Rate Carriage on the Carriage Cable.


Figure 11 Installing the Carriage Cable at the front
4. Remove the tape used for keeping the cable in place.
5. Adjust the position of Full Rate/Half Rate Carriages. (ADJ 11.6.1)
6. Manually move the Full Rate Carriage to ensure that it moves smoothly.

## REP 11.5.2 Carriage Motor Assembly

Parts List on PL 13.5

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. For the Platen models, remove the Platen Cover.
2. Remove the Platen Cover. (Figure 1)

3. Remove the ESS Cover Assembly.


Figure 2 Removing the ESS Cover
3. Remove the Rear Upper Cover. (Figure 3)

Figure 1 Remove the Platen Cover
2. For the DADF Models Remove the DADF. (REP 15.1.1)
3. Remove the ESS Cover Assembly. (Figure 2)

1. Loosen the screws (2).


Figure 3 Removing the Rear Upper Cover
4. Remove the IIT Left Cover. (Figure 4)

1. Remove the screws (2).
2. Remove the IIT Left Cover.

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Figure 4 Removing the IIT Left Cover
3. Remove the IIT Rear Cover. (Figure 5)
4. Remove the screws (2).
5. Remove the IIT Right Cover.

j0vr411007
Figure 5 Removing the IIT Right Cover
6. Remove the IIT Rear Cover. (Figure 6)
7. Remove the screws (3).
8. Remove the IIT Rear Cover


Figure 6 Removing the IIT Rear Cover
3. Disconnect the connector. (Figure 7)

1. Disconnect the connector.
2. Remove the clamp.
3. Remove the spring


Figure 7 Disconnecting the connector
4. Remove the Carriage Motor Assembly. (Figure 8)
a. 1. Remove the screws (x3).
b. 2. Remove the Carriage Motor Assembly.

j0vr411010
Figure 8 Removing the Carriage Motor Assembly

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 11.6.1 Exposure Lamp

Parts List on PL 13.6
Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Open the Platen Cover or DADF.
2. Remove the Platen Glass. (REP 11.3.1)
3. Move the Full Rate Carriage to the frame notch.
4. Remove the Exposure Lamp. (Figure 1)
5. Disconnect the connector.
6. Remove the screw.
7. Remove the Exposure Lamp.


Figure 1 Removing the Exposure Lamp

## REP 11.6.2 Lamp Wire Harness

Parts List on PL 13.6

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the DADF. (REP 15.1.1)
2. Remove the Platen Glass. (REP 11.3.1)
3. Remove the Lens Cover. (Figure 1)


## Figure 1 Removing Lens Cover

4. Remove the IPS Cover. (Figure 2)
5. Remove the screws (2).
6. Remove the IPS Cover


Figure 2 Removing the IPS Cover
5. Disconnect the connector of the Lamp Wire Harness. (Figure 3)

1. Disconnect the connector.


Figure 3 Disconnecting the connector ( $\mathrm{j} 0 \mathrm{st41125)}$
6. Release the Lamp Wire Harness from the hook. (Figure 4)

1. Release the Lamp Wire Harness from the hooks.
2. Remove the Harness from the frame opening.


Figure 4 Release the Lamp Wire Harness from the hook
3. Remove the Full Rate Carriage. (Figure 5)

1. Remove the screws (2).
2. Remove the Full Rate Carriage.


Figure 5 Removing the Full Rate Carriage (j0st41126)
4. Remove the Lamp Wire Harness from the Full Rate Carriage. (Figure 6)

1. Turn over the Full Rate Carriage.
2. Remove the screw.
3. Remove the guide.
4. Disconnect the connector.
5. Remove the Lamp Wire Harness.


Figure 6 Removing the Lamp Wire Harness (j0st41127)

## Replacement

1. Install the Lamp Wire Harness by aligning it with the marks as shown in the figure. (Figure 7)
2. To install, carry out the removal steps in reverse order.

NOTE: Adjust the positions of the Full Rate/Half Rate Carriages after installation. (ADJ 11.6.1)


Figure 7 Installing the Lamp Wire Harness

## REP 12.1.1 Tray 2 Feeder (2TM)

Parts List on PL 14.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Pull out Tray 2.
2. Remove the Foot Cover. (Figure 1)

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Figure 2 Removing the Left Lower Cover
4. Open the Left Cover Assembly.
5. Remove the bracket. (Figure 3)

1. Remove the screw
2. Remove the screw.
j0tp41201

Figure 1 Removing the Foot Covers
3. Remove the Left Lower Cover. (Figure 2)

6. Remove the Feed Out Chute. (Figure 4)

1. Remove the Feed Out Chute.


Figure 4 Removing the Feed Out Chute
7. Disconnect the connector. (Figure 5)

1. Disconnect the connector.
2. Release the clamp to remove the wire.


Figure 5 Disconnecting the connector
8. Remove the Tray 2 Feeder. (Figure 6)

1. Remove the screws (2).
2. Remove the Tray 2 Feeder.


Figure 6 Removing the Tray 2 Feeder

## Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing, enter Diag. mode. Clear the counter.

## REP 12.1.2 Tray 3 Feeder (2TM)

Parts List on PL 14.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Pull out Tray $2 / 3$.
2. Remove the Foot Covers. (Figure 1)

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j0st41213

Figure 2 Removing the Left Lower Cover
4. Open the Left Cover Assembly.
5. Remove the screws. (Figure 3)

1. Remove the screws.

Figure 1 Removing the Foot Covers
3. Remove the Left Lower Cover. (Figure 2)

6. Remove the Feed Out Chute. (Figure 4)

1. Remove the Feed Out Chute.


Figure 4 Removing the Feed Out Chute
7. Disconnect the connector. (Figure 5)

1. Disconnect the connector.
2. Release the clamp to remove the wire.


Figure 5 Disconnecting the connector
8. Remove the Tray 3 Feeder. (Figure 6)

1. Remove the screws (2).
2. Remove the Tray 3 Feeder.


Figure 6 Removing the Tray 3 Feeder

## Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing, enter Diag. mode. Clear the counter.

## REP 12.3.1 Feed/Retard/Nudger Roll (2TM)

## Parts List on PL 14.4

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.
NOTE: The Feed, Retard and Nudger Roll must be replaced at the same time.

1. Remove the paper tray for the Feed, Retard and Nudger Roll to be replaced
a. Pull out tray and remove paper.
b. Ensure tray is pulled out to the stop.
c. Lift end and pull out to remove.
2. Remove the Tray $2 / 3$ Feeder.

- Tray 2 Feeder (REP 12.1.1)
- Tray 3 Feeder (REP 12.1.2)

3. Move the Front Chute in the direction of the arrow. (Figure 1)
4. Move the Front Chute.

j0st41209
Figure 1 Moving the Front Chute
5. Remove the Feed/Retard/Nudger Roll. (Figure 2)
6. Release the hooks (3) to remove the Feed/Retard/Nudger Roll.


# REP 12.6.1 2TM PWB 

## Parts List on PL 14.7

## Clean

Replacement

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Before replacing the 2TM PWB, read and record the values at NVM location 742-022 and 742-023.
2. When replacing the 2TM PWB, set the 2TM PWB Dip Switch to the position as shown. (Figure 1)

Figure 2 Removing the Feed/Retard/Nudger Roll

## Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing, enter Diag. mode. Clear the counter.

3. After replacing the 2TM PWB, restore the original values to NVM locations $742-022$ and 742-023.

## REP 13.1.1 Tray 2 Assembly (TTM)

Parts List on PL 15.1

## Removal

WARNING
To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Pull out Tray 2.
2. Remove the paper from Tray 2.
3. Open the Left Cover Assembly.
4. Remove the Tray 2 Assembly. (Figure 1)
5. Remove the screw.
6. Slide the stopper.
7. Remove the Tray 2 Assembly.

j0st41301

## Replacement

1. To install, carry out the removal steps in reverse order.

Figure 1 Removing the Tray 2 Assembly

## REP 13.1.2 Tray 3 Assembly (TTM)

Parts List on PL 15.1

## Removal

WARNING
To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Pull out Tray 3.
2. Remove the paper from Tray 3.
3. Remove the Tray 3 Assembly. (Figure 1)
4. Remove the screws (2).
5. Push in Tray 3 Transport Assembly.
6. Remove the screw.
7. Remove the stopper.
8. Remove the Tray 3 Assembly.


Figure 1 Removing the Tray 3 Assembly

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 13.3.1 Front/Rear Tray Cable (TTM)

## Parts List on PL 15.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the Tray 3 Assembly. (REP 13.1.2)
2. Remove the Tray 3 Cover together with the frame. (Figure 1)
3. Remove the screws (4).
4. Remove the Tray 3 Cover together with the frame.

j0st41303
Figure 1 Removing the Tray 3 Cover
5. Remove the Tray Cable. (Figure 2)

NOTE: Only the replacement procedure for the Front Tray Cable is described here. The Rear Tray Cable is removed in the same way.

1. Remove the E-Clip.
2. Remove the Cable Guide
3. Remove the Tray Cable.
4. Remove the E-Clip.
5. Remove the Cable Guide
6. Remove the Tray Cable.


Figure 2 Removing the Tray Cable
4. Remove the Left Shaft Assembly to remove the Tray Cable. (Figure 3)

1. Remove the E-Clip.
2. Slide the bearings (2)
3. Remove the Lift Shaft Assembly.

## REP 13.4.1 Tray 3 Feeder (TTM)

## Parts List on PL 15.4

## Removal

## WARNING



Figure 3 Removing the Left Shaft Assembly to remove the Tray Cable

## Replacement

1. To install, carry out the removal steps in reverse order.

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the Tray 2 Assembly. (REP 13.1.1)
2. Remove the Tray 3 Assembly. (REP 13.1.2)
3. Remove the Tray 3 Transport Assembly. (Figure 1)
4. Remove the Tray 3 Transport Assembly.


Figure 1 Removing the Tray 3 Transport Assembly
4. Remove the Stud Bracket. (Figure 2)

1. Remove the screw.


Figure 2 Removing the Stud Bracket
5. Remove the Tray 3 Feeder Assembly. (Figure 3)

1. Disconnect the connectors (2).
2. Remove the screws (2).
3. Remove the Tray 3 Feeder Assembly.

j0st41307

## Figure 3 Removing the Tray 3 Feeder Assembly

6. Remove the Tray 3 Feeder. (Figure 4)
7. Remove the screws (2).
8. Remove the Upper Chute.
9. Remove the screws (2).
10. Remove the Lower Chute.

j0st41308

Figure 5 Removing the Tray 3 Feeder


## Figure 4 Removing the Lower Chute

7. Remove the Tray 3 Feeder. (Figure 5)
8. Remove the screws (2).
9. Remove the bracket.
10. Remove the screw.
11. Remove the bracket.
12. Remove the screw.
13. Remove the bracket.

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 13.5.1 Tray 2 Feeder (TTM)

## Parts List on PL 15.5

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove Tray 2 (REP 13.1.1).
2. Open the Left Cover
3. Remove the Upper/Lower Chute. (Figure 1)
4. Remove the Upper Chute.
5. Remove the Lower Chute.


Figure 1 Removing the Upper/Lower Chute


NOTE: This image is seen as looking in
from the front of the machine and viewing the rear frame. This screw is one of 3 that secures the Feeder Assembly.
j0st41315

## Figure 2 Removing the screw

5. Remove the Tray 2 Feeder Assembly. (Figure 3)
6. Remove the screws.
7. Release the Wire Harness from the clamp
8. Disconnect the connector
9. Remove the screws (2).
10. Remove the Tray 2 Assembly.
11. Remove the screw. (Figure 2)


Figure 3 Removing the Tray 2 Assembly
6. Remove the Tray 2 Feeder. (Figure 4)

1. Remove the screws (2).
2. Remove the bracket.


Figure 4 Removing the Tray 2 Feeder

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 13.6.1 Feed/Retard/Nudger Roll (TTM)

## Parts List on PL 15.7

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

NOTE: The Feed, Retard, and Nudger Roll must be replaced at the same time.

1. Remove the Paper Tray of the Feed Roll, Retard Roll, and Nudger Roll to be removed.

- Tray 2 (REP 13.1.1)
- Tray 3 (REP 13.1.2

2. Pull out tray and remove paper.
3. Move the Front Chute in the direction of the arrow. (Figure 1)
4. Move the Front Chute

j0st41209

Figure 1 Moving the Front Chute
4. Remove the Feed/Retard/Nudger Roll. (Figure 2)

1. Release the hooks (3) to remove the Feed Roll/Retard/Nudger Roll.


Figure 2 Removing the Feed/Retard/Nudger Roll

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 13.8.1 TTM PWB

## Parts List on PL 15.9

## Replacement

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Before replacing the $2 T M$ PWB, read and record the values at NVM location 742-022 and 742-023.
2. When replacing the TTM PWB, set the TTM PWB Dip Switch to the position as shown.

- Model (Figure 1)


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| OFF\|O | OFF | ON | OFF\| | 2TM |
| OFF | OFF | OFF | OFF | TTM |

Figure 1 Setting the Dip Switch
3. After replacing the 2TM PWB, restore the original values to NVM locations 742-022 and 742-023.

## REP 15.1.1 DADF

Parts List on PL 16.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

The DADF is heavy component. Take care when lifting the DADF.

1. Disconnect the connector. (Figure 1)
2. Loosen the screws ( x 2 ) and disconnect the connector.

j0st41501
Figure 1 Disconnecting the connector
3. Remove the DADF. (Figure 2)
4. Remove the Knob Screws (x2).
5. Remove the DADF.


Figure 2 Removing the DADF


Figure 3 Installing the DADF

## REP 15.1.2 DADF Platen Cushion

## Parts List on PL 16.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

NOTE: The DADF Platen Cushion pasted on with Velcro Fastening.

1. Remove the DADF Platen Cushion. (Figure 1)
2. Peel off the DADF Platen Cushion from the Velcro Fastening at 10 locations.

j0st41503

Figure 1 Removing the DADF Platen Cushion
2. Paste the DADF Platen Cushion. (Figure 2)

1. Place the DADF Platen Cushion on the Platen Glass.
2. Set up the gaps from the Registration Guide and Platen Guide.
3. Slowly lower the DADF and press on to the Platen Cushion.

j0st41504
Figure 2 Installing the DADF Platen Cushion

## REP 15.2.1 DADF Document Tray

## Parts List on PL 16.2

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the following parts:

- DADF Front Cover (REP 15.2.3)
- DADF Rear Cover (REP 15.2.4)

2. Open the Top Cover.
3. Disconnect the connectors. (Figure 1)
4. Remove the clamp.
5. Disconnect P/J760.
6. Disconnect P/J759.
7. Disconnect the screw (1).
8. Remove the Earth Wire.
9. Unhook the Wire Harness (x2).

## Replacement

1. To install, carry out the removal steps in reverse order.


Figure 1 Disconnecting the connectors
4. Remove the DADF Document Tray. (Figure 2)

1. Remove the Tapping Screws (1).
2. Remove the Tray Holder.
3. Remove the DADF Document Tray.
4. Pull out the Wire Harness.


Figure 2 Removing the DADF Document Tray

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 15.2.2 DADF Feeder Assembly

## Parts List on PL 16.2

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the DADF. (REP 15.1.1)
2. Remove the following covers.

- DADF Front Cover (REP 15.2.3)
- DADF Rear Cover (REP 15.2.4)

3. Open the Top Cover Assembly.
4. Remove the DADF Document Tray. (REP 15.2.1)
5. Disconnect the DADF PWB connectors. (Figure 1)
6. Disconnect the connectors (6).


Figure 1 Disconnecting the DADF PWB connectors
6. Remove the lever and Wire Harness. (Figure 2)

1. Loosen the Set Screw and remove the disk.
2. Release the hook and remove the lever.
3. Remove the screw (Gold).
4. Remove the washer.
5. Move the DADF Interlock Switch.
6. Disconnect the connector.
7. Disconnect the connector.
8. Remove the Wire Harness from the clamps (x3).


Figure 2 Removing the Lever and Wire Harness


Figure 3 Removing the DADF Feeder Assembly

## Replacement

1. To install, carry out the removal steps in reverse order.
2. When replacing, enter Diag. mode. Clear the [HFSI] counter.

## REP 15.2.3 DADF Front Cover

## Parts List on PL 16.2

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Open the Top Cover Assembly.
2. Remove the DADF Front Cover. (Figure 1)
3. Remove the Tapping Screw (1).
4. Remove the tabs (x2) from the Tab Slot and remove the DADF Front Cover.


## REP 15.2.4 DADF Rear Cover

## Parts List on PL 16.2

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Open the Top Cover.
2. Open the DADF Document Tray.
3. Remove the DADF Rear Cover. (Figure 1)
4. Remove the Tapping Screw (1).
5. Remove the screw (2).
6. Release the hooks (x2).
7. Remove the harness from the notch of the DADF Rear Cover.
8. Remove the tabs (x4) from the Tab Slot and remove the Data Rear Cover.

Figure 1 Removing the DADF Front Cover

## Replacement

1. To install, carry out the removal steps in reverse order.


Figure 1 Removing the DADF Rear Cover

## Replacement

1. Pull the harness to the notch of the DADF Rear Cover when installing the DADF Rear Cover. (Figure 2)
2. Pull the harness to the notch of DADF Rear Cover.


Figure 2 Installing the DADF Rear Cover

## REP 15.3.1 DADF PWB

## Parts List on PL 16.3

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine

1. Remove the DADF Rear Cover. (REP 15.2.4)
2. Disconnect the DADF PWB connectors. (Figure 1)
3. Disconnect the connectors (13)



Figure 2 Removing the DADF PWB

## Replacement

1. To install, carry out the removal steps in reverse order.
2. Check the S/W version and upgrade if necessary.

Figure 1 Disconnecting the DADF PWB connectors
3. Remove the DADF PWB. (Figure 2)

1. Remove the screws (1).
2. Remove the Tapping Screws (4).
3. Remove the Earth Wires ( x 2 ).
4. Remove the DADF PWB.

## REP 15.3.2 Left Counter Balance

## Parts List on PL 16.3

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

NOTE: Left/Right Counter Balance is identified by Compression Spring pressure. Left Counter Balance: Compression Spring pressure strong
Right Counter Balance: Compression Spring pressure weak

1. Remove the DADF. (REP 15.1.1)
2. Remove the following covers.

- DADF Front Cover (REP 15.2.3)
- DADF Rear Cover (REP 15.2.4)

3. Open the Top Cover Assembly.
4. Remove the DADF Document Tray. (REP 15.2.1)
5. Remove the DADF Feeder Assembly. (REP 15.2.2)
6. Remove the Left Counter Balance. (Figure 1)
7. Remove the Tapping Screws (4).
8. Remove the Left Counter Balance


Figure 1 Removing the Left Counter Balance

## Replacement

1. To install, carry out the removal steps in reverse order.

## REP 15.3.3 Right Counter Balance

## Parts List on PL 16.3

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

NOTE: Left/Right Counter Balance is identified by Compression Spring pressure. Left Counter Balance: Compression Spring pressure strong
Right Counter Balance: Compression Spring pressure weak

1. Remove the DADF. (REP 15.1.1)
2. Remove the DADF Rear Cover. (PL 15.2).
3. Remove the screw that secures the Right Counter Balance. (Figure 1)
4. Check the calibration.
5. Remove the screws (1).
6. Remove the Earth Wire.
7. Remove the Tapping Screws (4).


Figure 1 Unfastening the Right Counter Balance
4. Remove the Right Counter Balance. (Figure 2)

1. To remove, slide the Right Counter Balance in the direction of the arrow.
2. Precautions during installation
A.Slot
B.Boss
C.Cutout

## REP 15.4.1 Retard Roll

## Parts List on PL 16.4

## Removal

NOTE: The Feed, Retard and Nudger Roll must be replaced at the same time.

1. Open the Top Cover Assembly.
2. Remove the Retard Roll chute. (Figure 1)


Figure 1 Removing the Retard Roll chute.
3. Remove the Retard Roll Bracket and spring. (Figure 2)

1. Check DADF (ADJ 15.1.6).


Figure 2 Removing the Retard Roll Bracket and spring
4. Remove the Retard Roll. (Figure 3)

1. Remove the shaft.
2. Remove the Retard Roll.
3. Remove the Torque Limiter.


Figure 3 Removing the Retard Roll
Replacement
Check the software version and upgrade the software level as needed.

## REP 15.4.2 Top Cover Assembly

## Parts List on PL 16.5

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Open the Top Cover Assembly.
2. Remove the following covers:

- DADF Front Cover (REP 15.2.3)
- DADF Rear Cover (REP 15.2.4)

3. Remove the Feed Upper Chute. (Figure 1)
4. Remove the screw (1)
5. Remove the Feed Upper Chute.
6. Take note of the following at installation:
A. Insert the Boss into the U-groove.
B. Insert the Tab into the Tab Slot.


Figure 1 Removing the Feed Upper Chute
4. Remove the Harness Guide. (Figure 2)

1. Loosen the screw.
2. Remove the Earth Wire
3. Remove the Tapping Screw (1).
4. Unfasten the Harness Guide.


Figure 2 Removing the Harness Guide
5. Remove the Plate Spring. (Figure 3)

1. Remove the Tapping Screw (2).
2. Remove the Plate Spring.


Figure 3 Removing the Plate Spring
6. Remove the Top Cover with the Wire Harness connected. (Figure 4)

1. Remove the E-clip.
2. Remove the screw (1).
3. Remove the Stud Bracket.
4. Remove the stud.
5. Remove the Top Cover Assembly.


Figure 4 Removing the Top Cover Assembly
7. Unfasten the Wire Harness. (Figure 5)

1. Disconnect the connector.
2. Remove the Topping Screw (1).
3. Remove the Earth Wire.
4. Remove the Tapping Screw (2).
5. Unfasten the Harness Guide.


## Figure 5 Unfastening the Wire Harness

8. Remove the Wire Harness from the Top Cover. (Figure 6)
9. Disconnect the connector.
10. Remove the Wire Harness from the Harness Guide.
11. Remove the Wire Harnesses (3) from the square hole and remove the Top Cover.


## Replacement

1. Remove the Wire Harness from the new Top Cover Assembly when installing the cover.
2. Remove the Feed Upper Chute and Plate Spring from the new Top Cover Assembly. (Figure 7)
3. Remove the screw (1).
4. Remove the Feed Upper Chute.
5. Remove the Tapping Screw (2).
6. Remove the Plate Spring.


Figure 7 Removing the Feed Upper Chute and Plate Spring
3. Remove the Wire Harness from the new Top Cover. (Figure 8)

1. Disconnect the connectors (2).
2. Removing the Tapping Screw (3)
3. Removing the Wire Harness (x3) from the square hole.


Figure 8 Removing the Wire Harness
Figure 9 Hooking on the spring
4. Hook on the spring when securing the Harness Guide. (Figure 9)

## REP 15.6.1 Nudger Roll, Feed Roll

## Parts List on PL 16.6

## Removal

NOTE: The Feed, Retard and Nudger Rolls must be replaced at the same time.

1. Open the Top Cover Assembly.
2. Remove the Feed Upper Chute. (Figure 1)
3. Remove the screw (1).
4. Remove the Feed Upper Chute.
5. Precautions during Installation:
A. Insert the Boss into the U-groove.
B. Insert the Tab into the Tab Slot.


Figure 1 Removing the Feed Upper Chute
3. To remove the Nudger Roll rotate the inboard gear of the Torque Limiter until the Nudger Roll is fully extended. (Figure 2)


Figure 2 Rotate the gear to extend the Retard Roll
4. Lift the retaining clip from the Nudger Roll. (Figure 3)


Figure 3 Removing the retaining clip from the Nudger Roll
5. Remove the Nudger Roll Shaft and remove the Nudger Roll. (Figure 4)


Figure 4 Removing the Nudger Roll shaft and the Nudger Roll
6. Retract the Nudger Roll by rotating the Torque Limiter inboard gear.
7. To remove the Feed Roll, remove the locking tab. (Figure 5)


Figure 5 Removing the Feed Roll Locking Tab
8. Remove the Feed Roll Shaft and remove the Feed Roll. (Figure 6)


Figure 6 Removing the Feed Roll shaft and the Feed Roll

## Replacement

1. Extend the Nudger Roll by rotating the Torque Limiter inboard gear.
2. Install the Nudger Roll and Nudger Roll shaft. The shaft is spring loaded so push in the shaft and hold it and install the locking clip. (Figure 7)


Figure 7 Installing the Nudger Roll, Nudger Roll shaft and locking clip
3. Retract the Nudger Roll by rotating the Torque Limiter inboard gear.
4. Install the Feed Roll and Feed Roll shaft. The shaft is spring loaded so push in the shaft and hold it and install the locking clip. (Figure 8)


Figure 8 Installing the Feed Roll and Feed Roll shaft.
5. Observe following while installing Upper Feed Chute. (Figure 9)

- Insert the Boss into the U-groove (A).
- Insert the Tab into the Tab Slot (B).
- Install the screw (1)


Figure 9 Installing the Feed Upper Chute

## REP 15.8.1 Registration Roll

## Parts List on PL 16.8

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

1. Remove the DADF. (REP 15.1.1)
2. Remove the following covers.

- DADF Front Cover (REP 15.2.3)
- DADF Rear Cover (REP 15.2.4)

3. Open the Top Cover.
4. Remove the DADF Document Tray. (REP 15.2.1)
5. Remove the DADF Feeder Assembly. (REP 15.2.2)
6. Loosen the belt tension on the DADF Registration Motor. (Figure 1)
7. Remove the spring.
8. Loosen the screws (2).


Figure 1 Loosening the belt tension
7. Move the motor unit. (Figure 2)

1. Disconnect the connector.
2. Remove the screws ( 3 ).
3. Remove the guide.
4. Remove the Stud Screw.
5. Move the motor unit.
6. Remove the belt.


Figure 3 Removing the Feed Guide
10. Remove the sensor holder. (Figure 4)

1. Remove the Tapping Screws (2).
2. Remove the sensor holder.
3. Open the chute
4. Remove the Feed Guide. (Figure 3)
5. Remove the screws (2).
6. Remove the Feed Guide.


Figure 4 Removing the sensor holder
11. Loosen the belt tension. (Figure 5)

1. Remove the spring.
2. Loosen the screw.
3. Loosen the belt tension.
4. Remove the E-Clip.
5. Remove the gear.


Figure 5 Loosening the belt tension
12. Remove the Registration Roll. (Figure 6)

1. Remove the E-Clip.
2. Remove the bearings (2).
3. Remove the Registration Roll.

## Replacement

1. When installing the motor unit, pull the Wire Harness as shown in Fig. 7. (Figure 7)


Figure 6 Removing the Registration Roll

Figure 7 Pulling the Wire Harness

## REP 16.1.1 H-Transport Assembly

Parts List on PL 17.1
Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Remove the following parts:

- Finisher Assembly (REP 16.1.2)

2. Move the H -Transport Assembly. (Figure 1)
3. Remove the screws (x2).
4. Remove the H-Transport Assembly.


Figure 1 Removing the H -Transport Assembly

## REP 16.1.2 Finisher Assembly

## Parts List on PL 17.1

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the Right Cover. (Figure 1)
2. Remove the Right Cover.

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Figure 1 Removing the Right Cover
2. Remove the cover. (Figure 2)

1. Remove the cover.


Figure 2 Removing the cover


Figure 3 Removing the cover
4. Remove the Left Panel. (Figure 4)

1. Remove the Left Panel.

2. Disconnect the cables and connectors. (Figure 5)
3. Disconnect the connectors ( x 2 ).
4. Disconnect the cable.

## Figure 4 Removing the Left Panel

$\qquad$


Figure 5 Disconnecting the cables and connectors
6. Remove the Knob Screws. (Figure 6)

1. Remove the Knob Screws (x2).


Figure 6 Removing the Knob Screws
7. Move the Finisher Assembly to the left and lower it down from the rack. (Figure 7)

1. Remove the Finisher Assembly.


Figure 7 Removing the Finisher Assembly

## REP 16.3.1 H-Transport Belt

## Parts List on PL 17.3

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Remove the H -Transport Assembly. (REP 16.1.1)
2. Remove the H-Transport Rear Cover. (Figure 1)
3. Remove the screws (x2).
4. Remove the H-Transport Rear Cover.

5. Remove the belt. (Figure 2)
6. Remove the E-Clip.
7. Remove the belt.
8. Remove the pulley and bearing.


Figure 2 Removing the belt
4. Remove the Transport Roll. (Figure 3)

1. Remove the E-Clip and bearing.
2. Remove the Transport Roll.

Figure 1 Removing the H -Transport Rear Cover


Figure 3 Removing the Transport Roll
5. Remove the bracket. (Figure 4)

1. Remove the screw.
2. Remove the bracket.


Figure 5 Removing the H -Transport Belt

## REP 16.4.1 Front Cover Assembly

## Parts List on PL 17.4

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the Front Cover Assembly. (Figure 1)
2. Remove the screws (x4).
3. Remove the Front Cover Assembly.


Figure 1 Removing the Front Cover Assembly

## REP 16.4.2 Rear Cover

## Parts List on PL 17.4

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Remove the Left Panel. (Figure 1)
2. Remove the Left Panel.



Figure 2 Removing the connector
3. Remove the Rear Cover. (Figure 3)

1. Remove the screws (x4).
2. Remove the Rear Cover.

## Figure 1 Removing the Left Panel

2. Remove the connector. (Figure 2)
3. Remove the connector.


Figure 3 Removing the Rear Cover

## REP 16.5.1 Stack Height Sensor Assembly

## Parts List on PL 17.5

Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the link from the Top Open Cover Assembly. (Figure 1)
2. Lift up the Top Open Cover Assembly.
3. Remove the screws on both sides.
4. Remove the links on both sides.


Figure 1 Removing the link
2. Remove the Stack Height Sensor Assembly. (Figure 2)

1. Remove the screw.
2. Disconnect the connector
3. Remove the Stack Height Sensor Assembly.

# REP 16.5.2 Eject Roll Assembly 

## Parts List on PL 17.5



## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the following parts:

- Rear Cover (REP 16.4.2)
- Front Cover Assembly (REP 16.4.1)

2. Remove the Stacker Tray. (Figure 1)
3. Remove the screw.
4. Remove the Stacker Tray.


Figure 1 Removing the Stacker Tray
3. Remove the Right Cover. (Figure 2)

1. Remove the Right Cover.


Figure 2 Removing the Right Cover
4. Remove the bracket. (Figure 3)

1. Remove the screws (x4).
2. Remove the bracket.


Figure 3 Removing the bracket


## Figure 4 Disconnecting the connector

6. Remove the Knob Screws. (Figure 5)
7. Remove the Knob Screws (x2).


Figure 5 Removing the Knob Screws
7. Remove the Tray Guide. (Figure 6)

1. Remove the screws (x4).
2. Remove the rivet to remove the clamp.
3. Remove the wire from the hole.
4. Remove the Tray Guide.

j0st41617
Figure 6 Removing the Tray Guide
5. Remove the Set clamp clutch. (Figure 7)
6. Remove the clamp.
7. Remove the screw
8. Remove the spring.


Figure 7 Removing the Set Clamp clutch
9. Remove the Eject Roll. (Figure 8)

1. Remove the E-Clip and bearing on both sides.
2. Remove the hook from the Eject Shaft.
3. Remove the Eject Roll.


Figure 8 Removing the Eject Roll
10. Remove the Eject Shaft. (Figure 9)

1. Remove the E-Clip and gear.
2. Remove the E-Clip and bearing on both sides.
3. Remove the Eject Shaft.

## Replacement

NOTE: Replace the Exit Roll and Eject Roll at the same time.


Figure 9 Removing the Eject Shaft
NOTE: When installing the Actuator, ensure that the stopper is inserted into the ditch of the Actuator as illustrated below. (Figure 10)

j0st41621

Figure 10 Installing the Actuator

## REP 16.6.1 Decurler Roll

## Parts List on PL 17.6

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the following parts:

- Front Cover Assembly (REP 16.1.2)
- Rear Cover (REP 16.4.1)

2. Remove the Top Cover. (Figure 1)
3. Loosen the screws (x4).
4. Remove the Top Cover.


Figure 1 Removing the Top Cover
3. Remove the arm. (Figure 2)

1. Remove the spring
2. Remove the E-Clip.
3. Remove the arm.


Figure 2 Removing the arm

4. Remove the Decurler Roll Assembly. (Figure 3)

1. Remove the spring.
2. Remove the E-Clip.
3. Remove the arm.
4. Remove the Decurler Roll Assembly.

## REP 16.6.2 Finisher Drive Motor

## Parts List on PL 17.6

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Remove the Rear Cover. (REP 16.4.1)
2. Remove the Finisher Drive Motor. (Figure 1)
3. Disconnect the connector.
4. Remove the screws (x4).
5. Remove the Finisher Drive Motor.


## REP 16.7.1 Paper Eject Belt

## Parts List on PL 17.7

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the Rear Cover. (REP 16.4.1)
2. Turn the actuator. (Figure 1)
3. Turn the actuator in the direction of the arrow.


Figure 1 Turning the actuator
3. Release the clamp to remove the wire. (Figure 2)

1. Disconnect the connectors ( x 4 ).
2. Release the Edge Saddle to remove the wire.


Figure 2 Disconnecting the connectors
4. Remove the Cam Bracket Assembly. (Figure 3)

1. Remove the screws ( $\times 4$ ),
2. Remove the Cam Bracket Assembly


Figure 3 Removing the Cam Bracket Assembly
5. Remove the belt. (Figure 4)

1. Remove the E-Clip to remove the gear.
2. Remove the E-Clip to remove the pulley
3. Remove the Paper Eject Belt.


Figure 4 Removing the belt

## Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: Make sure the stud on the Cam Bracket Assembly is inserted into the hole. (Figure 5)

1. Lift up the Upper Cover to lift up the roller.
2. Insert the stud into the hole.


Figure 5 Installing the Cam Bracket Assembly

NOTE: When installing the Actuator, ensure the stopper is inserted into the ditch of the Actuator as illustrated below. (Figure 6)


## REP 16.8.1 Staple Unit Rail

## Parts List on PL 17.8

Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the following parts:

- Staple Assembly (REP 16.8.2)
- Front Cover Assembly (REP 16.1.2)
- Rear Cover (REP 16.4.1)

2. Disconnect the connectors. (Figure 1)
3. Disconnect the connectors ( $x 5$ ).
4. Release the Edge Saddles $(x 4)$ to remove the wire.
5. Remove the screw to remove the Earth Wire.

Figure 6 Installing the Actuator


Figure 1 Disconnecting the connectors
3. Remove the bracket. (Figure 2)

1. Remove the screw.
2. Loosen the screws ( $\times 2$ )
3. Remove the bracket.


Figure 2 Removing the bracket
4. Move the PWB Bracket in the direction of the arrow. (Figure 3)

1. Loosen the screw.
2. Remove the screws (x2).
3. Remove the PWB Bracket with the connector still connected.


Figure 3 Moving the PWB Bracket
5. Pull out the Wire Harness. (Figure 4 )

1. Remove the screws (x2).
2. Pull out the Wire Harness.


Figure 4 Pulling out the Wire Harness
6. Remove the screws. (Figure 5)

1. Disconnect the connector
2. Remove the screws (x2).

3. Remove the Rail Assembly. (Figure 6)
4. Remove the Rail Assembly.


Figure 6 Removing the Rail Assembly
8. To remove the Carriage Assembly, move it in the direction of the arrow. (Figure 7)

1. Remove the Carriage Assembly.

2. Remove the rail. (Figure 8)
3. Remove the screws ( $\times 5$ )
4. Remove the Staple Unit Rail.

## REP 16.8.2 Staple Assembly

Parts List on PL 17.8

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Remove the Front Cover Assembly. (REP 16.4.1)
2. Disconnect the connectors. (Figure 1)
3. Disconnect the connectors (x2).


Figure 1 Disconnecting the connectors

1. Remove the screw
2. Remove the screw to remove the Earth Wire.
3. Remove the Staple Assembly.


Figure 2 Removing the Staple Assembly
3. Remove the Staple Assembly. (Figure 2)

## Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: Ensure the tip of the Staple Assembly is inserted into the hole in the bracket. (Figure 3)


Figure 3 Installing the Staple Assembly

## REP 16.9.1 Compiler Tray Assembly

## Parts List on PL 17.9

Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the Staple Assembly (REP 16.8.2).
2. Remove the Tray Guide (Perform REP 16.5.2 up to Step 5.)
3. Release the clamp to remove the wire. (Figure 1)
4. Disconnect the connectors (x2).
5. Release the Edge Saddles ( x 2 ) to remove the wire.


Figure 1 Disconnecting the connectors
4. Remove the screws. (Figure 2)

1. Remove the screws ( x 2 ).


j0st41642
Figure 3 Removing the Compiler Assembly

Figure 2 Removing the screws
5. Remove the Compiler Assembly (item 1) (Figure 3).
2. Loosen the screws (x2)
3. Remove the bracket.

## REP 16.10.1 Stacker Motor Assembly

Parts List on PL 17.10

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the Rear Cover. (REP 16.4.1)
2. Slide the gear to lower down the Stacker Tray. (Figure 1)
3. Slide the gear to disengage the teeth of Cam.



Figure 2 Removing the bracket
4. Remove the screws. (Figure 3)

1. Remove the screws (x2).
2. Loosen the screw.
j0st41643
Figure 1 Moving the gear
3. Remove the bracket. (Figure 2)
4. Remove the screw.



Figure 4 Removing the Staple Motor Assembly
5. Remove the Stacker Motor Assembly. (Figure 4)

1. Remove the screws ( $\times 3$ ) while sliding the PWB Bracket upwards.
2. Slide the gear.
3. Remove the Stacker Motor Assembly.

## REP 16.10.2 Elevator Belt Assembly

## Parts List on PL 17.10

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display

1. Remove the Tray Guide. (Perform REP 16.5.2 up to Step 5.)
2. Remove the bracket. (Figure 1)
3. Remove the screw.
4. Loosen the screws (x2).
5. Remove the bracket.

6. Slide the PWB Bracket sideways. (Figure 2)
7. Disconnect the connectors (x2).
8. Release the clamps ( x 2) to remove the wire.
9. Remove the clamp
10. Remove the screws ( x 2 ).
11. Loosen the screw.
12. Slide the PWB Bracket in the direction of the arrow.


Figure 2 Moving the PWB Bracket

Figure 1 Removing the bracket
4. Remove the Elevator Belt Assembly. (Figure 3)

1. Remove the screws ( $\times 3$ ).
2. Remove the Elevator Belt Assembly.


## REP 16.11.1 Paddle Gear Shaft

## Parts List on PL 17.11

Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the Rear Cover. (REP 16.4.1)
2. Remove the Cam Bracket Assembly. (Perform REP 16.7.1 up to Step 4.)
3. Remove the bearing. (Figure 1)
4. Remove the E-Clip.
5. Remove the gear.
6. Remove the bearing.


Figure 1 Removing the bearing
4. Remove the screw securing the Paddle Gear Shaft. (Figure 2)

1. Remove the screw.


Figure 2 Removing the screw
5. Remove the Paddle Gear Shaft. (Figure 3)

1. Remove the Paddle Gear Shaft.


Figure 3 Removing the Paddle Gear Shaft

## REP 16.12.1 Finisher PWB

## Parts List on PL 17.12

Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Remove the Rear Cover. (REP 16.4.1)
2. Disconnect the connectors. (Figure 1)
3. Disconnect the connectors ( x 10 ).
4. Release the Edge Saddles ( $x 4$ ) to remove the wire.


Figure 1 Disconnecting the connectors
3. Remove the Finisher PWB. (Figure 2)

1. Remove the screws ( x 5 ).
2. Remove the Finisher PWB.


Figure 2 Removing the Finisher PWB

## Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: When installing, keep the core shown in Figure 2 inside the box.

## REP 16.12.2 Finisher LVPS PWB

## Parts List on PL 17.13

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.

1. Switch off the power and disconnect the Power Cord.
2. Remove the Front Cover. (REP 16.4.1)
3. Open the Top Cover Assembly.
4. Remove the Rear Cover. (REP 16.4.2)
5. Remove the Stacker Tray. (Figure 1)
6. Remove the screw (1).
7. Remove the Stacker Tray.



Figure 2 Removing the Stacker Bracket Cover
4. Remove the Stacker Bracket. (Figure 3)

1. Remove the screws (4).
2. Remove the Bracket.

Figure 1 Removing the Stacker Tray
3. Remove the Stacker Bracket Cover. (Figure 2)


Figure 4 Disconnecting the connector
4. Remove the Right Cover. (Figure 5)

1. Remove the Right Cover.
j0st41614
Figure 3 Removing the Stacker Bracket
2. Disconnect the Connector. (Figure 4)


Figure 5 Removing the Right Cover
2. Remove the knob screws. (Figure 6)

1. Remove the knob screws (2)


Figure 6 Removing the knob screws (2)
2. Remove the Tray Guide. (Figure 7)

1. Remove the screws (4).
2. Remove the plastic rivet to remove the wire harness clamp.
3. Remove the wire harness from the Tray Guide opening.
4. Remove the Tray Guide.



Figure 8 Removing the LVPS housing cover
6. Disconnect the connectors (3) from the Power Supply. (Figure 9)

Figure 7 Removing the Tray Guide
5. Remove the screws (3) from Low Voltage Power Supply housing cover. (Figure 8)


Figure 9 Disconnecting the Connectors (3)
7. Remove the screws (4). (Figure 10)


Figure 10 removing the screws (4)
8. Pinch together the legs of the plastic PWB StandOffs to release the locking tabs (2). (Figure 11, Figure 12)


Figure 11 Locating the locking tabs


Figure 12 Releasing the locking tabs (2)
9. Remove the Low Voltage Power Supply PWB.

## Replacement

1. When installing the Tray Guide, be sure to insert the lower tabs (2) into the Finisher frame.


Figure 13 Installing the Tray Guide

## REP 22.1 A-Finisher

Parts List on PL22.1

## Removal

WARNING
To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Disconnect the A-Finisher Wire Harness. (Figure 1)
(1)Remove Clamp.
(2)Disconnect Connectors (2).



Figure 2 Loosen the Thumb Screws (af422105)
3. Remove the A-Finisher. (Figure 3)

Figure 1 Disconnecting the Connectors (af422104)


Figure 3 Remove the A-Finisher (af422106)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.3.1 Paddle Belt

## Parts List on PL 22.3

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine. (REP 22.1)
2. Remove the Compile Assembly. (REP 22.9.1)
3. Remove the front Pulley. (Figure 1)
(1)Remove E-Clip.
(2)Remove Flange.
(3)Remove Belt from Pulley.
(4)Remove Pulley.


Figure 1 Removing the Pulley (jOfa42201)
4. Remove the front Bearing. (Figure 2)
(1)Remove Bearing.


Figure 2 Removing the Bearing (j0fa42202)
5. Remove the rear Gear. (Figure 3)
(1)Remove E-Clip.
(2)Remove Gear.


Figure 3 Removing the Gear (j0fa42203)
6. Remove the rear Bearing. (Figure 4)
(1)Remove Bearing.


Figure 4 Removing the Bearing (jofa42204)
7. Remove the Paddle Link Assembly. (Figure 5)
(1)Remove Paddle Link Assembly.

j0fa42205
Figure 5 Removing the Paddle Link Assembly (j0fa42205)
8. Remove the Bearing. (Figure 6)
(1)Remove E-Clip.
(2)Remove Bearing.


Figure 6 Removing Bearing (Ofa42206)
9. Remove the Shaft Assembly. (Figure 7)
(1)Remove Paddle Belt from Pulley.
(2)Remove Shaft Assembly in the direction of the arrow.


Figure 7 Removing Shaft Assembly (j0fa42207)
10. Remove the Paddle Belt. (Figure 8)
(1)Remove E-Clips (2).
(2)Move Bearings (2) in the direction of the arrow.
(3)Remove Sub Paddle Shaft Assembly.
(4)Remove Paddle Belt.


Figure 8 Removing the Paddle Belt (jofa42208)

## Replacement

1. Reverse the removal procedure for replacement.
2. Install the Paddle Link Assembly as shown in the figure. (Figure 9)


Figure 9 Installing the Paddle Link Assembly (j0fa42209)

## REP 22.3.2 Sub Paddle Solenoid

Parts List on PL 22.3

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Turn over the A-Finisher.
4. Remove the Bottom Cover. (PL 22.2)
5. Disconnect the Connector. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Disconnect Connector.


Figure 1 Disconnecting the Connector (jOfa42210)
6. Turn over the A-Finisher.
7. Remove the Sub Paddle Solenoid Assembly. (Figure 2)
(1)Disconnect Connector.
(2)Release Wire from Hook.
(3)Remove Screws (2).
(4)Remove Sub Paddle Solenoid Assembly.


Figure 2 Removing the Sub Paddle Solenoid Assembly (jOfa42211)
8. Remove the Support. (Figure 3)
(1)Remove Screw.
(2)Remove Support.


Ofa42212
Figure 3 Removing the Support (jOfa42212)
9. Remove the Sub Paddle Solenoid. (Figure 4)
(1)Remove Screws (2)
(2)Remove the Sub Paddle Solenoid.


Figure 4 Removing the Sub Paddle Solenoid (jOfa42213)

## Replacement

1. Reverse the removal procedure for replacement.
2. Install the Sub Paddle Assembly as shown in the figure. (Figure 5)


Figure 5 Installing the Sub Paddle Assembly (j0fa42214)

## REP 22.4.1 Exit Roll Assembly

## Parts List on PL 22.4

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Compile Assembly. (REP 22.9.1)
3. Remove the Pinch Roll. (REP 22.5.1)
4. Remove the Gear. (Figure 1)
(1)Remove KL-Clip.
(2)Remove Gear.


Figure 1 Removing the Gear (jOfa42215)
5. Remove the front Bearing. (Figure 2)
(1)Remove E-Clip.
(2)Remove Bearing


Figure 2 Removing the Bearing (j0fa42216)
6. Remove the rear Bearing. (Figure 3)
(1)Remove E-Clip.
(2)Remove Bearing.


Figure 3 Removing the Bearing (j0fa42217)
7. Remove the Exit Roll Assembly. (Figure 4)
(1)Remove Exit Roll Assembly.


Figure 4 Removing the Exit Roll Assembly (j0fa42218)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.4.2 Staple Assembly

Parts List on PL 22.4

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Staple Assembly. (Figure 1)
(1)Remove Clamps (2).
(2)Disconnect Connectors (2)
(3)Remove Screws (2).
(4)Remove Staple Assembly.


Figure 1 Removing the Staple Assembly (jofa42219)
4. Remove the Bracket from the Staple Assembly. (Figure 2)
(1)Remove Screws (2).


Figure 2 Removing the Bracket (jOfa42220)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.4.3 Set Clamp Home Sensor

## Parts List on PL 22.4

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Rear Cover. (PL 22.1)
3. Disconnect the Connector. (Figure 1)
(1)Release Clamp and remove the wire.
(2)Disconnect Connector.


Figure 1 Disconnecting Connector (jOfa42221)
4. Remove the Set Clamp Home Sensor Assembly. (Figure 2)
(1)Remove Screw.
(2)Remove Set Clamp Home Sensor Assembly.


Figure 2 Removing the Set Clamp Home Sensor Assembly (jOfa42222)
5. Remove the Set Clamp Home Sensor. (Figure 3)
(1)Remove Set Clamp Home Sensor from Bracket.
(2)Disconnect Connector.


Figure 3 Removing the Set Clamp Home Sensor (jOfa42223)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.4.4 Exit Roll Assembly

## Parts List on PL 22.4

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Rear Cover. (PL 22.1)
4. Remove the Left Cover. (PL 22.2)
5. Remove the Upper Frame Section. (Figure 1)
(1)Remove Screw and Bracket.
(2)Remove Screws (2).
(3)Remove Screw and Bracket.
(4)Remove Screws (2).
(5)Remove the Upper Frame Section


Figure 1 Removing the Upper Frame Section (af422101)
NOTE: The screws do not thread into the Upper Chute. They are used like pins to secure the Upper Chute in place.
6. Remove the Upper Chute Assembly. (Figure 2)
(1)Remove Screws (2).
(2)Remove Screw.
(3)Carefully Remove the Upper Chute Assembly.


Figure 2 Removing the Upper Chute Assembly (af422100)
7. Remove the Exit Roll Assembly. (Figure 3)
(1)Remove E-ring and Bearing.
(2)Remove E-ring and Bearing.
(3)Remove the Exit Roll Assembly.


Figure 3 Removing the Exit Roll Assembly (af422103)

## Replacement

1. Reverse the removal procedure for replacement.

NOTE: Ensure that the Paper Guides on the Upper Chute (PL 22.6) are not folded back on top of the Exit Roll Assembly (PL 22.5).

## REP 22.5.1 Pinch Roll

## Parts List on PL 22.5

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Compile Assembly. (REP 22.9.1)
3. Remove the Pinch Roll. (Figure 1)
(1)Raise Springs (4) in the direction of the arrow.
(2)Remove Pinch Rolls (4).


Figure 1 Removing the Pinch Rolls (jOfa42224)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.5.2 Finisher Entrance Sensor

## Parts List on PL 22.5

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Turn over the A-Finisher.
3. Remove the Bottom Cover. (PL 22.2)
4. Remove the Connector Bracket. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Disconnect Connectors (5).
(3)Remove Screws (2).
(4)Remove Connector Bracket.


Figure 1 Removing the Connector Bracket (j0fa42266)
5. Remove the Bottom Plate. (Figure 2)
(1)Release Clamps (5) and remove the wire.
(2)Disconnect Connectors (8).
(3)Remove Wire from Hook.
(4)Remove Screws (4).
(5)Remove Bottom Plate.


Figure 2 Removing the Bottom Plate (j0fa42267)
6. Remove the Finisher Entrance Sensor Assembly. (Figure 3)
(1)Disconnect Connector.
(2)Remove Tapping Screw.
(3)Remove Finisher Entrance Sensor Assembly.


Figure 3 Removing the Finisher Entrance Sensor Assembly (jOfa42225)
7. Remove the Finisher Entrance Sensor. (Figure 4) (1)Remove Finisher Entrance Sensor from Bracket


Figure 4 Removing the Finisher Entrance Sensor (j0fa42226)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.5.3 Compile Exit Sensor

## Parts List on PL 22.5

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Turn over the A-Finisher.
3. Remove the Bottom Cover. (PL 22.2)
4. Remove the Connector Bracket. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Disconnect Connectors (5).
(3)Remove Screws (2).
(4)Remove Connector Bracket.


Figure 1 Removing the Connector Bracket (Ofa42266)
5. Remove the Bottom Plate. (Figure 2)
(1)Release Clamps (5) and remove the wire.
(2)Disconnect Connectors (8).
(3)Release Wire from Hook.
(4)Remove Screws (4).
(5)Remove Bottom Plate.


Figure 2 Moving the Bottom Plate (jOfa42267)
6. Remove the Compile Exit Sensor Assembly. (Figure 3)
(1)Remove Screw.
(2)Remove Compile Exit Sensor Assembly.


Figure 3 Removing the Compile Exit Sensor Assembly (jOfa42227)
7. Remove the Compile Exit Sensor. (Figure 4)
(1)Release Clamps (2) and remove the wire.
(2)Disconnect Connector.
(3)Remove Compile Exit Sensor.


Figure 4 Removing the Compile Exit Sensor (jOfa42228)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.5.4 Main Paddle Shaft Assembly

## Parts List on PL 22.5

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Compile Assembly. (REP 22.9.1)
3. Remove the Gear. (Figure 1)
(1)Remove E-Clip.
(2)Remove Gear.
(3)Remove KL-Clip.
(4)Remove Gear.

jOfa42229
4. Remove the Gear Pulley. (Figure 2)
(1)Remove E-Clip.
(2)Remove Gear.
(3)Remove Flange.


Figure 2 Removing the Gear Pulley (jOfa42293)
5. Remove the Bearing. (Figure 3)
(1)Remove Bearing.


Figure 3 Removing the Bearing (j0fa42294)
6. Remove the Support Bearing from the ENT Lower Chute Assembly. (Figure 4) (1)Remove Tapping Screw.
(2)Remove Support Bearing.


Figure 4 Removing the Support Bearing (jOfa42232)
7. Remove the Main Paddle Shaft Assembly. (Figure 5)
(1)Remove Main Paddle Shaft Assembly.


Figure 5 Removing the Main Paddle Shaft Assembly (jOfa42233)
8. Remove the Support Bearing from the Main Paddle Shaft Assembly. (Figure 6) (1)Remove E-Clip.
(2)Remove Support Bearing.


Figure 6 Removing the Support Bearing (jOfa42234)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.5.5 Lower Chute Assembly

## Parts List on PL 22.5

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Compile Assembly. (REP 22.9.1)
3. Turn over the A-Finisher (Transport).
4. Remove the Stapler Assembly. (Figure 1)
(1)Release Clamps (2) and remove the wire.
(2)Disconnect Connectors (2).
(3)Remove Screws (2).
(4)Remove Stapler Assembly.


Figure 1 Removing the Stapler Assembly (j0fa42219)
5. Turn over the A-Finisher.
6. Remove the Transport Motor. (Figure 2)
(1)Remove Screws (2).
(2)Remove Belt from Pulley.
(3)Remove Transport Motor.


Figure 2 Removing the Transport Motor (j0fa42236)
7. Remove the Gear. (Figure 3)
(1)Remove E-Clip.
(2)Remove Gear.
(3)Remove KL-Clip.
(4)Remove Gear.

jOfa42229
Figure 3 Removing the Gear (j0fa42229)
8. Remove the Gear Pulley. (Figure 4)
(1)Remove E-Clip.
(2)Remove Gear.
(3)Remove Pulley from Belt.
(4)Remove Flange.


Figure 4 Removing the Gear Pulley (jOfa42230)
9. Remove the Bearing. (Figure 5)
(1)Remove the Bearing.


Figure 5 Removing the Bearing (j0fa42231)
10. Remove the ENT Lower Chute Assembly. (Figure 6)
(1)Remove Screws (2).
(2)Loosen Screws (2).
(3)Remove ENT Lower Chute Assembly.


Figure 6 Removing the ENT Lower Chute Assembly (jOfa42237)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.6.1 ENT Roll Assembly

## Parts List on PL 22.6

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Rear Cover. (PL 22.1)
4. Remove the Left Cover. (PL 22.2)
5. Remove the Upper Frame Section. (Figure 1)
(1)Remove Screw and Bracket.
(2)Remove Screws (2).
(3)Remove Screw and Bracket.
(4)Remove Screws (2).
(5)Remove the Upper Frame Section


Figure 1 Removing the Upper Frame Section (af422101)
NOTE: The screws do not thread into the Upper Chute. They are used like pins to secure the Upper Chute in place.
6. Remove the Upper Chute Assembly. (Figure 2)
(1)Remove Screws (2)
(2)Remove Screw.
(3)Carefully Remove the Upper Chute Assembly.


Figure 2 Removing the Upper Chute Assembly (af422100)
7. Remove the ENT Roll Assembly. (Figure 3)
(1)Disconnect Spring.
(2)Remove E-Rings (2).

NOTE: Capture the Bearing
(3)Remove Arm.
(4)Slide Shaft out of the Bearing in the Arm.


Figure 3 Removing the Gear (af422102)

## REP 22.6.2 Upper Chute Assembly

## Parts List on PL 22.6

Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Rear Cover. (PL 22.1)
4. Remove the Left Cover. (PL 22.2)
5. Remove the Upper Frame Section. (Figure 1)
(1)Remove Screw and Bracket.
(2)Remove Screws (2).
(3)Remove Screw and Bracket.
(4)Remove Screws (2).
(5)Remove the Upper Frame Section


Figure 1 Removing the Upper Frame Section (af422101)
NOTE: The screws do not thread into the Upper Chute. They are used like pins to secure the Upper Chute in place.
6. Remove the Upper Chute Assembly. (Figure 2)
(1)Remove Screws (2)
(2)Remove Screw.
(3)Carefully Remove the Upper Chute Assembly.


Figure 2 Removing the Upper Chute Assembly (af422100)

## Replacement

1. Reverse the removal procedure for replacement.

NOTE: Ensure that the Paper Guides (PL 22.6) are not folded back on top of the Exit Roll Assembly (PL 22.5).

## REP 22.7.1 Finisher Control PWB

## Parts List on PL 22.7

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Turn over the Finisher.
3. Remove the Bottom Cover. (PL 22.2)
4. Remove the Finisher Control PWB. (Figure 1)
(1)Disconnect Connectors (12).
(2)Remove Screws (4).
(3)Remove Finisher Control PWB.


Figure 1 Removing the Finisher Control PWB (j0fa42245)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.8.1 Stacker Tray Assembly

## Parts List on PL 22.8

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Rear Cover. (PL 22.1)
4. Turn over the A-Finisher.
5. Remove the Bottom Cover. (PL 22.2)
6. Remove the Tray Cover. (PL 22.2)
7. Disconnect Connector. (Figure 1)
(1)Release Clamp.
(2)Remove Clamp.
(3)Release and remove Wire from Hook.
(4)Release Clamp.
(5)Disconnect Connector.
(6)Release and remove Wire from Hook.


Figure 1 Disconnecting the Connector (j0fa42247)
8. Release the Clamps and the Hook to remove the wire. (Figure 2)
(1)Release Clamps (5).
(2)Remove Wire from Hook.


Figure 2 Disconnecting the Wire (j0fa42248)
9. Remove the Stacker Stack Sensor Assembly. (Figure 3)
(1)Remove Screw.
(2)Remove Stacker Stack Sensor Assembly.
(3)Release Clamps (4).
(4)Disconnect Connectors (2)


Figure 3 Removing the Stacker Sensor Assembly (jOfa42249)
10. Remove the Stacker Tray Assembly. (Figure 4)
(1)Remove Screws (5).
(2)Remove Stacker Tray Assembly.


Figure 4 Removing the Stacker Tray Assembly (j0fa42250)

## Replacement

1. Reverse the removal procedure for replacement.
2. Install the Stacker Tray Assembly and A-Finisher as shown in the figure. (Figure 5)

jofa42251
Figure 5 Installing the Stacker Tray Assembly (j0fa42251)

## REP 22.8.2 Stacker Shaft Assembly

## Parts List on PL 22.8

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.


Figure 2 Removing the Bracket (jOfa42253)
7. Remove the Top Tray. (Figure 3)
(1)Raise A-Finisher slightly in the direction of the arrow.
(2)Remove Top Tray.


Figure 3 Removing the Top Tray (jOfa42254)
8. Disconnect Connector. (Figure 4)
(1)Release Clamps (5) and remove the wire.
(2)Release Wire from Hook.
(3)Disconnect Connector.


Figure 4 Disconnecting the Connector (j0fa42255)
9. Remove the Stacker Stack Sensor Assembly. (Figure 5)
(1)Remove Screw.
(2)Remove Stacker Stack Sensor Assembly.
(3)Remove Wire from Clamps (5)


Figure 5 Removing the Stacker Stack Sensor Assembly (jOfa42256)
(1)Remove Tapping Screws (5).
(2)Remove Screw.
(3)Remove Stacker Assembly.


Figure 6 Removing the Stacker Assembly (jOfa42257)
11. Remove the Actuator. (Figure 7)
(1)Unhook.
(2)Remove Actuator.


Figure 7 Removing the Actuator (jOfa42258)
10. Remove the Stacker Assembly. (Figure 6)
12. Move the Bearing. (Figure 8)
(1)Remove E-Clip.
(2)Move Bearing in the direction of the arrow.


Figure 8 Moving the Bearing (j0fa42259)
13. Remove the Stacker Shaft Assembly. (Figure 9)
(1)Remove Stacker Shaft Assembly in the direction of the arrow.

jofa42260
Figure 9 Removing the Stacker Shaft Assembly (jOfa42260)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.8.3 Stacker Motor

## Parts List on PL 22.8

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Rear Cover. (PL 22.1)
3. Turn over the A-Finisher.
4. Remove the Tray Cover. (PL 22.2)
5. Disconnect the Connector. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Release Wire from Hook.
(3)Disconnect Connector.

jOfa42261

Figure 1 Disconnecting the Connector (j0fa42261)
6. Remove the Bracket. (Figure 2)
(1)Remove Screw.
(2)Remove Bracket.


Figure 2 Removing the Bracket (jOfa42262)
7. Remove the Stacker Motor Assembly. (Figure 3)
(1)Remove Screws (2).
(2)Remove Stacker Motor Assembly.


Figure 3 Removing the Stacker Motor Assembly (jOfa42263)
8. Remove the Stacker Motor. (Figure 4)
(1)Remove Screws (3).
(2)Remove Belt from Pulley.
(3)Remove Stacker Motor.


Figure 4 Removing the Stacker Motor (jOfa42264)

## Replacement

1. Reverse the removal procedure for replacement.
2. Install the Stacker Motor as shown in the figure. (Figure 5)


Figure 5 Installing the Stacker Motor (jOfa42265)

## REP 22.8.4 Stacker Stack Sensor

## Parts List on PL 22.8

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Rear Cover. (PL 22.1)
3. Turn over the A-Finisher.
4. Remove the Tray Cover. (PL 22.2)
5. Remove the Stacker Stack Sensor Assembly. (Figure 1)
(1)Release the wire from the Clamp.
(2)Remove Screw.
(3)Remove Stacker Stack Sensor Assembly.
(4)Disconnect the Sensor Connector and remove Sensor from Bracket (5)


Figure 1 Removing the Stacker Stack Sensor Assembly (af422108)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.9.1 Compile Assembly

## Parts List on PL 22.9

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Rear Cover. (PL 22.1)
4. Turn over the A-Finisher.
5. Remove the Bottom Cover. (PL 22.2)
6. Remove the Tray Cover. (PL 22.2)
7. Remove the Connector Bracket. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Disconnect Connectors (5).
(3)Remove Screws (2).
(4)Remove Connector Bracket.


Figure 1 Removing the Connector Bracket (jOfa42266)
8. Remove the Bottom Plate. (Figure 2)
(1)Release Clamps (5) and remove the wire.
(2)Disconnect Connectors (8).
(3)Remove Wire from Hook.
(4)Remove Screws (4).
(5)Remove Bottom Plate.


Figure 2 Removing the Bottom Plate (j0fa42267)
9. Release the Clamp from the wire. (Figure 3)
(1)Release Clamp and remove the wire.


Figure 3 Releasing the Clamp (j0fa42268)
10. Remove the Stacker Tray (Figure 4)
(1)Release wires from Clamps (5)
(2)Disconnect the Connector
(3)Remove Screws (7)
(4)Remove the Stacker Tray


Figure 4 Removing the Stacker Tray (af422107)
11. Remove the front Tapping Screw. (Figure 5)
(1)Remove Tapping Screw.


Figure 5 Removing the Tapping Screw (jOfa42269)
12. Remove the rear Screw. (Figure 5)
(1)Remove Screw.


Figure 6 Removing the Screw (jOfa42270)
13. Remove the Compile Assembly. (Figure 6)
(1)Remove Compile Assembly.


Figure 7 Removing the Compile Assembly (j0fa42271)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.9.2 Set Clamp Shaft

## Parts List on PL 22.9

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Compile Assembly. (REP 22.9.1)
3. Remove the Bracket Assembly. (Figure 1)
(1)Release Clamps (2) and remove the wire.
(2)Remove Screws (2).
(3)Remove Bracket Assembly.

jOfa42272

Figure 1 Removing the Bracket Assembly (j0fa42272)
4. Remove the KL-Clips from the Eject Shaft. (Figure 2)
(1)Remove KL-Clips (2).

j0fa42273
Figure 2 Removing the KL-Clips (jOfa42273)
5. Remove the Eject Shaft from the Front/Rear Tamper Motor Assembly. (Figure 3) (1)Move Bearings (2) in the direction of the arrow.
(2)Remove Eject Shaft in the direction of the arrow. (3)Remove Belt from Pulley.


Figure 3 Removing the Eject Shaft (jOfa42274)
6. Remove the Actuator and the Bearing. (Figure 4)
(1)Remove E-Clip.
(2)Remove Actuator.
(3)Remove E-Clip.
(4)Remove Bearing.


Figure 4 Removing the Actuator and Bearing (jOfa42275)
7. Remove the Bearing. (Figure 5)
(1)Remove E-Clip.
(2)Remove Bearing.


Figure 5 Removing the Bearing (j0fa42276)
8. Remove the Set Clamp Shaft. (Figure 6)
(1)Move Set Clamp Shaft in the direction of the arrow.
(2)Remove Belts (3) from Pulleys (3).
(3)Remove Set Clamp Shaft in the direction of the arrow.


Figure 6 Removing the Set Clamp Shaft (jOfa42277)

## Replacement

1. Reverse the removal procedure for replacement.
2. Install and align the Eject Belt with marks on the Pulleys. (Figure 7)


Figure 7 Installing the Eject Belt (jOfa42278)

## REP 22.9.3 Eject Belt

## Parts List on PL 22.9

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Compile Assembly. (REP 22.9.1)
3. Remove the Front/Rear Tamper Motor Assembly. (REP 22.10.1)
4. Move the Eject Home Sensor Assembly. (Figure 1)
(1)Remove Screw.
(2)Move Eject Home Sensor Assembly.


Figure 1 Moving the Eject Home Sensor Assembly (jOfa42279)
5. Remove the Eject Belt. (Figure 2)
(1)Move the blades of Set Clamp Shaft in the direction of the arrow.
(2)Remove Eject Belt in the direction of the arrow.


Figure 2 Removing the Eject Belt (jOfa42280)

## Replacement

1. Reverse the removal procedure for replacement.
2. Install and align the Eject Belt with marks on the Pulleys. (Figure 3)


Figure 3 Installing the Eject Belt (jOfa42278)

## REP 22.9.4 Eject/Set Clamp Motor Assembly

## Parts List on PL 22.9

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Rear Cover. (PL 22.1)
4. Turn over the A-Finisher.
5. Remove the Bottom Cover. (PL 22.2)
6. Remove the Connector Bracket. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Disconnect Connectors (5).
(3)Remove Screws (2).
(4)Remove Connector Bracket.


Figure 1 Removing the Connector Bracket (j0fa42266)
7. Remove the Bottom Plate. (Figure 2)
(1)Release Clamps (5) and remove the wire.
(2)Disconnect Connectors (8).
(3)Remove Wire from Hook.
(4)Remove Screws (4).
(5)Remove Bottom Plate.


Figure 2 Removing the Bottom Plate (j0fa42267)
8. Remove the Stacker Tray (Figure 3)
(1)Release wires from Clamps (5)
(2)Disconnect the Connector
(3)Remove Screws (7)
(4)Remove the Stacker Tray


Figure 3 Removing the Stacker Tray (af422107)
9. Remove the screws securing the Eject/Set Clamp Motor Assembly. (Figure 4) (1)Release Clamps (2) and remove the wire.
(2)Remove Screws (2).
(3)Remove Tapping Screws (2).


Figure 4 Removing Screws (j0fa42281)
10. Remove the Eject/Set Clamp Motor Assembly. (Figure 5)
(1)Remove Belts (2) from Pulley.
(2)Remove Eject/Set Clamp Motor Assembly.


Figure 5 Removing the Eject/Set Clamp Motor Assembly (j0fa42282)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.9.5 Rear Tamper Home Sensor

## Parts List on PL 22.9

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Rear Cover. (PL 22.1)
4. Turn over the A-Finisher.
5. Remove the Bottom Cover. (PL 22.2)
6. Remove the Connector Bracket. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Disconnect Connectors (5).
(3)Remove Screws (2).
(4)Remove Connector Bracket.


Figure 1 Removing the Connector Bracket (j0fa42266)
7. Remove the Bottom Plate. (Figure 2)
(1)Release Clamps (5) and remove the wire.
(2)Disconnect Connectors (8).
(3)Remove Wire form Hook.
(4)Remove Screw (4).
(5)Remove Bottom Plate.


Figure 2 Moving the Bottom Plate (jOfa42267)
8. Remove the Rear Tamper Home Sensor Assembly. (Figure 3)
(1)Release Clamps (2) and remove the wire.
(2)Remove Tapping Screw.
(3)Move Rear Tamper Home Sensor Assembly in order to disconnect the connector.


Figure 3 Removing the Rear Tamper Home Sensor Assembly (j0fa42283)
9. Remove the Rear Tamper Home Sensor. (Figure 4)
(1)Remove Rear Tamper Home Sensor from the bracket.


Figure 4 Removing the Rear Tamper Home Sensor (jOfa42284)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.9.6 Eject Shaft Assembly

## Parts List on PL 22.9

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Compile Assembly. (REP 22.9.1)
3. Remove the Bracket Assembly. (Figure 1)
(1)Release Clamps (2) and remove the wire.
(2)Remove Screws (2).
(3)Remove Bracket Assembly.

jOfa42272

Figure 1 Removing the Bracket Assembly (j0fa42272)
4. Remove the KL-Clips from the Eject Shaft. (Figure 2) (1)Remove KL-Clips (2).

jOfa42273
Figure 2 Removing the KL-Clips (jOfa42273)
5. Remove the Eject Shaft from the Front/Rear Tamper Motor Assembly. (Figure 3) (1)Move Bearings (2) in the direction of the arrow.
(2)Remove Eject Shaft in the direction of the arrow.
(3)Remove Belt from Pulley.


Figure 3 Removing the Eject Shaft (jOfa42274)

## Replacement

1. Reverse the removal procedure for replacement.
2. Install and align the Eject Belt with marks on the Pulleys. (Figure 7)


Figure 4 Installing the Eject Belt (jOfa42278)

## REP 22.10.1 Front /Rear Tamper Motor Assembly

## Parts List on PL 22.10

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Compile Assembly. (REP 22.9.1)
3. Remove the Bracket Assembly. (Figure 1)
(1)Release Clamps (2) and remove the wire.
(2)Remove Screws (2).
(3)Remove Bracket Assembly.

jOfa42272

Figure 1 Removing the Bracket Assembly (jOfa42272)
4. Remove the KL-Clips from the Eject Shaft. (Figure 2)
(1)Remove KL-Clips (2).

j0fa42273
Figure 2 Removing the KL-Clips (jOfa42273)
5. Remove the Eject Shaft from the Front/Rear Tamper Motor Assembly. (Figure 3) (1)Move Bearings (2) in the direction of the arrow.
(2)Remove Eject Shaft in the direction of the arrow. (3)Remove Belt from Pulley.


Figure 3 Removing the Eject Shaft ( $\mathrm{j} 0 \mathrm{fa42274}$ )
6. Remove the Front/Rear Tamper Motor Assembly. (Figure 4)
(1)Remove Tapping Screws (2).
(2)Remove Screw.
(3)Remove Front/Rear Tamper Motor Assembly.


Figure 4 Removing the Front/Rear Tamper Motor Assembly (j0fa42285)

## Replacement

1. Reverse the removal procedure for replacement.
2. Install and align the Eject Belt with marks on the Pulleys. (Figure 5)


Figure 5 Installing the Eject Belt (j0fa42278)

## REP 22.10.2 Front Tamper Home Sensor

Parts List on PL 22.10

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data. [with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Rear Cover. (PL 22.1)
4. Turn over the A-Finisher.
5. Remove the Bottom Cover. (PL 22.2)
6. Remove the Connector Bracket. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Disconnect Connectors (5).
(3)Remove Screws (2).
(4)Remove Connector Bracket.


Figure 1 Removing the Connector Bracket (j0fa42266)
7. Remove the Bottom Plate. (Figure 2)
(1)Release Clamps (5) and remove the wire.
(2)Disconnect Connectors (8).
(3)Remove Wire from Hook.
(4)Remove Screws (4).
(5)Remove Bottom Plate.


Figure 2 Removing the Bottom Plate ( $\mathbf{j O f} \mathbf{0} 42267$ )
8. Remove the Front Tamper Home Sensor Assembly. (Figure 3)
(1)Remove Screw.
(2)Remove Front Tamper Home Sensor Assembly.


Figure 3 Removing the Front Tamper Home Sensor Assembly (j0fa42286)
9. Remove the Front Tamper Home Sensor Assembly. (Figure 4) (1)Disconnect Connector.
(2)Remove Front Tamper Home Sensor Assembly.


Figure 4 Removing the Front Tamper Home Sensor (j0fa42287)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.10.3 Eject Clamp Home Sensor

## Parts List on PL 22.10

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Turn over the A-Finisher.
3. Remove the Bottom Cover. (PL 22.2)
4. Remove the Connector Bracket. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Disconnect Connectors (5).
(3)Remove Screws (2).
(4)Remove Connector Bracket.


Figure 1 Removing the Connector Bracket (j0fa42266)
5. Remove the Bottom Plate. (Figure 2)
(1)Release Clamps (5) and remove the wire.
(2)Disconnect Connectors (8).
(3)Remove Wire from Hook.
(4)Remove Screws (4).
(5)Remove Bottom Plate.


Figure 2 Removing the Bottom Plate (j0fa42267)
6. Remove the Eject Home Sensor. (Figure 3)
(1)Release Clamp and remove the wire.
(2)Disconnect Connector.
(3)Remove Eject Home Sensor from the bracket.


Figure 3 Removing the Eject Home Sensor (jOfa42288)

## Replacement

1. Reverse the removal procedure for replacement.

## REP 22.10.4 Stack Height Sensor

## Parts List on PL 22.10

## Removal

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Before turning OFF the power switch, note the following to prevent loss of customer data.
[with the FAX function]
Check that the "Job in Memory" lamp is off. Press the "Job Status" button and check that no job is in progress.
[with the Printer function]
Check that "Ready to print/send" is displayed on the Control Panel.

1. Remove the A-Finisher from the machine.
2. Remove the Inner Front Cover. (PL 22.1)
3. Remove the Rear Cover. (PL 22.1)
4. Turn over the A-Finisher.
5. Remove the Bottom Cover. (PL 22.2)
6. Remove the Connector Bracket. (Figure 1)
(1)Release Clamps (3) and remove the wire.
(2)Disconnect Connectors (5).
(3)Remove Screws (2).
(4)Remove Connector Bracket.


Figure 1 Removing the Connector Bracket (jOfa42266)
7. Remove the Bottom Plate. (Figure 2)
(1)Release Clamps (5) and remove the wire.
(2)Disconnect Connectors (8).
(3)Remove Wire from Hook.
(4)Remove Screws (4).
(5)Remove Bottom Plate.


Figure 2 Removing the Bottom Plate (j0fa42267)
8. Remove the Stacker Tray (Figure 3)
(1)Release wires from Clamps (5)
(2)Disconnect the Connector
(3)Remove Screws (7)
(4)Remove the Stacker Tray


Figure 3 Removing the Stacker Tray (af422107)
9. Remove the Bracket Assembly. (Figure 4)
(1)Release Clamps (2) and remove the wire.
(2)Remove Screws (2).
(3)Remove Bracket Assembly.


Figure 4 Removing the Bracket Assembly (j0fa42272)
10. Remove the Stack Height Sensor. (Figure 5)
(1)Remove Clamp.
(2)Release Clamps (4) and remove the wire.
(3)Disconnect Connector.
(4)Remove Stack Height Sensor from the bracket.


Figure 5 Removing the Stack Height Sensor (jOfa42289)

## Replacement

1. Reverse the removal procedure for replacement.

## ADJ 7.1.1 MSI (Bypass) Tray Guide Adjustment

## Purpose

To set the maximum and minimum positions of the MSI Side Guide for MSI Paper Size Sensor detection using the NVM.

## Adjustment

1. Access Diagnostic Routines.
a. Enter UI Diagnostics (Entering UI Diagnostics in UI Diagnostic Mode).
b. Access Diagnostic Routines (Accessing Diagnostic Routines in UI Diagnostic Mode).
2. Select Adjustment/Others.
3. Select Tray 5 (Bypass) Guide Adjustment.
4. Set the MSI Side Guide at the minimum position.
5. Select the minimum size position and press the Start button.
6. After the NVM sets the MSI Paper Size Sensor detection value, an OK or NG result will be displayed.
7. Set the MSI Side Guide at the maximum position.
8. Select the maximum size position and press the Start button.
9. After the NVM sets the MSI Paper Size Sensor detection value, an OK or NG result will be displayed.

## NVM Settings for LEF Paper in the MSI Tray

When using the MSI and selecting LEF, change the NVM location 870-211 to the following values.

NOTE: The NVM location (870-211) for the MSI paper size default is A4 (NVM =5). This location is held in flash memory and will reset when the machine is PO/PO'ed.
Table 1 NVM location 870-211

| Paper Size | NVM Value |
| :--- | :--- |
| A4 LEF | 5 |
| A3 LEF | 6 |
| $8.5 \times 11$ LEF | 19 |
| $11 \times 17$ LEF | 24 |

## ADJ 9.1.0 Toner Density Adjustment <br> Purpose

To set a suitable toner density for printing by determining the toner density in the Developer Unit from the difference between the Read value of the TC Sensor and the reference value, and by adjusting the toner level accordingly.

## Adjustment

1. Place the Standard Test Pattern (82E13120) on the platen glass.
2. Enter UI Diagnostic Mode.
3. Enter Max Setup and select Adjust Toner Density.

NOTE: The difference between TC Target and TC Measured should be within +/- 30 .
NOTE: If TC Measured is to high, the amount of toner used to create the patch is too low. Therefore use a positive number in the Select Quantity to increase the amount of toner in the developer.

NOTE: If TC Measure is to low, the amount of toner used to create the patch is too high. Therefore use a negative number in the Select Quantity to decrease the amount of toner in the developer.
NOTE: When the negative numbers are used in Select Quantity, the routine will print solid area coverage on several sheets of paper in order to tone down the developer.
4. Select Quantity, using the Up and Down buttons displayed for Magenta, Yellow, Cyan and Black. Adjust in 2 to 3 increments.
5. Press Start button to begin Toner Density Adjustment.
6. After the adjustment ends, the TC Measured value will be displayed.
7. Repeat steps 4 thorough 6 until all TC Measurements is within $+/-30$ of the TC Target
8. Exit Diagnostic Mode.
9. Place the Standard Test Pattern (82E13120) on the platen glass.
10. Make 5 copies of the test pattern and determine if Toner Density is properly adjusted.
11. Repeat this procedure until the Toner Density is satisfactory.

## ADJ 9.1.1 IOT Image Registration

## Purpose

The purpose of this adjustment is to properly align the ROS image to the paper / media, for all trays, all modes, print and copy. This adjustment must be completed prior to the IIT Lead Edge/ Side Edge Registration, and the DADF Lead Edge Registration.

## Specification

- For A3 paper, the specifications are as follows:
- The specification for lead edge registration is $10.0+/-0.5 \mathrm{~mm}$.
- The specification for side edge registration is $8.0+/-0.5 \mathrm{~mm}$. (Both Sides)
- For $11 \times 17^{\prime \prime}$ paper, the specifications are as follows:
- The specification for lead edge registration is $10.0+/-0.5 \mathrm{~mm}$.

The specification for side edge registration is $10.0+/-0.5 \mathrm{~mm}$. (Both Sides)

## Introduction

Initial set up should be done by following these 5 sequenced steps:

1. Tray Baseline

NOTE: The Tray Base line should only be performed as required to bring the machine back to the factory settings.
2. Tray 1 Lead Edge Set Up
3. Side Edge Adjustment, Trays 1, 2, 3, and MSI
4. IIT Alignment, Platen Glass
5. DADF Lead Edge / Side Edge Registration

NOTE: Copies / Prints are delivered to output Trays in different orientations depending on the job; example, Platen Glass, DADF, Finisher Un-collated or Collated/Stapled. Read and understand proper image viewing in each adjustment section.

NOTE: Label each image as it is removed from the output tray.
Mark the following references on each print:

- Tray 1, 2, 3 or MSI
- Color or B/W
- Mode, Bond, HW1 or HW2
- Lead Edge

NOTE: Lead Edge to Trail Edge Registration. Decrease the NVM Value to move the image towards the Lead Edge. ( 9 bits $=1 \mathrm{~mm}$ )
NOTE: Diagnostics must be exited for any Side Edge NVM changes to take effect. Lead Edge NVM changes take effect immediately.

NOTE: Positive numbers (bits) increases the image distance from the paper edge and negative numbers (bits) decreases the distance from the paper edge.

## Tray Baseline

1. For 2TM machines Load all paper trays with 11X17"/A3 paper SEF.

For TTM machines load paper Tray 1 and MSI tray with 11x17"/A5 paper SEF and Tray 2 and Tray 3 with $8.5 \times 11^{\prime \prime}$ paper LEF.
2. Disconnect the Network cable from the machine.
3. Enter UI Diagnostic Mode.
4. Set the following NVM's in Table 1, to the following default values.

| Table 1 Default NVM Settings |  |  |  |
| :--- | :---: | :---: | :---: |
| Description NVM Default Values Range <br> Lead Edge ALL $742-031$ 66 0 to 160 <br> L/E Tray $1-3$ $742-039$ 80 0 to 160 <br> L/E MSI $742-032$ 80 0 to 160 <br> L/E Duplex $742-046$ 80 0 to 255 <br> Side Edge Tray 1 $742-002$ 0 -25 to 25 <br> S/E MSI $742-009$ 0 -25 to 25 <br> S/E Tray 2 $742-022$ 3 -25 to 25 <br> S/E Tray 3 $742-023$ 0 -25 to 25 <br> S/E Duplex Tray 1 $742-018$ 0 -25 to 25 <br> S/E Duplex Tray 2 $742-019$ 0 -25 to 25 <br> S/E Duplex Tray 3 $742-020$ 0 -25 to 25 |  |  |  |

## Tray 1 Lead Edge Set Up

## Adjustment

NOTE: To properly view printed image, remove from center output tray and Flip Left to Right.

1. Enter UI Diagnostic Mode.
2. Select the Print Test Pattern routine and enter 58.

NOTE: Ensure Tray 1 is loaded with $11 \times 17$ or A3 paper and Tray 1 is selected. The default tray is Tray 1.
3. Press the Start button.
4. Remove the copy from the center exit tray and position it as shown in Figure 1.

NOTE: The Trail Edge of the image is being measured to the Trail Edge of the paper and the entire image is shifted by any adjustments.
5. Refer to Figure 1. Measure and record the dimensions.


Figure 1 Measurement on Test Pattern \#58
6. Determine the direction and the amount the image must be moved to achieve the $10.0+$ 0.5 mm dimension.

NOTE: 9 bits $=1 \mathrm{~mm}$
7. Enter NVM Read/Write and enter 742-031, select Confirm/Change.
8. Enter the new NVM value into Current Value, and press the Start button.
9. Enter Print Test Pattern and enter number 58, press the Start button.
10. Repeat steps 6 through 9 until the correct Lead Edge measurement is achieved.

## Lead Edge Adjustment Duplex

## Adjustment

1. Ensure Tray 1 is loaded with $11 \times 17$ " or A3 paper, Tray 1 and Duplex is selected. The default tray is Tray 1.

NOTE: The default is Tray 1.
2. Ensure that ADJ 11.1.1, IIT Lead Edge/Side Edge Registration has been performed.

NOTE: Use the Test Pattern Original that was created in ADJ 11.1.1, IIT Lead Edge/Side Edge Registration or create a Test Pattern Original in the next step.
3. To create a test pattern original, use a plain white sheet of $11 \times 17$ " paper and fold the sheet precisely in half lengthwise and width wise. Then with a straight edge, draw a straight line in the length wise crease and a straight line in the width wise edge. Write the words "Lead Edge" on the short edge that will be placed on the platen glass registration edge. (Figure 2)

LEAD EDGE


## Figure 2 Creating a Test Pattern Original

4. Place the Test Pattern Original face down on the platen glass with the short edge against the left registration edge.
5. From the UI Copying screen, select Black, 1-2 sided, $100 \%$, Tray 1 and press the Start Button.
6. After the first pass of the lens, place a small piece of paper under the Test Pattern Original, with the words "Side 2" written on it.
7. Press the Start button
8. Remove the print from the center exit tray and position it as indicated in the following note.

NOTE: Duplex copies will be delivered to the center output tray face down. To view the duplex prints for registration analysis, remove the prints from the tray and flip it left to right. The words "Side 2" should be visible.
NOTE: The Trail Edge of the image is being measured to the Trail Edge of the paper and the entire image is shifted by any adjustments.
9. Fold the copy in half in both directions.
10. The printed lines should align with the folds.
11. If not, measure and record the direction and distance the image need to be moved to align them with the folds. (Figure 3)


Figure 3 Measuring the distance to move the image
NOTE: 9 bits $=1 \mathrm{~mm}$
12. Enter NVM Read/Write and enter 742-046, then select Confirm/Change.
13. Enter the new NVM value into the Current Value, and press the Start Button.
14. Repeat steps 4 through 11 until the correct Lead Edge measurement is achieved.

## Side Edge Registration

## Purpose

To center the image from the side edges of the paper.
Optionally, the SE registration can be set for each tray individually; use the Tray 1 through MSI buttons and repeat the check or adjustment for each tray.

## Adjustment

NOTE: Exit and re-enter the Diagnostic Mode in order for the Side Edge Registration changes to take effect.

1. Enter UI Diagnostic Mode.
2. Enter Print Test Pattern, and print Test Pattern \#58.
3. Select Paper Tray 1.
4. Select the Print Count and press the Start button.
5. The Side Edge Registration dimensions should be $10.0+/-0.5 \mathrm{~mm}$. See Figure 1 .
6. Determine the difference between the measured dimensions and the desired specifications.
7. Calculate the number of NVM bits and the direction of movement.

NOTE: Side Edge Registration. Increase the value to move the image toward the side edge of the paper. (Each bit = approximately .2 mm ).
8. Enter NVM Read/Write and enter the NVM location for Side Edge Tray 1 (742-002) from Table 1.
9. Select Confirm/Change, and change the Current Value with the NVM bits determined.
10. Select Confirm.
11. Enter Print Test Pattern and print test pattern \#58.
12. Select Paper Tray 1.
13. Select the Print Count and press the Start button.
14. Repeat steps 5 through 14 to achieve the $10.0+/-0.5 \mathrm{~mm}$ dimension for the Side Edge.
15. Repeat steps 5 through 14 for Trays 2 , and 3 .
16. When using 11x17" paper in the MSI and selecting LEF, change NVM location 870-211 to 24.
17. Use Table 2 if using other size paper in the MSI for this procedure:

NOTE: When the machine powers off then powers on, the NVM location 870-211 will return to setting 5 for A4 paper.
Table 2 NVM location 870-211

| Paper Size | Set NVM to: |
| :--- | :---: |
| A4 LEF | 5 |
| A3 LEF | 6 |
| $8.5 \times 11$ LEF | 19 |
| $11 \times 17$ LEF | 24 |

18. Exit Diagnostics.

## ADJ 9.1.2 Max Setup

## Purpose

To conduct a check of the machine and set it up so that excellent copy quality can be consistently obtained by stabilizing the development potential and copy density.

## Adjustment

Max Setup consists of several separate adjustments that should be performed in the following sequence:

1. IIT Calibration ADJ 9.1.8
2. Procon On/Off Print ADJ 9.1.10
3. Adjust Toner Density ADJ 9.1.0
4. TRC Adjustment ADJ 9.1.6

## ADJ 9.1.6 TRC Adjustment

## Purpose

## CAUTION

Perform this adjustment only to correct a strong customer complaint. Altering the set points will affect both Print and Copy modes. Also, there is quite a bit of overlap among the low, medium, and high densities. For these reasons, it is recommended that this procedure not be used unless absolutely necessary. High density problems should be first investigated in IOT.

To adjust image quality (TRC) to meet the user's preference, by increasing or decreasing the center value of gradation correction for each (YMCK) color, in low density, medium density, and high density ranges.

## Adjustment

1. Enter UI Diagnostic Mode.
2. Under the Max Setup, select TRC Adjustment.
3. Select the TRC Adjust.
4. Select the first color toner to be adjusted.

NOTE: Adjusting the Low Density setting might cause background. It is best to leave the Low Density setting at " 0 ".
NOTE: Using a large number like 30 to 50 will make very noticeable differences in toner density.

NOTE: Adjusting all the colors, YMC and K, will also make very noticeable changes.
5. Adjust the medium and high density. Center value is " 0 ", the range is from -128 to 127.
6. Press the Start button to save the setting and then select the next color toner to be adjusted.
7. Adjust the medium and high density.
8. Press the Start button to save each setting.
9. Exit the Diagnostic Mode and place the Standard Test Pattern (82E13120) on the platen glass.
10. Make 2 prints or copies; the changes are not implemented until the $2 n d$ print is made.
11. Repeat steps 4 through 6 until the customer is satisfied with the image quality.

## ADJ 9.1.7 Color-To-Color Registration

## Purpose

This procedure is used to adjust the color-to-color registration, or Offset Displacement in the feed direction, by changing the NVM settings.

## Adjustment

NOTE: Mis-registration between colors in the Cross feed Direction cannot be adjusted in NVM. Cross feed Mis-registration is a mechanical problem that can be addressed in the IQ8 Color-toColor Mis-registration RAP.

NOTE: For Skew Mis-registration in the Feed Direction go to the IQ8 Color-to-Color Mis-registration RAP.
NOTE: Color-to-Color Mis-registration of 0.04 mm between jobs is allowable.
NOTE: Only the $K$ and $Y$ colors can be adjusted for Color-to-Color mis-registration in the Feed Direction.


## Color-to-Color Offset Displacement on the Lead Edge of the page

Table 1 Lead Edge NVM Settings

| NVM | Default Setting | Setting Range |
| :--- | :--- | :--- |
| $760-043$ | 50,000 | 0 |
| $760-048$ | 50,000 |  |
| $760-053$ | 53,000 |  |
| $760-056$ | 50,000 |  |
| $760-061$ | 50,000 |  |
| $760-066$ | 50,000 |  |

NOTE: An NVM increment of 20,000 will move the $K$ or $Y$ color by 0.1 mm .

1. If the $K$ color is shifted to the trail edge relative to the colors $M$ and $C$, increase the value of the following NVM's; (Figure 2)

- 760-056
- 760-061
- 760-066

2. If the $K$ color is shifted to the lead edge relative to the colors $M$ and $C$, decrease the value of the following NVM's; (Figure 3)

- 760-056
- 760-061
- 760-066

3. If the $Y$ color is shifted to the trail edge relative to the colors $M$ and $C$, increase the value of the following NVM's; (Figure 2)

- 760-043
- 760-048
- 760-053

4. If the $Y$ color is shifted to the lead edge relative to the colors $M$ and $C$, decrease the value of the following NVM's; (Figure 3)

- 760-043
- 760-048
- 760-053

NOTE: If any NVM values were changed in the above procedures, print 4 consecutive pages, evaluate the Trail Edge color-to-color registration and proceed to the following steps.

Figure 1 Ideal alignment of colors from test pattern \#61


0730004A-ELN
Figure 2 Shift of colors K or Y toward the Trail Edge


0730005A-ELN

Figure 3 Shift of colors $K$ and $Y$ toward the Lead Edge

## Color-to-Color Mis-registration on the Trail Edge of the page

Table 2 Trail Edge NVM Settings

| NVM | Default Settings | Setting Range |
| :--- | :--- | :--- |
| $760-091$ | 87 | 0 to 200 <br> $(100$ or above is <br> not recommended) |
| $760-094$ | 55000 | 0 to 100,000 |
| $760-101$ | 20235 | 20139 to 20274 |

1. If the K color is shifted to the Lead Edge relative to the colors M and C , decrease the value of the following NVM; (Figure 4)

NOTE: An NVM increment of 16 will move the $K$ color by 0.1 mm .

- 760-101

2. If the $K$ color is shifted to the Trail Edge relative to the colors $M$ and $C$, increase the value of the following NVM; (Figure 5)

NOTE: An NVM increment of 16 will move the K color by 0.1 mm .

- 760-101

3. If the $Y$ color is shifted to the Trail Edge relative to the colors $M$ and $C$, decrease the value of NVM 760-091 and increase the value of NVM 760-094. (Figure 4)

- For the NVM 760-091, a decrease of 9 will move the Y color by 0.1 mm .
- For the NVM 760-094, an increase of 20,000 will move the $Y$ color by 0.1 mm .

4. If the $Y$ color is shifted to the Lead Edge relative to the colors $M$ and $C$, increase the value of NVM 760-091 and decrease the value of NVM 760-094. (Figure 5)

- For the NVM 760-091, an increase of 9 will move the Y color by 0.1 mm .
- For the NVM 760-094, a decrease of 20,000 will more the $Y$ color by 0.1 mm .


0730006A-ELN

Figure 4 Shift of colors $K$ and $Y$


0730007A-ELN
Figure 5 Shift of colors $K$ and $Y$

## ADJ 9.1.8 IIT Calibration

## Purpose

The IIT Calibration is accomplished in two stages, White Reference Adjustment and CCD Calibration.

- The White Reference Adjustment calculates the White Reference Correction using white paper placed on the platen glass (reflectance difference from true white), and machine NVM value for "True White".
- CCD Calibration uses the standard test pattern, 82E13120 to calibrate the sensitivity of the CCD. It looks at the 5 squares in the upper center of the test pattern as a reference to do the calibration.


## NOTE:

## White Reference Adjustment

## Adjustment

1. For the White Reference Check, use Xerox Digital Color Xpressions+ or Colotech + paper. Result values for RGB should be approximately 130 to 145

- Digital Color Xpressions +24 lb . paper $=98$ Brightness rating ( 90 gsm ).
- Colortech + paper $=(90 \mathrm{gsm})$.

2. Place 10 sheets of $A 3$ or $11 \times 17^{\prime \prime}$ (short edge lead) clean white paper on the Document Glass.
3. Enter the UI Diagnostic Mode.
4. Enter Max Setup, IIT Calibration, White Reference Adjustment.
5. Press the Start on the screen.
6. Result values for RGB should be in the range of 130 to 145. (Table 1)
Table 1 White Reference

| R | $\mathbf{1 3 5}$ |
| :---: | :---: |
| G | $\mathbf{1 3 6}$ |
| B | $\mathbf{1 3 8}$ |

7. If the values are within range proceed to the CCD Calibration Adjustment below.
8. If the values are out of range continue with this procedure.

## CAUTION

If the Lens Kit was replaced, the Optical Axis Alignment (ADJ 9.1.9) must be performed.
9. If the Lens Kit was replaced, go to ADJ 9.1.9.
10. NVM $715-\mathrm{XXX}$ is set to a 1 . (With DADF, the lamp will park to the left.)
11. Make sure you have placed 10 sheets of $11 \times 17$ digital color Xpressions+ paper against the registration edge of the platen glass (98 Brightness).
12. Clean the Optics:
a. Switch off the power and allow the Exposure Lamp to cool off.
b. Using the optical Cleaning Cloth, clean the front and rear of the Document Glass, the White Reference Strip, Reflector, and Mirrors.

NOTE: The white reference strip under the registration guide on the underside of the platen glass.
c. Clean the Exposure Lamp with a clean cloth and Film Remover.
d. Clean the Lens with Lens and Mirror Cleaner and lint free cloth
13. If necessary, troubleshoot the Exposure Lamp, Lamp Ballast PWB, or IIT PWB.

## CCD Calibration

## Adjustment

1. Enter the UI Diagnostic Mode.
2. Enter Max Setup, IIT Calibration, CCD Calibration.
3. Place the Standard Test Pattern 82E13120 on the Document Glass with the lead edge to the left.

NOTE: If the Standard Test Pattern 82E13120 is not used, the Result for Pcon and Scan will be $N G$.
4. Reflection values for YMCK vs. RGB should be as follows:
a. Values for " $X$ " in Table 2 should be between 200 and 250.
b. The higher the number, the less reflectance. K is always higher than $\mathrm{C}, \mathrm{M}$ or Y .

Table 2 Values for "X" 200 to 250

| Reflection Ratio |  |  |  |
| :---: | :---: | :---: | :---: |
| $\mathbf{Y}$ | $\mathbf{R}$ | $\mathbf{G}$ | $\mathbf{B}$ |
| $\mathbf{M}$ |  | $\mathbf{X}$ | $\mathbf{X}$ |
| $\mathbf{C}$ |  | $\mathbf{X}$ |  |
| $\mathbf{K}$ | $\mathbf{X}$ | $\mathbf{X}$ | $\mathbf{X}$ |
| Result |  |  |  |

5. The $\mathrm{b}^{*}$ Measurement should be within 10 bits (+/-) of the $\mathrm{b}^{*}$ Target.

| Table 3 b* Calibration Coefficient Check |  |
| :--- | :---: | :---: |
|  PCON SCAN <br> $\mathbf{b}^{*}$ coefficient 3 3 <br> b* Patch Value <br> (measurement) 226 214 <br> b* Normal Value <br> (target) 225 223 <br> Result OK OK |  |

6. If values for "X" in Table 2 are less than 200 or $\mathrm{b}^{*}$ target Results Table 3 is NG, perform the following checks or troubleshoot.

- Make sure test pattern 82E13120 is being used and that the test pattern is clean and free of defects.
- Make sure the test pattern is position with the L.E. toward the left of the Platen Glass and registered.
- Clean both sides of the Document Glass, Document Cover, White Reference Strip, Reflector, and Mirrors.
- Clean the Lens with Lens and Mirror Cleaner and lint free cloth.
- Clean the Exposure Lamp with a clean cloth and Film Remover.
- Troubleshoot the Exposure Lamp, Lamp Ballast PWB and IIT PWB.
- Replace the Lens Pan Assembly if necessary.

NOTE: Do not select Optical Axis Calibration unless the Lens Pan Assembly is replaced.

## ADJ 9.1.9 Optical Axis Alignment

## Purpose

The purpose of this adjustment is to align the CCD with the lens. This procedure should only be performed if the lens or CCD is replaced, or if the documentation specifically directs.

## Check

1. Install the Platen Glass.

## CAUTION

Stray light will adversely affect the check. If there is significant ambient light around the machine (especially fluorescent light), open the platen cover as little as required to start the scan, and/or shroud the machine with a drop cloth, in order to keep as much stray light as possible away from the Lens and CCD.
2. Ensure the document cover or DADF is fully raised and that there is nothing on the platen glass.
3. Enter UI Diagnostic Mode. Raise the platen cover. Select Max Setup, IIT CaI., select the Optical Axis Correction and press Start.
4. Check the results in the Optical Axis Set Results box. If OK is displayed in the Result box, the check is good. Adjust the IIT Calibration (ADJ 9.1.8).
5. If the tool displays NG, perform the Adjustment.

## Adjustment

1. Place an index mark on the barrel of a 5.5 mm nut driver. The following figure shows the tool and the adjusting nuts. (Figure 1)

2. Check the results in the Front Nut Correction Angle and the Rear Nut Correction Angle box. The values displayed indicate the amount and direction of the correction required:

-     + means rotate clockwise
-     - means rotate counterclockwise
- The amount of correction is displayed in degrees. Each division around the nut represents 15 degrees (divide the displayed value by 15 to get the number of divisions). If a value higher than 990 is displayed, this may indicate that insufficient light is entering the CCD. Make sure that the Lens and Platen Glass are clean.

3. Remove the Platen Glass and the Optics cover. (Figure 2)


Figure 2 Removing the Optics Cover
4. Make the indicated correction for both the front and rear screws,
5. Reinstall the Platen Glass and the Optics cover, then select on Start on the screen.
6. Repeat steps 2 and 3 until OK is displayed.
7. Reinstall the Optics Cover and reinstall the Platen Glass.
8. Adjust the IIT Calibration (ADJ 9.1.8).

## ADJ 9.1.10 Procon ON/OFF Print

## Purpose

The purpose of this routine is to determine the proper functioning of the ADC Sensor, ADC Patch, ADC Shutter open and close, ADC Mini Setup, TC Patch, and the environment Temperature and Humidity. These machine parameters must be functioning properly before Max Setup can be run.

Procon is Process Control and Process Control on this product is the Tone Reproduction Control (TRC).

## Adjustment

1. Enter UI Diagnostic Mode.
2. Select Max Setup and select Procon "On/Off" Print.
3. Select Procon "ON" Print.
4. Press the Start button.
5. When the routine is completed, check the print out test pattern (Test Pattern \# 53)

Ensure that all colors (YMCK) have printed and Process Black is present in two places. (Figure 1)


Figure 1 Checking the test pattern for YMCK and Process Black printout.
6. Scroll through the Procon "ON" Print items list, find and check that the Items in table 1 are all OK.
7. If any items indicate NG (Fail), check for failed components: Return to Call Flow and determine component failure, etc. High Voltage Power Supply, ADC Assembly, Developer Housing, MCU PWB, Photoreceptor, bad Developer Bias.

NOTE: Most values in this table are for reference only. Actual values will vary.

Table 1 PRO CON "On Print"

| PRO CON On Print | Yellow | Magenta | Cyan | Black (K) | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Target ADC - H | 385 | 340 | 400 | 165 | Compare the Target ADC - H with the ADC Measurement - H. The Measurement should be within 30 bits of the Target. (Ignore ADC LS 1 Measurement - H and the ADC LS 2 Measurement -H) If not See Corrective Action 1 |
| ADC Measurement - H | 368 | 364 | 395 | 166 |  |
| ADC LS 1 Measurement - H | 455 | 402 | 484 | 213 |  |
| ADC LS 2 Measurement - H | 352 | 254 | 307 | 127 |  |
| Target ADC - M | 680 | 605 | 645 | 475 | Compare the Target ADC - M with the ADC Measurement - M. The Measurement should be within 30 bits of the Target. (Ignore ADC LS 1 Measurement - M and the ADC LS 2 Measurement -M) If not See Corrective Action 1 |
| ADC Measurement - M | 656 | 642 | 663 | 500 |  |
| ADC LS 1 Measurement - M | 710 | 675 | 718 | 543 |  |
| ADC LS 2 Measurement - M | 635 | 521 | 586 | 465 |  |
| Target ADC - L | 915 | 910 | 915 | 845 | Compare the Target ADC - L with the ADC Measurement - L. The Measurement should be within 30 bits of the Target. (Ignore ADC LS 1 Measurement - L and the ADC LS 2 Measurement -L) If not See Corrective Action 1 |
| ADC Measurement - L | 923 | 931 | 937 | 848 |  |
| ADC LS 1 Measurement - L | 041 | 951 | 965 | 866 |  |
| ADC LS 2 Measurement - L | 831 | 839 | 835 | 705 |  |
| ADC Patch Fail | OK | OK | OK | OK | If NG see Corrective Action 8 |
| ADC Sensor Fail | OK | - | - | - | If NG see Corrective Action 3 |
| ADC Shutter open Fail | OK | - | - | - | If NG see Corrective Action 2 |
| ADC Shutter close Fail |  |  |  |  |  |
| ADC Mini setup Fail | OK | OK | OK | OK | If NG see Corrective Action 9 |
| Charge Bias Voltage setting Common | 715 | 715 | 715 | 715 | If NG see Corrective Action 10 |
| Illumination Settings | 396 | 327 | 321 | 409 |  |
| Maximum Illuminations | 673 | 673 | 673 | 673 |  |
| Bias Settings | 575 | 580 | 580 | 565 |  |
| Target TC | 433 | 423 | 417 | 281 | Compare the TC Target with the TC Measurement value. The Measurement should be within 30 bits of the Target. <br> If not see Corrective Action 4 |
| TC Measurement | 400 | 332 | 341 | 266 |  |
| TC Patch Fail | OK | OK | OK | OK | If NG see Corrective Action 5 |
| Temperature | 26 | - | - | - |  |
| Humidity | 52 | - | - | - |  |
| Temperature Fail | OK | - | - | - | If NG see Corrective Action 6 |
| Humidity Fail | OK | - | - | - | If NG see Corrective Action 7 |

Table 2 PRO CON "Off"

| PRO CON On Print | Yellow | Magenta | Cyan | Black (K) | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Target ADC - H | 385 | 340 | 400 | 165 |  |
| ADC Measurement - H | 381 | 344 | 403 | 167 |  |
| ADC LS 1 Measurement - H | 474 | 418 | 500 | 212 |  |
| ADC LS 2 Measurement - H | 376 | 259 | 336 | 132 |  |
| Target ADC - M | 680 | 605 | 645 | 475 |  |
| ADC Measurement - M | 669 | 636 | 659 | 509 |  |
| ADC LS 1 Measurement - M | 723 | 680 | 726 | 544 |  |
| ADC LS 2 Measurement - M | 646 | 552 | 612 | 474 |  |
| Target ADC - L | 915 | 915 | 915 | 845 |  |
| ADC Measurement - L | 920 | 923 | 932 | 852 |  |
| ADC LS 1 Measurement - L | 943 | 948 | 971 | 860 |  |
| ADC LS 2 Measurement - L | 914 | 889 | 908 | 836 |  |
| ADC Patch Fail | OK | OK | OK | OK |  |
| ADC Sensor Fail | OK | - | - | - |  |
| ADC Shutter open Fail | OK | - | - | - |  |
| ADC Shutter close fail | OK | - | - | - |  |
| ADC Mini setup Fail | OK | OK | OK | OK |  |
| Grid Voltage setting Common | 715 | 715 | 715 | 715 |  |
| Illumination Settings | 433 | 347 | 335 | 423 |  |
| Maximum Illuminations | 674 | 674 | 674 | 674 |  |
| Bias Settings | 570 | 580 | 580 | 562 |  |
| Target TC | 432 | 423 | 417 | 282 |  |
| TC Measurement TC Patch Fail | 411 | 365 | 366 | 260 |  |
| Temperature | 26 | - | - | - |  |
| Humidity | 51 | - | - | - |  |
| Temperature Fail | OK | - | - | - |  |
| Humidity Fail | OK | - | - | - |  |

## Corrective Action 1

## Corrective Action

## 1. Procon Area

- ADC (Automatic Density Control) Target vs. Measured more than 30 bits off.

2. Prints And What To Look At.

- internal test pattern 53, Low, mid and high patches.

3. Corrective Action

- If the problem is in high density patches, then troubleshoot IOT problems.
- If the problem is only in low and mid density patches then perform TRC Adjustment and adjust low, mid and high starting with low density.

NOTE: Center value is " 0 ". Range is -128 to 127

## Corrective Action 2

## Corrective Action

1. Procon Area

- ADC (Automatic Density Control) Shutter Open Fail (NG) or ADC Shutter Close Fail (NG).

2. Prints And What To Look At.

- (Nothing to look at)

3. Corrective Action

- Check the connections to the ADC Sensor.
- Check the operation and condition of the Shutter.
- If OK, replace the $\mathrm{ADC} / \mathrm{MOB} /$ Temp/Humidity sensor bar. (PL 11.1)


## Corrective Action 3

## Corrective Action

1. Procon Area

- ADC (Automatic Density Control) Fail (NG).

2. Prints And What To Look At.

- (Nothing to look at)

3. Corrective Action

- Check the connections to the ADC Sensor.
- Check the operation and condition of the Shutter.
- If OK, replace the ADC/MOB/Temp/Humidity sensor bar. (PL 11.1)


## Corrective Action 4

## Corrective Action

1. Procon Area

- TC (Toner Concentration) Target vs. Measured more than 30 bits off.

2. Prints And What To Look At.

- internal test pattern 53, Low, mid and high patches.

3. Corrective Action

- Ensure that toner cartridges are not empty.
- Perform Adjust Toner Density.
- If the problem is in high density patches, then troubleshoot IOT problems.
- If the problem is only in low and mid density patches then perform TRC Adjustment and adjust low, mid and high starting with low density.

NOTE: Center value is "0". Range is -128 to 127

## Corrective Action 5

## Corrective Action

1. Procon Area

- TC (Toner Concentration) Patch Fail (NG).

2. Prints And What To Look At.

- (Nothing to look at)

3. Corrective Action

- Ensure that toner cartridges are not empty.
- Perform Adjust Toner Density.
- If the problem is in high density patches, then troubleshoot IOT problems.
- Observe Developer Mag Brush for defects or missing Mag Brush in all colors.


## Corrective Action 6

## Corrective Action

1. Procon Area

- $\quad$ Temp (NG).

2. Prints And What To Look At.

- (Nothing to look at)

3. Corrective Action

- Failure occurs below 32 degrees $F(0$ degrees $C$ ) or above 140 degrees $F(60$ degrees C).
- Check connections to the Temperature Sensor
- If the connections are good and the temperature is within spec then replace the ADC/MOB/Temp/Humidity Sensor Bar.


## Corrective Action 7

## Corrective Action

1. Procon Area

- Humidity (NG).

2. Prints And What To Look At.

- (Nothing to look at)

3. Corrective Action

- Failure occurs when the humidity is at $0 \%$ or above $105 \%$.
- Check connections to the Humidity Sensor.
- If the connections are good and the humidity is within spec then replace the ADC/ MOB/Temp/Humidity Sensor Bar.


## Corrective Action 8

## Corrective Action

1. Procon Area

ADC Patch Fail (NG).
2. Prints And What To Look At.

- (Nothing to look at)

3. Corrective Action

- Check ADC Target vs. Measured, ADC Sensor fail, ADC shutter fail and ADC mini setup fail.
- Check connections to the ADC Sensor.
- Check the operation and condition of the shutter and Clean if necessary.
- Replace the ADC/MOB/Temp/Humidity Sensor Bar. (PL 11.1)


## Corrective Action 9

## Corrective Action

1. Procon Area

- ADC Mini Setup Fail (NG).

2. Prints And What To Look At.

- (Nothing to look at)

3. Corrective Action

- Check connections to the ADC Sensor.
- Check the operation and condition of the shutter and Clean if necessary.
- Replace the ADC/MOB/Temp/Humidity Sensor Bar. (PL 11.1)
- Check for failed components:
- HVPS (PL 11.1)
- Developer Housing(s) (PL 5.2) or bad Developer Bias.
- MCU PWB (PL 11.1)
- Photoreceptor Machine Consumables


## Corrective Action 10

## Corrective Action

1. Procon Area

- Charge Bias Voltage Setting

2. Prints And What To Look At.

- (Nothing to look at)

3. Corrective Action

- Check the connections to the Developer Bias Brush and the HVPS.
- If OK, replace the HVPS. (PL 11.1)


## ADJ 9.2.1 Edge Erase Value Adjustment

## Purpose

To correct the Lead, Tail Edge and both Side Edge (rear/front) erase values.
NOTE: The IOT Lead Edge/Side Edge Registration must be adjusted.

## Check

1. Enter UI Diagnostic Mode.
2. Select NVM Read/Write.
3. Set Chain-Link No. 780-066 (Image Area) to 0.
4. Specify a tray with paper. Make a black copy with the Platen Cover open.
5. Check that the white sections of the Lead, Tail and Side Edges are 2 mm .

## Adjustment

1. Enter UI Diagnostic Mode.
2. Select NVM Read/Write
3. Adjust the measured values using the following NVM so that the measured values fall within the specifications ( 2 mm ).
If the setting value is increased, the erase value increases.
Table 1 NVM List

| Chain <br> Link | Name | Min. | Initial | Max | Increment |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $780-066$ | LEAD EDGE ERASE ADJUSTMENT | 40 | 40 | 50 | 1 mm |
| $780-067$ | TRAIL EDGE ERASE ADJUSTMENT | 20 | 20 | 30 | 1 mm |
| $780-068$ | SIDE EDGE ERASE ADJUSTMENT | 10 | 20 | 30 | 1 mm |

NOTE: A value of 10 moves the image 1 mm .
4. After adjustment, make another black copy without using any originals and leaving the Platen Cover open.
5. Repeat the procedure until the measured values of the Lead (A), and Side (B) Edges fall within the specifications.

## ADJ 9.3.1 Software Loading and Upgrading

## Purpose

The purpose of this procedure is to enable updating the machine software (ESS, FAX, IISS, and IOT) or when reinstallation of the software is required due to a failure. The PWS Diagnostic tool will be used for this procedure.

## CAUTION

This procedure is generic in nature and is intended as an overview only. Always follow the instructions that come with the software. There may be additional steps added, or other special requirements that vary from version to version.

## Setting up the PWS

1. Using the instructions on the pull out sheet that comes with the system software disc, load the WC 7132 software download tool on you PWS.
2. Make a copy of the color test pattern 82E13120 and check for Image Quality problems. Resolve any problems before performing the software loading.
3. Print a copy of the Systems Settings List.
4. Switch off the WC 7132.
5. Disconnect the RJ45 Network Connector to the customer's network.
6. Connect the PWS to the USB 1.1 port on the WC 7132.


Figure 1 Where to connect the PWS and Network cables

NOTE: A new hardware wizard may appear and you will be asked to install the "Fuji Xerox Firmware Download Device" on you PWS. Select "Cancel".
15. Start the WC 7132 PWS Diagnostic Tool. When connected select Enter Software Download.

NOTE: The actual instructions will list the files that need to be selected.

- Generally the Add All 1 File selection is used when upgrading to a newer version of the software. Use the Add All 1 File (Postscript) selection if a PostScript module is installed.

NOTE: Verify the presence of the PostScript module from the System Settings List under Software Version. If the Statement "Controller + PS ROM" appears, the PostScript module is installed. Alternatively you can remove the ESS cover and verify if a PostScript module is installed on the Printer PWB.

- If there is no PostScript module use the Add All 1 File (Standard).
- If installing software at the same version. you must use individual files as the Add All 1 File option will not overwrite a file of the same version.

16. Select the appropriate file(s) for download.
17. Select Start Download... the screen will display Processing. (Lead time is approximately 15 minutes).
18. When the download is completed the machine will reboot. Exit the PWS tool.
19. Perform any additional steps or procedures per the actual instructions that accompany the software.
20. Print a copy of the new Systems Settings List to see if the SW was upgraded.
21. Reconnect RJ45 Network connector to the customer's network.
22. Switch on the WC 7132.

NOTE: The first time the WC 7132 download tool is used on the PWS, the prompt to install the Fuji Gen 2 driver might appear. Select "Install the Software Automatically" radio button and select "Next". Follow the screen prompts to install the driver. If the message "Found new hardware" appears, follow the prompts.
8. Go to Product Tools and start the WC 7132 PWS Diagnostic Tool.

NOTE: The actual instructions that accompany the software may have additional steps here, such as a list of NVM values that need to be recorded. Record those values.
9. When the tool is connected, select Enter Diagnostics.
10. Select dC351, ensure that All is selected.
11. Select Save Machine Settings. When the upload is complete, select File and Exit the Diagnostics Tool.
12. When prompted, save the Machine Data file.
13. Switch off the WC 7132.
14. Switch on the power while pressing the Power Saver switch. Download Mode will be displayed on the UI.

## ADJ 11.1.1 IIT Lead Edge/Side Edge Registration Purpose

To set the home position for the IIT Lead Edge (Slow Scan) direction/IIT Side Edge (Fast Scan) direction.

NOTE: The IOT Lead Edge/Side Edge Registration must be adjusted before proceeding with this procedure.

## Check

1. To create a Test Pattern Original, use a plain white sheet of $8.5 \times 11$ " paper and fold the sheet precisely in half lengthwise and width wise. Then with a straight edge draw a straight line in the lengthwise crease and a straight line in the width wise crease. (Figure 1)


## Figure 1 Creating a Test Pattern Original

2. Load $8.5 \times 11$ " paper into Tray 1.
3. Place the Test Pattern Original face down on the platen glass with the long edge (Lead Edge) against the left registration edge.
4. From the UI Copying screen. select Black, 1-1, 100\%, Tray 1 and press the Start button.
5. Remove the copy from the output tray and label the lead edge, and indicate the tray feed from, type of paper, and color (Black).
6. Fold the copy in half in both directions.
7. The printed lines should align with the folds.
8. Measure and record the direction and distance the image need to be moved to align them with the folds. (Figure 2)


Figure 2 Measuring the distance to move the image
NOTE: Adjusting IIT Lead Edge 715-050. Decrease the value in NVM to move the image toward the lead edge of the print.

NOTE: Adjust IIT Side Edge 715-053. Decrease the value in NVM to move the image toward the outboard edge of the print.
9. If the measured distance is 2 mm then divide the measured distance by the $0.036 \mathrm{~mm} /$ step. $2 \mathrm{~mm} / 0.036 \mathrm{~mm}=55.5$ bits. To move the image to the left, increase the NVM reading by 55 bits. (If the current reading of $715-050$ is 84 then, $84+55=139$ )
10. Enter NVM Read/Write, enter 715-050 and change the reading by adding 55 bits to the current reading.
11. Exit Diagnostics.
12. Place the Test Pattern Original face down on the platen glass with the long edge (Lead Edge) against the left registration edge.
13. From the UI Copying screen. select Black, 1-1, 100\%, Tray 1 and press the Start button.
14. Remove the copy from the output tray and label the lead edge, and indicate the tray feed from, type of paper, and color (Black).
15. Fold the copy in half in both directions.
16. Measure and record the direction and distance the image need to be moved to align them with the folds and adjust the NVM until the IIT is correctly registered.
17. Check that the measured values of the Lead Edge and Side Edge fall within the specifications of the supporting mode.

## Table 1 IIT Registration Specification

| Item | NVM Location | Increments | Range |
| :--- | :--- | :--- | :--- |
| Lead Edge | $715-050$ | $0.036 \mathrm{~mm} /$ step | $16-184$ |
| Side Edge | $715-053$ | $0.085 \mathrm{~mm} /$ step | $16-184$ |

## ADJ 11.1.2 IIT Vertical/Horizontal Magnification

## Purpose

To correct the horizontal (fast scan)/vertical (slow scan) magnification ratio for a 100\% copy.

## Check

## CAUTION

Perform this procedure only if absolutely required. Changing the IIT magnification may adversely affect resolution due to ASIC shift, and may cause a color shift.

NOTE: Before performing this procedure, make sure that the IOT horizontal/Vertical magnification ratios are correct.

1. Place test pattern 82 E 8220 on the Platen Glass and make a copy using the following copy mode settings:

- Copy Mode: Black
- Document Type: Text/Photo
- Paper: $11 \times 17^{\prime \prime}$ or A3
- Magnification: 100\%
- Number of copies: 2

2. Check the 2nd copy for the following:
3. Check horizontal magnification.

- Measure the 200 mm line. If the dimension is not $200 \mathrm{~mm}+/-1 \mathrm{~mm}$, perform the Adjustment.

4. Check the vertical magnification.

- Measure the 300 mm line. If the dimension is not $300 \mathrm{~mm}+/-1.5 \mathrm{~mm}$, perform the Adjustment.


## Adjustment

1. Horizontal Magnification Adjustment

- Enter UI Diagnostics, NVM 715-051.
- Each bit represents $0.1 \%$ change.
- Increase the value to lengthen the line.
- Decrease the value to shorten the line.

1. Vertical Magnification Adjustment

- Enter UI Diagnostics, NVM 715-702.
- Each bit represents $0.1 \%$ change.
- Increase the value to lengthen the line.
- Decrease the value to shorten the line.
Table 1 NVM List

| Chain Link | Name | Min. | Initial | Max | Increments |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $715-051$ | Platen SS Reduce/Enlarge Adjustment | 44 | 50 | 56 | $0.1 \%$ |
| $715-702$ | Platen FS Reduce/Enlarge Adjustment | 0 | 50 | 100 | $0.1 \%$ |

## ADJ 11.2.1 Reduce/Enlarge Adjustment

## Purpose

To obtain the proper Reduce/Enlarge ratio for Copy in the Lead Edge to Trail Edge direction and the Front to Rear direction.

## Check

1. Use Side B of the Standard Test Pattern (82P521 or 82P524).

The tolerance for each Reduce/Enlarge setting in the Lead Edge to Trail Edge direction and the Front to Rear direction are listed in the following table.
Table $\mathbf{1}$

| Reduce/Enlarge (\%) | Measurement |
| :--- | :--- |
| 65 | 1302 mm |
| 101 | 2022 mm |
| 154 | 1541.5 mm |

Refer to Figure 1 for the areas to be measured. For $65 \%$ and $101 \%$, use areas $A$ and $B$ for reduction/enlargement in the Lead Edge to Trail Edge direction, and areas $C$ and $D$ for enlargement in the Front to Rear direction. For $154 \%$, use areas A and E for enlargement in the Lead Edge to Trail Edge direction, and areas C and F for enlargement in the Front to Rear direction. (Figure 1)


Figure 1 Enlargement areas to be measured

## ADJ 11.3.1 UI Alignment

## Purpose

To align the position of the buttons on the display and the touch panel so that the user can select the contents on the display using the touch panel. Perform this adjustment only after replacing the UI PWB and the Control Panel.

NOTE: Adjust using the Touch Pen found in the Control Panel. If the Touch Pen is not available, you may use a pointed object. Take care not to damage the surface of the UI when using the pointed object.

## Adjustment

1. Turn off the power. Remove the Control Panel and take out the Touch Pen. (Figure 1)

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## Figure 1 Location of the Touch Pen for UI Alignment

2. Return the Control Panel to its original position. Hold down the $0,1,3$ keys while turning on the machine.

| P1 | P2 | P3 |
| :--- | :--- | ---: |
| P4 | P5 | P6 |
| P7 | P8 | P9 |

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## Figure 2 UI Alignment Adjustment Screen

3. Using the Touch Pen, touch the intersections of the vertical and horizontal lines, P1 to P9, in sequence. (Stay on each point on the Touch Pen for approx. 1 sec . then proceed to the next point.)
After pressing all the buttons, the machine automatically calculates the difference between the coordinates and the correction values.
This calculation takes approx. 0.1 sec .
4. After a few seconds, turn the power Off/On. The Ul may be used after reboot as the data has been corrected.

NOTE: If power is turned off during adjustment, data before adjustment will be restored. Complete the whole procedure before turning off the machine.
5. Keep the Touch Pen in the Control Panel and return the Control Panel to its original position.

## ADJ 11.6.1 Full/Half Rate Carriage Position Adjustment

## Purpose

To adjust the position of the Full/Half Rate Carriage.

## Adjustment

## WARNING

To avoid personal injury or shock, do not perform repair or adjustment with electrical power applied to the machine.

## CAUTION

Check that "Ready to Copy" is displayed on the Control Panel display.
NOTE: Adjust the position of the Front and Rear Full/Half Rate Carriage separately.

1. Switch off the power and disconnect the power cord.
2. Remove the Platen Glass. (REP 11.3.1)
3. Remove the Lens Assembly cover. PL 13.4
4. Prepare the tools (2) for determining the position. (Figure 1)
5. Remove the screws (2).
6. Take out the tools (2).


Figure 1 Taking out the tools
5. Align the tool hole in the Half Rate Carriage with the tool hole of the rail (Front/Rear). (Figure 2)


Figure 2 Position Adjustment of Half Rate Carriage 1/3
6. Fix the tool to the Half Rate Carriage. (Figure 3)

NOTE: Install the tools near the edges (the front tool to the front and the rear tool to the rear).

1. Fix the tool. (Front/Rear)
2. Secure it with a screw.


Figure 3 Position Adjustment of Half Rate Carriage 2/3
NOTE: The fixing position of the pulley can be changed if the tool holes of the Half Rate Carriage and the rail are not aligned and the tool is not fixed in place. (Figure 4)

1. Loosen the screws (2).
2. Turn the Pulley until the tool hole aligns.
3. Align the shaft concave with the Pulley end face and tighten the screws (2).


Figure 4 Position Adjustment of Half Rate Carriage 3/3
7. Fix the tool to the tool hole on the frame and check the tool holes of the frame and the Full Rate Carriage. (Figure 5)

NOTE: When adjusting the position of Full Rate Carriage from the rear side, to it with the rear tool for Half Rate Carriage installed.

1. Fix the tool.
2. Secure it with a screw.


Figure 5 Position Adjustment of Full Rate Carriage 1/2
NOTE: Loosen the securing screw of the Carriage Cable and align the tool holes if the tool holes of the frame and the Full Rate Carriage are not aligned, and the tool is not fixed in place. (Figure 6)

1. Loosen the screw.
2. Move the Full Rate Carriage until the tool hole aligns.
3. Tighten the screw.


Figure 6 Position Adjustment of Full Rate Carriage $\mathbf{2 / 2}$
8. When adjusting the front position of Full Rate Carriage, move the tool for Half Rate Carriage to the front of Full Rate Carriage before doing the adjustment.
At this time the rear tool for Full Rate Carriage remains installed.

## ADJ 15.1.1 DADF Side Edge Registration

## Purpose

To set the DADF Scan Position (original scan position) Side Edge (Fast Scan Direction).
NOTE: The following adjustments must be checked.

- IOT Image Registration Adjustment (ADJ 9.1.1)
- IIT Lead Edge/Side Edge Registration Adjustment (ADJ 11.1.1)
- DADF Height Adjustment (ADJ 15.1.5)
- DADF Position (Skew) Adjustment (ADJ 15.1.6)

For this sequence of checks and adjustments, an original Cross Line Test Pattern with lines drawn exactly down the center and across in both directions, will need to be created.

## Check

## DADF Side Edge Registration Side 1

1. To create a Cross Line Test Pattern Original, use a plain white sheet of $8.5 \times 11^{\prime \prime}$ paper and fold the sheet precisely in half lengthwise and width wise. Then with a straight edge draw a straight line in the lengthwise crease and a straight line in the width wise crease Label the top for orientation purposes. (Figure 1)


## Figure 1 Creating a Test Pattern Original

2. Load Tray 1 with $8.5 \times 11^{\prime \prime}$ paper.
3. Place the new Cross Line Test Pattern on the DADF with the word TOP Face Up and towards the rear of the DADF.
4. Select Tray 1, 1-1 Sided.
5. $100 \%$
$1->1$ Sided
1 copy
6. Make one copy to the center tray.
7. Remove the copy from the center tray and Flip the copy left to right.
8. Fold the copy in half in the 8.5 inch direction.
9. If adjustment is required, enter UI Diagnostic Mode, NVM 711-272 to place the Center line on the fold. See Table 1.

NOTE: Increase the value to move the image toward the lead edge.

## DADF Side Edge Registration Side 2

1. Place the new Cross Line Test Pattern on the DADF with the word TOP Face Down and towards the rear of the DADF.
2. Select Tray 1, 2-2 Sided.
3. $100 \%$
$1->1$ Sided
1 copy
4. Make one copy to the center tray.
5. Remove the copy from the center tray but DO NOT FLIP the copy this time,
6. Fold the copy in half in the 8.5 inch direction.
7. If adjustment is required, enter UI Diagnostic Mode, NVM 711-274 to place the center line on the fold. See Table 1.

NOTE: Increase the value to move the image toward the lead edge.
NOTE: The Values of NVM 711-272 and 711-274 are written to NVM's 715-110, 715-111, 715-112, and 715-113, when the machine power is switched on.

- $711-272=715-110$
- $\quad 711-274=715-111,715-112,715-113$
Table 1 NVM List

| Chain Link | Name | Min. | Initial | Max | Increment |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $711-272$ | CVT FS Offset Side 1 Replace All | 0 | 120 | 240 | .06 mm |
| $711-274$ | CVT FS Offset Side 2 Replace All | 0 | 120 | 240 | .06 mm |

## ADJ 15.1.3 DADF Non-Standard Sized Original Customized Registration Function <br> Purpose

To enable non-standard sized originals to be fed as standard sized originals by registering original sizes that cannot be detected (non-standard sizes) by the DADF. This enables the feeding of customized original sizes for different users.
[Outline]
Original size detection is based on the customized registered data. The DADF then processes the original in the specified original size. Customized registration is limited to only 1 entry. If the registration data is valid, the original size is detected based on the priorities in the detection table.

## Preparation

1. Borrow a non-standard sized original to be registered from the customer.
2. Check in which direction (LEF or SEF) the customer wants to process the original using the DADF.
3. Check in which paper size and direction the customer wants the copy.
4. Check and make a note of the Fast Scan Direction Length ( X ) and Slow Scan Direction Length $(\mathrm{Y})$ of the original using the scale.

## Adjustment

1. Enter NVM Read/Write.
2. Set the following NVM Data for customized registration detection.

NOTE: Fast Scan Direction Max </= Fast Scan Direction Min. Value $=200$ (within 20mm)
NOTE: Slow Scan Direction Max </= Slow Scan Direction Min. Value = 200 (within 20mm)

NOTE: In order to prevent incorrect detection by the Size Sensor, the following sizes cannot be entered.

- Fast Scan Direction Max: 2190~2290
- Fast Scan Direction Min.: 2810~2910

For the measurements X and Y obtained in the preparation:

- Set the data for 710-565 to 1. (Customized registration is valid.)
- Set $(X+10) \times 10$ to be resident in the data for 710-559. (Fast Scan Direction Max Value Setting)
- Set (X-10) $\times 10$ to be resident in the data for 710-560. (Fast Scan Direction Max Value Setting)
- Set $(\mathrm{Y}+10) \times 10$ to be resident in the data for 710-561. (Slow Scan Direction Max Value Setting)
- Set $(\mathrm{Y}-10) \times 10$ to be resident in the data for 710-562. (Slow Scan Direction Min. Value Setting)
- Enter the data for 710-563. (Enter the data for a paper size selected from the table below based on the size specified by the customer.)
- Enter the data for 710-564. (Enter the data for a paper size selected from the table below based on the size specified by the customer.)
The information that is related to the NVM to be entered is as follows.
Table 1 NVM List

| Chain-Link | Display Data Name | Remarks |
| :---: | :---: | :---: |
| 710-559 | Fast Scan Direction Max Value Note 1) | Setting Range=1297~3070 in increments of 0.1 mm (Initial Value=2970) |
| 710-560 | Fast Scan Direction Min. Value Note 1) | Setting Range=1297~3070 in increments of 0.1 mm (Initial Value=2970) |
| 710-561 | Slow Scan Direction Max Value Note 2) | Setting Range=1297~4418 in increments of 0.1 mm (Initial Value=2100) |
| 710-562 | Slow Scan Direction Min. Value Note 2) | Setting Range=1297~4418 in increments of 0.1 mm (Initial Value=2100) |
| 710-563 | Specified Paper Code for Customized Registration | 03: $5.5 " x 8.5 "$ 04: A5 05: B5 08: A4 09: 8"x10" 10: $8.5 " \times 11 "$ 11: $8.5 " \times 12.4 "$ 12: $8.5 " \times 13 "$ 13: $8.5 " \times 14 "$ 14: B4 15: A3 16: 11"x17" 17: 8 K 20: ILLEGAL SIZE (Initial Value=08) |
| 710-564 | Feed Direction for Original Size | 0: LEF, 1: SEF (Initial Value=0) |
| 710-565 | Specified Customized Registration for DADF Original Size Detection Table | Do not use Specified Customized Registration for Original Size Detection Table: 0 <br> Use Specified Customized Registration for Original Size Detection Table: 1 (Initial Value=0) |

3. Check the NVM Data setting.
4. Feed the customized original registered in the Size Detection Table into the DADF. $\rightarrow$ Check that the original size is detected according to the settings.
NOTE: As non-standard sized originals are handled as standard sized originals, there may be problems such as image loss in the scan data.

## ADJ 15.1.4 DADF Lead Edge Registration

## Purpose

To set the DADF Lead Edge Registration in side 1 and side 2.
NOTE: The following adjustments must have been completed.

- IOT Image Registration Adjustment (ADJ 9.1.1)
- IIT Lead Edge/Side Edge Registration Adjustment (ADJ 11.1.1)
- DADF Height Adjustment (ADJ 15.1.5)
- DADF Position (Skew) Adjustment (ADJ 15.1.6)


## Check

1. Place the 82E8220 Test Pattern on the Document glass with the trade mark and part number as the lead edge.
2. Set up the machine to make two sided copies of the test pattern as follows:
a. On the UI Ready to Copy Screen, select the Copy tab.
b. Under Output Color select Black.
c. Under the Paper Supply select $11 \times 17$ " paper size.
d. Under 2 Sided Copying select 1 to 2 Sided.
e. Reduce / Enlarge should be set to $100 \%$.
f. On the UI Ready to Copy Screen, select the Layout Adjustment tab, Image Shift should be Side 1 and Side 2 No Shift. Select Save.
3. Select a Quantity of 5 .
4. Press the Start button to make side 1.
5. After side 1 is made, place a small piece of paper with the words side 2 written on it, onto the Document Glass and under the 82E8220 Test Pattern.

NOTE: Side 2 can now be identified by the word "side 2" copied from the small piece of paper placed on the Document Glass under the test pattern from step 5. (Figure 1)
6. Press the Start button to make side 2.

NOTE: The 2 sided copies will be used to run duplex sets for measurement through the DADF.
7. Place the 2 sided copies into the DADF and make one set of 2 sided copies.
8. On side 1 and side 2, measure on the scale from the 10 mm line to the edge of the paper. The measurement should as follows. (Table 1)

| Table 1 Specification |  |  |
| :--- | :--- | :--- |
| Item Simplex | Duplex |  |
| Lead Edge | $10 \pm 0.5 \mathrm{~mm}$ | $10 \pm 0.5 \mathrm{~mm}$ |


2. Select NVM Read/Write.
3. Adjust the Lead Edge using the following NVM so that the measured value falls within specifications.
If the measured value is short: Set a smaller value.
If the measured value is long: Set a larger value.
Table 2 NVM List

| Chain Link | Name | Min. | Initial | Max | Increment |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $711-140$ | DADF Lead Reg. Adjustment (Side 1) <br> Replace All | 80 | 129 | 230 | 0.458 mm |
| $711-141$ | DADF Lead Reg. Adjustment (Side 2) <br> Replace All | 80 | 129 | 230 | 0.458 mm |

4. After adjustment is complete, perform the check following the steps in the Check procedure.
5. Repeat the procedure until the measured value of the Lead Edge falls within the specifications.

Figure 1 Identifying side 2

## Adjustment

1. Enter UI Diagnostic Mode.

## ADJ 15.1.5 DADF Height Adjustment

## Purpose

To correct the feeding of the original by adjusting the height of the DADF.

## Check

1. Check the gap between the DADF Platen Guide tips ( x 3 ) and the Platen Glass or DADF Platen Glass. (Figure 1)
2. The DADF Platen Guide tip at the rear is touching the DADF Platen Glass.
3. The DADF Platen Guide tips ( x 2 ) at the front are touching the Platen Glass.


Figure 1 Checking the gap between the DADF Platen Guide and the Platen Glass

## Adjustment

NOTE: DADF height adjustment is basically carried out using the Left Counter Balance. In cases where such adjustment is not possible, adjustment is carried out using the Right Counter Balance.

1. Loosen the nut of the Left/Right Counter Balance and turn the screw to adjust the height and slant of the DADF. (Figure 2)

- Turning the screw in direction A will cause the front of the DADF to rise and the rear to fall. (Direction of arrow A)
- Turning the screw in direction $B$ will cause the front of the DADF to fall and the rear to rise. (Direction of arrow B)


$$
\text { Figure } 2 \text { Adjusting the DADF Height }
$$

NOTE: Ensure that the nut is securely tightened after adjustment.

## ADJ 15.1.6 DADF Position (Skew) Adjustment

## Purpose

To correct the feeding of the original by adjusting the height of the DADF. (DADF Skew)

## Check

1. Place the Test Chart 82E8220 on the Platen Glass.
2. Place $11 \times 17$ " paper in Tray 1.
3. Make a copy using the following settings in Copy mode.
a. On the UI Ready to Copy Screen, select the Copy tab.
b. Under Output Color select Black.
c. Under the Paper Supply select $11 \times 17^{\prime \prime}$ paper size.
d. Under 2 Sided Copying select 1 Sided.
e. Reduce / Enlarge should be set to $100 \%$.
f. On the UI Ready to Copy Screen, select the Layout Adjustment tab, Image Shift should be Side 1 No Shift. Select Save if necessary.
NOTE: The copy made from the Platen Glass will be used as the original in the DADF.
4. Place the copy made from the Platen Glass into the DADF and make 3 copies.
5. Check that the difference in the distance between the side and the Edges at the 100 mm mark and the 300 mm mark in the 3 copies is within 00.5 mm . (Figure 1)


Figure 1 Checking the Skew

## Adjustment

1. Remove the DADF Rear Cover. (REP 15.2.4)
2. Adjust the position of the DADF by moving the DADF in direction A or B. (Figure 2)
3. Loosen the screws (5)
4. Move the DADF in direction A or B .
5. Tighten the screws (5).


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Figure 3 Output copy after adjustment

- The DADF moved in direction B. (Figure 4)
- The DADF moved in direction A. (Figure 3)

j0st41560
Figure 4 Output copy after adjustment

3. Reinstall the DADF Rear Cover.
4. After adjustment, carry out DADF Side Edge Registration Adjustment (ADJ 15.1.1) and DADF Lead Edge Registration (ADJ 15.1.4).
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## Introduction

## Overview

The Parts List section identifies all part numbers and the corresponding location of all spared subsystem components.

## Organization

## Parts Lists

Each item number in the part number listing corresponds to an item number in the related illustration. All the parts in a given subsystem of the machine will be located in the same illustration or in a series of associated illustrations.

## Electrical Connectors and Fasteners

This section contains the illustrations and descriptions of the plugs, jacks, and fasteners used in the machine. A part number listing of the connectors is included.

## Common Hardware

The common hardware is listed in alphabetical order by the letter or letters used to identify each item in the part number listing and in the illustrations. Dimensions are in millimeters unless otherwise identified.

## Part Number Index

This index lists all the spared parts in the machine in numerical order. Each number is followed by a reference to the parts list on which the part may be found.

## Other Information

## Abbreviations

Abbreviations are used in the parts lists and the exploded view illustrations to provide information in a limited amount of space. The following abbreviations are used in this manual:

Table 1

| Abbreviation | Meaning |
| :--- | :--- |
| A3 | $297 \times 594$ Millimeters |
| A4 | $210 \times 297$ Millimeters |
| A5 | $148 \times 210$ Millimeters |
| AD | Auto Duplex |
| AWG | American Wire Gauge |
| EMI | Electro Magnetic Induction |
| GB | Giga Byte |
| KB | Kilo Byte |
| MB | Mega Byte |
| MM | Millimeters |
| MOD | Magneto Optical Drive |
| NOHAD | Noise Ozone Heat Air Dirt |
| PL | Parts List |
| P/O | Part of |


|  | Table 1 |
| :--- | :--- |
| Abbreviation | Meaning |
| R/E | Reduction/Enlargement |
| REF: | Refer to |
| SCSI | Small Computer Systems Interface |
| W/ | With |
| W/O | Without |

Table 2

|  | Operating Companies |
| :--- | :--- |
| Abbreviation | Meaning |
| AO | Americas Operations |
| NASG - US | North American Solutions Group - US |
| NASG - <br> Canada | North American Solutions Group - <br> Canada |
| XE | Xerox Europe |

## Symbology

Symbology used in the Parts List section is identified in the Symbology section.

## Service Procedure Referencing

If a part or assembly has an associated repair or adjustment procedure, the procedure number will be listed at the end of the part description in the parts lists e.g. (REP 5.1, ADJ 5.3)

## Subsystem Information

## Use of the Term "Assembly"

The term "assembly" will be used for items in the part number listing that include other itemized parts in the part number listing. When the word "assembly" is found in the part number listing, there will be a corresponding item number on the illustrations followed by a bracket and a listing of the contents of the assembly.

## Brackets

A bracket is used when an assembly or kit is spared, but is not shown in the illustration. The item number of the assembly or kit precedes the bracket; the item numbers of the piece parts follow the bracket.

## Tag

The notation "W/Tag" in the parts description indicates that the part configuration has been updated. Check the change Tag index in the General Information section of the Service Data for the name and purpose of the modification.

In some cases, a part or assembly may be spared in two versions: with the Tag and without the Tag. In those cases, use whichever part is appropriate for the configuration of the machine on which the part is to be installed. If the machine does not have a particular Tag and the only replacement part available is listed as "W/Tag", install the Tag kit or all of the piece parts. The Change Tag Index tells you which kit or piece parts you need.

Whenever you install a Tag kit or all the piece parts that make up a Tag, mark the appropriate number on the Tag matrix.

## Symbology

A Tag number within a circle pointing to an item number shows that the part has been changed by the tag number within the circle (Figure 1). Information on the modification is in the Change Tag Index.

A Tag number within a circle having a shaded bar and pointing to an item number shows that the configuration of the part shown is the configuration before the part was changed by the Tag number within the circle (Figure 2).


Figure 2 Without Tag Symbol

Figure 1 With Tag Symbol

A tag number within a circle with no apex shows that the entire drawing has been changed by the tag number within the circle (Figure 3). Information on the modification is in the Change Tag Index.

A tag number within a circle with no apex and having a shaded bar shows that the entire drawing was the configuration before being changed by the tag number within the circle (Figure 4).


Figure 3 Entire Drawing With Tag Symbol


Figure 4 Entire Drawing Without Tag Symbol

## PL 1.1 Main Drive

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | 007 K 93911 | Drum Drive Assembly (REP 1.1.2) |
| 2 | 007 K 93974 | Developer Drive Assembly (REP <br>  <br> 3 |
| 4.27 (127K48670 | Fuser Motor, Developer Motor |  |
| 4 | - | Upper Bracket (P/O PL 1.1 Item 2) |
| 5 | - | Harness Guard (P/O PL 1.1 Item 2) |
| 6 | - | Gear (30/27T) (P/O PL 1.1 Item 2) |
| 7 | - | Gear (55/30T) (P/O PL 1.1 Item 2) |
| 8 | - | Gear (33T) (P/O PL 1.1 Item 2) |
| 9 | - | Bearing (P/O PL 1.1 Item 2) |
| 10 | 121 K36990 | Dispenser Clutch |
| 11 | - | Lower Bracket (P/O PL 1.1 Item 2) |
| 12 | $007 K 93962$ | Main Drive (REP 1.1.1) |
| 13 | $127 K 48660$ | Main Motor (25w) |
| 14 | - | Screw (Not Spared) |
| 15 | - | Bracket (P/O PL 1.1 Item 12) |
| 16 | $423 W 06955$ | Belt, Exit 1 |
| 17 | - | Flange (Not Spared) |

PL 1.1



## PL 1.2 Drum Drive Assembly

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Drum Shaft (P/O PL 1.1 Item 1) |
| 2 | - | Gear (144T) (P/O PL 1.1 Item 1) |
| 3 | - | Bearing (P/O PL 1.1 Item 1) |
| 4 | 930W00111 | Photo INT Sensor |
| 5 | 127 K 48680 | Drum Motor |
| 6 | - | Connector Bracket (P/O PL 1.1 Item 1) |
| 7 | - | Harness Bracket (P/O PL 1.1 Item 1) |
| 8 | - | Cam Wheel (P/O PL 1.1 Item 1) |
| 9 | - | Sensor Bracket (P/O PL 1.1 Item 1) |
| 10 | - | Upper Bracket (P/O PL 1.1 Item 1) |
| 11 | - | Gear (50T) (P/O PL 1.1 Item 1) |
| 12 | - | Gear (42/23T) (P/O PL 1.1 Item 1) |
| 13 | - | Bearing (P/O PL 1.1 Item 1) |
| 14 | - | Clutch (P/O PL 1.1 Item 1) |
| 15 | - | Gear (27T) (P/O PL 1.1 Item 1) |
| 16 | - | Clutch (P/O PL 1.1 Item 1) |
| 17 | - | Gear (23T) (P/O PL 1.1 Item 1) |
| 18 | - | Bearing (P/O PL 1.1 Item 1) |
| 19 | - | Clutch (P/O PL 1.1 Item 1) |
| 20 | - | Shaft (P/O PL 1.1 Item 1) |
| 21 | - | Gear (37T) (P/O PL 1.1 Item 1) |
| 22 | - | Bearing Sleeve (P/O PL 1.1 Item 1) |
| 23 | - | Gear (80/45T) (P/O PL 1.1 Item 1) |
| 24 | - | Shaft (P/O PL 1.1 Item 1) |
| 25 | - | Gear (45T) (P/O PL 1.1 Item 1) |
| 26 | - | Gear (35T) (P/O PL 1.1 Item 1) |
| 27 | - | Bearing (P/O PL 1.1 Item 1) |
| 28 | - | Gear (72T) (P/O PL 1.1 Item 1) |
| 29 | - | Gear (144T) (P/O PL 1.1 Item 1) |
| 30 | - | Bracket (P/O PL 1.1 Item 1) |
| 31 | - | Gear (43T) (P/O PL 1.1 Item 1) |
| 32 | - | Compression Spring (P/O PL 1.1 Item 1) |
| 33 | - | IBT Auger Coupling (P/O PL 1.1 Item 1) |
| 34 | - | Gear (53T) (P/O PL 1.1 Item 1) |
| 35 | - | Bracket (Not Spared) |
| 36 | - | Coupling (P/O PL 1.1 Item 1) |
| 37 | - | Shaft (P/O PL 1.1 Item 1) |

PL 1.2


## PL 2.1 Tray, Feeder Assembly

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | $003 E 61510$ | Tray Stopper |
| 2 | - | Tray Spacer (Not Spared) |
| 3 | 050 K 53945 | Tray Assembly |
| 4 | 110 K 12100 | Tray Paper Size Switch |
| 5 | - | Bracket (Not Spared) |
| 6 | 054 K 27051 | Feeder Chute Assembly (REP |
|  |  | 2.1.1) |
| 7 | - | Pad (P/O PL 2.1 Item 6) |
| 8 | - | Pad (P/O PL 2.1 Item 6) |
| 9 | - | Paper Guide (P/O PL 2.1 Item 6) |
| 10 | $054 K 27520$ | Feed Out Chute |
| 11 | $059 K 42524$ | Tray 1 Feeder Assembly (REP |
| 12 | - | 2.1.1) |
| 13 | - | Tray No. 1 Label (P/O PL 2.1 Item |
| 14 | - | 15) |
|  |  | Slide Lock Block (Not Spared) |
| 15 | $604 K 20550$ | Label (Instruction) (P/O PL 2.1 Item |
| 16 | - | Tray Label Kit |
|  |  | Cushion (Not Spared) |
|  |  |  |



PL 2.2 Tray 1

## Description

Tray Assembly (Not Spared)
Tray Cover (Not Spared)
Slide Lock
Label (Max) (P/O PL 2.2 Item 1)
Bottom Plate (P/O PL 2.2 Item 1)
Bottom Pad (P/O PL 2.2 Item 1)
Front Side Guide (P/O PL 2.2 Item
1, 7)
Tray Pad (P/O PL 2.2 Item 1)
Right Side Guide (P/O PL 2.2 Item
1)

Side Actuator (P/O PL 2.2 Item 1)
Side Actuator (P/O PL 2.2 Item 1)
Spring (P/O PL 2.2 Item 1)
Pinion (P/O PL 2.2 Item 1)
End Guide (P/O PL 2.2 Item 1)
Spring Guide (P/O PL 2.2 Item 1)
End Guide Actuator (P/O PL 2.2
Item 1)
End Link Guide (P/O PL 2.2 Item 1)
Gear (13) (P/O PL 2.2 Item 1, 27)
Gear (13/60) (P/O PL 2.2 Item 1
27)

Gear (60) (P/O PL 2.2 Item 1, 27)
Rear Plate (P/O PL 2.2 Item 1)
Lift Shift (P/O PL 2.2 Item 1)
Right Tray Stopper (P/O PL 2.2 Item 1)
Seal (P/O PL 2.2 Item 1)
Cassette Housing (P/O PL 2.2 Item 1)

Front Side Guide (P/O PL 2.2 Item 1)

Gear Tray Kit

PL 2.2


0502002A-ELA

## PL 2.3 Feeder 1 Assembly (1 of 2)

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | - | Upper Frame (P/O PL 2.1 Item 11) |
| 2 | 127 K 38171 | Tray 1 Feed Lift Motor |
| 3 | - | Drive Bracket (P/O PL 2.1 Item 11) |
| 4 | 014 E 44770 | Spacer |
| 5 | - | Gear (31) (P/O PL 2.1 Item 11) |
| 6 | - | Spring (P/O PL 2.1 Item 11) |
| 7 | - | Clutch (P/O PL 2.1 Item 11) |
| 8 | - | Gear (P/O PL 2.1 Item 11) |
| 9 | - | Gear (33T) (P/O PL 2.1 Item 11) |
| 10 | - | Bearing Shaft (P/O PL 2.1 Item 11) |
| 11 | - | Drive Shaft (P/O PL 2.1 Item 11) |
| 12 | - | Chute (P/O PL 2.1 Item 11) |
| 13 | $120 E 22481$ | Actuator |
| 14 | $930 W 00113$ | No Paper Sensor, Level Sensor |
| 15 | - | Rail (P/O PL 2.1 Item 11) |
| 16 | - | Gear (28/21) (P/O PL 2.1 Item 11) |
| 17 | - | Gear (29) (P/O PL 2.1 Item 11) |
| 18 | - | Washer (P/O PL 2.1 Item 11) |
| 19 | 930 W00211 | Prefeed Sensor |
| 20 | - | Harness Rear Holder (P/O PL 2.1 |
|  |  | Item 11) |
| 21 | - | Upper Harness Holder (P/O PL 2.1 |
| 22 | - | Item 11) |
|  |  | Center Harness Holder (P/O PL 2.1 |
|  |  | Item 11) |



## PL 2.4 Feeder 1 Assembly (2 of 2)



## PL 2.5 Registration

## Item

| Item | Pa |
| :---: | :--- |
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
|  |  |
| 5 | 059 |
| 6 | 121 |
| 7 | 130 |
| 8 | - |
| 9 | 054 |
| 10 | 130 |
| 11 | - |
| 12 | - |
| 13 | - |
| 14 | 103 |

## Description

Chute (Not Spared)
Registration Bearing (P/O PL 2.5 Item 15)
Registration Chute (P/O PL 2.5 Item 15)
Adjust Skew Block (P/O PL 2.5 Item 15)
Registration Roller
Registration Clutch
Registration Sensor
Bracket (P/O PL 2.5 Item 15)
Inlet Chute
Transparency Sensor
Cap (P/O PL 2.5 Item 15)
Conductor Out (P/O PL 2.5 Item 15)

Conductor In (P/O PL 2.5 Item 15) Resistor
Registration Transport Assembly (REP 2.4.1)
Registration Harness (Not Spared)


## PL 2.6 Vertical Transport Cover

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | $013 E 29830$ | Bearing |
| 2 | $413 W 77559$ | Bearing |
| 3 | 110 E11580 | Lower L/H Cover Interlock |
| 4 | - | Left Low Rivet (Not Spared) |
| 5 | - | Lower Chute (Not Spared) |
| 6 | - | Tray 1 Takeaway Roll (Not Spared) |
|  |  | (REP 2.5.1) |
| 7 | - | Left Low Handle (Not Spared) |
| 8 | - | Left Low Bracket (Not Spared) |
| 9 | - | Bearing In (Not Spared) |
| 10 | - | Bearing Out (Not Spared) |
| 11 | $059 E 98371$ | Takeaway Pinch Roller |
| 12 | 130 K64261 | Tray 1 TA Sensor |
| 13 | - | Left Low Spring (Not Spared) |
| 14 | - | Spring-In (Not Spared) |
| 15 | 962 K23460 | Transport Sensor Harness |
| 16 | - | Earth Plate (Not Spared) |
| 17 | $802 E 55701$ | Left Low Back Cover |
| 18 | - | Spring (Not Spared) |
| 19 | - | Gear (18T) (Not Spared) |
| 20 | $013 E 26091$ | Bearing |
| 21 | $815 E 27180$ | Idler Bracket |
| 22 | $807 E 14650$ | Idler Gear (54T) |
| 23 | $807 E 14640$ | Idler Gear (21T) |
| 24 | $807 E 14630$ | Idler Gear (37T) |
| 25 | - | Gear (19T) (Not Spared) |
| 26 | - | Bracket (Not Spared) |
| 27 | - | Transport Bracket (Not Spared) |
| 28 | $013 E 26060$ | Bearing |
| 29 | 121 K37120 | Takeaway Clutch |
| 30 | - | Transport Shaft (Not Spared) |
| 31 | - | Washer (Not Spared) |
| 32 | - | Switch Bracket (Not Spared) |
|  |  | - |
|  | - |  |

PL 2.6


| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | 802K85352 | Left Hand Upper Cover Assembly (REP 2.6.2) |
| 2 | - | Left Hand Cover (P/O PL 2.7 Item 1) |
| 3 | 003E65100 | Handle |
| 4 | - | Spring (P/O PL 2.7 Item 1) |
| 5 | 054E23950 | Cover Chute |
| 6 | - | Frame (P/O PL 2.7 Item 1) |
| 7 | - | Guide Handle (P/O PL 2.7 Item 1) |
| 8 | - | Gear (P/O PL 2.7 Item 1) |
| 9 | 849E67970 | Cover Support |
| 10 | 054K24060 | Duplex Chute |
| 11 | - | Duplex Pad (P/O PL 2.7 Item 1) |
| 12 | - | Guide (P/O PL 2.7 Item 1) |
| 13 | - | Chute Support (P/O PL 2.7 Item 1) |
| 14 | - | Spring (P/O PL 2.7 Item 1) |
| 15 | 054K30340 | Pinch Chute Assembly |
| 16 | - | Registration Pinch Chute (P/O PL <br> 2.7 Item 15) |
| 17 | - | Pulley (P/O PL 2.7 Item 15) |
| 18 | 059K43251 | Pinch Roller, Registration |
| 19 | - | Extension Spring (P/O PL 2.7 Item 15) |
| 20 | - | Cap (P/O PL 2.7 Item 15) |
| 21 | - | Holder (P/O PL 2.7 Item 15) |
| 22 | - | Reflector (P/O PL 2.7 Item 15) |
| 23 | - | Guide (P/O PL 2.7 Item 15) |
| 24 | - | Conductor (P/O PL 2.7 Item 1) |
| 25 | - | Earth Housing (P/O PL 2.7 Item 1) |
| 26 | - | Seal (P/O PL 2.7 Item 1) |
| 27 | - | Interlock Switch Bracket (Not Spared) |
| 28 | 110 E97990 | L/H Upper Cover Interlock Switch |
| 29 | - | Stud (Not Spared) |
| 30 | 008R13026 | 2nd BTR Roll Assembly |



PL 3.1 ROS

Item

Part
062K16371
927 W00111
-
$-$
-
-

## Description

ROS Assembly (REP 3.1.1)
ROS Fan Assembly (Not Spared) ROS Fan
Duct (P/O PL 3.1 Item 2)
Hex Screw (P/O PL 3.1 Item 2)
ROS Cleaner Assembly (Not Spared)
Cleaner Rod (P/O PL 3.1 Item 6) Cleaner Base (P/O PL 3.1 Item 6) Guide Rod (P/O PL 3.1 Item 6)

PL 3.1
2\{3-5
$6\{7-9$



## PL 4.1 Drum Assembly, Waste Bottle

## Assembly

Item Part
122K93890
032K98501
-
-
160K95831
$962 K 36820$
-
-
110K13041 -

Description
Lamp, Erase Assembly
Waste Bottle Guide Assembly Waste Toner Bottle (Not Spared) Holder PWB Crum (Not Spared) Xero Crum PWB (CP1) Connector (Not Spared) Harness Xerographic Drum Module (Not Spared) (REP 4.2.3) Spiral Paddle (Not Spared) Xero Interlock Switch Plate (Not Spared) Support (Not Spared)


## PL 4.2 Waste Bottle Guide Assembly

| Part | Description |
| :--- | :--- |
| 068 K29580 | Bracket Sensor Assembly |
| - | Bracket Sensor (P/O PL 4.2 Item 1) |
| - | Present Sensor (P/O PL 4.2 Item 1) |
| - | Toner Full Sensor (P/O PL 4.2 Item |
|  | 1) |
| - | Waste Bottle Guide (P/O PL 4.1 |
|  | Item 2) |
| - | Pipe Collector (P/O PL 4.1 Item 2) |
| 835E02121 | Toner Seal |
| $005 E 89320$ | Middle Coupling |
| - | Bearing Sleeve (P/O PL 4.1 Item 2) |
| - | Auger Shaft (P/O PL 4.1 Item 2) |
| - | Auger Bearing (P/O PL 4.1 Item 2) |
| $807 E 12770$ | Gear (22T) |
| - | IB Bracket (P/O PL 4.1 Item 2) |
| $807 E 12760$ | Gear (17T) |
| - | Bearing Sleeve (P/O PL 4.1 Item 2) |
| $807 E 12750$ | Gear (24T) |
| $807 E 12740$ | Gear (26T) |
| - | Thrust Guide (P/O PL 4.1 Item 2) |
| - | Shaft Slide (P/O PL 4.1 Item 2) |
| $005 E 89310$ | Self Locate Coupling |

$\begin{aligned} \text { PL } & 4.2 \\ 1 & \{2-4\end{aligned}$

j0vr50402

## PL 5.1 Developer Component

Item Part
1
2
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7
8
9

10
11
12
13
14
15
16
17
18

802K86741
-

117K37281
-

- 930 W 00111
- 
- 
- 

127K4886
-
-
$014 K 82501$
675K38910 675K38920 675K38940 675K38930 $130 K 69210$

Description
Toner Cartridge Door Rotary Plate (Not Spared) Cap Lock (Not Spared)
Shaft Lock (Not Spared)
Developer Wire
Rotary Assembly (Not Spared)
Rotary Holder (Not Spared)
Sensor Plate
Rotary House Sensor (P/O PL 5.1
Item 19)
Harness Cover (Not Spared)
Rotary Block (Not Spared)
Lock Spring (Not Spared)
Rotary Motor (REP 4.2.6)
Rotary Cover (Not Spared) (REP
4.1.1)

IBT Tie Cleaner Plate (Not Spared)
Toner Cartridge Door Lock
Ground Plate (Not Spared)
Developer K (REP 4.2.7)
Developer C (REP 4.2.7)
Developer Y (REP 4.2.7)
Developer M (REP 4.2.7)
Rotary Sensor Assembly


## PL 5.2 Developer Housing, Developer

## Cartridge

| Item | Part |
| :---: | :--- |
| 1 | - |
| 2 | 802 K 83411 |

## Description

Rotary Frame (Not Spared) Developer K Housing (Developer not included, must order PL5.1 Item 18) (REP 4.1.1)

Developer Housing K (P/O PL 5.2 Item 2)
Front Cover K (P/O PL 5.2 Item 2)
Out Cover K (P/O PL 5.2 Item 2)
Cyan Developer Housing Assembly (Developer not included, must order PL5.1 Item 18) (REP 4.1.1) Developer Housing C (P/O PL 5.2 Item 6)
Front Cover (P/O PL 5.2 Item 6, 10, 14)

Cyan Out Cover (P/O PL 5.2 Item 6) Magenta Developer Housing Assembly (Developer not included, must order PL5.1 Item 18) (REP 4.1.1)

Magenta Developer Housing (P/O PL 5.2 Item 10)
Yellow Out Cover (P/O PL 5.2 Item 14)

Magenta Out Cover (P/O PL 5.2 Item 10)
Yellow Developer Housing Assembly (Developer not included, must order PL5.1 Item 18) (REP 4.1.1)

Yellow Developer Housing (P/O PL 5.2 Item 14)

Toner Cartridge (Yellow) (Not
Spared) (REP 4.1.2)
Toner Cartridge (Magenta) (Not Spared) (REP 4.1.2)
Toner Cartridge (Black) (Not Spared) (REP 4.1.2) Toner Cartridge (Cyan) (Not Spared) (REP 4.1.2)

PL 5.2

$$
\begin{aligned}
2 & \{3-5 \\
6 & \{7-9 \\
10 & \{8,11,13 \\
14 & \{8,12,15
\end{aligned}
$$



0505002A-ELA

PL 6.1 IBT, 2nd BTR, IBT Cleaner Assembly


## PL 6.2 IBT Belt Assembly

Item

Part
064K92332
-
$-$
-
-
-
031 K93360 059K43080
-

031K93370

## Description

IBT Belt (REP 4.2.5)
BT Frame (P/O PL 6.1 Item 6)
Lower Tie Plate (P/O PL 6.1 Item 6)
Bearing (P/O PL 6.1 Item 6)
BTR 1 Retract Shaft (P/O PL 6.1
Item 6)
Spacer (P/O PL 6.1 Item 6)
Contact Arm
Backup Roll
Roll Bur Housing (P/O PL 6.1 Item 6)

Ball Bearing (P/O PL 6.1 Item 6) Bias BUR Cover (P/O PL 6.1 Item 6)

Conductive BUR Bearing (P/O PL 6.1 Item 6)

Rear Contact Arm

PL 6.2


| Part | Description |  |
| :--- | :--- | ---: |
| 015 K 71820 | Exit Bracket Assembly | PL 7.1 |
| - | Exit Sensor Holder (P/O PL 7.1 | Item 1) |
| - | Fuser Exit Sensor (P/O PL 7.1 Item | $1\{2-5$ |
| - | 1) | $6\{7-9$ |
| - | Exit Actuator (P/O PL 7.1 Item 1) |  |
| - | Actuator Spring (P/O PL 7.1 Item 1) |  |
| 012 K 94820 | Drive Link Assembly |  |
| - | Link Housing (P/O PL 7.1 Item 6) |  |
| - | Exit Link Spring (P/O PL 7.1 Item 6) |  |
| - | Drive Link (P/O PL 7.1 Item 6) |  |
| $008 R 13022$ | Fuser Assembly (110V) (REP |  |
| $008 R 13023$ | $5.1 .1)$ |  |
|  | Fuser Assembly (220V) (REP |  |
|  | $5.1 .1)$ |  |
|  | Link (Not Spared) |  |

## PL 7.2 Fuser Component

## Item Part Description

- $\quad$ Base Cover (P/O PL 7.1 Item 10)

Low Chute (P/O PL 7.1 Item 10)
Bearing (P/O PL 7.1 Item 10)
Handle (P/O PL 7.1 Item 10) Gear (15T) (P/O PL 7.1 Item 10) Bearing (P/O PL 7.1 Item 10) Exit Roll
Base Cover (P/O PL 7.1 Item 10) Fuser Frame (P/O PL 7.1 Item 10) POB/APS Long Sensor (P/O PL 7.1 tem 10)
Decurler Cover (P/O PL 7.1 Item 10)

PL 7.2


## PL 8.1 Exit

Item

## Description

Exit 1 Assembly (Not Spared) Exit 2 Transport Assembly (REP 6.1.1)
$050 K 51100$ Face-up Tray

- Tray Cover (Not Spared) 050E20162 Exit 2 Tray



## PL 8.2 Exit 1

1
2
3

## Description

Pad-Exit A (Not Spared)
Pad-Exit B (Not Spared)
Exit 1 Guide Assembly
Pad-Exit C (P/O PL 8.2 Item 3)
Paper Weight (P/O PL 8.2 Item 3) Exit 1 Tray Guide (P/O PL 8.2 Item 3)

Exit 1 Static Eliminator (P/O PL 8.2 Item 3)
Gasket (P/O PL 8.2 Item 3)
Earth Plate (P/O PL 8.2 Item 3)
_
059K44011
Exit 1 Transport Assembly
Low Chute Assembly
Low Chute (P/O PL 8.2 Item 12
Seal-V1 (P/O PL 8.2 Item 11) Seal-V2 (P/O PL 8.2 Item 11) Seal-V3 (P/O PL 8.2 Item 11) Seal-V4 (P/O PL 8.2 Item 11) Exit Gear (P/O PL 8.2 Item 10) Gear (19Z) (P/O PL 8.2 Item 10) Bearing
Bearing (P/O PL 8.2 Item 10)
Cap (P/O PL 8.2 Item 10)
Exit 1 Gate (P/O PL 8.2 Item 10)
Exit 1 Support (P/O PL 8.2 Item 10)
Pinch Exit Roller
Exit 1 Roller
Gate Spring (P/O PL 8.2 Item 10)
inch Exit Spring (P/O PL 8.2 Item 10)

Earth Plate (P/O PL 8.2 Item 10)
Gate Stopper (P/O PL 8.2 Item 10) Exit 2 Bracket (Not Spared)
Exit 1 Label (Not Spared)
Top Exit Cover (Not Spared)


## PL 8.3 L/H Upper Chute Assembly

## (Exit 2)



## PL 8.4 Tray Guide Assembly (OCT 2)

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Tray 2 Guide (P/O PL 8.1 Item 2) |
| 2 | - | Exit 2 Eliminator (P/O PL 8.1 Item 2) |
| 3 | 013E25550 | Bearing |
| 4 | - | Bearing (P/O PL 8.1 Item 2) |
| 5 | - | OCT2 Chute (P/O PL 8.1 Item 2) |
| 6 | - | Earth Plate (P/O PL 8.1 Item 2) |
| 7 | 059 K 26760 | Exit 2 Roll |
| 8 | - | Bearing Roll (P/O PL 8.1 Item 2) |
| 9 | - | Gear (22Z) (P/O PL 8.1 Item 2) |
| 10 | - | Exit Pinch Roll (P/O PL 8.1 Item 2) |
| 11 | - | Exit Pinch Spring (P/O PL 8.1 Item 2) |
| 12 | 003E60171 | Latch |
| 13 | 809E50210 | Front Latch Spring |
| 14 | - | Front Plate (P/O PL 8.1 Item 2) |
| 15 | - | Earth 2 Plate (P/O PL 8.1 Item 2) |
| 16 | - | Earth 3 Plate (P/O PL 8.1 Item 2) |
| 17 | 120E22451 | Exit Actuator |
| 18 | 110E11580 | Exit 2 Interlock Switch |
| 19 | - | Offset 2 Gear (P/O PL 8.1 Item 2) |
| 20 | - | Rear Plate (P/O PL 8.1 Item 2) |
| 21 | 809E52100 | Rear Latch Spring |
| 22 | - | Link (P/O PL 8.1 Item 2) |
| 23 | 121 K 32370 | Face Up Gate Solenoid |
| 24 | - | Gear (33Z) (P/O PL 8.1 Item 2) |
| 25 | - | Gear Shaft (P/O PL 8.1 Item 2) |
| 26 | - | Gear (16/47Z) (P/O PL 8.1 Item 2) |
| 27 | - | Pinch In Spring (P/O PL 8.1 Item 2) |
| 28 | - | Exit Gate Link (P/O PL 8.1 Item 2) |
| 29 | 121 K 37100 | Solenoid |
| 30 | 127K37951 | Offset Motor |
| 31 | - | Pinch Roll (P/O PL 8.1 Item 2) |
| 32 | - | Actuator Roller (P/O PL 8.1 Item 2) |
| 33 | - | Lower Chute (P/O PL 8.1 Item 2) |
| 34 | 809E37332 | Actuator Spring |
| 35 | 930W00113 | Photo Sensor |
| 36 | - | Wire Harness (P/O PL 8.1 Item 2) |
| 37 | 127 K 48890 | Exit 2 Motor |
| 38 | - | Label (P/O PL 8.1 Item 2) |
| 39 | 127 K 39420 | CCD Fan |
| 40 | - | Inner Cover (P/O PL 8.1 Item 2) |



## PL 9.1 MSI Assembly

Item Pa

930W00113
-
050K56600
962K13120
-
-
-
604K20410
120E22231
801K22671
-
-
604K20520 -
-

## Description

MSI Feeder Assembly (Not Spared)
(REP 7.1.1)
MSI Paper Detact Sensor
Upper Frame (P/O PL 9.1 Item 1)
Gear Bracket (P/O PL 9.1 Item 1)
MSI Tray Assembly
MSI Harness
Pinch Chute (P/O PL 9.1 Item 1)
Pinch Shaft (P/O PL 9.1 Item 1)
Spring Spacer (P/O PL 9.1 Item 1) pinch Guide (P/O PL 9.1 Item 1)
Kit 2 Roller 2
Pinch Spring (P/O PL 9.1 Item 1 Actuator
ower Frame Assembly
MSI Spring (P/O PL 9.1 Item 1)
MSI Front Cover (Not Spared)
MSI Rear Cover (Not Spared)
MSI Label Kit
Label (P/O PL 9.1 Item 18)
Label (Max) (P/O PL 9.1 Item 18)

PL 9.1
$1\{2-15$
$18\{19,20$

j0vr50901

## PL 9.2 Lower Frame Assembly



PL 9.2
$30\{16-21$


## PL 9.3 MSI Tray Assembly

## Item Part Description

| 1 | - | Pinion Gear (P/O PL 9.1 Item 5) |
| :---: | :--- | :--- |
| 2 | - | Front Rack (P/O PL 9.1 Item 5) |
| 3 | - | Rear Rack (P/O PL 9.1 Item 5) |
| 4 | - | Link (P/O PL 9.1 Item 5) |
| 5 | - | Front Side Guide (P/O PL 9.1 Item |
|  |  | $5)$ |
| 6 | - | Rear Side Guide (P/O PL 9.1 Item |
|  |  | 5) |
| 7 | - | Tray MSI (P/O PL 9.1 Item 5) |
| 8 | - | Exit Tray (P/O PL 9.1 Item 5) |
| 9 | - | Tray Cover (P/O PL 9.1 Item 5) |
| 10 | - | Sensor Spring (P/O PL 9.1 Item 5) |
| 11 | - | MSI Harness |
| 12 | $962 K 13120$ |  |



## PL 10.1 Duplex

## Part

059K44291
127K48381
-
-
849E13740
110E11580
-
-
-
011E14582
-
011E14590
-
120E21261
930W00113
809E37280
960K16431
-
$-$
$-$
-

962K19011
-
Description
Duplex Transport Assembly
Duplex Cover (P/O PL 10.1 Item 1)
Duplex Motor Assembly
Duplex Fan (P/O PL 10.1 Item 3) Duplex Motor (P/O PL 10.1 Item 3 Motor Bracket
Switch
Gear (28) (P/O PL 10.1 Item 1)
Gear (33) (P/O PL 10.1 Item 1)
Gear (42T) (P/O PL 10.1 Item 1)
Gear (33/74) (P/O PL 10.1 Item 1)
atch Lever (Rear)
Latch Plate (P/O PL 10.1 Item 1)
Front Latch Lever
Spring (P/O PL 10.1 Item 1)
Actuator
Paper Detact Sensor
Actuator Spring
Duplex PWB
Lower Chute (P/O PL 10.1 Item 1) Inner Chute Assembly (P/O PL 10.1 tem 1)
Duplex SNR Harness (P/O PL 10.1 tem 1)
Duplex Motor Harness (P/O PL
10.1 Item 1)

Duplex Harness
Duplex UI Label (P/O PL 10.1 Item 1)

Duplex Duct (P/O PL 10.1 Item 1)

## PL 10.2 Inner Chute Assembly

## Description

003E59821
Stopper

013E22671 Bearing
029E32580 Pin
054E23872 Outer Chute
$059 K 36880$
059K36890 604K20460

Inner Chute (P/O PL 10.1 Item 21)
Duplex Roller
Duplex Roller
4 Roller 1 Kit
Duplex Pinch Spring (P/O PL 10.1 Item 21)


PL 11.1 Electrical

105E16410
110E11230
-
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-
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105E16382
105E16392
-
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104E94890 101K52640 -

908W01201
-
-
-
-

960K09570
960K09388 927W00144 927W00121 130K69060

## Description

PSHV-04A1
Main Power Switch
Bracket (Not Spared)
Main Switch AC Harness (Not Spared)
Main Switch DC Harness (Not Spared)
Power (120v) Chassis Assembly, Unit (240v) Chassis Assembly (Not Spared) (REP 9.2.3)
Power Unit (120v) (REP 9.2.3)
Power Unit (240v) (23/28CPM) Chassis (P/O PL 11.1 Item 6) LVPS Front Bracket (P/O PL 11.1 tem 6)
LVPS Rear Bracket (P/O PL 11.1 tem 6) (33CPM)
Choke Coil (220 Only)
AC Chassis Assembly
AC Chassis (P/O PL 11.1 Item 12)
Outlet (P/O PL 11.1 Item 12)
GFI
FG 1 VRN Harness (P/O PL 11.1 Item 12)
FG 2 VRN Harness (P/O PL 11.1 Item 12)
Screw (P/O PL 11.1 Item 12) AC Power VRN Harness (P/O PL
11.1 Item 12)

PWB Relay
PWB Support
MCU PWB (REP 9.1.1)
Fan-Fuser
Fan-Rear (REP 10.3.1)
Sensor Bar Assembly (REP 4.3.1)


PL 11.2 ESS

## Part

101K52632
-
-
-
-
-

960K18345
133K24720
$133 K 24740$
-
540K02665
960K16132
-
-
-

## Description

Printer Chassis Assembly
Printer Panel (P/O PL 11.2 Item 1)
Printer PWB (P/O PL 11.2 Item 1)
Rail Printer Bracket (P/O PL 11.2
Item 1)
Base Chassis (Not Spared)
Panel (Not Spared)
Blind Chassis Bracket (Not Spared)
Blind Dsub Bracket
Blind PSW Bracket (Not Spared)
Lock Screw (Not Spared)
EVE Color PWB Assembly (Not Spared) (REP 9.2.1)
ESS PWB
DDR DIMM 256mb
PC133 So-0DIMM (128MB)
ESS Chassis (Not Spared)
HDD Bracket (P/O PL 11.2 Item 18) PS DIMM (Option)
HDD Chassis Assembly
Eden2 PWB (P/O PL 11.2 Item 18) IDE Harness (P/O PL 11.2 Item 18) Screw (P/O PL 11.2 Item 18)
Bumper (P/O PL 11.2 Item 18) IDE HDD (40gb) (P/O PL 11.2 Item 18)


0511002A-ELA

## PL 11.3 FAX Unit

| Item | Part | Description <br> 1 |
| :---: | :--- | :--- |
|  | - | FAX Chassis Box (P/O PL 11.3 <br> Item 13) |
| 2 | - | Panel (P/O PL 11.3 Item 13) <br> 3 |
| 4 | - | Speaker (P/O PL 11.3 Item 13) |
| speaker Bracket (P/O PL 11.3 Item |  |  |
|  | - | $13)$ |
| 5 | $960 K 24942$ | FCB PWB (XC) |
| - | $960 K 24952$ | FCB PWB (XE) |
| - | $960 K 24962$ | FCB PWB (ARZ) |
| 6 | $960 K 28320$ | EMB PWB |
| 7 | $960 K 15962$ | G3B PWB (XC) |
| - | 960 K 18771 | G3B PWB (XE) |
| 8 | - | Back Left Fax Cover (P/O PL 11.3 |
| 9 | - | Item 13) |
|  |  | Snap Fax Cover (P/O PL 11.3 Item |
| 10 | - | 13) |
| 11 | - | Tel Cable (Not Spared) |
| 12 | $117 K 37370$ | 1CH Snap Fax Cover (Not Spared) |
| 13 | - | Fax Cable Box Unit (Not Spared) |

PL 11.3


## PL 11.4 Wire Harnesses

| Item | Part |
| :---: | :--- |
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | - |

## Description

Front Harness (Not Spared)
Exit Harness (Not Spared) Switch Harness (Not Spared)
P/H Harness (Not Spared)
Fuser AC Harness (Not Spared)
ROS Harness (Not Spared)
Exit Sensor Harness (Not Spared)

PL11.4


PL 12.1 Cover-Front, Left


## PL 12.2 Cover-Rear, Right

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Right Upper Cover (Not Spared) (REP 10.2.3) |
| 2 | - | Right Lower Cover (Not Spared) |
| 3 | - | ESS Right Cover (Not Spared) |
| 4 | 008R13025 | PR Filter |
| 5 | - | ESS Cover (P/O PL 12.2 Item 4) (REP 10.2.1) |
| 6 | - | ESS Cover (P/O PL 12.2 Item 4) |
| 7 | - | Screw (P/O PL 12.2 Item 4) |
| 8 | - | Cushion (P/O PL 12.2 Item 4) |
| 9 | - | Rear Lefthand Upper Cover (Not Spared) (REP 10.2.1) |
| 10 | 802E88700 | Filter Cover |
| 11 | - | Rear Lower Cover (Not Spared) (REP 10.2.1) |
| 12 | - | Cap MCU Cover (Not Spared) (REP 10.2.1) |
| 13 | - | Fax Cover (Not Spared) (REP 10.2.1) |
| 14 | - | Blind Fax Cover (Not Spared) |
| 15 | - | Rear Low Lefthand Cover (Not Spared) |
| 16 | - | Data Plate (MN 120/220) (Not Spared) |
| 17 | - | Outlet Label (120/220) (Not Spared) |
| 18 | - | Rear Foot (Not Spared) |
| 19 | - | Filter Duct (Not Spared) |
| 20 | - | Fan Motor (Not Shown) |
| 21 | 604K33510 | Ozone Filter Kit (120V) |

PL 12.2


0512002B-ELA

## PL 13.1 Platen Cover/IIT Assembly

AF Platen Cover Assembly
A Platen Cover
Counter Balance (P/O PL 13.1 Item 1)

Interlock Magnet (P/O PL 13.1 Item
1)

Platen A Cover (P/O PL 13.1 Item
1)

004E13450
-
-

062 K 16326
-

Hinge Cover (Not Spared Platen Cushion (REP 11.1.1) IIT Left Cover (Not Spared) IIT Right Cover (Not Spared) Top Rear Cover (Not Spared) Exit Guide (Not Spared)
Main IIT Assembly Console Assembly (REP 11.1.2) HB Cable (Not Spared) Ul Bracket (Not Spared) IT Rear Cover (Not Spared) Name Label (Not Spared)


## PL 13.2 Control Panel

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | 802K60062 | Panel (Left) |
| 2 | - | Case 560 Panel Assembly (P/O PL 13.1 Item 13) |
| 3 | - | Case 560 Panel (P/O PL 13.2 Item 2) |
| 4 | - | Ul560 Plate (P/O PL 13.2 Item 2) |
| 5 | - | Base Case Panel (P/O PL 13.2 Item 2) |
| 6 | - | Base Case Panel (P/O PL 13.1 Item 13) |
| 7 | 110 K 11610 | Touch Panel |
| 8 | 123K94951 | Display |
| 9 | - | PWB Support Bracket (P/O PL 13.1 Item 13) |
| 10 | 160K91631 | Inverter PWB |
| 11 | 960K02444 | IF PWB |
| 12 | - | Support (P/O PL 13.1 Item 13) |
| 13 | - | Control Panel PWB (P/O PL 13.1 Item 13) |
| 14 | - | Wire Harness (P/O PL 13.1 Item 13) |
| 15 | - | Wire Harness (P/O PL 13.1 Item 13) |
| 16 | - | Wire Harness (P/O PL 13.1 Item 13) |
| 17 | - | Wire Harness (P/O PL 13.1 Item 13) |
| 18 | - | Contrast PWB (P/O PL 13.1 Item 13) |
| 19 | 802E91581 | Panel (Center) |
| 20 | 802E55532 | Panel (Right) |



## PL 13.3 Platen Glass

Item
1
2

3
4
5
6
7
7
8
9
10
11
12
13
14
15
16
17
18

| Part | Description |
| :---: | :---: |
| 090K02332 | Platen Glass (REP 11.3.1) |
| - | Right Side Plate (P/O PL 13.1 Item 12) |
| - | IPS Cover (P/O PL 13.1 Item 12) |
| 960K16486 | IIT/IPS PWB (REP 11.3.2) |
| - | IIT/IPS PWB (P/O PL 13.3 Item 4) |
| - | IIT/IPS Bracket (P/O PL 13.3 Item <br> 4) |
| - | Screw (P/O PL 13.3 Item 4) |
| 117E26161 | FFC CCD |
| - | IIT Harness (P/O PL 13.1 Item 12) |
| 090K93011 | Platen Cover |
| - | Support Glass (P/O PL 13.1 Item 12) |
| - | Lock Screw (P/O PL 13.1 Item 12) |
| - | Screw (P/O PL 13.1 Item 12) |
| - | Filter |
| - | Front Support Bracket (P/O PL 13.1 Item 12) |
| - | Rear Support Bracket (P/O PL 13.1 Item 12) |
| - | Bracket (P/O PL 13.1 Item 12) |
| 17K3724 | ESS Cable |



## PL 13.4 CCD PWB, Sensor

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Lens Cover (P/O PL 13.1 Item 12) |
| 2 | - | Lens (P/O PL 13.4 Item 14) |
| 3 | - | CCD PWB (P/O PL 13.4 Item 14) |
| 4 | - | Lens Plate Base (P/O PL 13.4 Item 14) (REP 11.4.1) |
| 5 | - | APS Sensor (P/O PL 13.1 Item 12) |
| 6 | - | APS Bracket (P/O PL 13.1 Item 12) |
| 7 | 130 K 64150 | APS Sensor |
| 8 | - | Screw (P/O PL 13.1 Item 12) |
| 9 | 110K11960 | Platen Open Switch |
| 10 | 130 E 87280 | IIT Registration Sensor, Platen Angle Sensor |
| 11 | - | Actuator Support (P/O PL 13.1 Item 12) |
| 12 | - | Platen Actuator Sensor (P/O PL <br> 13.1 Item 12) |
| 13 | - | Extension Spring (P/O PL 13.1 Item 12) |
| 14 | 604 K 29710 | Lens Kit (220V) |
| - | 604K29711 | Lens Kit (120V) |



## PL 13.5 Carriage Cable/Motor

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Capstan Pulley (P/O PL 13.1 Item 12) |
| 2 | - | Drive Shaft (P/O PL 13.1 Item 12) |
| 3 | - | Front Carriage Cable (P/O PL 13.5 Item 15) |
| 4 | - | Rear Carriage Cable (P/O PL 13.5 Item 15) (REP 11.5.1) |
| 5 | - | Extension Spring (P/O PL 13.1 Item 12) (REP 11.5.1) |
| 6 | 020E37030 | Pulley |
| 7 | 604K20440 | Spring Kit |
| 8 | - | Tape (P/O PL 13.1 Item 12) |
| 9 | - | Tape (P/O PL 13.1 Item 12) |
| 10 | - | Bearing (P/O PL 13.1 Item 12) |
| 11 | 023E26430 | Belt |
| 12 | 127 K 49532 | IIT Motor Assembly (120V) |
| - | 127 K 49530 | IIT Motor Assembly (220V) |
| 13 | - | Carriage Motor (P/O PL 13.5 Item 12) (REP 11.5.2) |
| 14 | - | Motor Bracket (P/O PL 13.5 Item 12) |
| 15 | 604K20510 | IIT Cable Kit |



## PL 13.6 Full/Half Rate Carriage

## Description

Full Rate Carriage Assembly Full Rate Carriage (P/O PL 13.6 Item 1)
117E26350
062E10040
-
-
$122 K 93910$ 105E16700

Flat Cable (REP 11.6.2)
Cord Guide (P/O PL 13.6 Item 1) Mirror No. 1 Mirror Clip (P/O PL 13.6 Item 1) Insulator (P/O PL 13.6 Item 1) Lamp (REP 11.6.1) Exposure Lamp Power Supply Cable Guide (P/O PL 13.6 Item 1) Pad (P/O PL 13.6 Item 1) Half Rate Carriage Assembly No. 2 Mirror, No. 3 Mirror (P/O PL 3.6 Item 12)

Cord Holder (Not Spared)
Half Rate Carriage (P/O PL 13.6 Item 12)
Pulley (P/O PL 13.6 Item 12)
Pulley
Cord Guide (P/O PL 13.6 Item 12)


0513006A-ELA

## PL 14.1 Tray 2/3 Assembly, Feeder

## Assembly-2TM

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Tray 2/3 Assembly (Not Spared) |
| 2 | 604K20550 | Kit Tray Label |
| 3 | - | Paper Size Switch (Not Spared) <br> (REP 12.6.1) |
| 4 | 014E51110 | Tray Spacer |
| 5 | 003E61510 | Tray Stopper |
| 6 | 059K42930 | Feeder Assembly |
| 7 | 059K42524 | Tray 2 Feeder (REP 12.1.1), Tray 3 Feeder (REP 12.1.2) |
| 8 | 054E22622 | Chute |
| 9 | - | Sensor Cover (P/O PL 14.1 Item 6) |
| 10 | 059K42940 | Final Feeder Assembly |
| 11 | - | Cushion (Not Spared) |
| 12 | - | Feeder Out Chute (P/O PL 14.1 Item 10) |
| 13 | - | Sensor Cover (P/O PL 14.1 Item 10) |
| 14 | - | Feeder Cover (P/O PL 14.1 Item 10) |
| 15 | - | Label (Not Spared) |
| 16 | - | Slide Lock Block (Not Spared) |
| 17 | - | Paper Size Switch (Not Spared) <br> (REP 12.6.1) |



## PL 14.2 Tray 2/3 Assembly-2TM

Description
Tray Gear Kit
ray Cover (Not Spared)
Slide Lock (P/O PL 14.2 Item 26)
Label (Max) (Not Spared)
Bottom Plate (P/O PL 14.1 Item 1) Bottom Pad (P/O PL 14.1 Item 1) Front Side Guide (P/O PL 14.2 Item 26)

Tray Pad (P/O PL 14.1 Item 1)
Rear Side Guide (P/O PL 14.1 Item
1)

Side Guide Actuator (P/O PL 14.1
Item 1)
Side Actuator (P/O PL 14.1 Item 1)
Spring (P/O PL 14.1 Item 1 )
Pinion Gear (P/O PL 14.1 Item 1)
End Guide (P/O PL 14.1 Item 1)
Spring Guide (P/O PL 14.1 Item 1 ) End Guide Actuator (P/O PL 14.1 tem 1)

Link (P/O PL 14.1 Item 1)
Coupling Gear (13T) (P/O PL 14.2
Item 1 )
Gear (13T/60T) (P/O PL 14.2 Item 1)

Gear (60T) (P/O PL 14.2 Item 1) Rear Plate (P/O PL 14.1 Item 1) Lift Up Shaft (P/O PL 14.1 Item 1) Stopper (P/O PL 14.1 Item 1) Seal (P/O PL 14.1 Item 1) Cassette Housing (P/O PL 14.1 Item 1)
Front Side Guide (P/O PL 14.1 Item 1)

PL 14.2
1 \{18-20
$26\{3,7$


## PL 14.3 Feeder 1/2 Assembly 2TM (1

## of 2)

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | - | Upper Frame (Not Spared) |
| 2 | 127 K 38171 | Stepper Motor |
| 3 | - | Drive Bracket (Not Spared) |
| 4 | 014 E44770 | Spacer |
| 5 | - | Gear (Not Spared) |
| 6 | - | Spring (Not Spared) |
| 7 | - | Clutch (Not Spared) |
| 8 | - | Gear (Not Spared) |
| 9 | - | Gear Spur (33T) (Not Spared) |
| 10 | - | Bearing Shaft (Not Spared) |
| 11 | - | Drive Shaft (Not Spared) |
| 12 | - | Chute (Not Spared) |
| 13 | $120 E 22481$ | SNR Actuator |
| 14 | $930 W 00113$ | Photo In-Level Sensor, Photo In-No |
| 15 | - | Paper Sensor |
| 16 | - | Harness Rear Holder (Not Spared) |
| 17 | - | Gear (28/21) (Not Spared) |
| 18 | - | Gear (29T) (Not Spared) |
| 19 | $930 W 00211$ | Washer (Not Spared) |
| 20 | - | Reflection Sensor |
| 21 | - | Rail (Not Spared) |
|  |  | Upper Harness Holder (Not |
| 22 | - | Spared) |
|  |  | Center Harness Holder (Not |
|  |  | Spared) |



## PL 14.4 Feeder 1/2 Assembly 2TM (2

## of 2)

Item

| Part | Description |
| :--- | :--- |
| - | Spring (Not Spared) |
| - | Roll (P/O PL 14.4 Item 24) |
| 005 K05890 | Clutch |
| 005 K06760 | Clutch |
| - | Bearing (Not Spared) |
| - | Feed Shaft (Not Spared) |
| 054 E 23170 | Feed In Chute |
| - | Retard Spring (Not Spared) |
| 005 K07010 | Friction Clutch |
| - | Retard Support (Not Spared) |
| - | Roll (P/O PL 14.4 Item 24) |
| - | Spacer (Not Spared) |
| - | Gear (13T) (Not Spared) |
| - | Nudger Support (Not Spared) |
| - | Roll (P/O PL 14.4 Item 24) |
| - | Gear (25T) (Not Spared) |
| $962 K 18912$ | Feed Harness |
| - | Rear Frame (Not Spared) |
| - | Bearing Sleeve (Not Spared) |
| - | Gear (34T) (Not Spared) |
| - | Lever (Not Spared) |
| - | Holder (Not Spared) |
| - | Spring (Not Spared) |
| $604 K 20360$ | Tray Feed Roll Kit (REP 12.3.1) |


| tem | 802K |
| :---: | :--- |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | - |
| 10 | - |
| 11 | - |
| 12 | - |
| 13 | 059 |
| 14 | 830 |

059E98190 830E45710 110E12220

Description
Left Lower Cover Assembly Shaft Latch (P/O PL 14.5 Item 1) Hook (P/O PL 14.5 Item 1) Handle (P/O PL 14.5 Item 1) Left Cover (P/O PL 14.5 Item 1) Chute (P/O PL 14.5 Item 1) Actuator (P/O PL 14.5 Item 1) Latch Spring (P/O PL 14.5 Item 1) Pinch Bracket (P/O PL 14.5 Item 1) Pinch Spring (P/O PL 14.5 Item 1) Bearing (P/O PL 14.5 Item 1) Bearing (P/O PL 14.5 Item 1) Pinch Roll
Lefthand Cover Support
Left Cover Interlock Switch Interlock Bracket (Not Spared) Pivot Bracket (Not Spared)


## PL 14.6 Takeaway Roll-2TM

Item Part Description

| Item | Part | De |
| :---: | :--- | :--- |
| 1 | - | Chu |
| 2 | - | Co |
| 3 | 130 K 64121 | Tra |
| 4 | 962 K 18171 | Wir |
| 5 | - | Chu |
| 6 | 130 K 64471 | Fee |
| 7 | 962 K 18900 | Fee |
| 8 | $059 K 40370$ | Tak |
| 9 | - | Bea |

## Chute (Not Spared)

Cover Sensor (Not Spared)
Tray 2 Feed Out Sensor
Wire Harness
Chute (Not Spared)
Feed Out Tray 3 Sensor Feeder Harness
Takeaway Roll
Bearing (Not Spared)


## PL 14.7 Electrical-2TM

## Description

2Tray Module PWB (REP 12.6.1)
Clutch
Clutch Bracket (Not Spared)
Clutch Shaft (Not Spared) Bearing (Not Spared) Gear (38T) (Not Spared) Takeaway Motor Gear (22T/40T) (Not Spared) Gear (126T) (Not Spared) Gear (60T) (Not Spared) Gear (37T) (Not Spared) Gear (32T) (Not Spared)
SLC Harness
Gasket (Not Spared)
Bearing Kit


## PL 14.8 Cover-2TM

| Item | Part |
| :---: | :--- |
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | - |
| 10 | - |
| 11 | - |
| 12 | - |

## Description

Top Cover (Not Spared) Foot Cover (Not Spared) Right Cover (Not Spared) eft Cover (Not Spared) Rear Cover (Not Spared) Caster (Stopper) (Not Spared) Caster (Not Spared) oot (Not Spared) Foot Cover (Not Spared) Docking Bracket (Not Spared) Screw (Not Spared) OT Support Bracket (Not Spared)


## PL 15.1 Tray 2/3, feeder

## Assembly-TTM

Item Part
050K53962 Tray 2 Assembly (REP 13.1.1)
Label (2) (Not Spared)
050K53952
-
-
-
110K11820 059E98210

Tray 3 Assembly (REP 13.1.2) Stop Spring (Not Spared) Label (TTM) (Not Spared) Label (3) (Not Spared) Bracket Stopper (Not Spared) Paper Size Switch (REP 13.8.1) Roller
Shaft (Not Spared)
Roll Bracket (Not Spared)
Label (Instruction) (Not Spared)


## PL 15.2 Tray 2 Assembly-TTM

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Left Tray Cover (P/O PL 15.1 Item 1) |
| 2 | - | Handle Tray (P/O PL 15.1 Item 1) |
| 3 | 020E36821 | Pulley Cable |
| 4 | 006K23014 | Lift Shaft |
| 5 | 020E36560 | Pulley |
| 6 | 032E20890 | Cable Guide |
| 7 | 604K20730 | Pulley |
| 8 | 604K20740 | Cable Guide |
| 9 | - | Left Rear Cable (P/O PL 15.2 Item 30) (REP 13.3.1) |
| 10 | - | Left Front Cable (P/O PL 15.2 Item 30) (REP 13.3.1) |
| 11 | - | Left Cable (P/O PL 15.2 Item 30) |
| 12 | - | Bottom Plate (P/O PL 15.1 Item 1) |
| 13 | - | Pad (P/O PL 15.1 Item 1) |
| 14 | - | Front Side Guide (P/O PL 15.1 Item 1) |
| 15 | - | Knob (P/O PL 15.1 Item 1) |
| 16 | - | Knob (P/O PL 15.1 Item 1) |
| 17 | - | Spring (P/O PL 15.1 Item 1) |
| 18 | - | Rear Side Guide (P/O PL 15.1 Item 1) |
| 19 | - | Side 1 Guide Bracket (P/O PL 15.1 Item 1) |
| 20 | - | Gear Rack (P/O PL 15.1 Item 1) |
| 21 | - | Pinion (P/O PL 15.1 Item 1) |
| 22 | 003E49861 | Stopper |
| 23 | 030K75541 | Brake Bracket |
| 24 | - | Rail Spacer (P/O PL 15.1 Item 1) |
| 25 | - | Spacer (P/O PL 15.1 Item 1) |
| 26 | - | Actuator (P/O PL 15.1 Item 1) |
| 27 | - | Pad (P/O PL 15.1 Item 1) |
| 28 | - | Tray Base (P/O PL 15.1 Item 1) |
| 29 | - | Label (Max) (Not Spared) |
| 30 | 604K20750 | Cable Guide Kit |



## PL 15.3 Tray 3 Assembly-TTM

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Tray Cover (P/O PL 15.1 Item 3) |
| 2 | 059K26340 | Transport Assembly |
| 3 | - | Frame (P/O PL 15.1 Item 3) |
| 4 | 006K23014 | Shaft |
| 5 | 020E36821 | Pulley |
| 6 | - | Pulley (P/O PL 15.1 Item 3) |
| 7 | - | Cable Guide (P/O PL 15.1 Item 3) |
| 8 | - | Right Rear Cable (P/O PL 15.2 Item 30) (REP 13.3.1) |
| 9 | - | Right Front Cable (P/O PL 15.2 Item 30) (REP 13.3.1) |
| 10 | - | Bottom Plate (P/O PL 15.1 Item 3) |
| 11 | - | Pad (P/O PL 15.1 Item 3) |
| 12 | - | Front Side Guide (P/O PL 15.1 Item 3) |
| 13 | - | Knob (P/O PL 15.1 Item 3) |
| 14 | - | Knob (P/O PL 15.1 Item 3) |
| 15 | - | Spring (P/O PL 15.1 Item 3) |
| 16 | - | Brake Bracket (P/O PL 15.1 Item 3) |
| 17 | 007E78390 | Gear |
| 18 | - | Rack Gear (P/O PL 15.1 Item 3) |
| 19 | - | Pinion (P/O PL 15.1 Item 3) |
| 20 | - | Bracket (P/O PL 15.1 Item 3) |
| 21 | - | Rail Roll (P/O PL 15.1 Item 3) |
| 22 | - | Shaft (P/O PL 15.1 Item 3) |
| 23 | 003E49861 | Stopper |
| 24 | - | Actuator (P/O PL 15.1 Item 3) |
| 25 | - | Pad (P/O PL 15.1 Item 3) |
| 26 | - | Tray Base (P/O PL 15.1 Item 3) |
| 27 | - | Rear Side Guide (P/O PL 15.1 Item 3) |
| 28 | - | Label (Max) (P/O PL 15.1 Item 3) |
| 29 | 604K20750 | Tray Cable Kit |

## Description

Tray Cover (P/O PL 15.1 Item 3)
ransport Assembly
Frame (P/O PL 15.1 Item 3)

Pulley (P/O PL 15.1 Item 3) Cable Guide (P/O PL 15.1 Item 3) Right Rear Cable (P/O PL 15.2

Right Front Cable (P/O PL 15.2 Item 30) (REP 13.3.1) Bottom Plate (P/O PL 15.1 Item 3) ront Side Guide (P/O PL 15.1 Item 3)

Knob (P/O PL 15.1 Item 3)

Spring (P/O PL 15.1 Item 3)
Brake Bracket (P/O PL 15.1 Item 3) Gear

Pinion (P/O PL 15.1 Item 3) Bracket (P/O P Rail Roll (P/O PL 15.1 Item 3) Shaft (P/O PL 15.1 Item 3)

Actuator (P/O PL 15.1 Item 3) Pad (P/O PL 15.1 Item 3) Tray Base (P/O PL 15.1 Item 3) 3) Label (Max) (P/O PL 15.1 Item 3) 604K20750 Tray Cable Kit


## PL 15.4 Paper Feed (1 of 2)-TTM

## 059K42960

 059K42524 -
## Description

Guide Rail (P/O PL 15.3 Item 2)
Guide (P/O PL 15.3 Item 2)
Transport Assembly
Upper Chute (P/O PL 15.4 Item 3) Takeaway Roll
Bearing
pinch Cover (P/O PL 15.4 Item 3)
Pinch Roll
Bearing (P/O PL 15.4 Item 3) Spring (P/O PL 15.4 Item 3) Bearing (P/O PL 15.4 Item 3) Transport Rail (P/O PL 15.4 Item 3) Low Chute (P/O PL 15.4 Item 3)
Feeder Assembly
Tray 3 Feeder (REP 13.4.1) Bracket (P/O PL 15.4 Item 14) Cover (P/O PL 15.4 Item 14)
930 W 00212
Sensor
Upper Chute (P/O PL 15.4 Item 14) Lower Chute (P/O PL 15.4 Item 14) Bracket (P/O PL 15.4 Item 14) Harness (P/O PL 15.4 Item 14) Harness (Not Spared)


## PL 15.5 Paper Feed (2 of 2)-TTM

Tray 2 Feeder (REP 13.5.1) Cover (P/O PL 15.5 Item 11) Feed Out Chute Feed Low Chute (Not Spared) Sensor Cover (Not Spared) Chute (Not Spared) Harness Feed Out Sensor Transport Roll Bearing (Not Spared) Feeder Assembly


## PL 15.6 Feeder 1 Assembly (1 of 2)



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## PL 15.7 Feeder 1 Assembly (2 of 2)



## PL 15.8 Left Cover-TTM

## Part <br> Description

802K70854
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-
802K53489
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-
$-$

059E98190 830E45710 110E12220 Left Cover Pinch Roll

Interlock Switch

Left Lower Cover Assembly Shaft Latch (P/O PL 15.8 Item 1) Hook (P/O PL 15.8 Item 1) Handle (P/O PL 15.8 Item 1)

Chute (P/O PL 15.8 Item 1)
Actuator (P/O PL 15.8 Item 1)
Latch Spring (P/O PL 15.8 Item 1) Pinch Bracket (P/O PL 15.8 Item 1) Pinch Spring (P/O PL 15.8 Item 1) Bearing (P/O PL 15.8 Item 1) Bearing (P/O PL 15.8 Item 1)
efthand Cover Support
Interlock Bracket (Not Spared) Pivot Bracket (Not Spared)


## PL 15.9 Electrical-TTM

## Item

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-
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## Description

Gear Bracket (Not Spared)
Gear Bracket (Not Spared)
Takeaway Motor
Gear (22T/40T) (Not Spared)
Tray Module PWB
Gear Bracket Cover (Not Spared) Clutch
Clutch Bracket (Not Spared) Bearing (Not Spared) Gear (38T) (Not Spared) Shaft (Not Spared) Gear (37T) (Not Spared) Gear (32T) (Not Spared) Gear (60T) (Not Spared) Gear (60T) (Not Spared) Transport Bracket (Not Spared)
TTM Harness
Gasket (Not Spared)
Gasket (Not Spared) Bearing (Not Spared)


## PL 15.10 Cover-TTM

| Item | Part |
| :---: | :--- |
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | - |
| 10 | - |
| 11 | - |
| 12 | - |

Description
Right Cover (Not Spared) Top Cover (Not Spared) Foot Cover (Not Spared) Rear Lower Cover (Not Spared) Left Cover (Not Spared) Caster (Stopper) (Not Spared) Caster (Not Spared)
oot (Not Spared)
Foot Cover (Not Spared) Docking Bracket (Not Spared)
Screw (Not Spared)
OT Support Bracket (Not Spared)


## PL 16.1 DADF Accessory

Item
1

Feeder Assembly (REP 15.1.1) Label (Not Spared)
Frame Side Velcro Kit

## PL16.1 <br> $5\{2$


jovr51601B

## PL 16.2 DADF Component Cover



PL 16.3 DADF Base Cover

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | 960K02756 | DADF PWB (REP 15.3.1) |
| 2 | 962K19793 | Harness |
| 3 | - | Ground Wire (P/O PL 16.2 Item 1) |
| 4 | - | PWB Bracket (P/O PL 16.2 Item 1) |
| 5 | - | Open Type Bush (P/O PL 16.2 Item 1) |
| 6 | 801K22541 | Frame Assembly |
| 7 | - | DADF Base Frame (P/O PL 16.3 Item 6) |
| 8 | - | Gate Pad (P/O PL 16.3 Item 6) |
| 9 | - | Tape (P/O PL 16.3 Item 6) |
| 10 | - | Magnet (Interlock) (P/O PL 16.3 Item 6) |
| 11 | - | Magnet Screw (P/O PL 16.3 Item 6) |
| 12 | - | Exit Shaft (P/O PL 16.3 Item 6) |
| 13 | - | Exit Holder (P/O PL 16.3 Item 6) |
| 14 | - | Pinch Roll (Exit) (P/O PL 16.3 Item 6) |
| 15 | - | Bearing (P/O PL 16.3 Item 6) |
| 16 | - | Exit Spring (P/O PL 16.3 Item 6) |
| 17 | - | Pinch Shaft (P/O PL 16.3 Item 6) |
| 18 | - | Registration Pinch Roll (P/O PL 16.3 Item 6) |
| 19 | - | Registration Pinch Roll (P/O PL 16.3 Item 6) |
| 20 | - | Registration Spring (P/O PL 16.3 Item 6) |
| 21 | - | P-Clamp (P/O PL 16.2 Item 1) |
| 22 | 117E27450 | DADF IIT Cable |
| 23 | - | Spring (P/O PL 16.3 Item 6) |
| 24 | - | Sensor Pad (P/O PL 16.3 Item 6) |
| 25 | - | Registration Cover (P/O PL 16.3 Item 6) |
| 26 | 028E94260 | KL-Clip |
| 27 | - | Solenoid Lever (P/O PL 16.2 Item 1) |
| 28 | - | Rear Cap Cover (P/O PL 16.2 Item 1) |
| 29 | 036 K 91551 | Left Counter Balance (REP 15.3.2) |
| 30 | 036 K 91561 | Right Counter Balance (REP 15.3.3) |



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## PL 16.4 DADF Feeder Component

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | - | Hinge Stud (P/O PL 16.2 Item 2) |
| 2 | - | Bracket (P/O PL 16.4 Item 4) |
| 3 | - | Harness Guide (P/O PL 16.4 Item |
|  |  | 4) |
| 4 | $059 K 45213$ | Upper Feed Assembly |
| 5 | $059 K 45231$ | DADF Feeder Assembly |
| 6 | - | Retard Chute (P/O PL 16.4 Item 5) |
| 7 | - | Retard Housing (P/O PL 16.4 Item |
|  |  | 5) |
| 8 | $059 K 44920$ | Retard Roll (REP 15.4.1) |
| 9 | $019 K 98770$ | Brake |
| 10 | - | Retard Shaft (P/O PL 16.4 Item 5) |
| 11 | - | Retard Spring (P/O PL 16.4 Item 5) |
| 12 | - | Pad (P/O PL 16.4 Item 5) |
| 13 | $019 K 99070$ | Actuator Pad |
| 14 | - | Seal (P/O PL 16.4 Item 5) |
| 15 | - | C-Clip (P/O PL 16.4 Item 5) |
| 16 | - | Retard Guide (P/O PL 16.4 Item 5) |
| 17 | - | Label (Retard) (P/O PL 16.4 Item 5) |
| 18 | - | Front Seal (Not Spared) |
| 19 | - | Retard Seal (Not Spared) |
| 20 | - | FE Harness (Not Spared) |
| 21 | - | Harness (Not Spared) |
| 22 | - | Harness (Not Spared) |
| 23 | - | Harness Guide (Not Spared) |
| 24 | - | Damper Roll (Not Spared) |
| 25 | - | Motor Assembly (Not Spared) |
| 26 | - | Harness Guide (Not Spared) |
| 27 | - | Screw (Not Spared) |
| 28 | $604 K 20780$ | DADF Belt Kit |
| 29 | 121 K31912 | Solenoid |
| 30 | $160 K 97600$ | LED PWB |
| 31 | - | DADF Feeder (P/O PL 16.4 Item 5) |
|  |  | - |
|  | - |  |



## PL 16.5 Top Cover Component

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Cover (P/O PL 16.4 Item 4) (REP 15.4.2) |
| 2 | - | Handle Lever (P/O PL 16.4 Item 4) |
| 3 | - | Actuator (Feed Out) (P/O PL 16.4 Item 4) |
| 4 | - | Feeder Bracket (Front) (P/O PL 16.4 Item 4) |
| 5 | - | Feeder Bracket (Rear) (P/O PL 16.4 Item 4) |
| 6 | 059 K 31291 | Takeaway Pinch Roll |
| 7 | 127K38411 | DADF Nudger Motor |
| 8 | - | DADF Nudger Sensor (P/O PL 16.4 Item 4) |
| 9 | - | Nudger Harness (P/O PL 16.4 Item 4) |
| 10 | - | Harness Guide (P/O PL 16.4 Item 4) |
| 11 | - | Front Guide-Set (P/O PL 16.4 Item 4) |
| 12 | 059K45220 | Feeder Assembly |
| 13 | - | Harness Guide (P/O PL 16.4 Item 4) |
| 14 | - | Label (Size) (P/O PL 16.4 Item 4) |
| 15 | - | Label (Jam Clear) (P/O PL 16.4 Item 4) |
| 16 | 028E94260 | KL-Clip |
| 17 | - | Rear Guide Set (P/O PL 16.4 Item 4) |
| 18 | - | Exit Spring (P/O PL 16.4 Item 4) |
| 19 | - | Actuator (Set) (P/O PL 16.4 Item 4) |
| 20 | - | Chute (P/O PL 16.4 Item 4) |
| 21 | - | Actuator Pad (P/O PL 16.4 Item 4) |
| 22 | - | Ground Wire (P/O PL 16.4 Item 4) |
| 23 | - | Harness Seal (P/O PL 16.4 Item 4) |



## PL 16.6 Takeaway Pinch Roll, Nudger

## Motor, Nudger/Feed Roll

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Bracket (P/O PL 16.5 Item 6) |
| 2 | - | Shaft (Takeaway Pinch Roll) (P/O PL 16.5 Item 6) |
| 3 | - | Roll (P/O PL 16.5 Item 6) |
| 4 | - | Roll (P/O PL 16.5 Item 6) |
| 5 | - | Bracket (P/O PL 16.5 Item 6) |
| 6 | - | Spring (P/O PL 16.5 Item 6) |
| 7 | - | Bracket (P/O PL 16.5 Item 7) |
| 8 | - | Gear (18T/19T) (P/O PL 16.5 Item 7) |
| 9 | - | Gear (36T/19T) (P/O PL 16.5 Item 7) |
| 10 | - | Gear (36T/16T) (P/O PL 16.5 Item 7) |
| 11 | - | Lift Motor (P/O PL 16.5 Item 7) |
| 12 | - | Lift Bracket (P/O PL 16.5 Item 7) |
| 13 | - | Motor Bracket (P/O PL 16.5 Item 7 ) |
| 14 | - | Nudger Housing (P/O PL 16.5 Item 12) |
| 15 | - | Gear (28T) (P/O PL 16.5 Item 12) |
| 16 | - | Idler Gear (36T) (P/O PL 16.5 Item 12) |
| 17 | - | Nudger Shaft (P/O PL 16.5 Item 12) |
| 18 | - | Nudger Gear (34T) (P/O PL 16.5 Item 12) |
| 19 | - | Nudger Roll (P/O PL 16.6 Item 30) (REP 15.6.1) |
| 20 | - | Nudger Shaft (P/O PL 16.5 Item 12) |
| 21 | - | Set Stopper (P/O PL 16.5 Item 12) |
| 22 | - | Feed Shaft (P/O PL 16.5 Item 12) |
| 23 | 807E00550 | Feed Gear (26T) |
| 24 | - | Feed Roll (P/O PL 16.6 Item 30) (REP 15.6.1) |
| 25 | - | C-Clip (P/O PL 16.5 Item 12) |
| 26 | - | Rear Nudger/Feed Spring (P/O PL 16.5 Item 12) |
| 27 | - | Front Nudger/Feed Spring (P/O PL 16.5 Item 12) |
| 28 | - | Bearing (P/O PL 16.5 Item 12) |
| 29 | 007K88751 | Feed Gear (20T) |
| 30 | 604K20760 | DADF Roll Kit (Feeder/Nudger/Retard) |

## PL 16.7 DADF Feeder-Chute

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Lower Chute (P/O PL 16.4 Item 5) |
| 2 | - | Chute (Scan Position) (P/O PL 16.4 Item 5) |
| 3 | - | Spring (P/O PL 16.4 Item 5) |
| 4 | - | Invert Guide (P/O PL 16.4 Item 5) |
| 5 | 962K19722 | FE Harness |
| 6 | - | CVT Spring (P/O PL 16.4 Item 5) |
| 7 | - | Feed Frame (Front) (P/O PL 16.4 Item 5) |
| 8 | 110K11981 | DADF Interlock Switch |
| 9 | - | Feed Frame (Rear) (P/O PL 16.4 Item 5) |
| 10 | - | Guide Sensor (P/O PL 16.4 Item 5) |
| 11 | - | Registration Sensor Bracket (P/O PL 16.4 Item 5) |
| 12 | 930W00111 | DADF APS 1 Sensor, DADF APS 2 <br> Sensor, DADF APS 3 Sensor, <br> DADF Preregistration Sensor, <br> DADF Invert Sensor |
| 13 | 930W00211 | Registration Sensor |
| 14 | - | Seal (P/O PL 16.4 Item 5) |
| 15 | - | Seal (P/O PL 16.4 Item 5) |
| 16 | - | Eliminator (P/O PL 16.4 Item 5) |
| 17 | - | Eliminator (P/O PL 16.4 Item 5) |
| 18 | - | Feeder Chute (P/O PL 16.4 Item 5) |
| 19 | - | Actuator (Preregistation) (P/O PL 16.7 Item 27) |
| 20 | - | Actuator (APS 1) (P/O PL 16.7 Item 27) |
| 21 | - | Actuator (APS 2) (P/O PL 16.7 Item 27) |
| 22 | - | Actuator (APS3) (P/O PL 16.7 Item 27) |
| 23 | - | Actuator (Invert) (P/O PL 16.7 Item 27) |
| 24 | - | Torsion Spring (P/O PL 16.4 Item 5) |
| 25 | - | Front Chute Bracket (P/O PL 16.4 Item 5) |
| 26 | - | Chute Bracket (Rear) (P/O PL 16.4 Item 5) |
| 27 | 604K20770 | DADF Actuator Kit |



## PL 16.8 DADF Feeder-Roll

## Part DAD Feeder=RD

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | - | Registration Roll (P/O PL 16.4 Item |
|  |  | 5) (REP 15.8.1) |
| 2 | - | Out Roll (P/O PL 16.4 Item 5) |
| 3 | - | Exit Roll (P/O PL 16.4 Item 5) |
| 4 | - | Takeaway Roll (P/O PL 16.4 Item 5) |
| 5 | - | Ball Bearing (P/O PL 16.4 Item 5) |
| 6 | - | Exit Bearing (P/O PL 16.4 Item 5) |
| 7 | - | Bearing (P/O PL 16.4 Item 5) |
| 8 | - | Pulley (Registration) (P/O PL 16.4 |
|  |  | Item 5) |
| 9 | - | Pulley (Out) (P/O PL 16.4 Item 5) |
| 10 | - | Pulley (Exit) (P/O PL 16.4 Item 5) |
| 11 | - | Gear (Takeaway) (P/O PL 16.4 Item |
|  |  | Flange Pulley (P/O PL 16.4 Item 5) |
| 12 | - | Belt (P/O PL 16.4 Item 5) |
| 13 | - | Handle Pulley (P/O PL 16.4 Item 5) |
| 14 | - | Belt (P/O PL 16.4 Item 5) |
| 15 | - | Tension Bracket (P/O PL 16.4 Item |
| 16 | - | Tension Roller (P/O PL 16.4 Item 5) |
| 17 | - | Tension Spring |
| 18 | $809 E 50762$ | Idler Pulley (P/O PL 16.4 Item 5) |
| 19 | - | Belt |
| 20 | $023 E 25640$ | DADF Document Set Sensor |
| 21 | $930 W 00111$ | KL-Clip (P/O PL 16.4 Item 5) |
| 22 | - | Tension Bracket (P/O PL 16.4 Item |
| 23 | $028 E 94260$ | KL-Clip |
| 24 | - | 5) |
| 25 | $604 K 20780$ | DADF Belt Kit |
| 26 | - | Exit Spring (P/O PL 16.4 Item 5) |



## PL 16.9 Motor Unit Assembly

## Item Part <br> Description

Motor Bracket (P/O PL 16.8 Item
15)

Gear Pulley (20/50) (P/O PL 16.8 Item 15)
Gear Pulley (14/32/37) (P/O PL
16.8 Item 15)

DADF Feed Motor
127 K 38440 930W00111

423W08055 423W29955 127K38460 OAD Sensor Spring (P/O PL 15.8 Item 15) Takeaway Belt (4mm) Feed Belt ( 6 mm ) DADF Registration Motor Spring (Not Spared)

PL16.9


## PL 16.10 DADF Document Tray

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | - | Hinge Tray (P/O PL 16.2 Item 3) |
| 2 | - | Side Guide (Rear) (P/O PL 16.2 Item 3) |
| 3 | - | Side Guide (Front) (P/O PL 16.2 Item 3) |
| 4 | - | Rack Gear (P/O PL 16.2 Item 3) |
| 5 | - | Pinion Gear (P/O PL 16.2 Item 3) |
| 6 | 120 E 22370 | Rack Gear and Actuator |
| 7 | 809E51860 | Rack Spring |
| 8 | - | Tray Upper Cover (P/O PL 16.2 Item 3) |
| 9 | - | Sensor Bracket (P/O PL 16.2 Item 3) |
| 10 | - | Tray Spring (P/O PL 16.2 Item 3) |
| 11 | - | Roller (P/O PL 16.2 Item 3) |
| 12 | 930W00111 | DADF Tray Set Guide Sensor 1, DADF Tray Set Guide Sensor 2, DADF Tray Set Guide Sensor 3 |
| 13 | - | Harness Guide (P/O PL 16.2 Item 3) |
| 14 | - | Tray Lower Cover (P/O PL 16.2 Item 3) |
| 15 | 130E89950 | DADF Tray Size 1 Sensor, DADF Tray Size 2 Sensor (P/O PL 16.2 Item 3) |
| 16 | 962K19712 | Tray Wire Harness |
| 17 | 105E06910 | Eliminator |
| 18 | - | Earth Bracket (P/O PL 16.2 Item 3) |
| 19 | - | Label (Installation) (P/O PL 16.2 Item 3) |
| 20 | - | Label (Max) (P/O PL 16.2 Item 3) |



## PL 17.1 Finisher Unit

## Item Part

1
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3

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8
9
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| - | Cover (Not Spared) | PL17.1 |
| :---: | :---: | :---: |
| 022K73591 | H-Transport Assembly (REP |  |
|  | 16.1.1) |  |
| - | Finisher Assembly (Not Spared) |  |
|  | (REP 16.1.2) |  |
| - | Finisher Knob Kit (Not Spared) |  |
| - | Rack Assembly (Not Spared) |  |
| - | Right Cover (Not Spared) |  |
| 050E19620 | Stacker Tray |  |
| - | Screw (Not Spared) |  |
| - | Bracket (Not Spared) |  |
| - | Screw (Not Spared) |  |

## PL 17.2 H-Transport Assembly (1 of 2)

| Item | Part | Description <br> 1 | - |
| :---: | :--- | :--- | :---: |
| 2 | - | Top Door (P/O PL 17.1 Item 2) <br> Hinge Assembly (P/O PL 17.1 Item | PLI7.2 |
| 3 | - | 2) |  |
|  |  | Hinge Assembly (P/O PL 17.1 Item <br> 2) | 10\{6-8 |

## PL 17.3 H-Transport Assembly (2 of 2)



## PL 17.4 Cover

Item Part

1
1
2
802E28560
-
-
802E28550
-
-

## Description

Front Cover (REP 16.4.1) Rear Cover (Not Spared) (REP 6.4.2) Top Cover (Not Spared) Left Cover (Not Spared) Front Door Left Panel (Not Spared) Hinge (Not Spared) Magnet (Not Spared) Label (Not Spared) abel (Not Spared)


## PL 17.5 Top Open Cover and Eject

## Roll

Item

| Part | Description |
| :--- | :--- |
| 802 K 28571 | Top Open Cover Assembly |
| - | Arm Assembly (Not Spared) |
| - | Bearing (Not Spared) |
| - | Bracket (Not Spared) |
| - | Spring (Not Spared) |
| - | Support (Not Spared) |
| - | Bracket (Not Spared) |
| - | Shaft (Not Spared) |
| 022 K61480 | Eject Pinch Roll |
| - | Eject Chute (Not Spared) |
| 130 K61920 | Stack Height Sensor Assembly |
|  | (REP 16.5.1) |
| - | Actuator (P/O PL 17.5 Item 11) |
| - | Bracket (P/O PL 17.5 Item 11) |
| - | Stack Height Sensor (P/O PL 17.5 |
| - | Item 11) |
| - | Shaft (Not Spared) |
| - | Actuator (Not Spared) |
| - | Set Clamp Clutch |
| 121 K34190 | Bearing (Not Spared) |
| - | Collar (Not Spared) |
| - | Eject Roll (P/O PL 17.5 Item 25) |
| - | (REP 16.5.2) |
| $007 K 86910$ | Gear (20T) |
| - | Bearing (Not Spared) |
| - | Eject Shaft (P/O PL 17.5 Item 25) |
| $006 K 23710$ | Eject Roll Assembly |
| - | Link (Not Spared) |
| $022 K 67800$ | Eject Pinch Roll (Front) |



## PL 17.6 Paper Transport (1 of 2)



## PL 17.7 Paper Transport (2 of 2)

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | 068 K49000 | Cam Bracket Assembly |
| 2 | 020 E 34970 | Pulley |
| 3 | - | Gear (15T) (P/O PL 17.7 Item 1) |
| 4 | - | Paper Eject Belt (P/O PL 17.6 Item |
|  |  | 14) (REP 16.7.1) |
| 5 | - | Gear (30T) (P/O PL 17.7 Item 1) |
| 6 | - | Collar (P/O PL 17.7 Item 1) |
| 7 | - | Gear Pulley (P/O PL 17.7 Item 1) |
| 8 | 127 K39930 | Eject Motor |
| 9 | $007 E 67800$ | Cam Gear |
| 10 | 130 K88780 | Set Clamp Home Sensor, Eject |
|  |  | Clamp Home Sensor |
| 11 | - | Stopper (P/O PL 17.7 Item 1) |
| 12 | - | Bracket (P/O PL 17.7 Item 1) |
| 13 | $962 K 45980$ | Wire Harness |
| 14 | - | Gear (42/27T) (Not Spared) |
| 15 | - | Plate (Not Spared) |
| 16 | - | Spring (Not Spared) |
| 17 | - | Bracket (Not Spared) |
| 18 | - | Bracket (Not Spared) |



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## PL 17.8 Staple Unit

## Part

041K94260
-

127 K 32860
$130 K 88780$
$-$
-
-
029K03720
050K48750

## Description

Carriage Assembly
Bracket Assembly (P/O PL 17.8 Item 1)
Staple Move Motor
Gear (P/O PL 17.8 Item 1)
Staple Move Sensor, Staple Front Corner Sensor
Roll (P/O PL 17.8 Item 1)
Wire Harness (Not Spared)
Plate (Not Spared)
Staple Unit Rail (Not Spared) (REP 16.8.1)

Staple Assembly (REP 16.8.2) Staple (P/O PL 17.8 Item 10)
Staple Cartridge
Bracket (Not Spared)


## PL 17.9 Compiler Tray Assembly

Item

## Part

127K39920
$130 K 88770$
-
-
-
-
130K88780 120E24490 -
-
-
$-$
-

## Description

ompiler Tray Assembly (REP
6.9.1)

Front/Rear Tamper Motor
Plate (P/O PL 17.9 Item 1)
Front/Rear Tamper Home Sensor Rack (P/O PL 17.9 Item 1) Actuator (P/O PL 17.9 Item 1) Tamper Assembly (P/O PL 17.9 Item 1)
Finger (P/O PL 17.9 Item 1) Spring (P/O PL 17.9 Item 1) Compiler Paper Sensor
Actuator
Paper Guide (P/O PL 17.9 Item 1)
Spring (P/O PL 17.9 Item 1) Wire Harness (P/O PL 17.9 Item 1) End Guide (P/O PL 17.9 Item 1) Finger (P/O PL 17.9 Item 1)

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-
-
-
-
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-
-
-
-
-
$127 K 39910$
16.10.1) (

Elevator Bracket (Front) (Not Spared)
-
$007 E 67830$
-
007E67840
-
$-$
$015 K 51640$ $130 K 88770$

Stacker Motor Assembly (REP
lamp (Not Spared)
Bearing (Not Spared)
Gear (Rear)
Actuator (Not Spared)
Gear (Front)
Stacker Tray Bracket Assembly (Not Spared)
Rack (Not Spared)
Tray Guide (Not Spared) Stack Paper Sensor Assembly Stack Paper Sensor, Stacker Upper

## Description

 Limit/Stack A/Stack B Sensor Actuator (P/O PL 17.10 Item 11) Bracket (P/O PL 17.10 Item 11) Spring (P/O PL 17.10 Item 11) Cover (P/O PL 17.10 Item 11)Bracket (Not Spared)
Bracket (Not Spared)
Bracket (Not Spared)
Pin (Not Spared)
Bearing (Not Spared)
Shaft (Not Spared)
Rivet (Not Spared)
Elevator Belt (Not Spared) (REP 16.10.2)


0517010A-ELA

## PL 17.11 Exit

Item
Part
-
-
-
-
-
-
$006 K 23730$
-
-
-
$022 K 65140$
$022 K 67460$
-
-
-

## Description

Gear (46Z) (Not Spared)
Bearing (Not Spared)
Exit Shaft (Not Spared)
Collar (Not Spared)
Gear (32Z/18T) (Not Spared)
Bearing (Not Spared)
Paddle Gear Shaft (REP 16.11.1)
Paddle Bearing (Not Spared) Lower Exit Chute (Not Spared) Eliminator (Not Spared) Pinch Roll (Exit 1) Pinch Roll (exit R)
Upper Exit Chute (Not Spared) Compiler Entrance Sensor (Not Spared)
Bracket (Not Spared)


## PL 17.12 Electrical

Item
Description
960K15771 Finisher PWB (REP 16.12.1)
537K68531
539E02401
-

110E97990 -

962K27330 962K45100

ROM
Finisher IC Prom
PWB Bracket (Not Spared)
Bracket (Not Spared)
Top Cover/Front Door Interlock Switch
Bracket (Not Spared)
I/F Harness
I/F Harness
PL17.1


## PL 17.13 LVPS

## Item Part

1
2
3
4
$962 K 27340$

## Description

LVPS Frame (Not Spared) LVPS (100V) (REP 16.12.2) Cover (Not Spared)
Power Cord

PL17.13

jOvr51713

## PL 17.14 Rack

Item Part

| 1 | - |
| :--- | :--- |
| 2 | - |
| 3 | - |
| 4 | - |

## Description

Rear Rack (Not Spared) Front Rack (Not Spared) Bottom Plate (Not Spared) Foot (Not Spared)

PL17.14


PL 22.1 Finisher Assembly (Part 1 of
2)

Item
Part
802K85541
-

802E95552
068K29870
068K29880 802 K 85550
-
$-$
-
802E95570
-
042E92330

## Description

Front Cover Assembly Front Cover (P/O PL 22.1 Item 1) Bracket (P/O PL 22.1 Item 1) Magnet (P/O PL 22.1 Item 1) Label (P/O PL 22.1 Item 1) Front Inner Cover
Hinge Hinge
Top Cover Assembly Top Cover (P/O PL 22.1 Item 9) Bracket (P/O PL 22.1 Item 9) Stopper (P/O PL 22.1 Item 9) Magnet (P/O PL 22.1 Item 9) Rear Cover
Hinge (Not Spared)
TT Cover (Not Spared) Eliminator


PL 22.2 Finisher Assembly (Part 2 of
2)

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | - | Bottom Cover (Not Spared) |
| 2 | - | Spacer (Not Spared) |
| 3 | - | Tray Cover (Not Spared) |
| 4 | 802 E95582 | Left Cover |
| 5 | - | Support (Not Spared) |
| 6 | - | Rear Bracket (Not Spared) |
| 7 | $962 K 42291$ | Wire Harness |
| 8 | $050 K 55890$ | Stacker Tray Assembly (REP |
|  |  | 22.8 .1 ) |
| 9 | - | Stacker Base Assembly (Not |
|  |  | Spared) |
| 10 | - | Bracket (Not Spared) |
| 11 | - | Screw (Not Spared) |

PL22. 2


PL 22.3 Stacker Base Assembly (Part 1 of 5)

| Item | Part |
| :---: | :--- |
| 1 | $003 E 65500$ |
| 2 | 005 E 89470 |
| 3 | $423 W 10454$ |
| 4 | 012 K 94850 |
| 5 | - |
| 6 | 012 E 14913 |
| 7 | - |
| 8 | - |
| 9 | $423 W 06054$ |
| 10 | $413 W 75959$ |
| 11 | 020 K 13900 |
| 12 | 005 E 89490 |
| 13 | 807 E 13260 |
| 14 | 120 E 27240 |
| 15 | 802 K 85560 |
| 16 | - |
| 17 | - |
| 18 | 012 K 94840 |
| 19 | - |
| 20 | 130 K 88780 |
| 21 | 110 K 12980 |
| 21 | - |
| 22 | - |
| 23 | - |
| 24 | - |
| 25 | - |
| 26 | - |
| 27 | 121 K 34620 |
| 28 | - |

Description
Knob
Collar
Belt
Link Shaft Assembly
Link Shaft (P/O PL 22.3 Item 4)
Support
Sub Paddle Shaft Assembly (P/O
PL 22.3 Item 4)
Bearing (P/O PL 22.3 Item 4)
Paddle Belt (REP 22.3.1)
Bearing
Pulley
Collar
Gear (21T)
Actuator
Knob Cover Assembly
Knob Cover (P/O PL 22.3 Item 15)
Spring (P/O PL 22.3 Item 15) Sub Paddle Solenoid Assembly Bracket (Not Spared)
Finisher Top Cover Interlock Sensor
Finisher Top Cover Interlock +24V Switch
Support (P/O PL 22.3 Item 18) Cushion (P/O PL 22.3 Item 18) Link (P/O PL 22.3 Item 18) Arm (P/O PL 22.3 Item 18) Bracket (P/O PL 22.3 Item 22) Sub Paddle Solenoid (REP 22.3.2) Spring (P/O PL 22.3 Item 18)


PL 22.4 Stacker Base Assembly (Part 2 of 5)

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | 050K55880 | Compile Assembly (REP 22.9.1) |
| 2 | $029 K 92350$ | (SCC) Staple Assembly (REP <br>  <br> 3 |
| 4 | - | 22.4.2) <br> Cartridge (P/O PL 22.4 Item 2) <br> 5 |
| 6 | - | Stapler (P/O PL 22.4 Item 2) |
| 7 | - | Bracket (Not Spared) |
|  | $930 W 00111$ | Support (Not Spared) |
| 8 | 962 Set Clamp Home Sensor (REP |  |
| 9 | 022 K72790 | 22.4.3) |
| 10 | - | Wire Harness |
| 11 | $004 E 15340$ | Exit Roll Assembly (REP 22.4.1) |
| 12 | $004 E 15330$ | Damper (P/O PL 22.4 Item 9) |
| 13 | - | Center Damper |
| 14 | $007 K 94220$ | Onewing (Not Spared) |
| 15 | $005 E 89470$ | Collar |
| 16 | $807 E 13230$ | Gear Pulley (16T/18T) |
| 17 | $127 K 49800$ | Finisher Transport Motor |
| 18 | $423 W 06954$ | Belt |


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PL 22.5 Stacker Base Assembly (Part 3 of 5)

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | 807 E 13250 | Gear Pulley (37T/45T) |
| 2 | 005 E89480 | Collar |
| 3 | $413 W 75959$ | Bearing |
| 4 | 006 K25001 | Main Paddle Shaft Assembly (REP |
|  |  | $22.5 .4)$ |
| 5 | $423 W 09854$ | Belt |
| 6 | - | Shaft (Not Spared) |
| 7 | $413 W 77559$ | Bearing |
| 8 | 020 E43500 | Pulley (19T) |
| 9 | $054 K 30360$ | Lower Chute Assembly (REP |
|  |  | $22.5 .5)$ |
| 10 | - | Lower Chute (P/O PL 22.5 Item 9) |
| 11 | 022 K73190 | Pinch Roll (REP 22.5.1) |
| 12 | $809 E 65931$ | Spring |
| 13 | - | Support (Not Spared) |
| 14 | - | Bracket (Not Spared) |
| 15 | - | Bracket (Not Spared) |
| 16 | $130 K 93251$ | Compile Exit Sensor (REP 22.5.3) |
| 17 | $807 E 13240$ | Gear (27T) |
| 18 | - | Bracket (Not Spared) |
| 19 | $130 K 88190$ | Finisher Entrance Sensor (REP |
|  |  | $22.5 .2)$ |

PL 22.6 Stacker Base Assembly (Part 4 of 5)

| Item | Part |
| :---: | :--- |
| 1 | 068 K 29930 |
| 2 | 068 K 29940 |
| 3 | 054 K 30600 |
|  |  |
| 4 | - |
| 5 | 042 E 92241 |
| 6 | 022 K 72782 |
| 7 | 031 E 97041 |
| 8 | 031 E 97020 |
| 9 | $413 W 66250$ |
| 10 | - |
| 11 | 042 E 92330 |
| 12 | - |

Description
Bracket
Bracket
Upper Chute Assembly (REP 22.6.2) Upper Chute (P/O PL 22.6 Item 3) Eliminator ENT Roll Assembly (REP 22.6.1) Arm Arm
Ball Bearing
Spring (Not Spared)
Eliminator
Guide Paper (P/O PL 22.6 Item 3)

PL22.6

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## PL 22.7 Stacker Base Assembly (Part

 5 of 5)| Item | Part |
| :---: | :--- |
| 1 | $960 K 2606$ |
| 2 | $055 K 3085$ |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | - |
| 10 | - |
| 11 | - |
| 12 | 110 E9799 |

Description
Finisher PWB (REP 22.7.1) Connector Bracket Harness Guide (Not Spared) PWB Bracket (Not Spared) Wire Harness (Drive) Wire Harness (Stapler) Wire Harness (Interlock) Wire Harness (Front Sensor) Wire Harness (Compile) Wire Harness (Stacker) Bracket (Not Spared) Finisher Front Interlock Switch

## PL22.7



## PL 22.8 Stacker Tray Assembly

| Item | Part | Description |
| :---: | :--- | :--- |
| 1 | - | Bearing (Not Spared) |
| 2 | - | Top Tray (Not Spared) |
| 3 | - | bracket (Not Spared) |
| 4 | - | Plate (Not Spared) |
| 5 | - | Bracket (Not Spared) |
| 6 | - | Base Tray (Not Spared) |
| 7 | - | Base Bracket (Not Spared) |
| 8 | 006 K25031 | Stacker Shaft Assembly (REP |
|  |  | $22.8 .2)$ |
| 9 | $127 K 49420$ | Stacker Motor (REP 22.8.3) |
| 10 | - | Pulley (60) (Not Spared) |
| 11 | - | Worm Gear (Not Spared) |
| 12 | - | Gear (16T/32T) (Not Spared) |
| 13 | - | Stud (Not Spared) |
| 14 | - | Bracket (Not Spared) |
| 15 | - | Bearing (Not Spared) |
| 16 | $423 W 07354$ | Belt |
| 17 | - | Bracket (Not Spared) |
| 18 | $930 W 00111$ | Stacker Stack Sensor 1 (Q1), |
|  |  | Sensor 2 (Q2) (REP 22.8.4) |
| 19 | - | Actuator (Not Spared) |
| 20 | - | Wire Harness (Not Spared) |



## PL 22.9 Compile Assembly (Part 1 of



## PL 22.10 Compile Assembly (Part 2 of

| Item | Part | Description |
| :---: | :---: | :---: |
| 1 | 068K30510 | Bracket Assembly |
| 2 | - | Bracket (P/O PL 22.10 Item 1) |
| 3 | - | Wire Harness (P/O PL 22.10 Item 1) |
| 4 | 050E94302 | Compile Tray |
| 5 | - | Support (Not Spared) |
| 6 | 930W00111 | (SCC) Front Tamper Home Sensor (REP 22.10.2) |
| 7 | 038E34860 | Paper Guide |
| 8 | - | Bracket (Not Spared) |
| 9 | - | Stack Height Sensor (REP 22.10.4) |
| - | 930 W 00212 | Eject Home Sensor (P/O PL 22.10 Item 7) (REP 22.10.3) |
| 10 | 962K42270 | Wire Harness |
| 11 | - | bracket (P/O PL 22.10 Item 10) |
| 12 | - | Wire Harness (P/O PL 22.10 Item 10) |
| 13 | 038 K 88990 | Tamper Guide, Rear |
| - | - | Stack Height Sensor (P/O PL 22.10 Item 10) (REP 22.10.4) |
| 14 | 068K30740 | (SCC) Front/Rear Tamper Motor Assembly (REP 22.10.1) |
| 15 | - | Front / Rear Tamper Motor (P/O PL 22.10 Item 14) |
| 16 | - | Bracket (P/O PL 22.10 Item 14) |
| 17 | 001 E 0981 | Rail |
| 18 | 038 K 89260 | Tamper Guide, Front |



| Common Hardware |  |  | BB | 112W27659 | Screw (M3 $\times 6$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | BC | 113W16051 | Screw (M2 x 10) |
| Item | Part | Description | BD | 113W20688 | Screw (M2.5 $\times 6$ ) |
| A | 112W27677 | Screw (Red) (M3 $\times 6$ ) | BE | 113W27551 | Screw (M3 $\times 5$ ) |
| B | 112W27678 | Screw (M3 $\times 8$ ) | BF | 141W27451 | Setscrew (M3 x 4) |
| C | 112W27851 | Screw (M3 x 8) | BG | 153W15888 | Tapping Screw (M4 x 12) |
| D | 112W27898 | Screw (M3 $\times 8$ ) | BH | 153W16288 | Tapping Screw (M4 $\times 12$ ) |
| E | 113W15488 | Screw (M2 x 4) | BJ | 158W35878 | Screw (M4 x 8) |
| F | 113W20678 | Screw (M3 $\times 6$ ) | BK | 271W16050 | Dowel Pin ( $2 \times 10$ ) |
| G | 113W20857 | Screw (M3 x 8) | BL | 285W16051 | Spring Pin ( $2 \times 10$ ) |
| H | 113W21278 | Screw (M3 x 12) | BM | 153W17655 | Tapping Screw (M3 $\times 6$ ) |
| $J$ | 113W21778 | Screw (M3 $\times 18$ ) | BN | 153W17855 | Tapping Screw (M3 x 8) |
| K | 113W27688 | Screw (M3 $\times 6$ ) | BP | 252W29450 | Nylon Washer (t1) (8) |
| L | 113W36278 | Screw (M4 x 12) | BQ | 158W36255 | Screw ( $\mathrm{M} 4 \times 12$ ) |
| M | 114W27678 | Screw (M3 $\times 6$ ) | BR | 354W26251 | E-Clip (5) |
| N | 141W35651 | Set Screw (M4 x 6) | BS | 153W27855 | Tapping Screw (M3 x 8) |
| P | 153W17688 | Tapping Screw (M3 $\times 6$ ) | BT | 113W20457 | Screw (M3 $\times 4$ ) |
| Q | 153W17888 | Tapping Screw (M3 $\times 8$ ) | BU | 113W27451 | Screw (M3 $\times 4$ ) |
| R | 153W18088 | Tapping Screw (M3 $\times 10$ ) | BV | 113W20657 | Screw (M3 $\times 6$ ) |
| S | 153W27678 | Tapping Screw (M3 $\times 6$ ) | BW | 112W35651 | Screw (M4 x 6) |
| T | 153W27878 | Tapping Screw (M3 x 8) | BX | 112W27859 | Screw (M3 x 8) |
| U | 158W27655 | Screw (M3 x 6) | BY | 158W28678 | Screw (M3 $\times 16$ ) |
| V | 158W27663 | Screw (M3 x 6) | BZ | 285W21851 | Spring Pin ( $2.5 \times 20$ ) |
| w | 158W27677 | Screw (Red) (M3 x 6) | CA | 252W26450 | Nylon Washer (t1) (5) |
| X | 158W27678 | Screw (M3 $\times 6$ ) | CB | 251W19278 | Washer (t0.5) (2.5) |
| Y | 158W27855 | Screw (M3 x 8) | CC | 113W21478 | Screw (M3 x 14) |
| Z | 158W27863 | Screw (M3 $\times 8$ ) | CD | 113W21078 | Screw (M3 x 10) |
| AA | 158W27878 | Screw (M3 $\times 8$ ) | CE | 354W13278 | E-Clip (1.5) |
| AB | 158W28078 | Screw (M3 x 10) | CF | 158W27688 | Screw (M3 $\times 7$ ) |
| AC | 158W28255 | Screw (M3 $\times 12$ ) | CG | 113W35878 | Screw (M4 x 8) |
| AD | 158W28278 | Screw (M3 x 12) | CH | 158W27888 | Screw (M3 $\times 9$ ) |
| AE | 158W35678 | Screw (M4 x 6) | CJ | 113W20878 | Screw (M3 x 8) |
| AF | 220W21278 | Nut (M3) | CK | 252W24278 | Nylon Washer (6) |
| AG | 271W21250 | Dowel Pin (2.5 x 12) | CL | 252W29350 | Washer |
| AH | 285W16251 | Spring Pin ( $2 \times 12$ ) | CM | 271W20850 | Dowel Pin ( $2.5 \times 12$ ) |
| AJ | 285W28051 | Spring Pin ( $3 \times 10$ ) | CN | 271W28650 | Dowel Pin (2.5 x 12) |
| AK | 354W15251 | E-Clip (2) | CP | 158W45078 | Screw |
| AL | 354W15278 | E-Clip (2) | CQ | 113W16088 | Screw (M2 x 10) |
| AM | 354W21251 | E-Clip (2) | CR | 113W27588 | Screw (M3 $\times 5$ ) |
| AN | 354W21278 | E-Clip (3) | CS | 113W20478 | Screw (M3 $\times 4$ ) |
| AP | 354W24251 | E-Clip (4) | CT | 252W31350 | Washer (10) (t0.5) |
| AQ | 354W24254 | KL-Clip (4) | CU | 252W31250 | Washer (10) (t0.25) |
| AR | 354W24278 | E-Clip (4) | CV | 112 W 27878 | Screw-DT (M3 $\times 8$ ) |
| AS | 354W26278 | E-Clip (5) | cW | 113W27488 | Pan Head Screw |
| AT | 354W27251 | E-Clip (6) |  |  |  |
| AU | 354W27254 | KL-Clip (6) |  |  |  |
| AV | 354W27278 | E-Clip (6) |  |  |  |
| AW | 354W28278 | E-Clip (7) |  |  |  |
| AX | 354W29251 | E-Clip (8) |  |  |  |
| AY | 354W29278 | E-Clip (8) |  |  |  |
| AZ | 251W21278 | Washer T. 05 (3) |  |  |  |
| BA | 113W27651 | Screw (M3 $\times 6$ ) |  |  |  |

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## UI Diagnostic Mode

## Procedure

Access UI Diagnostics by following the procedures below.

## Entering UI Diagnostics

1. At the Control Panel, press and hold the $\mathbf{0}$ key for 5 seconds, then press the Start button while still pressing the 0 key.
The CE Mode - Password Entry screen will appear.
2. Enter the Access Number 6789 and press Confirm.

The colors on the display are reversed to indicate that UI Diagnostics mode is active.

## Accessing Diagnostic routines

1. Press the Log In/Out button on the Control Panel.
2. Select System Settings
3. Select Common Settings.
4. Select Maintenance/Diagnostics.
5. The following Diagnostics Routines can be accessed from the UI screen. (Figure 1)
a. NVM Read/Write

- Follow the instructions on the screen. If one or more NVM locations is changed, the machine will reboot upon exit.
b. Component Control
c. Sub System
- Initialize Hard Disk
- Delete All Data
- Software Options
- Fax Diagnostics
d. Print Test Pattern
e. Initialize NVM
f. Adjustment/Others
- Machine ID/Billing Data
- Initialize HFSI Counter
- Adjust Toner Density
- Tray 5(Bypass) Guide Adjustment (Tray 5=MPT)

j0el6101a
Figure 1 Maintenance/Diagnostics


## Printing Service Reports

1. To access Service reports, follow the Entering UI Diagnostics procedure.
2. After entering the Access Number, press the Machine Status button on the Control Panel.
3. Select the Billing Meter/Print Reports tab on the display.
4. Press the Print Reports/List button.
5. Press the $\mathbf{C E}$ button.
6. The following reports can be printed

- Debug Log Report
- HFSI Report
- Jam Report
- Shutdown Report
- Failure Report
- Protocol Monitor Report

7. Select the required report and press the Start button. The selected report will be printed.

## Exiting UI Diagnostics

## CAUTION

Ensure that the machine is not inadvertently left in UI Diagnostics.
There are three ways to exit from UI Diagnostics.

- Switch the power off and on.
- Perform the following:
- Press Close to exit any of the service screens that were opened.
- When the System Settings screen is displayed, press Exit.
- When the reversed-color Copy Mode screen is displayed, press the Start button while the $\mathbf{0}$ key is pressed.
- If the Restart button is displayed on the screen, pressing the button will exit UI Diagnostics and restart the operation.


## Jam Report

## Purpose

To check the frequency of jams.

## Print Contents

Perform following to print Jam Report

1. Enter UI Diagnostics (Entering UI Diagnostics).
2. Press the Machine Status button on the Control Panel.
3. Select the Billing Meter/Print Reports tab on the display
4. Select the Print Reports/List button.
5. Select the Jam Report button.
6. Press the Start button to print Jam Report

## Failure Report

## Purpose

To display the frequency of failures.

## Print Contents

Report Name: Failure Report
Perform following to print Failure Report.

1. Enter UI Diagnostics (Entering UI Diagnostics).
2. Press the Machine Status button on the Control Panel.
3. Select the Billing Meter/Print Reports tab on the display.
4. Select the Print Reports/List button.
5. Select the Failure Report button.
6. Press the Start button to print Failure Report.

## Shutdown Report

## Purpose

To output the history that was registered in advance.

## Print Contents

Perform following to print Shutdown Report.

1. Enter UI Diagnostics (Entering UI Diagnostics).
2. Press the Machine Status button on the Control Panel.
3. Select the Billing Meter/Print Reports tab on the display.
4. Select the Print Reports/List button.
5. Select the CE button (may have to scroll down).
6. Select the Shutdown Report button.
7. Press the Start button to print Shutdown Report.

## NVM Read/Write

## Purpose

Reads, sets or changes the NVM data.

## Procedure

1. Access Diagnostic Routines.
a. Enter UI Diagnostics (Entering UI Diagnostics in UI Diagnostic Mode).
b. Access Diagnostic Routines (Accessing Diagnostic Routines in UI Diagnostic Mode).
2. Select Maintenance/Diagnostics
3. Select NVM Read/Write

## Reading NVM

1. Input Chain-Link number( 6 digits) on NVM Read/Write screen.
2. Select Confirm/Change
3. Current Value appears in Current Value column.

## Writing NVM

1. Input New number in New Value column
2. Select Save.
3. New number appears on Current Value column.

| Table 1 Component VS Chain number |  |  |
| :--- | :--- | :--- |
| Component Item IOT/IT/Controller Chain Number Allocation <br> ESS IF IOT 740 <br> Recycle IOT 740 <br> Billing IOT 740 <br> Drive IOT 741 <br> NOHAD IOT 741 <br> PH IOT $740,742,760$ <br> EXIT IOT 742,764 <br> Tray IOT 742 <br> Fuser IOT 744 <br> ROS IOT 749 <br> Process Control IOT $751,752,753$ <br> Xero IOT 751 <br> CRU IOT 751 <br> Finisher IIT 764 <br> DADF IIT 711 <br> IISS (DADF) IIT 710 <br> IISS IIT 715 <br> IISS (Config) Controller 719 <br> Common Controller 700 <br> Meter Counter Controller 720 <br> Stored Data $731,732,733,734$  |  |  |

## IOT NVM List

## Chain 740-xxx IOT Manager

| Chain-Link | Name | Default | Range | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 740-003 | CycleDownTimer for SheetEmpty | 0 | 0~5000 | RW | Cycle Down Timer (in steps of 1 ms ) for the state in which Tray is empty. Timer measuring time from the time Tray becomes empty during printing to the start of Cycle Down. When having a failure or instructed to stop, the M/C immediately starts to cycle down without using this Timer. |
| 740-004 | IOT-PL Number | 0 | 0~255 | R | IOT-PL management number written in ROM built in CPU. At Power On, IOT-PL info is checked and stored in this NVM. $0-255$ : IOT-PL management number available |
| 740-006 | Comm Fail History ID | 1 | 0~255 | RW | Where to connect in the event of a fail: 0x00: Controller <br> 0x01: No occurrence |
| 740-007 | Comm Fail History State | 0 | 0~255 | RW | ```Communication Fail Type 1: Send Queue NG 2: No ACK 3: Receive Queue Full``` |
| 740-008 | Comm Fail History Tx State | 0 | 0~255 | RW | Transmission status in the event of a fail: <br> 0 : Idling (waiting) <br> 1: Sending Msg <br> 2: Waiting for Ack to sent Msg <br> 3: Waiting for Ack to sent Sync <br> 4: Checking Send Queue after sending Msg |
| 740-009 | Comm Fail History Rx State | 0 | 0~255 | RW | Reception status in the event of a fail: <br> 0 : Idling (waiting) <br> 1: Waiting for Msg Length <br> 2: Waiting for ClientData/BCC <br> 3: Waiting to receive Command to Establish Sync. <br> 4: Finished receiving Msg <br> 5: Finished receiving Command to Establish Sync. |
| 740-010 | Comm Fail History Uart Tx Use | 0 | 0~255 | RW | For what Physical Layer is used in the event of a fail: <br> 0 : Send physical layer used to send Msg <br> 1: Send physical layer used to send Ack |
| 740-011 | Comm Fail History Rx Func Use | 0 | 0~255 | RW | How the M/C waits for a Receive Function in the event of a fail: 0: Clear the use of Receive Function 1: Set the use of Receive Function |
| 740-012 | FPGA Video Version | 0 | 0~255 | R | Version of FPGA Video Module |
| 740-013 | FPGA I/O Version | 0 | 0~255 | R | Version of FPGA I/O Module |
| 740-014 | Logic Fail Information | 0 | 0~255 | RW | $\begin{aligned} & \text { Type 0-99: IM } \\ & \text { Type 100-: Library/DD-Num } \end{aligned}$ |
| 740-015 | Logic Fail Information | 0 | 0~255 | RW | Detail 1 |
| 740-016 | Logic Fail Information | 0 | 0~255 | RW | Detail 2 |
| 740-017 | Logic Fail Information | 0 | 0~255 | RW | Detail 3 |

Table 1 Chain 740-xxx IOT Manager

| Chain-Link | Name | Default | Range | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 740-018 | M/C Type | - | 0~255 | R | M/C Type <br> 0: 1MFrom/16KEEPROM <br> 1: 2MFrom/64KEEPROM <br> Set at Power ON and NVM Initialization. |
| 740-019 | Product Type | 10 | 0~255 | R | Product Identification MN/MNPL: 0 (unused) IBG: 10 (fixed) |
| 740-020 | Range Over Chain Link | 0 | 0~255 | RW | Memorizes Link (high byte) that was over the range in Reading at Power On. |
| 740-021 | Range Over Chain Link | 0 | 0~255 | RW | Memorizes Link (low byte) that was over the range in Reading at Power On. |
| 740-022 | Range Over Chain Link | 0 | 0~255 | RW | Memorizes abnormal value of Chain Link that was over the range in Reading at Power On. <br> (higher bits in 1-byte data/2-byte data; highest bit in 4-byte data) |
| 740-023 | Range Over Chain Link | 0 | 0~255 | RW | Memorizes abnormal value of Chain Link that was over the range in Reading at Power On. (lower bits in 2-byte data; middle and higher bits in 4-byte data) |
| 740-024 | Range Over Chain Link | 0 | 0~255 | RW | Memorizes abnormal value of Chain Link that was over the range in Reading at Power On. <br> (middle and lower bits in 4-byte data) |
| 740-025 | Range Over Chain Link | 0 | 0~255 | RW | Memorizes abnormal value of Chain Link that was over the range in Reading at Power On. (lowest bit in 4-byte data) |
| 740-026 | Range Over Chain Link | 0 | 0~255 | RW | a specified number ( n ) of Links that were over their ranges in Reading at Power On |
| 740-027 | Range Over Chain Link | 0 | 0~255 | RW | the number of Chain Links that were over their ranges in Reading at Power On |
| 740-055 | CRUM Mode Information | 0 | 0~1 | R | Stores how to control CRUM: 1: 3rd Party Mode (no communication with CRUM) any except 1: Xerox Mode (communication with CRUM |
| 740-056 | CRUM Mode Switch | 0 | 0~1 | RW | Switch to change 3rd Party Mode to Xerox Mode 0: N/A 1: transfer to Xerox Mode |
| 740-060 | CRUM Comm Fail Information | 0 | 0~255 | RW | At what command CRUM Comm Fail occurred 0: No occurrence 1: at REQ RX Command 2: at ATTRIB Command 3: at CSPWD Command 4: Normally at Read/Write Command |
| 740-061 | Status Regi Information | 0 | 0~255 | RW | State of Status Register in the event of a CRUM Comm Fail The content of Register in the event of a fail is stored. <br> NOTE: <br> However, the above is not applicable in the following cases: <br> Data error internal to FIFO occurs: OxFF will be stored. <br> Data Length error occurs: OxFE will be stored (applicable also when FIFOBL exceeds 35). |

Table 1 Chain 740-xxx IOT Manager

| Chain-Link | Name | Default | Range | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 740-062 | CRUM ASIC Comm Fail Information | 0 | 0~255 | RW | What CRUM ASIC Comm Fail occurred: <br> 0 : No occurrence <br> 1: WUP_REQ Busy Err <br> 2: REQ_RX Busy Err <br> 3: REQ_RX CRC Err <br> 4: ATTRIB Busy Err <br> 5: ATTRIB CRC Err <br> 6: CSPWD Busy Err <br> 7: CRPWD CRC Err <br> 8: RSB Busy Err <br> 9: RSB CRC Err <br> 10: RMB Busy Err <br> 11: RMB CRC Err <br> 12: WSB Busy Err <br> 13: WSB CRC Err <br> 14: at I2C Write SDA Line not open <br> 15: I2C Write No ACK <br> 16: I2C Write No ACK <br> 17: at I2C Read SDA Line not open <br> 18: I2C Read No ACK |
| 740-064 | CRUM Deve Access Time Read/Write | 5000 | 0~65535 | RW | Max waiting time (ms) for CRUM R/W operation (ms) at Read/Write |
| 740-065 | CRUM Deve Access Time Write | 3000 | 0~65535 | RW | Waiting time (ms) before CRUM Write at Write Only |
| 740-067 | Non CRUM Drum Event | 2 | 1~8 | RW | Drum CRUM event to be reported in No CRUM mode <br> 1: CRUM disconnected <br> 2: the same CRUM <br> 4: old CRUM <br> 8: new CRUM |
| 740-068 | Non CRUM Toner Y Event | 2 | 1~8 | RW | Toner Y CRUM event to be reported in No CRUM mode <br> 1: CRUM disconnected <br> 2: the same CRUM <br> 4: old CRUM <br> 8: new CRUM |
| 740-069 | Non CRUM Toner M Event | 2 | 1~8 | RW | Toner M CRUM event to be reported in No CRUM mode <br> 1: CRUM disconnected <br> 2: the same CRUM <br> 4: old CRUM <br> 8: new CRUM |
| 740-070 | Non CRUM Toner C Event | 2 | 1~8 | RW | Toner C CRUM event to be reported in No CRUM mode <br> 1: CRUM disconnected <br> 2: the same CRUM <br> 4: old CRUM <br> 8: new CRUM |
| 740-071 | Non CRUM Toner K Event | 2 | 1~8 | RW | Toner K CRUM event to be reported in No CRUM mode <br> 1: CRUM disconnected <br> 2: the same CRUM <br> 4: old CRUM <br> 8: new CRUM |

# Table 1 Chain 740-xxx IOT Manager 

| Chain-Link | Name | Default | Range | Read/Write | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $740-084$ | FPGA Video Version | 0 | $0 \sim 65535$ | R | Version of FPGA Video Module |
| $740-085$ | FPGA I/O Version | 0 | $0 \sim 65535$ | R | Version of FPGA I/O Module |

## Chain 741-xxx Drive/MQ/NOHAD

Table 2 Drive/MQ/NOHAD

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 741-001 | DRUM/IBT MOTOR HIGH PULSE | 20 | 0~40 | Fine Adjustment of Drum/IBT Motor speed (standard) [Table No.] |
| 741-002 | DRUM/IBT MOTOR LOW PULSE | 20 | 0~40 | Fine Adjustment of Drum/IBT Motor speed (half speed) [Table No.] |
| 741-003 | DRUM/IBT MOTOR REVERSE TIME | 20 | 0~40 | Drum/IBT Motor Reverse Rotation Time [50msec] |
| 741-004 | MAIN MOTOR HIGH PULSE | 9722 | $\begin{aligned} & 8736 \sim 1073 \\ & 6 \end{aligned}$ | Fine Adjustment of Main Motor speed (standard) [division ratio] |
| 741-005 | MAIN MOTOR LOW PULSE | 19476 | $\begin{aligned} & \hline 17474 ~ 214 \\ & 74 \end{aligned}$ | Fine Adjustment of Main Motor speed (half speed) [division ratio] |
| 741-006 | DEVE MOTOR PULSE | 20 | 0~40 | Fine Adjustment of DEVE Motor speed [Table No.] |
| 741-007 | AUGER MOTOR PULSE | 20 | 0~40 | Fine Adjustment of Auger Motor speed [Table No.] |
| 741-008 | FUSER FAN DELAY TIME | 1 | 0~120 | Fuser Fan's delay in turning Off. [15sec] |
| 741-009 | REAR FAN DELAY TIME | 1 | 0~120 | Rear Fan's delay in turning Off. [15sec] |
| 741-011 | DEW MODE TEMPERATURE OF POWERON | 12 | 0~30 | Dew Mode Threshold Temperature [degree C] |
| 741-012 | DEW MODE TIME FOR POWERON | 90 | 1~120 | Dew Mode Time [min] |
| 741-013 | FUSER FAN FAIL BYPASS | 0 | 0~1 | FUSER FAN FAIL Prevention <br> 0 : Normal Mode <br> 1: FAN FAIL Prevention |
| 741-014 | REAR FAN FAIL BYPASS | 0 | 0~1 | REAR FAN FAIL Prevention <br> 0: Normal Mode <br> 1: FAN FAIL Prevention |
| 741-015 | DEODORANT FILTER SW | 0 | 0~1 | Sets whether or not Deodorant Filter is present. <br> 0: No Deodorant Filter <br> 1: Deodorant Filter present |
| 741-016 | DEW MODE TEMPERATURE OF PRINT | 14 | 0~30 | Dew Mode Threshold Temperature at the start of print [degree C] |
| 741-017 | DEW MODE TIME FOR PRINT | 60 | 15~180 | How long Fan maintains its low-speed rotation in Dew Mode at the start of print [sec] |
| 741-018 | DRUM MOTOR DELAY TIME | 130 | 1~255 | DRUM MOTOR's delay in turning OFF corresponding to FPOT [10msec] |

# Table 2 Drive/MQ/NOHAD 

| Chain-Link | Name | Default | Range | Description |
| :--- | :--- | :--- | :--- | :--- |
| $741-019$ | MAIN MOTOR HIGH PULSE | 9742 | $8736 \sim 1073$ <br> 6 | Fine Adjustment of Main Motor speed (standard/heavy 1) <br> [division ratio] |
| $741-020$ | MAIN MOTOR HIGH PULSE | 9742 | $8736 \sim 1073$ <br> 6 | Fine Adjustment of Main Motor speed (standard/label) <br> [division ratio] |
| $741-021$ | MAIN MOTOR LOW PULSE | 19476 | $17474 \sim 214$ <br> 74 | Fine Adjustment of Main Motor speed (half speed/heavy 2) <br> [division ratio] |
| $741-022$ | MAIN MOTOR LOW PULSE | 19476 | $17474 \sim 214$ <br> 74 | Fine Adjustment of Main Motor speed (half speed/label) <br> [division ratio] |
| $741-023$ | MAIN MOTOR LOW PULSE | 19476 | $17474 \sim 214$ <br> 74 | Fine Adjustment of Main Motor speed (half speed/transparency) [division ratio] <br> $741-024$ MAIN MOTOR LOW PULSE |

Chain 742-xxx Paper Handling

| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-001 | ROS Write Position (All) | 0 | -25~25 | 0.2 mm | RW | Base Adjustment of Side Regi in fast scan direction (affects all the trays/paper types/color modes) |
| 742-002 | ROS Write Position (Tray 1/Plain Paper/Common) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (Trays 1-3/plain paper/common) |
| 742-003 | ROS Write Position (Trays 1-3/heavy 1, coated 1/B) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (Trays 1-3/heavy 1, coated 1/B) |
| 742-004 | ROS Write Position (Trays 1-3/heavy 1, coated 1/color) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (Trays 1-3/heavy 1, coated 1/color) |
| 742-005 | ROS Write Position (Trays 1-3/heavy 2, coated 2/common) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (Trays 1-3/heavy 2, coated 2/common) |
| 742-006 | ROS Write Position (Trays 1-3/abel/B) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (Trays 1-3/label/B) |
| 742-007 | ROS Write Position (Trays1-3/label/color) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (Trays 1-3/label/color) |
| 742-008 | ROS Write Position (Trays 1-3/transparency/common) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (Trays 1-3/transparency/common) |
| 742-009 | ROS Write Position (MSI/plain paper/common) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (MSI/plain paper/common) |
| 742-010 | ROS Write Position (MSI/heavy 1, coated 1/B) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (MSI/heavy 1, coated 1/B) |
| 742-011 | ROS Write Position (MSI/heavy 1, coated 1/color) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (MSI/heavy 1, coated 1/color) |
| 742-012 | ROS Write Position (MSI/heavy 2, coated 2/common) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (MSI/heavy 2, coated 2/common) |
| 742-013 | ROS Write Position (MSI/Iabel/B) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (MSI/label/B) |
| 742-014 | ROS Write Position (MSI/label/color) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (MSI/label/color) |
| 742-015 | ROS Write Position (MSI/transparency/common) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (MSI/transparency/common) |
| 742-016 | ROS Write Position (Duplex All/plain paper/common) | 0 | -25~25 | 1 ms | RW | Side Regi ADJ in fast scan direction (Duplex All/plain paper/common) |
| 742-017 | ROS Write Position (Duplex All/heavy 1, coated 1/B) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan direction (Duplex All/heavy 1, coated 1/B) |
| 742-018 | ROS Write Position (Duplex, feed from Tray 1/plain/common) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan (Duplex, feed from Tray 1/plain paper/common) |
| 742-019 | ROS Write Position (Duplex, feed from Tray 2/plain/common) | 0 | -25~25 | 0.2mm | RW | Side Regi ADJ in fast scan (Duplex, feed from Tray 2/plain paper/common) |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-020 | ROS Write Position (Duplex, feed from Tray 3/plain/common) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan (Duplex, feed from Tray 3/plain paper/common) |
| 740-021 | ROS Write Position (Duplex, feed from MSI/plain/com- mon) | 0 | -25~25 | 0.2mm | RW | Side Regi ADJ in fast scan (Duplex, feed from MSI/plain paper/common) |
| 742-022 | ROS Write Position (Tray 2/plain paper/common) | 0 | -25~25 | 0.2mm | RW | Side Regi ADJ in fast scan direction (Tray2/plain paper/common) |
| 742-023 | ROS Write Position (Tray 3/plain paper/common) | 0 | -25~25 | 0.2 mm | RW | Side Regi in fast scan direction (Tray 3/plain paper/common) |
| 742-024 | ROS Write Position (whole Tray Module/plain/common) | 0 | -25~25 | 0.2 mm | RW | Side Regi ADJ in fast scan (whole Tray Module/plain paper/common) |
| 742-031 | Timing of Starting Registration Operation (All) | 56 | 0~160 | 1 mc | RW | Base Adjustment of Lead Regi in slow scan direction (affects all the trays/paper types/color modes) |
| 742-032 | Timing of Starting Registration Operation (MSI/full speed/plain paper) | 80 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (MSI/full speed/plain paper) |
| 742-033 | Timing of Starting Registration Operation (MSI/full speed/heavy 1) | 80 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (MSI/full speed/heavy 1) |
| 742-034 | Timing of Starting Registration Operation (MSI/half speed/heavy 1) | 92 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (MSI/heavy 1, coated $1 /$ color) |
| 742-035 | Timing of Starting Registration Operation (MSI/half speed/heavy 2) | 92 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (MSI/half speed/heavy 2) |
| 742-036 | Timing of Starting Registration Operation (MSI/full speed/label) | 80 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (MSI/full speed/label) |
| 742-037 | Timing of Starting Registration Operation (MSI/half speed/label) | 92 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (MSI/half speed/label) |
| 742-038 | Timing of Starting Registration Operation (MSI/half speed/transparency) | 92 | 0~160 | 1 mc | RW | Base Adjustment of Lead Regi in slow scan direction (MSI/half speed/transparency) |
| 742-039 | Timing of Starting Registration Operation (Trays 1-3/full speed/plain paper) | 80 | 0~160 | 1 mc | RW | Base Adjustment of Lead Regi in slow scan direction (Trays 1-3/full speed/plain paper) |
| 742-040 | Timing of Starting Registration Operation (Trays 1-3/full speed/heavy 1) | 80 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (Trays 1-3/full speed/heavy 1) |
| 742-041 | Timing of Starting Registration Operation (Trays 1-3/half speed/heavy 1) | 92 | 0~160 | 1 mc | RW | Base Adjustment of Lead Regi in slow scan direction (Trays $1-3 /$ half speed/heavy 1) |
| 742-042 | Timing of Starting Registration Operation (Trays 1-3/half speed/heavy 2) | 92 | 0~160 | 1 mc | RW | Base Adjustment of Lead Regi in slow scan direction (Trays $1-3 /$ half speed/heavy 2) |
| 742-043 | Timing of Starting Registration Operation (Trays 1-3/full speed/label) | 80 | 0~160 | 1 mc | RW | Base Adjustment of Lead Regi in slow scan direction (Trays 1-3/full speed/label) |
| 742-044 | Timing of Starting Registration Operation (Trays $1-3 /$ half speed/label) | 92 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (Trays 1-3/half speed/label) |
| 742-045 | Timing of Starting Registration Operation (Trays $1-3 /$ half speed/transparency) | 92 | 0~160 | 1 mc | RW | Base Adjustment of Lead Regi in slow scan direction (Trays 1-3/transparency/common) |
| 742-046 | Timing of Starting Registration Operation (Duplex/full speed/plain paper) | 80 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (Duplex/full speed/plain paper) |
| 742-047 | Timing of Starting Registration Operation (Duplex/full speed/heavy 1) | 80 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (Duplex/full speed/heavy 1) |
| 742-048 | Timing of Starting Registration Operation (MSI/half speed/plain paper) | 92 | 0~160 | 1mc | RW | Base Adjustment of Lead Regi in slow scan direction (MSI/half speed/plain paper) |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-049 | Timing of Starting Registration Operation (Trays 1-3/half speed/plain paper) | 92 | 0~160 | 1 mc | RW | Base Adjustment of Lead Regi in slow scan direction (Trays 1-3/half speed/plain paper) |
| 742-055 | Timing of Starting MSI Feed Control (MSI/full speed/plain) ('PH standard signal' to Feed Start) | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting MSI Feed (full speed/plain paper) |
| 742-056 | ```Timing of Starting MSI Feed Control (MSI/full speed/non- plain) ("PH standard signal" to Feed Start)``` | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting MSI Feed (full speed/any other than plain paper) |
| 742-057 | ```Timing of Starting MSI Feed Control (MSI/half speed/ plain) ("PH standard signal" to Feed Start)``` | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting MSI Feed (half speed/plain paper) |
| 742-058 | ```Timing of Starting MSI Feed Control (MSI/half speed/non- plain) ("PH standard signal" to Feed Start)``` | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting MSI Feed (half speed/except plain paper) |
| 742-059 | Timing of Starting Tray Feed Control (Tray 1/full speed/B/ $8.5 \times 11 \mathrm{LEF}-\mathrm{G}$ ) ("PH standard signal" to Feed Start) | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (full speed/B/8.5x11LEF-G) |
| 742-060 | Timing of Starting Tray Feed Control (Tray 1/full speed/B/ A4SEF-G~11x17SEF-G) <br> ("PH standard signal" to Feed Start) | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (full speed/B/A4SEF-G to 11x17SEFG) |
| 742-061 | Timing of Starting Tray Feed Control (Tray 1/full/color/side A) ("PH standard signal" to Feed Start) | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (full speed/color/side A) |
| 742-062 | Timing of Starting Tray Feed Control (Tray 1/full/color/side B) <br> ("PH standard signal" to Feed Start) | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (full speed/color/side B) |
| 742-063 | Timing of Starting Tray Feed Control (Tray 1/half speed/ except transparency/B/8.5x11LEF-G) <br> ("PH standard signal" to Feed Start) | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (half speed/except transparency/B/ $8.5 \times 11$ LEF-G) |
| 742-064 | $\begin{aligned} & \text { Timing of Starting Tray Feed Control (Tray 1/half speed/ } \\ & \text { except transparency/B/A4SEF-G } \sim 11 \times 17 \text { SEF-G) } \\ & \text { ("PH standard signal" to Feed Start) } \end{aligned}$ | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (half speed/except transparency/B/ A4SEF-G to $11 \times 17$ SEF-G) |
| 742-065 | ```Timing of Starting Tray Feed Control (Tray 1/half speed/ except transparency/color/side A) ("PH standard signal" to Feed Start)``` | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (half speed/except transparency/ color/side A) |
| 742-066 | $\begin{aligned} & \text { Timing of Starting Tray Feed Control (Tray 1/half speed/ } \\ & \text { except transparency/color/side B) } \\ & \text { ("PH standard signal" to Feed Start) } \end{aligned}$ | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (half speed/except transparency/ color/side B) |
| 742-067 | ```Timing of Starting Tray Feed Control (Tray 1/half speed/ transparency/B/side A) ("PH standard signal" to Feed Start)``` | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (half speed/transparency/B/side A) |
| 742-068 | ```Timing of Starting Tray Feed Control (Tray 1/half speed/ transparency/B/side B) ("PH standard signal" to Feed Start)``` | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (half speed/transparency/B/side B) |


| Chain-Link | Name | Default | Range | $\begin{aligned} & \text { Step } \\ & \text { (mm) } \end{aligned}$ | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-069 | Timing of Starting Tray Feed Control (Tray 1/half speed/ transparency/color/side A) ("PH standard signal" to Feed Start) | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (half speed/transparency/color/side A) |
| 742-070 | Timing of Starting Tray Feed Control (Tray 1/half speed/ transparency/color/side B) <br> ("PH standard signal" to Feed Start) | 10 | -100~100 | 2 ms | RW | Adjusts the timing of starting Tray 1 Feed (half speed/transparency/color/side B) |
| 742-071 | Timing of Starting Tray Feed Control (2TM Tray 2/full speed/B/8.5x11LEF-G) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 | 2 ms | RW | Adjustment of Start Feed signal (2TM Tray 2) |
| 742-072 | Timing of Starting Tray Feed Control (2TM Tray 2/full speed/B/A4SEF-G~11x17SEF-G) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-073 | Timing of Starting Tray Feed Control (2TM Tray 2/full speed/color/side A) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-074 | Timing of Starting Tray Feed Control (2TM Tray 2/full speed/color/side B) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-075 | Timing of Starting Tray Feed Control (2TM Tray 2/half speed/except transparency/B/8.5x11LEF-G) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-076 | Timing of Starting Tray Feed Control (2TM Tray 2/half speed/except transparency/B/A4SEF-G~11x17SEF-G) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-077 | Timing of Starting Tray Feed Control (2TM Tray 2/half speed/except transparency/color/side A) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-078 | Timing of Starting Tray Feed Control (2TM Tray 2/half speed/except transparency/color/side B) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-079 | Timing of Starting Tray Feed Control (2TM Tray 2/transparency/B/side A) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-080 | Timing of Starting Tray Feed Control (2TM Tray 2/transparency $/ \mathrm{B} /$ side B ) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-081 | Timing of Starting Tray Feed Control (2TM Tray 2/transparency/color/side A) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-082 | Timing of Starting Tray Feed Control (2TM Tray 2/transparency/color/side B) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-083 | Timing of Starting Tray Feed Control (TTM Tray 2/full speed/B/8.5×11LEF-G) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 | 2 ms | RW | Start Feed signal Adjustment (TTM Tray 2) |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-084 | Timing of Starting Tray Feed Control (TTM Tray 2/full speed/B/A4SEF-G~11x17SEF-G) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-085 | $\begin{aligned} & \text { Timing of Starting Tray Feed Control (TTM Tray 2/full } \\ & \text { speed/color/side A) } \\ & \text { (Start Feed signal to Regi Clutch On signal) } \\ & \hline \end{aligned}$ | 10 | -100~100 |  | RW | ditto |
| 742-086 | $\begin{aligned} & \text { Timing of Starting Tray Feed Control (TTM Tray 2/full } \\ & \text { speed/color/side B) } \\ & \text { (Start Feed signal to Regi Clutch On signal) } \end{aligned}$ | 10 | -100~100 |  | RW | ditto |
| 742-087 | Timing of Starting Tray Feed Control (TTM Tray 2/half speed/except transparency/B/8.5x11LEF-G) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-088 | Timing of Starting Tray Feed Control (TTM Tray 2/half speed/B/A4SEF-G~11x17SEF-G) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-089 | Timing of Starting Tray Feed Control (TTM Tray 2/half speed/except transparency/color/side A) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-090 | Timing of Starting Tray Feed Control (TTM Tray 2/half speed/except transparency/color/side B) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-091 | ```Timing of Starting Tray Feed Control (TTM Tray 2/trans- parency/B/side A) (Start Feed signal to Regi Clutch On signal)``` | 10 | -100~100 |  | RW | ditto |
| 742-092 | $\begin{aligned} & \text { Timing of Starting Tray Feed Control (TTM Tray 2/trans- } \\ & \text { parency/B/side B) } \\ & \text { (Start Feed signal to Regi Clutch On signal) } \end{aligned}$ | 10 | -100~100 |  | RW | ditto |
| 742-093 | ```Timing of Starting Tray Feed Control (TTM Tray 2/trans- parency/color/side A) (Start Feed signal to Regi Clutch On signal)``` | 10 | -100~100 |  | RW | ditto |
| 742-094 | ```Timing of Starting Tray Feed Control (TTM Tray 2/trans- parency/color/side B) (Start Feed signal to Regi Clutch On signal)``` | 10 | -100~100 |  | RW | ditto |
| 742-095 | $\begin{aligned} & \text { Timing of Starting Tray Feed Control (2TM Tray 3/full } \\ & \text { speed/B/8.5x11LEF-G) } \\ & \text { (Start Feed signal to Regi Clutch On signal) } \end{aligned}$ | 10 | -100~100 | 2 ms | RW | Start Feed signal Adjustment (2TM Tray 3) |
| 742-096 | Timing of Starting Tray Feed Control (2TM Tray 3/full speed/B/A4SEF-G~11x17SEF-G) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-097 | $\begin{aligned} & \text { Timing of Starting Tray Feed Control (2TM Tray 3/full } \\ & \text { speed/color/side A) } \\ & \text { (Start Feed signal to Regi Clutch On signal) } \end{aligned}$ | 10 | -100~100 |  | RW | ditto |
| 742-098 | $\begin{aligned} & \text { Timing of Starting Tray Feed Control (2TM Tray 3/full } \\ & \text { speed/color/side B) } \\ & \text { (Start Feed signal to Regi Clutch On signal) } \\ & \hline \end{aligned}$ | 10 | -100~100 |  | RW | ditto |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-099 | Timing of Starting Tray Feed Control (2TM Tray 3/half speed/except transparency/B/8.5x11LEF-G) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-100 | Timing of Starting Tray Feed Control (2TM Tray 3/half speed/except transparency/B/A4SEF-G~11x17SEF-G) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-101 | Timing of Starting Tray Feed Control (2TM Tray 3/half speed/except transparency/color/side A) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-102 | Timing of Starting Tray Feed Control (2TM Tray 3/half speed/except transparency/color/side B) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-103 | ```Timing of Starting Tray Feed Control (2TM Tray 3/trans- parency/B/side A) (Start Feed signal to Regi Clutch On signal)``` | 10 | -100~100 |  | RW | ditto |
| 742-104 | Timing of Starting Tray Feed Control (2TM Tray 3/transparency/B/side B) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-105 | Timing of Starting Tray Feed Control (2TM Tray 3/transparency/color/side A) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-106 | Timing of Starting Tray Feed Control (2TM Tray 3/transparency/color/side B) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-107 | Timing of Starting Tray Feed Control (TTM Tray 3/full speed/B/8.5×11LEF-G) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 | 2 ms | RW | Start Feed signal Adjustment (TTM Tray 3) |
| 742-108 | Timing of Starting Tray Feed Control (TTM Tray 3/full speed/B/A4SEF-G~11x17SEF-G) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-109 | Timing of Starting Tray Feed Control (TTM Tray 3/full speed/color/side A) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-110 | Timing of Starting Tray Feed Control (TTM Tray 3/full speed/color/side B) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-111 | Timing of Starting Tray Feed Control (TTM Tray 3/half speed/except transparency/B/8.5x11LEF-G) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-112 | Timing of Starting Tray Feed Control (TTM Tray 3/half speed/B/A4SEF-G~11x17SEF-G) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-113 | Timing of Starting Tray Feed Control (TTM Tray 3/half speed/except transparency/color/side A) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-114 | Timing of Starting Tray Feed Control (TTM Tray 3/half speed/except transparency/color/side B) (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-115 | Timing of Starting Tray Feed Control (TTM Tray 3/transparency $/ \mathrm{B} /$ side A ) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-116 | Timing of Starting Tray Feed Control (TTM Tray 3/transparency $/ \mathrm{B} /$ side B ) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-117 | Timing of Starting Tray Feed Control (TTM Tray 3/transparency/color/side A) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-118 | Timing of Starting Tray Feed Control (TTM Tray 3/transparency/color/side B) <br> (Start Feed signal to Regi Clutch On signal) | 10 | -100~100 |  | RW | ditto |
| 742-119 | Tray1 Feed Off Timing (full speed) (From \#1 Feed Out Snr On) | 0 | -10~10 | 10ms | RW | Adjusts the timing of turning Off Feed Motor after \#1 Feed Out SNR ON (full speed) |
| 742-120 | Tray 1 Feed Off Timing (half speed) (From \#1 Feed Out Snr On) | 0 | -20~20 | 10ms | RW | Adjusts the timing of turning Off Feed Motor after \#1 Feed Out SNR ON (half speed) |
| 742-136 | T/A CL ON Timing at Feed Adjustment (full speed) (Start MSI Feed signal) | 0 | -5~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from MSI. (full speed) |
| 742-137 | T/A CL ON Timing at Feed Adjustment (half speed) (Start MSI Feed signal) | 0 | -10~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from MSI. (half speed) |
| 742-138 | T/A CL ON Timing at Feed Adjustment (full speed) (from Start \#1Feed signal) | 0 | -15~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from Tray 1. (full speed) |
| 742-139 | T/A CL ON Timing at Feed Adjustment (half speed) (from Start \#1Feed signal) | 0 | -5~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from Tray 1. (half speed) |
| 742-140 | T/A CL ON Timing at Feed Adjustment (full speed) (from Start 2TM \#2 Feed signal) | 0 | -20~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from 2TM Tray 2. (full speed) |
| 742-141 | T/A CL ON Timing at Feed Adjustment (half speed) (from Start 2TM \#2 Feed signal) | 0 | -20~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from 2TM Tray 2 (half speed) |
| 742-142 | T/A CL ON Timing at Feed Adjustment (full speed) (from Start 2TM \#3 Feed signal) | 0 | -20~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from 2TM Tray 3 (full speed) |
| 742-143 | T/A CL ON Timing at Feed Adjustment (half speed) (from Start 2TM \#3 Feed signal) | 0 | -20~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from 2TM Tray 3 (half speed) |
| 742-144 | T/A CL ON Timing at Feed Adjustment (full speed) (from Start TTM \#2 Feed signal) | 0 | -20~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from TTM Tray 2 (full speed) |
| 742-145 | T/A CL ON Timing at Feed Adjustment (half speed) (from Start TTM \# 2Feed signal) | 0 | -20~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from TTM Tray 2 (half speed) |
| 742-146 | T/A CL ON Timing at Feed Adjustment (full speed) (from Start TTM \#3 Feed signal) | 0 | -20~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from TTM Tray 3 (full speed) |
| 742-147 | T/A CL ON Timing at Feed Adjustment (half speed) (from Start TTM \#3 Feed signal) | 0 | -20~20 | 10ms | RW | Adjusts the timing of connecting Take Away Clutch after feed from TTM Tray 3 (half speed) |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-148 | ```T/A CL OFF Timing at Regi Loop Formation (MSI/full speed/plain paper) RegiSnrOn to TA Clutch Off``` | -6 | -100~100 | 2 ms | RW | Loop Amount Adjustment (MSI/full speed/plain paper) |
| 742-149 | ```T/A CL OFF Timing at Regi Loop Formation (MSI/full speed/heavy 1) RegiSnrOn to TA Clutch Off``` | -13 | -100~100 | 2 ms | RW | Loop Amount Adjustment (MSI/full speed/heavy 1) |
| 742-150 | T/A CL OFF Timing at Regi Loop Formation (MSI/half speed/heavy 1) <br> RegiSnrOn to TA Clutch Off | -25 | -100~100 | 2 ms | RW | Loop Amount Adjustment (MSI/half speed/heavy 1) |
| 742-151 | T/A CL OFF Timing at Regi Loop Formation (MSI/half speed/heavy 2) <br> RegiSnrOn to TA Clutch Off | -25 | -100~100 | 2 ms | RW | Loop Amount Adjustment (MSI/half speed/heavy 2) |
| 742-152 | ```T/A CL OFF Timing at Regi Loop Formation (MSI/full speed/label) RegiSnrOn to TA Clutch Off``` | -19 | -100~100 | 2 ms | RW | Loop Amount Adjustment (MSI/full speed/label) |
| 742-153 | T/A CL OFF Timing at Regi Loop Formation (MSI/half speed/label) <br> RegiSnrOn to TA Clutch Off | -38 | -100~100 | 2 ms | RW | Loop Amount Adjustment (MSI/half speed/label) |
| 742-154 | T/A CL OFF Timing at Regi Loop Formation (MSI/half speed/transparency) <br> RegiSnrOn to TA Clutch Off | -13 | -100~100 | 2 ms | RW | Loop Amount Adjustment (MSI/half speed/transparency) |
| 742-155 | T/A CL OFF Timing at Regi Loop Formation (Trays 1-3/full speed/plain paper) <br> RegiSnrOn to TA Clutch Off | 0 | -100~100 | 2 ms | RW | Loop Amount Adjustment (Trays 1-3/full speed/plain paper) |
| 742-156 | ```T/A CL OFF Timing at Regi Loop Formation (Trays 1-3/full speed/heavy 1) RegiSnrOn to TA Clutch Off``` | 0 | -100~100 | 2 ms | RW | Loop Amount Adjustment (Trays 1-3/full speed/heavy 1) |
| 742-157 | ```T/A CL OFF Timing at Regi Loop Formation (Trays 1-3/ half speed/heavy 1) RegiSnrOn to TA Clutch Off``` | 0 | -100~100 | 2 ms | RW | Loop Amount Adjustment (Trays 1-3/half speed/heavy 1) |
| 742-158 | T/A CL OFF Timing at Regi Loop Formation (Trays 1-3/ half speed/heavy 2) RegiSnrOn to TA Clutch Off | -24 | -100~100 | 2 ms | RW | Loop Amount Adjustment (Trays1-3/half speed/heavy 2) |
| 742-159 | T/A CL OFF Timing at Regi Loop Formation (Trays 1-3/full speed/label) <br> RegiSnrOn to TA Clutch Off | -6 | -100~100 | 2 ms | RW | Loop Amount Adjustment (Trays 1-3/full speed/label) |
| 742-160 | ```T/A CL OFF Timing at Regi Loop Formation (Trays 1-3/ half speed/label) RegiSnrOn to TA Clutch Off``` | -13 | -100~100 | 2 ms | RW | Loop Amount Adjustment (Trays 1-3/half speed/label) |
| 742-161 | ```T/A CL OFF Timing at Regi Loop Formation (Trays 1-3/ half speed/transparency) RegiSnrOn to TA Clutch Off``` | 0 | -100~100 | 2 ms | RW | Loop Amount Adjustment (Trays 1-3/half speed/transparency) |
| 742-162 | T/A CL ON Timing at Regi Projection (Trays 1-3, MSI/full speed/plain paper) <br> (RegiClutchOn signal to TA Clutch On) | 0 | 0~200 | 1 ms | RW | Adjusts the timing of connecting Take Away Clutch after Regi Clutch ON (Trays 1-3, MSI/full speed/plain paper) |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-163 | ```T/A CL ON Timing at Regi Projection (Trays 1-3, MSI/full speed/heavy 1) (RegiClutchOn signal to TA Clutch On)``` | 0 | 0~200 | 1 ms | RW | Adjusts the timing of connecting Take Away Clutch after Regi Clutch ON (Trays 1-3, MSI/full speed/heavy 1) |
| 742-164 | T/A CL ON Timing at Regi Projection (Trays 1-3, MSI/half speed/heavy 1) <br> (RegiClutchOn signal to TA Clutch On) | 0 | 0~200 | 1 ms | RW | Adjusts the timing of connecting Take Away Clutch after Regi Clutch ON (Trays $1-3, \mathrm{MSI} /$ half speed/heavy 1) |
| 742-165 | T/A CL ON Timing at Regi Projection (Trays 1-3, MSI/half speed/heavy 2) <br> (RegiClutchOn signal to TA Clutch On) | 0 | 0~200 | 1 ms | RW | Adjusts the timing of connecting Take Away Clutch after Regi Clutch ON (Trays $1-3, \mathrm{MSI} /$ half speed/heavy 2) |
| 742-166 | ```T/A CL ON Timing at Regi Projection (Trays 1-3, MSI/full speed/label) (RegiClutchOn Signal ~TA Clutch On)``` | 13 | 0~200 | 1 ms | RW | Adjusts the timing of connecting Take Away Clutch after Regi Clutch ON (Trays 1-3, MSI/full speed/label) |
| 742-167 | T/A CL ON Timing at Regi Projection (Trays 1-3, MSI/half speed/label) <br> (RegiClutchOn signal to TA Clutch On) | 25 | 0~200 | 1 ms | RW | Adjusts the timing of connecting Take Away Clutch after Regi Clutch ON (Trays 1-3, MSI/half speed/label) |
| 742-168 | T/A CL ON Timing at Regi Projection (Trays 1-3, MSI/half speed/transparency) <br> (RegiClutchOn signal to TA Clutch On) | 0 | 0~200 | 1 ms | RW | Adjusts the timing of connecting Take Away Clutch after Regi Clutch ON (Trays1-3, MSI/half speed/transparency) |
| 742-169 | T/A CL OFF Timing (full speed/B) (From RegiSnrOff) | 0 | -50~100 | 1 ms | RW | Adjusts the timing of stopping Take Away Clutch after Regi projection (full speed/B) |
| 742-170 | T/A CL OFF Timing (full speed/color) (From RegiSnrOff) | 0 | -50~100 | 1 ms | RW | Adjusts the timing of stopping Take Away Clutch after Regi projection (full speed/color) |
| 742-171 | T/A CL OFF Timing (half speed/B) (From RegiSnrOff) | 0 | -50~100 | 1 ms | RW | Adjusts the timing of stopping Take Away Clutch after Regi projection (half speed/B) |
| 742-172 | T/A CL OFF Timing (half speed/color) (From RegiSnrOff) | 0 | -50~100 | 1 ms | RW | Adjusts the timing of stopping Take Away Clutch after Regi projection (half speed/color) |
| 742-175 | T/A CL OFF Timing at Regi Loop Formation (MSI/half speed/plain paper) <br> RegiSnrOn to TA Clutch Off | -13 | -100~100 | 2 ms | RW | Loop Amount Adjustment (MSI/half speed/plain paper) |
| 742-176 | ```T/A CL OFF Timing at Regi Loop Formation (Trays 1-3/ half speed/plain paper) RegiSnrOn to TA Clutch Off``` | 0 | -100~100 | 2 ms | RW | Loop Amount Adjustment (Trays 1-3/half speed/plain paper) |
| 742-179 | T/A CL ON Timing at Regi Projection (Trays 1-3, MSI/half speed/plain paper) (Regi Clutch On signal to TA Clutch On) | 0 | 0~200 | 1 ms | RW | Adjusts the timing of connecting Take Away Clutch after Regi Clutch ON (Trays $1-3, \mathrm{MSI} /$ half speed/plain paper) |
| 742-181 | [TM] TA Clutch ON Timing (2TM)-in Full Speed mode | 0 | -75~75 | 2 ms | RW | Adjusts time from Feed to the start of TA Clutch ON. |
| 742-182 | [TM] TA Clutch ON Timing (2TM) -half speed/except transparency | 0 | -75~75 |  | RW | ditto |
| 742-183 | [TM] TA Clutch ON Timing (2TM) -half speed/in Transparency mode | 0 | -25~75 |  | RW | ditto |
| 742-184 | [TM] TA Clutch ON Timing (TTM-Tray 2) -in Full Speed mode | 0 | -75~75 |  | RW | ditto |
| 742-185 | [TM] TA Clutch ON Timing (TTM-Tray 2) -half speed/except transparency | 0 | -75~75 |  | RW | ditto |


| Chain-Link | Name | Default | Range | $\begin{aligned} & \text { Step } \\ & \text { (mm) } \end{aligned}$ | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-186 | [TM] TA Clutch ON Timing (TTM-Tray2) -half speed/in Transparency mode | 0 | -75~75 |  | RW | ditto |
| 742-187 | [TM] TA Clutch ON Timing (TTM-Tray 3) -in Full Speed mode | 0 | -75~75 |  | RW | ditto |
| 742-188 | [TM] TA Clutch ON Timing (TTM-Tray3) -half speed/except Transparency | 0 | -75~75 |  | RW | ditto |
| 742-189 | [TM] TA Clutch ON Timing (TTM-Tray3) -half speed/in Transparency mode | 0 | -75~75 |  | RW | ditto |
| 742-190 | [TM] TA Clutch OFF Timing (TM) at Arrival at Regi -in Full Speed mode | 0 | -100~100 | 2 ms | RW | Adjusts time from F/O Snr \#2 On to the start of TA Clutch Off. (Control of post-T/A pushing) |
| 742-191 | [TM] TA Clutch OFF Timing (TM) at Arrival at Regi -in Half Speed mode | 0 | -100~100 |  | RW | ditto |
| 742-192 | [TM] Feed Stop OFF Timing (post-Regi pushing) -in Full Speed mode | 0 | 0~30 | 1ms | RW | Adjusts time from Regi Clutch On (Feed Stop) to the start of TA Clutch On. (Clearance of post-T/A pushing) |
| 742-193 | [TM] Feed Stop OFF Timing (post-Regi pushing) -in Half Speed mode | 0 | 0~30 |  | RW | ditto |
| 742-194 | [TM] Wait TA Clutch OFF Timing(2TM) -in Full Speed mode | 35 | 1~69 | 1 ms | RW | Adjusts time from F/O Snr On to the start of TA Clutch Off. (Control of temporarily stopping T/A) |
| 742-195 | [TM] Wait TA Clutch OFF Timing(2TM) -in Half Speed mode | 85 | 25~145 |  | RW | ditto |
| 742-196 | [TM] Wait TA Clutch OFF Timing(TTM) -in Full Speed mode | 30 | 2~60 |  | RW | ditto |
| 742-197 | [TM] Wait TA Clutch OFF Timing(TTM) -in Half Speed mode | 75 | 15~135 |  | RW | ditto |
| 742-198 | Feed Stop OFF Timing (no preceding paper/2TM Tray 2) -in Full Speed mode | 0 | -100~100 | 1ms | RW | Adjusts time from Tray 2 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-199 | Feed Stop OFF Timing (no preceding paper/2TM Tray 2) -half speed/except transparency/B | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 2 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-200 | Feed Stop OFF Timing (no preceding paper/2TM Tray 2) -half speed/except transparency/color | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 2 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-201 | Feed Stop OFF Timing (no preceding paper/2TM Tray 2) -in Half Speed and Transparency mode | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 2 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) <br> ADJ Unit: $1[\mathrm{~ms} / \mathrm{step}]$ |
| 742-202 | Feed Stop OFF Timing (no preceding paper/2TM Tray 3) -in Full Speed mode | 0 | -100~100 | 1 ms | RW | Adjusts time Tray 3 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) <br> ADJ Unit: $1[\mathrm{~ms} / \mathrm{step}$ ] |
| 742-203 | Feed Stop OFF Timing (no preceding paper/2TM Tray 3) -half speed/except transparency/B | 0 | -100~100 | 1ms | RW | Adjusts time from Tray 3 Feed to the start of TA Clutch ON (Clearance of temporarily stopping T/A) <br> 1[ms/step] adjustment |
| 742-204 | Feed Stop OFF Timing (no preceding paper/2TM Tray 3) -half speed/except transparency/color | 0 | -100~100 | 1ms | RW | Adjusts Tray 3 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) <br> ADJ Unit: 1 [ $\mathrm{ms} / \mathrm{step}$ ] |
| 742-205 | Feed Stop OFF Timing (no preceding paper/2TM Tray 3) -in Half Speed and Transparency mode | 0 | -100~100 | 1ms | RW | Adjusts Tray 3 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |

Table 3 Paper Handling

| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-206 | Feed Stop OFF Timing (no preceding paper/TTM Tray 2) -in Full Speed mode | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 2 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-207 | Feed Stop OFF Timing (no preceding paper/TTM Tray 2) -half speed/except transparency/B | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 2 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-208 | Feed Stop OFF Timing (no preceding paper/TTM Tray 2) -half speed/except transparency/color | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 2 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-209 | Feed Stop OFF Timing (no preceding paper/TTM Tray 2) -in Half Speed and Transparency mode | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 2 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-210 | Feed Stop OFF Timing (no preceding paper/TTM Tray 3) -in Full Speed mode | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 3 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-211 | Feed Stop OFF Timing (no preceding paper/TTM Tray 3) -half speed/except transparency/B | 0 | -100~100 | 1 ms | RW | Starts time from Tray 3 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-212 | Feed Stop OFF Timing (no preceding paper/TTM Tray 3) -half speed/except transparency/color | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 3 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-213 | Feed Stop OFF Timing (no preceding paper/TTM Tray 3) -in Half Speed and Transparency mode | 0 | -100~100 | 1 ms | RW | Adjusts time from Tray 3 Feed to the start of TA Clutch ON. (Clearance of temporarily stopping T/A) |
| 742-231 | Timing of Stopping Registration Operation -full speed | 76 | 0~246 | 1 ms | RW | Adjusts the timing of stopping Regi Clutch after Regi projection. (full speed) |
| 742-232 | Timing of Stopping Registration Operation -half speed | 76 | 0~246 | 2 ms | RW | Adjusts the timing of stopping Regi Clutch after Regi projection (half speed) |
| 742-233 | Size-in-Feed-direction Detection Coefficient T1 | 0 | -20~20 | 2 ms | RW | Adjusts the parameter in the formula for detecting a size in feed direction |
| 742-236 | Paper Inverting Operation <br> Timing of Stopping Forward Rotation (full speed/plain paper) | 60 | 0~200 | 1 ms | RW | Adjusts the timing of stopping the forward rotation to invert the paper after paper turns Off Exit Sensor 1. (plain paper) |
| 742-237 | Paper Inverting Operation <br> Timing of Stopping Forward Rotation (full speed/heavy 1) | 60 | 0~200 | 1 ms | RW | Adjusts the timing of stopping the forward rotation to invert the paper after paper turns Off Exit Sensor 1. (heavy 1) |
| 742-238 | Paper Inverting Operation <br> Timing of Starting Reverse Rotation (L<=216/Exit1) | 100 | 0~200 | 1 ms | RW | Adjusts the timing of starting to invert paper after Regi Clutch On for it. The paper waiting to be inverted is small-sized and will be output from Exit 1. |
| 742-239 | Paper Inverting Operation <br> Timing of Starting Reverse Rotation (L<=216/Exit2, Side Tray) | 100 | 0~200 | 1 ms | RW | Adjusts the timing of starting to invert paper after Regi Clutch On for it. The paper waiting to be inverted is small-sized and will be output from Exit 2/Side Tray. |
| 742-240 | Paper Inverting Operation <br> Timing of Adjusting Regi Loop (plain paper/L>216) | 64 | 0~164 | 1 ms | RW | Adjusts the timing of stopping Exit Motor after Regi Sensor ON, in correcting and controlling Duplex Regi Feed. (plain paper) |
| 742-241 | Paper Inverting Operation <br> Timing of Adjusting Regi Loop (heavy 1/L>216) | 64 | 0~164 | 1 ms | RW | Adjusts the timing of stopping Exit Motor after Regi Sensor ON, in correcting and controlling Duplex Regi Feed. (heavy 1) |
| 742-242 | Paper Inverting Operation <br> Timing of Starting Post-Regi Pushing (plain paper/L>216) | 0 | 0~200 | 1 ms | RW | Adjusts time from Regi Projection to Exit Motor On, in correcting and controlling Duplex Post-Regi-Projection Pushing. (plain paper) |
| 742-243 | Paper Inverting Operation <br> Timing of Starting Post-Regi Pushing (heavy 1/L>216) | 0 | 0~200 | 1 ms | RW | Adjusts time from Regi Projection to Exit Motor On, in correcting and controlling Duplex Post-Regi-Projection Pushing (heavy 1) |
| 742-244 | Timing of Starting Duplex Transporting Operation (full speed) | 30 | 0~60 | 10 ms | RW | Timing of turning On Duplex Motor to pull in paper to invert it (Exit2 Motor CCW On to Duplex Motor On) <br> ADJ Unit: 10 [ $\mathrm{ms} / \mathrm{step}$ ] |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-245 | Timing of Temporarily Stopping Duplex Transporting Operation (color/L<=216mm) | 87 | 0~174 | 1.5 ms | RW | Timing of turning Off Duplex Motor to stop paper at the Wait Station (Duplex Wait Sensor ON to Duplex Motor OFF) |
| 742-246 | Timing of Starting Duplex Feed Operation (Exit1/color/L<=216mm) | 67 | 0~134 | 1.5 ms | RW | Timing of turning On Duplex Motor to restart feeding paper |
| 742-247 | Duplex Regi Loop Adjustment Timing (plain paper) | 43 | 0~110 | 1.5 ms | RW | Loop Amount Adjustment (Dup/plain paper) Time from Regi Snr On to Dup Motor Off |
| 742-248 | Duplex Regi Loop Adjustment Timing (heavy 1) | 43 | 0~110 | 1.5 ms | RW | Loop Amount Adjustment (Dup/heavy 1) Time from Regi Snr On to Dup Motor Off |
| 742-249 | Timing of Starting Duplex Post-Regi Pushing (plain paper) | 0 | 0~134 | 1.5 ms | RW | Adjusts the timing of activating Duplex Motor for Regi projection. (Dup/plain paper/common) |
| 742-250 | Timing of Starting Duplex Post-Regi Pushing (heavy 1) | 0 | 0~134 | 1.5 ms | RW | Adjusts the timing of activating Duplex Motor for Regi projection (Dup/heavy 1, coated 1/B) |
| 742-251 | Timing of Starting Duplex Post-Regi Pushing (L<=216) | 20 | 0~40 | 10.5 ms | RW | Adjusts the timing of stopping Duplex Motor after Regi projection (small size) |
| 742-252 | Timing of Starting Duplex Post-Regi Pushing (L>216) | 20 | 0~40 | 10.5 ms | RW | Adjusts the timing of stopping Duplex Motor after Regi projection (large size) |
| 742-261 | OCT Operation Limit | 0 | 0~1 |  | RW | BAM <br> 0: Operation permitted <br> 1: Operation prohibited |
| 742-262 | Timing of Starting OCT Initializing Operation | 30 | 0~60 | 10 ms | RW | Adjusts the timing of starting to initialize OCT. (From Regi Start to \#2Offset Motor Homing On) |
| 742-263 | Timing of Starting Offset Operation (full speed/L<=216) | 23 | 0~30 | 10 ms | RW | Adjusts the timing of starting Offset Operation. (full speed/L<=216) (From Exit2 Snr Off to Offset Motor On) |
| 742-264 | Timing of Starting Offset Operation (full speed/L>216) | 0 | 0~30 | 10 ms | RW | Adjusts the timing of starting Offset Operation. (full speed/L>216) (From Exit Snr2 Off to Offset Motor On) |
| 742-265 | Timing of Starting Offset Operation (half speed/L<=216) | 30 | 0~40 | 20 ms | RW | Adjusts the timing of starting Offset Operation. (half speed/L<=216) (From Exit2 Snr Off to Offset Motor On) |
| 742-266 | Timing of Starting Offset Operation (half speed/L>216) | 0 | 0~30 | 20 ms | RW | Adjusts the timing of starting Offset Operation. (half speed/L>216) (From Exit Snr2 Off to Offset Motor On) |
| 742-267 | Timing of Starting Return Operation (full speed/L<=216) | 15 | 0~60 | 10 ms | RW | Adjusts the timing of starting Return-to-Offset Operation. (full speed/L<=216) (From Exit2 Snr Off to Offset Motor On) |
| 742-268 | Timing of Starting Return Operation (full speed/L>216) | 15 | 0~60 | 10 ms | RW | Adjusts the timing of starting Return-to-Offset Operation. (full speed/L>216) (From Exit Snr2 Off to Offset Motor On) |
| 742-269 | Timing of Starting Return Operation (half speed/L<=216) | 17 | 0~60 | 20 ms | RW | Adjusts the timing of starting Return-to-Offset Operation. (half speed/L<=216) (From Exit2 Snr Off to Offset Motor On) |
| 742-270 | Timing of Starting Return Operation (half speed/L>216) | 17 | 0~60 | 20 ms | RW | Adjusts the timing of starting Return-to-Offset Operation. (half speed/L>216) (From Exit Snr2 Off to Offset Motor On) |
| 742-271 | Limit on Countermeasure against Condensation | 0 | 0~1 |  | RW | Sets whether or not to rotate \#2 Exit Drive Motor in outputting paper from \#1Exit in Simplex mode. <br> 0 : enabled <br> 1: disabled |
| 742-272 | Timing of Starting Countermeasure Operation against Condensation | 1 | 1~250 | 1ñá | RW | Timing of starting to rotate \#2 Exit Drive Motor; Adjusts the number of a series of sheets for which the countermeasure against condensation is intended, in order to start the control. |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-273 | Timing of Finishing Countermeasure Ope against Condensation (full speed) | 14 | 0~50 | 100 ms | RW | Timing of stopping Exit 2 Motor after Exit Sensor 1Off (full speed) |
| 742-274 | Timing of Finishing Countermeasure Ope against Condensation (half speed) | 27 | 0~50 | 100ms | RW | Timing of stopping Exit 2 Motor after Exit Sensor 1Off (half speed) |
| 742-281 | MSI-Feed Paper Qty | 0 | 0~1500000 |  | R | It is time to replace the periodic replacement part: TA Roll |
| 742-282 | Tray 1-Feed Paper Qty | 0 | 0~1500000 |  | R | It is time to replace the periodic replacement part: TA Roll |
| 742-283 | Tray 2-Feed Paper Qty | 0 | 0~600000 |  | R | It is time to replace periodic replacement parts: Nudger/Feed/Retard Roll |
| 742-284 | Tray 3-Feed Paper Qty | 0 | 0~600000 |  | R | It is time to replace periodic replacement parts: Nudger/Feed/Retard Roll |
| 742-285 | Qty of Tray 1 Lifter Adjustments | 0 | 0~100 |  | R | Counts Tray 1 Lifter adjustments. Every time Lifter is adjusted after it lifts up, 1 is added. (for reference) |
| 742-286 | Tray 1 Lift Up Time | 0 | 0~3000 |  | R | Stores Tray 1 Lift Up time. (for reference) |
| 742-287 | Tray 2 Lift Up Time | 0 | 0~15000 |  | R | Stores Tray 2 Lift Up time. (for reference) |
| 742-288 | Tray 3 Lift Up Time | 0 | 0~15000 |  | R | Stores Tray 3 Lift Up time. (for reference) |
| 742-289 | Count Coefficient for Remaining Paper Qty Detection (Tray 1) <br> (Remaining Qty Correction Time in adjusting Lifter) | 30 | 0~100 | 1 ms | RW | Coefficient for detecting and calculating what quantity of paper remains in Tray 1. (time taken to adjust Lifter) |
| 742-290 | Count Coefficient for Remaining Paper Qty Detection (2TM-Tray 2) (Remaining Qty Correction Time in adjusting Lifter) | 30 | 0~100 | 1 ms | RW | Coefficient for detecting and calculating what quantity of paper remains in 500sheet Tray. (time taken to adjust Lifter) |
| 742-291 | Count Coefficient for Remaining Paper Qty Detection (2TM-Tray 3) (Remaining Qty Correction Time in adjusting Lifter) | 30 | 0~100 | 1 ms | RW | Coefficient for detecting and calculating what quantity of paper remains in 500sheet Tray. (time taken to adjust Lifter) |
| 742-292 | Count Coefficient for Remaining Paper Qty Detection (TTM-Tray 2) (Remaining Qty Correction Time in adjusting Lifter) | 34 | 0~100 | 1 ms | RW | Coefficient for detecting and calculating what quantity of paper remains in TTM Tray 2. (time taken to adjust Lifter) |
| 742-293 | Count Coefficient for Remaining Paper Qty Detection (TTM-Tray 3) (Remaining Qty Correction Time in adjusting Lifter) | 34 | 0~100 | 1 ms | RW | Coefficient for detecting and calculating what quantity of paper remains in TTM Tray 3. (time taken to adjust Lifter) |
| 742-294 | MSI Size Guide minimum position | 963 | 904~1023 |  | RW | Stores min. data in correcting Size Sensor. |
| 742-295 | MSI Size Guide maximum position | 194 | 0~258 |  | RW | Stores max. data in correcting Size Sensor. |
| 742-301 | OHP Sensor PWM default value (at Power On) | 1000 | 0~1000 | 0.1\% | RW | Default to execute auxiliary operation that controls variations in OHP Sensor. (used with Power On) |
| 742-302 | OHP Sensor Correction Operation standard value | 1000 | 0~1000 | 0.1\% | RW | Default to execute auxiliary operation that controls variations in OHP Sensor |
| 742-303 | OHP Sensor target value | 155 | 60~330 | 1 | RW | Adjusts threshold to correct OHP PWM output value in OHP correction operation. |
| 742-304 | Sampling Qty (in OHP correction operation) | 2 | 1~5 | 2 | RW | Adjusts how many samples of OHP Sensor Value to take in OHP correction operation. |
| 742-305 | Sampling Qty (detection of paper type) | 10 | 1~20 | 1 | RW | Adjusts how many samples of OHP Sensor Value to take in detecting paper type. |
| 742-306 | Delay in sampling (in OHP correction operation) | 3 | 1~10 | 1 ms | RW | Adjusts how long to delay sampling OHP Sensor value after PWM output in OHP correction operation. |


| Chain-Link | Name | Default | Range | Step (mm) | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 742-307 | OHP Sensor PWM Step | 1 | 1~30 | 0.1\% | RW | Adjusts in steps of what amount OHP Sensor PWM Output should be decreased. |
| 742-308 | Timing of Starting Paper Type Detection (full speed) | 95 | 0~255 | 1 ms | RW | Timing of starting paper type detection after Regi Clutch ON (full speed) |
| 742-309 | Timing of Starting Paper Type Detection (half speed) | 95 | 0~255 | 2 ms | RW | Timing of starting paper type detection after Regi Clutch ON (half speed) |
| 742-310 | Threshold for Judging Paper Type | 620 | 0~1023 | 1 | RW | Adjusts threshold used to judge paper to be transparent in paper type detection. |
| 742-311 | OHP Sensor Fail Judgment Value | 125 | 0~200 | 0.5\% | RW | Adjusts, in OHP correction operation, value used to judge from OHP PWM output that OHP Sensor failed. |
| 742-312 | Timing of Detecting OHP Sensor Fail | 40 | 0~90 | 10ms | RW | Adjusts the timing of trying to detect OHP Sensor Fail. |
| 742-314 | OHP Sensor Standard Value Adjustment Range | 20 | 1~250 | 0.1\% | RW | Value used to adjust standard value in OHP correction operation |
| 742-319 | No Paper Run \& Jam Bypass | 0 | 0~15 |  | RW | 0: Normal mode <br> 1: Jam Bypass <br> 2: No Paper Run <br> 3: Check IBT |
| 742-320 | Selecting where to output Test Print | 0 | 0~4 |  | RW | Switch where to output Test Print 0: Face Down Tray \#1 / Finisher Stacker 1: Face Down Tray \#2 2: Face Up Tray |
| 742-321 | Selecting whether/how to offset-output Test Print | 0 | 0~2 |  | RW | Offset selection <br> 0 : No Offset <br> 1: Front Offset <br> 2: Rear Offset <br> Applies only when Output Tray is Face Down Tray \#2 |
| 742-322 | Component Control Feed /Lift Up Motor Speed (all the trays) | 17 | 0~17 |  | RW | Specifies the speed of Feed/Lift Up Motor in Component Control. |
| 742-323 | Pre Feed SNR ON Jam Timer (all the trays) | 0 | -20~20 | 10 ms | RW | Jam Timer Value Adjustment |
| 742-324 | Feed Out SNR ON Jam Timer (all the trays) | 0 | -30~30 | 10 ms | RW | Jam Timer Value Adjustment |

Chain 744-xxx FUSER

| Table 4 Fuser |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Chain-Link | Name | Default | Range | Step | Read/ <br> Write | Description |  |
| $744-001$ | Control Temperature in Low Power Mode | 140 | $0 \sim 200$ | 1 deg C | RW | Target temperature of NCS-Center in Low Power Mode |  |
| $744-004$ | Failure Detection Flag | 0 | $0 \sim 3$ |  | RW | 0: Normal <br> 1: Abnormal high temp of NCS-Center detected <br> 2: Abnormal high temp of STS-Front detected <br> 3: Abnormal temp of NCS/STS |  |
| $744-005$ | Abnormal-Amplified-Difference Detection Flag | 0 | $0 \sim 1$ |  | RW | 0: Normal <br> 1: Abnormal amplified difference detected |  |
| $744-008$ | Ready Temperature 1 | 150 | $100 \sim 200$ | 1 deg C | RW |  |  |
| $744-009$ | Ready Temperature 2 | 165 | $100 \sim 200$ | 1 deg C | RW |  |  |
| $744-010$ | Standby Temperature | 175 | $100 \sim 200$ | 1 deg C | RW |  |  |


| Chain-Link | Name | Default | Range | Step | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 744-111 | B/W Plain Paper SEF Setup Temperature | 5 | 0~5 |  | RW | Control Table No. $0: 1-1$ $1: 1-2$ $2: 1-3$ $3: 2-1$ $4: 2-2$ $5: 2-3$ |
| 744-112 | B/W Heavy 1 SEF Setup Temperature | 1 | 0~2 |  | RW | Control Table No. <br> 0: 3-1 heavy 1 (setup temp-low) <br> 1: 3-2 heavy 1 (standard) <br> 2: 3-3 heavy 1 (setup temp-high) |
| 744-113 | B/W Heavy 2 SEF Setup Temperature | 2 | 0~2 |  | RW | Control Table No. $0: 4-1$ $1: 4-2$ $2: 4-3$ |
| 744-114 | F/C Plain Paper SEF Setup Temperature | 5 | 0~5 |  | RW | Control Table No. $0: 6-1$ $1: 6-2$ $2: 6-3$ $3: 7-1$ $4: 7-2$ $5: 7-3$ |
| 744-115 | F/C Heavy 1 SEF Setup Temperature | 1 | 0~2 |  | RW | Control Table No. o: 8-1 heavy 1 (setup temp-low) 1: 8-2 heavy 1 (standard) 2: 8-3 heavy 1 (setup temp-high) |
| 744-116 | F/C Heavy 2 SEF Setup Temperature | 2 | 0~2 |  | RW | Control Table No. 0:9-1, 1:9-2, 2:9-3 |
| 744-125 | Environment Temp Correction Coefficient | 5 | 0~5 |  | RW | Max. correction temp based on Environment Sensor-detected temp <br> 0 : No correction <br> 1: 2 degrees C <br> 2: 4 degrees C <br> 3: 6 degrees C <br> 4: 8 degrees C <br> 5: 10 degrees $C$ |
| 744-127 | Environment Correction Operating Temp | 35 | 20~50 | 1 deg C | RW | Reads Environment Sensor temp if NCS-Center temp equals or is lower than NVM value. |
| 744-139 | Temp Shift Time at Power On | 15 | 0~30 | 1 min | RW | Time taken to increase 5 degrees C at Power On |
| 744-140 | Individual Action mode for Plain Paper BW Mode Poor Fusing | 0 | 0~1 |  | RW | 0: Individual action OFF <br> 1: Individual action ON |
| 744-141 | Individual Action mode for Poor Fusing: Shift Temp | 2 | 0~10 |  | RW | Shift temp in relation to Run temp |
| 744-181 | Condensation Prevention Mode | 0 | 0~15 | 1 min | RW | how long to wait since the attainment of Ready Temp in Condensation Prevention mode |
| 744-196 | Fine Adjustment of Fuser Mot Speed: plain paper | 10292 | 9770~11172 |  | RW | 158mm/s (-1.2\%) |
| 744-197 | Fine Adjustment of Fuser Mot Speed: heavy 1 B/W | 10292 | 9770~11172 |  | RW | 158mm/s (-1.2\%) |
| 744-198 | Fine Adjustment of Fuser Mot Speed: heavy 1 F/C | 20480 | 19540~22344 |  | RW | 79mm/s (-0.7\%) |


| Chain-Link | Name | Default | Range | Step | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 744-199 | Fine Adjustment of Fuser Mot Speed: heavy 2 | 20376 | 19540~22344 |  | RW | 79mm/s (-0.2\%) |
| 744-200 | Fuser Mot Off Time | 200 | 0~255 | 10 msec | RW | Detects Exit SNR OFF. |
| 744-201 | Fuser Mot Off Time half speed | 82 | 0~255 | 10msec | RW | Detects Exit SNR OFF. |
| 744-266 | Fine Adjustment of Fuser Mot Speed coated paper 1 B/W | 10235 | 9770~11172 |  | RW | 158mm/s(-0.7\%) |
| 744-267 | Fine Adjustment of Fuser Mot Speed coated paper 1 F/C | 20440 | 19540~22344 |  | RW | 79mm/s(-0.5\%) |

## Chain 746-xxx Chain 747-xxx Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-001 | Environment control execution switch | 1 | 0~1 | Environment control execution switch |
| 746-002 | Compulsory designated environment NO | 5 | 0~9 | Compulsory designated environment NO |
| 746-003 | The relative temperature threshold value to specify environment NO. \#0 | 22 | 0~100 | The relative temperature threshold value to specify environment NO. \#0 |
| 746-004 | absolute humidity AH threshold value to specify environment NO. \#0 | 3 | 0~20 | absolute humidity AH threshold value to specify environment NO. \#0 |
| 746-005 | Storage of calculated value of absolute humidity | 10 | 0~255 | Stores a calculated value of absolute humidity. |
| 746-006 | Storage of selected Environment No. | 5 | 0~9 | Stores a selected Environment No. |
| 746-007 | 1st BTR On Timing | 60 | 0~200 | 1st BTR On Timing |
| 746-008 | 1st BTR Output changeover Timing ( $\mathrm{Y}->\mathrm{M}->\mathrm{C}$ ) | 45 | 0~200 | 1st BTR Output changeover Timing ( $\mathrm{Y}->\mathrm{M}->\mathrm{C}$ ) |
| 746-009 | 1st BTR Output changeover Timing (full->half) | 0 | 0~50 | 1st BTR Output changeover Timing (full->half) |
| 746-010 | 1st BTR Off Timing (full) | 56 | 0~200 | 1st BTR Off Timing (full Speed) |
| 746-011 | 1st BTR Off Timing (half) | 464 | 300~550 | 1st BTR Off Timing (halfSpeed) |
| 746-012 | The amount of a film compensation electric current | 2 | 0~20 | The amount of a film compensation electric current |
| 746-013 | A film decreases, compensation electric current calculation result storage | 0 | 0~255 | A film decreases, compensation electric current calculation result storage |
| 746-014 | 1st BTR Mode environment revise (BW_Side1) | 100 | 0~200 | 1st BTR Mode environment revise (BW_Side1) |
| 746-015 | 1st BTR Mode environment revise (BW_Side2) | 100 | 0~200 | 1st BTR Mode environment revise (BW_Side2) |
| 746-016 | 1st BTR Mode environment revise (FC_Side1) | 100 | 0~200 | 1st BTR Mode environment revise (FC_Side1) |
| 746-017 | 1st BTR Mode environment revise (FC_Side2) | 100 | 0~200 | 1st BTR Mode environment revise (FC_Side2) |
| 746-018 | 1st BTR Halfspeed time output compensation coefficient | 50 | 0~200 | 1st BTR Halfspeed time output compensation coefficient |
| 746-020 | 1st BTR Environment compensation coefficient NotUsually (environment NO.1-3_K) | 100 | 0~200 | 1st BTR Environment compensation coefficient NotUsually (environment NO.1-3_K) |
| 746-021 | 1st BTR Environment compensation coefficient NotUsually (environment NO.4-6_K) | 100 | 0~200 | 1st BTR Environment compensation coefficient NotUsually (environment NO.4-6 K) |
| 746-022 | 1st BTR Environment compensation coefficient NotUsually (environment NO.7_K) | 100 | 0~200 | 1st BTR Environment compensation coefficient NotUsually (environment NO.7_K) |
| 746-023 | 1st BTR Environment compensation coefficient NotUsually (environment NO.8-9_K) | 100 | 0~200 | 1st BTR Environment compensation coefficient NotUsually (environment NO.8-9_K) |
| 746-024 | 1st BTR Environment compensation coefficient NotUsually (environment NO.O_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient NotUsually (environment NO.O_YMC) |


| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-025 | 1st BTR Environment compensation coefficient NotUsually (environment NO.1-3_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient NotUsually (environment NO.1-3_YMC) |
| 746-026 | 1st BTR Environment compensation coefficient NotUsually (environment NO.4-6_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient NotUsually (environment NO.4-6_YMC) |
| 746-027 | 1st BTR Environment compensation coefficient NotUsually (environment NO.7_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient NotUsually (environment NO.7_YMC) |
| 746-028 | 1st BTR Environment compensation coefficient NotUsually (environment NO.8-9_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient NotUsually (environment NO.8-9_YMC) |
| 746-029 | 1st BTR Environment compensation coefficient (Full_environment NO.O_K_Side1) | 150 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.O_K_Side1) |
| 746-30 | 1st BTR Environment compensation coefficient (Full_environment NO.1-3_K_Side1) | 120 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.1-3_K_Side1) |
| 746-031 | 1st BTR Environment compensation coefficient (Full_environment NO.4-6_K_Side1) | 110 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.4-6_K_Side1) |
| 746-032 | 1st BTR Environment compensation coefficient (Full_environment NO.7_K_Side1) | 120 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.7_K_Side1) |
| 746-033 | 1st BTR Environment compensation coefficient (Full_environment NO.8-9_K_Side1) | 150 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.8-9_K_Side1) |
| 746-034 | 1st BTR Environment compensation coefficient (Full_environment NO.O_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.O_YMC) |
| 746-035 | 1st BTR Environment compensation coefficient (Full_environment NO.1-3_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.1-3_YMC) |
| 746-036 | 1st BTR Environment compensation coefficient (Full_environment NO.4-6_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.4-6_YMC) |
| 746-037 | 1st BTR Environment compensation coefficient (Full_environment NO.7_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.7_YMC) |
| 746-038 | 1st BTR Environment compensation coefficient (Full_environment NO.8-9_YMC) | 100 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.8-9_YMC) |
| 746-039 | 1st BTR Environment compensation coefficient (Full_environment NO.0_K_Side2) | 160 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.0_K_Side2) |
| 746-040 | 1st BTR Environment compensation coefficient (Full_environment NO.1-3_K_Side2) | 110 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.1-3_K_Side2) |
| 746-041 | 1st BTR Environment compensation coefficient (Full_environment NO.4-6_K_Side2) | 120 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.4-6_K_Side2) |
| 746-042 | 1st BTR Environment compensation coefficient (Full_environment NO.7_K_Side2) | 130 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.7_K_Side2) |
| 746-043 | 1st BTR Environment compensation coefficient (Full_environment NO.8-9_K_Side2) | 160 | 0~200 | 1st BTR Environment compensation coefficient (Full_environment NO.8-9_K_Side2) |
| 746-044 | 1st BTR Environment compensation coefficient (Half_environment NO.0_K_Side1) | 150 | 0~200 | 1st BTR Environment compensation coefficient (Half_environment NO.0_K_Side1) |
| 746-045 | 1st BTR Environment compensation coefficient (Half_environment NO.1-3_K_Side1) | 120 | 0~200 | 1st BTR Environment compensation coefficient (Half_environment NO.1-3_K_Side1) |
| 746-046 | 1st BTR Environment compensation coefficient (Half_environment NO.4-6_K_Side1) | 110 | 0~200 | 1st BTR Environment compensation coefficient (Half_environment NO.4-6_K_Side1) |

Table 5 Xfer
\(\left.\left.$$
\begin{array}{|l|l|l|l|l|}\hline \text { Chain-Link } & \text { Name } & \text { Default } & \text { Range } & \text { Description } \\
\hline 746-047 & \begin{array}{l}\text { 1st BTR Environment compensation coefficient } \\
\text { (Half_environment NO.__K_Side1) }\end{array} & 120 & 0 \sim 200 & \begin{array}{l}\text { 1st BTR Environment compensation coefficient } \\
\text { (Half_environment NO.7_K_Side1) }\end{array} \\
\hline 746-048 & \begin{array}{l}\text { 1st BTR Environment compensation coefficient } \\
\text { (Half_environment NO.8-9_K_Side1) }\end{array} & 150 & 0 \sim 200 & \begin{array}{l}\text { 1st BTR Environment compensation coefficient } \\
\text { (Half_environment NO.8-9_K_Side1) }\end{array} \\
\hline 746-049 & \begin{array}{l}\text { 1st BTR Environment compensation coefficient } \\
\text { (Half_environment NO.0_YMC) }\end{array} & 100 & 0 \sim 200 \\
\text { (Half_environment NO.0_YMC) }\end{array}
$$\right] \begin{array}{l}1st BTR Environment compensation coefficient <br>

(Half_environment NO.1-3_YMC)\end{array}\right\}\)| 1st BTR Environment compensation coefficient |
| :--- |
| (Half_environment NO.4-6_YMC) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-089 | 2nd BTR output is changed only to the tip.(half speed heavy paper FC) | 150 | 0~500 | 2nd BTR output is changed only to the tip.(half speed heavy paper FC) |
| 746-090 | 2nd BTR output is changed only to the tip.(half speed film paper BW) | 150 | 0~500 | 2nd BTR output is changed only to the tip.(half speed film paper BW) |
| 746-091 | 2nd BTR output is changed only to the tip.(half speed film paper FC) | 150 | 0~500 | 2nd BTR output is changed only to the tip.(half speed film paper FC) |
| 746-092 | 2nd BTR output is changed only to the tip.(half speed coat paper BW) | 150 | 0~500 | 2nd BTR output is changed only to the tip.(half speed coat paper BW) |
| 746-093 | 2nd BTR output is changed only to the tip.(half speed coat paper FC) | 150 | 0~500 | 2nd BTR output is changed only to the tip.(half speed coat paper FC) |
| 746-095 | 2nd BTR output is changed only to the tip.(half speed usually paper FC) | 150 | 0~500 | 2nd BTR output is changed only to the tip.(half speed usually paper FC) |
| 746-096 | 2nd BTR output is changed only to the tip.(full speed usually paper BW) | 0 | 0~500 | 2nd BTR output is changed only to the tip.(full speed usually paper BW) |
| 746-097 | 2nd BTR output is changed only to the tip.(full speed usually paper FC) | 0 | 0~500 | 2nd BTR output is changed only to the tip.(full speed usually paper FC) |
| 746-098 | 2nd BTR output is changed only to the tip.(full speed heavy paper BW) | 0 | 0~500 | 2nd BTR output is changed only to the tip.(full speed heavy paper BW) |
| 746-099 | 2nd BTR output is changed only to the tip.(full speed coat paper BW) | 0 | 0~500 | 2nd BTR output is changed only to the tip.(full speed coat paper BW) |
| 746-100 | 2nd BTR Mode environment revise (BW_Side1) | 100 | 0~200 | 2nd BTR Mode environment revise (BW_Side1) |
| 746-101 | 2nd BTR Mode environment revise (BW_Side2) | 100 | 0~200 | 2nd BTR Mode environment revise (BW_Side2) |
| 746-102 | 2nd BTR Mode environment revise (FC_Side1) | 100 | 0~200 | 2nd BTR Mode environment revise (FC_Side1) |
| 746-103 | 2nd BTR Mode environment revise (FC_Side2) | 100 | 0~200 | 2nd BTR Mode environment revise (FC_Side2) |
| 746-112 | 2nd BTR Final output storage (Side1) | 0 | 0~600 | 2nd BTR Final output storage (Side1) |
| 746-113 | 2nd BTR Final output storage (Side2) | 0 | 0~600 | 2nd BTR Final output storage (Side2) |
| 746-117 | Chosen 2nd BTR CLN (-) output storage | 0 | 0~600 | Chosen 2nd BTR CLN (-) output storage |
| 746-118 | 2nd BTR CLN (-) output (environment NO.0) | 60 | 0~600 | 2nd BTR CLN (-) output (environment NO.0) |
| 746-119 | 2nd BTR CLN (-) output (environment NO.1-3) | 50 | 0~600 | 2nd BTR CLN (-) output (environment NO.1-3) |
| 746-120 | 2nd BTR CLN (-) output (environment NO.4-6) | 60 | 0~600 | 2nd BTR CLN (-) output (environment NO.4-6) |
| 746-121 | 2nd BTR CLN (-) output (environment NO.7) | 60 | 0~600 | 2nd BTR CLN (-) output (environment NO.7) |
| 746-122 | 2nd BTR CLN (-) output (environment NO.8-9) | 60 | 0~600 | 2nd BTR CLN (-) output (environment NO.8-9) |
| 746-123 | DTS reference voltage (full speed) | 30 | 0~30 | DTS reference voltage (full speed) |
| 746-124 | DTS reference voltage (halfspeed) | 30 | 0~30 | DTS reference voltage (halfspeed) |
| 746-125 | DTS Mode environment revise (BW_Side1) | 100 | 0~100 | DTS Mode environment revise (BW_Side1) |
| 746-126 | DTS Mode environment revise (BW_Side2) | 0 | 0~100 | DTS Mode environment revise (BW_Side2) |
| 746-127 | DTS Mode environment revise (FC_Side1) | 100 | 0~100 | DTS Mode environment revise (FC_Side1) |
| 746-128 | DTS Mode environment revise (FC_Side2) | 0 | 0~100 | DTS Mode environment revise (FC_Side2) |
| 746-129 | DTS Environment compensation coefficient (environment NO.0) | 100 | 0~100 | DTS Environment compensation coefficient (environment NO.0) |
| 746-130 | DTS Environment compensation coefficient (environment NO.1-3) | 100 | 0~100 | DTS Environment compensation coefficient (environment NO.1-3) |
| 746-131 | DTS Environment compensation coefficient (environment NO.4-6) | 100 | 0~100 | DTS Environment compensation coefficient (environment NO.4-6) |
| 746-132 | DTS Environment compensation coefficient (environment NO.7) | 100 | 0~100 | DTS Environment compensation coefficient (environment NO.7) |
| 746-133 | DTS Environment compensation coefficient (environment NO.8-9) | 100 | 0~100 | DTS Environment compensation coefficient (environment NO.8-9) |
| 746-134 | DTS The extreme last train pressure storage (Side1) | 0 | 0~30 | DTS The extreme last train pressure storage (Side1) |
| 746-135 | DTS The extreme last train pressure storage (Side2) | 0 | 0~30 | DTS The extreme last train pressure storage (Side2) |
| 746-136 | Chosen DTS reference voltage storage (Side1) | 0 | 0~30 | Chosen DTS reference voltage storage (Side1) |
| 746-137 | Chosen DTS reference voltage storage (Side2) | 0 | 0~30 | Chosen DTS reference voltage storage (Side2) |
| 746-139 | 1st BTR Resistance detection V monitor result storage (Ave) | 0 | 0~6500 | 1st BTR Resistance detection V monitor result storage (Ave) |
| 746-140 | 1st BTR Resistance detection V monitor result storage (data1) | 0 | 0~6500 | 1st BTR Resistance detection V monitor result storage (data1) |
| 746-141 | 1st BTR Resistance detection V monitor result storage (data2) | 0 | 0~6500 | 1st BTR Resistance detection V monitor result storage (data2) |
| 746-142 | 1st BTR Resistance detection V monitor result storage (data3) | 0 | 0~6500 | 1st BTR Resistance detection V monitor result storage (data3) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-143 | 1st BTR Resistance detection V monitor result storage (data4) | 0 | 0~6500 | 1st BTR Resistance detection V monitor result storage (data4) |
| 746-144 | 1st BTR Resistance detection V monitor result storage (data5) | 0 | 0~6500 | 1st BTR Resistance detection V monitor result storage (data5) |
| 746-145 | 1st BTR Resistance detection V monitor result storage (data6) | 0 | 0~6500 | 1st BTR Resistance detection V monitor result storage (data6) |
| 746-147 | IBT CLN Auger Clutch On Timing (full speed) | 0 | 0~255 | IBT CLN Auger Clutch On Timing (full speed) |
| 746-148 | IBT CLN Auger Clutch On Timing (half speed) | 0 | 0~255 | IBT CLN Auger Clutch On Timing (half speed) |
| 746-149 | IBT CLN Auger Clutch Off Timing (BW_ full speed) | 0 | 0~255 | IBT CLN Auger Clutch Off Timing (BW_ full speed) |
| 746-150 | IBT CLN Auger Clutch Off Timing (FC_ full speed) | 0 | 0~255 | IBT CLN Auger Clutch Off Timing (FC_ full speed) |
| 746-151 | IBT CLN Auger Clutch Off Timing (BW_ half speed) | 0 | 0~255 | IBT CLN Auger Clutch Off Timing (BW_ halfspeed) |
| 746-152 | IBT CLN Auger Clutch Off Timing (FC_ half speed) | 0 | 0~255 | IBT CLN Auger Clutch Off Timing (FC_ halfspeed) |
| 746-153 | toner splash countermeasure (full speed) | 0 | 0~3 | toner splash countermeasure (full speed) |
| 746-154 | toner splash countermeasure (half speed) | 0 | 0~3 | toner splash countermeasure (halfspeed) |
| 746-155 | Flag is Over System Register Max Value | 0 | 0~1 | Flag is Over System Register Max Value $0: R>R n$ $1: R>R n$ |
| 746-156 | The concentration of the transcription Initial toner band | 60 | 0~100 | The concentration of the transcription Initial toner band |
| 746-157 | The concentration of the transcription toner band | 60 | 0~100 | The concentration of the transcription toner band |
| 746-158 | toner band execution environment NO. threshold value | 0 | 0~9 | toner band execution environment NO. threshold value |
| 746-162 | Transcription belt reverse execution switch (Job End) | 1 | 0~1 | Transcription belt reverse execution switch (Job End) |
| 746-163 | Transcription belt reverse environment NO. threshold value (Common) | 5 | 0~9 | Transcription belt reverse environment NO. threshold value (Common) |
| 746-164 | Transcription belt reverse quantity (at the time of usual) | 50 | 0~100 | Transcription belt reverse quantity (at the time of usual) |
| 746-167 | Resistance detection execution switch | 1 | 0~1 | Resistance detection execution switch |
| 746-168 | 1st BTR Resistance detection standard electric current | 200 | 0~800 | 1st BTR Resistance detection standard electric current |
| 746-169 | 1st BTR fixed standard output I alpha Y | 200 | 0~800 | 1st BTR fixed standard output I alpha Y |
| 746-170 | 1st BTR fixed standard output I alpha M | 200 | 0~800 | 1st BTR fixed standard output I alpha M |
| 746-171 | 1st BTR fixed standard output I alpha C | 200 | 0~800 | 1st BTR fixed standard output I alpha C |
| 746-172 | 1st BTR fixed standard output I alpha K | 350 | 0~800 | 1st BTR fixed standard output I alpha K |
| 746-203 | 2nd BTR Resistance detection appropriate voltage | 100 | 0~600 | 2nd BTR Resistance detection appropriate voltage |
| 746-204 | The second transcription department composition resistance calculation result storage | 0 | 0~10000 | The second transcription department composition resistance calculation result storage |
| 746-205 | The chosen the second transcription coefficient: alpha storage | 0 | 0~6000 | The chosen the second transcription coefficient: alpha storage |
| 746-206 | The chosen the second transcription coefficient: beta storage | 0 | 0~6000 | The chosen the second transcription coefficient: beta storage |
| 746-207 | 2nd BTR resistance detection I monitor result storage (average) | 0 | 0~6000 | 2nd BTR resistance detection I monitor result storage (average) |
| 746-260 | 1st BTR Output (at the time of Diag) | 200 | 0~800 | 1st BTR Output (at the time of Diag) |
| 746-261 | 2nd BTR Output (at the time of Diag) | 100 | 0~600 | 2nd BTR Output (at the time of Diag) |
| 746-262 | DTS Output (at the time of Diag) | 30 | 0~30 | DTS Output (at the time of Diag) |
| 746-263 | HFSI Life (IBT Unit_Life) | 480000 | 0~1000000 | HFSI Life (IBT Unit_Life) |
| 746-264 | HFSI Life (2nd BTR Unit_Life) | 150000 | 0~1000000 | HFSI Life (2nd BTR Unit_Life) |
| 746-265 | HFSI Life (IBT CLN Unit_Life) | 100000 | 0~1000000 | HFSI Life (IBT CLN Unit_Life) |
| 746-266 | Near End Warning (IBT Unit) | 478500 | 0~1000000 | Near End Warning (IBT Unit) |
| 746-267 | Near End Warning (2nd BTR Unit) | 148500 | 0~1000000 | Near End Warning (2nd BTR Unit) |
| 746-268 | Near End Warning (IBT CLN Unit) | 98500 | 0~1000000 | Near End Warning (IBT CLN Unit) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-269 | HFSI Counter storage (IBT Unit) | 0 | 0~1000000 | HFSI Counter storage (IBT Unit) |
| 746-270 | HFSI counter storage (2nd BTR Unit) | 0 | 0~1000000 | HFSI counter storage (2nd BTR Unit) |
| 746-271 | HFSI counter storage (IBT CLN Unit) | 0 | 0~1000000 | HFSI counter storage (IBT CLN Unit) |
| 746-272 | 2nd BTR Paper kind compensation coefficient (usually, paper_full) | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.0_S1) |
| 746-273 | 2nd BTR Paper kind compensation coefficient (usually, paper_Half) | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.1_S1) |
| 746-274 | 2nd BTR Paper kind compensation coefficient usually | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.2_S1) |
| 746-275 | 2nd BTR Paper kind compensation coefficient usually | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.3_S1) |
| 746-276 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.4_S1) |
| 746-277 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.5_S1) |
| 746-278 | 2nd BTR Paper kind compensation coefficient usually | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.6_S1) |
| 746-279 | 2nd BTR Paper kind compensation coefficient usually | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.7_S1) |
| 746-280 | 2nd BTR Paper kind compensation coefficient usually | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.8_S1) |
| 746-281 | 2nd BTR Paper kind compensation coefficient usually | 124 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_BW_Full_Env.9_S1) |
| 746-282 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.0_S1) |
| 746-283 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.1_S1) |
| 746-284 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.2_S1) |
| 746-285 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.3_S1) |
| 746-286 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.4_S1) |
| 746-287 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.5_S1) |
| 746-288 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.6_S1) |
| 746-289 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.7_S1) |
| 746-290 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.8_S1) |
| 746-291 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_BW_Full_Env.9_S1) |
| 746-292 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.0_S1) |
| 746-293 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.1_S1) |
| 746-294 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.2_S1) |
| 746-295 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.3_S1) |
| 746-296 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.4_S1) |
| 746-297 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.5_S1) |
| 746-298 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.6_S1) |
| 746-299 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.7_S1) |
| 746-300 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.8_S1) |
| 746-301 | 2nd BTR Paper kind compensation coefficient usually | 112 | 0~255 | 2nd BTR Paper kind compensation coefficient(C_BW_Full_Env.9_S1) |
| 746-302 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.0_S1) |
| 746-303 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.1_S1) |
| 746-304 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.2_S1) |
| 746-305 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.3_S1) |
| 746-306 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.4_S1) |
| 746-307 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.5_S1) |
| 746-308 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.6_S1) |
| 746-309 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.7_S1) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-310 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.8_S1) |
| 746-311 | 2nd BTR Paper kind compensation coefficient usually | 112 | 0~255 | 2nd BTR Paper kind compensation coefficient(D_BW_Full_Env.9_S1) |
| 746-312 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.0_S1) |
| 746-313 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.1_S1) |
| 746-314 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.2_S1) |
| 746-315 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.3_S1) |
| 746-316 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.4_S1) |
| 746-317 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.5_S1) |
| 746-318 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.6_S1) |
| 746-319 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.7_S1) |
| 746-320 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.8_S1) |
| 746-321 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient(E_BW_Full_Env.9_S1) |
| 746-322 | 2nd BTR Paper kind compensation coefficient usually | 113 | 0~255 | 2nd BTR Paper kind compensation coefficient(F_BW_Full_Env.0_S1) |
| 746-323 | 2nd BTR Paper kind compensation coefficient usually | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient(F_BW_Full_Env.1_S1) |
| 746-324 | 2nd BTR Paper kind compensation coefficient usually | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient(F_BW_Full_Env.2_S1) |
| 746-325 | 2nd BTR Paper kind compensation coefficient usually | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient(F_BW_Full_Env.3_S1) |
| 746-326 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficientF_BW_Full_Env.4_S1) |
| 746-327 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(F_BW_Full_Env.5_S1) |
| 746-328 | 2nd BTR Paper kind compensation coefficient usually | 113 | 0~255 | 2nd BTR Paper kind compensation coefficient(F_BW_Full_Env.6_S1) |
| 746-329 | 2nd BTR Paper kind compensation coefficient usually | 113 | 0~255 | 2nd BTR Paper kind compensation coefficientF_BW_Full_Env.7_S1) |
| 746-330 | 2nd BTR Paper kind compensation coefficient usually | 113 | 0~255 | 2nd BTR Paper kind compensation coefficient(F_BW_Full_Env.8_S1) |
| 746-331 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient(F_BW_Full_Env.9_S1) |
| 746-332 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient(G_BW_Full_Env.0_S1) |
| 746-333 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient(G_BW_Full_Env.1_S1) |
| 746-334 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient(G_BW_Full_Env.2_S1) |
| 746-335 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficientG_BW_Full_Env.3_S1) |
| 746-336 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient(G_BW_Full_Env.4_S1) |
| 746-337 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient(G_BW_Full_Env.5_S1) |
| 746-338 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient(G_BW_Full_Env.6_S1) |
| 746-339 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient(G_BW_Full_Env.7_S1) |
| 746-340 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient(G_BW_Full_Env.8_S1) |
| 746-341 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient(G_BW_Full_Env.9_S1) |
| 746-342 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.0_S1) |
| 746-343 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.1_S1) |
| 746-344 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.2_S1) |
| 746-345 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.3_S1) |
| 746-346 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.4_S1) |
| 746-347 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.5_S1) |
| 746-348 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.6_S1) |
| 746-349 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.7_S1) |
| 746-350 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.8_S1) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-351 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient(S_BW_Full_Env.9_S1) |
| 746-352 | 2nd BTR Paper kind compensation coefficient (usually, paper_full) | 141 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.0_S1) |
| 746-353 | 2nd BTR Paper kind compensation coefficient (usually, paper_Half) | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.1_S1) |
| 746-354 | 2nd BTR Paper kind compensation coefficient usually | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.2_S1) |
| 746-355 | 2nd BTR Paper kind compensation coefficient usually | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.3_S1) |
| 746-356 | 2nd BTR Paper kind compensation coefficient usually | 101 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.4_S1) |
| 746-357 | 2nd BTR Paper kind compensation coefficient usually | 101 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.5_S1) |
| 746-358 | 2nd BTR Paper kind compensation coefficient usually | 141 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.6_S1) |
| 746-359 | 2nd BTR Paper kind compensation coefficient usually | 141 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.7_S1) |
| 746-360 | 2nd BTR Paper kind compensation coefficient usually | 141 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.8_S1) |
| 746-361 | 2nd BTR Paper kind compensation coefficient usually | 142 | 0~255 | 2nd BTR Paper kind compensation coefficient(A_FC_Full_Env.9_S1) |
| 746-362 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_FC_Full_Env.0_S1) |
| 746-363 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_FC_Full_Env.1_S1) |
| 746-364 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_FC_Full_Env.2_S1) |
| 746-365 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_FC_Full_Env.3_S1) |
| 746-366 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_FC_Full_Env.4_S1) |
| 746-367 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_FC_Full_Env.5_S1) |
| 746-368 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_FC_Full_Env.6_S1) |
| 746-369 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_FC_Full_Env.7_S1) |
| 746-370 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient(B_FC_Full_Env.8_S1) |
| 746-371 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.9_S1) |
| 746-372 | 2nd BTR Paper kind compensation coefficient usually | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.0_S1) |
| 746-373 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.1_S1) |
| 746-374 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.2_S1) |
| 746-375 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.3_S1) |
| 746-376 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.4_S1) |
| 746-377 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.5_S1) |
| 746-378 | 2nd BTR Paper kind compensation coefficient usually | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.6_S1) |
| 746-379 | 2nd BTR Paper kind compensation coefficient usually | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.7_S1) |
| 746-380 | 2nd BTR Paper kind compensation coefficient usually | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.8_S1) |
| 746-381 | 2nd BTR Paper kind compensation coefficient usually | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.9_S1) |
| 746-382 | 2nd BTR Paper kind compensation coefficient usually | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.0_S1) |
| 746-383 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.1_S1) |
| 746-384 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.2_S1) |
| 746-385 | 2nd BTR Paper kind compensation coefficient usually | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.3_S1) |
| 746-386 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.4_S1) |
| 746-387 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.5_S1) |
| 746-388 | 2nd BTR Paper kind compensation coefficient usually | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.6_S1) |
| 746-389 | 2nd BTR Paper kind compensation coefficient usually | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.7_S1) |
| 746-390 | 2nd BTR Paper kind compensation coefficient usually | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.8_S1) |
| 746-391 | 2nd BTR Paper kind compensation coefficient usually | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.9_S1) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-392 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.0_S1) |
| 746-393 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.1_S1) |
| 746-394 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.2_S1) |
| 746-395 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.3_S1) |
| 746-396 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.4_S1) |
| 746-397 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.5_S1) |
| 746-398 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.6_S1) |
| 746-399 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.7_S1) |
| 746-400 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.8_S1) |
| 746-401 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.9_S1) |
| 746-402 | 2nd BTR Paper kind compensation coefficient usually | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.0_S1) |
| 746-403 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.1_S1) |
| 746-404 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.2_S1) |
| 746-405 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.3_S1) |
| 746-406 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.4_S1) |
| 746-407 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.5_S1) |
| 746-408 | 2nd BTR Paper kind compensation coefficient usually | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.6_S1) |
| 746-409 | 2nd BTR Paper kind compensation coefficient usually | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.7_S1) |
| 746-410 | 2nd BTR Paper kind compensation coefficient usually | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.8_S1) |
| 746-411 | 2nd BTR Paper kind compensation coefficient usually | 133 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.9_S1) |
| 746-412 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.0_S1) |
| 746-413 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.1_S1) |
| 746-414 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.2_S1) |
| 746-415 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.3_S1) |
| 746-416 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.4_S1) |
| 746-417 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.5_S1) |
| 746-418 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.6_S1) |
| 746-419 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.7_S1) |
| 746-420 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.8_S1) |
| 746-421 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.9_S1) |
| 746-422 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.0_S1) |
| 746-423 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.1_S1) |
| 746-424 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.2_S1) |
| 746-425 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.3_S1) |
| 746-426 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.4_S1) |
| 746-427 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.5_S1) |
| 746-428 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.6_S1) |
| 746-429 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.7_S1) |
| 746-430 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.8_S1) |
| 746-431 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.9_S1) |
| 746-432 | 2nd BTR Paper kind compensation coefficient (usually, paper_full) | 118 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.0_S2) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-433 | 2nd BTR Paper kind compensation coefficient (usually, paper_Half) | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.1_S2) |
| 746-434 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.2_S2) |
| 746-435 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.3_S2) |
| 746-436 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.4_S2) |
| 746-437 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.5_S2) |
| 746-438 | 2nd BTR Paper kind compensation coefficient usually | 118 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.6_S2) |
| 746-439 | 2nd BTR Paper kind compensation coefficient usually | 118 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.7_S2) |
| 746-440 | 2nd BTR Paper kind compensation coefficient usually | 118 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.8_S2) |
| 746-441 | 2nd BTR Paper kind compensation coefficient usually | 117 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_BW_Full_Env.9_S2) |
| 746-442 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.0_S2) |
| 746-443 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.1_S2) |
| 746-444 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.2_S2) |
| 746-445 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.3_S2) |
| 746-446 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.4_S2) |
| 746-447 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.5_S2) |
| 746-448 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.6_S2) |
| 746-449 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.7_S2) |
| 746-450 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.8_S2) |
| 746-451 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_BW_Full_Env.9_S2) |
| 746-452 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.0_S2) |
| 746-453 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.1_S2) |
| 746-454 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.2_S2) |
| 746-455 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.3_S2) |
| 746-456 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.4_S2) |
| 746-457 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.5_S2) |
| 746-458 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.6_S2) |
| 746-459 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.7_S2) |
| 746-460 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.8_S2) |
| 746-461 | 2nd BTR Paper kind compensation coefficient usually | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_BW_Full_Env.9_S2) |
| 746-462 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.0_S2) |
| 746-463 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.1_S2) |
| 746-464 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.2_S2) |
| 746-465 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.3_S2) |
| 746-466 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.4_S2) |
| 746-467 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.5_S2) |
| 746-468 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.6_S2) |
| 746-469 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.7_S2) |
| 746-470 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.8_S2) |
| 746-471 | 2nd BTR Paper kind compensation coefficient usually | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_BW_Full_Env.9_S2) |
| 746-472 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.0_S2) |
| 746-473 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.1_S2) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-474 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.2_S2) |
| 746-475 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.3_S2) |
| 746-476 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.4_S2) |
| 746-477 | 2nd BTR Paper kind compensation coeefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.5_S2) |
| 746-478 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.6_S2) |
| 746-479 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.7_S2) |
| 746-480 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.8_S2) |
| 746-481 | 2nd BTR Paper kind compensation coeefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_BW_Full_Env.9_S2) |
| 746-482 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.0_S2) |
| 746-483 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.1_S2) |
| 746-484 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.2_S2) |
| 746-485 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.3_S2) |
| 746-486 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.4_S2) |
| 746-487 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.5_S2) |
| 746-488 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.6_S2) |
| 746-489 | 2nd BTR Paper kind compensation coefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.7_S2) |
| 746-490 | 2nd BTR Paper kind compensation coeefficient usually | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.8_S2) |
| 746-491 | 2nd BTR Paper kind compensation coeefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_BW_Full_Env.9_S2) |
| 746-492 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.0_S2) |
| 746-493 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.1_S2) |
| 746-494 | 2nd BTR Paper kind compensation coeefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.2_S2) |
| 746-495 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.3_S2) |
| 746-496 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.4_S2) |
| 746-497 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.5_S2) |
| 746-498 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.6_S2) |
| 746-499 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.7_S2) |
| 746-500 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.8_S2) |
| 746-501 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_BW_Full_Env.9_S2) |
| 746-502 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.0_S2) |
| 746-503 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.1_S2) |
| 746-504 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.2_S2) |
| 746-505 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.3_S2) |
| 746-506 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.4_S2) |
| 746-507 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.5_S2) |
| 746-508 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.6_S2) |
| 746-509 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.7_S2) |
| 746-510 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.8_S2) |
| 746-511 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_BW_Full_Env.9_S2) |
| 746-512 | 2nd BTR Paper kind compensation coefficient (usually, paper_full) | 132 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.0_S2) |
| 746-513 | 2nd BTR Paper kind compensation coefficient (usually, paper_Half) | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.1_S2) |
| 746-514 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.2_S2) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-515 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.3_S2) |
| 746-516 | 2nd BTR Paper kind compensation coefficient usually | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.4_S2) |
| 746-517 | 2nd BTR Paper kind compensation coefficient usually | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.5_S2) |
| 746-518 | 2nd BTR Paper kind compensation coefficient usually | 132 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.6_S2) |
| 746-519 | 2nd BTR Paper kind compensation coefficient usually | 132 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.7_S2) |
| 746-520 | 2nd BTR Paper kind compensation coefficient usually | 132 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.8_S2) |
| 746-521 | 2nd BTR Paper kind compensation coefficient usually | 122 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(A_FC_Full_Env.9_S2) |
| 746-522 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.0_S2) |
| 746-523 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.1_S2) |
| 746-524 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.2_S2) |
| 746-525 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.3_S2) |
| 746-526 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.4_S2) |
| 746-527 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.5_S2) |
| 746-528 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.6_S2) |
| 746-529 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.7_S2) |
| 746-530 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.8_S2) |
| 746-531 | 2nd BTR Paper kind compensation coefficient usually | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(B_FC_Full_Env.9_S2) |
| 746-532 | 2nd BTR Paper kind compensation coefficient usually | 102 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.0_S2) |
| 746-533 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.1_S2) |
| 746-534 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.2_S2) |
| 746-535 | 2nd BTR Paper kind compensation coeefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.3_S2) |
| 746-536 | 2nd BTR Paper kind compensation coefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.4_S2) |
| 746-537 | 2nd BTR Paper kind compensation coefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.5_S2) |
| 746-538 | 2nd BTR Paper kind compensation coefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.6_S2) |
| 746-539 | 2nd BTR Paper kind compensation coefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.7_S2) |
| 746-540 | 2nd BTR Paper kind compensation coefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.8_S2) |
| 746-541 | 2nd BTR Paper kind compensation coefficient usually | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(C_FC_Full_Env.9_S2) |
| 746-542 | 2nd BTR Paper kind compensation coefficient usually | 102 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.0_S2) |
| 746-543 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.1_S2) |
| 746-544 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.2_S2) |
| 746-545 | 2nd BTR Paper kind compensation coefficient usually | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.3_S2) |
| 746-546 | 2nd BTR Paper kind compensation coefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.4_S2) |
| 746-547 | 2nd BTR Paper kind compensation coeefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.5_S2) |
| 746-548 | 2nd BTR Paper kind compensation coeefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.6_S2) |
| 746-549 | 2nd BTR Paper kind compensation coefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.7_S2) |
| 746-550 | 2nd BTR Paper kind compensation coefficient usually | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.8_S2) |
| 746-551 | 2nd BTR Paper kind compensation coeefficient usually | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(D_FC_Full_Env.9_S2) |
| 746-552 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.0_S2) |
| 746-553 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.1_S2) |
| 746-554 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.2_S2) |
| 746-555 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.3_S2) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-556 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.4_S2) |
| 746-557 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.5_S2) |
| 746-558 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.6_S2) |
| 746-559 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.7_S2) |
| 746-560 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.8_S2) |
| 746-561 | 2nd BTR Paper kind compensation coefficient usually | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(E_FC_Full_Env.9_S2) |
| 746-562 | 2nd BTR Paper kind compensation coefficient usually | 108 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.0_S2) |
| 746-563 | 2nd BTR Paper kind compensation coefficient usually | 108 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.1_S2) |
| 746-564 | 2nd BTR Paper kind compensation coefficient usually | 108 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.2_S2) |
| 746-565 | 2nd BTR Paper kind compensation coefficient usually | 108 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.3_S2) |
| 746-566 | 2nd BTR Paper kind compensation coefficient usually | 113 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.4_S2) |
| 746-567 | 2nd BTR Paper kind compensation coefficient usually | 113 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.5_S2) |
| 746-568 | 2nd BTR Paper kind compensation coefficient usually | 113 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.6_S2) |
| 746-569 | 2nd BTR Paper kind compensation coefficient usually | 113 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.7_S2) |
| 746-570 | 2nd BTR Paper kind compensation coefficient usually | 113 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.8_S2) |
| 746-571 | 2nd BTR Paper kind compensation coefficient usually | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(F_FC_Full_Env.9_S2) |
| 746-572 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.0_S2) |
| 746-573 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.1_S2) |
| 746-574 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.2_S2) |
| 746-575 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.3_S2) |
| 746-576 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.4_S2) |
| 746-577 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.5_S2) |
| 746-578 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.6_S2) |
| 746-579 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.7_S2) |
| 746-580 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.8_S2) |
| 746-581 | 2nd BTR Paper kind compensation coefficient usually | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(G_FC_Full_Env.9_S2) |
| 746-582 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.0_S2) |
| 746-583 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.1_S2) |
| 746-584 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.2_S2) |
| 746-585 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.3_S2) |
| 746-586 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.4_S2) |
| 746-587 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.5_S2) |
| 746-588 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.6_S2) |
| 746-589 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.7_S2) |
| 746-590 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.8_S2) |
| 746-591 | 2nd BTR Paper kind compensation coefficient usually | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient usually(S_FC_Full_Env.9_S2) |
| 746-592 | 2nd BTR Paper kind compensation coefficient usually half | 80 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.0_S1) |
| 746-593 | 2nd BTR Paper kind compensation coefficient usually half | 116 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.1_S1) |
| 746-594 | 2nd BTR Paper kind compensation coefficient usually half | 116 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.2_S1) |
| 746-595 | 2nd BTR Paper kind compensation coefficient usually half | 116 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.3_S1) |
| 746-596 | 2nd BTR Paper kind compensation coefficient usually half | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.4_S1) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-597 | 2nd BTR Paper kind compensation coefficient usually half | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.5_S1) |
| 746-598 | 2nd BTR Paper kind compensation coefficient usually half | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.6_S1) |
| 746-599 | 2nd BTR Paper kind compensation coefficient usually half | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.7_S1) |
| 746-600 | 2nd BTR Paper kind compensation coefficient usually half | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.8_S1) |
| 746-601 | 2nd BTR Paper kind compensation coefficient usually half | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.9_S1) |
| 746-602 | 2nd BTR Paper kind compensation coefficient usually half | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.0_S2) |
| 746-603 | 2nd BTR Paper kind compensation coefficient usually half | 97 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.1_S2) |
| 746-604 | 2nd BTR Paper kind compensation coefficient usually half | 97 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.2_S2) |
| 746-605 | 2nd BTR Paper kind compensation coefficient usually half | 97 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.3_S2) |
| 746-606 | 2nd BTR Paper kind compensation coefficient usually half | 80 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.4_S2) |
| 746-607 | 2nd BTR Paper kind compensation coefficient usually half | 80 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.5_S2) |
| 746-608 | 2nd BTR Paper kind compensation coefficient usually half | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.6_S2) |
| 746-609 | 2nd BTR Paper kind compensation coefficient usually half | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.7_S2) |
| 746-610 | 2nd BTR Paper kind compensation coefficient usually half | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.8_S2) |
| 746-611 | 2nd BTR Paper kind compensation coefficient usually half | 96 | 0~255 | 2nd BTR Paper kind compensation coefficient usually half(Env.9_S2) |
| 746-612 | 2nd BTR Paper kind compensation coefficient heavy1 | 87 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.0_S1) |
| 746-613 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.1_S1) |
| 746-614 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.2_S1) |
| 746-615 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.3_S1) |
| 746-616 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.4_S1) |
| 746-617 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.5_S1) |
| 746-618 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.6_S1) |
| 746-619 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.7_S1) |
| 746-620 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.8_S1) |
| 746-621 | 2nd BTR Paper kind compensation coefficient heavy1 | 70 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.9_S1) |
| 746-622 | 2nd BTR Paper kind compensation coefficient heavy1 | 87 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.0_S1) |
| 746-623 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.1_S1) |
| 746-624 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.2_S1) |
| 746-625 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.3_S1) |
| 746-626 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.4_S1) |
| 746-627 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.5_S1) |
| 746-628 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.6_S1) |
| 746-629 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.7_S1) |
| 746-630 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.8_S1) |
| 746-631 | 2nd BTR Paper kind compensation coefficient heavy1 | 75 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.9_S1) |
| 746-632 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.0_S1) |
| 746-633 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.1_S1) |
| 746-634 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.2_S1) |
| 746-635 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.3_S1) |
| 746-636 | 2nd BTR Paper kind compensation coefficient heavy1 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.4_S1) |
| 746-637 | 2nd BTR Paper kind compensation coefficient heavy1 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.5_S1) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-638 | 2nd BTR Paper kind compensation coefficient heavy1 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.6_S1) |
| 746-639 | 2nd BTR Paper kind compensation coefficient heavy1 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.7_S1) |
| 746-640 | 2nd BTR Paper kind compensation coefficient heavy1 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.8_S1) |
| 746-641 | 2nd BTR Paper kind compensation coefficient heavy1 | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.9_S1) |
| 746-642 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.0_S1) |
| 746-643 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.1_S1) |
| 746-644 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.2_S1) |
| 746-645 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.3_S1) |
| 746-646 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.4_S1) |
| 746-647 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.5_S1) |
| 746-648 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.6_S1) |
| 746-649 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.7_S1) |
| 746-650 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.8_S1) |
| 746-651 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.9_S1) |
| 746-652 | 2nd BTR Paper kind compensation coefficient heavy1 | 82 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.0_S2) |
| 746-653 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.1_S2) |
| 746-654 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.2_S2) |
| 746-655 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.3_S2) |
| 746-656 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.4_S2) |
| 746-657 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.5_S2) |
| 746-658 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.6_S2) |
| 746-659 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.7_S2) |
| 746-660 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.8_S2) |
| 746-661 | 2nd BTR Paper kind compensation coefficient heavy1 | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_BW_Full_Env.9_S2) |
| 746-662 | 2nd BTR Paper kind compensation coefficient heavy1 | 84 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.0_S2) |
| 746-663 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.1_S2) |
| 746-664 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.2_S2) |
| 746-665 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.3_S2) |
| 746-666 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.4_S2) |
| 746-667 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.5_S2) |
| 746-668 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.6_S2) |
| 746-669 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.7_S2) |
| 746-670 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.8_S2) |
| 746-671 | 2nd BTR Paper kind compensation coefficient heavy1 | 85 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_BW_Full_Env.9_S2) |
| 746-672 | 2nd BTR Paper kind compensation coefficient heavy1 | 93 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.0_S2) |
| 746-673 | 2nd BTR Paper kind compensation coefficient heavy1 | 83 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.1_S2) |
| 746-674 | 2nd BTR Paper kind compensation coefficient heavy1 | 83 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.2_S2) |
| 746-675 | 2nd BTR Paper kind compensation coefficient heavy1 | 83 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.3_S2) |
| 746-676 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.4_S2) |
| 746-677 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.5_S2) |
| 746-678 | 2nd BTR Paper kind compensation coefficient heavy1 | 93 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.6_S2) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-679 | 2nd BTR Paper kind compensation coefficient heavy1 | 93 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.7_S2) |
| 746-680 | 2nd BTR Paper kind compensation coefficient heavy1 | 93 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.8_S2) |
| 746-681 | 2nd BTR Paper kind compensation coefficient heavy1 | 88 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_BW_Full_Env.9_S2) |
| 746-682 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.0_S2) |
| 746-683 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.1_S2) |
| 746-684 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.2_S2) |
| 746-685 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.3_S2) |
| 746-686 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.4_S2) |
| 746-687 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.5_S2) |
| 746-688 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.6_S2) |
| 746-689 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.7_S2) |
| 746-690 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.8_S2) |
| 746-691 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_BW_Full_Env.9_S2) |
| 746-692 | 2nd BTR Paper kind compensation coefficient heavy1 | 96 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.0_S1) |
| 746-693 | 2nd BTR Paper kind compensation coefficient heavy1 | 84 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.1_S1) |
| 746-694 | 2nd BTR Paper kind compensation coefficient heavy1 | 84 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.2_S1) |
| 746-695 | 2nd BTR Paper kind compensation coefficient heavy1 | 84 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.3_S1) |
| 746-696 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.4_S1) |
| 746-697 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.5_S1) |
| 746-698 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.6_S1) |
| 746-699 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.7_S1) |
| 746-700 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.8_S1) |
| 746-701 | 2nd BTR Paper kind compensation coefficient heavy1 | 84 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.9_S1) |
| 746-702 | 2nd BTR Paper kind compensation coefficient heavy1 | 87 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.0_S1) |
| 746-703 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.1_S1) |
| 746-704 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.2_S1) |
| 746-705 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.3_S1) |
| 746-706 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.4_S1) |
| 746-707 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.5_S1) |
| 746-708 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.6_S1) |
| 746-709 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.7_S1) |
| 746-710 | 2nd BTR Paper kind compensation coefficient heavy1 | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.8_S1) |
| 746-711 | 2nd BTR Paper kind compensation coefficient heavy1 | 84 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.9_S1) |
| 746-712 | 2nd BTR Paper kind compensation coefficient heavy1 | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.0_S1) |
| 746-713 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.1_S1) |
| 746-714 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.2_S1) |
| 746-715 | 2nd BTR Paper kind compensation coefficient heavy1 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.3_S1) |
| 746-716 | 2nd BTR Paper kind compensation coefficient heavy1 | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.4_S1) |
| 746-717 | 2nd BTR Paper kind compensation coefficient heavy1 | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.5_S1) |
| 746-718 | 2nd BTR Paper kind compensation coefficient heavy1 | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.6_S1) |
| 746-719 | 2nd BTR Paper kind compensation coefficient heavy1 | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.7_S1) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-720 | 2nd BTR Paper kind compensation coefficient heavy1 | 131 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.8_S1) |
| 746-721 | 2nd BTR Paper kind compensation coefficient heavy1 | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.9_S1) |
| 746-722 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.0_S1) |
| 746-723 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coeefficient heavy1(S_FC_Half_Env.1_S1) |
| 746-724 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.2_S1) |
| 746-725 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.3_S1) |
| 746-726 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.4_S1) |
| 746-727 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.5_S1) |
| 746-728 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.6_S1) |
| 746-729 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.7_S1) |
| 746-730 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.8_S1) |
| 746-731 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.9_S1) |
| 746-732 | 2nd BTR Paper kind compensation coefficient heavy1 | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.0_S2) |
| 746-733 | 2nd BTR Paper kind compensation coefficient heavy1 | 112 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.1_S2) |
| 746-734 | 2nd BTR Paper kind compensation coefficient heavy1 | 112 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.2_S2) |
| 746-735 | 2nd BTR Paper kind compensation coefficient heavy1 | 112 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.3_S2) |
| 746-736 | 2nd BTR Paper kind compensation coefficient heavy1 | 83 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.4_S2) |
| 746-737 | 2nd BTR Paper kind compensation coefficient heavy1 | 83 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.5_S2) |
| 746-738 | 2nd BTR Paper kind compensation coefficient heavy1 | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.6_S2) |
| 746-739 | 2nd BTR Paper kind compensation coefficient heavy1 | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.7_S2) |
| 746-740 | 2nd BTR Paper kind compensation coefficient heavy1 | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.8_S2) |
| 746-741 | 2nd BTR Paper kind compensation coefficient heavy1 | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(A_FC_Half_Env.9_S2) |
| 746-742 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.0_S2) |
| 746-743 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.1_S2) |
| 746-744 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.2_S2) |
| 746-745 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.3_S2) |
| 746-746 | 2nd BTR Paper kind compensation coefficient heavy1 | 80 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.4_S2) |
| 746-747 | 2nd BTR Paper kind compensation coefficient heavy1 | 80 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.5_S2) |
| 746-748 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.6_S2) |
| 746-749 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.7_S2) |
| 746-750 | 2nd BTR Paper kind compensation coefficient heavy1 | 92 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.8_S2) |
| 746-751 | 2nd BTR Paper kind compensation coefficient heavy1 | 123 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(B_FC_Half_Env.9_S2) |
| 746-752 | 2nd BTR Paper kind compensation coefficient heavy1 | 115 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.0_S2) |
| 746-753 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.1_S2) |
| 746-754 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.2_S2) |
| 746-755 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.3_S2) |
| 746-756 | 2nd BTR Paper kind compensation coefficient heavy1 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.4_S2) |
| 746-757 | 2nd BTR Paper kind compensation coefficient heavy1 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.5_S2) |
| 746-758 | 2nd BTR Paper kind compensation coefficient heavy1 | 115 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.6_S2) |
| 746-759 | 2nd BTR Paper kind compensation coefficient heavy1 | 115 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.7_S2) |
| 746-760 | 2nd BTR Paper kind compensation coefficient heavy1 | 115 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.8_S2) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-761 | 2nd BTR Paper kind compensation coefficient heavy1 | 126 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(C_FC_Half_Env.9_S2) |
| 746-762 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.0_S2) |
| 746-763 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.1_S2) |
| 746-764 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.2_S2) |
| 746-765 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.3_S2) |
| 746-766 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.4_S2) |
| 746-767 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.5_S2) |
| 746-768 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.6_S2) |
| 746-769 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.7_S2) |
| 746-770 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.8_S2) |
| 746-771 | 2nd BTR Paper kind compensation coefficient heavy1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy1(S_FC_Half_Env.9_S2) |
| 746-772 | 2nd BTR Paper kind compensation coefficient heavy2 | 122 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.0_S1) |
| 746-773 | 2nd BTR Paper kind compensation coefficient heavy2 | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.1_S1) |
| 746-774 | 2nd BTR Paper kind compensation coefficient heavy2 | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.2_S1) |
| 746-775 | 2nd BTR Paper kind compensation coefficient heavy2 | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.3_S1) |
| 746-776 | 2nd BTR Paper kind compensation coefficient heavy2 | 126 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.4_S1) |
| 746-777 | 2nd BTR Paper kind compensation coefficient heavy2 | 126 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.5_S1) |
| 746-778 | 2nd BTR Paper kind compensation coefficient heavy2 | 126 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.6_S1) |
| 746-779 | 2nd BTR Paper kind compensation coefficient heavy2 | 126 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.7_S1) |
| 746-780 | 2nd BTR Paper kind compensation coefficient heavy2 | 126 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.8_S1) |
| 746-781 | 2nd BTR Paper kind compensation coefficient heavy2 | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.9_S1) |
| 746-782 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.0_S1) |
| 746-783 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.1_S1) |
| 746-784 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.2_S1) |
| 746-785 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.3_S1) |
| 746-786 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.4_S1) |
| 746-787 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.5_S1) |
| 746-788 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.6_S1) |
| 746-789 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.7_S1) |
| 746-790 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.8_S1) |
| 746-791 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.9_S1) |
| 746-792 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.0_S1) |
| 746-793 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.1_S1) |
| 746-794 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.2_S1) |
| 746-795 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.3_S1) |
| 746-796 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.4_S1) |
| 746-797 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.5_S1) |
| 746-798 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.6_S1) |
| 746-799 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.7_S1) |
| 746-800 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.8_S1) |
| 746-801 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.9_S1) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-802 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.0_S1) |
| 746-803 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.1_S1) |
| 746-804 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.2_S1) |
| 746-805 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.3_S1) |
| 746-806 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.4_S1) |
| 746-807 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.5_S1) |
| 746-808 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.6_S1) |
| 746-809 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.7_S1) |
| 746-810 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.8_S1) |
| 746-811 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.9_S1) |
| 746-812 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.0_S1) |
| 746-813 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.1_S1) |
| 746-814 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.2_S1) |
| 746-815 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.3_S1) |
| 746-816 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.4_S1) |
| 746-817 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.5_S1) |
| 746-818 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.6_S1) |
| 746-819 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.7_S1) |
| 746-820 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.8_S1) |
| 746-821 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.9_S1) |
| 746-822 | 2nd BTR Paper kind compensation coefficient heavy2 | 122 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.0_S1) |
| 746-823 | 2nd BTR Paper kind compensation coefficient heavy2 | 125 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.1_S1) |
| 746-824 | 2nd BTR Paper kind compensation coefficient heavy2 | 125 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.2_S1) |
| 746-825 | 2nd BTR Paper kind compensation coefficient heavy2 | 125 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.3_S1) |
| 746-826 | 2nd BTR Paper kind compensation coefficient heavy2 | 134 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.4_S1) |
| 746-827 | 2nd BTR Paper kind compensation coefficient heavy2 | 134 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.5_S1) |
| 746-828 | 2nd BTR Paper kind compensation coefficient heavy2 | 134 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.6_S1) |
| 746-829 | 2nd BTR Paper kind compensation coefficient heavy2 | 134 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.7_S1) |
| 746-830 | 2nd BTR Paper kind compensation coefficient heavy2 | 134 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.8_S1) |
| 746-831 | 2nd BTR Paper kind compensation coefficient heavy2 | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.9_S1) |
| 746-832 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.0_S1) |
| 746-833 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.1_S1) |
| 746-834 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.2_S1) |
| 746-835 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.3_S1) |
| 746-836 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.4_S1) |
| 746-837 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.5_S1) |
| 746-838 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.6_S1) |
| 746-839 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.7_S1) |
| 746-840 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.8_S1) |
| 746-841 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.9_S1) |
| 746-842 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.0_S1) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-843 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.1_S1) |
| 746-844 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.2_S1) |
| 746-845 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.3_S1) |
| 746-846 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.4_S1) |
| 746-847 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.5_S1) |
| 746-848 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.6_S1) |
| 746-849 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.7_S1) |
| 746-850 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.8_S1) |
| 746-851 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.9_S1) |
| 746-852 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.0_S1) |
| 746-853 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.1_S1) |
| 746-854 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.2_S1) |
| 746-855 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.3_S1) |
| 746-856 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.4_S1) |
| 746-857 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.5_S1) |
| 746-858 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.6_S1) |
| 746-859 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.7_S1) |
| 746-860 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.8_S1) |
| 746-861 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.9_S1) |
| 746-862 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.0_S1) |
| 746-863 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.1_S1) |
| 746-864 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.2_S1) |
| 746-865 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.3_S1) |
| 746-866 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.4_S1) |
| 746-867 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.5_S1) |
| 746-868 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.6_S1) |
| 746-869 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.7_S1) |
| 746-870 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.8_S1) |
| 746-871 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.9_S1) |
| 746-872 | 2nd BTR Paper kind compensation coefficient heavy2 | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.0_S2) |
| 746-873 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.1_S2) |
| 746-874 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.2_S2) |
| 746-875 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.3_S2) |
| 746-876 | 2nd BTR Paper kind compensation coefficient heavy2 | 101 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.4_S2) |
| 746-877 | 2nd BTR Paper kind compensation coefficient heavy2 | 101 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.5_S2) |
| 746-878 | 2nd BTR Paper kind compensation coefficient heavy2 | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.6_S2) |
| 746-879 | 2nd BTR Paper kind compensation coefficient heavy2 | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.7_S2) |
| 746-880 | 2nd BTR Paper kind compensation coefficient heavy2 | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.8_S2) |
| 746-881 | 2nd BTR Paper kind compensation coefficient heavy2 | 122 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_BW_Half_Env.9_S2) |
| 746-882 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.0_S2) |
| 746-883 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.1_S2) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-884 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.2_S2) |
| 746-885 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.3_S2) |
| 746-886 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.4_S2) |
| 746-887 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.5_S2) |
| 746-888 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.6_S2) |
| 746-889 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.7_S2) |
| 746-890 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.8_S2) |
| 746-891 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_BW_Half_Env.9_S2) |
| 746-892 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.0_S2) |
| 746-893 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.1_S2) |
| 746-894 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.2_S2) |
| 746-895 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.3_S2) |
| 746-896 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.4_S2) |
| 746-897 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.5_S2) |
| 746-898 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.6_S2) |
| 746-899 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.7_S2) |
| 746-900 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.8_S2) |
| 746-901 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_BW_Half_Env.9_S2) |
| 746-902 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.0_S2) |
| 746-903 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.1_S2) |
| 746-904 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.2_S2) |
| 746-905 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.3_S2) |
| 746-906 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.4_S2) |
| 746-907 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.5_S2) |
| 746-908 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.6_S2) |
| 746-909 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.7_S2) |
| 746-910 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.8_S2) |
| 746-911 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_BW_Half_Env.9_S2) |
| 746-912 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.0_S2) |
| 746-913 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.1_S2) |
| 746-914 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.2_S2) |
| 746-915 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.3_S2) |
| 746-916 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.4_S2) |
| 746-917 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.5_S2) |
| 746-918 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.6_S2) |
| 746-919 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.7_S2) |
| 746-920 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.8_S2) |
| 746-921 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_BW_Half_Env.9_S2) |
| 746-922 | 2nd BTR Paper kind compensation coefficient heavy2 | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.0_S2) |
| 746-923 | 2nd BTR Paper kind compensation coefficient heavy2 | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.1_S2) |
| 746-924 | 2nd BTR Paper kind compensation coefficient heavy2 | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.2_S2) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 746-925 | 2nd BTR Paper kind compensation coefficient heavy2 | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.3_S2) |
| 746-926 | 2nd BTR Paper kind compensation coefficient heavy2 | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.4_S2) |
| 746-927 | 2nd BTR Paper kind compensation coefficient heavy2 | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.5_S2) |
| 746-928 | 2nd BTR Paper kind compensation coefficient heavy2 | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.6_S2) |
| 746-929 | 2nd BTR Paper kind compensation coefficient heavy2 | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.7_S2) |
| 746-930 | 2nd BTR Paper kind compensation coefficient heavy2 | 127 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.8_S2) |
| 746-931 | 2nd BTR Paper kind compensation coefficient heavy2 | 122 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(A_FC_Half_Env.9_S2) |
| 746-932 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.0_S2) |
| 746-933 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.1_S2) |
| 746-934 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.2_S2) |
| 746-935 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.3_S2) |
| 746-936 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.4_S2) |
| 746-937 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.5_S2) |
| 746-938 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.6_S2) |
| 746-939 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.7_S2) |
| 746-940 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.8_S2) |
| 746-941 | 2nd BTR Paper kind compensation coefficient heavy2 | 110 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(B_FC_Half_Env.9_S2) |
| 746-942 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.0_S2) |
| 746-943 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.1_S2) |
| 746-944 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.2_S2) |
| 746-945 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.3_S2) |
| 746-946 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.4_S2) |
| 746-947 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.5_S2) |
| 746-948 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.6_S2) |
| 746-949 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.7_S2) |
| 746-950 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.8_S2) |
| 746-951 | 2nd BTR Paper kind compensation coefficient heavy2 | 120 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(C_FC_Half_Env.9_S2) |
| 746-952 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.0_S2) |
| 746-953 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.1_S2) |
| 746-954 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.2_S2) |
| 746-955 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.3_S2) |
| 746-956 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.4_S2) |
| 746-957 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.5_S2) |
| 746-958 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.6_S2) |
| 746-959 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.7_S2) |
| 746-960 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.8_S2) |
| 746-961 | 2nd BTR Paper kind compensation coefficient heavy2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(D_FC_Half_Env.9_S2) |
| 746-962 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.0_S2) |
| 746-963 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.1_S2) |
| 746-964 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.2_S2) |
| 746-965 | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.3_S2) |

Table 5 Xfer

| Chain-Link | Name | Default | Range | Description |
| :--- | :--- | :--- | :--- | :--- |
| $746-966$ | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | $0 \sim 255$ | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.4_S2) |
| $746-967$ | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | $0 \sim 255$ | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.5_S2) |
| $746-968$ | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | $0 \sim 255$ | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.6_S2) |
| $746-969$ | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | $0 \sim 255$ | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.__S2) |
| $746-970$ | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | $0 \sim 255$ | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.8_S2) |
| $746-971$ | 2nd BTR Paper kind compensation coefficient heavy2 | 100 | $0 \sim 255$ | 2nd BTR Paper kind compensation coefficient heavy2(S_FC_Half_Env.9_S2) |
| $746-972$ | The back dirt measures execution switch after resistance detection | 0 | $0 \sim 255$ | The back dirt measures execution switch after resistance detection |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-001 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.0_S1) |
| 747-002 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.1_S1) |
| 747-003 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.2_S1) |
| 747-004 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.3_S1) |
| 747-005 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.4_S1) |
| 747-006 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.5_S1) |
| 747-007 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.6_S1) |
| 747-008 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.7_S1) |
| 747-009 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.8_S1) |
| 747-010 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.9_S1) |
| 747-011 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.0_S2) |
| 747-012 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.1_S2) |
| 747-013 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.2_S2) |
| 747-014 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.3_S2) |
| 747-015 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.4_S2) |
| 747-016 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.5_S2) |
| 747-017 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.6_S2) |
| 747-018 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.7_S2) |
| 747-019 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.8_S2) |
| 747-020 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(BW_Full_Env.9_S2) |
| 747-021 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.0_S1) |
| 747-022 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.1_S1) |
| 747-023 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.2_S1) |
| 747-024 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.3_S1) |
| 747-025 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.4_S1) |
| 747-026 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.5_S1) |
| 747-027 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.6_S1) |
| 747-028 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.7_S1) |
| 747-029 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.8_S1) |
| 747-030 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.9_S1) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-031 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.0_S2) |
| 747-032 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.1_S2) |
| 747-033 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.2_S2) |
| 747-034 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.3_S2) |
| 747-035 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.4_S2) |
| 747-036 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.5_S2) |
| 747-037 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.6_S2) |
| 747-038 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.7_S2) |
| 747-039 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.8_S2) |
| 747-040 | 2nd BTR Paper kind compensation coefficient coat1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat1(FC_Half_Env.9_S2) |
| 747-041 | 2nd BTR Paper kind compensation coefficient coat2 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.0_S1) |
| 747-042 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.1_S1) |
| 747-043 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.2_S1) |
| 747-044 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.3_S1) |
| 747-045 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.4_S1) |
| 747-046 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.5_S1) |
| 747-047 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.6_S1) |
| 747-048 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.7_S1) |
| 747-049 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.8_S1) |
| 747-050 | 2nd BTR Paper kind compensation coefficient coat2 | 96 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.9_S1) |
| 747-051 | 2nd BTR Paper kind compensation coefficient coat2 | 90 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.0_S1) |
| 747-052 | 2nd BTR Paper kind compensation coefficient coat2 | 101 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.1_S1) |
| 747-053 | 2nd BTR Paper kind compensation coefficient coat2 | 101 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.2_S1) |
| 747-054 | 2nd BTR Paper kind compensation coefficient coat2 | 101 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.3_S1) |
| 747-055 | 2nd BTR Paper kind compensation coefficient coat2 | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.4_S1) |
| 747-056 | 2nd BTR Paper kind compensation coefficient coat2 | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.5_S1) |
| 747-057 | 2nd BTR Paper kind compensation coefficient coat2 | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.6_S1) |
| 747-058 | 2nd BTR Paper kind compensation coefficient coat2 | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.7_S1) |
| 747-059 | 2nd BTR Paper kind compensation coefficient coat2 | 104 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.8_S1) |
| 747-060 | 2nd BTR Paper kind compensation coefficient coat2 | 96 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.9_S1) |
| 747-061 | 2nd BTR Paper kind compensation coefficient coat2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.0_S2) |
| 747-062 | 2nd BTR Paper kind compensation coefficient coat2 | 97 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.1_S2) |
| 747-063 | 2nd BTR Paper kind compensation coefficient coat2 | 97 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.2_S2) |
| 747-064 | 2nd BTR Paper kind compensation coefficient coat2 | 97 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.3_S2) |
| 747-065 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.4_S2) |
| 747-066 | 2nd BTR Paper kind compensation coefficient coat2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.5_S2) |
| 747-067 | 2nd BTR Paper kind compensation coefficient coat2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.6_S2) |
| 747-068 | 2nd BTR Paper kind compensation coefficient coat2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.7_S2) |
| 747-069 | 2nd BTR Paper kind compensation coefficient coat2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.8_S2) |
| 747-070 | 2nd BTR Paper kind compensation coefficient coat2 | 121 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(BW_Half_Env.9_S2) |
| 747-071 | 2nd BTR Paper kind compensation coefficient coat2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.0_S2) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-072 | 2nd BTR Paper kind compensation coefficient coat2 | 97 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.1_S2) |
| 747-073 | 2nd BTR Paper kind compensation coefficient coat2 | 97 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.2_S2) |
| 747-074 | 2nd BTR Paper kind compensation coefficient coat2 | 97 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.3_S2) |
| 747-075 | 2nd BTR Paper kind compensation coefficient coat2 | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.4_S2) |
| 747-076 | 2nd BTR Paper kind compensation coefficient coat2 | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.5_S2) |
| 747-077 | 2nd BTR Paper kind compensation coefficient coat2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.6_S2) |
| 747-078 | 2nd BTR Paper kind compensation coefficient coat2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.7_S2) |
| 747-079 | 2nd BTR Paper kind compensation coefficient coat2 | 130 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.8_S2) |
| 747-080 | 2nd BTR Paper kind compensation coefficient coat2 | 122 | 0~255 | 2nd BTR Paper kind compensation coefficient coat2(FC_Half_Env.9_S2) |
| 747-081 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.0_S1) |
| 747-082 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.1_S1) |
| 747-083 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.2_S1) |
| 747-084 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.3_S1) |
| 747-085 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.4_S1) |
| 747-086 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.5_S1) |
| 747-087 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.6_S1) |
| 747-088 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.7_S1) |
| 747-089 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.8_S1) |
| 747-090 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.9_S1) |
| 747-091 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.0_S2) |
| 747-092 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.1_S2) |
| 747-093 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.2_S2) |
| 747-094 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.3_S2) |
| 747-095 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.4_S2) |
| 747-096 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.5_S2) |
| 747-097 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.6_S2) |
| 747-098 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.7_S2) |
| 747-099 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.8_S2) |
| 747-100 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(BW_Full_Env.9_S2) |
| 747-101 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.0_S1) |
| 747-102 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.1_S1) |
| 747-103 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.2_S1) |
| 747-104 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.3_S1) |
| 747-105 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.4_S1) |
| 747-106 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.5_S1) |
| 747-107 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.6_S1) |
| 747-108 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.7_S1) |
| 747-109 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.8_S1) |
| 747-110 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.9_S1) |
| 747-111 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.0_S2) |
| 747-112 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.1_S2) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-113 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.2_S2) |
| 747-114 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.3_S2) |
| 747-115 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.4_S2) |
| 747-116 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.5_S2) |
| 747-117 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.6_S2) |
| 747-118 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.7_S2) |
| 747-119 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.8_S2) |
| 747-120 | 2nd BTR Paper kind compensation coefficient post1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post1(FC_Half_Env.9_S2) |
| 747-121 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.0_S1) |
| 747-122 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.1_S1) |
| 747-123 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.2_S1) |
| 747-124 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.3_S1) |
| 747-125 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.4_S1) |
| 747-126 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.5_S1) |
| 747-127 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.6_S1) |
| 747-128 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.7_S1) |
| 747-129 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.8_S1) |
| 747-130 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.9_S1) |
| 747-131 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.0_S1) |
| 747-132 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.1_S1) |
| 747-133 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.2_S1) |
| 747-134 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.3_S1) |
| 747-135 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.4_S1) |
| 747-136 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.5_S1) |
| 747-137 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.6_S1) |
| 747-138 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.7_S1) |
| 747-139 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.8_S1) |
| 747-140 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.9_S1) |
| 747-141 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.0_S2) |
| 747-142 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.1_S2) |
| 747-143 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.2_S2) |
| 747-144 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.3_S2) |
| 747-145 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.4_S2) |
| 747-146 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.5_S2) |
| 747-147 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.6_S2) |
| 747-148 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.7_S2) |
| 747-149 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.8_S2) |
| 747-150 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(BW_Half_Env.9_S2) |
| 747-151 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.0_S2) |
| 747-152 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.1_S2) |
| 747-153 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.2_S2) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-154 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.3_S2) |
| 747-155 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.4_S2) |
| 747-156 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.5_S2) |
| 747-157 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.6_S2) |
| 747-158 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.7_S2) |
| 747-159 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.8_S2) |
| 747-160 | 2nd BTR Paper kind compensation coefficient post2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient post2(FC_Half_Env.9_S2) |
| 747-161 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.0_S1) |
| 747-162 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.1_S1) |
| 747-163 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.2_S1) |
| 747-164 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.3_S1) |
| 747-165 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.4_S1) |
| 747-166 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.5_S1) |
| 747-167 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.6_S1) |
| 747-168 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.7_S1) |
| 747-169 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.8_S1) |
| 747-170 | 2nd BTR Paper kind compensation coefficient label | 93 | 0~255 | 2nd BTR Paper kind compensation coefficient label(BW_Full_Env.9_S1) |
| 747-171 | 2nd BTR Paper kind compensation coefficient label | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.0_S1) |
| 747-172 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.1_S1) |
| 747-173 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.2_S1) |
| 747-174 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.3_S1) |
| 747-175 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.4_S1) |
| 747-176 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.5_S1) |
| 747-177 | 2nd BTR Paper kind compensation coefficient label | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.6_S1) |
| 747-178 | 2nd BTR Paper kind compensation coefficient label | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.7_S1) |
| 747-179 | 2nd BTR Paper kind compensation coefficient label | 105 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.8_S1) |
| 747-180 | 2nd BTR Paper kind compensation coefficient label | 109 | 0~255 | 2nd BTR Paper kind compensation coefficient label(FC_Half_Env.9_S1) |
| 747-181 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.0_S1) |
| 747-182 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.1_S1) |
| 747-183 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.2_S1) |
| 747-184 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.3_S1) |
| 747-185 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.4_S1) |
| 747-186 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.5_S1) |
| 747-187 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.6_S1) |
| 747-188 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.7_S1) |
| 747-189 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.8_S1) |
| 747-190 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.9_S1) |
| 747-191 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.0_S2) |
| 747-192 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.1_S2) |
| 747-193 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.2_S2) |
| 747-194 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.3_S2) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-195 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.4_S2) |
| 747-196 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.5_S2) |
| 747-197 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.6_S2) |
| 747-198 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.7_S2) |
| 747-199 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.8_S2) |
| 747-200 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(BW_Full_Env.9_S2) |
| 747-201 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.0_S1) |
| 747-202 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.1_S1) |
| 747-203 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.2_S1) |
| 747-204 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.3_S1) |
| 747-205 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.4_S1) |
| 747-206 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.5_S1) |
| 747-207 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.6_S1) |
| 747-208 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.7_S1) |
| 747-209 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.8_S1) |
| 747-210 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.9_S1) |
| 747-211 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.0_S2) |
| 747-212 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.1_S2) |
| 747-213 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.2_S2) |
| 747-214 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.3_S2) |
| 747-215 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.4_S2) |
| 747-216 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.5_S2) |
| 747-217 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.6_S2) |
| 747-218 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.7_S2) |
| 747-219 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.8_S2) |
| 747-220 | 2nd BTR Paper kind compensation coefficient envelope1 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope1(FC_Half_Env.9_S2) |
| 747-221 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.0_S1) |
| 747-222 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.1_S1) |
| 747-223 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.2_S1) |
| 747-224 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.3_S1) |
| 747-225 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.4_S1) |
| 747-226 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.5_S1) |
| 747-227 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.6_S1) |
| 747-228 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.7_S1) |
| 747-229 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.8_S1) |
| 747-230 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.9_S1) |
| 747-231 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.0_S1) |
| 747-232 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.1_S1) |
| 747-233 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.2_S1) |
| 747-234 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.3_S1) |
| 747-235 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.4_S1) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-236 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.5_S1) |
| 747-237 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.6_S1) |
| 747-238 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.7_S1) |
| 747-239 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.8_S1) |
| 747-240 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.9_S1) |
| 747-241 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.0_S2) |
| 747-242 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.1_S2) |
| 747-243 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.2_S2) |
| 747-244 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.3_S2) |
| 747-245 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.4_S2) |
| 747-246 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.5_S2) |
| 747-247 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.6_S2) |
| 747-248 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.7_S2) |
| 747-249 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.8_S2) |
| 747-250 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(BW_Half_Env.9_S2) |
| 747-251 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.0_S2) |
| 747-252 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.1_S2) |
| 747-253 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.2_S2) |
| 747-254 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.3_S2) |
| 747-255 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.4_S2) |
| 747-256 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.5_S2) |
| 747-257 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.6_S2) |
| 747-258 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.7_S2) |
| 747-259 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.8_S2) |
| 747-260 | 2nd BTR Paper kind compensation coefficient envelope2 | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient envelope2(FC_Half_Env.9_S2) |
| 747-261 | 2nd BTR Paper kind compensation coefficient OHP | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.0_S1) |
| 747-262 | 2nd BTR Paper kind compensation coefficient OHP | 80 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.1_S1) |
| 747-263 | 2nd BTR Paper kind compensation coefficient OHP | 80 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.2_S1) |
| 747-264 | 2nd BTR Paper kind compensation coefficient OHP | 80 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.3_S1) |
| 747-265 | 2nd BTR Paper kind compensation coefficient OHP | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.4_S1) |
| 747-266 | 2nd BTR Paper kind compensation coefficient OHP | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.5_S1) |
| 747-267 | 2nd BTR Paper kind compensation coefficient OHP | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.6_S1) |
| 747-268 | 2nd BTR Paper kind compensation coefficient OHP | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.7_S1) |
| 747-269 | 2nd BTR Paper kind compensation coefficient OHP | 111 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.8_S1) |
| 747-270 | 2nd BTR Paper kind compensation coefficient OHP | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(BW_Half_Env.9_S1) |
| 747-271 | 2nd BTR Paper kind compensation coefficient OHP | 107 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.0_S1) |
| 747-272 | 2nd BTR Paper kind compensation coefficient OHP | 98 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.1_S1) |
| 747-273 | 2nd BTR Paper kind compensation coefficient OHP | 98 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.2_S1) |
| 747-274 | 2nd BTR Paper kind compensation coefficient OHP | 98 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.3_S1) |
| 747-275 | 2nd BTR Paper kind compensation coefficient OHP | 117 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.4_S1) |
| 747-276 | 2nd BTR Paper kind compensation coefficient OHP | 117 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.5_S1) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-277 | 2nd BTR Paper kind compensation coefficient OHP | 117 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.6_S1) |
| 747-278 | 2nd BTR Paper kind compensation coefficient OHP | 117 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.7_S1) |
| 747-279 | 2nd BTR Paper kind compensation coefficient OHP | 117 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.8_S1) |
| 747-280 | 2nd BTR Paper kind compensation coefficient OHP | 106 | 0~255 | 2nd BTR Paper kind compensation coefficient OHP(FC_Half_Env.9_S1) |
| 747-281 | The second transcription coefficient | 55 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.0_plain_S_Side1) |
| 747-282 | The second transcription coefficient | 150 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.1_plain_S_Side1) |
| 747-283 | The second transcription coefficient | 150 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.2_plain_S_Side1) |
| 747-284 | The second transcription coefficient | 150 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.3_plain_S_Side1) |
| 747-285 | The second transcription coefficient | 150 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.4_plain_S_Side1) |
| 747-286 | The second transcription coefficient | 150 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.5_plain_S_Side1) |
| 747-287 | The second transcription coefficient | 150 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.6_plain_S_Side1) |
| 747-288 | The second transcription coefficient | 140 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.7_plain_S_Side1) |
| 747-289 | The second transcription coefficient | 110 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.8_plain_S_Side1) |
| 747-290 | The second transcription coefficient | 55 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.9_plain_S_Side1) |
| 747-291 | The second transcription coefficient | 2100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.0_plain_S_Side1) |
| 747-292 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.1_plain_S_Side1) |
| 747-293 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.2_plain_S_Side1) |
| 747-294 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.3_plain_S_Side1) |
| 747-295 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.4_plain_S_Side1) |
| 747-296 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.5_plain_S_Side1) |
| 747-297 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.6_plain_S_Side1) |
| 747-298 | The second transcription coefficient | 1200 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.7_plain_S_Side1) |
| 747-299 | The second transcription coefficient | 1500 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.8_plain_S_Side1) |
| 747-300 | The second transcription coefficient | 2100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.9_plain_S_Side1) |
| 747-301 | The second transcription coefficient | 45 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.0_plain_S_Side2) |
| 747-302 | The second transcription coefficient | 250 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.1_plain_S_Side2) |
| 747-303 | The second transcription coefficient | 250 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.2_plain_S_Side2) |
| 747-304 | The second transcription coefficient | 250 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.3_plain_S_Side2) |
| 747-305 | The second transcription coefficient | 225 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.4_plain_S_Side2) |
| 747-306 | The second transcription coefficient | 225 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.5_plain_S_Side2) |
| 747-307 | The second transcription coefficient | 225 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.6_plain_S_Side2) |
| 747-308 | The second transcription coefficient | 200 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.7_plain_S_Side2) |
| 747-309 | The second transcription coefficient | 140 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.8_plain_S_Side2) |
| 747-310 | The second transcription coefficient | 45 | 0~6000 | The second transcription coefficient:A(BW/FC_Full_Env.9_plain_S_Side2) |
| 747-311 | The second transcription coefficient | 2600 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.0_plain_S_Side2) |
| 747-312 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.1_plain_S_Side2) |
| 747-313 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.2_plain_S_Side2) |
| 747-314 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.3_plain_S_Side2) |
| 747-315 | The second transcription coefficient | 1300 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.4_plain_S_Side2) |
| 747-316 | The second transcription coefficient | 1300 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.5_plain_S_Side2) |
| 747-317 | The second transcription coefficient | 1300 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.6_plain_S_Side2) |


| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-318 | The second transcription coefficient | 1500 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.7_plain_S_Side2) |
| 747-319 | The second transcription coefficient | 1900 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.8_plain_S_Side2) |
| 747-320 | The second transcription coefficient | 2600 | 0~6000 | The second transcription coefficient:B(BW/FC_Full_Env.9_plain_S_Side2) |
| 747-321 | The second transcription coefficient | 30 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.0_heavy1_S_Side1) |
| 747-322 | The second transcription coefficient | 145 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.1_heavy1_S_Side1) |
| 747-323 | The second transcription coefficient | 145 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.2_heavy1_S_Side1) |
| 747-324 | The second transcription coefficient | 145 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.3_heavy1_S_Side1) |
| 747-325 | The second transcription coefficient | 145 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.4_heavy1_S_Side1) |
| 747-326 | The second transcription coefficient | 145 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.5_heavy1_S_Side1) |
| 747-327 | The second transcription coefficient | 145 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.6_heavy1_S_Side1) |
| 747-328 | The second transcription coefficient | 125 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.7_heavy1_S_Side1) |
| 747-329 | The second transcription coefficient | 90 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.8_heavy1_S_Side1) |
| 747-330 | The second transcription coefficient | 30 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.9_heavy1_S_Side1) |
| 747-331 | The second transcription coefficient | 2800 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.0_heavy1_S_Side1) |
| 747-332 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.1_heavy1_S_Side1) |
| 747-333 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.2_heavy1_S_Side1) |
| 747-334 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.3_heavy1_S_Side1) |
| 747-335 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.4_heavy1_S_Side1) |
| 747-336 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.5_heavy1_S_Side1) |
| 747-337 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.6_heavy1_S_Side1) |
| 747-338 | The second transcription coefficient | 1400 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.7_heavy1_S_Side1) |
| 747-339 | The second transcription coefficient | 1900 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.8_heavy1_S_Side1) |
| 747-340 | The second transcription coefficient | 2800 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.9_heavy1_S_Side1) |


| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-341 | The second transcription coefficient | 40 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.0_heavy1_S_Side2) |
| 747-342 | The second transcription coefficient | 310 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.1_heavy1_S_Side2) |
| 747-343 | The second transcription coefficient | 310 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.2_heavy1_S_Side2) |
| 747-344 | The second transcription coefficient | 310 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.3_heavy1_S_Side2) |
| 747-345 | The second transcription coefficient | 250 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.4_heavy1_S_Side2) |
| 747-346 | The second transcription coefficient | 250 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.5_heavy1_S_Side2) |
| 747-347 | The second transcription coefficient | 250 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.6_heavy1_S_Side2) |
| 747-348 | The second transcription coefficient | 210 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.7_heavy1_S_Side2) |
| 747-349 | The second transcription coefficient | 140 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.8_heavy1_S_Side2) |
| 747-350 | The second transcription coefficient | 40 | 0~6000 | The second transcription coefficient:A(BW/FC_Full/ Half_Env.9_heavy1_S_Side2) |
| 747-351 | The second transcription coefficient | 3300 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.0_heavy1_S_Side2) |
| 747-352 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.1_heavy1_S_Side2) |
| 747-353 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.2_heavy1_S_Side2) |
| 747-354 | The second transcription coefficient | 1100 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.3_heavy1_S_Side2) |
| 747-355 | The second transcription coefficient | 1600 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.4_heavy1_S_Side2) |
| 747-356 | The second transcription coefficient | 1600 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.5_heavy1_S_Side2) |
| 747-357 | The second transcription coefficient | 1600 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.6_heavy1_S_Side2) |
| 747-358 | The second transcription coefficient | 1900 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.7_heavy1_S_Side2) |
| 747-359 | The second transcription coefficient | 2500 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.8_heavy1_S_Side2) |
| 747-360 | The second transcription coefficient | 3300 | 0~6000 | The second transcription coefficient:B(BW/FC_Full/ Half_Env.9_heavy1_S_Side2) |
| 747-361 | The second transcription coefficient | 30 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.0_heavy2_S_Side1) |
| 747-362 | The second transcription coefficient | 150 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.1_heavy2_S_Side1) |
| 747-363 | The second transcription coefficient | 150 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.2_heavy2_S_Side1) |
| 747-364 | The second transcription coefficient | 150 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.3_heavy2_S_Side1) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-365 | The second transcription coefficient | 135 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.4_heavy2_S_Side1) |
| 747-366 | The second transcription coefficient | 135 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.5_heavy2_S_Side1) |
| 747-367 | The second transcription coefficient | 135 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.6_heavy2_S_Side1) |
| 747-368 | The second transcription coefficient | 120 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.7_heavy2_S_Side1) |
| 747-369 | The second transcription coefficient | 80 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.8_heavy2_S_Side1) |
| 747-370 | The second transcription coefficient | 30 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.9_heavy2_S_Side1) |
| 747-371 | The second transcription coefficient | 3300 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.0_heavy2_S_Side1) |
| 747-372 | The second transcription coefficient | 900 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.1_heavy2_S_Side1) |
| 747-373 | The second transcription coefficient | 900 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.2_heavy2_S_Side1) |
| 747-374 | The second transcription coefficient | 900 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.3_heavy2_S_Side1) |
| 747-375 | The second transcription coefficient | 1200 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.4_heavy2_S_Side1) |
| 747-376 | The second transcription coefficient | 1200 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.5_heavy2_S_Side1) |
| 747-377 | The second transcription coefficient | 1200 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.6_heavy2_S_Side1) |
| 747-378 | The second transcription coefficient | 1550 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.7_heavy2_S_Side1) |
| 747-379 | The second transcription coefficient | 2250 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.8_heavy2_S_Side1) |
| 747-380 | The second transcription coefficient | 3300 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.9_heavy2_S_Side1) |
| 747-381 | The second transcription coefficient | 50 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.0_heavy2_S_Side2) |
| 747-382 | The second transcription coefficient | 330 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.1_heavy2_S_Side2) |
| 747-383 | The second transcription coefficient | 330 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.2_heavy2_S_Side2) |
| 747-384 | The second transcription coefficient | 330 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.3_heavy2_S_Side2) |
| 747-385 | The second transcription coefficient | 280 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.4_heavy2_S_Side2) |
| 747-386 | The second transcription coefficient | 280 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.5_heavy2_S_Side2) |
| 747-387 | The second transcription coefficient | 280 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.6_heavy2_S_Side2) |
| 747-388 | The second transcription coefficient | 240 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.7_heavy2_S_Side2) |
| 747-389 | The second transcription coefficient | 160 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.8_heavy2_S_Side2) |
| 747-390 | The second transcription coefficient | 50 | 0~6000 | The second transcription coefficient:A(BW/FC_Half_Env.9_heavy2_S_Side2) |
| 747-391 | The second transcription coefficient | 3300 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.0_heavy2_S_Side2) |
| 747-392 | The second transcription coefficient | 1200 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.1_heavy2_S_Side2) |
| 747-393 | The second transcription coefficient | 1200 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.2_heavy2_S_Side2) |
| 747-394 | The second transcription coefficient | 1200 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.3_heavy2_S_Side2) |
| 747-395 | The second transcription coefficient | 1600 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.4_heavy2_S_Side2) |
| 747-396 | The second transcription coefficient | 1600 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.5_heavy2_S_Side2) |
| 747-397 | The second transcription coefficient | 1600 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.6_heavy2_S_Side2) |
| 747-398 | The second transcription coefficient | 1900 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.7_heavy2_S_Side2) |
| 747-399 | The second transcription coefficient | 2500 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.8_heavy2_S_Side2) |
| 747-400 | The second transcription coefficient | 3300 | 0~6000 | The second transcription coefficient:B(BW/FC_Half_Env.9_heavy2_S_Side2) |
| 747-401 | System Register Max Value R0 (Env0) | 600 | 0~10000 | System Register Max Value R0 (Env0) |
| 747-402 | System Register Max Value R1 (Env1) | 50 | 0~10000 | System Register Max Value R1 (Env1) |
| 747-403 | System Register Max Value R2 (Env2) | 50 | 0~10000 | System Register Max Value R2 (Env2) |
| 747-404 | System Register Max Value R3 (Env3) | 50 | 0~10000 | System Register Max Value R3 (Env3) |
| 747-405 | System Register Max Value R4 (Env4) | 100 | 0~10000 | System Register Max Value R4 (Env4) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-406 | System Register Max Value R5 (Env5) | 100 | 0~10000 | System Register Max Value R5 (Env5) |
| 747-407 | System Register Max Value R6 (Env6) | 100 | 0~10000 | System Register Max Value R6 (Env6) |
| 747-408 | System Register Max Value R7 (Env7) | 150 | 0~10000 | System Register Max Value R7 (Env7) |
| 747-409 | System Register Max Value R8 (Env8) | 300 | 0~10000 | System Register Max Value R8 (Env8) |
| 747-410 | System Register Max Value R9 (Env9) | 600 | 0~10000 | System Register Max Value R9 (Env9) |
| 747-411 | Counter is Over System Register Max Value | 0 | 0~65535 | Counter is Over System Register Max Value |
| 747-905 | Chosen 2nd BTR reference output storage(Side1) | 0 | 0~600 | Chosen 2nd BTR reference output storage(Side1) |
| 747-906 | Chosen 2nd BTR reference output storage(Side2) | 0 | 0~600 | Chosen 2nd BTR reference output storage(Side2) |
| 747-907 | 2nd BTR Contact Timing (full speed) | 1049 | 0~2000 | 2nd BTR Contact Timing (full speed) |
| 747-908 | 2nd BTR Contact Timing (halfspeed) | 1694 | 0~2000 | 2nd BTR Contact Timing (halfspeed) |
| 747-909 | 2nd BTR Retract Timing (full speed) | 645 | 0~1000 | 2nd BTR Retract Timing (full speed) |
| 747-910 | 2nd BTR Retract Timing (half speed) | 1295 | 0~2000 | 2nd BTR Retract Timing (half speed) |
| 747-911 | 2nd BTR Contact movement stop Timing | 874 | 0~1500 | 2nd BTR Contact movement stop Timing |
| 747-912 | 2nd BTR Retract movement stop Timing | 49 | 0~1500 | 2nd BTR Retract movement stop Timing |
| 747-913 | 2nd BTR Print output On Timing (full speed) | 1599 | 50~2000 | 2nd BTR Print output On Timing (full speed) |
| 747-914 | 2nd BTR Print output On Timing (halfspeed) | 2013 | 50~3000 | 2nd BTR Print output On Timing (halfspeed) |
| 747-915 | 2nd BTR Print output Off Timing (full speed) | 41 | 0~1000 | 2nd BTR Print output Off Timing (full speed) |
| 747-916 | 2nd BTR Print output Off Timing (halfspeed) | 81 | 0~1000 | 2nd BTR Print output Off Timing (halfspeed) |
| 747-917 | 2nd BTR Contact Timing in Position_B (full speed) | 1049 | 0~2000 | 2nd BTR Contact Timing in Position_B (full speed) |
| 747-919 | 2nd BTR Print output On Timing in Position_B(full speed) | 1599 | 50~2000 | 2nd BTR Print output On Timing in Position_B(full speed) |
| 747-927 | The 2nd BTR Print output Off Timing of Size Mismatch FullSpeeg Printoutput ->CLN ( + ) | 0 | 0~2550 | The 2nd BTR Print output Off Timing of Size Mismatch FullSpeeg Printoutput ->CLN (+) |
| 747-928 | The 2nd BTR Print output Off Timing of Size Mismatch HalfSpeed Printoutput ->CLN (+) | 0 | 0~4500 | The 2nd BTR Print output Off Timing of Size Mismatch HalfSpeed Printoutput ->CLN (+) |
| 747-929 | IBT CLN Contact Timing (full speed) | 2859 | 2000~4000 | IBT CLN Contact Timing (full speed) |
| 747-930 | IBT CLN Contact Timing (BW_halfl speed) | 3604 | 3000~5000 | IBT CLN Contact Timing (BW_halfl speed) |
| 747-931 | IBT CLN Contact Timing (FC_half speed) | 3454 | 3000~5000 | IBT CLN Contact Timing (FC_half speed) |
| 747-932 | IBT CLN Retract Timing (BW_full speed) | 3095 | 2000~5000 | IBT CLN Retract Timing (BW_ full speed) |
| 747-933 | IBT CLN Retract Timing (FC_ full speed) | 3095 | 2000~5000 | IBT CLN Retract Timing (FC_ full speed) |
| 747-934 | IBT CLN Retract Timing (BW_halfspeed) | 3158 | 2000~5000 | IBT CLN Retract Timing (BW_ halfspeed) |
| 747-935 | IBT CLN Retract Timing (FC_ halfspeed) | 3032 | 2000~5000 | IBT CLN Retract Timing (FC_halfspeed) |
| 747-936 | IBT CLN Contact movement stop Timing | 391 | 0~800 | IBT CLN Contact movement stop Timing |
| 747-937 | IBT CLN Retract movement stop Timing | 12 | 0~800 | IBT CLN Retract movement stop Timing |
| 747-938 | The chosen the second transcription coefficient_SIDE2: Alpha storage | 0 | 0~6000 | The chosen the second transcription coefficient_SIDE2: Alpha storage |
| 747-939 | The chosen the second transcription coefficient_SIDE2: Beta storage | 0 | 0~6000 | The chosen the second transcription coefficient_SIDE2: Beta storage |
| 747-940 | Transcription belt reverse sw | 1 | 0~1 | SW that enables rotating Transfer Belt in reverse direction (Job divided) |
| 747-941 | Transcription belt reverse pv threshold value | 250 | 1~1000 | Transfer Belt Reverse Rotation pv Threshold (Job divided) |
| 747-942 | Transcription belt reverse pv counter storage | 0 | 0~1000 | Transfer Belt Reverse Rotation pv Counter Storage (Job divided) |

Table 6 Xfer

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 747-943 | high document ibt cln cycle sw | 1 | 0~1 | SW that enables IBT CLN cycle for an image with a high resolution |
| 747-944 | 2nd BTR parameter designated (BW/FC, Common Heavy1 paper _S) | 0 | 0~1 | 2nd BTR parameter designated (BW/FC, Common Heavy1 paper_S) 0:usually_PARA 1:heavy_1S_PARA |
| 747-945 | 2nd BTR parameter designated (FC,Heavy1 paper _S) | 30 | 0~50 | Waiting time from the end of reverse rotation of Transfer Belt to the start of the next print |
| 747-946 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.0_S1) |
| 747-947 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.1_S1) |
| 747-948 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.2_S1) |
| 747-949 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.3_S1) |
| 747-950 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.4_S1) |
| 747-951 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.5_S1) |
| 747-952 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.6_S1) |
| 747-953 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.7_S1) |
| 747-954 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.8_S1) |
| 747-955 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (BW_Full_Env.9_S1) |
| 747-956 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.0_S1) |
| 747-957 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.1_S1) |
| 747-958 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.2_S1) |
| 747-959 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.3_S1) |
| 747-960 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.4_S1) |
| 747-961 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.5_S1) |
| 747-962 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.6_S1) |
| 747-963 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.7_S1) |
| 747-964 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.8_S1) |
| 747-965 | 2nd BTR Paper kind compensation coefficient label | 100 | 0~255 | 2nd BTR Paper kind compensation coefficient label NA (FC_Half_Env.9_S1) |

## Chain 749-xxx ROS

| Table 7 ROS |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Chain-Link | Name | Default | Range | Description |
| $749-001$ | Polygon Motor Off Delay Time | 1 | $1 \sim 10$ | Time from the end of exposure of last image to the start of stopping Polygon Motor <br> [sec] |
| $749-002$ | Fast Polygon Motor Start Time Out | 10 | $0 \sim 30$ | Time [sec] before Polygon Motor is turned Off in case the machine is not instructed to start printing <br> though Polygon Motor is activated in advance. <br> [sec] |
| $749-003$ | ROS Fan On Temp | 24 | $15 \sim 30$ | Environment temp [degree C] where ROS Fan is rotated during rotation of Polygon Motor |
| $749-004$ | ROS Fan Stop Delay Time | 10 | $6 \sim 14$ | Time [sec] before ROS Fan is rotated after Polygon Motor stops rotating |
| $749-005$ |  | 600 | $0 \sim 65535$ | Delay start of the ROS Shutter close process (msec) |
| $749-006$ |  | 100 | $100 \sim 4096$ | Number of input pulse per ROS Shutter close process (pps) |
| $749-007$ |  | 0 | $0 \sim 65535$ | Time period of ROS Shutter close process (10msec) |


| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 749-008 |  | 0 | 0~1 | Rotation direction to close ROS Shutter <br> 0: Clockwise <br> 1: Counter Clockwise |
| 749-009 |  | 100 | 100~4096 | Number of input pulse per ROS Shutter open process (pps) |
| 749-010 |  | 0 | 0~65535 | Time period of ROS Shutter open process ( $10 \mathrm{msec} \mathrm{)}$ |
| 749-011 |  | 0 | 0~1 | Rotation direction to open ROS Shutter <br> 0: Clockwise <br> 1: Counter Clockwise |
| 749-012 | Video Asic Fail R/W NG Counter | 0 | 0~6 | the number of R/W NG results when Video ASIC Fail occurs |
| 749-020 | Halftone Pattern1 | 0 | 0~65535 | Halftone Pattern 1 [16-bit data] |
| 749-021 | Halftone Pattern2 | 0 | 0~65535 | Halftone Pattern 2 [16-bit data] |
| 749-022 | Halftone Pattern3 | 0 | 0~65535 | Halftone Pattern 3 [16-bit data] |
| 749-023 | Halftone Pattern4 | 0 | 0~65535 | Halftone Pattern 4 [16-bit data] |
| 749-024 | TR0 Filter Length | 0 | 0~255 | TR0 Filter Constant [VCLK] |
| 749-036 | Lattice Pattern dot | 2 | 1~2 | the number of dots per line in lattice pattern |

## Chain 751-xxx 752-xxx Chain 753-xxx Procon

| Table 8 Xero/Clean |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Chain-Link | Name | Default | Range | Description |
| $751-284$ | DRUM MAX IMPRESSION | 78 | $0 \sim 255$ | Max. number of prints [1000pv]: Drum is available until a max number of prints are made. |


| Chain-Link | Name | Default | Range | Description |
| :--- | :--- | :--- | :--- | :--- |
| $752-010$ | Flag NewPR | 0 | $0 \sim 1$ | $0:$ old 1: new |
| $752-011$ | Flag TonerExchange[Y] | 0 | $0 \sim 1$ | $0:$ no replacement 1: replace |
| $752-012$ | Flag TonerExchange[M] | 0 | $0 \sim 1$ | $0:$ no replacement 2: replace |
| $752-013$ | Flag TonerExchange[C] | 0 | $0 \sim 1$ | $0:$ no replacement 3: replace |
| $752-014$ | Flag TonerExchange[K] | 0 | $0 \sim 1$ | $0:$ no replacement 4: replace |
| $752-015$ | Flag NewToner[Y] | 0 | $0 \sim 1$ | $0:$ old 1: new |
| $752-016$ | Flag NewToner[M] | 0 | $0 \sim 1$ | $0:$ old 2: new |
| $752-017$ | Flag NewToner[C] | 0 | $0 \sim 1$ | $0:$ old 3: new |
| $752-018$ | Flag NewToner[K] | 0 | $0 \sim 1$ | $0:$ old 4: new |
| $752-019$ | Flag NewIBT | 0 | $0 \sim 1$ | $0:$ old 1: new |
| $752-020$ | Flag NewIBTcleaner | 0 | $0 \sim 1$ | $0:$ old 1: new |
| $752-040$ | Temp | 0 | $-100 \sim 100$ | Temperature after AD conversion (NVM100: 0 degree C) |
| $752-041$ | Humidity | 0 | $0 \sim 100$ | Humidity after AD conversion (NVM0: $0 \%)$ |

Table 9 Process Control

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 752-060 | Fail Environment SNR Humidity | 0 | 0~1 | Humidity Sensor fail ("Standard Humidity" fixed) |
| 752-061 | Fail Environment SNR TEMP | 0 | 0~1 | Temperature Sensor fail ("Standard Temp" fixed) |
| 752-091 | Judge Number of ADC Fails Mcstop[N] | 50 | 0~255 | Threshold used to judge MC should be forcedly stopped in response to"the number of a series of ADC Fails." In normal mode |
| 752-092 | Judge Number of ADC Fails Mcstop[PN] | 8 | 0~255 | Threshold used to judge MC should be forcedly stopped in response to"the number of a series of ADC <br> Fails." "Flag Status: Empty Detection">=1 |
| 752-093 | Judge Number of ADC Fails Display | 3 | 0~255 | Threshold used to judge Fail should be displayed in response to "the number of a series of ADC Fails" |
| 752-094 | Fail ADC | 0 | 0~1 | ADC Sensor Fail. This fail occurs if a specified or larger number of ADC-related fails occur. |
| 752-095 | Fail ADC Sensor | 0 | 0~1 | ADC Sensor Fail |
| 752-096 | Fail ADC ShutterOpen | 0 | 0~1 | Fail: ADC Shutter stays open |
| 752-097 | Fail ADC ShutterClose | 0 | 0~1 | Fail: ADC Shutter stays closed |
| 752-098 | Fail ADC TCpatch[Y] | 0 | 0~1 | TC Patch Fail |
| 752-099 | Fail ADC TCpatch[M] | 0 | 0~1 | TC Patch Fail |
| 752-100 | Fail ADC TCpatch[C] | 0 | 0~1 | TC Patch Fail |
| 752-101 | Fail ADC TCpatch[K] | 0 | 0~1 | TC Patch Fail |
| 752-102 | Fail ADC patch[Y] | 0 | 0~1 | Tone Patch Fail |
| 752-103 | Fail ADC patch[M] | 0 | 0~1 | Tone Patch Fail |
| 752-104 | Fail ADC patch[C] | 0 | 0~1 | Tone Patch Fail |
| 752-105 | Fail ADC patch[K] | 0 | 0~1 | Tone Patch Fail |
| 752-106 | Fail ADC LongSetup[Y] | 0 | 0~1 | Patch Density Fail during Long Setup |
| 752-107 | Fail ADC LongSetup[M] | 0 | 0~1 | Patch Density Fail during Long Setup |
| 752-108 | Fail ADC LongSetup[C] | 0 | 0~1 | Patch Density Fail during Long Setup |
| 752-109 | Fail ADC LongSetup[K] | 0 | 0~1 | Patch Density Fail during Long Setup |
| 752-111 | Flag ADC Dirt | 0 | 0~1 | Flag indicating ADC Sensor Detection Surface is contaminated. |
| 752-112 | Vcln | 760 | 0~1023 | ADC average detection value of Belt-reflected light with Spectral LED On |
| 752-113 | Vdatk | 0 | 0~1023 | Detection value with both Spectral and Diffuse LEDs Off when Shutter closed. |
| 752-114 | DiffusionVcln | 30 | 0~1023 | ADC average detection value of Belt-reflected light with Diffuse LED On |
| 752-115 | Vref | 800 | 0~1023 | Detection value with only Diffuse LED On when Shutter closed. |
| 752-116 | Vclose | 0 | 0~1023 | Detection value with only Spectral LED On when Shutter closed. |
| 752-121 | Number of Continuous ADC Fails | 0 | 0~255 | the number of a series of ADC Fails |
| 752-127 | VTCpatch[Y] | 0 | 0~1023 | TC Patch Vp average value |
| 752-128 | VTCpatch[M] | 0 | 0~1023 | TC Patch Vp average value |
| 752-129 | VTCpatch[C] | 0 | 0~1023 | TC Patch Vp average value |
| 752-130 | VTCpatch[K] | 0 | 0~1023 | TC Patch Vp average value |
| 752-132 | Vpatch[Y][B] | 0 | 0~1023 | CinB Patch ADC average detection value |
| 752-135 | Vpatch[M][B] | 0 | 0~1023 | CinB Patch ADC average detection value |
| 752-138 | Vpatch[C][B] | 0 | 0~1023 | CinB Patch ADC average detection value |
| 752-141 | Vpatch[K][B] | 0 | 0~1023 | CinB Patch ADC average detection value |
| 752-183 | Nominal RADC Target[Y] | 432 | 0~1023 | RADC target value set up as the center |
| 752-184 | Nominal RADC Target[M] | 422 | 0~1023 | RADC target value set up as the center |
| 752-185 | Nominal RADC Target[C] | 417 | 0~1023 | RADC target value set up as the center |

Table 9 Process Control

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 752-186 | Nominal RADC Target[K] | 282 | 0~1023 | RADC target value set up as the center |
| 752-187 | RADC Target[Y] | 350 | 0~1023 | RADC target value after various corrections |
| 752-188 | RADC Target[M] | 350 | 0~1023 | RADC target value after various corrections |
| 752-189 | RADC Target[C] | 350 | 0~1023 | RADC target value after various corrections |
| 752-190 | RADC Target[K] | 350 | 0~1023 | RADC target value after various corrections |
| 752-195 | RADC[Y] | 0 | 0~1023 | RADC value calculated from ADC-related detection values |
| 752-196 | RADC[M] | 0 | 0~1023 | RADC value calculated from ADC-related detection values |
| 752-197 | RADC[C] | 0 | 0~1023 | RADC value calculated from ADC-related detection values |
| 752-198 | RADC[K] | 0 | 0~1023 | RADC value calculated from ADC-related detection values |
| 752-203 | TRC RADC Target[Y][A] | 680 | 0~1023 | Target RADC for tone correction |
| 752-204 | TRC RADC Target[Y][B] | 385 | 0~1023 | Target RADC for tone correction |
| 752-205 | TRC RADC Target[Y][C] | 915 | 0~1023 | Target RADC for tone correction |
| 752-206 | TRC RADC Target[M][A] | 605 | 0~1023 | Target RADC for tone correction |
| 752-207 | TRC RADC Target[M][B] | 340 | 0~1023 | Target RADC for tone correction |
| 752-208 | TRC RADC Target[M][C] | 910 | 0~1023 | Target RADC for tone correction |
| 752-209 | TRC RADC Target[C][A] | 645 | 0~1023 | Target RADC for tone correction |
| 752-210 | TRC RADC Target[C][B] | 400 | 0~1023 | Target RADC for tone correction |
| 752-211 | TRC RADC Target[C][C] | 915 | 0~1023 | Target RADC for tone correction |
| 752-212 | TRC RADC Target[K][A] | 475 | 0~1023 | Target RADC for tone correction |
| 752-213 | TRC RADC Target[K][B] | 165 | 0~1023 | Target RADC for tone correction |
| 752-214 | TRC RADC Target[K][C] | 845 | 0~1023 | Target RADC for tone correction |
| 752-215 | TRC RADC[Y][A] | 0 | 0~1023 | RADC value for tone correction |
| 752-216 | TRC RADC[Y][B] | 0 | 0~1023 | RADC value for tone correction |
| 752-217 | TRC RADC[Y][C] | 0 | 0~1023 | RADC value for tone correction |
| 752-218 | TRC RADC[M][A] | 0 | 0~1023 | RADC value for tone correction |
| 752-219 | TRC RADC[M][B] | 0 | 0~1023 | RADC value for tone correction |
| 752-220 | TRC RADC[M][C] | 0 | 0~1023 | RADC value for tone correction |
| 752-221 | TRC RADC[C][A] | 0 | 0~1023 | RADC value for tone correction |
| 752-222 | TRC RADC[C][B] | 0 | 0~1023 | RADC value for tone correction |
| 752-223 | TRC RADC[C][C] | 0 | 0~1023 | RADC value for tone correction |
| 752-224 | TRC RADC[K][A] | 0 | 0~1023 | RADC value for tone correction |
| 752-225 | TRC RADC[K][B] | 0 | 0~1023 | RADC value for tone correction |
| 752-226 | TRC RADC[K][C] | 0 | 0~1023 | RADC value for tone correction |
| 752-253 | Nominal TRC RADC Target[Y][B] | 385 | 0~1023 | TRC_RADC target value set up as the center |
| 752-254 | Nominal TRC RADC Target[M][B] | 340 | 0~1023 | TRC_RADC target value set up as the center |
| 752-255 | Nominal TRC RADC Target[C][B] | 400 | 0~1023 | TRC_RADC target value set up as the center |
| 752-256 | Nominal TRC RADC Target[K][B] | 165 | 0~1023 | TRC_RADC target value set up as the center |
| 752-299 | SW DispMode | 0 | 0~2 | Switch that selects Disp Mode (0: ADC+ICDCdisp 1: ICDCdisp 2: Timerdisp) |
| 752-301 | Timer Disp time[Y] | 5 | 0~255 | Timer Disp set time (in steps of 10ms) |
| 752-302 | Timer Disp time[M] | 5 | 0~255 | Timer Disp set time (in steps of 10ms) |
| 752-303 | Timer Disp time[C] | 5 | 0~255 | Timer Disp set time (in steps of 10ms) |

Table 9 Process Control

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 752-304 | Timer Disp time[K] | 5 | 0~255 | Timer Disp set time (in steps of 10ms) |
| 752-441 | SW LD Control | 0 | 0~1 | Switch that sets LD Control to ON/OFF (0: LDControl ON 1: LD Control OFF) |
| 752-443 | SW DeveBias Control | 0 | 0~1 | 0: Vbias controlled 1: Vbias not controlled (delta Vbias=0) |
| 752-444 | LD Light qty when LD Control is OFF[Y] | 420 | 0~1023 | LD light quantity with electric potential control Off |
| 752-445 | LD Light qty when LD Control is OFF[M] | 420 | 0~1023 | LD light quantity with electric potential control Off |
| 752-446 | LD Light qty when LD Control is OFF[C] | 420 | 0~1023 | LD light quantity with electric potential control Off |
| 752-447 | LD Light qty when LD Control is OFF[K] | 420 | 0~1023 | LD light quantity with electric potential control Off |
| 752-448 | LD light gty[Y] | 420 | 0~1023 | Ideal LD light quantity calculated from delta LD light quantity |
| 752-449 | LD light qty[M] | 420 | 0~1023 | Ideal LD light quantity calculated from delta LD light quantity |
| 752-450 | LD light qty[C] | 420 | 0~1023 | Ideal LD light quantity calculated from delta LD light quantity |
| 752-451 | LD light qty[K] | 420 | 0~1023 | Ideal LD light quantity calculated from delta LD light quantity |
| 752-460 | Flag LD Light aty Limit[Y] | 0 | 0~2 | 0: within upper \& lower limits 1: lower limit 2: upper limit |
| 752-461 | Flag LD Light qty Limit[M] | 0 | 0~2 | 0: within upper \& lower limits 1 : lower limit 2: upper limit |
| 752-462 | Flag LD Light aty Limit[C] | 0 | 0~2 | 0: within upper \& lower limits 1 : lower limit 2: upper limit |
| 752-463 | Flag LD Light qty Limit[K] | 0 | 0~2 | 0: within upper \& lower limits 1: lower limit 2: upper limit |
| 752-464 | Warn LD Light qty[Y] | 0 | 0~1 | 0 : within upper \& lower limits 1: upper or lower limit |
| 752-465 | Warn LD Light qty[M] | 0 | 0~1 | 0 : within upper \& lower limits 1: upper or lower limit |
| 752-466 | Warn LD Light qty[C] | 0 | 0~1 | 0: within upper \& lower limits 1: upper or lower limit |
| 752-467 | Warn LD Light qty[K] | 0 | 0~1 | 0: within upper \& lower limits 1: upper or lower limit |
| 752-705 | Flag Empty Detection Status[Y] | 0 | 0~3 | 0: Normal 1: PreNear 2: NearEmpty 3: Empty |
| 752-706 | Flag Empty Detection Status[M] | 0 | 0~3 | 0: Normal 1: PreNear 2: NearEmpty 3: Empty |
| 752-707 | Flag Empty Detection Status[C] | 0 | 0~3 | 0: Normal 1: PreNear 2: NearEmpty 3: Empty |
| 752-708 | Flag Empty Detection Status[K] | 0 | 0~3 | 0: Normal 1: PreNear 2: NearEmpty 3: Empty |
| 752-789 | SW PreNear | 0 | 0~1 | Switch that selects whether or not PreNear should be displayed. (1: not displayed 2: displayed) |
| 752-790 | PreNear Threshold[Y] | 4032 | 0~65535 | PreNear Threshold calculated from ICDC for a remaining toner ratio of 0\% |
| 752-791 | PreNear Threshold[M] | 3750 | 0~65535 | PreNear Threshold calculated from ICDC for a remaining toner ratio of 0\% |
| 752-792 | PreNear Threshold[C] | 4032 | 0~65535 | PreNear Threshold calculated from ICDC for a remaining toner ratio of 0\% |
| 752-793 | PreNear Threshold[K] | 11533 | 0~65535 | PreNear Threshold calculated from ICDC for a remaining toner ratio of 0\% |
| 752-794 | Flag PreNear[Y] | 0 | 0~1 | 0: Normal status 1: PreNear and afterward |
| 752-795 | Flag PreNear[M] | 0 | 0~1 | 0: Normal status 2: PreNear and afterward |
| 752-796 | Flag PreNear[C] | 0 | 0~1 | 0: Normal status 3: PreNear and afterward |
| 752-797 | Flag PreNear[K] | 0 | 0~1 | 0: Normal status 4: PreNear and afterward |
| 752-812 | Toner Level[Y] | 100 | 0~100 | a ratio of toner remaining in Toner Cartridge |
| 752-813 | Toner Level[M] | 100 | 0~100 | a ratio of toner remaining in Toner Cartridge |
| 752-814 | Toner Level[C] | 100 | 0~100 | a ratio of toner remaining in Toner Cartridge |
| 752-815 | Toner Level[K] | 100 | 0~100 | a ratio of toner remaining in Toner Cartridge |
| 752-825 | Toner Level 0\% ICDC[Y] | 4743 | 0~65535 | ICDC total value corresponding to 0\% of remaining toner |
| 752-826 | Toner Level 0\% ICDC[M] | 4412 | 0~65535 | ICDC total value corresponding to 0\% of remaining toner |
| 752-827 | Toner Level 0\% ICDC[C] | 4743 | 0~65535 | ICDC total value corresponding to 0\% of remaining toner |
| 752-828 | Toner Level 0\% ICDC[K] | 13568 | 0~65535 | ICDC total value corresponding to 0\% of remaining toner |


| ChainLink | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 753-001 | SW ADC Tone Correction | 0 | 0~1 | Switch that sets ADC Tone Correction to ON/OFF $\begin{aligned} & \text { 0: ON } \\ & \text { 1: OFF } \end{aligned}$ |
| 753-002 | SW TRC Adjust | 0 | 0~1 | Switch that sets TRCadjust to ON/OFF <br> 0: TRCadj_ON <br> 1: TRCadj_OFF |

## Chain 760-xxx Registration Control

| Chain-Link | Name | Default | Range | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 760-001 | Polygon Synchronic Correction Switch | 0 | 0~1 | RW | Polygon Sync Correction Switch 0: ON <br> 1: OFF |
| 760-002 | Offset Correction Switch | 0 | 0~1 | RW | $\begin{aligned} & \text { Offset Correction Switch } \\ & \text { 0: ON } \\ & \text { 1: OFF } \\ & \hline \end{aligned}$ |
| 760-003 | Learn Value Use Switch | 0 | 0~1 | RW | Learning-Result Using Switch <br> 0 : Learned value <br> 1: NVM value |
| 760-004 | K-Speed Correction Switch | 0 | 0~1 | RW | Belt Speed Up Correction Switch $0: \mathrm{ON}$ 1: OFF |
| 760-005 | K-Speed Correction Learn Value Use Switch | 0 | 0~1 | RW | Switch sets whether to use learning result in correcting Belt speed to speed it up. 0 : Learned value <br> 1: NVM value |
| 760-006 | GAPy | 0 | 0~65535 | R | Phase difference between TR0 and SOS: GAPy [1/50 micro s] |
| 760-007 | GAPm | 0 | 0~65535 | R | Phase difference between TR0 and SOS: GAPm [1/50 micro s] |
| 760-008 | GAPc | 0 | 0~65535 | R | Phase difference between TR0 and SOS: GAPc [1/50 micro s] |
| 760-009 | GAPk | 0 | 0~65535 | R | Phase difference between TR0 and SOS: GAPk [1/50 micro s] |
| 760-014 | BL Thresh | 90 | 0~500 | RW | Learn Mode Execution Count switching threshold [100PV] |
| 760-015 | BL Cycle1 | 15 | 0~70 | RW | Learn Mode Execution Count Value 1 [100PV] |
| 760-016 | BL Cycle2 | 30 | 0~100 | RW | Learn Mode Execution Count Value 2 [100PV] |
| 760-017 | Belt Length Correction Switch | 0 | 0~1 | RW | Belt Cycle Length Correction Switch [0: On 1: Off] |


| Chain-Link | Name | Default | Range | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 760-026 | Xm | 100 | 0~200 | RW | Polygon Sync Correction Coefficient: Xm |
| 760-027 | Xc | 100 | 0~200 | RW | Polygon Sync Correction Coefficient: Xc |
| 760-028 | Xk | 100 | 0~200 | RW | Polygon Sync Correction Coefficient: Xk |
| 760-029 | Learn Belt HFSI Counter | 0 | $\begin{aligned} & \hline 0 \sim 42949 \\ & 67295 \end{aligned}$ | R | Belt HFSI Count during learning [HFSI Count] |
| 760-030 | Learn Cleaner HFSI Counter | 0 | $\begin{aligned} & \hline 0 \sim 42949 \\ & 67295 \end{aligned}$ | R | Cleaner HFSI Count during learning [HFSI Count] |
| 760-031 | Learn 2nd BTR HFSI Counter | 0 | $\begin{aligned} & \hline 0 \sim 42949 \\ & 67295 \end{aligned}$ | R | 2nd BTR HFSI Count [HFSI Count] |
| 760-032 | T11 | 0 | 0~50000 | R | Learning result: T11 [1/50 x 2048 micro s] |
| 760-033 | T12 | 0 | 0~50000 | R | $\begin{aligned} & \text { Learning result: T12 } \\ & {[1 / 50 \times 2048 \text { micro s] }} \end{aligned}$ |
| 760-034 | T21 | 0 | 0~50000 | R | Learning result: T21 [1/50 x 2048 micro s] |
| 760-035 | T22 | 0 | 0~50000 | R | Learning result: T22 $[1 / 50 \times 2048$ micro s] |
| 760-036 | T31 | 0 | 0~50000 | R | Learning result: T31 [1/50 x 2048 micro s] |
| 760-037 | T32 | 0 | 0~50000 | R | $\begin{aligned} & \text { Learning result: T32 } \\ & {[1 / 50 \times 2048 \text { micro s] }} \end{aligned}$ |
| 760-038 | T41 | 0 | 0~50000 | R | Learning result: T41 $[1 / 50 \times 2048$ micro s] |
| 760-039 | T42 | 0 | 0~50000 | R | Learning result: T42 [1/50 x 2048 micro s] |
| 760-040 | Y1 | 56300 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: Y1 |
| 760-041 | Y2 | 90 | 0~200 | RW | Offset Correction Coefficient: Y2 |
| 760-042 | Y3 | 100 | 0~200 | RW | Offset Correction Coefficient: Y3 |
| 760-043 | Y4 | 50000 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: Y4 |
| 760-044 | Y5 | 56300 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: Y5 |
| 760-045 | Y6 | 90 | 0~200 | RW | Offset Correction Coefficient: Y6 |
| 760-046 | Y7 | 93 | 0~200 | RW | Offset Correction Coefficient: Y7 |
| 760-047 | Y8 | 100 | 0~200 | RW | Offset Correction Coefficient: Y8 |
| 760-048 | Y9 | 50000 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: Y9 |
| 760-049 | Y10 | 59452 | $\begin{aligned} & \text { 0~10000 } \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: Y10 |
| 760-050 | Y11 | 95 | 0~200 | RW | Offset Correction Coefficient: Y11 |
| 760-051 | Y12 | 77 | 0~200 | RW | Offset Correction Coefficient: Y12 |


| Chain-Link | Name | Default | Range | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 760-052 | Y13 | 100 | 0~200 | RW | Offset Correction Coefficient: Y13 |
| 760-053 | Y14 | 53000 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: Y14 |
| 760-054 | K1 | 43700 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: K1 |
| 760-055 | K2 | 62 | 0~200 | RW | Offset Correction Coefficient: K2 |
| 760-056 | K3 | 50000 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: K3 |
| 760-057 | K4 | 34247 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: K4 |
| 760-058 | K5 | 85 | 0~200 | RW | Offset Correction Coefficient: K5 |
| 760-059 | K6 | 85 | 0~200 | RW | Offset Correction Coefficient: K6 |
| 760-060 | K7 | 100 | 0~200 | RW | Offset Correction Coefficient: K7 |
| 760-061 | K8 | 50000 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: K8 |
| 760-062 | K9 | 31095 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: K9 |
| 760-063 | K10 | 85 | 0~200 | RW | Offset Correction Coefficient: K10 |
| 760-064 | K11 | 85 | 0~200 | RW | Offset Correction Coefficient: K11 |
| 760-065 | K12 | 100 | 0~200 | RW | Offset Correction Coefficient: K12 |
| 760-066 | K13 | 50000 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: K13 |
| 760-077 | K14 | 74 | 0~200 | RW | Offset Correction Coefficient: K14 |
| 760-078 | K15 | 75 | 0~200 | RW | Offset Correction Coefficient: K15 |
| 760-079 | K16 | 100 | 0~200 | RW | Offset Correction Coefficient: K16 |
| 760-080 | K17 | 43000 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Offset Correction Coefficient: K17 |
| 760-081 | K-speed-offset start timing | 12 | 4~15 | RW | Time ( 100 msec )from Belt Home detection that triggers plotting an image in K to the start of modulating IBT Belt speed. |
| 760-082 | K-speed-offset end timing | 3700 | $\begin{aligned} & 300 ~ 370 \\ & 0 \end{aligned}$ | RW | Time (msec) from Belt Home detection that triggers plotting an image in K to the end of modulating IBT Belt speed |
| 760-083 | K-speed-offset value | 20264 | $\begin{aligned} & 20193 ~ 2 \\ & 0274 \end{aligned}$ | RW | The double of this NVM value shall be an actual division ratio in speed modulation for K. |
| 760-085 | Slope of Low Brightness | 261 | 0~511 | RW | Low-light-intensity-area regi correction gradient |
| 760-086 | Slope of High Brightness | 69 | 0~511 | RW | High-light-intensity-area regi correction gradient |
| 760-087 | Intercept of Low Brightness | 6528 | 0~65535 | RW | Low-light-intensity-area Y intercept |
| 760-088 | Intercept of High Brightness | 1723 | 0~6535 | RW | High-light-intensity-area Y intercept |
| 760-089 | LD-Volume Adjust Switch | 0 | 0~1 | RW | $\begin{aligned} & \text { Light Qty Regi Correction S/W } \\ & \text { 0: On } \\ & \text { 1: Off } \end{aligned}$ |
| 760-090 | Regi-Control Change Point | 430 | 250~880 | RW | Control Gradient changing point |
| 760-091 | Y15 | 87 | 0~200 | RW | Y15 |


| Chain-Link | Name | Default | Range | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 760-092 | Y16 | 96 | 0~200 | RW | Y16 |
| 760-093 | Y17 | 100 | 0~200 | RW | Y17 |
| 760-094 | Y18 | 55000 | $\begin{aligned} & 0 \sim 10000 \\ & 0 \end{aligned}$ | RW | Y18 |
| 760-095 | Y-Speed Correction Switch | 0 | 0~1 | RW | $\begin{aligned} & \text { Y Belt Speed Up Correction Switch } \\ & \text { o: On } \\ & 1: \text { Off } \end{aligned}$ |
| 760-096 | Y-Speed Correction Learn Value Use Switch | 0 | 0~1 | RW | Switch sets whether to use learning result in correcting Y Belt speed to speed it up. <br> 0: Learned value <br> 1: NVM value |
| 760-097 | Y-speed-offset start timing | 22 | 20~30 | RW | Time ( 100 msec )from Belt Home detection that triggers plotting an image in $Y$ to the start of modulating IBT Belt speed |
| 760-098 | Y-speed-offset value | 20302 | $\begin{aligned} & 20274 ~ 2 \\ & 0355 \end{aligned}$ | RW | The double of this NVM value shall be an actual division ratio in speed modulation for Y . |
| 760-100 | K-Speed Two Step Correction Switch | 0 | 0~1 | RW | $\begin{aligned} & \text { 2-step speed modulation for K } \\ & \text { 0: On } \\ & \text { 1: Off } \end{aligned}$ |
| 760-101 | K-speed Two Step offset value | 20235 | $\begin{aligned} & 20139 ~ 2 \\ & 0274 \end{aligned}$ | RW | 2-step Speed Modulation division ratio for K |
| 760-102 | K-Two Step-speed-offset start timing | 2600 | $\begin{aligned} & 2000 \sim 37 \\ & 00 \end{aligned}$ | RW | 2-step speed modulation starting point for K [msec] |
| 760-103 | TR0 seal dirt error counter | 0 | 0~255 | RW | Logs how many times dirt has been detected on the effective area of TR0 sticker. |
| 760-104 | TR0 seal dirt warning counter | 0 | 0~255 | RW | Logs how many times dirt on TR0 sticker has been detected. |
| 760-105 | Belt Home Position Too Long Fail threshold | 2354 | $\begin{aligned} & 2337 ~ 45 \\ & 30 \end{aligned}$ | RW | Threshold for detecting Broken Belt Fail |

## Chain 762-xxx Developer

| Chain-Link | Name | Default | Range | Read/Write | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $762-001$ | BIAS_DC_ON | 67 | $1 \sim 145$ | RW | DC BIAS ON Timing (67 Steps before) |
| $762-002$ | BIAS_AC_ON | 67 | $1 \sim 145$ | RW | AC BIAS ON Timing (67 Steps before) |
| $762-003$ | BIAS_DC_OFF | 67 | $1 \sim 145$ | RW | DC BIAS OFF Timing (67 Steps after) |
| $762-004$ | BIAS_AC_OFF | 67 | $1 \sim 145$ | RW | AC BIAS OFF Timing (67 Steps after) |
| $762-005$ | DEVE_MOT_ON | 200 | $0 \sim 1000$ | RW | DEVE_MOT ON Timing (300ms before image) |
| $762-006$ | DEVE_MOT_OFF | 1 | $1 \wedge 145$ | RW | DEVE_MOT OFF Timing (1 Step after) |
| $762-007$ | ROT_MOT_ON | 10 | $0 \sim 500$ | RW | ROTARY MOTOR ON Signal ON timing (10ms before HI/LOW signal) |
| $762-008$ | ROT_MOT_OFF | 10 | $0 \sim 500$ | RW | ROTARY MOTOR ON Signal OFF timing (10ms after HI/LOW signal) |
| $762-009$ | ROT_MOT_HL_ON | 30 | $0 \sim 500$ | RW | ROTARY HI/LOW Signal ON timing (30ms before DEVE CLK) |
| $762-010$ | ROT_MOT_HL_OFF | 200 | $0 \sim 500$ | RW | ROTARY HI/LOW Signal OFF timing (200ms after DEVE CLK) |
| $762-011$ | FIRST_ROT_TIME_FC | 693 | $0 \sim 2000$ | RW | the timing of starting rotating Rotary when FC cycles up <br> (693ms before image) |


| Chain-Link | Name | Default | Range | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 762-012 | FIRST_ROT_TIME_BW | 693 | 0~2000 | RW | the timing of starting rotating Rotary when BW cycles up (693ms before image) |
| 762-014 | ROT_MOT_TIME_END | 10 | 0~500 | RW | the timing of starting rotating Rotary when the M/C cycles down (10ms after the trail edge of image) |
| 762-015 | Home Back Wait Time | 500 | 0~2000 | RW | Wait Time between Exchange Position and Back Home ( 500 ms after the instruction) |
| 762-016 | ROTARY_POSITION | 0 | 0~4 | RW | 0: Home <br> 1: Kex <br> 2: Yex <br> 3: Mex <br> 4: Cex |
| 762-017 | ESCAPE_INT_TIME | 1700 | 0~3000 | RW | Rest Time (1700ms) in Kesc |
| 762-022 | ESCAPE BIAS DC | 100 | 0~1000 | RW | Bias DC Value (100V) for generating band for a color that passes the development position |
| 762-023 | BW_TRICLE_START_WAIT | 500 | 0~2000 | RW | Wait Time before starting the operation of trickling toner ( 500 ms after the trail edge of image) |
| 762-024 | BW_TRICLE_WAIT_TIME | 1000 | 0~3000 | RW | Wait Time ( 1000 ms ) at the position trickling is done |
| 762-025 | BW_TRICLE_DISP_LIMIT | 1500 | 0~5000 | RW | Total Dispense Time Threshold ( 15 sec : in steps of 10 ms ) in continuous B/W in order to do the operation of trickling |
| 762-026 | BW_TRICLE_DISP_TOTAL | 0 | 0~5000 | RW | Total Dispense Time in continuous B/W in order to do the operation of trickling during job |
| 762-027 | NVM_HOME_ADJ_Switch | 0 | 0~1 | RW | 0: Adjustment Mode not executed 1: Adjustment Mode executed |
| 762-028 | NVM_HOME_ADJ_PULSE | 33 | 0~65 | RW | HOME SENSOR Installing Position Correction Value (N) |
| 762-029 | NVM_ROTARY_FAIL_LIMIT | 8 | 0~50 | RW | Home Position Fail Occurrence Threshold (F) |
| 762-030 | Deve_Bias_DC | 570 | 0~1000 | RW | Deve Bias DC Value (Default: 600V) |
| 762-031 | Deve_Bias_AC_F | 6250 | 0~10000 | RW | Deve Bias AC Frequency (Default: 6000Hz) |
| 762-032 | Deve_Bias_AC_PP | 1000 | 0~2000 | RW | Deve Bias AC Vpeak-peak Value (Default: 1000V) |
| 762-033 | Deve_Bias_AC_Duty | 65 | 0~100 | RW | Deve Bias AC Duty (Default: 65\%) |
| 762-034 | CRUM R/W WAIT TIME 1 | 10 | 0~500 | RW | Wait Time (ms) before CRUM R/W |
| 762-035 | CRUM R/W WAIT TIME 2 | 10 | 0~500 | RW | Wait Time (ms) after CRUM R/W |
| 762-036 | HOME POSITION ANGLE | 35 | 0~65 | RW | Home Position Angle Preset Value (H) |
| 762-038 | CRUM R/W WAIT TIME 5 | 30 | 0~500 | RW | CRUM R/W Escape Wait Time (ms) |
| 762-039 | BAND_DEVE_ROT_TIME_K | 0 | 0~65535 | RW | Total Deve Drive Time for band generation K |
| 762-040 | BAND_DEVE_ROT_TIME_Y | 0 | 0~65535 | RW | Total Deve Drive Time for band generation $Y$ |
| 762-041 | BAND_DEVE_ROT_TIME_M | 0 | 0~65535 | RW | Total Deve Drive Time for band generation M |
| 762-042 | BAND_DEVE_ROT_TIME_C | 0 | 0~65535 | RW | Total Deve Drive Time for band generation C |
| 762-043 | BAND Cin | 60 | 0~100 | RW | Band Cin (Default: 60\%) |
| 762-044 | BAND COVERAGE LIMIT | 75 | 0~1000 | RW | Threshold for Band Execution Judgment |
| 762-045 | BAND LENGTH | 145 | 0~1000 | RW | Band Length Calculation standard value |
| 762-046 | Down Step Timing 1 | 247 | 0~1000 | RW | the timing of starting Step Down in Step Control (layout difference from BCR: $227 \mathrm{~ms}+20 \mathrm{~ms}$ ) |
| 762-047 | Down Step Timing 2 | 50 | 0~500 | RW | In Step Down in Step Control, Vm 3 hours |

Table 12 Deve

| Chain-Link | Name | Default | Range | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 762-048 | Down Step Timing 3 | 50 | 0~500 | RW | In Step Down in Step Control, Vm 2 hours |
| 762-049 | Up Step Timing 1 | 207 | 0~1000 | RW | the timing of starting Step Up in Step Control (layout difference from BCR: 227ms20ms) |
| 762-050 | Up Step Timing 2 | 50 | 0~500 | RW | In Step Up in Step Control, Vm 2 hours |
| 762-051 | Up Step Timing 3 | 50 | 0~500 | RW | In Step Up in Step Control, Vm 3 hours |
| 762-052 | ESCAPE_INT_TIME_HALF_K | 8830 | 0~10000 | RW | BW Rest Time (8330ms) in Kesc after speed reduction |
| 762-053 | ESCAPE DEVE DC HALF | 100 | 1~1000 | RW | Cin (in speed reduction) for generating band for color that passes the development position |
| 762-054 | INT_ROT_TIME_FC | 693 | 0~2000 | RW | the timing of starting rotating Rotary in FC after speed reduction (693ms before image) |
| 762-055 | Deve_Bias_DC_Nominal | 570 | 1~1000 | RW | Deve Bias DC Value when Voltage Control Off |
| 762-056 | ROT_BAND_WARNING | 0 | 0~1 | RW | Whether to rotate Rotary with P/R not in operation |
| 762-057 | ROT_TIME_LIMIT | 2000 | 0~5000 | RW | Fail Time Threshold (ms) in Home Positioning |
| 762-058 | ROT_TIME_SHORT_YMC | 2947 | 2000~4000 | RW | the timing of rotating Rotary during Print YMC (1) |
| 762-059 | ROT_TIME_SHORT_K | 3057 | 2000~4000 | RW | the timing of rotating Rotary during Print K (1) |
| 762-060 | ROT_TIME_MID_YMC | 1207 | 0~2000 | RW | the timing of rotating Rotary during Print YMC (2) |
| 762-061 | ROT_TIME_MID_K | 1318 | 0~2000 | RW | the timing of rotating Rotary during Print K (2) |
| 762-062 | ROT_TIME_LONG_YMCK | 1 | 0~500 | RW | the timing of rotating Rotary during Print YMCK |
| 762-063 | CHANGE_INT_RECOVERY | 200 | 0~2000 | RW | Wait Time (200ms) in changing color during the recovery operation |
| 762-064 | Cartridge First Set UP | 0 | 0~1 | RW | Installing Operation at installation <br> 0 : Yes <br> 1: No |
| 762-244 | DEVE_UNIT_LIFE | 420000 | 0~840000 | RW | Developer Unit Life |
| 762-245 | DEVE_UNIT_LIFE_WARNING | 418500 | 0~840000 | RW | Warning on Developer Unit |

## Chain 764-xxx Finisher

| Table 13 Output Control |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Chain-Link | Name | Default | Range | Description |
| $764-002$ | B-Fin Sleep Mode Recovery Indicate | 0 | $0 \sim 1$ | Indicates whether Finisher has recovered from Sleep Mode. <br> $1:$ Recovery from Sleep Mode <br> $0:$ Power ON in any case other than the above |
| $764-003$ | Fin Decurler On Level | 0 | $-50 \sim 50$ | Curl Amount based on which Finisher Decurler should be turned on |
| $764-004$ | Fin Sheet Width of Last EjectedSheet | 0 | $0 \sim 65535$ | the width (in steps of 0.1 mm ) of the top sheet of a stack of paper on Finisher Stacker <br> (Rewrite in Sleep Mode) |
| $764-005$ | Fin Sheet Length of Last EjectedSheet | 0 | $0 \sim 65535$ | the length (in steps of 0.1 mm ) of the top sheet of a stack of paper on Finisher Stacker <br> (Rewrite in Sleep Mode) |
| $764-006$ | Fin Sheet Width of Maximum SizeSheet | 0 | $0 \sim 65535$ | the width (in steps of 0.1 mm ) of the largest sheet of a stack of paper on Finisher Stacker) <br> (Rewrite in Sleep Mode) |
| $764-007$ | Fin Sheet Length of Maximum SizeSheet | 0 | $0 \sim 65535$ | the length (in steps of 0.1 mm ) of the largest sheet of a stack of paper on Finisher Stacker) <br> (Rewrite in Sleep Mode) |

Table 13 Output Control

| Chain-Link | Name | Default | Range | Description |
| :---: | :---: | :---: | :---: | :---: |
| 764-008 | Fin Number Of Ejected Staple Set | 0 | 0~255 | the number of to-be-stapled sets ejected on Finisher Stacker (Rewrite in Sleep Mode) |
| 764-009 | Fin Mix Sensor Level Indicate | 0 | 0~1 | Finisher Stacker Tray Mix SNR position level (Rewrite in Sleep Mode) |
| 764-010 | Fin Staple Mode of Last Set | 0 | 0~255 | Staple Mode (including unstaple) for the last set on Finisher Stacker (Rewrite in Sleep Mode) |
| 764-011 | Fin Mix Stack Enable/Disable | 0 | 0~1 | Prohibits stacking mixed-size sheets after detecting the Finisher MIX STCK position 0: Prohibited <br> 1: Not prohibited |
| 764-012 | B-Fin Maximum Set Count | 50 | 0~100 | the max number of sets that can be stacked on B-Finisher Stacker |
| 764-013 | B-Fin Max Compile Sheet Count for Staple | 50 | 10~100 | the upper limit on the number of sheets to be compiled for B-Finisher Stapling |
| 764-014 | B-Fin Max Compile Sheet Count(Un-Staple/Big) | 25 | 10~100 | the upper limit on the number of large sheets to be compiled for B-Finisher Un-Stapling |
| 764-015 | B-Fin Max Compile Sheet Count(Un-Staple/Small) | 50 | 10~100 | the upper limit on the number of small sheets to be compiled for B-Finisher Un-Stapling |
| 764-016 | B-Fin Decurler Detect SW | 0 | 0~1 | Indicates whether Decurler Kit is installed in B-Finisher. 0 : Not installed <br> 1: Installed |
| 764-017 | A-Fin Maximum Set Count | 30 | 0~100 | the max number of sets that can be stacked on A-Finisher Stacker |
| 764-018 | A-Fin Maximum Compile Sheet Count (Staple/Big) | 30 | 10~100 | the upper limit on the number of large sheets to be compiled for A-Finisher Stapling |
| 764-019 | A-Fin Maximum Compile Sheet Count (Staple/Small) | 50 | 10~100 | the upper limit on the number of small sheets to be compiled for A-Finisher Stapling |
| 764-020 | A-Fin Max Compile Sheet Count (Un-Staple/Plain Big) | 5 | 1~25 | the upper limit on the number of large plain sheets to be compiled for A-Finisher Un-Stapling |
| 764-021 | A-Fin Max Compile Sheet Count (Un-Staple/Plain Small) | 10 | 1~50 | the upper limit on the number of small plain sheets to be compiled for A-Finisher Un-Stapling |
| 764-022 | A-Fin Max Compile Sheet Count (Un-Staple/Special Paper Big) | 5 | 1~25 | the upper limit on the number of large special sheets to be compiled for A-Finisher Un-Stapling |
| 764-023 | A-Fin Max Compile Sheet Count (Un-Staple/Special Paper Small) | 5 | 1~50 | the upper limit on the number of small special sheets to be compiled for A-Finisher Un-Stapling |
| 764-024 | A-Fin Max Compile Sheet Count (Un-Staple/OHP Big) | 1 | 1~25 | the upper limit on the number of large transparencies to be compiled for A-Finisher Un-Stapling |
| 764-025 | A-Fin Max Compile Sheet Count (Un-Staple/OHP Small) | 1 | 1~50 | the upper limit on the number of small transparencies to be compiled for A-Finisher Un-Stapling |
| 764-026 | Fin Number Of Ejected Sheet Count | 0 | 0~65535 | the number of sheets ejected on Finisher Stacker (Rewrite in Sleep Mode) |

## IIT NVM List

| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 710-501 | Fax Document Size Detection Method for DADF | 0 | 0~1 | Indicates the switching of detection method when Fax Document Size Detection is specified in DADF mode. 0: A/B series, 1: Inch series |
| 710-551 | JAM Bypass | 0 | 0~1 | 0: Do not bypass, 1: Bypass Applies to CVT mode. |
| 710-600 | Size Mismatch Jam Detection Setting (Applicable only in Simplex mode) | 1 | 1~2 | 1: Size Mismatch Jam Detection On 2: Size Mismatch Jam Detection Off |
| 710-603 | Alternate Size Set3 | 0 | 0~2 | PF1: Switches between 11x15S and 11x17S. No-Mix: mm, No-Mix/Size-Mix: Inch13/Inch14,0: Default,1: 11x17S,2: 11x15S PF2: Switches between 11x15S and 11x17S. No-Mix: mm/Inch13/ Inch14, Size-Mix: Inch13/Inch14,0: Default,1: 11x17S,2: 11x15S |
| 710-604 | Alternate Size Set4 | 0 | 0~2 | PF1: Switches between $8.46 \times 12.4 \mathrm{~S}, 8.5 \times 13 \mathrm{~S}$ and $8.5 \times 14 \mathrm{~S}$. No-Mix/Size-Mix: mm,0: Default,1: $8.5 \times 13 \mathrm{~S}, 2$ : $8.5 \times 14$ SF2: Switches between $8.5 \times 13$ S and $8.5 \times 14 \mathrm{~S}$. No-Mix/Size-Mix: mm Initial value: 2,0 : Default, $1: 8.5 \times 13 \mathrm{~S}, 2: 8.5 \times 14 \mathrm{~S}$ |
| 710-605 | Alternate Size Set5 | 0 | 0~2 | PF1: Switches between BS5 and 16KS. No-Mix: mm,0: Default,1: B5S,2: 16KS PF2: Switches between B5S and 16KS. No-Mix/Size-Mix: mm Initial value: mm,0: Default,1: B5S,2: 16KS |
| 710-606 | Alternate Size Set6 | 0 | 0~3 | PF1: Switches between $8 \times 10$ S, $8 \times 10.5$ S and $8.5 \times 11$ S. Size-Mix: Inch13/Inch14,0: Default, 1: $8.5 \times 11 \mathrm{~S}, 2$ : $8 \times 10 \mathrm{~S}, 3: 8 \times 10.5 \mathrm{~S}$ PF2: Switches between $8 \times 10 \mathrm{~S}, 8 \times 10.5 \mathrm{~S}$ and $8.5 \times 11$ S. Size-Mix: Inch13/Inch14,0: Default, 1: $8.5 \times 11 \mathrm{~S}, 2: 8 \times 10 \mathrm{~S}, 3: 8 \times 10.5 \mathrm{~S}$ |
| 710-607 | Alternate Size Set7 | 0 | 0~3 | PF1: Switches between $8 \times 10 \mathrm{~L}, 8 \times 10.5 \mathrm{~L}$ and $8.5 \times 11 \mathrm{~L}$. Size-Mix: Inch13/Inch14,0: Default, 1 : $8.5 \times 11 \mathrm{~L}, 2: 8 \times 10 \mathrm{~L}, 3: 8 \times 10.5 \mathrm{~L}$ PF2: Switches between $8 \times 10 \mathrm{~L}, 8 \times 10.5 \mathrm{~L}$ and $8.5 \times 11 \mathrm{~L}$. Size-Mix: Inch13/ Inch14,0: Default, 1: $8.5 \times 11 \mathrm{~L}, 2: 8 \times 10 \mathrm{~L}, 3: 8 \times 10.5 \mathrm{~L}$ |
| 710-608 | Alternate Size Set8 | 0 | 0~4 | PF2: Switches between B4S, 8KS, 11x15S and 11x17S. Size-Mix: mm,0: Default, 1: B4S,2: 8KS 3: 11x15S 4: 11x17S PF2: Switches between B4S, 8KS and 11x17S. Size-Mix: mm, 0: Default, 1: B4S,2: $8 \mathrm{KS} \quad 3$ : $11 \times 17 \mathrm{~S}$ PF2 setting range is $0 \sim 3$. |
| 710-609 | Alternate Size Set9 | 0 | 0~2 | PF1: Switches between $8 \times 10$ and $8 \times 10.5 \mathrm{~S}$. No-Mix: Inch13/Inch14,0: Default, 1: $8 \times 10 \mathrm{~S}, 2: 8 \times 10.5 \mathrm{~S}$ PF2: Switches between $8 \times 10 \mathrm{~S}$ and $8 \times 10.5 \mathrm{~S}$. No-Mix: Inch13/Inch14,0: Default, $1: 8 \times 10 \mathrm{~S}, 2: 8 \times 10.5 \mathrm{~S}$ |
| 710-610 | Alternate Size Set10 | 0 | 0~2 | PF1: Switches between B5L and 16KL. Size-Mix: mm,0: Default,1: B5L,2: 16KL PF2: Switches between B5L, 16KL and $8.5 \times 11 \mathrm{~L}$. Size-Mix: mm,0: Default 1:B5L,2: 16KL $\quad 3: 8.5 \times 11 \mathrm{~L}$ PF2 setting range is $0 \sim 3$. |
| 710-612 | Size-Mix Mode Size Orientation | 1 | 0~1 | Switches between LEF and SEF.,0: LEF, 1: SEF |
| 710-613 | Fax Job Mixed-Sizes Standard Mode | 0 | 0~1 | Switches to a size (standard/non-standard) that DADF should report to IISS in Fax Mixed-Sizes Mode. <br> 0: Non-standard Mode <br> 1: Standard Mode |

## Chain 711-xxx CVT DADF NVM LIST

Table 2 CVT DADF NVM LIST

| Chain-Link | Content | Default | Range | 1 Count | Meaning |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $711-001$ | DADF Lead Registration Adjustment (Side1) <br> $(37.5 \mathrm{~mm} / \mathrm{sec})$ | 129 | $0 \sim 214$ | 0.0458 mm | Initial value Omm (129 pulse) $+5.9 \mathrm{~mm}(-129 \mathrm{pulse}) /-3.9 \mathrm{~mm}(+85 \mathrm{pulse})$ |
| $711-002$ | DADF Lead Registration Adjustment (Side1) <br> $(50.0 \mathrm{~mm} / \mathrm{sec})$ | 129 | $0 \sim 214$ | 0.0458 mm | Initial value Omm (129 pulse) $+5.9 \mathrm{~mm}(-129 \mathrm{pulse}) /-3.9 \mathrm{~mm}(+85 \mathrm{pulse})$ |

Table 2 CVT DADF NVM LIST

| Chain-Link | Content | Default | Range | 1 Count | Meaning |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 711-003 | DADF Lead Registration Adjustment (Side1) ( $66.7 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-004 | DADF Lead Registration Adjustment (Side1) ( $75.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-005 | DADF Lead Registration Adjustment (Side1) ( $100.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-006 | DADF Lead Registration Adjustment (Side1) ( $133.3 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-007 | DADF Lead Registration Adjustment (Side1) ( $150.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-008 | DADF Lead Registration Adjustment (Side1) (200.0mm/sec) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-009 | DADF Lead Registration Adjustment (Side1) ( $300.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-015 | DADF Lead Registration Adjustment (Side2) ( $37.5 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-016 | DADF Lead Registration Adjustment (Side2) ( $50.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-017 | DADF Lead Registration Adjustment (Side2) ( $66.7 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-018 | DADF Lead Registration Adjustment (Side2) ( $75.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-019 | DADF Lead Registration Adjustment (Side2) ( $100.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-020 | DADF Lead Registration Adjustment (Side2) (133.3mm/sec) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-021 | DADF Lead Registration Adjustment (Side2) ( $150.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-022 | DADF Lead Registration Adjustment (Side2) (200.0mm/sec) | 129 | 0~214 | 0.0458mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-023 | DADF Lead Registration Adjustment (Side2) ( $300.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~214 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -3.9mm (+85 pulse) |
| 711-029 | DADF Tail Edge Fine Adjustment (Side1) ( $37.5 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value 0 mm ( 129 pulse) +5.9 mm ( -129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment $=$ Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-030 | DADF Tail Edge Fine Adjustment (Side1) ( $50.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458 mm | Initial value 0 mm (129 pulse) +5.9 mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-031 | DADF Tail Edge Fine Adjustment (Side1) ( $66.7 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458 mm | Initial value 0 mm (129 pulse) +5.9mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-032 | DADF Tail Edge Fine Adjustment (Side1) ( $75.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-033 | DADF Tail Edge Fine Adjustment (Side1) ( $100.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458 mm | Initial value 0 mm ( 129 pulse) +5.9 mm ( -129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-034 | DADF Tail Edge Fine Adjustment (Side1) ( $133.3 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458 mm | Initial value 0 mm ( 129 pulse) +5.9 mm ( -129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment $=$ Lead Registration adjustment value + Tail Edge fine adjustment value |

Table 2 CVT DADF NVM LIST

| Chain-Link | Content | Default | Range | 1 Count | Meaning |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 711-035 | DADF Tail Edge Fine Adjustment (Side1) ( $150.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value 0 mm (129 pulse) +5.9 mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-036 | DADF Tail Edge Fine Adjustment (Side1) ( $200.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value 0 mm (129 pulse) +5.9 mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-037 | DADF Tail Edge Fine Adjustment (Side1) (300.0mm/sec) | 129 | 0~255 | 0.0458 mm | Initial value 0mm (129 pulse) +5.9mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-043 | DADF Tail Edge Fine Adjustment (Side2) ( $37.5 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value 0 mm (129 pulse) +5.9 mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-044 | DADF Tail Edge Fine Adjustment (Side2) ( $50.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value Omm (129 pulse) +5.9mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment $=$ Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-045 | DADF Tail Edge Fine Adjustment (Side2) ( $66.7 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value 0 mm (129 pulse) +5.9 mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-046 | DADF Tail Edge Fine Adjustment (Side2) ( $75.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value 0 mm (129 pulse) +5.9 mm ( -129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-047 | DADF Tail Edge Fine Adjustment (Side2) ( $100.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value 0 mm (129 pulse) +5.9 mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-048 | DADF Tail Edge Fine Adjustment (Side2) ( $133.3 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value 0 mm (129 pulse) +5.9 mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment $=$ Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-049 | DADF Tail Edge Fine Adjustment (Side2) ( $150.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458 mm | Initial value 0 mm (129 pulse) +5.9 mm ( -129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-050 | DADF Tail Edge Fine Adjustment (Side2) ( $200.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458 mm | Initial value 0 mm ( 129 pulse) +5.9 mm ( -129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment = Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-051 | DADF Tail Edge Fine Adjustment (Side2) ( $300.0 \mathrm{~mm} / \mathrm{sec}$ ) | 129 | 0~255 | 0.0458mm | Initial value 0 mm ( 129 pulse) +5.9 mm (-129 pulse) / -5.8 mm (+126 pulse) Tail Edge adjustment $=$ Lead Registration adjustment value + Tail Edge fine adjustment value |
| 711-057 | Vertical Ratio Fine Adjustment (37.5mm/sec) | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. |
| 711-058 | Vertical Ratio Fine Adjustment (50.0mm/sec) | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. |
| 711-059 | Vertical Ratio Fine Adjustment (66.7mm/sec) | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. |
| 711-060 | Vertical Ratio Fine Adjustment (75.0mm/sec) | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. |
| 711-061 | Vertical Ratio Fine Adjustment (100.0mm/sec) | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. |
| 711-062 | Vertical Ratio Fine Adjustment (133.3mm/sec) | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. |
| 711-063 | Vertical Ratio Fine Adjustment (150.0mm/sec) | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. |
| 711-064 | Vertical Ratio Fine Adjustment (200.0mm/sec) | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. |
| 711-065 | Vertical Ratio Fine Adjustment (300.0mm/sec) | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. |
| 711-070 | T/A Roll Transport Speed Adjustment (Side1) ( $37.5 \mathrm{~mm} / \mathrm{sec}$ ) | 15 | 0~50 | 0.001 | Initial value $1.5 \%$ (15) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |

Table 2 CVT DADF NVM LIST

| Chain-Link | Content | Default | Range | 1 Count | Meaning |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 711-071 | T/A Roll Transport Speed Adjustment (Side1) $(50.0 \mathrm{~mm} / \mathrm{sec})$ | 15 | 0~50 | 0.001 | Initial value $1.5 \%$ (15) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-072 | T/A Roll Transport Speed Adjustment (Side1) ( $66.7 \mathrm{~mm} / \mathrm{sec}$ ) | 15 | 0~50 | 0.001 | Initial value $1.5 \%$ (15) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-073 | T/A Roll Transport Speed Adjustment (Side1) ( $75.0 \mathrm{~mm} / \mathrm{sec}$ ) | 15 | 0~50 | 0.001 | Initial value 1.5\% (15) Maximum 5\% (50), Minimum 0\% (0), 0.1\% increments Adjusts only Top Speed for Feed Motor. |
| 711-074 | T/A Roll Transport Speed Adjustment (Side1) ( $100.0 \mathrm{~mm} / \mathrm{sec}$ ) | 15 | 0~50 | 0.001 | Initial value $1.5 \%$ (15) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-075 | T/A Roll Transport Speed Adjustment (Side1) ( $133.3 \mathrm{~mm} / \mathrm{sec}$ ) | 15 | 0~50 | 0.001 | Initial value $1.5 \%$ (15) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-076 | T/A Roll Transport Speed Adjustment (Side1) ( $150.0 \mathrm{~mm} / \mathrm{sec}$ ) | 15 | 0~50 | 0.001 | Initial value $1.5 \%$ (15) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-077 | T/A Roll Transport Speed Adjustment (Side1) (200.0mm/sec) | 15 | 0~50 | 0.001 | Initial value $1.5 \%$ (15) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-078 | T/A Roll Transport Speed Adjustment (Side1) ( $300.0 \mathrm{~mm} / \mathrm{sec}$ ) | 15 | 0~50 | 0.001 | Initial value $1.5 \%$ (15) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-080 | T/A Roll Transport Speed Adjustment (Side2) ( $37.5 \mathrm{~mm} / \mathrm{sec}$ ) | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), 0.1\% increments Adjusts only Top Speed for Feed Motor. |
| 711-081 | T/A Roll Transport Speed Adjustment (Side2) ( $50.0 \mathrm{~mm} / \mathrm{sec}$ ) | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), 0.1\% increments Adjusts only Top Speed for Feed Motor. |
| 711-082 | T/A Roll Transport Speed Adjustment (Side2) ( $66.7 \mathrm{~mm} / \mathrm{sec}$ ) | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-083 | T/A Roll Transport Speed Adjustment (Side2) ( $75.0 \mathrm{~mm} / \mathrm{sec}$ ) | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-084 | T/A Roll Transport Speed Adjustment (Side2) ( $100.0 \mathrm{~mm} / \mathrm{sec}$ ) | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), 0.1\% increments Adjusts only Top Speed for Feed Motor. |
| 711-085 | T/A Roll Transport Speed Adjustment (Side2) ( $133.3 \mathrm{~mm} / \mathrm{sec}$ ) | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-086 | T/A Roll Transport Speed Adjustment (Side2) ( $150.0 \mathrm{~mm} / \mathrm{sec}$ ) | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-087 | T/A Roll Transport Speed Adjustment (Side2) ( $200.0 \mathrm{~mm} / \mathrm{sec}$ ) | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. |
| 711-088 | T/A Roll Transport Speed Adjustment (Side2) ( $300.0 \mathrm{~mm} / \mathrm{sec}$ ) | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), 0.1\% increments Adjusts only Top Speed for Feed Motor. |
| 711-140 | DADF Lead Registration Adjustment (Side1) Replace All | 129 | 0~214 | 0.0458 mm | Initial value 0 mm ( 129 pulse) +5.9 mm ( -129 pulse) / -3.9 mm (+85 pulse) Rewrites all data of 711-001 to 711-009 with specified data. |
| 711-141 | DADF Lead Registration Adjustment (Side2) Replace All | 129 | 0~214 | 0.0458 mm | Initial value 0 mm ( 129 pulse) +5.9 mm ( -129 pulse) / -3.9 mm (+85 pulse) Rewrites all data of 711-015 to 711-023 with specified data. |
| 711-142 | DADF Tail Edge Fine Adjustment (Side1) Replace All | 129 | 0~255 | 0.0458 mm | Initial value 0 mm (129 pulse) +5.9 mm ( -129 pulse) / -5.8 mm (+126 pulse) Rewrites all data of 711-029 to 711-037 with specified data. |
| 711-143 | DADF Tail Edge Fine Adjustment (Side2) Replace All | 129 | 0~255 | 0.0458 mm | Initial value 0 mm ( 129 pulse) +5.9 mm ( -129 pulse) / -5.8 mm (+126 pulse) Rewrites all data of 711-043 to 711-051 with specified data. |
| 711-144 | Vertical Ratio Fine Adjustment Replace All | 20 | 0~40 | 0.001 | Initial value 0\% (20) +/-2\% (+/-20), 0.1\% increments Adjusts only Top Speed for Feed Motor and Regi Motor. Rewrites all data of 711-057 to 711-065 with specified data. |

Table 2 CVT DADF NVM LIST

| Chain-Link | Content | Default | Range | 1 Count | Meaning |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 711-145 | T/A Roll Transport Speed Adjustment (Side1) Replace All | 15 | 0~50 | 0.001 | Initial value 1.5\% (15) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. Rewrites all data of 711-070 to 711-078 with specified data. |
| 711-146 | T/A Roll Transport Speed Adjustment (Side2) Replace All | 0 | 0~50 | 0.001 | Initial value 0\% (0) Maximum 5\% (50), Minimum 0\% (0), $0.1 \%$ increments Adjusts only Top Speed for Feed Motor. Rewrites all data of 711-080 to 711-088 with specified data. |
| 711-150 | Loop Amount Adjustment (Side1) (x1 Pulse) | 3 | 0~9 | 0.6835 mm | Initial value 3.6 mm (172 pulse, 130 pulse for High Speed mode) $+4.1 \mathrm{~mm} /-2.1 \mathrm{~mm} 10$ pulse increments |
| 711-151 | Loop Amount Adjustment (Side2) (x6 Pulse) | 5 | 0~14 | 0.4581 mm | Initial value 4.0 mm ( 256 pulse) +4.1 mm ( 346 pulse) / -2.3 mm (206 pulse) 10 pulse increments |
| 711-152 | Simplex Speed Mode Switch | 0 | 0~1 | - | 0 : High Speed mode Off 1: High Speed mode On |
| 711-158 | Position Adjustment for End Position during Invert (x4 Pulse) | 10 | 20 | 0.4581 mm | Initial value 31.1 mm ( 450 pulse) +4.6 mm ( 766 pulse) / -4.6 mm ( 566 pulse) 10 pulse increments |
| 711-164 | Slow Scan Original Size Correction Value | 50 | 0~100 | 0.1 mm | Correction value for [Size Detection Auto-Correction Function] Original Size Correction Value: $+/-5 \mathrm{~mm}$ |
| 711-200 | Position Adjustment for Pre Regist End Position (Original Lead Edge Eject Amount from Regi Roll in x2 Pulse Increments) | 8 | 0~16 | 0.6249 mm | Initial value 0 mm ( 0 pulse) +5.0 mm ( 80 pulse) / -5.0 mm ( -80 pulse) 10 pulse increments This value also applies to Scan Position Transport Time. |
| 711-201 | Position Adjustment for Feed Motor Off Start Position (x3 Pulse) | 8 | 1~15 | 0.6249 mm | Initial value 5.0 mm ( 80 pulse) +4.4 mm ( 150 pulse) / -4.4 mm ( 10 pulse) 10 pulse increments |
| 711-202 | Position Adjustment for Position to Start Increasing Speed in Duplex (x5 Pulse) | 10 | 0~20 | 0.4581 mm | Initial value 50.4 mm ( 1080 pulse) +4.6 mm ( 1180 pulse) / -4.6 mm ( 980 pulse) 10 pulse increments |
| 711-203 | Position Adjustment for First-Out Pre Feed Position in Duplex (x7 Pulse) | 5 | 0~10 | 0.6835 mm | Initial value 14.6 mm (224 pulse) +3.4 mm (274 pulse) / -3.4 mm ( 174 pulse) 10 pulse increments |
| 711-204 | Position Adjustment for N.R. Solenoid On Position during Invert Output (x8 Pulse) | 10 | 0~20 | 0.4581 mm | Initial value 15.0 mm ( 241 pulse) +4.6 mm ( 341 pulse) / -4.6 mm ( 141 pulse) 10 pulse increments |
| 711-205 | Side2 Feed Motor Reverse Start Time Adjustment Value (T1 ms) | 4 | 0~20 | 4 msec | Initial value $0 \mathrm{~ms}+80 \mathrm{~ms} /-20 \mathrm{~ms}$, 4ms increments |
| 711-207 | Next Feed Start Time Adjustment Value (T3 ms) | 5 | 2~27 | 4msec | Initial value $0 \mathrm{~m}+88 \mathrm{~ms} /-12 \mathrm{~ms}$, 4 ms increments |
| 711-208 | Simplex Next Pre Regist Start Time Adjustment Value (T4 ms) | 6 | 6~25 | 4 msec | Initial value $4 \mathrm{~ms}+76 \mathrm{~ms} / 0 \mathrm{~ms}$, 4 ms increments |
| 711-209 | Invert Start Time Adjustment Value (T6 ms) | 5 | 0~25 | 4 msec | Initial value $0 \mathrm{~ms}+80 \mathrm{~ms} /-20 \mathrm{~ms}$, 4ms increments |
| 711-210 | N.R. Solenoid On Start Time Adjustment Value during Invert Output (T7 ms) | 5 | 0~15 | 4 msec | Initial value0ms +40ms/-20ms, 4ms increments |
| 711-211 | First-Out Original Feed Start Time Adjustment Value (T8 ms) | 5 | 0~25 | 4msec | Initial value $0 \mathrm{~ms}+80 \mathrm{~ms} /-20 \mathrm{~ms}, 4 \mathrm{~ms}$ increments |
| 711-212 | Duplex Next Pre Regist Start Time Adjustment Value (T9 ms) | 6 | 6~25 | 4msec | Initial value $4 \mathrm{~ms}+76 \mathrm{~ms} / 0 \mathrm{~ms}$, 4ms increments |
| 711-215 | Slow Down Start Time Adjustment Value during Nudger Lift Down (T11 ms) | 10 | 0~20 | 4msec | Initial value 0ms +/-40ms, 4ms increments |
| 711-216 | Slow Down Start Time Adjustment Value during Nudger Lift Up (T12 ms) | 10 | 10~20 | 4msec | Initial value0ms +40ms/-0ms, 4ms increments |
| 711-217 | Feed Out Sensor Static Jam Detection Sampling No. Setting | 20 | 1~40 | 1 time | Initial value 20 times +20 times/-19 times, 1 time increments |

Table 2 CVT DADF NVM LIST

| Chain-Link | Content | Default | Range | 1 Count | Meaning |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 711-218 | Feed Out Sensor Act. Correction Coefficient - A9 | 59 | 0~255 | 0.01 | Initial value 0.59 0.00~2.55, 0.01 increments |
| 711-219 | Feed Out Sensor Act. Correction Coefficient - B9 | 104 | 0~255 | 1 | Initial value $1040 \sim 255,1$ increments |
| 711-270 | ADF-IIT Combine Adjustment Value Data 1 | 0 | 0~255 | - | Adjustment Value Data 1 sent to IIT during ADF-IIT Combine. |
| 711-271 | ADF-IIT Combine Adjustment Value Data 2 | 0 | 0~255 | - | Adjustment Value Data 2 sent to IIT during ADF-IIT Combine. |
| 711-272 | ADF-IIT Combine Adjustment Value Data 3 | 0 | 0~255 | - | Adjustment Value Data 3 sent to IIT during ADF-IIT Combine. |
| 711-273 | ADF-IIT Combine Adjustment Value Data 4 | 0 | 0~255 | - | Adjustment Value Data 4 sent to IIT during ADF-IIT Combine. |
| 711-274 | ADF-IIT Combine Adjustment Value Data 5 | 0 | 0~255 | - | Adjustment Value Data 5 sent to IIT during ADF-IIT Combine. |
| 711-275 | ADF-IIT Combine Adjustment Value Data 6 | 0 | 0~255 | - | Adjustment Value Data 6 sent to IIT during ADF-IIT Combine. |
| 711-276 | ADF-IIT Combine Adjustment Value Data 7 | 0 | 0~255 | - | Adjustment Value Data 7 sent to IIT during ADF-IIT Combine. |
| 711-277 | ADF-IIT Combine Adjustment Value Data 8 | 0 | 0~255 | - | Adjustment Value Data 8 sent to IIT during ADF-IIT Combine. |
| 711-278 | ADF-IIT Combine Adjustment Value Data 9 | 0 | 0~255 | - | Adjustment Value Data 9 sent to IIT during ADF-IIT Combine. |
| 711-279 | ADF-IIT Combine Adjustment Value Data 10 | 0 | 0~255 | - | Adjustment Value Data 10 sent to IIT during ADF-IIT Combine. |
| 711-280 | ADF-IIT Combine Adjustment Value Data 11 | 0 | 0~255 | - | Adjustment Value Data 11 sent to IIT during ADF-IIT Combine. |
| 711-281 | ADF-IIT Combine Adjustment Value Data 12 | 0 | 0~255 | - | Adjustment Value Data 12 sent to IIT during ADF-IIT Combine. |
| 711-282 | ADF-IIT Combine Adjustment Value Data 13 | 0 | 0~255 | - | Adjustment Value Data 13 sent to IIT during ADF-IIT Combine. |
| 711-283 | ADF-IIT Combine Adjustment Value Data 14 | 0 | 0~255 | - | Adjustment Value Data 14 sent to IIT during ADF-IIT Combine. |
| 711-284 | ADF-IIT Combine Adjustment Value Data 15 | 0 | 0~255 | - | Adjustment Value Data 15 sent to IIT during ADF-IIT Combine. |
| 711-297 | Communication Fail Bypass | 0 | 0~1 | - | 0: Disable Communication Fail Bypass 1: Enable Communication Fail Bypass |
| 711-468 | DADF Open/Close Life Count (upper digits) | 3 | 0~65535 | - | 260 K * Life value may be changed in Counter Write Command. It cannot be written in Chain Link setting. |
| 711-469 | DADF Open/Close Life Count (lower digits) | 63392 | 0~65535 | - |  |
| 711-470 | DADF Document Feed Life Count (upper digits) | 3 | 0~65535 | - | 200 K * Life value may be changed in Counter Write Command. It cannot be written in Chain Link setting. |
| 711-471 | DADF Document Feed Life Count (lower digits) | 3392 | 0~65535 | - |  |
| 711-472 | DADF Simplex and Duplex Document Feed Life Count (upper digits) | 13 | 0~65535 | - | 912 K * Life value may be changed in Counter Write Command. It cannot be written in Chain Link setting. |
| 711-473 | DADF Simplex and Duplex Document Feed Life Count (lower digits) | 60032 | 0~65535 | - |  |
| 711-474 | Invert Solenoid Life Count (upper digits) | 7 | 0~65535 | - | 500 K * Life value may be changed in Counter Write Command. It cannot be written in Chain Link setting. |

Chain 715-xxx IISS
Table 3 IISS

| Chain-Link | Content | Default | Range | Meaning |
| :--- | :--- | :--- | :--- | :--- |
| $715-007$ | PH_CL_Contone Scan Speed | 0 | $0 \sim 1$ | Switches scan speed in Scan Photographic Printing Paper mode. <br> $0:$ Half Speed mode <br> 1: Normal Speed mode |
| $715-017$ | IIT Fail Bypass | 0 | $0 \sim 1$ | $0:$ Fail Bypass Off, 1: Fail Bypass On |
| $715-018$ | FAN Control Mode | 0 | $0 \sim 1$ | $0:$ Normal mode; $1:$ M/C for Multiple Stores mode |
| $715-020$ | No. of APS | 1 | $0 \sim 1$ | $0: 1$ APS, 1:2 APS |

Table 3 IISS

| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 715-022 | Lamp Fan Fail Bypass | 1 | 0~1 | Existence or of Lamp Fan Fail Detection <br> 0: Lamp Fan Fail Detection existent <br> 1: Lamp Fan Fail Detection not existent |
| 715-023 | Lamp Fan On Time (Low Rotation) | 15 | 0~60 | Lamp Fan On at Low Speed time (in minute) |
| 715-024 | Lamp Fan Off Time | 1 | 0~60 | Lamp Fan Off time (in minute) |
| 715-025 | FL Timer Set | 0 | 0~1 | 0: Standard FL Timer settings (30min rest/0.5sec On), 1: Condensation mode setting (Diag 715026, 715-027 timer settings apply) |
| 715-026 | Lamp ON Interval | 30 | 0~60 | Interval setting (unit: min) |
| 715-027 | Lamp ON Time | 1 | 0~60 | Lamp ON time setting (unit: sec) |
| 715-030 | IIT Failure Part Diagnosis | 1 | 0~65535 | Writing 1 allows starting diagnostics of a failed IIT part. <br> Reading this NVM after diagnostics is made on a failed part makes a certain presumed part No. appear. <br> If a fail occurs during diagnostics of a failed part, Fail Code associated with the fail is logged in this NVM and the diagnostics ends. <br> *Even if 1 is written, 1 is not actually done. <br> *If any value other than 1 is entered, the value becomes illegal. |
| 715-050 | Platen SS Registration Adjustment | 100 | 16~184 | Slow Scan Direction Regi Correction Value ( $0.036 \mathrm{~mm} / \mathrm{increment}$ ), Factory Settings |
| 715-051 | Platen SS Reduce/Enlarge Adjustment | 50 | 44~56 | Slow Scan Direction Regi Correction Value (0.1\%/increment), Factory Settings |
| 715-052 | Platen Glass Type | 2 | 0~2 | 0: Platen model, 1: Belt DADF, 2: CVT, Factory Settings |
| 715-053 | Platen PRadjF | 120 | 0~240 | Fast Scan Direction Regi Correction Value (Dot), VLSS=PROMVLSS+(PRadjF-120)x2, Factory Set- tings |
| 715-056 | CVT FS Offset Side1-1 (139.7-148) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-057 | CVT FS Offset Rear Side2-1 (139.7~148) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment}$ ) in CVT. Factory Settings |
| 715-058 | CVT FS Offset Side1-2 (182-194) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-059 | CVT FS Offset Side2-2 (182-194) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-060 | CVT FS Offset Side1-3 (203.2) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment}$ ) in CVT. Factory Settings |
| 715-061 | CVT FS Offset Side2-3 (203.2) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment}$ ) in CVT. Factory Settings |
| 715-062 | CVT FS Offset Side1-4 (210) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-063 | CVT FS Offset Side2-4 (210) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment}$ ) in CVT. Factory Settings |
| 715-064 | CVT FS Offset Side1-5 (214.9-215.9) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-065 | CVT FS Offset Side2-5 (214.9-215.9) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-066 | CVT FS Offset Side1-6 (254-257) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment}$ ) in CVT. Factory Settings |
| 715-067 | CVT FS Offset Side2-6 (254-257) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-068 | CVT FS Offset Side1-7 (266.7-267) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-069 | CVT FS Offset Side2-7 (266.7-267) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-070 | CVT FS Offset Side1-8 (279.4) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-071 | CVT FS Offset Side2-8 (279.4) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-072 | CVT FS Offset Side1-9 (297) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment}$ ) in CVT. Factory Settings |
| 715-073 | CVT FS Offset Side2-9 (297) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-074 | CVT FS Offset Side3-1 (139.7-148) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-075 | CVT FS Offset Side4-1 (139.7-148) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-076 | CVT FS Offset Side3-2 (182-194) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |

Table 3 IISS

| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 715-077 | CVT FS Offset Side4-2 (182-194) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-078 | CVT FS Offset Side3-3 (203.2) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-079 | CVT FS Offset Side4-3 (203.2) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-080 | CVT FS Offset Side3-4 (210) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-081 | CVT FS Offset Side4-4 (210) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-082 | CVT FS Offset Side3-5 (214.9-215.9) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-083 | CVT FS Offset Side4-5 (214.9-215.9) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-084 | CVT FS Offset Side3-6 (254-257) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-085 | CVT FS Offset Side4-6 (254-257) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-086 | CVT FS Offset Side3-7 (266.7-267) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-087 | CVT FS Offset Side4-7 (266.7-267) | 120 | 0~240 | Fast Scan Direction Regi Correction Value ( $0.1 \mathrm{~mm} / \mathrm{increment)}$ ) in CVT. Factory Settings |
| 715-088 | CVT FS Offset Side3-8 (279.4) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-089 | CVT FS Offset Side4-8 (279.4) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-090 | CVT FS Offset Side3-9 (297) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-091 | CVT FS Offset Side4-9 (297) | 120 | 0~240 | Fast Scan Direction Regi Correction Value (0.1mm/increment) in CVT. Factory Settings |
| 715-092 | WREF_ADJ_Red | 140 | 70~255 | Red W-Ref correction coefficient, Factory Settings |
| 715-093 | WREF_ADJ_Green | 140 | 70~255 | Green W-Ref correction coefficient, Factory Settings |
| 715-094 | WREF_ADJ_Blue | 140 | 70~255 | Blue W-Ref correction coefficient, Factory Settings |
| 715-102 | WREF_Offset_Red | 63 | 0~127 | Red W-Ref Correction Coefficient; Correction for individual sheets of paper |
| 715-103 | WREF_Offset_Green | 63 | 0~127 | Green W-Ref Correction Coefficient; Correction for individual sheets of paper |
| 715-104 | WREF_Offset_Blue | 63 | 0~127 | Blue W-RefCorrection Coefficient; Correction for individual sheets of paper |
| 715-106 | IIT Paper Code | 0 | 0~8 | 0: NVM uses coefficient for each individual paper type 1: J paper, 2: P paper, 3: C2 paper, 4: Green100 paper, 5: Digital Color Xpression, 6: Color Tech+, 7: Xerox4200 paper, 8: Xerox Business |
| 715-107 | Nut_Angle_Front | 990 | 0~1980 | Light Axis Front Nut rotation angle (990~1980: Right revolution angle, 0~990: Left revolution angle) |
| 715-108 | Nut_Angle_Rear | 990 | 0~1980 | Light Axis Rear Nut rotation angle (990~1980: Right revolution angle, 0~990: Left revolution angle) |
| 715-118 | Ctracs Lamp On Wait Time | 0 | 0~300 | Lamp On Wait Time before auto gradation adjustment (in sec) |
| 715-119 | WREF Lamp On Wait Time | 0 | 0~300 | Lamp On Wait Time before W-Ref correction (in sec) |
| 715-201 | ACS Detection Level Extension | 0 | 0~1 | 0: Normal; 1: Extend adjustment range |
| 715-241 | Black Line Correction Level Value (for Color) | 8 | 0~15 | Black Line Correction Strength Level Setting when reading Color, the larger the value, the stronger the correction strength ("0" means correction reset). |
| 715-242 | Black Line Correction Level Value (for BW) | 8 | 0~15 | Black Line Correction Strength Level Setting when reading BW, the larger the value, the stronger the correction strength ("0" means correction reset). |
| 715-243 | DCIC TEST MODE | 0 | 0~7 | Test Mode Setting for Designing Black Line Correction Parameter, "0" means normal operation. |
| 715-249 | DCIC Level for White Line | 8 | 0~15 | Sets White Line detection strength level for background. As the value is larger, detection strength increases. ("0" clears the detection.) |
| 715-250 | DCIC Original Level for Black Line | 8 | 0~15 | Sets Black Line detection strength level for original image. As the value is larger, detection strength increases. ("0" clears the detection.) |
| 715-251 | DCIC Original Level for White Line | 8 | 0~15 | Sets Black Line detection strength level for original image. As the value is larger, detection strength increases. ("0" clears the detection.) |
| 715-252 | DCIC Detection Result | 0 | 0~1 | Result of abnormal garbage detection. "1" indicates abnormal garbage has been detected. |
| 715-280 | HOSEI_SCAN (for detection) | 3 | 0~6 | Correction Coefficient No "Factory Settings" |
| 715-281 | HOSEI_SCAN (for image) | 3 | 0~6 | Correction Coefficient No "Factory Settings" |

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| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 715-282 | CCD Calib Y Scan Red | 0 | 0~1023 | CCD Calib Y patch when reading Red (Reflectivity LSB) "Factory Settings" |
| 715-283 | CCD Calib Y Scan Green | 0 | 0~1023 | CCD Calib Y patch when reading Green (Reflectivity LSB) "Factory Settings" |
| 715-284 | CCD Calib Y Scan Blue | 0 | 0~1023 | CCD Calib Y patch when reading Blue (Reflectivity LSB) "Factory Settings" |
| 715-285 | CCD Calib M Scan Red | 0 | 0~1023 | CCD Calib M patch when reading Red (Reflectivity LSB) "Factory Settings" |
| 715-286 | CCD Calib M Scan Green | 0 | 0~1023 | CCD Calib M patch when reading Green (Reflectivity LSB) "Factory Settings" |
| 715-287 | CCD Calib M Scan Blue | 0 | 0~1023 | CCD Calib M patch when reading Blue (Reflectivity LSB) "Factory Settings" |
| 715-288 | CCD Calib C Scan Red | 0 | 0~1023 | CCD Calib C patch when reading Red (Reflectivity LSB) "Factory Settings" |
| 715-289 | CCD Calib C Scan Green | 0 | 0~1023 | CCD Calib C patch when reading Green (Reflectivity LSB) "Factory Settings" |
| 715-290 | CCD Calib C Scan Blue | 0 | 0~1023 | CCD Calib C patch when reading Blue (Reflectivity LSB) "Factory Settings" |
| 715-291 | CCD Calib PK Scan Red | 0 | 0~1023 | CCD Calib PK patch when reading Red (Reflectivity LSB) "Factory Settings" |
| 715-292 | CCD Calib PK Scan Green | 0 | 0~1023 | CCD Calib PK patch when reading Green (Reflectivity LSB) "Factory Settings" |
| 715-293 | CCD Calib PK Scan Blue | 0 | 0~1023 | CCD Calib PK patch when reading Blue (Reflectivity LSB) "Factory Settings" |
| 715-300 | A6/Postcard Detection | 0 | 0~2 | 0: Table default 1: A6SEF 2: PostcardSEF (mm series) or PostcardSEF (Inch series) |
| 715-302 | A4S/8.5in Detection 2 | 3 | 0~6 | 0:210mm, 1:211mm, 2: 212 mm , 3: $213 \mathrm{~mm}, 4: 214 \mathrm{~mm}, 5: 215 \mathrm{~mm}, 6: 216 \mathrm{~mm}$ |
| 715-303 | B5/8x10 Detection | 0 | 0~3 | 0: Table default 1: B5LEF or ExecutiveLEF 2: $8 \times 10 \mathrm{LEF} / 8 \times 10.5 \mathrm{LEF} 3$ : Off |
| 715-305 | $8.5 \times 13 / 8.5 \times 14$ Detection | 0 | 0~3 | 0: Table default 1: 12.4inch 2: 13inch 3: 14inch |
| 715-306 | Original Detection Table for Special Paper | 0 | 0~2 | 0: Do not use Special Table 1: APS OFF, A4; APS ON, A3 2: APS OFF, Letter; APS ON, 17inch |
| 715-307 | Original Size Detection Table Switch | 2 | 1~5 | 1: Inch13-2 2: mm-2 3: mm 4: Inch13-1 5: Inch14 |
| 715-308 | 5.5x8.5/Postcard Detection | 0 | 0~2 | 0: Table default 1: A5SEF or 5.5x8.5SEF 2: PostCardLEF |
| 715-310 | A3/11x17 Detection | 0 | 0~3 | 0: Table default 1: A3SEF 2: 11x17SEF 3: A3SEF, 11x17SEF |
| 715-311 | A4/8.5x11 Detection | 0 | 0~3 | 0: Table default 1: A4LEF 2: 8.5x11LEF 3: $8.5 \times 11 \mathrm{LEF}$, A4LEF |
| 715-312 | A6S Threshold | 90 | 50~110 | Changes fast scan threshold for non-standard, Postcard SEF and A6SEF. If any value out of the range of 50 to 110 is set up, fast scan threshold shall be 90 mm . <br> 50: 50 mm or more; 110: 110 mm ( $1 \mathrm{~mm} /$ step) |
| 715-344 | Original Size Detection, Platen Background Countermeasure for Dirt | 0 | 0~1 | 0 : Detection by 4 registers 1: Detection by 3 registers (countermeasure for dirt) |
| 715-345 | GCO/TFX Size Switch | 1 | 0~1 | 0: GCO (16K/8K=270x195/270x390) 1: TFX (16K/8K=267x194/267x388) |
| 715-346 | B4/8K Fast Scan Threshold Value Setting | 3 | 0~6 | 0: $256 \mathrm{~mm}, 1: 258 \mathrm{~mm}, 2: 260 \mathrm{~mm}, 3: 262 \mathrm{~mm}, 4: 264 \mathrm{~mm}, 5: 266 \mathrm{~mm}, 6: 268 \mathrm{~mm}$ |
| 715-347 | 8K/11x17SEF Fast Scan Threshold Value Setting | 3 | 0~6 | 0: $269 \mathrm{~mm}, 1: 271 \mathrm{~mm}, 2: 273 \mathrm{~mm}, 3: 275 \mathrm{~mm}, 4: 277 \mathrm{~mm}, 5: 279 \mathrm{~mm}, 6: 281 \mathrm{~mm}$ |
| 715-349 | B6/5x7 Detection | 0 | 0~2 | 0: Table default 1: B6SEF 2: 5x7SEF |
| 715-362 | FL_CHK_NG_Count | 0 | 0~65535 | Lamp Check NG Count (Reset when lamp is replaced) |
| 715-363 | FL_CHK_NG_Data | 0 | 0~1023 | Data obtained when Lamp Check Fails (Read G Write data compared at checking) |
| 715-418 | AOCerr | 0 | 0~255 | No. of times the AOC flow has ended abnormally |
| 715-550 | BW Copy during AE BGR-AE Adjustment Level (Text/Photo) | 0 | 0~4095 | Value (0~15) x $3=$ Erase Amount (8bit conversion) (x12 for 10bit conversion) Lower digits Obit $\sim 3$ bit, Platen 4Bit $\sim$ Bit CVT or DADF machine 8Bit~11Bit CVT or DADF machine 2 Sided Copy |


| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 715-551 | Color Copy at during AE BGR-AE Adjustment Level (Text/Photo) | 0 | 0~4095 | Value (0~15) $\times 3=$ Erase Amount (8bit conversion) (x12 for 10bit conversion) Lower digits Obit $\sim$ 3bit, Platen 4Bit $\sim$ Bit CVT or DADF machine 8Bit~11Bit CVT or DADF machine 2 Sided Copy |
| 715-552 | BW Copy during AE BGR-AE Adjustment Level (Text) | 0 | 0~4095 | Value (0~15) x 3 = Erase Amount (8bit conversion) (x12 for 10bit conversion) <br> Lower digits Obit~3bit, Platen <br> 4Bit $\sim$ Bit CVT or DADF machine <br> 8Bit~11Bit CVT or DADF machine 2 Sided Copy |
| 715-553 | Color Copy at during AE BGR-AE Adjustment Level (Text) | 0 | 0~4095 | Value (0~15) x 3 = Erase Amount (8bit conversion) (x12 for 10bit conversion) Lower digits Obit~3bit, Platen 4Bit 7Bit CVT or DADF machine 8Bit~11Bit CVT or DADF machine 2 Sided Copy |
| 715-554 | BW ContoneScan during AE BGR-AE Adjustment Level (Text/Photo) | 0 | 0~4095 | Value (0~15) x 3 = Erase Amount (8bit conversion) (x12 for 10bit conversion) <br> Lower digits Obit $\sim$ 3bit, Platen <br> 4Bit $\sim$ Bit CVT or DADF machine <br> 8Bit~11Bit CVT or DADF machine 2 Sided Copy |
| 715-555 | Color ContoneScan during AE BGR-AE Adjustment Level (Text/Photo) | 0 | 0~4095 | Value (0~15) $\times 3$ = Erase Amount (8bit conversion) (x12 for 10bit conversion) Lower digits Obit $\sim$ 3bit, Platen 4Bit~7Bit CVT or DADF machine 8Bit~11Bit CVT or DADF machine 2 Sided Copy |
| 715-600 | AE1 FS External Area | 255 | 0~65535 | High Speed AE/Fast Scan Direction undetected area INSTV At SMPST, SMPED setting |
| 715-601 | AE2 FS External Area | 255 | 0~65535 | High Speed AE/Fast Scan Direction undetected area INSTV At SMPST, SMPED setting |
| 715-602 | AE3 FS External Area | 255 | 0~65535 | High Speed AE/Fast Scan Direction undetected area INSTV At MAEFST, MAEFSE setting (* Area used as detection area is used for PreIPS noise removal as well) |
| 715-603 | AE4 FS External Area | 255 | 0~65535 | High Speed AE/Fast Scan Direction undetected area INSTV At SMPST, SMPED setting |
| 715-604 | Line to Fix Variation | 60 | 0~65535 | High Speed AE/Slow Scan Direction variable fixed position/NCON, Slow Scan Edge AE Detection Amount ( 0.16 mm increments) |
| 715-605 | HAE Line to Fix Variation | 240 | 0~65535 | High Speed AE/Slow Scan Direction End position, Slow Scan Edge AE Detection Amount HAESSE |
| 715-606 | MAE Line to Fix Variation | 240 | 0~65535 | High Speed AE/Slow Scan Direction End position, Slow Scan Edge AE Detection Amount MAESSE |
| 715-607 | NAE Line to Fix Variation | 240 | 0~65535 | High Speed AE/Slow Scan Direction End position, Slow Scan Edge AE Detection Amount NAESSE |
| 715-608 | Variation Control for BW Copy | 1 | 0~1 | LIM Control mode |
| 715-609 | Variation Control for Color Copy | 1 | 0~1 | LIM Control mode |
| 715-610 | Variation Control for FAX, BinScan | 1 | 0~1 | LIM Control mode |
| 715-611 | Variation Control for ContoneScan | 1 | 0~1 | LIM Control mode |
| 715-612 | Background Color Suppression Threshold Value (HAE) | 127 | 0~255 | HAE Histogram threshold value Specify using 100/255\% increments. HAETH |
| 715-613 | Background Color Suppression Threshold Value (NAE1) | 33 | 0~255 | NAE Block Count Threshold (Color Block Count Threshold) Set in 100/255\% increments. NAEBLK- THC |
| 715-614 | Background Color Suppression Threshold Value (NAE2) | 204 | 0~255 | NAE Block Count Threshold (Specified Color Block threshold value) Set in 100/255\% increments. NAEBLKTHY |

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| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 715-615 | Background Color Suppression Threshold Value (NAE3) | 8 | 0~65535 | NAE Color Line threshold value Specify the no. of lines. NAETHC |
| 715-616 | Background Color Suppression Threshold Value (NAE4) | 4 | 0~65535 | NAE Color Line threshold value Specify the no. of lines. NAETHY |
| 715-617 | AE Control of FS Length | 0 | 0~1 | 0 : Always use the document size detection result 1: Use the input document size as the detection size For AES parameter calculation. |
| 715-618 | Minimum FS Length for AE | 500 | 0~65535 | Fast Scan Detection Min range (0.1mm increments) For AES parameter calculation. |
| 715-619 | AE Parameter Slow Scan Enlargement Correction Upper Limit 1 | 4000 | 0~4000 | Slow Scan Detection Max range (0.1mm increments) For RAE. |
| 715-620 | AE Parameter Slow Scan Enlargement Correction Upper Limit 2 | 4000 | 0~4000 | Slow Scan Detection Max range (0.1mm increments) For MAE. |
| 715-621 | AE Parameter Slow Scan Enlargement Correction Upper Limit 3 | 4000 | 0~4000 | Slow Scan Detection Max range (0.1mm increments) For HAE. |
| 715-622 | AE Parameter Slow Scan Enlargement Correction Upper Limit 4 | 4000 | 0~4000 | Slow Scan Detection Max range (0.1mm increments) For NAE. |
| 715-629 | TX_BW_Fax Offset Level of AE (Normal, Pencil) | 0 | 0~8191 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) 0bit $\sim 3 b i t$, Platen 4bit $\sim 7 b i t$, CVT or DADF 8bit $\sim 11$ bit, CVT or DADF 2 Sided Copy |
| 715-630 | TP_BW_Copy_Fax Suppression Level of AE (Print, Photograph, Copy) | 0 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) Obit~3bit, Platen 4bit~7bit, CVT or DADF 8bit $\sim 11$ bit, CVT or DADF 2 Sided Copy (* Used as the PreIPS EAER_DAT suppression level as well) |
| 715-631 | TP_BW_Copy_Fax Offset Level of AE (Print, Photograph, Copy) | 273 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) 0bit $\sim 3 b i t$, Platen 4bit $\sim 7 b i t$, CVT or DADF 8bit $\sim 11$ bit, CVT or DADF 2 Sided Copy |
| 715-632 | TX_BW_Copy_Fax Suppression Level of AE (Normal, Pencil Text) | 0 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) Obit~3bit, Platen 4bit~7bit, CVT or DADF. 8bit~11bit, CVT or DADF 2 Sided Copy (* Used as the PreIPS EAER_DAT suppression level as well) |
| 715-633 | TX_BW_Copy_Fax Offset Level of AE (Normal, Pencil Text) | 273 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) Obit~3bit, Platen 4bit~7bit, CVT or DADF 8bit $\sim 11$ bit, CVT or DADF 2 Sided Copy |
| 715-634 | TPL_BW_Copy_Fax Suppression Level of AE (Light Document) | 0 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) 0bit~3bit, Platen 4bit~7bit, CVT or DADF 8bit~11bit, CVT or DADF 2 Sided Copy (* Used as the PreIPS EAER_DAT suppression level as well) |
| 715-635 | TPL_BW_Copy_Fax Offset Level of AE (Light Document) | 273 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) 0bit $\sim 3 b i t$, Platen 4bit $\sim 7 b i t$, CVT or DADF 8bit $\sim 11$ bit, CVT or DADF 2 Sided Copy |
| 715-636 | TRP_BW_Copy_Fax Suppression Level of AE (Tracing Paper) | 0 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) Obit~3bit, Platen 4bit~7bit, CVT or DADF 8bit~11bit, CVT or DADF 2 Sided Copy (* Used as the PreIPS EAER_DAT suppression level as well) |

Table 3 IISS

| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 715-637 | TRP_BW_Copy_Fax Offset Level of AE (Tracing Paper) | 273 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) 0bit~3bit, Platen 4bit~7bit, CVT or DADF 8bit 11bit, CVT or DADF 2 Sided Copy |
| 715-638 | Background Color Suppression Level Text/Photo Mode (Print, Photograph Paper, Inkjet, Highlighted) for Color Copy. | 0 | 0~4095 | 0: Strength Level 0 (Standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: <br> Strength Level 4, 5~15 or above: Level 0 (Standard) <br> Obit~3bit, Platen <br> 4Bit~7Bit CVT or DADF machine <br> 8Bit~11Bit CVT or DADF machine 2 Sided Copy <br> Tools and coupling <br> (Determine the Parameter Selection Level by adding the tool value (level 0 to 4 ) and the NVM Level (level 0 to 4 ). If the total is Level 4 and above, it is determined as Level 4) <br> (* Also used by the PreIPS EAER_DAT Removal Level) |
| 715-639 | Background Color Suppression Offset Level Text/ Photo Mode (Print, Photograph Paper, Inkjet, Highlighted) for Color Copy | 0 | 0~4095 | 0: Strength Level 0 (Standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 or above: Level 0 (Standard) <br> Obit~3bit, Platen <br> 4Bit $\sim$ Bit CVT or DADF machine <br> 8Bit~11Bit CVT or DADF machine 2 Sided Copy |
| 715-640 | Background Color Suppression Level Text (Normal) for Color Copy | 0 | 0~4095 | 0: Strength Level 0 (Standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: <br> Strength Level 4, 5~15 or above: Level 0 (Standard) <br> Obit~3bit, Platen <br> 4Bit~7Bit CVT or DADF machine <br> 8Bit~11Bit CVT or DADF machine 2 Sided Copy <br> Tools and coupling <br> (Determine the Parameter Selection Level by adding the tool value (level 0 to 4 ) and the NVM Level <br> (level 0 to 4 ). If the total is Level 4 and above, it is determined as Level 4) <br> (* Also used by the PreIPS EAER_DAT Removal Level) |
| 715-641 | Background Color Suppression Offset Level Text (Normal) for Color Copy | 0 | 0~4095 | 0: Strength Level 0 (Standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 or above: Level 0 (Standard) <br> Obit~3bit, Platen <br> 4Bit $\sim$ Bit CVT or DADF machine <br> 8Bit~11Bit CVT or DADF machine 2 Sided Copy |
| 715-642 | TP_BW_Contone Suppression Level of AE | 819 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) 0bit $\sim 3$ bit, Platen 4bit $\sim 7 b i t$, CVT or DADF 8bit $\sim 11$ bit, CVT or DADF 2 Sided Copy (* Used as the PreIPS EAER_DAT suppression level as well) |
| 715-643 | TP_BW_Contone Offset Level of AE | 0 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) Obit~3bit, Platen 4bit~7bit, CVT or DADF 8bit 11 bit, CVT or DADF 2 Sided Copy |
| 715-644 | woTP_BW_Contone Suppression Level of AE | 819 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) 0bit $\sim 3$ bit, Platen 4bit $\sim 7 b i t$, CVT or DADF 8bit $\sim 11$ bit, CVT or DADF 2 Sided Copy (* Used as the PreIPS EAER_DAT suppression level as well) |
| 715-645 | woTP_BW_Contone Offset Level of AE | 0 | 0~4095 | 0: Strength Level 0 (standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 and above: Strength Level 0 (standard) Obit~3bit, Platen 4bit~7bit, CVT or DADF 8bit 11 bit, CVT or DADF 2 Sided Copy |

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| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 715-646 | Color Contone Scan Background Color Suppression Level (Text/Photo) | 0 | 0~4095 | 0: Strength Level 0 (Standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 or above: Level 0 (Standard) <br> Obit~3bit, Platen <br> 4Bit $\sim$ Bit CVT or DADF machine <br> 8Bit~11Bit CVT or DADF machine 2 Sided Copy <br> Tools and coupling <br> (Determine the Parameter Selection Level by adding the tool value (level 0 to 4 ) and the NVM Level (level 0 to 4 ). If the total is Level 4 and above, it is determined as Level 4) <br> (* Also used by the PreIPS EAER DAT Removal Level) |
| 715-647 | Color Contone Scan Background Color Suppression Offset Level (Text/Photo) | 0 | 0~4095 | 0: Strength Level 0 (Standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 or above: Level 0 (Standard) <br> Obit~3bit, Platen <br> 4Bit $\sim$ Bit CVT or DADF machine <br> 8Bit~11Bit CVT or DADF machine 2 Sided Copy |
| 715-648 | Color Contone Scan Background Color Suppression Level (other than Text/Photo) | 0 | 0~4095 | 0: Strength Level 0 (Standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 or above: Level 0 (Standard) <br> Obit~3bit, Platen <br> 4Bit $\sim$ Bit CVT or DADF machine <br> 8Bit~11Bit CVT or DADF machine 2 Sided Copy <br> (* Also used by the PreIPS EAER_DAT Removal Level) |
| 715-649 | Color Contone Scan Background Color Suppression Offset Level (other than Text/Photo) | 0 | 0~4095 | 0: Strength Level 0 (Standard), 1: Strength Level 1, 2: Strength Level 2, 3: Strength Level 3, 4: Strength Level 4, 5~15 or above: Level 0 (Standard) <br> Obit~3bit, Platen <br> 4Bit $\sim$ 7Bit CVT or DADF machine <br> 8Bit $\sim 11$ Bit CVT or DADF machine 2 Sided Copy |
| 715-660 | 2 Sided AE Control Parameter Lower Limit Multiplication Coefficient | 0 | 0~255 | Used when calculating the HAE background value. 1/255 units. 255 indicates 1. |
| 715-661 | 2 Sided AE Control Parameter Upper Limit Multi- plication Coefficient | 255 | 0~255 | Used when calculating the HAE background value. Set as Upper limit multiplication coefficient + Lower limit multiplication coefficient = $2551 / 255$ units. 255 indicates 1 . |
| 715-662 | 2 Sided AE Control Parameter Relative Margin OFST | 8 | 0~255 | The value added (or subtracted) when comparing the RAE background value and the HAE background value. When the value is large, Side2 cannot be selected. |
| 715-663 | 2 Sided AE Control Parameter Background Level Threshold Value LEVEL N | 16 | 0~255 | The value used to compare with the HAE background value when selecting 2 Sided. 2 Sided is not selected if this NVM is not reached for the HAE background value. |
| 715-664 | 2 Sided AE Control Parameter Forced Selection | 3 | 0~3 | 0: 2 Sided AE Control 1: Forced Side 1 (L0) Selection. 2: Force Side2 (L1) output |
| 715-668 | Dual Color Copy Control | 0 | 0~1 | Dual Color Copy Control. DLUT Parameter Selection Factor 0: Normal 1: Black (emphasize BW) |
| 715-669 | Control of Tracing Paper Mode | 0 | 0~1 | 0:,Normal, 1: Tracing Paper mode (* Used as PrelPS C mode as well) |
| 715-680 | Default Value Color Balance Adjustment Level Y Color Low density | 4 | 0~8 | Default Value Color Balance Adjustment Level Y Color Low density |
| 715-681 | Default Value Color Balance Adjustment Level Y Color Medium density | 4 | 0~8 | Default Value Color Balance Adjustment Level Y Color Medium density |
| 715-682 | Default Value Color Balance Adjustment Level Y Color High density | 4 | 0~8 | Default Value Color Balance Adjustment Level Y Color High density |
| 715-683 | Default Value Color Balance Adjustment Level M Color Low density | 4 | 0~8 | Default Value Color Balance Adjustment Level M Color Low density |

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| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 715-684 | Default Value Color Balance Adjustment Level M Color Medium density | 4 | 0~8 | Default Value Color Balance Adjustment Level M Color Medium density |
| 715-685 | Default Value Color Balance Adjustment Level M Color High density | 4 | 0~8 | Default Value Color Balance Adjustment Level M Color High density |
| 715-686 | Default Value Color Balance Adjustment Level C Color Low density | 4 | 0~8 | Default Value Color Balance Adjustment Level C Color Low density |
| 715-687 | Default Value Color Balance Adjustment Level C Color Medium density | 4 | 0~8 | Default Value Color Balance Adjustment Level C Color Medium density |
| 715-688 | Default Value Color Balance Adjustment Level C Color High density | 4 | 0~8 | Default Value Color Balance Adjustment Level C Color High density |
| 715-689 | CL Balance Def K / Low Density | 4 | 0~8 | Default Color Balance Adjustment Level K Color Low Density |
| 715-690 | CL Balance Def K / Medium Density | 4 | 0~8 | Default Color Balance Adjustment Level K Color Medium Density |
| 715-691 | CL Balance Def K / High Density | 4 | 0~8 | Default Color Balance Adjustment Level K Color High Density |
| 715-702 | PLTN/Belt FS Reduce/Enlarge Adjustment | 50 | 0~100 | Fine adjustment for Fast Scan Direction Reduce/Enlarge ratios. Specify within the range of 0 and 100 in increments of 1 . The value indicates the fine adjustment with $0=-5 \%, 50=0 \%$ and $100=5 \%$ at $+/-5 \%$ ( $0.1 \%$ increments). (No adjustment in Factory Settings) |
| 715-703 | CVT FS Reduce/Enlarge Adjustment | 50 | 0~100 | Fine adjustment for Fast Scan Direction Reduce/Enlarge ratios. Specify within the range of 0 and 100 in increments of 1 . The value indicates the fine adjustment with $0=-5 \%, 50=0 \%$ and $100=5 \%$ at $+/-5 \%$ ( $0.1 \%$ increments). (No adjustment in Factory Settings) |
| 715-704 | IPS Through Setting1 | 0 | 0~65535 | IPS Through Setting 1. Force to skip Image Processing functions at memory sample scan. Change a value at S/W \& H/W DEBUG. Always set " 0 " in normal use. (Handle with care) --The usage is as follows: Whether to execute/force to skip functions is assigned to each bit. However, you can specify multiple bits at a time. [PF1]\| [PF2],D'0: AES | BEXG_TH,D'1: DF39 | FSRE_TH,D'2: SSR | SSR_TH,D'3: FSRE | NSP_TH,D'4: NSP | AER_TH,D'5: 4DLUT | TRC2_TH,D'6: 5AER | ED_TH,D'7: 5MUL | SEL_TH,D'8: 5MWA | SEL2_TH, D'9: 4AER | (spare),D'10: 4MUL | (spare),D'11: TRC | (spare), D'12: ED | (spare), D'13: DIRECT | (spare), D'14: (spare) | (spare), D'15: (spare) | (spare) The specified bit value is: $\mathrm{B}^{\prime} 0$ : Unchanged, $\mathrm{B}^{\prime} 1$ : Forced to skip. |
| 715-705 | IPS Through Setting2 | 0 | 0~65535 | IPS Through Setting 2 Set the 4DLUT Bypass mode. <br> This setting is valid only when IPS Bypass Setting1 is set to force skip 4DLUT. Change a value at S/W \& H/W DEBUG. <br> 0: $L^{*} a^{*} b^{*}$ through from $Y$ block <br> 1: L*a*b* through from M block <br> 2: L*a* ${ }^{*}$ through from C block <br> 3: L*a* ${ }^{*}$ through from K block <br> 4: L* through from YMCK block <br> 5: a* through from YMCK block <br> 6: $b^{*}$ through from YMCK block <br> 7~65535: Oh output |
| 715-720 | Normal Density Text (BW Copy) | 128 | 0~256 | B/W COPY Text Normal Density Adjustment |
| 715-721 | High Density Text (BW Copy) | 128 | 0~256 | B/W COPY Text Darker 3 Density Adjustment |
| 715-722 | Normal Density Text (Scan/Fax) | 128 | 0~256 | Scan/FAX Text Normal Density Adjustment |
| 715-723 | High Density Text (Scan/Fax) | 128 | 0~256 | Scan/FAX Text Darker 3 Density Adjustment |
| 715-724 | PLTN RAE SS Not Detect Area | 0 | 0~65535 | Slow Scan Non-detection area Setup Value at Real Time AE for Platen model. BASE, HAEST, MAESST, NAESS |

Table 3 IISS

| Chain-Link | Content | Default | Range | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| 715-725 | DADF-P-Job RAE SS Not Detect Area | 0 | 0~65535 | Slow Scan Non-detection area Setup Value at Real Time AE for DADF model Platen job. Or, Slow Scan Non-detection area Setup Value at Real Time AE for CVT job. BASE, HAEST, MAESST, NAESS |
| 715-726 | DADF-D-Job RAE SS Not Detect Area | 0 | 0~65535 | Slow Scan Non-detection area Setup Value at Real Time AE for DADF model DADF job. BASE, HAEST, MAESST, NAESS |
| 715-780 | Hue Angle B Starts | 270 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-781 | Hue Angle B Ends | 320 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-782 | Hue Angle G Starts | 110 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-783 | Hue Angle G Ends | 200 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-784 | Hue Angle R Starts | 350 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-785 | Hue Angle R Ends | 60 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-786 | Hue Angle Y Starts | 60 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-787 | Hue Angle Y Ends | 120 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-788 | Hue Angle M Starts | 320 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-789 | Hue Angle M Ends | 360 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-790 | Hue Angle C Starts | 360 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-791 | Hue Angle C Ends | 360 | 0~360 | 1 degree increments. It means End to 360 and 0 to Start when Start > End. |
| 715-800 | IISS-DADF Communication Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-801 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-802 | IISS-Controller Communication Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-803 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-804 | DADF EEPROM Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-805 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-808 | CRG Position Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-809 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-810 | IISS LOGIC Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-811 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-814 | Lamp Illumination Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-815 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-816 | CRG Over Run Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-817 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-822 | AGC Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-823 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-824 | AOC Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-825 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-826 | IPS PWBA Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-827 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-840 | IPS PWBA Memory Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-841 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |
| 715-856 | IIT Hot Line Fail | 0 | 0~65535 | Accumulative Fail Counter value. (Write not permitted) |
| 715-857 | (Same as above) | 0 | 0~65535 | Accumulative Fail Counter value since it was last reset. (Write not permitted) |

Table 3 IISS

| Chain-Link | Content | Default | Range | Meaning |
| :--- | :--- | :--- | :--- | :--- |
| $715-860$ | Scan Replacement Life Count (upper digits) | 91 | $0 \sim 65535$ | Scan Replacement Life Count (upper digits) (Write not permitted): 6,000,000 times (including Pre <br> Scan) |
| $715-861$ | Scan Replacement Life Count (lower digits) | 36224 | $0 \sim 65535$ | Scan Replacement Life Count (lower digits) (Write not permitted) |
| $715-875$ | Lamp On Time Replacement Life Count (upper <br> digits) | 109 | $0 \sim 65535$ | Lamp On Time Replacement Life Count (upper digits) (Write not permitted): 7,200,000 sec (2,000 <br> hr) |
| $715-876$ | Lamp On Time Replacement Life Count (lower <br> digits) | 56576 | $0 \sim 65535$ | Lamp On Time Replacement Life Count (lower digits) (Write not permitted) |
| $715-890$ | Lamp On Replacement Life Count (upper digits) | 91 | $0 \sim 65535$ | Lamp On Replacement Life Count (upper digits) (Write not permitted): 6,000,000 times |
| $715-891$ | Lamp On Replacement Life Count (lower digits) | 36224 | $0 \sim 65535$ | Lamp On Replacement Life Count (lower digits) (Write not permitted) |

Chain 719-xxx Configuration

| Table 4 Configuration |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Chain-Link | Name | Default | Range | Remarks |
| $719-008$ | Market Information | 0 | $0 \sim 3$ | $0:$ FX, 1: AP, 2: XC, 3: XE |
| $719-009$ | IISS Major Version | 0 | $0 \sim 65535$ | IISS Major Version No. (Same as when downloaded) |
| $719-010$ | IISS Minor Version | 0 | $0 \sim 65535$ | IISS Minor Version No. (Same as when downloaded) |
| $719-011$ | IISS Revision Version | 0 | $0 \sim 65535$ | IISS Revision Version No. (Same as when downloaded) |
| $719-012$ | IISS Patch Version | 0 | $0 \sim 65535$ | IISS Patch Version No. (Same as when downloaded) |
| $719-013$ | ADF Major Version | 0 | $0 \sim 65535$ | ADF Major Version No. (Same as when downloaded) |
| $719-014$ | ADF Minor Version | 0 | $0 \sim 65535$ | ADF Minor Version No. (Same as when downloaded) |
| $719-015$ | ADF Revision Version | 0 | $0 \sim 65535$ | ADF Revision Version No. (Same as when downloaded) |
| $719-016$ | ADF Patch Version | 0 | $0 \sim 65535$ | ADF Patch Version No. (Same as when downloaded) |
| $719-017$ | IPL Version | 0 | $0 \sim 65535$ | IPL Version No. |
| $719-018$ | Black Line Suppression FPGA Version | 0 | $0 \sim 65535$ | Black Line Suppression FPGA Version No. |


| Chain-Link | NVM Name | Setup <br> Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-061 | FAX Card Availability | -2~0 | - | Read | 0: Normal, -1: Error, -2: Not installed |
| 700-064 | Availability of Fax Card for Ch0 Installed by Host. (It is good that the Fax Card performs only auto detection.) | 0~1 | 0: Off | Read/Write | 0: OFF, 1: ON |
| 700-071 | USB Port Receive Buffer | 64~1024 | 64KB | Read/Write | [64KB~1MB](32KB increments) Unit: Kbyte |
| 700-073 | Page Memory Size (Volume) | - | - | Read | bytes (Auto Setting) |
| 700-075 | ART User Definition Memory (Valid only when the machine is installed with the ART/Emulation option) | 32~2048 | 32 KB | Read/Write | [32KB~2048KB](32KB increments) Unit: Kbyte |
| 700-076 | PostScript Memory (Valid only when PS option is installed) | 8~96 | $\begin{array}{\|l} \hline 24 \mathrm{MB} \\ \left(24^{*} 1024\right) \end{array}$ | Read/Write | [8MB~96MB](0.25MB increments) Unit: Kbyte |
| 700-078 | Form Data Memory (ART and ESC/P) (Valid only when the machine is installed with the ART/Emulation option and not installed with the HDD.) | 128~2048 | 128KB | Read/Write | [128KB~2048KB]Unit: Kbyte |
| 700-080 | HPGL/Auto Layout Memory (Valid only when the machine is installed with the ART/Emulation option and not installed with the HDD.) | 64~5120 | 64KB | Read/Write | [64KB~5120KB](32KB increments) Unit: Kbyte |
| 700-081 | Parallel (IEEE1284) Port | 64~1024 | 64KB | Read/Write | [64KB~1MB](32KB increments) Unit: Kbyte |
| 700-082 | Port9100 Port | 64~1024 | 256KB | Read/Write | [64KB~1MB](32KB increments) Unit: Kbyte |
| 700-083 | Ipd: Spool Off | 64~1024 | 256KB | Read/Write | [64KB~1MB](32KB increments) Unit: Kbyte |
| 700-084 | NetWare | 64~1024 | 256KB | Read/Write | [64KB~1MB](32KB increments) Unit: Kbyte |
| 700-085 | AppleTalk (EtherTalk) | 64~1024 | 256KB | Read/Write | [64KB~1MB](32KB increments) Unit: Kbyte |
| 700-086 | SMB: Spool Off | 64~1024 | 256KB | Read/Write | [64KB~1MB](32KB increments) Unit: Kbyte |
| 700-087 | IPP: Spool Off | 64~1024 | 256KB | Read/Write | [64KB~1MB](32KB increments) Unit: Kbyte |
| 700-088 | Salutation | 64~1024 | 256KB | Read/Write | [64KB~1MB](32KB increments) Unit: Kbyte |
| 700-089 | HDD Availability | -2~0 | - | Read | 0: Yes, -1: Error, -2: No (Auto Detect) |
| 700-100 | Enable/Disable the Setting of Forced Warmup Mode | 0, 1 | 0: Cannot be set | Read/Write | 0: Cannot be set, 1: Can be set |
| 700-109 | Forced Warmup Mode | 0,1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-110 | Specify Start Time for Forced Warmup (Hour) | 0~23 | 8 (Hour) | Read/Write | 0-23 (Hour) |
| 700-111 | Specify Start Time for Forced Warmup (Min) | 0~59 | 0 (Min) | Read/Write | 0-59 (Min) |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-120 | Time Zone | -600~+600 | +540(FX <br> Default) +600 (AP default) -300 (XC default) | Read/Write | Displays the time difference from GMT. For example, Japan: 540, Hawaii: -600 |
| 700-124 | Auto Clear Timer (Combining Auto Resume Timer, Auditron Off Timer and Tools Off Timer) | 0~240 | $\begin{aligned} & 1 \min (\mathrm{MF}: \\ & 60, \mathrm{P}: 1) \end{aligned}$ | Read/Write | $\begin{aligned} & \text { Input from the menu is MF: } 0 \text { (Disable), } 60,120,180,240 \text { (sec), P: } 0 \text { (Disable), } \\ & 1 \sim 30 \text { (min) } \\ & 0 \text { (prohibit) } 240 \text { can be entered from ChainLink for MF and P but they must be } \\ & \text { within the range specified above. } \end{aligned}$ |
| 700-125 | Job Cancel Timer | 0~5940 | 10min | Read/Write | 0, 240~5940: [Disable, 4~99min](1 min increments) (The MF-UI SOD has a dif- ferent value.) |
| 700-126 | Operating Timer | 0~240 | 10sec | Read/Write | 0: Not started, 1~240: [1~240sec](1sec increments) |
| 700-127 | Job End Timer | 0~240 | 6 sec | Read/Write | 0: Not started, 1~240: [1~240sec](1sec increments) |
| 700-128 | Scanning Timer | 1~20 | $4 \mathrm{sec}, 3 \mathrm{sec}$ <br> (Allagash only) | Read/Write | 1~20: [1~20sec (1sec increments)] |
| 700-129 | Low Power Mode Timer | 1~240 | 15 min | Read/Write | 1~240: [1~240min (1 min increments)], (Ignored if Low Power mode is disabled) |
| 700-130 | Sleep Mode Timer | 1~240 | 60 min | Read/Write | 1~240: [1~240min (1min increments)], (Ignored if Sleep Mode is disabled) |
| 700-131 | Sleep Mode Availability Setting | 0~1 | 1: Enable | Read/Write | 0: Not valid, 1: Valid |
| 700-132 | Operation Panel Normal Input Beep | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-133 | Operation Panel Error Input Beep | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-134 | Normal Completion Beep (Copy) | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-135 | Normal Completion Beep (Other than Copy) | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-136 | Abnormal Warning Beep | 0~3 | 0: Off | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud (For P Models, there is no volume adjustment. Any setting in soft, normal or loud means On.) |
| 700-137 | Abnormal Completing Beep | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-138 | Ready Beep | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-139 | Toner Empty Warning Beep | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-140 | Bell Tone | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-141 | Line Monitor Tone | 0~3 | 2: Normal | Read/Write | 1: Soft, 2: Normal, 3: Loud |
| 700-142 | Low Power Mode Availability Setting | 0~1 | 1: Enable | Read/Write | 0: Disable, 1: Enable |
| 700-143 | Job Memory Entry Tone | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-144 | Job History Report Auto Output Specification | 0~1 | 0: OFF | Read/Write | 0: OFF, 1: ON |
| 700-145 | Duplex Printing Specification | 0~1 | 0: OFF | Read/Write | 0: OFF, 1: ON |
| 700-146 | Mail Box Receive Notification Report Output Specification | 0~1 | ON | Read/Write | 0: OFF, 1: ON |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-147 | Protocol Monitor Output Control | 0~2 | 0: When print instruction is specified | Read/Write | 0: When print instruction is specified, 1: When error occurs, 2: Always |
| 700-148 | Broadcast/Multi-Poll Report Output Control | 0~1 | 1: Print | Read/Write | 0: Do not print, 1: Print |
| 700-149 | Relay Broadcast Report Output Setting | 0~3 | 1: Send to Relay Station | Read/Write | 0: Off, 1: Send to Relay Station, 2: Print to Local, 3: Send to Relay Station \& Print to Local |
| 700-150 | Activity Report Output Setting | 0~1 | 1: Print | Read/Write | 0: Do not print, 1: Print |
| 700-151 | Unsend Report Output | 0~2 | 1: ON | Read/Write | 0: OFF, 1: ON, 2: Always Print <br> CAUTION <br> Transmission reports can only be printed from the Panel. However, with Transmission Report=On, when sending fails, undelivered reports will be printed. |
| 700-152 | Unsend Report Output Setting when sending is stopped | 0~1 | $\begin{aligned} & \text { 0: Do not } \\ & \text { print } \end{aligned}$ | Read/Write | 0: Do not print, 1: Print |
| 700-153 | Abnormal Warning Beep (Out of paper) | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-154 | Auto Clear Pre Notify Tone | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-155 | Base Point Tone | 0~3 | 2: Normal | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-164 | Language Information | 1~32 | $\begin{aligned} & \text { 1: Japa- } \\ & \text { nese (FX), } \\ & \text { 2: English } \\ & \text { (AP/XC) } \end{aligned}$ | Read/Write | 1: Japanese, 2: English, 3: French, 4: German, 5: Italian, 6: Spanish, 7: Portuguese, 8: Russian, 9: Chinese, 10: Korean, 11: Thai, 12: Vietnamese, 13: Chinese (Taiwan), 14: Dutch, 15: Danish, 16: Swedish, 17: Finnish, 18: Norwegian, 19: Portuguese (Brazil), 20: Bulgarian, 21: Polish, 22: Hungarian, 23: Romanian, 24: Czech, 25: Greek, 26: Turkish, 27: Arabic, 28: Persian, 29: Hebrew |
| 700-165 | Area Code / SEEPROM (uses ISO3166 values): Key Code to change the system data default value to the target value in the EPROM compatible for multiple Area. | - | Depends on factory settings | Read/Write | 0 = Undefined, 840 =USA, 124=Canada, 076=Brazil, 826=UK, 276=Germany, 380=Italy, 250=France, 724=Spain, 528=Holland, 756=Swiss, 752=Sweden, 056=Belgium, 040=Austria, 620=Portugal, 246=Finland, 208=Denmark, 578=Norway, 300=Greece, 372=Ireland, 036=Australia, 554=New Zealand, 360=indonesia, 702=Singapore, 458=Malaysia, 608=Philippin, 764=Thailand, 344=Hong Kong, 704=Vietnum, 392=Japan, 158=Taiwan, 410=Korea, Mexico=484, Chile=152, Argentina=032, Venezuela=862, Columbia=170, Peru=604, India=356, Egypt=818, South Africa=710, Turkey=792, Russia=643, Czech Republic=203, Poland=616, Hungary=348, Romania=642, Bulgaria=100, Morocco=504, 156=China |
| 700-171 | KO Tools Entry Password | - | 11111 (five one's) | Read/Write | P Models: 0~9 (ASCII) 4 digits. MF Model: 0~9 (ASCII) 4 digits~12 digits |
| 700-173 | Off Hook Alarm (XE) Added on 2000.12.19 | 0~3 | 2 (XE) | Read/Write | 0: Off, 1: Soft, 2: Normal, 3: Loud |
| 700-175 | Display position of remote terminals on Activity Report | 0~1 | 0 : Displays lead edge in 40 digits | Read/Write | 0 : Displays 40 digits in lead edge, 1: Displays the 40 digits in rear edge |
| 700-197 | Maximum No. of Jobs | 90~3000 | 600 | Read/Write | Set between 90(Min) 300(Max) in increments of 1 |
| 700-198 | Flag to permit/prohibit job passing | 0~1 | 1: Permit | Read/Write | 1: Permit, 0: Prohibit |
| 700-301 | SEEPROM Serial\# (1st digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-302 | SEEPROM Serial\# (2nd digit) | - | - | Read | Alphanumerics (ASCII) |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-303 | SEEPROM Serial\# (3rd digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-304 | SEEPROM Serial\# (4th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-305 | SEEPROM Serial\# (5th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-306 | SEEPROM Serial\# (6th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-307 | SEEPROM Serial\# (7th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-308 | SEEPROM Serial\# (8th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-309 | SEEPROM Serial\# (9th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-310 | SEEPROM Serial\# (10th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-311 | Battery Backup SRAM Serial \# (1st digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-312 | Battery Backup SRAM Serial \# (2nd digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-313 | Battery Backup SRAM Serial \# (3rd digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-314 | Battery Backup SRAM Serial \# (4th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-315 | Battery Backup SRAM Serial \#(5th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-316 | Battery Backup SRAM Serial \# (6th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-317 | Battery Backup SRAM Serial \# (7th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-318 | Battery Backup SRAM Serial \# (8th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-319 | Battery Backup SRAM Serial \# (9th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-320 | Battery Backup SRAM Serial \# (10th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-321 | SEEPROM Product \# (1st digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-322 | SEEPROM Product \# (2nd digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-323 | SEEPROM Product \# (3rd digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-324 | SEEPROM Product \# (4th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-325 | Battery Backup SRAM Product \# (1st digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-326 | Battery Backup SRAM Product \# (2nd digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-327 | Battery Backup SRAM Product \# (3rd digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-328 | Battery Backup SRAM Product \# (4th digit) | - | - | Read | Alphanumerics (ASCII) |
| 700-329 | SEEPROM Product Code (1st digit) | - | - | Read/Write | Alphanumerics (ASCII) |
| 700-330 | SEEPROM Product Code (2nd digit) | - | - | Read/Write | Alphanumerics (ASCII) |
| 700-331 | SEEPROM Product Code (3rd digit) | - | - | Read/Write | Alphanumerics (ASCII) |
| 700-332 | SEEPROM Product Code (4th digit) | - | - | Read/Write | Alphanumerics (ASCII) |
| 700-333 | SEEPROM Product Code (5th digit) | - | - | Read/Write | Alphanumerics (ASCII) |
| 700-334 | SEEPROM Product Code (6th digit) | - | - | Read/Write | Alphanumerics (ASCII) |
| 700-335 | SEEPROM Product Code (7th digit) | - | - | Read/Write | Alphanumerics (ASCII) |
| 700-336 | SEEPROM Product Code (8th digit) | - | - | Read/Write | Alphanumerics (ASCII) |
| 700-337 | Types of Devices (Information on the SEEPROM) | - | - | Read/Write | [P, SP, CSP, CFSP (,C)](C is requested by M/N) Adjusted at Factory Settings. P (rinter), $\mathrm{F}(\mathrm{ax}), \mathrm{C}(\mathrm{opy}), \mathrm{S}(\mathrm{can})$ are allocated the following bits and are expressed in the following logic. P: 0x01, F: 0x02, C: $0 \times 04, \mathrm{~S}: 0 \times 08$ |
| 700-338 | Territory Information (FX, XC, XE, AP) (Information on SEEPROM) (Data outside the target for Initialize by Country function) | 1~4 | - | Read/Write | 1: FX, 2: XC, 3: XE, 4: AP |

Table 1 Common

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-368 | Ipd: Memory Spool | 512~1024 | 1MB | Read/Write | Memory spooling: [512KB~32MB](256KB increments) Unit: Kbyte |
| 700-390 | Memory size for mail print (E-mail To Print) | 64~1024 | $\begin{aligned} & \hline 256 \mathrm{~KB} \\ & (256) \end{aligned}$ | Read/Write | 64K~1M Byte Unit: Kbyte |
| 700-396 | Auditron Color Mode for Copy (Color Mode for unauthenticated user) | 0~2 | 0: Prohibit | Read/Write | 0: ProhiBit, 1: BW, 2: BW \& Low Price Color |
| 700-397 | Default Paper Size for Reports | 5~44 | 5: A4 (FX/ AP default), 44: Letter (XC default) | Read/Write | 5: A4, 44: Letter |
| 700-398 | CE Auditron Mode: (Print User Restriction Setup Menu Display) | 0~1 | 1: Display | Read/Write | 0: No display 1: Display |
| 700-399 | Millimeter/Inch Settings | 1~3 | $\begin{aligned} & \text { 1: Millime- } \\ & \text { ter (FX/AP } \\ & \text { default), 3: } \\ & \text { Inch (XC } \\ & \text { default) } \end{aligned}$ | Read/Write | 1: Millimeter, 3: Inch |
| 700-401 | Paper Size Group (NVM) | 1~5 | The value specified in Paper Size Group (Factory Settings SEEPROM ) | Read/Write | 1: Japan, 2: NA (North America), 3: EU, 4: AP, 5: SA (South America) |
| 700-402 | Paper Size Group (SEEPROM) | 1~5 | Sets every destination at the factory | Read/Write | 1: Japan, 2: NA (North America), 3: EU, 4: AP, 5: SA (South America) |
| 700-410 | Electronic Sort Print Area Size (RAM Disk) |  | 33M with standard memory, 50M with 128M expansion memory, and 66M with 256M expansion memory | Read/Write | This setting becomes valid only when extending the printer kit with HDD not installed. Do not set other than the situation above. The setting range is from 0 to "current value + amount of free memory". Setting increment is 1MB Units. The current value can be checked from the System Settings List of the device, while the amount of free memory can be checked from the Memory Settings Menu. <br> CAUTION <br> If a value that is larger than the "current value + amount of free memory" is entered, every Memory Settings (inclusive of Receiving Buffer of the Host IF, Form Memory, etc.) will revert to their Factory Shipment Settings. <br> Please make sure that the total of the increased portion does not exceed the amount of free memory if the Electronic Sort Copy Size is also changed. <br> The Electronic Sort function listed to the left stops when its value is set to " 0 ". However, please do not set only this value to " 0 ". Also set the Electronic Sort Copy Area to " 0 " when setting this value to " 0 ". |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-411 | Electronic Sort Copy Area Size (RAM Disk) |  | 33M with standard memory, 50M with 128M expansion memory, 66M with 256M expansion memory, and 100M with 386M expansion memory (TBD) | Read/Write | This setting becomes valid only when the HDD is not installed. Do not set other than the situation above. The setting range is from 0 to "current value + amount of free memory". Setting increment is 1 MB Units. <br> The current value can be checked from the System Settings List of the device, while the amount of free memory can be checked from the Memory Settings Menu. <br> CAUTION <br> If a value that is larger than the "current value + amount of free memory" is entered, every Memory Settings will revert to their Factory Shipment Settings. <br> Please make sure that the total of the increased portion does not exceed the amount of free memory if the Electronic Sort Print Area is also changed. <br> The Electronic Sort function listed to the left stops when its value is set to " 0 ". However, please do not set only this value to " 0 ". Also set the Electronic Sort Print Area to " 0 " when setting this value to " 0 ". |
| 700-412 | Mailbox Area Size (RAM Disk) |  | 7M | Read/Write | Cannot be set (TBD) |
| 700-420 | Download Disable Flag | 0~1 | 0: Permit | Read/Write | 0: Permit, 1: Prohibit |
| 700-421 | Product ID to identify downloaded file (first character) | - | NULL | Read/Write | ASCII |
| 700-422 | Product ID to identify downloaded file (2nd character) | - | NULL | Read/Write | ASCII |
| 700-423 | Product ID to identify downloaded file (3rd character) | - | NULL | Read/Write | ASCII |
| 700-424 | Product ID to identify downloaded file (4th character) | - | NULL | Read/Write | ASCII |
| 700-425 | Product ID to identify downloaded file (5th character) | - | NULL | Read/Write | ASCII |
| 700-426 | Product ID to identify downloaded file (6th character) | - | NULL | Read/Write | ASCII |
| 700-427 | Product ID to identify downloaded file (7th character) | - | NULL | Read/Write | ASCII |
| 700-428 | Product ID to identify downloaded file (8th character) | - | NULL | Read/Write | ASCII |
| 700-430 | Certificate Credibility (PKI Mode) | 1~3 | 1: Level 1 | Read/Write | 1: Level 1, 2: Level 2, 3: Level 3 |
| 700-431 | Device Certification Type | 0~2 | 0: Not registered | Read/Write | 0: Not registered, 1: On (Self-generate), 2: Available (Import) |
| 700-437 | SSL Availability Setting | 0~1 | 0: FALSE Invalid | Read/Write | 0: FALSE Invalid, 1: TRUE Valid |
| 700-440 | S/MIME Availability Setting | 0, 1 | 0: FALSE Invalid | Read/Write | [0: FALSE Invalid, 1: TRUE Valid] |
| 700-441 | S/MIME Device Certification | $\begin{aligned} & \text { 0~0xFFFFF } \\ & \text { FFF } \end{aligned}$ | 0 | Read/Write |  |
| 700-442 | S/MIME Message Digest Algorithm | 0, 1 | 0: SHA1 | Read/Write | [0: SHA1, 1: MD5] |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-443 | S/MIME Contents Encryption Method | 0~3 | 0: 3DES | Read/Write | [0: 3DES, 1: RC4-40, 2: RC4-64, 3: RC4-128] |
| 700-444 | S/MIME Signature Mode | 0~2 | 0: Fixed as Device Certificate | Read/Write | 0: Fixed as Device Certificate (Default) <br> 1: Fixed as Personal Certificate <br> 2: Fixed as User Certificate |
| 700-445 | SSL Port Number | 443~9999 | 443 | Read/Write | 443, 8000~9999 |
| 700-446 | HDD Overwrite Setting | 0~1 | 1: Enable | Read/Write | 0: Disable, 1: Enable |
| 700-447 | HDD Overwrite Count Setting | 0~3 | 1 | Read/Write | 1,3 |
| 700-452 | SNTP Server Address Valid | 0~1 | 0: FALSE | Read/Write | 0: FALSE, 1: TRUE |
| 700-453 | SNTP Server Address | $\begin{aligned} & \text { 0x00000000 } \\ & \sim 0 \times F F F F F F F \\ & \text { FF } \end{aligned}$ | 0.0.0.0 | Read/Write | 00000000~FFFFFFFFF |
| 700-454 | SNTP Enabled/Disabled | 0~1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-455 | SNTP Time Retrieval Interval | 1~500 | 168 | Read/Write | 1~500hr |
| 700-458 | Prohibit Receiving of Untrusted E-mail | 0, 1 | 0: Do not prohibit | Read/Write | 0: Do not prohibit, 1: Prohibit |
| 700-459 | Enable/Disable Auto Store Certificates | 0, 1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-460 | SEC Data Restriction Setup | 0, 1 | 0: OFF | Read/Write | [0: OFF, 1: ON] |
| 700-461 | Prohibit Receiving of Untrusted E-mail (@iFax) | 0, 1 | 0: Do not prohibit | Read/Write | 0: Do not prohibit, 1: Prohibit |
| 700-462 | SCANFILE Signature Device Certification | $\begin{aligned} & \text { 0~0XFFFFF } \\ & \text { FFF } \end{aligned}$ | 0 | Read/Write | $\begin{aligned} & \text { 0: TBD } \\ & >0: \text { Certificate Index Number } \end{aligned}$ |
| 700-463 | SCANFILE Signature Signer | 0~2 | 0: Fixed as Device Signature | Read/Write | 0: Fixed as Device Certificate <br> 1: Fixed as Personal Certificate <br> 2: Fixed as User Certificate |
| 700-464 | XDW Signature | 1~4 | 4: User selection | Read/Write | 2: Always add signature (visible) <br> 3: Do not add signature <br> 4: User selection |
| 700-465 | PDF Signature | 0~4 | 4: User selection | Read/Write | 1: Always add signature (invisible) <br> 2: Always add signature (visible) <br> 3: Do not add signature <br> 4: User selection |
| 700-466 | Print Delay Restriction Prohibition Settings | 0, 1 | 0: Do not prohibit | Read/Write | 0: Do not prohibit, 1: Prohibit |
| 700-467 | Time to Start Print Prohibited State (Hour) | 0~23 | 21 | Read/Write | 0~23 |
| 700-468 | Time to Start Print Prohibited State (Min) | 0~59 | 0 | Read/Write | 0~59 |
| 700-469 | Time to End Print Prohibited State (Hour) | 0~23 | 9 | Read/Write | 0~23 |
| 700-470 | Time to End Print Prohibited State (Min) | 0~59 | 0 | Read/Write | 0~59 |
| 700-471 | Output CO User Report | 0, 1 | 1: TRUE (Allow) | Read/Write | 0: FALSE (Prohibit), 1: TRUE (Allow) |
| 700-490 | Target Stored Document for Stored Document LED | 0~1 | 0: All Documents | Read/Write | 0: All Documents, 1: Received Fax documents |
| 700-500 | Enable/Disable iFAX Transfer for iFAX Receive | 0~1 | 1: Enable | Read/Write | 1: Enable, 0: Disable |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-501 | Enable/Disable E-mail Transfer for iFAX Receive | 0~1 | 1: Enable | Read/Write | 1: Enable, 0: Disable |
| 700-502 | Enable/Disable Auto Deletion of Extended Mailbox Document | 0~1 | 0: Do not auto delete | Read/Write | 1: Auto delete, 0: Do not auto delete |
| 700-503 | Extended Mailbox Document Auto Deletion Frequency by Days | 0~14 | 7 | Read/Write | 1~14 days |
| 700-504 | Extended Mailbox Document Auto Deletion Frequency by Hours (Hour) | 0~23 | 3 | Read/Write | 0~23 |
| 700-505 | Extended Mailbox Document Auto Deletion by Hours (Min) | 0~59 | 0 | Read/Write | 0~59 |
| 700-506 | Document Processing after Document Retrieval from Client | 0~1 | 0: Follow Box settings | Read/Write | 0: Follow Box settings, 1: Delete |
| 700-510 | Enable/Disable Deletion of Auditron Print Document | 0, 1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-511 | Enable/Disable Deletion of Secure Print Document | 0, 1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-512 | Enable/Disable Deletion of Sample Print Document | 0, 1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-513 | Confirmation screen control for the Print Saved Job of Box Service | 0, 1 | 1: Display | Read/Write | 0: Do not display, 1: Display |
| 700-520 | SESAMi Manager Port Number | 1~65535 | 80 | Read/Write | 80, 8000~9999 |
| 700-521 | SESAMi Manager Maximum Sessions | 1~5 | 3 | Read/Write | 1~5 |
| 700-522 | SESAMi Manager Connector Timeout Time (Unit: sec) | 30~255 | 30 | Read/Write | 1~255 |
| 700-523 | Individual Setting Information related to ESR Task (Communication timeout when Application Interface starts) | 1~900 | 60 | Read/Write | 1~900 |
| 700-530 | Rebooting when failure occurs | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 700-540 | Auditron Mode (Auditron Mode/Login Mode) | 0~2 | 0: OFF | Read/Write | 0: OFF, 1: INTERNAL AUDITRON, 2: NETWORK ACCOUNTING |
| 700-541 | Printing Restriction for Mailbox Print | 0~1 | 1: ON | Read/Write | 0: OFF (Not restricted), 1: ON (Restricted) |
| 700-542 | Restriction for outputting Electronic Document from Mailbox | 0~1 | 1: ON | Read/Write | 0: OFF (Not restricted), 1: ON (Restricted) |
| 700-543 | User Information Location (User Information Storage Location) | 0~1 | 0: NVRAM | Read/Write | 0: NVRAM, 1: HDD |
| 700-544 | Matching of Login Information | 0~1 | 1: Enable | Read/Write | 0: Disable, 1: Enable |
| 700-545 | Password Mode for Local Access (Login Password Mode) | 0~1 | 0: OFF | Read/Write | 0: OFF, 1: ON |
| 700-546 | Operation when Login Information is not available | 0~1 | 0: Cancel | Read/Write | 0: Cancel, 1: Store |
| 700-547 | User ID Notation | - | User ID | Read/Write | 1~15 characters (7Bit ASCII) |
| 700-548 | Account ID Notation | - | Account ID | Read/Write | 1~15 characters (7Bit ASCII) |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-549 | Conceal UserID | 0~1 | 0: FALSE | Read/Write | 0: FALSE, 1: TRUE |
| 700-550 | Conceal AccountID | 0~1 | 0: FALSE | Read/Write | 0: FALSE, 1: TRUE |
| 700-551 | Remote Authentication Mode for Scan (Remote Login Mode for Scan) | 0~2 | 0: OFF | Read/Write | 0: OFF, 1: ON, 2: ON with Guest |
| 700-552 | Remote Authentication Service (Remote Login Service Selection) | 0~1 | 0: Ker- beros (Windows2 000 ) | Read/Write | 0: Kerberos (Windows2000), 1: Kerberos (Solaris) |
| 700-553 | Guest Password | - | Guest | Read/Write | 4~12 characters (7Bit ASCII) |
| 700-554 | KDC IP Address | 0~255 | 0.0.0.0 | Read/Write | 0.0.0.0~255.255.255.255 |
| 700-555 | KDC Server Port Number | 0~65535 | 88 | Read/Write | Values between 1-65535 |
| 700-556 | KDC FQDN | - | NULL character | Read/Write | Character below 255bytes valid in FQDN |
| 700-557 | KDC Realm Name | - | NULL character | Read/Write | Character string below 64bytes |
| 700-558 | Pay for Print Storing | 0~2 | 0: Off | Read/Write | 0: OFF, 1: ON, 2:Compulsion accumulates by the print job. |
| 700-559 | Enable/Disable Pay for Print Storing Job Command | 0~1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-560 | Operation for incorrect Login Information | 0~1 | 0: Cancel | Read/Write | 0: Cancel, 1: Store |
| 700-561 | Enable/Disable Pay for Print Control Job Command | 0~1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-562 | No Account User Print (Enable/Disable Non-Account Print) | 0~1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-563 | Maximum Number of Continuous KO Login Errors | 0~10 | 5 | Read/Write | 0~10 |
| 700-564 | Maximum Number of Login Errors | 0~600 | 10 | Read/Write | 0~600 |
| 700-565 | KDC IP Address-2 | $\begin{aligned} & 0.0 .0 .0 \sim 255 \\ & .255 .255 .25 \\ & 5 \end{aligned}$ | 0.0.0.0 | Read/Write | 0.0.0.0~255.255.255.255 |
| 700-566 | KDC Server Port Number-2 | 1~65535 | 88 | Read/Write | Values between 1-65535 |
| 700-567 | KDC FQDN-2 |  | NULL character | Read/Write | Character below 255bytes valid in FQDN |
| 700-568 | KDC Realm Name-2 |  | NULL character | Read/Write | Character string below 64bytes |
| 700-569 | KDC IP Address-3 |  | 0.0.0.0 | Read/Write | 0.0.0.0~255.255.255.255 |
| 700-570 | HCF ROM Major Version | - | - | Read | Auto setting |
| 700-571 | HCF ROM Minor Version | - | - | Read | Auto setting |
| 700-572 | HCF ROM Revision Version | - | - | Read | Auto setting |
| 700-573 | Finisher ROM Major Version | - | - | Read | Auto setting |
| 700-574 | Finisher ROM Minor Version | - | - | Read | Auto setting |
| 700-575 | Finisher ROM Revision Version | - | - | Read | Auto setting |
| 700-576 | IIT Extension ROM Major Version | - | - | Read | Auto setting |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-577 | IIT Extension ROM Minor Version | - | - | Read | Auto setting |
| 700-578 | IIT Extension ROM Revision Version | - | - | Read | Auto setting |
| 700-580 | KDC Server Port Number-3 | 1~65535 | 88 | Read/Write | Values between 1-65535 |
| 700-581 | KDC FQDN-3 |  | NULL character | Read/Write | Character below 255bytes valid in FQDN |
| 700-582 | KDC Realm Name-3 |  | NULL character | Read/Write | Character string below 64bytes |
| 700-583 | KDC IP Address-4 |  | 0.0.0.0 | Read/Write | 0.0.0.0~255.255.255.255 |
| 700-584 | KDC Server Port Number-4 | 1~65535 | 88 | Read/Write | Values between 1-65535 |
| 700-585 | KDC FQDN-4 |  | NULL character | Read/Write | Character below 255bytes valid in FQDN |
| 700-586 | KDC Realm Name-4 |  | NULL character | Read/Write | Character string below 64bytes |
| 700-587 | KDC IP Address-5 |  | 0.0.0.0 | Read/Write | 0.0.0.0~255.255.255.255 |
| 700-588 | KDC Server Port Number-5 | 1~65535 | 88 | Read/Write | Values between 1-65535 |
| 700-589 | KDC FQDN-5 |  | NULL character | Read/Write | Character below 255bytes valid in FQDN |
| 700-590 | KDC Realm Name-5 |  | NULL character | Read/Write | Character string below 64bytes |
| 700-591 | Direct Fax Job Restricted Mode | 0, 1 | 0: Allow | Read/Write | 0: Allow: 1 Prohibit |
| 700-600 | DC132 Supplementary Data Group 1 (IOT) | - | - | Read | Auto setting |
| 700-601 | DC132 Supplementary Data Group 1 (SYS1) | - | - | Read | Auto setting |
| 700-602 | DC132 Supplementary Data Group 1 (SYS2) | - | - | Read | Auto setting |
| 700-603 | DC132 Supplementary Data Group 2 (IOT) | - | - | Read | Auto setting |
| 700-604 | DC132 Supplementary Data Group 2 (SYS1) | - | - | Read | Auto setting |
| 700-605 | DC132 Supplementary Data Group 2 (SYS2) | - | - | Read | Auto setting |
| 700-606 | DC132 Supplementary Data Group 3 (IOT) | - | - | Read | Auto setting |
| 700-607 | DC132 Supplementary Data Group 3 (SYS1) | - | - | Read | Auto setting |
| 700-608 | DC132 Supplementary Data Group 3 (SYS2) | - | - | Read | Auto setting |
| 700-610 | IT Option Connection Settings | 0,1 | 0: Do not connect | Read/Write | [0: Do not connect, 1: Connect] |
| 700-611 | KDC IP Address - For Backup 1 |  | 0.0.0.0 | Read/Write | IP Address |
| 700-612 | KDC IP Address - For Backup 2 |  | 0.0.0.0 | Read/Write | IP Address |
| 700-613 | KDC IP Address - For Backup 3 |  | 0.0.0.0 | Read/Write | IP Address |
| 700-614 | KDC IP Address - For Backup 4 |  | 0.0.0.0 | Read/Write | IP Address |
| 700-615 | KDC IP Address - For Backup 5 |  | 0.0.0.0 | Read/Write | IP Address |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 700-616 | KDC FQDN - For Backup 1 |  | null | Read/Write | Text (ASCII 256 Characters) |
| 700-617 | KDC FQDN - For Backup 2 |  | null | Read/Write | Text (ASCII 256 Characters) |
| 700-618 | KDC FQDN - For Backup 3 |  | null | Read/Write | Text (ASCII 256 Characters) |
| 700-619 | KDC FQDN - For Backup 4 |  | null | Read/Write | Text (ASCII 256 Characters) |
| 700-620 | KDC FQDN - For Backup 5 |  | null | Read/Write | Text (ASCII 256 Characters) |
| 700-621 | KDC Server Port Number - For Backup 1 | 1-65535 | 88 | Read/Write | 1-65535 |
| 700-622 | KDC Server Port Number - For Backup 2 | 1-65535 | 88 | Read/Write | 1-65535 |
| 700-623 | KDC Server Port Number - For Backup 3 | 1-65535 | 88 | Read/Write | 1-65535 |
| 700-624 | KDC Server Port Number - For Backup 4 | 1-65535 | 88 | Read/Write | 1-65535 |
| 700-625 | KDC Server Port Number - For Backup 5 | 1-65535 | 88 | Read/Write | 1-65535 |
| 700-626 | Authentication agent - timeout | 1~300 | 60 (sec) | Read/Write | 1-300 (sec) |
| 700-627 | LDAP Authentication - Sequence Type | 0, 1 | $\begin{array}{\|l} \hline \text { 0: Direct } \\ \text { Login } \end{array}$ | Read/Write | 0: Direct Login <br> 1: Search and Login |
| 700-628 | LDAP Authentication - Login User Login Attributes Type |  | samAccountName | Read/Write | Text (ASCII 32 Characters) |
| 700-629 | LDAP Authentication - Login User Search Attributes Type |  | mail | Read/Write | Text (ASCII 32 Characters) |
| 700-630 | LDAP Authentication - User Name Additional Text |  | null | Read/Write | Text (ASCII 64 Characters) |
| 700-631 | LDAP Authentication - Enable/Disable User Name Additional Text | 0, 1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 700-632 | SMB Authentication - Domain Name 1 |  | null | Read/Write | Text (ASCII 15 Characters) |
| 700-633 | SMB Authentication - Domain Name 2 |  | null | Read/Write | Text (ASCII 15 Characters) |
| 700-634 | SMB Authentication - Domain Name 3 |  | null | Read/Write | Text (ASCII 15 Characters) |
| 700-635 | SMB Authentication - Domain Name 4 |  | null | Read/Write | Text (ASCII 15 Characters) |
| 700-636 | SMB Authentication - Domain Name 5 |  | null | Read/Write | Text (ASCII 15 Characters) |
| 700-637 | SMB Authentication - Server Address 1 |  | 0.0.0.0 | Read/Write | IP Address |
| 700-638 | SMB Authentication - Server Address 2 |  | 0.0.0.0 | Read/Write | IP Address |
| 700-639 | SMB Authentication - Server Address 3 |  | 0.0.0.0 | Read/Write | IP Address |
| 700-640 | SMB Authentication - Server Address 4 |  | 0.0.0.0 | Read/Write | IP Address |
| 700-641 | SMB Authentication - Server Address 5 |  | 0.0.0.0 | Read/Write | IP Address |
| 700-642 | SMB Authentication - Server/SMB Name 1 |  | null | Read/Write | Text (ASCII 64 Characters) |
| 700-643 | SMB Authentication - Server/SMB Name 2 |  | null | Read/Write | Text (ASCII 64 Characters) |
| 700-644 | SMB Authentication - Server/SMB Name 3 |  | null | Read/Write | Text (ASCII 64 Characters) |
| 700-645 | SMB Authentication - Server/SMB Name 4 |  | null | Read/Write | Text (ASCII 64 Characters) |
| 700-646 | SMB Authentication - Server/SMB Name 5 |  | null | Read/Write | Text (ASCII 64 Characters) |
| 700-652 | SMTP Authentication - Specification Method | 0~3 | 0 : DOMAIN NAME | Read/Write | 0: DOMAIN NAME <br> 1: SERVER NAME <br> 2: SERVER ADDRESS <br> 3: SERVER SMB NAME |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 701-912 | ADC Gradation Correction LUT Validity (A, B) | 0~1 | 1 | Read/Write | 0: Disable, 1: Enable |
| 701-917 | ADC Gradation Correction LUT Validity (E, F) | 0, 1 | 1 | Read/Write | 0: Disable, 1: Enable |
| 701-924 | Auto Gradation Correction LUT Validity (A, B) | 0~1 | 1 | Read/Write | 0: Disable, 1: Enable |
| 701-929 | Auto Gradation Correction LUT Validity (E, F) | 0~1 | 1 | Read/Write | 0: Disable, 1: Enable |
| 702-931 | BufferCont Management Memory Partition Data | 0, 1 | FALSE: Not prohibited | Read/Write | Expansion of memory partition size prohibition. <br> TRUE: Prohibited <br> FALSE: Not prohibited (Default) <br> If the expansion of memory partition size is prohibited, memory partition expansion request by PfBufloctl() will be refused. |
| 702-932 | External Scan Feature | 0~2 | 0: None | Read/Write | 0 : None <br> 1: ExtNetScan <br> 2: CDIScan |
| 702-934 | Output Settings for Error Report during JFS Error | 0, 1 | $\begin{aligned} & \text { 0: Auto } \\ & \text { output Off } \end{aligned}$ | Read/Write | 0: Auto output Off, 1: Auto output On |
| 702-935 | Confirmation screen control for the Print Saved Job of Print Service | 0, 1 | 1: Display | Read/Write | 0: Do not display, 1:Display |
| 702-940 | Size Type Settings during sending of FAX Document | 1, 2 | 2: Nonstandard | Read/Write | 1: Standard, 2: Non-standard |
| 702-941 | Threshold Value Settings for size determination in Slow Scan direction during sending of FAX Document | 0~10 | 10mm | Read/Write | 0~10mm |
| 702-942 | "Mixed A3 and Ledger" Condition Settings for size determination in Slow Scan direction during sending of FAX Document | 1,2 | Conforms to RECEIVE_ DOCSIZE SELECT of "(A10 Country Specific SystemDat aDefault)" in the FaxCard Features Specifications Manual. | Read/Write | 1: Mixed A3 and Ledger allowed 2: Mixed A3 and Ledger prohibited |

Chain 720-xxx Meter Counter

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 720-002 | Billing Display | 1~7 | PFV_BILLING TYPE_1 | Read/Write | Meter Counter. 1: Billing 1, 2: Billing 2, 3: Billing 3, 4: Billing 4, 5: Billing 5, 6: Billing 6, 7: Billing 7 |
| 720-003 | Master Print-Full Color | 0~19999999 | - | Read | Meter Counter |
| 720-004 | Master Print-Color 1 | 0~19999999 | - | Read | Meter Counter |
| 720-005 | Master Print-Color 2 | 0~19999999 | - | Read | Meter Counter |
| 720-006 | Master Print-B\&W | 0~19999999 | - | Read | Meter Counter |
| 720-007 | Master Copy-Full Color | 0~19999999 | - | Read | Meter Counter |
| 720-008 | Master Copy-Color2 | 0~19999999 | - | Read | Meter Counter |
| 720-009 | Master Copy-B\&W | 0~19999999 | - | Read | Meter Counter |
| 720-010 | Master FAX-Full Color | 0~19999999 | - | Read | Meter Counter |
| 720-011 | Master FAX-B\&W | 0~19999999 | - | Read | Meter Counter |
| 720-046 | Master Large Size B\&W | 0~19999999 | - | Read | Meter Counter |
| 720-047 | Master Large Size Color | 0~19999999 | - | Read | Meter Counter |
| 720-052 | Billing Count Type | 0~2 | 0: STANDARD | Read/Write | Meter Counter. 0: STANDARD, 1: CUSTOM 1, 2: CUSTOM |
| 720-053 | Master Modal Color | 0~19999999 | - | Read | Meter Counter |
| 720-054 | Master Modal B\&W | 0~19999999 | - | Read | Meter Counter |
| 720-055 | Backup1 Modal Color Counter | 0~19999999 | - | Read | Meter Counter |
| 720-057 | Modal Break Point | 10~100 | 10 | Read/Write | Meter Counter |

Chains 730-xxx, 731-xxx, 732-xxx, 733-xxx, 734-xxx Stored-Data

| Chain-Link | NVM Name | PWS Display | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 730-010 | Control of correctly authenticated print job at Authentication Mode of Print Auditron. | Pay for Print - Correct Account | 0, 1 | 00: Print | Read/Write | 0: Print, 1: Forced save |
| $\begin{array}{\|l\|} \hline 731- \\ 001 ~ 999 \end{array}$ | Modem Speed | Speed Dial setting for Modem Speed (Link 1-500) | - | 0 : Follow the modem speed of system data | Read/Write | 0: Follow the modem speed of system data, 1: 2400bps, 2: 4800bps, 3: 7200bps, 4: 9600bps, 5: 12000bps, 6: 144000bps, 7: 16800bps, 8: 19200bps, 9: 21600bps, 10: 24000bps, 11: 26400 bps , 12: 28800bps, 13: 31200bps, 14: 33600bps, Speed Dial (Address Book) (999 stations) |
| $\begin{array}{\|l} \hline 732- \\ \text { 001~999 } \end{array}$ | Super G3 Disable Setting | Speed Dial setting for Super G3 (Link 1-500=Dial) | 0~1 | 0: Enable | Read/Write | Speed Dial (Address Book) (999 stations) <br> 0: Enable, 1: Disable |
| $\begin{array}{\|l\|} \hline 733- \\ \text { 001~999 } \end{array}$ | ECM Disable Setting | Speed Dial setting for ECM (Link 1-500=Dial) | 0~1 | 0: Enable | Read/Write | Speed Dial (Address Book) (999 stations) 0 : Enable, 1: Disable |
| $\begin{array}{\|l\|} \hline 734- \\ 001 ~ 999 \end{array}$ | JBIG Disable Setting | Speed Dial setting for JBIG (Link 1-500=Dial) | 0~1 | 0: Enable | Read/Write | Speed Dial (Address Book) (999 stations) 0: Enable, 1: Disable |

Chain 770-xxx I/O Port Protocol

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 770-001 | Enable Setting | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-002 | Print Mode | 0~29 | 1: Auto | Read/Write | 1: Auto, 14: Dump, 15: ART, 16: PLW, 3: HPGL2, 8: ESCP, 9: 201H, 5: PostScript, 10: TIFF, 2: PCL, 17: KS5843, 18: KSSM, 29: KS5895. Refer to the FF Host I/F of each product for the setup range. |
| 770-003 | JCL Switch | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 770-004 | Adobe Communication Protocol | 0~2 | 0: Standard | Read/Write | 0: Standard, 1: Binary, 2: TBCP |
| 770-005 | Auto Feed Time | 1~255 | 6 (30sec) | Read/Write | 1-255 (5-1275 sec) |
| 770-006 | Input Prime | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 770-007 | Bi-directional Mode | 0~1 | 0: ON | Read/Write | 0: ON, 1: OFF |
| 770-009 | Applicable Communication Specification | 0~1 | $\begin{array}{\|l\|} \hline \text { O: IEEE } \\ \text { P1284 } \end{array}$ | Read/Write | 0: IEEE P1284, 1: Centronics |
| 770-010 | Operation Speed | 1~0x7F | $\begin{array}{\|l} \hline \text { 0x7F (127): } \\ \text { Auto } \\ \hline \end{array}$ | Read/Write | 0x7F: Auto, 2: 100BASE-TX, 1: 10BASE-T |
| 770-011 | JBA 2004 Extensions | 0, 1 | 0: Not supported | Read | 0: Not supported, 1: Operate in expanded mode |
| 770-012 | Enable Setting | 0, 1 | 1: Enable | Read/Write | 0: Disable, 1: Enable |
| 770-020 | Operation Speed | - | 4: Auto | Read/Write | Auto:4, 4MB/s: 1, 16MB/s: 2, 100MB/s: 3 |
| 770-021 | Maximum Packet Size | - | 1500 | Read/Write | 1500, 2088, 4472, 8232 |
| 770-030 | Operation Frame Type Setting | 0~255 | 255: Auto | Read/Write | 255: Auto, 2: Ethernet II, 4: Ethernet SNAP, 3: Ethernet 802.2, 1: Ethernet 802.3, 6: Token SNAP, 5: Token 802.5 |
| 770-040 | Enable Setting | 0~1 | 0: Disable | Read/Write | 0: Disable 1: Enable |
| 770-041 | Print Mode | - | 5: PostScript | Read/Write | PostScript |
| 770-042 | JCL Switch is set as PJL Switch for AP | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 770-050 | Enable Setting | 0~1 | 0: Disable | Read/Write | 0: Disable 1: Enable |
| 770-051 | Print Mode | 0~29 | 1: Auto | Read/Write | 1: Auto, 14: Dump, 15: ART, 16: PLW, 3: HPGL2, 8: ESCP, 5: PostScript, 10: TIFF, 2: PCL, 17: KS5843, 18: KSSM, 29: KS5895. <br> Refer to the FF Host I/F of each product for the setup range. |
| 770-052 | JCL Switch | 0~1 | 1: Enable | Read/Write | 0: Disable, 1: Enable |
| 770-053 | Filter | 0~1 | 0: None | Read/Write | 0: None, 1: TBCP |
| 770-054 | Transport | 0~3 | 1: IPX/SPX | Read/Write | 1: IPX/SPX, 2: TCP/IP, 3: both |
| 770-060 | Enable Setting | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-061 | Print Mode | 1~29 | 1: Auto | Read/Write | 1: Auto, 14: Dump, 15: ART, 16: PLW, 3: HPGL2, 8: ESCP, 5: PostScript, 10: TIFF, 2: PCL, 17: KS5843, 18: KSSM, 29: KS5895. <br> Refer to the FF Host I/F of each product for the setup range. |
| 770-062 | JCL Switch | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 770-063 | Filter | 0~1 | 0: None | Read/Write | 0: None, 1: TBCP |
| 770-064 | Spool Type | 0~1 | 0: Non Spool | Read/Write | 0: Non Spool, 1: Spool |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 770-065 | Connection Timeout Time | $2 \sim 3600$ <br> $2 \sim 3600$ sec <br> (Setup <br> range: <br> $2 \sim 65,535$ ) | 16sec | Read/Write |  |
| 770-068 | Port Number | - | 515 | Read/Write | 515, 8000~9999 |
| 770-070 | Address Limitation (Valid for Ipd in Japan market) | 0~1 | 0: OFF | Read/Write | 0: OFF, 1: ON |
| 770-071 | Receive IP Address 1 | - | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-072 | Receive IP Address 2 | - | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-073 | Receive IP Address 3 | - | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-074 | Receive IP Address 4 | - | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-075 | Receive IP Address 5 | - | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-077 | SMTP Port Number | 1~65535 | 25 | Read/Write | 1~65535 |
| 770-080 | Enable Setting | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-081 | Print Mode | 1~29 | 1: Auto | Read/Write | 1: Auto, 14: Dump, 15: ART, 16: PLW, 3: HPGL2, 8: ESCP, 5: PostScript, 10: TIFF, 2: PCL, 17: KS5843, 18: KSSM, 29: KS5895. Refer to the FF Host I/F of each product for the setup range. |
| 770-082 | JCL Switch is set as PJL Switch for AP | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 770-083 | Filter | 0~1 | 0: None | Read/Write | 0: None, 1: TBCP |
| 770-084 | Spool Type | 1 | 0: Non Spool | Read/Write | 0: Non Spool, 1: Spool |
| 770-085 | Transport | 2~6 | 6: both | Read/Write | 2: TCP/IP, 4: NetBeui, 6: both |
| 770-090 | Enable Setting | 0~1 | 0: Disable | Read/Write | 0: Disable 1: Enable |
| 770-091 | Print Mode | 1~29 | 1: Auto | Read/Write | 1: Auto, 14: Dump, 15: ART, 16: PLW, 3: HPGL2, 8: ESCP, 5: PostScript, 10: TIFF, 2: PCL, 17: KS5843, 18: KSSM, 29: KS5895. Refer to the FF Host I/F of each product for the setup range. |
| 770-092 | JCL Switch | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 770-093 | Filter | 0~1 | 0: None | Read/Write | 0: None, 1: TBCP |
| 770-094 | Acl Authorization (Acl Authorization) | 0~1 | $\begin{aligned} & \text { 0: OFF } \\ & \text { (none) } \end{aligned}$ | Read/Write | 1: ON (local), 0: OFF (none) |
| 770-095 | Use DNS Name | 0~1 | 1: ON | Read/Write | 1: ON, 0: OFF |
| 770-097 | Port no. (Value can be changed by user) | 9999 | 80 | Read/Write | 0, 80, any one value between 8000~9999 |
| 770-098 | Spool Type | 1 | 0: Non Spool is 1 | Read/Write | 0: Non Spool, 1: Spool |
| 770-099 | Time Out | 0~65535 | 60 | Read/Write | 0~65535 [Sec] |
| 770-100 | IP Address Solution | 1~0x10 | 2: DHCP | Read/Write | 0x10: Manual, 4: BOOTP, 2: DHCP, 1: RARP |
| 770-101 | IP Address | $\begin{aligned} & 0 \times 000000 \\ & 00 \sim 0 x F F F \\ & \text { FFFFF } \end{aligned}$ | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-102 | Subnet Mask | $\begin{aligned} & 0 \times 000000 \\ & 00 \sim 0 \times F F F \\ & \text { FFFFF } \end{aligned}$ | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 770-103 | Gateway Address | $\begin{aligned} & 0 \times 000000 \\ & \text { 00~0xFFF } \\ & \text { FFFFF } \end{aligned}$ | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-110 | DNS Auto Config. | 0~0x10 | DHCP | Read/Write | 0x10: Manual Setting, 0x02: DHCP |
| 770-112 | DNS Domain Name | - | NULL | Read/Write | DNS Domain Name (Normally, it is within 255 characters including the "." (dot) at the end which is not displayed) |
| 770-120 | WINS Auto Config. | - | DHCP | Read/Write | 0x10: Manual Setting, 0x02: DHCP |
| 770-121 | WINS Server Address 1 | - | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-123 | WINS Server Address 2 | $\begin{aligned} & 0 \times 000000 \\ & 00 \sim 0 \times F F F \\ & \text { FFFFF } \end{aligned}$ | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-130 | Enable Setting | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-131 | Transport | 0~3 | 2: UDP | Read/Write | 0: both OFF, 1: IPX, 2: UDP, 3: both ON |
| 770-133 | Community Name (For Set/Get Access) | - | NULL <br> (Replace to "fxSystemMgr" on the PDU) | Read/Write | JISX0201 Character Code 12 Characters |
| 770-140 | Enable Setting | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-150 | Enable Setting | 0~1 | 0; 1: Disable | Read/Write | 0: Disable 1: Enable |
| 770-160 | Enable Setting | 0~1 | 0: Disable | Read/Write | 0: Disable 1: Enable |
| 770-166 | No. of concurrent requests received | 1~10 | 5 | Read/Write | 1~10 |
| 770-190 | Enable, Disable | 0~1 | 1: Enable | Read/Write | 1: Enable, 0: Disable |
| 770-191 | Addressee of Mail Sender (Self-machine mail address) | - | NULL | Read/Write | Maximum 128 ASCII characters (Character type includes alphanumeric, [@][. (period) $][+][-][=][$ (underscore) $][/][<][>]$ ) username@domain.name format |
| 770-202 | SMTP Mail Server IP Address | $\begin{aligned} & 0 \times 000000 \\ & 00 \sim 0 x F F F \\ & \text { FFFFF } \end{aligned}$ | 0.0.0.0 | Read/Write | 00000000~FFFFFFFF |
| 770-222 | Start Setup | 0, 1 | 1 | Read/Write | 0: Stop, 1: Start |
| 770-250 | Adobe Communication Protocol | 0~2 | 0: Standard | Read/Write | 0: Standard, 1: Binary, 2: TBCP |
| 770-251 | JCL Switch | 0~1 | 0: ON | Read/Write | 0: OFF 1: ON |
| 770-252 | Print Mode | 1~29 | Auto | Read/Write | 1: Auto, 14: Dump, 15: ART, 16: PLW, 3: HPGL2, 8: ESCP, 5: PostScript, 10: TIFF, 2: PCL, 17: KS5843, 18: KSSM, 29: KS5895. |
| 770-254 | Enable Setting | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-255 | Auto Feed Time | 0~255 | 6 (30sec) | Read/Write | 1-255 (5-1275 sec) |
| 770-280 | Enable Setting | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-281 | Print Mode | 1~29 | 10: TIFF | Read | 1: Auto, 14: Dump, 15: ART, 16: PLW, 3: HPGL2, 8: ESCP, 5: PostScript, 10: TIFF, 2: PCL, 17: KS5843, 18: KSSM, 29: KS5895. <br> Refer to the FF Host I/F of each product for the setup range. |
| 770-282 | JCL Switch | 0~1 | 1: ON | Read | 0: OFF, 1: ON |
| 770-283 | Filter | 0~1 | 0: None | Read | 0: None, 1: TBCP |
| 770-284 | Spool Type | 0~1 | 0: Non Spool | Read | 0: Non Spool (Ring Buffer), 1: Spool (RAM Disk) |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 770-285 | Print Control for Mail Header and Contents in Email Receive Print | 0~3 | 1: "Print basic headers and contents" | Read/Write | 0: Print all headers and contents, 1: Print basic headers and contents, 2: Do not print headers or contents, 3: Auto print according to content |
| 770-286 | POP Server User Name | $-$ | NULL | Read/Write | - |
| 770-287 | POP Server Password | - | NULL | Read/Write | - |
| 770-290 | Enable Setting | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-291 | UPnP Port Number | 0~65535 | 80 | Read/Write | 1~65535 |
| 770-295 | Enable Setting | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-296 | BMLinkS Discovery Service Port Number | 0~65535 | 80 | Read/Write | 1~65535 |
| 770-297 | BMLinkS Print Service Port Number | 0~65535 | 80 | Read/Write | 1~65535 |
| 770-310 | Notification Timing for Recipient 1 | 0~2 | 0 | Read/Write | The prefix ""PFV_MAIL_REQUEST_TYPE""PFV_MAIL_REQUEST_TYPE"' is omitted. <br> NULL (Default) <br> Not specified. <br> STATUS_REPORT <br> Request for periodic status notification. <br> IMMEDIATE_STATUS_REPORT <br> Request for immediate status notification. |
| 770-311 | Notification Timing for Recipient 2 | 0~2 | 0 | Read/Write | The prefix ""PFV_MAIL_REQUEST_TYPE""PFV_MAIL_REQUEST_TYPE"' is omitted. <br> NULL (Default) <br> Not specified. <br> STATUS_REPORT <br> Request for periodic status notification. <br> IMMEDIATE_STATUS_REPORT <br> Request for immediate status notification. |
| 770-312 | Notification Timing for Recipient 3 | 0~2 | 0 | Read/Write | The prefix ""PFV_MAIL_REQUEST_TYPE""PFV_MAIL_REQUEST_TYPE"' is omitted. <br> NULL (Default) <br> Not specified. <br> STATUS_REPORT <br> Request for periodic status notification. <br> IMMEDIATE_STATUS_REPORT <br> Request for immediate status notification. |
| 770-320 | Sesami External Interface Settings Information | 0~1 | 1: Enable | Read/Write | 0: Disable 1: Enable |
| 770-339 | FTP Server Availability | 0, 1 | PFDISABLE <br> (0): Disable | Read/Write | PFENABLE (1): Enable <br> PFDISABLE (0): Disable (Default) |
| 770-340 | IT Option MAC Address | $\begin{array}{\|l\|} \hline 0 \times 0 \sim 0 x F F \\ \text { FFFFFFFF } \\ \text { FF } \end{array}$ | 0x0 | Read/Write |  |
| 770-341 | IT Option IP Address | $\begin{array}{\|l\|} \hline 0 \times 0 \sim 0 \times F F \\ \text { FFFFFFFF } \\ \text { FF } \\ \hline \end{array}$ | 0x0 | Read/Write |  |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 770-342 | IT Option MAC Address \#1 | 0x0~0xFF | 0x0 | Read/Write | Byte 1 of IT Option MAC Address |
| 770-343 | IT Option MAC Address \#2 | 0x0~0xFF | 0x0 | Read/Write | Byte 2 of IT Option MAC Address |
| 770-344 | IT Option MAC Address \#3 | 0x0~0xFF | 0x0 | Read/Write | Byte 3 of IT Option MAC Address |
| 770-345 | IT Option MAC Address \#4 | 0x0~0xFF | 0x0 | Read/Write | Byte 4 of IT Option MAC Address |
| 770-346 | IT Option MAC Address \#5 | 0x0~0xFF | 0x0 | Read/Write | Byte 5 of IT Option MAC Address |
| 770-347 | IT Option MAC Address \#6 | 0x0~0xFF | 0x0 | Read/Write | Byte 6 of IT Option MAC Address |
| 770-400 | Enable Setting | 0, 1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 770-401 | Port No. (User modifiable value) | 0~65535 | 80 | Read/Write | Port no. |
| 770-402 | Time-Out | 0~65535 | 30 | Read/Write | Time-Out (Seconds) |

## Chain 770-xxx 840-xxx Scan Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 770-301 | Directory Server (Primary) - FQDN | - | NULL | Read/Write | Below 64 bytes. Refer to RFC1034 for the available characters. |
| 770-302 | Directory Server (Primary) - IP Address | - | NULL | Read/Write | Below 4 bytes. Invalid if FQDN is specified. Invalid if retrieval by DHCP is specified. 1.1.1.1~254.254.254.254 |
| 770-303 | Directory Server (Primary) - LDAP Port No. | 1~65535 | 389 | Read/Write | 1~65535 |
| 770-304 | Directory Server (Secondary) - FQDN | - | NULL | Read/Write | Below 64 bytes. Refer to RFC1034 for the available characters. |
| 770-305 | Directory Server (Secondary) - IP Address | - | NULL | Read/Write | Below 4 bytes. Invalid if FQDN is specified. Invalid if retrieval by DHCP is specified. 1.1.1.1~254.254.254.254 |
| 770-306 | Directory Server (Secondary) - LDAP Port No. | 1~65535 | 389 | Read/Write | 1~65535 |
| 840-001 | Scan Feature Setting | 0~1 | 0: Enable | Read/Write | 0: Enable, 1: Disable |
| 840-002 | Scan Illegal Operation (Operation when there was no specific timing when an error occurs in storing) | 0~1 | 0: Enable Stored Document | Read/Write | 0: Discard stored documents, 1: Enable stored documents |
| 840-003 | Maximum No. of Storage | 1~999 | 999 sheets | Read/Write | 1~999 sheets |
| 840-004 | Brightness 3 Setting | 0~200 | 192: -92 <br> (Density) | Read/Write | 0~200: -100~100 |
| 840-005 | Brightness 2 Setting | 0~200 | $\begin{array}{\|l\|} \hline \text { 161: -61 } \\ \text { (Density) } \end{array}$ | Read/Write | 0~200: -100~100 |
| 840-006 | Brightness 1 Setting | 0~200 | $\begin{aligned} & \hline \text { 131: }-31 \\ & \text { (Density) } \end{aligned}$ | Read/Write | 0~200: -100~100 |
| 840-007 | Brightness-1 Setting | 0~200 | $\begin{aligned} & \text { 99: } 1 \text { (Den- } \\ & \text { sity) } \end{aligned}$ | Read/Write | 0~200: -100~100 |
| 840-008 | Brightness -2 Setting | 0~200 | $\begin{aligned} & \text { 98: } 2 \text { (Den- } \\ & \text { sity) } \end{aligned}$ | Read/Write | 0~200: -100~100 |
| 840-009 | Brightness -3 Setting | 0~200 | $\begin{aligned} & \text { 97: } 3 \text { (Den- } \\ & \text { sity) } \end{aligned}$ | Read/Write | 0~200: -100~100 |
| 840-010 | Brightest Setting | 0~200 | 150:50 | Read/Write | 0~200: -100~100 |

## General procedures information

Controller \& Fax NVM List

Table 5 Scan Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 840-011 | Brighter Setting | 0~200 | 125:25 | Read/Write | 0~200: -100~100 |
| 840-012 | Softer Setting | 0~200 | 75:-25 | Read/Write | 0~200: -100~100 |
| 840-013 | Softest Setting | 0~200 | 50: -50 | Read/Write | 0~200: -100~100 |
| 840-019 | RGB Color Space | 0~1 | 0: Standard Color Space | Read/Write | 0: Standard Color Space, 1: Device Color Space |
| 840-021 | SCAN ACS Menu Display Settings | 0~1 | 0: Do not display (FX), 1: Display (AP/ MN Default) | Read/Write | 0: Do not display 1: Display |
| 840-022 | Color Saturation Adjustment Default | 0~4 | 2: Standard | Read/Write | 0: Stronger 2, 1: Stronger 1, 2: Standard, 3: Softer 1, 4: Softer 2 |
| 840-023 | Background Color Suppression Level Adjustment | 0~4 | 3: Stronger+1 | Read/Write | 0: Stronger+4, 1: Stronger+3, 2: Stronger+2, 3: Stronger+1, 4: Normal Applicable to Full Color only |
| 840-024 | Bleed Prevention Adjustment Default | 0~4 | 2: Standard | Read/Write | 0: Stronger 2, 1: Stronger 1, 2: Standard, 3: Softer 1, 4: Softer 2 |
| 840-041 | ScanToPC Network Browsing Time Out Time | 1~300 | 5 (sec) | Read/Write | 1~300 (sec) |
| 840-080 | Enable Use of Remote Mail Address Book | 0~1 | 1: Permit | Read/Write | 1: Permit, 0: Prohibit |
| 840-081 | LDAP Attribute Type for [Recipient Name] | - | cn | Read/Write | Text string below 32 bytes |
| 840-082 | LDAP Attribute Type for [Surname] | - | sn | Read/Write | Text string below 32 bytes |
| 840-083 | LDAP Attribute Type for [Name] | - | givenname | Read/Write | Text string below 32 bytes |
| 840-084 | LDAP Attribute Type for [Mail Address] | - | mail | Read/Write | Text string below 32 bytes |
| 840-085 | Attribute Name assigned in [Supplementary Item 1] | - | Telephone <br> No. (FX <br> Default) | Read/Write | Text string below 16 bytes (FX), Default text string is different depending on the designated market |
| 840-086 | LDAP Attribute Type for [Supplementary Item 1] | - | Telephone No. | Read/Write | Text string below 32 bytes |
| 840-087 | Attribute Name assigned in [Supplementary Item 2] | - | Company (FX Default) | Read/Write | Text string below 16 bytes (Japan market) Default text string is different depending on the designated market |
| 840-088 | LDAP Attribute Type for [Supplementary Item 2] | - | 0 | Read/Write | Text string below 32 bytes |
| 840-089 | Attribute Name assigned in [Supplementary Item 3] | - | Company (FX Default) | Read/Write | Text string below 16 bytes (Japan market) Default text string is different depending on the designated market |
| 840-090 | LDAP Attribute Type for [Supplementary Item 3] | - | ou | Read/Write | Text string below 32 bytes |
| 840-091 | Maximum Hit Count | 5~100 | 50 | Read/Write | 5~100 |
| 840-092 | Device User DN Name (for LDAP Authentication) | - | NULL | Read/Write | Below 256 bytes. Do not set if LDAP Authentication is not required. |
| 840-093 | Password (for LDAP Authentication) | - | NULL | Read/Write | Below 32 bytes. Do not set if password is not required for LDAP Authentication. |
| 840-094 | Search Root Entry DN | - | NULL | Read/Write | Below 255 bytes. |
| 840-095 | Search Range | 0~3 | All levels below root entry | Read/Write | 1: Root entry only, 2: One level below root entry only, 3: All levels below root entry |

Table 5 Scan Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 840-096 | Object Class | - | - | Read/Write | Below 32 bytes |
| 840-097 | Timeout Value (second) | - | 30 | Read/Write | For 0 or 5~120 detected by the device, set the timeout value to a numerical value other than 0 . If 0 is specified, the device will not detect timeout. The timeout setting will follow the setting in the Directory Server Service. |
| 840-098 | Directory Server Application | - | NULL | Read/Write | 0: None, 1: Microsoft) ActiveDirectory or Microsoft) ExchangeServer5.5, 2: Novel) NetWare5.*, Mapping of properties for retrieval and LDAP property is done based on this setting. |
| 840-116 | ScanToEmail Transmission S/MIME Signature Settings | 1~3 | 3: By user specification | Read/Write | 1: Always add signature <br> 2: Do not add signature <br> 3: By user specification |
| 840-117 | iFAX Transmission S/MIME Signature Settings | 1~3 | 3: User selection | Read/Write | 1: Always add signature <br> 2: Do not add signature <br> 3: User selection |
| 840-118 | Certificate Attribute Name |  | userCertificate;binary | Read/Write | Text that displays the certificate attribute name |
| 840-121 | Resolution Change Process for Fax Transmission of Scanned Documents | 2~15 | 15: Input resolution | Read/Write | $\begin{aligned} & \text { 2: } 200 x 200 \\ & \text { 15: Input resolution } \end{aligned}$ |
| 840-122 | Color Page Resolution Change Process for IFax Transmission of Scanned Documents | 0, 1 | 1: High Speed | Read/Write | 0: High Quality <br> 1: High Speed |
| 840-123 | BW Page Resolution Change Process for IFax Transmission of Scanned Documents | 1,2 | 1: High Speed | Read/Write | 1: High Speed <br> 2: Profile Priority |
| 840-125 | LDAP - SSL ON/OFF During Server Access | 0,1 | 0: OFF | Read/Write | 0: OFF, 1: ON |
| 840-126 | Body Text Message |  | NULL character | Read/Write | - |
| 840-127 | Add Login User Name | 0, 1 | 1 | Read/Write | 0: Disable <br> 1: Enable |
| 840-128 | Add Login User Address | 0, 1 | 1 | Read/Write | 0: Disable <br> 1: Enable |
| 840-129 | Add Number of Pages Sent | 0, 1 | 1 | Read/Write | 0: Disable <br> 1: Enable |
| 840-130 | Add Appended File Format Information | 0, 1 | 1 | Read/Write | 0: Disable <br> 1: Enable |
| 840-131 | Add IP Address of Sender Device | 0, 1 | 0 | Read/Write | 0: Disable <br> 1: Enable |
| 840-132 | Add Serial Number of Sender Device | 0, 1 | 0 | Read/Write | 0: Disable <br> 1: Enable |
| 840-133 | Add MAC Address of Sender Device | 0, 1 | 0 | Read/Write | 0: Disable <br> 1: Enable |
| 840-134 | Add Device Name of Sender Device | 0, 1 | 1 | Read/Write | 0: Disable <br> 1: Enable |
| 840-135 | Add Location Information of Sender Device | 0, 1 | 1 | Read/Write | 0: Disable <br> 1: Enable |

Table 5 Scan Service

| Chain-Link | NVM Name | Setup <br> Range | Initial Value | Read/Write | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $840-136$ | Signature Message | NULL char- <br> acter | Read/Write | - |  |
| $840-137$ | Permission to change "From:", when suc- <br> cessful in obtaining E-mail address during <br> authentication | 0,1 | 0 | Read/Write | 0: Prohibit, 1: Allow |
| $840-138$ | Permission to change "From:", when failed <br> in obtaining E-mail address during authen- <br> tication | 0,1 | 1 | Read/Write | 0: Prohibit, 1: Allow |
| $840-139$ | Permission to change "From:", for Guest <br> User | 0,1 | 0 | Read/Write | 0: Prohibit, 1: Allow |
| $840-140$ | Permission to change "From:", when not <br> authenticated | 0,1 | 0 | Read/Write | 0: Prohibit, 1: Allow |
| $840-141$ | Permission to use ScanToEmail, when <br> failed in obtaining E-mail address during <br> authentication | 0,1 | 1 | Allow |  |

Chain 780-xxx IOT
Table 6 IOT

| Chain-Link | NVM Name | Setup <br> Range | Initial Value | Read/Write |
| :--- | :--- | :--- | :--- | :--- | Description | Table 6 IOT |
| :--- |
| $780-013$ |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 780-014 | Paper Type for Tray 2 | 1~61 | $\begin{array}{\|l} \hline \text { 1: Plain } \\ \text { Paper } \end{array}$ | Read/Write | 1: Plain Paper, 2: OHP Sheet, 3: Envelope, 4: Envelope (Plain), 5: Envelope (with window), 6: Labels, 7: Forms, 8: Coated Paper 1, 9: Tracing Paper, 10: Heavyweight 1, 11: Heavyweight 1 Side 2, 12: Heavyweight 2, 13: Heavyweight 2 Side 2, 14: Recycled Paper, 15: Continuous paper (Long), 16: Continuous Paper (short), 17: TABSTOCK, 18: MULTILAYER, 19: OPAQUEFILM, 20: TACK_FILM, 21: Lightweight, 22: Bond paper, 23: Custom Paper 1, 24: Custom Paper 2, 25: Custom Paper 3, 26: Custom Paper 4, 27: Custom Paper 5, 28: Others, 29: Wrapping Paper, 30: Special Glossy Paper, 31: Coated Paper 2, 32: Coated Paper 1 (Side 2), 33: Coated Paper 2 (Side 2), 34: Finisher-supported Heavyweight 1, 35: Finisher-supported Coated Paper 1, 36: Heavyweight 1_A, 37: Heavyweight 1_B, 38: Heavyweight 1_C, 39: Heavyweight 1_S, 40: Heavyweight 2_A, 41: Heavyweight 2_B, 42: Heavyweight 2_C, 43: Heavyweight 2_D, 44: Heavyweight 2_S, 45: Finisher-supported Heavyweight 1_A, 46: Finisher-supported Heavyweight 1_B, 47: Finisher-supported Heavyweight 1_C, 48: Finisher-supported Heavyweight 1_S, 49: Postcard Stock, 50: Postcard Stock (Side 2), 51: Plain Paper (Side 2), 52: Bond paper (Side 2), 53: Recycled Paper (Side 2), 54: Special, 55: Special (Side 2), 56: Backing Sheet, 57: Perforated Paper, 58: Tab Stock Heavyweight 1, 59: Tab Stock Heavyweight 2 |
| 780-015 | Paper Type for Tray 3 | 1~61 | $\begin{array}{\|l} \hline \text { 1: Plain } \\ \text { Paper } \end{array}$ | Read/Write | 1: Plain Paper, 2: OHP Sheet, 3: Envelope, 4: Envelope (Plain), 5: Envelope (with window), 6: Labels, 7: Forms, 8: Coated Paper 1, 9: Tracing Paper, 10: Heavyweight 1, 11: Heavyweight 1 Side 2, 12: Heavyweight 2, 13: Heavyweight 2 Side 2, 14: Recycled Paper, 15: Continuous paper (Long), 16: Continuous Paper (short), 17: TABSTOCK, 18: MULTILAYER, 19: OPAQUEFILM, 20: TACK_FILM, 21: Lightweight, 22: Bond paper, 23: Custom Paper 1, 24: Custom Paper 2, 25: Custom Paper 3, 26: Custom Paper 4, 27: Cus tom Paper 5, 28: Others, 29: Wrapping Paper, 30: Special Glossy Paper, 31: Coated Paper 2, 32: Coated Paper 1 (Side 2), 33: Coated Paper 2 (Side 2), 34: Finisher-supported Heavyweight 1, 35: Finisher-supported Coated Paper 1, 36: Heavyweight 1_A, 37: Heavyweight 1_B, 38: Heavyweight 1_C, 39: Heavyweight 1_S, 40: Heavyweight 2_A, 41: Heavyweight 2_B, 42: Heavyweight 2_C, 43: Heavyweight 2_D, 44: Heavyweight 2_S, 45: Finisher-supported Heavyweight 1_A, 46: Finisher-supported Heavyweight 1_B, 47: Finisher-supported Heavyweight 1_C, 48: Finisher-supported Heavyweight 1_S, 49: Postcard Stock, 50: Postcard Stock (Side 2), 51: Plain Paper (Side 2), 52: Bond paper (Side 2), 53: Recycled Paper (Side 2), 54: Special, 55: Special (Side 2), 56: Backing Sheet, 57: Perforated Paper, 58: Tab Stock Heavyweight 1, 59: Tab Stock Heavyweight 2 |
| 780-018 | Paper Type for SMH | 1~61 | 1: Plain Paper | Read/Write | 1: Plain Paper, 2: OHP Sheet, 3: Envelope, 4: Envelope (Plain), 5: Envelope (with window), 6: Labels, 7: Forms, 8: Coated Paper 1, 9: Tracing Paper, 10: Heavyweight 1, 11: Heavyweight 1 Side 2, 12: Heavyweight 2, 13: Heavyweight 2 Side 2, 14: Recycled Paper, 15: Continuous paper (Long), 16: Continuous Paper (short), 17: TABSTOCK, 18: MULTILAYER, 19: OPAQUEFILM, 20: TACK_FILM, 21: Lightweight, 22: Bond paper, 23: Custom Paper 1, 24: Custom Paper 2, 25: Custom Paper 3, 26: Custom Paper 4, 27: Custom Paper 5, 28: Others, 29: Wrapping Paper, 30: Special Glossy Paper, 31: Coated Paper 2, 32: Coated Paper 1 (Side 2), 33: Coated Paper 2 (Side 2), 34: Finisher-supported Heavyweight 1, 35: Finisher-supported Coated Paper 1, 36: Heavyweight 1_A, 37: Heavyweight 1_B, 38: Heavyweight 1_C, 39: Heavyweight 1_S, 40: Heavyweight 2_A, 41: Heavyweight 2_B, 42: Heavyweight 2_C, 43: Heavyweight 2_D, 44: Heavyweight 2_S, 45: Finisher-supported Heavyweight 1_A, 46: Finisher-supported Heavyweight 1_B, 47: Finisher-supported Heavyweight 1_C, 48: Finisher-supported Heavyweight 1_S, 49: Postcard Stock, 50: Postcard Stock (Side 2), 51: Plain Paper (Side 2), 52: Bond paper (Side 2), 53: Recycled Paper (Side 2), 54: Special, 55: Special (Side 2), 56: Backing Sheet, 57: Perforated Paper, 58: Tab Stock Heavyweight 1, 59: Tab Stock Heavyweight 2 |
| 780-019 | User Define: Name of Paper Type 1 |  | NULL | Read/Write | 8 alphanumeric Katakana (single byte) characters; maximum 12 alphanumeric, symbols, Katakana, Hiragana, or Kanji (double bytes) (Japan) characters; maximum 24 ASCII characters (M/N) |
| 780-020 | User Define: Name of Paper Type 2 |  | NULL | Read/Write | 8 alphanumeric Katakana (single byte) characters; maximum 12 alphanumeric, symbols, Katakana, Hiragana, or Kanji (double bytes) (Japan) characters; maximum 24 ASCII characters (M/N) |

Table 6 IOT

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 780-021 | User Define: Name of Paper Type 3 |  | NULL | Read/Write | 8 alphanumeric Katakana (single byte) characters; maximum 12 alphanumeric, symbols, Katakana, Hiragana, or Kanji (double bytes) (Japan) characters; maximum 24 ASCII characters (M/N) |
| 780-022 | User Define: Name of Paper Type 4 |  | NULL | Read/Write | 8 alphanumeric Katakana (single byte) characters; maximum 12 alphanumeric, symbols, Katakana, Hiragana, or Kanji (double bytes) (Japan) characters; maximum 24 ASCII characters (M/N) |
| 780-023 | User Define: Name of Paper Type 5 |  | NULL | Read/Write | 8 alphanumeric Katakana (single byte) characters; maximum 12 alphanumeric, symbols, Katakana, Hiragana, or Kanji (double bytes) (Japan) characters; maximum 24 ASCII characters (M/N) |
| 780-025 | Image Quality Control Category: Bond paper | 1~60 | $\begin{aligned} & \text { 1: Plain } \\ & \text { Paper A } \end{aligned}$ | Read/Write | 1: Plain Paper A, 2: Plain Paper B, 4: Plain Paper C, 8: Plain Paper D, 11: Plain Paper 32, 5: Plain Paper F, 64: Plain Paper G, 128: Plain Paper S |
| 780-026 | Image Quality Control Category: Plain Paper | 1~60 | $\begin{aligned} & \text { 2: Plain } \\ & \text { Paper B } \end{aligned}$ | Read/Write | 1: Plain Paper A, 2: Plain Paper B, 4: Plain Paper C, 8: Plain Paper D, 11: Plain Paper 32, 5: Plain Paper F, 64: Plain Paper G, 128: Plain Paper S |
| 780-027 | Image Quality Control Category: Recycled Paper | 1~60 | $\begin{aligned} & \text { 4: Plain } \\ & \text { Paper C } \end{aligned}$ | Read/Write | 1: Plain Paper A, 2: Plain Paper B, 4: Plain Paper C, 8: Plain Paper D, 11: Plain Paper 32, 5: Plain Paper F, 64: Plain Paper G, 128: Plain Paper S |
| 780-028 | Image Quality Control Category: Custom Paper 1 | 1~60 | $\begin{aligned} & \text { 2: Plain } \\ & \text { Paper B } \end{aligned}$ | Read/Write | 1: Plain Paper A, 2: Plain Paper B, 4: Plain Paper C, 8: Plain Paper D, 11: Plain Paper 32, 5: Plain Paper F, 64: Plain Paper G, 128: Plain Paper S |
| 780-029 | Image Quality Control Category: Custom Paper 2 | 1~60 | $\begin{aligned} & \text { 2: Plain } \\ & \text { Paper B } \end{aligned}$ | Read/Write | 1: Plain Paper A, 2: Plain Paper B, 4: Plain Paper C, 8: Plain Paper D, 11: Plain Paper 32, 5: Plain Paper F, 64: Plain Paper G, 128: Plain Paper S |
| 780-030 | Image Quality Control Category: Custom Paper 3 | 1~60 | $\begin{aligned} & \text { 2: Plain } \\ & \text { Paper B } \end{aligned}$ | Read/Write | 1: Plain Paper A, 2: Plain Paper B, 4: Plain Paper C, 8: Plain Paper D, 11: Plain Paper 32, 5: Plain Paper F, 64: Plain Paper G, 128: Plain Paper S |
| 780-031 | Image Quality Control Category: Custom Paper 4 | 1~60 | $\begin{aligned} & \text { 2: Plain } \\ & \text { Paper B } \end{aligned}$ | Read/Write | 1: Plain Paper A, 2: Plain Paper B, 4: Plain Paper C, 8: Plain Paper D, 11: Plain Paper 32, 5: Plain Paper F, 64: Plain Paper G, 128: Plain Paper S |
| 780-032 | Image Quality Control Category: Custom Paper 5 | 1~60 | $\begin{aligned} & \text { 128: Plain } \\ & \text { Paper S } \end{aligned}$ | Read/Write | 1: Plain Paper A, 2: Plain Paper B, 4: Plain Paper C, 8: Plain Paper D, 11: Plain Paper 32, 5: Plain Paper F, 64: Plain Paper G, 128: Plain Paper S |
| 780-033 | Image Quality Control Category: Heavyweight 1 | 0~60 | 19: Heavyweight 1_A | Read/Write | 0: Plain Paper A, 1: Plain Paper B, 2: Plain Paper C, 3: Plain Paper D, 4: Plain Paper E, 5: Plain Paper F, 6: Plain Paper G, 7: Plain Paper S, 8: Labels, 9: Lightweight, 10: OHP Sheet, 11: Heavyweight 1, 12: Heavyweight 1 (Side 2), 13: Heavyweight 2, 14: Heavyweight 2 (Side 2), 15: Coated Paper 1, 16: Coated Paper 1 (Side 2), 17: Coated Paper 2, 18: Coated Paper 2 (Side 2), 19: Heavyweight 1_A, 20: Heavyweight 1_B, 21: Heavyweight 1_C, 22: Heavyweight 1_S, 23: Heavyweight 1_A (Side 2), 24: Heavyweight 1_B (Side 2), 25: Heavyweight 1_C (Side 2), 26: Heavyweight 1_S (Side 2), 27: Heavyweight 2_A, 28: Heavyweight 2_B, 29: Heavyweight 2_C, 30: Heavyweight 2_D, 31: Heavyweight 2_S, 32: Heavyweight 2_A (Side 2), 33: Heavyweight 2_B (Side 2), 34: Heavyweight 2_C (Side 2), 35: Heavyweight 2_D (Side 2), 36: Heavyweight 2_S (Side 2), 37: Plain Paper T |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 780-034 | Image Quality Control Category: Heavyweight 1 Finisher | 0~60 | 19: Heavy- <br> weight 1_A | Read/Write | 0: Plain Paper A, 1: Plain Paper B, 2: Plain Paper C, 3: Plain Paper D, 4: Plain Paper E, 5: Plain Paper F, 6: Plain Paper G, 7: Plain Paper S, 8: Labels, 9: Lightweight, 10: OHP Sheet, 11: Heavyweight 1, 12: Heavyweight 1 (Side 2), 13: Heavyweight 2, 14: Heavyweight 2 (Side 2), 15: Coated Paper 1, 16: Coated Paper 1 (Side 2), 17: Coated Paper 2, 18: Coated Paper 2 (Side 2), 19: Heavyweight 1_A, 20: Heavyweight 1_B, 21: Heavyweight 1_C, 22: Heavyweight 1_S, 23: Heavyweight 1_A (Side 2), 24: Heavyweight 1_B (Side 2), 25: Heavyweight 1_C (Side 2), 26: Heavyweight 1_S (Side 2), 27: Heavyweight 2_A, 28: Heavyweight 2_B, 29: Heavyweight 2_C, 30: Heavyweight 2_D, 31: Heavyweight 2_S, 32: Heavyweight 2_A (Side 2), 33: Heavyweight 2_B (Side 2), 34: Heavyweight 2_C (Side 2), 35: Heavyweight 2_D (Side 2), 36: Heavyweight 2_S (Side 2), 37: Plain Paper T |
| 780-035 | Image Quality Control Category: Heavyweight 1 (Side 2) | 0~60 | 19: Heavyweight 1_A | Read/Write | 0: Plain Paper A, 1: Plain Paper B, 2: Plain Paper C, 3: Plain Paper D, 4: Plain Paper E, 5: Plain Paper F, 6: Plain Paper G, 7: Plain Paper S, 8: Labels, 9: Lightweight, 10: OHP Sheet, 11: Heavyweight 1, 12: Heavyweight 1 (Side 2), 13: Heavyweight 2, 14: Heavyweight 2 (Side 2), 15: Coated Paper 1, 16: Coated Paper 1 (Side 2), 17: Coated Paper 2, 18: Coated Paper 2 (Side 2), 19: Heavyweight 1_A, 20: Heavyweight 1_B, 21: Heavyweight 1_C, 22: Heavyweight 1_S, 23: Heavyweight 1_A (Side 2), 24: Heavyweight 1_B (Side 2), 25: Heavyweight 1_C (Side 2), 26: Heavyweight 1_S (Side 2), 27: Heavyweight 2_A, 28: Heavyweight 2_B, 29: Heavyweight 2_C, 30: Heavyweight 2_D, 31: Heavyweight 2_S, 32: Heavyweight 2_A (Side 2), 33: Heavyweight 2_B (Side 2), 34: Heavyweight 2_C (Side 2), 35: Heavyweight 2_D (Side 2), 36: Heavyweight 2_S (Side 2), 37: Plain Paper T |
| 780-036 | Image Quality Control Category: Heavyweight 2 | 0~60 | 27: Heavyweight 2_A | Read/Write | 0: Plain Paper A, 1: Plain Paper B, 2: Plain Paper C, 3: Plain Paper D, 4: Plain Paper E, 5: Plain Paper F, 6: Plain Paper G, 7: Plain Paper S, 8: Labels, 9: Lightweight, 10: OHP Sheet, 11: Heavyweight 1, 12: Heavyweight 1 (Side 2), 13: Heavyweight 2, 14: Heavyweight 2 (Side 2), 15: Coated Paper 1, 16: Coated Paper 1 (Side 2), 17: Coated Paper 2, 18: Coated Paper 2 (Side 2), 19: Heavyweight 1_A, 20: Heavyweight 1_B, 21: Heavyweight 1_C, 22: Heavyweight 1_S, 23: Heavyweight 1_A (Side 2), 24: Heavyweight 1_B (Side 2), 25: Heavyweight 1_C (Side 2), 26: Heavyweight 1_S (Side 2), 27: Heavyweight 2_A, 28: Heavyweight 2_B, 29: Heavyweight 2_C, 30: Heavyweight 2_D, 31: Heavyweight 2_S, 32: Heavyweight 2_A (Side 2), 33: Heavyweight 2_B (Side 2), 34: Heavyweight 2_C (Side 2), 35: Heavyweight 2_D (Side 2), 36: Heavyweight 2_S (Side 2), 37: Plain Paper T |
| 780-037 | Image Quality Control Category: Heavyweight 2 (Side 2) | 0~60 | 32: Heavyweight 2_A (Side 2) | Read/Write | 0: Plain Paper A, 1: Plain Paper B, 2: Plain Paper C, 3: Plain Paper D, 4: Plain Paper E, 5: Plain Paper F, 6: Plain Paper G, 7: Plain Paper S, 8: Labels, 9: Lightweight, 10: OHP Sheet, 11: Heavyweight 1, 12: Heavyweight 1 (Side 2), 13: Heavyweight 2, 14: Heavyweight 2 (Side 2), 15: Coated Paper 1, 16: Coated Paper 1 (Side 2), 17: Coated Paper 2, 18: Coated Paper 2 (Side 2), 19: Heavyweight 1_A, 20: Heavyweight 1_B, 21: Heavyweight 1_C, 22: Heavyweight 1_S, 23: Heavyweight 1_A (Side 2), 24: Heavyweight 1_B (Side 2), 25: Heavyweight 1_C (Side 2), 26: Heavyweight 1_S (Side 2), 27: Heavyweight 2_A, 28: Heavyweight 2_B, 29: Heavyweight 2_C, 30: Heavyweight 2_D, 31: Heavyweight 2_S, 32: Heavyweight 2_A (Side 2), 33: Heavyweight 2_B (Side 2), 34: Heavyweight 2_C (Side 2), 35: Heavyweight 2_D (Side 2), 36: Heavyweight 2_S (Side 2), 37: Plain Paper T |
| 780-038 | Image Quality Control Category: Side 2 (Plain Paper Side 2) | 0~60 | 1: Plain Paper B | Read/Write | 0: Plain Paper A, 1: Plain Paper B, 2: Plain Paper C, 3: Plain Paper D, 4: Plain Paper E, 5: Plain Paper F, 6: Plain Paper G, 7: Plain Paper S, 8: Labels, 9: Lightweight, 10: OHP Sheet, 11: Heavyweight 1, 12: Heavyweight 1 (Side 2), 13: Heavyweight 2, 14: Heavyweight 2 (Side 2), 15: Coated Paper 1, 16: Coated Paper 1 (Side 2), 17: Coated Paper 2, 18: Coated Paper 2 (Side 2), 19: Heavyweight 1_A, 20: Heavyweight 1_B, 21: Heavyweight 1_C, 22: Heavyweight 1_S, 23: Heavyweight 1_A (Side 2), 24: Heavyweight 1_B (Side 2), 25: Heavyweight 1_C (Side 2), 26: Heavyweight 1_S (Side 2), 27: Heavyweight 2_A, 28: Heavyweight 2_B, 29: Heavyweight 2_C, 30: Heavyweight 2_D, 31: Heavyweight 2_S, 32: Heavyweight 2_A (Side 2), 33: Heavyweight 2_B (Side 2), 34: Heavyweight 2_C (Side 2), 35: Heavyweight 2_D (Side 2), 36: Heavyweight 2_S (Side 2), 37: Plain Paper T |
| 780-050 | Paper Type Priority: Bond Paper | 0x01~0xff | 3 | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): Oxff Repetition Allowed, n is the maximum number of paper types that can be selected |

Table 6 IOT

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 780-051 | Paper Type Priority: Plain Paper | 0x01~0xff | 1 | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-052 | Paper Type Priority: Recycled Paper | 0x01~0xff | 2 | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-053 | Paper Type Priority: Custom Paper 1 | 0x01~0xff | X (Not applicable for ATS) | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-054 | Paper Type Priority: Custom Paper 2 | 0x01~0xff | X (Not applicable for ATS) | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-055 | Paper Type Priority: Custom Paper 3 | 0x01~0xff | X (Not applicable for ATS) | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-056 | Paper Type Priority: Custom Paper 4 | 0x01~0xff | X (Not applicable for ATS) | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-057 | Paper Type Priority: Custom Paper 5 | 0x01~0xff | X (Not applicable for ATS) | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-060 | Tray 1 Priority | 1~4 | 1 | Read/Write | 1~4: $1,2,3,4$, The priority follows the number and 1 is the highest priority. Repetition not allowed. |
| 780-061 | Tray 2 Priority | 1~4 | 2 | Read/Write | 1~4: 1, 2, 3, 4, The priority follows the number and 1 is the highest priority. Repetition not allowed. |
| 780-062 | Tray 3 Priority | 1~4 | 3 | Read/Write | 1~4: 1, 2, 3, 4, The priority follows the number and 1 is the highest priority. Repetition not allowed. |
| 780-066 | Edge Erase Adjustment value (Lead Edge) | 40~50 | 4.0 | Read/Write | $4.0 \sim 5.0 \mathrm{~mm}$ ( 0.1 mm unit) |
| 780-067 | Edge Erase Adjustment value (Trail Edge) | 20~30 | 2.0 | Read/Write | 2.0.0~3.0mm (0.1mm unit) |
| 780-068 | Edge Erase Adjustment value (Side) | 20~30 | 2.0 | Read/Write | $1.0 \sim 3.0 \mathrm{~mm}$ (0.1mm unit) |
| 780-069 | Image Enhancement MC Setting | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 780-073 | Offset operation of Finisher Tray | 0~3 | 1: Offset per set | Read/Write | 1: Offset per set, 2: Offset per job, 3: No offset |
| 780-076 | Paper Type Priority: Heavyweight 1 Finisher | 0x01~0xff | X | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): Oxff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-077 | Paper Type Priority: Heavyweight 1 Finisher (A) | 0x01~0xff | X | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-078 | Paper Type Priority: Heavyweight 1 Finisher (B) | 0x01~0xff | X | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-079 | Paper Type Priority: Heavyweight 1 Finisher (C) | 0x01~0xff | X | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |

Reversion 4.0
WorkCentre 7132

Table 6 IOT

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 780-080 | Paper Type Priority: Heavyweight 1 Finisher (S) | 0x01~0xff | X | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-081 | Paper Type Priority: Coated Paper 1 Finisher | 0x01~0xff | X | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): Oxff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-084 | $\begin{aligned} & \text { Paper Type Priority: Side } \\ & 2 \end{aligned}$ | 0x01~0xff | X | Read/Write | 1~n: 1~n, X (Not applicable for Priority Tray for APS/ATS): 0xff Repetition Allowed, n is the maximum number of paper types that can be selected |
| 780-141 | Center Tray2 Offset Enable | Offset per Set | 1~3 | Read/Write | 1: Offset per Set 2: Offset per Job3: No Offset. |
| 780-142 | Forced Duplex for Odd Number Page when 2 Sided Print is selected | 0~1 | 1:2 Sided | Read/Write | 1: 2 Sided, 0: 1 Sided |
| 780-145 | Offset operation at Staple mode | 0~3 | 1: Offset per set | Read/Write | 1: Offset per set, 2: Offset per job, 3: No offset |
| 780-146 | Operation for Abnormal Mix Size Staple | 0~1 | 0: Release | Read/Write | 1: Staple, 0: Release |
| 780-147 | Maximum Paper Count for 1 Set | 10~150 | 50 | Read | 10 sheets $\sim 100$ sheets (B-Finisher) 25 sheets $\sim 75$ sheets (C-Finisher/D-Finisher ( 50 sheets)) 50 sheets $\sim 150$ sheets (D-Finisher (100 sheets)) |
| 780-148 | Maximum Paper Count for 1 Set (/Small Size) | 0~200 | 100 sheets | Read | 2 sheets $\sim 200$ sheets |
| 780-149 | Maximum Paper Count for 1 Set (/Large Size) | 0~200 | 65 sheets | Read | 2 sheets $\sim 200$ sheets |
| 780-150 | Maximum Paper Count for Bi-Fold | 1~15 | 5 sheets | Read | 1 sheet $\sim 15$ sheets |
| 780-151 | Maximum Paper Count for 1 Set | 2~25 | 15 | Read | 2 sheets $\sim 25$ sheets |
| 780-153 | Enable/Disable User Confirmation for Paper Type / Paper Attribute Inconsistency | 0~1 | 1: Confirm to wait for user's instruction | Read/Write | 1: Confirm to wait for user's instruction, 0: Proceed without confirmation |
| 780-162 | Tray 1 Medium Attributes | 0~2 | 0. None | Read/Write | 0: None, 1: Paper for BW, 2: Paper for Color |
| 780-163 | Tray 2 Medium Attributes | 0~2 | 0. None | Read/Write | 0: None, 1: Paper for BW, 2: Paper for Color |
| 780-164 | Tray 3 Medium Attributes | 0~2 | 0. None | Read/Write | 0: None, 1: Paper for BW, 2: Paper for Color |
| 780-196 | Output Tray Offset Feature Availability | 1 | (Auto Detect) | Read/Write | 0: FALSE, 1: TRUE, (Auto Detect) |

## Chain 785-xxx IIT

| Table 7 IIT |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Chain-Link | NVM Name | Setup <br> Range | Initial Value | Read/Write | Description |
| $785-002$ | ACS Separate Level | $0 \sim 5$ | 3: Normal | Read/Write | 1: More Black, 2: Black, 3: Normal, 4: Color, 5: More Color |

Table 7 IIT

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 785-003 | Image Processing Method of FAX Photo | 0~1 | $\begin{aligned} & \text { 0: Error Diffu- } \\ & \text { sion } \end{aligned}$ | Read/Write | 0: Error Diffusion (1Bit ED), 1: Dither |
| 785-004 | Background Color removal method in B/ W Mode | 0~1 | 1: Fast Speed | Read/Write | 0: Image Quality, 1: Fast Speed |
| 785-005 | Background Color removal method in Color Mode | 0~1 | 1: Fast Speed | Read/Write | 0: Image Quality, 1: Fast Speed |
| 785-008 | DADF Type | 0~2 | 0: None | Read/Write | Automatic recognition 1: PF1, 2: PF2 |
| 785-010 | FAX Document Size Detect Method in DADF | 0~1 | 0: A/B Series *The default for $X C$ is "Inch Series" | Read/Write | 0: A/B Series, 1: Inch Series |
| 785-015 | Text / Photo Separate Level | 1~5 | 3: Normal | Read/Write | 1: More Text, 2: Text, 3: Normal, 4: Photo, 5: More Photo |
| 785-016 | Photo Reproduction Level | 1~5 | 3: Normal | Read/Write | 1: More Text, 3: Normal, 5: More Photo |
| 785-020 | Copy Text/Photo Mode Special Color Reproduction | 0~2 | 0: Normal | Read/Write | 0: Normal, 1: Inkjet, 2: Highlighter |
| 785-022 | Background Color Suppression Level (Color Copy Text/Photo) | 0~4 | 1: +1 | Read/Write | 0: $0,1:+1,2:+2,3:+3,4:+4$, |
| 785-023 | Background Color Suppression Level (Color Copy Text) | 0~4 | 1: +1 | Read/Write | 0: 0, 1: +1, 2: +2, 3: +3, 4: +4, |
| 785-024 | Fine-tune 100\% Fast Scan Ratio | $\begin{aligned} & 980 \sim 102 \\ & 0 \end{aligned}$ | 1 | Read/Write | 980: 98.0\%~1020: $102.0 \%$ *0.1\% increments |
| 785-025 | Fine-tune 100\% Slow Scan Ratio | $\begin{aligned} & 980 \sim 102 \\ & 0 \end{aligned}$ | 100.0\% | Read/Write | 980: 98.0\% ~1020: $102.0 \%$ *0.1\% increments |
| 785-026 | Enable/Disable Fine-tune 100\% DADF | 0~1 | 1: Disable | Read/Write | 0: Disable, 1: Enable |
| 785-028 | Enable/Disable CVT Original Size Required | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 785-030 | APS Applicable / Not Applicable (5.5.x8.5 (Statement)) | 0~1 | Set for each region | Read/Write | 0: Not Applicable, 1: Applicable |
| 785-031 | APS Applicable/ Not Applicable (A5) | 0~1 | Set for each region | Read/Write | 0: Not Applicable, 1: Applicable |
| 785-032 | APS Applicable/Not Applicable (B5) | 0~1 | Set for each region | Read/Write | 0: Not Applicable, 1: Applicable |
| 785-033 | APS Applicable/Not Applicable (8.25x10.5 (Executive)) | 0~1 | Set for each region | Read/Write | 0: Not Applicable, 1: Applicable |
| 785-034 | APS Applicable/Not Applicable (8x10) | 0~1 | Set for each region | Read/Write | 0: Not Applicable, 1: Applicable |
| 785-035 | APS Applicable/Not Applicable (16K) | 0~1 | Set for each region | Read/Write | 0: Not Applicable, 1: Applicable |
| 785-036 | APS Applicable/Not Applicable (8.5x11 (Letter)) | 0~1 | Set for each region | Read/Write | 0: Not Applicable, 1: Applicable |
| 785-037 | APS Applicable/Not Applicable (A4) | 0~1 | Set for each region | Read/Write | 0: Not Applicable, 1: Applicable |

Table 7 IIT

| Chain-Link | NVM Name | Setup <br> Range | Initial Value | Read/Write | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $785-038$ | APS Applicable/Not Applicable (8.5x13 <br> (Foolscap)) | $0 \sim 1$ | Set for each <br> region | Read/Write | 0: Not Applicable, 1: Applicable |
| $785-039$ | APS Applicable/Not Applicable (8.5x14 <br> (Legal)) | $0 \sim 1$ | Set for each <br> region | Read/Write | 0: Not Applicable, 1: Applicable |
| $785-040$ | APS Applicable/Not Applicable (B4) | $0 \sim 1$ | Set for each <br> region | Read/Write | 0: Not Applicable, 1: Applicable |
| $785-041$ | APS Applicable/Not Applicable (8K) | $0 \sim 1$ | Set for each <br> region | Read/Write | 0: Not Applicable, 1: Applicable |
| $785-042$ | APS Applicable/Not Applicable (11x17 <br> (Ledger)) | $0 \sim 1$ | Set for each <br> region | Read/Write | 0: Not Applicable, 1: Applicable |
| $785-043$ | APS Applicable/Not Applicable (A3) | $0 \sim 1$ | Set for each <br> region | Read/Write | 0: Not Applicable, 1: Applicable |
| $785-050$ | Applicable Range of the Input Original <br> Size when Original Size is Not Specified | $0 \sim 1$ | $0:$ Applicable to <br> such Originals <br> only | Read/Write | 0: Applicable to such Originals only, 1: Applicable to all the following non- <br> standard Originals |
| $785-065$ | Image Layout Center/Corner Switch for <br> Large Size Paper 25501: Paste to Center |  | Read/Write | 0: Paste to Corner <br> 1: Paste to Center |  |
| $785-080$ | Edge Erase Settings for smaller paper | $0 \sim 10$ | 5 | Read/Write | 0~10mm (1mm increments) |
| $785-082$ | SCAN Background Suppression Method | $1 \sim 0$ | 1 | Read/Write | 0: High Quality, 1: High Speed |

## Chain 790-xxx UI

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-001 | Startup Display Setting | 0~2 | 0: Settings List screen | Read Write | 0: Settings List screen, 1: Job Management screen, 2: Machine Information screen |
| 790-002 | Function Setup Startup Display | 0~255 | 0: Menu | Read/ Write | 0: Menu, 1: Copy, 2:FAX/iFAX, 3:Scan to Email, 4:Scan to Mail Box, 5:Scan to Server, 6:Scan to PC, 7:Box, 8:Print, 9:Job Flow Service, 10:Job Memory, 11:Multi Service, 12:Gemini, 13:Docu Share, 14:Media Print (Digital Camera Print), 15:Media Print (Document print) |
| 790-003 | Fax Broadcast/Multi-Poll Confirmation Display (CE Setting) | 0~1 | 1: Display | Read Write | 0: Do not display 1: Display |
| 790-004 | Toner Near Empty - Advance Notification (Pre Near Empty) Display (CE Setting) | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-005 | Address Keyboard, 10 Key Input Prohibited | 0, 1 | $\begin{aligned} & \text { 0: Do not pro- } \\ & \text { hibit } \end{aligned}$ | Read/ Write | 0: Do not prohibit, 1: Prohibit |
| 790-019 | Remaining Job Auto Clear Timer Settings When Accessory is Connected | 1~59 | 15 sec | Read/ Write |  |
| 790-050 | Pre Set Tray 1 | 0~255 | 1: Tray 1 | Read/ Write | 0: None (not in use), 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5: SMH,6: HCF1,7: HCF2 |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-051 | Pre Set Tray 2 | 0~255 | 2: Tray 2 | Read Write | 0: None (not in use), 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5:6: HCF1,SMH,7: HCF2 |
| 790-052 | Pre Set Tray 3 | 0~255 | $\begin{aligned} & \hline \text { 3: Tray 3 } \\ & \text { (HBUI), 5: } \\ & \text { SMH (FCWUI) } \end{aligned}$ | Read Write | 0: None (not in use), 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5: SMH,6: HCF1,7: HCF2 |
| 790-060 | R/E Preset 1 | 0~12 | 2: R/E Preset 2 | Read/ Write | 0: None, 1~12: R/E Preset 1 to R/E Preset 12 |
| 790-061 | R/E Preset 2 | 0~12 | 7: R/E Preset 7 | Read/ Write | 0: None, 1~12: R/E Preset 1 to R/E Preset 12 |
| 790-070 | Default Tray Setting in Copy Mode | 0~5 | 0: Auto | Read/ Write | 0: Auto, 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5: SMH |
| 790-071 | Tray at Auto Cancellation | 0~12 | 1: Tray 1 | Read/ Write | 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4 |
| 790-072 | Default R/E Setting in Copy Mode | 0~255 | 0: 100\% | Read/ Write | 0: 100\%, 1~12: R/E Preset 1 to R/E Preset 12, 255: Auto |
| 790-073 | R/E Preset 1 Setting | 25~1025 | 1003: 50.00\% | Read/ Write | 1~24: Not in use, 25~400:\%, 401~1000: Not in use, 1001: 25.00\%, 1002: 35.30\%, 1003: 50.00\%, 1004: $57.70 \%, 1005: 61.20 \%, 1006: 64.70 \%, 1007: 70.70 \%, 1008: 78.50 \%, 1009: 81.60 \%, 1010: 86.60 \%$, 1011: $94.00 \%$, 1012: $97.30 \%$, 1013: 115.40\%, 1014: 122.50\%, 1015: 127.30\%, 1016: 129.40\%, 1017: $141.40 \%$, 1018: 154.50\%, 1019: 163.20\%, 1020: 173.20\%, 1021: 180.00\%, 1022: 200.00\%, 1023: 220.00\%, 1024: 282.80\%, 1025: 400.00\% |
| 790-074 | R/E Preset 2 Setting | 1001~1025 | 1007: 70.70\% | Read/ Write | $1 \sim 1000:$ Not in use,1001: 25.00\%, 1002: 35.30\%, 1003: 50.00\%, 1004: $57.70 \%, 1005: 61.20 \%, 1006:$ $64.70 \%, 1007: 70.70 \%, 1008: 78.50 \%, 1009: 81.60 \%, 1010: 86.60 \%, 1011: 94.00 \%, 1012: 97.30 \%$, $1013: 115.40 \%, 1014: 122.50 \%, 1015: 127.30 \%, 1016: 129.40 \%, 1017: 141.40 \%, 1018: 154.50 \%$, $1019: 163.20 \%, 1020: 173.20 \%, 1021: 180.00 \%, 1022: 200.00 \%, 1023: 220.00 \%, 1024: 282.80 \%$, $1025: 400.00 \%$ |
| 790-075 | R/E Preset 3 Setting | 1001~1025 | 1009: 81.60\% | Read/ Write | ditto |
| 790-076 | R/E Preset 4 Setting | 1001~1025 | 1010: 86.60\% | Read/ Write | ditto |
| 790-077 | R/E Preset 5 Setting | 1001~1025 | 1013: 115.40\% | Read Write | ditto |
| 790-078 | R/E Preset 6 Setting | 1001~1025 | 1014: 122.50\% | Read/ Write | ditto |
| 790-079 | R/E Preset 7 Setting | 1001~1025 | 1017: 141.40\% | Read/ Write | ditto |
| 790-089 | Default Extracted Color for Dual Color | 1~255 | 1: Except Black | Read/ Write | 1 (0x01): Except Black, 2 (0x02): Red, 4 (0x04): Green, 8 (0x08): Blue, 16 (0x10): Yellow (Y), 32 (0x20): Magenta (M), 64 (0x40): Cyan (C) |
| 790-090 | Default Color Mode | 0~5 | 2: BW | Read/ Write | 0: None, 1: Auto, 2: BW, 3: 4 Color, 4: Single Color, 5: Dual Color |
| 790-091 | Default Single Color Selection | 1~12 | 1: Custom Color 1 | Read/ Write | 1~6: Preset Color 1 to Preset Color 6, 7~12: Custom Color 1 to Custom Color 6 |
| 790-092 | Reproduction Color Selection Default except for Extracted Part | 0~12 | 0: Black | Read/ Write | 0: Black, 1~6: Preset Color 1 to Preset Color 6, 7~12: Custom Color 1 to Custom Color 6 |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-093 | Default Reproduction Color in Extracted Part | 0~12 | $\begin{aligned} & \text { 1: Preset Color } \\ & 1 \end{aligned}$ | Read Write | 0: Black, 1~6: Preset Color 1 to Preset Color 6, 7~12: Custom Color 1 to Custom Color 6 |
| 790-096 | Default Document Type (Color Machine) | 0~10 | $\begin{aligned} & \text { 4: Text/Photo } \\ & \text { (Print) } \end{aligned}$ | Read Write | 0: Auto, 1: Text (Normal Text), 4: Text/Photo (Print), 5: Text/Photo (Photograph Paper), 6: Text/Photo (Color Copy Originals), 7: Photo (Print), 8: Photo (Photograph Paper), 9: Photo (Color Copy Originals), 10: Map |
| 790-097 | Default Background Color Removal | 0~1 | 1: ON | Read Write | 0: OFF, 1: ON |
| 790-098 | Default Density Adjustment | 0~6 | 3: Normal | Read/ Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 790-099 | Default Mixed Size | 0~1 | 0: OFF | Read/ Write | 0: OFF, 1: ON |
| 790-100 | Default Color Balance (Y: Low Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-101 | Default Color Balance (Y: Medium Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-102 | Default Color Balance (Y: High Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-103 | Default Color Balance (M: Low Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-104 | Default Color Balance (M: Medium Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-105 | Default Color Balance (M: High Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-106 | Default Color Balance (C: Low Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-107 | Default Color Balance (C: Medium Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-108 | Default Color Balance (C: High Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-109 | Default Color Balance (K: Low Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-110 | Default Color Balance (K: Medium Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-111 | Default Color Balance (K: High Density) | 0~6 | 0: Normal | Read/ Write | 0~6: -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3) |
| 790-120 | Default Color Shift | 0~4 | 2: 0 degree | Read/ Write | 0: -20 degree, 1: -10 degree, 2: 0 degree, 3: +10 degree, 4: +20 degree |
| 790-121 | Default Color Saturation | 0~4 | 2: Normal | Read/ Write | 0: Stronger 2 (Highest), 1: Stronger (High), 2: Normal, 3: Softer 1 (Low), 4: Softer 2 (Lower) |
| 790-122 | Default Sharpness | 0~4 | 2: Normal | Read/ Write | 0: Sharper, 1: Sharp, 2: Normal, 3: Soft, 4: Softer |
| 790-123 | Default Contrast | 0~4 | 2: Normal | Read/ Write | 0: Sharper, 1: Sharp, 2: Normal, 3: Soft, 4: Softer |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-124 | Default Center/Corner Shift Position (Side1) | 0~9 | 0: OFF | Read/ Write | 0: OFF, 1: Center, 2: Top Right, 3: Bottom Right, 4: Top Left, 5: Bottom Left, 6: Top Center, 7: Bottom Center, 8: Left Center, 9: Right Center, 10: Symmetrical position with Side 1 |
| 790-125 | Default Center/Corner Shift Position (Side2) | 0~10 | 10: Symmetrical position with Side 1 | Read/ Write | 0: OFF, 1: Center, 2: Top Right, 3: Bottom Right, 4: Top Left, 5: Bottom Left, 6: Top Center, 7: Bottom Center, 8: Left Center, 9: Right Center, 10: Symmetrical position with Side 1 |
| 790-126 | FAX Broadcast Control | 0, 1 | 0: Do not broadcast | Read/ Write | 0: Do not broadcast <br> 1: Broadcast |
| 790-127 | Secondary Input Method of First Speed Dial Instruction Condition | 0~2 | 0: Address Number | Read/ Write | 0: Address Number 1: Full Dial 2: Do not perform secondary input |
| 790-128 | Default Center Erase | 0~50 | 0: 0 (mm) | Read/ Write | 1 mm unit from 0 (mm) to 50 (mm) |
| 790-129 | Rotation Default Setting | 0~2 | 1: ON for APS/ AMS only | Read/ Write | 0: Always ON, 1: ON for APS/AMS only, 2: Always OFF |
| 790-130 | Image Orientation Default Setting | 0~2 | "0: Auto" with Finisher, "1: Portrait Originals - Left Edge" without Finisher | Read/ Write | 0: Auto, 1: Portrait Originals - Left Edge, 2: Portrait Originals - Right Edge |
| 790-131 | Fixed Size 1 of Copy Document Size Input | 2~255 | 10: A3 SEF | Read/ Write | 1: Not fixed, 10: A3 SEF, 11: A4 LEF, 12: A4 SEF, 13: A5 LEF, 14: A5 SEF, <br> 15: A6 LEF, 16: A6 SEF, 50: Envelope: C4 SEF, 51: Envelope: C5 LEF, <br> 55: Envelope: DL LEF, 66: B4 SEF, 67: B5 LEF, 68: B5 SEF, 69: B6 LEF, <br> 70: B6 SEF, 80: $11 \times 17$ SEF, 87: Postcard LEF, 88: Postcard SEF, 89: $8.5 \times 11$ LEF, 90: $8.5 \times 11$ SEF, 92 : <br> 8.5x14 SEF, 94: $12 \times 18$ SEF, 98: $12 \times 19$ SEF, 101: 16K LEF, 102: 16K SEF, 104: 8K SEF, 105: PostCard <br> (3.5x5.5) LEF, 106: PostCard (3.5x5.5) SEF, 107: PostCard (4x6) LEF, 108: PostCard (4x6) SEF, 109: <br> PostCard (5x7) LEF, 110: PostCard (5x7) SEF, 111: 5.5x8.5 LEF, 112: 5.5x8.5 SEF, 113: PostCard (6x9) <br> LEF, 114: PostCard (6x9) SEF, 115: $8 \times 10$ LEF, 116: $8 \times 10$ SEF, 118: $8.5 \times 13$ SEF, 119: $7.25 \times 10.5$ LEF, <br> 120: 7.25x10.5 SEF, 123: Envelope: You Chou 3 LEF, <br> 124: Envelope: Choukei 3SEF, 126: Envelope: Choukei 4SEF, 132: 11x15 SEF, 135: 3.5x5 (Photo L) <br> LEF, 136: $3.5 \times 5$ (Photo L) SEF, 137: Envelope: Commercial\#10 LEF, 139: $215 \times 315 \mathrm{~mm}(8.46 \times 12.4)$ <br> SEF, 141: SRA3 SEF, <br> 142: Special A3 SEF, 143: Special A4 LEF, 144: Special A4 SEF, 145: A4Cover SEF, 146: A4Cover LEF, 147: $13 \times 19$ SEF, 148: $13 \times 18$ SEF, 149: 12.6x19.2 SEF, 150: Letter Cover (9x11) SEF, 151: LetterCover (9x11) LEF, 152: Envelope: Monarch7.3/4 LEF, 154: Return Postcard LEF, 155: Return Postcard SEF, 156: 16K LEF (mainland China), 157: 16K SEF (mainland China), 159: 8K SEF (mainland China) |
| 790-132 | Fixed Size 2 of Copy Document Size Input | 2~255 | 12: A4 SEF | Read/ Write | ditto |
| 790-133 | Fixed Size 3 of Copy Document Size Input | 2~255 | 11: A4 LEF | Read/ Write | ditto |
| 790-134 | Fixed Size 4 of Copy Document Size Input | 2~255 | 14: A5 SEF | Read/ Write | ditto |
| 790-135 | Fixed Size 5 of Copy Document Size Input | 2~255 | 16: A6 SEF | Read/ Write | ditto |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-136 | Fixed Size 6 of Copy Document Size Input | 2~255 | 66: B4 SEF | Read/ Write | ditto |
| 790-137 | Fixed Size 7 of Copy Document Size Input | 2~255 | 68: B5 SEF | Read/ Write | ditto |
| 790-138 | Fixed Size 8 of Copy Document Size Input | 2~255 | 67: B5 LEF | Read/ Write | ditto |
| 790-139 | Fixed Size 9 of Copy Document Size Input | 2~255 | 80: $11 \times 17$ SEF | Read/ Write | ditto |
| 790-140 | Fixed Size 10 of Copy Document Size Input | 2~255 | $\begin{aligned} & \text { 90: } 8.5 \times 11 \\ & \text { SEF } \end{aligned}$ | Read/ Write | ditto |
| 790-141 | Fixed Size 11 of Copy Document Size Input | 2~255 | 89: 8.5x11 LEF | Read/ Write | ditto |
| 790-180 | Default [Document Orientation] in Copy Mode | 0~1 | 0: Head to Top | Read/ Write | 0: Head to Top, 1: Head to Left |
| 790-181 | Duplex feature default setting | 0~3 | 0: No | Read/ Write | 0: No (1 to 1 Sided), 1: 1 to 2 Sided, 2: 2 to 1 Sided, 3: 2 to 2 Sided |
| 790-182 | Default Collate Mode in Copy Mode | 0~2 | 0: Auto | Read/ Write | 0: Auto, 1: Collated, 2: Uncollated |
| 790-183 | Default Output Tray in Copy Mode | 0~4 | 0: Center Tray | Read/ Write | 0: Center Tray, 1: Side Tray, 2: Finisher Tray, 3: Center Tray2, 4: Top Tray *Options that are not installed cannot be selected |
| 790-184 | FAX Sending Display Availability | 0~1 | 0: OFF | Read/ Write | 0: OFF, 1: ON |
| 790-185 | Receiver Initial Display Availability | 0~1 | 0: OFF | Read/ Write | 0: OFF, 1: ON |
| 790-186 | Default Communication Mode | 0~6 | 2: G3 Auto | Read/ Write | 1: G4 Auto, 2: G3 Auto, 3: International Communication (Communication Speed is below 4800bps). The following is added in M/N, 4: G3, 5: G3 (ECM), 6: G3 (ECM) - Forced4800 |
| 790-187 | Default Density (Scan Density) | 0~6 | 3: Normal | Read/ Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 790-188 | Default Image Quality (Document Type) | 0~2 | 0: Text | Read/ Write | 0: Text, 1: Photo, 2: Text/Photo |
| 790-189 | Default Resolution (Scan Resolution) | 0~3 | 0: Standard | Read/ Write | 0: Standard, 1: High Quality (200x200), 2: High Quality (400x400), 3: High Quality (600x600) |
| 790-190 | Default Monitor Print | 0~1 | 0: OFF | Read/ Write | 0: OFF, 1: ON |
| 790-192 | Default Sender Records | 0~1 | 1: ON | Read/ Write | 0: OFF, 1: ON |
| 790-193 | Default display starting number of Receiver List | 0~500 | 1 | Read/ Write | 1~500 |
| 790-194 | Default Mixed Size | 0~1 | 0: OFF | Read/ Write | 0: OFF, 1: ON |
| 790-195 | Default Receive Mode | 0~1 | 0: Auto Receive | Read/ <br> Write | 0: Auto Receive, 1: Manual Receive |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-196 | Delayed Send Time Settinghour | 0~23 | 21 | Read Write | Hour (0~23) |
| 790-197 | Delayed Send Time Settingminutes | 0~59 | 0 | Read Write | Minute (0~59) |
| 790-198 | Manual Send/Receive Settings | 0~1 | 0: Manual Receive | Read Write | 0: Manual Receive, 1: Manual Send |
| 790-200 | FAX Fixed R/E Default Setting 1 | 25~1025 | 1003: 50.00\%, | Read/ Write | 1~24: Not in use, 25~400:\%, 401~1000: Not in use, 1001: 25.00\%, 1002: 35.30\%, 1003: 50.00\%, 1004: $57.70 \%, 1005: 61.20 \%, 1006: 64.70 \%$, 1007: 70.70\%, 1008: 78.50\%, 1009: 81.60\%, 1010: 86.60\%, 1011: $94.00 \%, 1012: 97.30 \%, 1013: 115.40 \%, 1014: 122.50 \%, 1015: 127.30 \%, 1016: 129.40 \%, 1017$ : $141.40 \%$, 1018: 154.50\%, 1019: 163.20\%, 1020: 173.20\%, 1021: 180.00\%, 1022: 200.00\%, 1023 : 220.00\%, 1024: 282.80\%, 1025: 400.00\% |
| 790-201 | FAX Fixed R/E Default Setting 2 | 25~1025 | 1007: 70.70\% | Read/ Write | ditto |
| 790-202 | FAX Fixed R/E Default Setting 3 | 25~1025 | 1009: 81.60\% | Read Write | ditto |
| 790-203 | FAX Fixed R/E Default Setting 4 | 25~1025 | 1010: 86.60\% | Read/ Write | ditto |
| 790-204 | FAX Fixed R/E Default Setting 5 | 25~1025 | 1013: 115.40\% | Read/ Write | ditto |
| 790-205 | FAX Fixed R/E Default Setting 6 | 25~1025 | 1014: 122.50\% | Read/ Write | ditto |
| 790-206 | FAX Fixed R/E Default Setting 7 | 25~1025 | 1017: 141.40\% | Read/ Write | ditto |
| 790-210 | Fixed Size 1 of FAX Scan Size Input | 1~255 | 10: A3 SEF | Read/ Write | 1: Not fixed, 10: A3 SEF, 11: A4 LEF, 12: A4 SEF, 13: A5 LEF, 14: A5 SEF, 15: A6 LEF, 16: A6 SEF, 50: Envelope: C4 SEF, 51: Envelope: C5 LEF, 55: Envelope: DL LEF, 66: B4 SEF, 67: B5 LEF, 68: B5 SEF, 69: B6 LEF, 70: B6 SEF, 80: 11x17 SEF, 87: Postcard LEF, 88: Postcard SEF, 89: 8.5×11 LEF, 90: 8.5x11 SEF, 92: 8.5x14 SEF, 94: $12 \times 18$ SEF, 98: $12 \times 19$ SEF, 101: 16K LEF, 102: 16K SEF, 104: 8K SEF, 105: PostCard ( $3.5 \times 5.5$ ) LEF, 106: PostCard (3.5x5.5) SEF, 107: PostCard (4x6) LEF, 108: PostCard (4x6) SEF, 109: PostCard (5x7) LEF, 110: PostCard (5x7) SEF, 111: 5.5x8.5 LEF, 112: $5.5 \times 8.5$ SEF, 113: PostCard (6x9) LEF, 114: PostCard (6x9) SEF, 115: $8 \times 10$ LEF, 116: $8 \times 10$ SEF, $118: 8.5 \times 13$ SEF, 119: $7.25 \times 10.5$ LEF, 120: $7.25 \times 10.5$ SEF, 123: Envelope: You Chou 3 LEF, 124: Envelope: Choukei 3SEF, 126: Envelope: Choukei 4SEF, 132: 11x15 SEF, 135: 3.5x5 (Photo L) LEF, 136: $3.5 \times 5$ (Photo L) SEF, 137: Envelope: Commercial\#10 LEF, 139: $215 \times 315 \mathrm{~mm}$ (8.46x12.4) SEF, 141: SRA3 SEF, 142: Special A3 SEF, 143: Special A4 LEF, 144: Special A4 SEF, 145: A4Cover SEF, 146: A4Cover LEF, 147: 13x19 SEF, 148: $13 \times 18$ SEF, 149: 12.6x19.2 SEF, 150: Letter Cover (9x11) SEF, 151: LetterCover (9x11) LEF, 152: Envelope: Monarch7.3/4 LEF, 154: Return Postcard LEF, 155: Return Postcard SEF, 156: 16K LEF (mainland China), 157: 16K SEF (mainland China), 159: 8K SEF (mainland China) |
| 790-211 | Fixed Size 2 of FAX Scan Size Input | 1~255 | 12: A4 SEF | Read/ Write | ditto |
| 790-212 | Fixed Size 3 of FAX Scan Size Input | 1~255 | 11: A4 LEF | Read/ Write | ditto |
| 790-213 | Fixed Size 4 of FAX Scan Size Input | 1~1025 | 14: A5 SEF | Read/ Write | ditto |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-214 | Fixed Size 5 of FAX Scan Size Input | 1~255 | 16: A6 SEF | Read/ Write | ditto |
| 790-215 | Fixed Size 6 of FAX Scan Size Input | 1~255 | 66: B4 SEF | Read/ Write | ditto |
| 790-216 | Fixed Size 7 of FAX Scan Size Input | 1~255 | 68: B5 SEF | Read/ Write | ditto |
| 790-217 | Fixed Size 8 of FAX Scan Size Input | 1~255 | 67: B5 LEF | Read/ Write | ditto |
| 790-218 | Fixed Size 9 of FAX Scan Size Input | 1~255 | 80: 11x17 SEF | Read/ Write | ditto |
| 790-219 | Fixed Size 10 of FAX Scan Size Input | 1~255 | $\begin{aligned} & \text { 90: } 8.5 \times 11 \\ & \text { SEF } \end{aligned}$ | Read/ Write | ditto |
| 790-220 | Fixed Size 11 of FAX Scan Size Input | 1~255 | 89: $8.5 \times 11$ LEF | Read/ Write | ditto |
| 790-221 | Default FAX Profile | 1~2 | 0:TIFF-S | Read/ Write | 0: TIFF-S, 1: TIFF-F, 2: TIFF-J |
| 790-222 | Default Mixed Size | 0~1 | 0: OFF | Read/ Write | 0: OFF, 1: ON |
| 790-223 | Default Color Mode | 0~3 | 2: B/W Binary | Read/ Write | 0: Full Color, 1: Grayscale, 2: B/W Binary, 3: Auto |
| 790-224 | Default Document Type | 0~2 | 0: Text | Read/ Write | 0: Text, 1: Text/Photo, 2: Photo |
| 790-225 | Default Resolution | 0~4 | 0: 200dpi | Read/ Write | 0: 200dpi, 1: 300dpi, 2: 400dpi, 3: 600dpi, TBD: 100dpi |
| 790-226 | Default Top and Bottom Edge Erase | 0~50 | 2 (mm) | Read/ Write | 1 mm unit from 0 (mm) to 50 (mm) |
| 790-227 | Default Left and Right Edge Erase | 0~50 | 2 (mm) | Read/ Write | 1 mm unit from 0 (mm) to 50 (mm) |
| 790-228 | Default Center Erase | 0~50 | 0 (mm) | Read/ Write | 1 mm unit from 0 (mm) to 50 (mm) |
| 790-229 | Default Density/Brightness Adjustment (Using data common to Density, Brightness) | 0~6 | 3: Standard | Read/ Write | 0: Brightness (Density) 3, 1: Brightness (Density) 2, 2: Brightness (Density) 1, 3: Standard, 4: Brightness (Density) -1, 5: Brightness (Density) -2, 6: Brightness (Density) -3 |
| 790-230 | Default Contrast Adjustment | 0~4 | 2: Standard | Read/ Write | 0: Stronger 2, 1: Stronger 1, 2: Standard, 3: Softer 1, 4: Softer 2 |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-231 | Fixed Size 1 of Scan Document Size Input | 1~255 | 10: A3 SEF | Read/ Write | 1: Not fixed, 10: A3 SEF, 11: A4 LEF, 12: A4 SEF, 13: A5 LEF, 14: A5 SEF, 15: A6 LEF, 16: A6 SEF, 50: Envelope: C4 SEF, 51: Envelope: C5 LEF, 55: Envelope: DL LEF, 66: B4 SEF, 67: B5 LEF, 68: B5 SEF, 69: B6 LEF, 70: B6 SEF, 80: $11 \times 17$ SEF, 87: Postcard LEF, 88: Postcard SEF, 89: 8.5×11 LEF, 90: 8.5x11 SEF, 92: 8.5x14 SEF, 94: $12 \times 18$ SEF, 98: $12 \times 19$ SEF, 101: 16K LEF, 102: 16K SEF, 104: 8K SEF, 105: PostCard ( $3.5 \times 5.5$ ) LEF, 106: PostCard (3.5x5.5) SEF, 107: PostCard (4x6) LEF, 108: PostCard (4x6) SEF, 109: PostCard (5x7) LEF, 110: PostCard (5x7) SEF, 111: 5.5x8.5 LEF, 112: 5.5x8.5 SEF, 113: PostCard (6x9) LEF, 114: PostCard (6x9) SEF, 115: $8 \times 10$ LEF, 116: $8 \times 10$ SEF, 118: $8.5 \times 13$ SEF, 119: $7.25 \times 10.5$ LEF, 120: $7.25 \times 10.5$ SEF, 123: Envelope: You Chou 3 LEF, 124: Envelope: Choukei 3SEF, 126: Envelope: Choukei 4SEF, 132: 11x15 SEF, 135: 3.5x5 (Photo L) LEF, 136: $3.5 \times 5$ (Photo L) SEF, 137: Envelope: Commercial\#10 LEF, 139: $215 \times 315 \mathrm{~mm}$ (8.46x12.4) SEF, 141: SRA3 SEF, 142: Special A3 SEF, 143: Special A4 LEF, 144: Special A4 SEF, 145: A4Cover SEF, 146: A4Cover LEF, 147: 13x19 SEF, 148: $13 \times 18$ SEF, 149: 12.6x19.2 SEF, 150: Letter Cover (9x11) SEF, 151: LetterCover (9x11) LEF, 152: Envelope: Monarch7.3/4 LEF, 154: Return Postcard LEF, 155: Return Postcard SEF, 156: 16K LEF (mainland China), 157: 16K SEF (mainland China), 159: 8K SEF (mainland China) |
| 790-232 | Fixed Size 2 of Scan Document Size Input | 1~255 | 12: A4 SEF | Read/ Write | ditto |
| 790-233 | Fixed Size 3 of Scan Document Size Input | 1~255 | 11: A4 LEF | Read/ Write | ditto |
| 790-234 | Fixed Size 4 of Scan Document Size Input | 1~255 | 14: A5 SEF | Read/ Write | ditto |
| 790-235 | Fixed Size 5 of Scan Document Size Input | 1~255 | 16: A6 SEF | Read/ Write | ditto |
| 790-236 | Fixed Size 6 of Scan Document Size Input | 1~255 | 66: B4 SEF | Read/ Write | ditto |
| 790-237 | Fixed Size 7 of the Subsequent >Scan Document Size Input | 1~255 | 68: B5 SEF | Read/ Write | ditto |
| 790-238 | Fixed Size 8 of Scan Document Size Input | 1~255 | 67: B5 LEF | Read/ Write | ditto |
| 790-239 | Fixed Size 9 of Scan Document Size Input | 1~255 | 80: 11x17 SEF | Read/ Write | ditto |
| 790-240 | Fixed Size 10 of Scan Document Size Input | 1~255 | $\begin{aligned} & \text { 90: } 8.5 \times 11 \\ & \text { SEF } \end{aligned}$ | Read/ Write | ditto |
| 790-241 | Fixed Size 11 of Scan Document Size Input | 1~255 | 89: $8.5 \times 11$ LEF | Read/ Write | ditto |
| 790-250 | Fixed Size 1 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is " 0 " |
| 790-251 | Fixed Size 1 Slow Scan | 0~432 | NULL | Read Write | 15~432mm *Default Value is " 0 " |
| 790-252 | Fixed Size 2 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is "0" |
| 790-253 | Fixed Size 2 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is " 0 " |
| 790-254 | Fixed Size 3 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is " 0 " |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-255 | Fixed Size 3 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is " 0 " |
| 790-256 | Fixed Size 4 Fast Scan | 0~297 | NULL | Read Write | 15~297mm *Default Value is " 0 " |
| 790-257 | Fixed Size 4 Slow Scan | 0~432 | NULL | Read/ Write | 15~432mm *Default Value is " 0 " |
| 790-258 | Fixed Size 5 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is "0" |
| 790-259 | Fixed Size 5 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is " 0 " |
| 790-260 | Fixed Size 6 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is " 0 " |
| 790-261 | Fixed Size 6 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is " 0 " |
| 790-262 | Fixed Size 7 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is " 0 " |
| 790-263 | Fixed Size 7 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is " 0 " |
| 790-264 | Fixed Size 8 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is " 0 " |
| 790-265 | Fixed Size 8 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is " 0 " |
| 790-266 | Fixed Size 9 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is "0" |
| 790-267 | Fixed Size 9 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is " 0 " |
| 790-268 | Fixed Size 10 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is " 0 " |
| 790-269 | Fixed Size 10 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is " 0 " |
| 790-270 | Fixed Size 11 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is " 0 " |
| 790-271 | Fixed Size 11 Slow Scan | 0~432 | NULL | Read/ Write | 15~432mm *Default Value is "0" |
| 790-272 | Default [Document Orientation] in SCAN Mode | 0~1 | 1: Head to Left | Read/ Write | 0: "Head to Top", 1: "Head to Left" |
| 790-273 | SCAN Fixed R/E Default Setting 1 | 25~1025 | 1003: 50.00\%, | Read/ Write | 1~24: Not in use, 25~400:\%, 401~1000: Not in use, 1001: 25.00\%, 1002: 35.30\%, 1003: 50.00\%, 1004: $57.70 \%, 1005: 61.20 \%, 1006: 64.70 \%$, 1007: 70.70\%, 1008: 78.50\%, 1009: 81.60\%, 1010: 86.60\%, 1011: $94.00 \%$, 1012: $97.30 \%$, 1013: 115.40\%, 1014: 122.50\%, 1015: 127.30\%, 1016: 129.40\%, 1017: $141.40 \%, 1018: 154.50 \%, 1019: 163.20 \%$, 1020: 173.20\%, 1021: 180.00\%, 1022: 200.00\%, 1023: 220.00\%, 1024: 282.80\%, 1025: 400.00\% |
| 790-274 | SCAN Fixed R/E Default Setting 2 | 25~1025 | 1007: 70.70\% | Read/ Write | ditto |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-275 | SCAN Fixed R/E Default Setting 3 | 25~1025 | 1009: 81.60\% | Read/ Write | ditto |
| 790-276 | $\begin{aligned} & \text { SCAN Fixed R/E Default Setting } \\ & 4 \end{aligned}$ | 25~1025 | 1010: 86.60\% | Read/ Write | ditto |
| 790-277 | $\begin{aligned} & \text { SCAN Fixed R/E Default Setting } \\ & 5 \end{aligned}$ | 25~1025 | 1013: 115.40\% | Read/ Write | ditto |
| 790-278 | SCAN Fixed R/E Default Setting 6 | 25~1025 | 1014: 122.50\% | Read/ Write | ditto |
| 790-279 | SCAN Fixed R/E Default Setting 7 | 25~1025 | 1017: 141.40\% | Read/ Write | ditto |
| 790-280 | Output Size 1 | 0~255 | 10: A3 SEF | Read/ Write | 1: Not fixed, 10: A3 SEF, 11: A4 LEF, 12: A4 SEF, 13: A5 LEF, 14: A5 SEF, 15: A6 LEF, 16: A6 SEF, 50: Envelope: C4 SEF, 51: Envelope: C5 LEF, 55: Envelope: DL LEF, 66: B4 SEF, 67: B5 LEF, 68: B5 SEF, 69: B6 LEF, 70: B6 SEF, 80: 11x17 SEF, 87: Postcard LEF, 88: Postcard SEF, 89: 8.5×11 LEF, 90: 8.5x11 SEF, 92: 8.5x14 SEF, 94: $12 \times 18$ SEF, 98: $12 \times 19$ SEF, 101: 16K LEF, 102: 16K SEF, 104: 8K SEF, 105: PostCard (3.5x5.5) LEF, 106: PostCard (3.5x5.5) SEF, 107: PostCard (4x6) LEF, 108: PostCard (4x6) SEF, 109: PostCard (5x7) LEF, 110: PostCard (5x7) SEF, 111: 5.5x8.5 LEF, 112: 5.5x8.5 SEF, 113: PostCard (6x9) LEF, 114: PostCard (6x9) SEF, 115: $8 \times 10$ LEF, 116: $8 \times 10$ SEF, 118: $8.5 \times 13$ SEF, 119: $7.25 \times 10.5$ LEF, 120: $7.25 \times 10.5$ SEF, 123: Envelope: You Chou 3 LEF, 124: Envelope: Choukei 3SEF, 126: Envelope: Choukei 4SEF, 132: 11x15 SEF, 135: 3.5x5 (Photo L) LEF, 136: 3.5x5 (Photo L) SEF, 137: Envelope: Commercial\#10 LEF, 139: $215 \times 315 \mathrm{~mm}$ ( $8.46 \times 12.4$ ) SEF, 141: SRA3 SEF, 142: Special A3 SEF, 143: Special A4 LEF, 144: Special A4 SEF, 145: A4Cover SEF, 146: A4Cover LEF, 147: 13x19 SEF, 148: $13 \times 18$ SEF, 149: 12.6x19.2 SEF, 150: Letter Cover (9x11) SEF, 151: LetterCover (9x11) LEF, 152: Envelope: Monarch7.3/4 LEF, 154: Return Postcard LEF, 155: Return Postcard SEF, 156: 16K LEF (mainland China), 157: 16K SEF (mainland China), 159: 8K SEF (mainland China) |
| 790-281 | Output Size 2 | 0~255 | 12: A4 SEF | Read/ Write | ditto |
| 790-282 | Output Size 3 | 0~255 | 11: A4 LEF | Read/ Write | ditto |
| 790-283 | Output Size 4 | 0~255 | 14: A5 SEF | Read/ Write | ditto |
| 790-284 | Output Size 5 | 0~255 | 16: A6 SEF | Read/ Write | ditto |
| 790-285 | Output Size 6 | 0~255 | 66: B4 SEF | Read/ Write | ditto |
| 790-286 | Output Size 7 | 0~255 | 68: B5 SEF | Read/ Write | ditto |
| 790-287 | Output Size 8 | 0~255 | 89: 8.5x11 LEF | Read/ Write | ditto |
| 790-288 | Default Background Color Removal in SCAN Mode | 0~1 | 1: ON | Read/ Write | 0: OFF, 1: ON |
| 790-290 | Basic Screen Preset R/E 1 | 1~7 | 2: R/E Preset 2 | Read/ Write | 1~7: R/E Reset 1~7 |
| 790-291 | Basic Screen Preset R/E 2 | 1~7 | 4: R/E Preset 4 | Read/ Write | 1~7: R/E Reset 1~7 |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-292 | Basic Screen Preset R/E 3 | 1~7 | 7: R/E Preset 7 | Read/ Write | 1~7: R/E Reset 1~7 |
| 790-300 | Enable/Disable Special Document Selection Display | 0~1 | 0: Do not display | Read/ Write | 0: Do not display 1: Display |
| 790-301 | Default Top Edge Erase Margin | 0~50 | 2 (mm) | Read/ Write | 1 mm unit from 0 (mm) to 50 (mm) |
| 790-302 | Default Bottom Edge Erase Margin | 0~50 | 2 (mm) | Read/ Write | 1 mm unit from 0 (mm) to 50 (mm) |
| 790-303 | Default Left Edge Erase Margin | 0~50 | 2 (mm) | Read/ Write | 1 mm unit from 0 (mm) to 50 (mm) |
| 790-304 | Default Right Edge Erase Margin | 0~50 | 2 (mm) | Read/ Write | 1 mm unit from 0 (mm) to 50 (mm) |
| 790-305 | Direction Adjust in Scan | 0~1 | 0: ON | Read/ Write | 0: OFF, 1: ON |
| 790-306 | Bleed Prevention Default | 0~1 | 0: OFF | Read/ Write | 0: OFF, 1: ON |
| 790-307 | Default Compression Ratio | 0~4 | 2: Normal | Read/ Write | 0: High Compression Rate Priority, 1: Moderate Compression Rate Priority, 2: Normal, 3: Moderate Image Quality Priority, 4: High Image Quality Priority |
| 790-308 | Default Transfer Protocol | 0~2 | 0: FTP | Read/ Write | 0: FTP, 1: SMB, 2: SMB (UNC) |
| 790-309 | Default File Format | 0~4 | 0: TIFF/JFIF Auto Select | Read/ Write | 0: TIFF/JFIF Auto Select, 1: TIFF (Single Page File), 2: TIFF (Multiple Pages), 3: PDF, 4: XDW (Not applicable for XC/XE) |
| 790-310 | IFax Send Confirmation Default | 0~1 | 0: OFF | Read/ Write | 0: OFF, 1: ON |
| 790-311 | Default Sharpness Adjustment | 0~4 | 2: Normal | Read/ Write | 0: Stronger 2, 1: Stronger 1, 2: Normal, 3: Softer 1, 4: Softer 2 |
| 790-312 | Enable/Disable Edge Erase | 0~1 | 0: Enable | Read/ Write | 0: Enable, 1: Disable |
| 790-317 | Color Space Display Settings | 0~1 | 1: Do not display | Read/ Write | 0: Display, 1: Do not display |
| 790-320 | BW Copy Document Type Default (when Document Type is "Auto") | 1~10 | 1: Text (Normal Text) | Read/ Write | 1: Text (Normal Text), 2: Text (Pencil Text (Black)), 4: Text/Photo (Print), 5: Text/Photo (Photograph Paper), 6: Text/Photo (Color Copy), 7: Photo (Print), 8: Photo (Photograph Paper), 9: Photo (Color Copy), 10: Map |
| 790-321 | Default Document Type for Color/Auto (ACS) (when Document Type is "Auto") | 1~10 | 4: Text/Photo (Print) | Read/ <br> Write | 1: Text (Normal Text), 4: Text/Photo (Print), 5: Text/Photo (Photograph Paper), 6: Text/Photo (Color Copy), 7: Photo (Print), 8: Photo (Photograph Paper), 9: Photo (Color Copy), 10: Map |
| 790-322 | Default Side 2 Edge Erase | 0~1 | 0: Same as Side 1 | Read/ Write | 0: Same as Side 1, 1: Side 1 as Target |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-350 | Fixed Size 12 of Scan Document Size Input | 1~255 | $\begin{aligned} & \text { 88: Postcard } \\ & \text { SEF } \end{aligned}$ | $\begin{array}{\|l} \hline \text { Read/ } \\ \text { Write } \end{array}$ | 1: Not fixed, 10: A3 SEF, 11: A4 LEF, 12: A4 SEF, 13: A5 LEF, 14: A5 SEF, 15: A6 LEF, 16: A6 SEF, 50: 69: B6 LEF, 70: B6 SEF, 80: $11 \times 17$ SEF, 87: Postcard LEF, 88: Postcard SEF, 89: $8.5 \times 11$ LEF, 90 : 8.5×11 SEF, 92 : $8.5 \times 14$ SEF, 94 : $12 \times 18$ SEF, $98: 12 \times 19$ SEF, 101: 16 K LEF, $102: 16 \mathrm{~K}$ SEF, $104: 8 \mathrm{~K}$ SEF, 105: PostCard ( $3.5 \times 5.5$ ) LEF, 106: PostCard (3.5x5.5) SEF, 107: PostCard (4x6) LEF, 108: PostCard (4x6) SEF, 109: PostCard (5x7) LEF, 110: PostCard (5x7) SEF, 111: 5.5x8.5 LEF, 112: 5.5×8.5 SEF, 113: PostCard (6x9) LEF, 114: PostCard (6x9) SEF, 115: $8 \times 10$ LEF, 116: $8 \times 10$ SEF, 118: $8.5 \times 13$ SEF, 119: 7.25×10.5 LEF, 120: 7.25×10.5 SEF, 123: Envelope: You Chou 3 LEF, 124: Envelope: Choukei 3SEF, 126: Envelope: Choukei 4SEF, 132: 11x15 SEF, 135: 3.5x5 (Photo L) LEF, 136: 3.5x5 (Photo L) SEF, 137: Envelope: Commercial\#10 LEF, 139: 215x315mm (8.46x12.4) SEF, 141: SRA3 SEF, 142: Special A3 SEF, 143: Special A4 LEF, 144: Special A4 SEF, 145: A4Cover SEF, 146: A4Cover LEF, 147: $13 \times 19$ SEF, 148: $13 \times 18$ SEF, 149: 12.6×19.2 SEF, 150: Letter Cover (9×11) SEF, 151: LetterCover ( $9 \times 11$ ) LEF, 152: Envelope: Monarch7.3/4 LEF, 154: Return Postcard LEF, 155: Return Postcard SEF, 156: 16K LEF (mainland China), 157: 16K SEF (mainland China), 159: 8K SEF (mainland China) |
| 790-351 | Fixed Size 13 of Scan Document Size Input | 1~255 | 80: 11x17 SEF | $\begin{array}{\|l} \hline \text { Read/ } \\ \text { Write } \end{array}$ | ditto |
| 790-352 | Fixed Size 14 of Scan Document Size Input | 1~255 | $\begin{aligned} & \text { 92: } 8.5 \times 14 \\ & \text { SEF } \end{aligned}$ | $\begin{aligned} & \hline \text { Read/ } \\ & \text { Write } \end{aligned}$ | ditto |
| 790-353 | Fixed Size 15 of Scan Document Size Input | 1~255 | $\begin{aligned} & \text { 118: } 8.5 \times 13 \\ & \text { SEF } \end{aligned}$ | $\begin{array}{\|l} \hline \text { Read/ } \\ \text { Write } \end{array}$ | ditto |
| 790-354 | Fixed Size 16 of Scan Document Size Input | 1~255 | $\begin{aligned} & \text { 90: } 8.5 \times 11 \\ & \text { SEF } \end{aligned}$ | $\begin{array}{\|l} \hline \text { Read/ } \\ \text { Write } \end{array}$ | ditto |
| 790-355 | Fixed Size 17 of Scan Document Size Input | 1~255 | 89: 8.5x11 LEF | $\begin{aligned} & \text { Read/ } \\ & \text { Write } \end{aligned}$ | ditto |
| 790-360 | Fixed Size 12 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is "0" |
| 790-361 | Fixed Size 12 Slow Scan | 0~432 | NULL | $\begin{array}{\|l} \hline \text { Read/ } \\ \text { Write } \end{array}$ | $15 \sim 432 \mathrm{~mm}$ *Default Value is "0" |
| 790-362 | Fixed Size 13 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is "0" |
| 790-363 | Fixed Size 13 Slow Scan | 0~432 | NULL | Read/ <br> Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is "0" |
| 790-364 | Fixed Size 14 Fast Scan | 0~297 | NULL | Read/ <br> Write | 15~297mm *Default Value is "0" |
| 790-365 | Fixed Size 14 Slow Scan | 0~432 | NULL | Read/ Write | 15~432mm *Default Value is " 0 " |
| 790-366 | Fixed Size 15 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is "0" |
| 790-367 | Fixed Size 15 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is "0" |
| 790-368 | Fixed Size 16 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is "0" |
| 790-369 | Fixed Size 16 Slow Scan | 0~432 | NULL | Read/ Write | 15~432mm *Default Value is "0" |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-370 | Fixed Size 17 Fast Scan | 0~297 | NULL | Read/ Write | 15~297mm *Default Value is "0" |
| 790-371 | Fixed Size 17 Slow Scan | 0~432 | NULL | Read/ Write | $15 \sim 432 \mathrm{~mm}$ *Default Value is " 0 " |
| 790-380 | $\begin{aligned} & \hline \text { SCAN Fixed R/E Default Setting } \\ & 8 \end{aligned}$ | 25~1025 | 1014: 122.50\% | Read/ Write | 1~24: Not in use, 25~400:\%, 401~1000: Not in use, 1001: 25.00\%, 1002: 35.30\%, 1003: 50.00\%, 1004: 57.70\%, 1005: 61.20\%, 1006:64.70\%, 1007: 70.70\%, 1008: 78.50\%, 1009: 81.60\%, 1010: 86.60\%, 1011: 94.00\%, 1012: $97.30 \%, 1013: 115.40 \%, 1014: 122.50 \%, 1015: 127.30 \%, 1016: 129.40 \%, 1017:$ 141.40\%, 1018: $154.50 \%, 1019: 163.20 \%, 1020: 173.20 \%, 1021: 180.00 \%, 1022: 200.00 \%, 1023:$ $220.00 \%, 1024: 282.80 \%, 1025: 400.00 \%$ |
| 790-381 | SCAN Fixed R/E Default Setting 9 | 25~1025 | 1017: 141.40\% | $\begin{aligned} & \text { Read/ } \\ & \text { Write } \end{aligned}$ | ditto |
| 790-382 | SCAN Fixed R/E Default Setting 10 | 25~1025 | 1019: 163.20\% | $\begin{aligned} & \text { Read/ } \\ & \text { Write } \end{aligned}$ | ditto |
| 790-383 | $\begin{array}{\|l\|} \hline \text { SCAN Fixed R/E Default Setting } \\ 11 \end{array}$ | 25~1025 | 1022:200.00\% | $\begin{aligned} & \text { Read/ } \\ & \text { Write } \end{aligned}$ | ditto |
| 790-384 | $\begin{array}{\|l\|} \hline \text { SCAN Fixed R/E Default Setting } \\ 12 \end{array}$ | 25~1025 | 1025:400.00\% | $\begin{aligned} & \text { Read/ } \\ & \text { Write } \end{aligned}$ | ditto |
| 790-390 | Output Size 9 | 1~255 | 70: B6 SEF | Read/ Write | 1: Not fixed, 10: A3 SEF, 11: A4 LEF, 12: A4 SEF, 13: A5 LEF, 14: A5 SEF, 15: A6 LEF, 16: A6 SEF, 50: Envelope: C4 SEF, 51: Envelope: C5 LEF, 55: Envelope: DL LEF, 66: B4 SEF, 67: B5 LEF, 68: B5 SEF, 69: B6 LEF, 70: B6 SEF, 80: 11x17 SEF, 87: Postcard LEF, 88: Postcard SEF, 89: 8.5x11 LEF, 90: 8.5×11 SEF, 92 : $8.5 \times 14$ SEF, 94 : $12 \times 18$ SEF, $98: 12 \times 19$ SEF, 101 : 16 K LEF, 102 : 16 K SEF, $104: 8 \mathrm{~K}$ SEF, 105: PostCard ( $3.5 \times 5.5$ ) LEF, 106: PostCard ( $3.5 \times 5.5$ ) SEF, 107: PostCard ( $4 \times 6$ ) LEF, 108: PostCard ( $4 \times 6$ ) SEF, 109: PostCard (5x7) LEF, 110: PostCard ( $5 \times 7$ ) SEF, 111: $5.5 \times 8.5$ LEF, 112: 5.5x8.5 SEF, 113: PostCard (6x9) LEF, 114: PostCard (6x9) SEF, 115: $8 \times 10$ LEF, 116: $8 \times 10$ SEF, 118: $8.5 \times 13$ SEF, 119: 7.25x10.5 LEF, 120: 7.25×10.5 SEF, 123: Envelope: You Chou 3 LEF, 124: Envelope: Choukei 3SEF, 126: Envelope: Choukei 4SEF, 132: 11x15 SEF, 135: 3.5x5 (Photo L) LEF, 136: 3.5x5 (Photo L) SEF, 137: Envelope: Commercial\#10 LEF, 139: $215 \times 315 \mathrm{~mm}$ ( $8.46 \times 12.4$ ) SEF, 141: SRA3 SEF, 142: Special A3 SEF, 143: Special A4 LEF, 144: Special A4 SEF, 145: A4Cover SEF, 146: A4Cover LEF, 147: $13 \times 19$ SEF, 148: $13 \times 18$ SEF, 149: 12.6×19.2 SEF, 150: Letter Cover (9x11) SEF, 151: LetterCover ( $9 \times 11$ ) LEF, 152: Envelope: Monarch7.3/4 LEF, 154: Return Postcard LEF, 155: Return Postcard SEF, 156: 16K LEF (mainland China), 157: 16K SEF (mainland China), 159: 8K SEF (mainland China) |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-391 | Output Size 10 | 1~255 | $\begin{aligned} & \text { 135: 3.5x5 } \\ & \text { (Photo L) LEF } \end{aligned}$ | Read/ Write | 1: Not fixed, 10: A3 SEF, 11: A4 LEF, 12: A4 SEF, 13: A5 LEF, 14: A5 SEF, 15: A6 LEF, 16: A6 SEF, 50: Envelope: C4 SEF, 51: Envelope: C5 LEF, 55: Envelope: DL LEF, 66: B4 SEF, 67: B5 LEF, 68: B5 SEF, 69: B6 LEF, 70: B6 SEF, 80: 11x17 SEF, 87: Postcard LEF, 88: Postcard SEF, 89: 8.5×11 LEF, 90: 8.5x11 SEF, 92: 8.5x14 SEF, 94: $12 \times 18$ SEF, 98: $12 \times 19$ SEF, 101: 16K LEF, 102: 16K SEF, 104: 8K SEF, 105: PostCard ( $3.5 \times 5.5$ ) LEF, 106: PostCard (3.5x5.5) SEF, 107: PostCard (4x6) LEF, 108: PostCard (4x6) SEF, 109: PostCard (5x7) LEF, 110: PostCard (5x7) SEF, 111: 5.5x8.5 LEF, 112: $5.5 \times 8.5$ SEF, 113: PostCard (6x9) LEF, 114: PostCard (6x9) SEF, 115: $8 \times 10$ LEF, 116: $8 \times 10$ SEF, $118: 8.5 \times 13$ SEF, 119: 7.25x10.5 LEF, 120: 7.25x10.5 SEF, 123: Envelope: You Chou 3 LEF, 124: Envelope: Choukei 3SEF, 126: Envelope: Choukei 4SEF, 132: 11x15 SEF, 135: 3.5x5 (Photo L) LEF, 136: 3.5x5 (Photo L) SEF, 137: Envelope: Commercial\#10 LEF, 139: $215 \times 315 \mathrm{~mm}$ (8.46x12.4) SEF, 141: SRA3 SEF, 142: Special A3 SEF, 143: Special A4 LEF, 144: Special A4 SEF, 145: A4Cover SEF, 146: A4Cover LEF, 147: 13x19 SEF, 148: 13x18 SEF, 149: 12.6x19.2 SEF, 150: Letter Cover (9x11) SEF, 151: LetterCover (9x11) LEF, 152: Envelope: Monarch7.3/4 LEF, 154: Return Postcard LEF, 155: Return Postcard SEF, 156: 16K LEF (mainland China), 157: 16K SEF (mainland China), 159: 8K SEF (mainland China) |
| 790-392 | Output Size 11 | 1~255 | 135: $3.5 \times 5$ (Photo L) LEF | Read/ Write | ditto |
| 790-393 | Output Size 12 | 1~255 | 88: Postcard SEF | Read/ Write | ditto |
| 790-394 | Output Size 13 | 1~255 | 80: 11x17 SEF | Read/ Write | ditto |
| 790-395 | Output Size 14 | 1~255 | $\begin{aligned} & \text { 92: } 8.5 \times 14 \\ & \text { SEF } \end{aligned}$ | Read/ Write | ditto |
| 790-396 | Output Size 15 | 1~255 | $\begin{aligned} & \text { 118: } 8.5 \times 13 \\ & \text { SEF } \end{aligned}$ | Read/ Write | ditto |
| 790-397 | Output Size 16 | 1~255 | $\begin{aligned} & \text { 90: } 8.5 \times 11 \\ & \text { SEF } \end{aligned}$ | Read/ Write | ditto |
| 790-398 | Output Size 17 | 1~255 | 89: 8.5×11 LEF | Read/ Write | ditto |
| 790-401 | Menu Screen Favorite Setting 1 | 0~255 | 1: Copy | Read/ Write | 0: No features, 1: Copy, 2: FAX/iFAX, 3: Scan to E-mail, 4: Scan to Mailbox, 5: Scan to Server, 6: Scan to PC, 7: Box, 8: Print, 9: Job Flow Service, 10: Job Memory, 11: Multi Service, 12: Gemini, 13: DocuShare, 14: Media Print, 101: Auto Gradation Adjustment, 102: FAX Receive mode, 103: Activity Report, 104: Language, 105: Create, 106: Printer mode, 107: Help, 108:Recognition print, 109:Security print box, 110:Sample print box, 111:Specified print box time, 112:Private recognition print, 200:Screen brightness |
| 790-402 | Menu Screen Favorite Setting 2 | 0~255 | 2: FAX/iFAX | Read/ Write | ditto |
| 790-403 | Menu Screen Favorite Setting 3 | 0~255 | 104: Language | Read/ Write | ditto |
| 790-404 | Menu Screen Favorite Setting 4 | 0~255 | 3: Scan To Email | Read/ Write | ditto |
| 790-405 | Menu Screen Favorite Setting 5 | 0~255 | $\begin{aligned} & \text { 4: Scan To } \\ & \text { Mail Box } \end{aligned}$ | Read/ Write | ditto |
| 790-406 | Menu Screen Favorite Setting 6 | 0~255 | 105: Create | Read/ Write | ditto |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-407 | Menu Screen Favorite Setting 7 | 0~255 | 5: Scan To Server | Read/ Write | ditto |
| 790-408 | Menu Screen Favorite Setting 8 | 0~255 | 6: Scan To PC | Read/ Write | ditto |
| 790-409 | Menu Screen Favorite Setting 9 | 0~255 | 106: Printer mode | Read Write | ditto |
| 790-410 | Menu Screen Favorite Setting 10 | 0~255 | 7: Box | Read Write | ditto |
| 790-411 | Menu Screen Favorite Setting 11 | 0~255 | 10: Job Memory | Read/ Write | ditto |
| 790-412 | Menu Screen Favorite Setting 12 | 0~255 | 102: FAX <br> Receive mode | Read/ Write | ditto |
| 790-413 | Menu Screen Favorite Setting 13 | 0~255 | 9: Job Flow Service | Read/ Write | ditto |
| 790-414 | Menu Screen Favorite Setting 14 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-415 | Menu Screen Favorite Setting 15 | 0~255 | 103: Activity Report | Read Write | ditto |
| 790-416 | Menu Screen Favorite Setting 16 | 0~255 | $\begin{aligned} & \text { 103: Activity } \\ & \text { Report } \end{aligned}$ | Read/ Write | ditto |
| 790-417 | Menu Display Utility Setting 1 | 0~255 | 0: No features | Read/ Write | 0: No features, 101: Auto Gradation Adjustment, 102: FAX Receive mode, 103: Activity Report, 104: Language, 105: Create, 106: Printer mode, 107: Help, 108:Recognition print, 109:Security print box, 110:Sample print box, 111:Specified print box time, 112:Private recognition print, 200:Screen brightness |
| 790-418 | Menu Display Utility Setting 2 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-419 | Menu Display Utility Setting 3 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-420 | Menu Display Utility Setting 4 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-421 | Basic Copy Favorite Function Number (0/3/6) | 0~2 | $\begin{aligned} & \text { 1: Customized } \\ & \text { L1 } \end{aligned}$ | Read/ Write | 0: Not Customized, 1: Customized L1, 2: Customized L2 |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-422 | Basic Copy Favorite Function Settings (L1-1) | 0~255 | 26: Image Shift | Read/ Write | Refer to the UI Dialog Specifications for the setting range as the contents of this column varies according to the product or launch. 0: Not Set, 1: Color Mode, 2: Image Quality Presets, 3: Image Quality of Originals, 4: Copy Density/Contrast (Color machine), 5: Copy Density (Open), 6: Sharpness/Saturation (Color machine), 7: Sharpness (BW machine), 8: Background Color Suppression, 9: Color Balance, 10: Color Shift, 21: 2 Sided Selection, 22: Bound Document, 23: Book Duplex, 24: Document Size Input, 25: Edge Erase, 26: Image Shift, 27: Auto Image Rotation, 28: Mirror Image/Negative/Positive Inversion, 29: Document Setting Direction, 30: Mixed Size Originals, 41: Collate, 42: Booklet Creation, 43: Covers, 44: Transparency Separators, 45: Multiple Up, 46: Poster, 47: Repeat Image, 48: Chapter Division / Separators Insertion / Tab Paper Copy, 49: Annotation, 50: Duplication Management, 51: Face Up Specification, 52: Fold, 61: Build Job, 62: Image Composition (Simple Composition Copy), 63: Extract/ Delete, 65:Tab stock copy, 66:Luster, 67:Sample Copy, 68:Large amount of copy, 101: 2 Sided Selection (1 to 2 Sided (Head to Head)), 102: 2 Sided Selection (2 to 2 Sided (Head to Head)), 103: Mixed Size Originals (Direct Specification), 104: Image Shift (Center), 105: Collate (Collate), 106: Collate (Staple (Left Single)), 107: Collate (Staple (Left Double)), 108: Multiple Up (2 Up (Right to Left)), 109: Multiple Up (2 Up (Left to Right / Top to Bottom)), 110: Face Up Specification (Reverse Output Specification), 111: Fold (Z-Fold), 112: Sample Copy, 113: High Capacity Originals, 114: Double Copy, 115: Smaller |
| 790-423 | Basic Copy Favorite Function Settings (L1-2) | 0~255 | 25: Edge Erase | Read/ Write | ditto |
| 790-424 | Basic Copy Favorite Function Settings (L1-3) | 0~255 | $\begin{aligned} & \text { 5: Copy Den- } \\ & \text { sity (Open) } \end{aligned}$ | Read/ Write | ditto |
| 790-425 | Basic Copy Favorite Function Settings (L2-1) | 0~255 | 26: Image Shift | Read/ Write | ditto |
| 790-426 | Basic Copy Favorite Function Settings (L2-2) | 0~255 | 3: Image Quality of Originals | Read/ Write | ditto |
| 790-427 | Basic Copy Favorite Function Settings (L2-3) | 0~255 | 5: Copy Density (Open) | Read/ Write | ditto |
| 790-428 | Basic Copy Favorite Function Settings (L2-4) | 0~255 | 0: No features | Read/ Write | ditto |
| 790-429 | Basic Copy Favorite Function Settings (L2-5) | 0~255 | 0: No features | Read/ Write | ditto |
| 790-430 | Basic Copy Favorite Function Settings (L2-6) | 0~255 | 0: No features | Read/ Write | ditto |
| 790-431 | Basic Copy Favorite Function Settings (L2-7) | 0~255 | 0: No Set | Read/ Write | ditto |
| 790-432 | Basic Scan Favorite Function Number | 0~1 | 0: Not Customized | Read/ Write | 0: Not Customized, 1: Customized L1 |
| 790-433 | Basic Scan Favorite Function Settings (L1-1) | 0~255 | 0: No Set | Read/ Write | 0: Not Set, 1: 2 Sided Scan, 2: Scan Resolution, 3: Scan Density, 4: Scan Ratio |
| 790-434 | Basic Scan Favorite Function Settings (L1-2) | 0~255 | 0: No Set | Read/ Write | 0: Not Set, 1: 2 Sided Scan, 2: Scan Resolution, 3: Scan Density, 4: Scan Ratio |
| 790-435 | Current Display Language | 1~32 | 1: Japanese | Read/ Write | 1: Japanese, 2: English, 3: French, 4: German, 5: Italian, 6: Spanish, 7: Portuguese, 8: Russian, 9: Chinese, 10: Korean, 11: Thai, 12: Vietnamese, 13: Chinese (Taiwan), 14: Dutch, 15: Danish, 16: Swedish, 17: Finnish, 18: Norwegian, 19: Portuguese (Brazil), 20: Bulgarian, 21: Polish, 22: Hungarian, 23: Romanian, 24: Czech, 25: Greek, 26: Turkish, 27: Arabic, 28: Persian, 29: Hebrew |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-436 | Service Customize Key 1 | 0~255 | 1: Copy | Read/ Write | 0: No features, 1: Copy, 2: FAX/iFAX, 3: Scan to E-mail, 4: Scan to Mailbox, 5: Scan to Server, 6: Scan to PC, 7: Box, 8: Print, 9: Job Flow Service, 10: Job Memory, 11: Multi Service, 12: Gemini, 13: DocuShare, 14: Media Print, 101: Auto Gradation Adjustment, 102: FAX Receive mode, 103: Activity Report, 104: Language, 105: Create, 106: Printer mode, 107: Help, 108: Recognition print, 109: Security print box, 110: Sample print box, 111: specified print box of time, 112: Private recognition print |
| 790-437 | Service Customize Key 2 | 0~255 | 0: No features | $\begin{aligned} & \text { Read/ } \\ & \text { Write } \end{aligned}$ | ditto |
| 790-438 | Service Customize Key 3 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-439 | Keyboard Types Switch | 0~1 | 0: Qwerty | Read/ Write | 0: Qwerty, 1: ABC |
| 790-440 | Supports ASCII Only keyboard | 0~1 | 1: Displays non-ASCII items | Read/ Write | 0: Displays only ASCII items, 1: Displays non-ASCII items |
| 790-441 | Display Language Limit - Language 1 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-442 | Display Language Limit - Language 2 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-443 | Display Language Limit - Language 3 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-444 | Display Language Limit - Language 4 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-445 | Display Language Limit - Language 5 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-446 | Display Language Limit - Language 6 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-447 | Display Language Limit - Language 7 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-448 | Display Language Limit - Language 8 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-449 | Display Language Limit - Language 9 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-450 | Display Language Limit - Language 10 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-451 | Display Language Limit - Language 11 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-452 | Display Language Limit - Language 12 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-453 | Display Language Limit - Language 13 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-454 | Display Language Limit - Language 14 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-455 | Display Language Limit - Language 15 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-456 | Display Language Limit - Language 16 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-457 | Display Language Limit - Language 17 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-458 | Display Language Limit - Language 18 | 0~1 | 1: Display | Read Write | 0: Do not display 1: Display |
| 790-459 | Display Language Limit - Language 19 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-460 | Display Language Limit - Language 20 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-461 | Display Language Limit - Language 21 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-462 | Display Language Limit - Language 22 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-463 | Display Language Limit - Language 23 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-464 | Display Language Limit - Language 24 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-465 | Display Language Limit - Language 25 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-466 | Display Language Limit - Language 26 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-467 | Display Language Limit - Language 27 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-468 | Display Language Limit - Language 28 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-469 | Display Language Limit - Language 29 | 0~1 | 1: Display | Read Write | 0: Do not display 1: Display |
| 790-470 | Display Language Limit - Language 30 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-471 | Display Language Limit - Language 31 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-472 | Display Language Limit - Language 32 | 0~1 | 1: Display | Read/ Write | 0: Do not display 1: Display |
| 790-473 | Job List Display Filter Control | 0~3 | 0: Displays All | Read/ Write | 0: Displays All, 1: Transfer, 2: Print, 3: Communications |
| 790-478 | Allow Key Reset Settings | 0~1 | 1: ON | Read/ Write | 0: OFF, 1: ON |
| 790-488 | Menu Screen Favorite Setting 17 | 0~255 | 0: No features | Read/ Write | 0: No features, 1: Copy, 2: FAX/iFAX, 3: Scan to E-mail, 4: Scan to Mailbox, 5: Scan to Server, 6: Scan to PC, 7: Box, 8: Print, 9: Job Flow Service, 10: Job Memory, 11: Multi Service, 12: Gemini, 13: DocuShare, 14: Media Print, 101: Auto Gradation Adjustment, 102: FAX Receive mode, 103: Activity Report, 104: Language, 105: Create, 106: Printer mode, 107: Help, 108:Recognition print, 109:Security print box, 110:Sample print box, 111:Specified print box time, 112:Private recognition print, 200:Screen brightness |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-489 | Menu Screen Favorite Setting 18 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-490 | Menu Display Utility Setting 5 | 0~255 | 0: No features | Read/ Write | 0: No features, 101: Auto Gradation Adjustment, 102: FAX Receive mode, 103: Activity Report, 104: Language, 105: Create, 106: Printer mode, 107: Help, 108:Recognition print, 109:Security print box, 110:Sample print box, 111:Specified print box time, 112:Private recognition print, 200:Screen brightness |
| 790-491 | Menu Display Utility Setting 6 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-492 | Menu Display Utility Setting 7 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-493 | Menu Display Utility Setting 8 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-494 | Menu Display Utility Setting 9 | 0~255 | 0: No features | Read/ Write | ditto |
| 790-550 | FAX Fixed R/E Setting 8 | 25~1025 | 1014: 122.50\% | Read/ Write | 1~24: Not in use, 25~400:\%, 401~1000: Not in use, 1001: 25.00\%, 1002: 35.30\%, 1003: 50.00\%, 1004: $57.70 \%, 1005: 61.20 \%, 1006: 64.70 \%, 1007: 70.70 \%, 1008: 78.50 \%, 1009: 81.60 \%, 1010: 86.60 \%$, 1011: $94.00 \%$, 1012: $97.30 \%$, 1013: 115.40\%, 1014: 122.50\%, 1015: 127.30\%, 1016: 129.40\%, 1017: $141.40 \%$, 1018: 154.50\%, 1019: 163.20\%, 1020: 173.20\%, 1021: 180.00\%, 1022: 200.00\%, 1024 : 282.80\%, 1025: 400.00\% |
| 790-551 | FAX Fixed R/E Setting 9 | 25~1025 | 1017: 141.40\% | Read/ Write | ditto |
| 790-552 | FAX Fixed R/E Setting 10 | 25~1025 | 1019: 163.20\% | Read/ Write | ditto |
| 790-553 | FAX Fixed R/E Setting 11 | 0~1025 | 1022: 200.00\% | Read/ Write | ditto |
| 790-554 | FAX Fixed R/E Setting 12 | 25~1025 | 1025: 400.00\% | Read/ Write | ditto |
| 790-560 | Fixed Size 12 of FAX Scan Size Input | 1~255 | 88: Postcard SEF | Read/ Write | 1: Not fixed, 10: A3 SEF, 11: A4 LEF, 12: A4 SEF, 13: A5 LEF, 14: A5 SEF, 15: A6 LEF, 16: A6 SEF, 50: Envelope: C4 SEF, 51: Envelope: C5 LEF, 55: Envelope: DL LEF, 66: B4 SEF, 67: B5 LEF, 68 : B5 SEF, 69: B6 LEF, 70: B6 SEF, 80: $11 \times 17$ SEF, 87: Postcard LEF, 88: Postcard SEF, 89: 8.5×11 LEF, 90: 8.5x11 SEF, 92: 8.5x14 SEF, 94: $12 \times 18$ SEF, 98: $12 \times 19$ SEF, 101: 16K LEF, 102: 16K SEF, 104: 8K SEF, 105: PostCard ( $3.5 \times 5.5$ ) LEF, 106: PostCard ( $3.5 \times 5.5$ ) SEF, 107: PostCard (4x6) LEF, 108: PostCard (4x6) SEF, 109: PostCard (5x7) LEF, 110: PostCard (5x7) SEF, 111: 5.5x8.5 LEF, 112: $5.5 \times 8.5$ SEF, 113: PostCard (6x9) LEF, 114: PostCard (6x9) SEF, 115: $8 \times 10$ LEF, 116: $8 \times 10$ SEF, $118: 8.5 \times 13$ SEF, 119: $7.25 \times 10.5$ LEF, 120: $7.25 \times 10.5$ SEF, 123: Envelope: You Chou 3 LEF, 124: Envelope: Choukei 3SEF, 126: Envelope: Choukei 4SEF, 132: 11x15 SEF, 135: 3.5x5 (Photo L) LEF, 136: 3.5x5 (Photo L) SEF, 137: Envelope: Commercial\#10 LEF, 139: $215 \times 315 \mathrm{~mm}$ (8.46x12.4) SEF, 141: SRA3 SEF, 142: Special A3 SEF, 143: Special A4 LEF, 144: Special A4 SEF, 145: A4Cover SEF, 146: A4Cover LEF, 147: 13x19 SEF, 148: $13 \times 18$ SEF, 149: 12.6x19.2 SEF, 150: Letter Cover (9x11) SEF, 151: LetterCover (9x11) LEF, 152: Envelope: Monarch7.3/4 LEF, 154: Return Postcard LEF, 155: Return Postcard SEF, 156: 16K LEF (mainland China), 157: 16K SEF (mainland China), 159: 8K SEF (mainland China) |
| 790-561 | Fixed Size 13 of FAX Scan Size Input | 1~255 | 80: $11 \times 17$ SEF | Read/ Write | ditto |
| 790-562 | Fixed Size 14 of FAX Scan Size Input | 1~255 | $\begin{aligned} & \text { 92: } 8.5 \times 14 \\ & \text { SEF } \end{aligned}$ | Read/ Write | ditto |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-563 | Fixed Size 15 of FAX Scan Size Input | 1~255 | $\begin{aligned} & \text { 118: } 8.5 \times 13 \\ & \text { SEF } \end{aligned}$ | Read/ Write | ditto |
| 790-564 | Fixed Size 16 of FAX Scan Size Input | 1~255 | $\begin{aligned} & \text { 90: } 8.5 \times 11 \\ & \text { SEF } \end{aligned}$ | Read/ Write | ditto |
| 790-565 | Fixed Size 17 of FAX Scan Size Input | 1~255 | 89: 8.5×11 LEF | Read/ Write | ditto |
| 790-566 | FAX Pass Stamp UI Default | 0~1 | 0: OFF | Read/ Write | 0: OFF, 1: ON |
| 790-570 | User permission settings for PTT country modification | 0~2 | 0: Prohibited | Read/ Write | 0: Prohibited, 1: Allow for EU country settings, 2: Allow for NA country settings |
| 790-621 | The display after scanning by Scan Service is completed | 0~2 | 0 : Do not display 7sec "Scanning completed" message and "Transferring data" screen | Read/ Write | 0: Do not display 7sec "Scanning completed" message and "Transferring data" screen; 1: Display 7sec "Scanning completed" message but not the "Transferring data" screen; 2: Display 7sec "Scanning completed" message and the "Transferring data" screen |
| 790-630 | No. of digits for Assumed Speed Dial No. | 0~6 | 0: Actual Address Book | Read/ <br> Write | 0: Actual Address Book 3: 3-digit Virtual Address Book 4: 4-digit Virtual Address Book 5: 5-digit Virtual Address Book 6: 6-digit Virtual Address Book (*1, 2 cannot be set up) |
| 790-631 | Move Registration Data in Address Book | 0~1 | 0: Do not transfer | Read/ Write | 0 : Do not transfer, 1: Transfer |
| 790-632 | Added Thumbnail Default (Net Save) | 0, 1 | 1: Add | RW | 0: Do not add, 1: Add |
| 790-633 | Added Thumbnail Default (Mail) | 0,1 | 0: Do not add | RW | 0: Do not add, 1: Add |
| 790-640 | Paper Type Change Screen Display | 0~255 | 0 : Do not display | RW | 0: Do not display, 1: Display |
| 790-641 | Paper Information Color Attribute Display Availability | 0~255 | 0 : Do not display | Read/ <br> Write | 0: Do not display, 1: Display |
| 790-642 | Paper Information Other Attributes Display Availability | 0~255 | 1: Display applied size | Read/ Write | 0: Do not display, 1: Display applied size, 2: Display hole punch attributes, 3: Display color attributes |
| 790-661 | Report Storage Mailbox | 1~500 | 1 | Read/ Write | Mailbox No. |
| 790-662 | Consumables Check Auto Display Timing Settings | 0~2 | 0: Do not display | Read/ Write | 0: Do not display, 1: Display only after the Power ON initialization sequence has completed and the system is Ready, 2: Display every time auto clear occurred |
| 790-664 | Address Book Import Operation Mode | 0, 1 | 0: Add Mode | Read/ Write | [0: Add Mode, 1: Substitute Mode] |
| 790-665 | Paper Tray Settings Screen Access on Setup Menu | 0, 1 | 1: ON | Read/ Write | [0: OFF, 1: ON] |
| 790-666 | DADF Mixed Standard Size Scan Mode Display Settings | 0, 1 | 1: Display | Read/ Write | 0: Do not display, 1: Display |
| 790-667 | Blank Document Detection Feature Panel Default | 0, 1 | 0: OFF | Read/ <br> Write | [0: OFF, 1: ON] |
| 790-668 | Allow/Prohibit JT/FT/Address Book Registration Settings | 0, 1 | 0: Prohibit | Read/ Write | [0: Prohibit, 1: Allow] |

Table 8 UI

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/ Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-670 | Blank Document Detection Feature Display Settings | 0, 1 | 0: Do not display | Read/ Write | 0: Do not display <br> 1: Display |
| 790-671 | Auto Resume Feature Settings | 0, 1 | 1: Auto Resume | Read/ Write | 0: Do not Auto Resume 1: Auto Resume |
| 790-672 | Auto Clear Time-Out Display Screen | 0,1 | 1: Follow M/C configuration | Read/ Write | 0: Maintain previous service <br> 1: Follow M/C configuration |
| 790-674 | Basic FAX favorite setting (2nd row) | 0~255 | 0: Not set | Read/ Write | 0: Not set, <br> 1: 2 Sided Document Feed, <br> 2: Monitor Report, <br> 3: Communication Mode, <br> 4: Send Header |
| 790-676 | Separator Tray Default for Build Separator Insertion | 1~8 | 5: SMH | Read/ Write | 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5: SMH, 6: Tray 6 (HCF), 7: Tray 7 (HCF), <br> 8: Interposer |
| 790-677 | Side1 Cover Tray Default for Cover | 1~8 | 5: SMH | Read/ Write | 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5: SMH, 6: Tray 6 (HCF), 7: Tray 7 (HCF), <br> 8: Interposer |
| 790-678 | Side2 Cover Tray Default for Cover | 1~8 | 5: SMH | Read/ Write | 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5: SMH, 6: Tray 6 (HCF), 7: Tray 7 (HCF), 8: Interposer |
| 790-679 | Side1 Cover Tray Default for Booklet | 1~8 | 5: SMH | Read/ Write | 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5: SMH, 6: Tray 6 (HCF), 7: Tray 7 (HCF), <br> 8: Interposer |
| 790-680 | Fax Number Double Input Restriction | 0, 1 | 0: Do not allow double input | Read/ Write | 0: Do not allow double input <br> 1: Allow double input |
| 790-682 | Separator Sheet Default Tray Setting | 0~8 | 5: SMH | Read/ Write | ```0: Auto, 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5: SMH, 6: Tray 6 (HCF), 7: Tray 7 (HCF), 8: Interposer Refer to the FF of Copy Service Func for the setup range.``` |
| 790-683 | Brightness/Contrast Settings | $\begin{aligned} & \hline-127 \\ & \sim 127 \end{aligned}$ | 0 | Read/ Write | -127~127 <br> (Because the valid range for each MCW Panel is different, the upper and lower limit values are controlled through the UI Panel) |
| 790-684 | UI Screen Default Shortcut Screen Settings | 0, 1 | 0: Do not display anything | Read/ Write | 0 : Do not display anything, 1: Display login screen |

## Chain 790-xxx Chain 810-xxx Copy Service

| Table 9 Copy Service |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Chain-Link | NVm Name | Setup <br> Range | Initial Value | Read/Write | Description |  |
| $790-600$ | Poster Overlap Width | $1 \sim 25$ | 10 mm | Read/Write | $10 \mathrm{~mm} \sim 25 \mathrm{~mm}$ |  |
| $790-601$ | Index Paper Copy Image Shift <br> Amount | $0 \sim 15$ | 13 mm | Read/Write | $0 \mathrm{~mm} \sim 15 \mathrm{~mm}$ |  |
| $790-602$ | Default Output Face | $0 \sim 3$ | Auto | Read/Write | $0:$ Auto, 1: Output Side 2, 2: Output Side 1, 3: Output in reverse order |  |
| $790-604$ | Single Copy Output Face <br> Switch | 0,1 | Face Up | Read/Write | $0:$ Face Up, 1: Face Down |  |
| $790-605$ | Sample Copy Default | $0 \sim 1$ | 0: Disable Sam- <br> ple Copy | Read/Write | 0: Disable Sample Copy, 1: Enable Sample Copy |  |

Table 9 Copy Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 790-605 | Sample Copy Default | 0~1 | 0: Disable Sample Copy | Read/Write | 0: Disable Sample Copy, 1: Enable Sample Copy |
| 790-606 | Print Pattern Default (Page Number) | 1~6 | 1:N | Read/Write | 1: $\mathrm{N}, 2:-\mathrm{N}-, 3:$ Page $\mathrm{N}, 4: \mathrm{N} / \mathrm{M}, 5:-\mathrm{N} / \mathrm{M}-$, 6: Page $\mathrm{N} / \mathrm{M}$ |
| 790-607 | Print Position Default (Page Number) | 1~6 | 6: Bottom Center | Read/Write | 1: Top Left, 2: Top Right, 3: Top Center, 4: Bottom Left, 5: Bottom Right, 6: Bottom Center |
| 790-609 | Side 2 Position Specification (Page Number) | 0~1 | 0: Opposite position | Read/Write | 0: Opposite position, 1: Same Position |
| 790-611 | Print Position Default (Date) | 1~6 | 5: Bottom Right | Read/Write | 1: Top Left, 2: Top Right, 3: Top Center, 4: Bottom Left, 5: Bottom Right, 6: Bottom Center |
| 790-613 | Side 2 Position Specification (Date) | 0~1 | 0: Opposite position | Read/Write | 0: Opposite position, 1: Same Position |
| 790-614 | Print Position Default (Stamp) | 1~9 | 5: Top Right | Read/Write | 1: Top Left, 2: Top Right, 3: Top Center, 4: Bottom Left, 5: Bottom Right, 6: Bottom Center, 7: Bottom Left Center, 8: Bottom Right Center 9: Center |
| 790-616 | Color Default (Stamp) | 1~7 | 1: Black | Read/Write | 1: Black, 2: Red, 3: Green, 4: Blue, 5: Yellow, 6: Magenta, 7: Cyan |
| 790-617 | Permeability (Stamp) | 0~2 | 0: 0\% (Solid) | Read/Write | 0: [0\% (Solid), 1: 25\%, 2: 50\% |
| 790-618 | Side 2 Position Specification (Stamp) | 0~1 | 1: Same Position | Read/Write | 0: Opposite position, 1: Same Position |
| 790-619 | Based on the Mixed Document Direction for Stamp | 0~1 | 1: Set for each sheet | Read/Write | 0: Set by first sheet, 1: Set for each sheet |
| 790-620 | Allover Copy Execution Availability | 1,2 | 1: [Do not execute (reduce slightly)] | Read/Write | 1: [Do not execute (reduce slightly)] <br> 2: [Execute Allover Copy] |
| 810-002 | Y Component | 0~128 | 102: 80\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-003 | M Component | 0~128 | 128: $100 \%$ | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-004 | C Component | 0~128 | 0: 0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-005 | Y Component | 0~128 | 118: 92\% | Read/Write | 0\% $100 \%, 1 / 128 \%$ Units (0~128) |
| 810-006 | M Component | 0~128 | 0: 0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-007 | C Component | 0~128 | 128: $100 \%$ | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |
| 810-008 | Y Component | 0~128 | 0: 0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-009 | M Component | 0~128 | 102: 80\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-010 | C Component | 0~128 | 128: 100\% | Read/Write | 0\% $100 \%, 1 / 128 \%$ Units (0~128) |
| 810-011 | Y Component | 0~128 | 128: $100 \%$ | Read/Write | 0\% $100 \%, 1 / 128 \%$ Units (0~128) |
| 810-012 | M Component | 0~128 | 0: 0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-013 | C Component | 0~128 | 0:0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-014 | Y Component | 0~128 | 0:0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-015 | M Component | 0~128 | 128: $100 \%$ | Read/Write | 0\% $100 \%, 1 / 128 \%$ Units (0~128) |
| 810-016 | C Component | 0~128 | 0:0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-017 | Y Component | 0~128 | 0:0\% | Read/Write | 0\% $100 \%, 1 / 128 \%$ Units (0~128) |
| 810-018 | M Component | 0~128 | 0:0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-019 | C Component | 0~128 | 128: 100\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-020 | Y Component | 0~128 | 0: 0\% | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |

Table 9 Copy Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 810-021 | M Component | 0~128 | 0:0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-022 | C Component | 0~128 | 0: 0\% | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |
| 810-023 | Y Component | 0~128 | 0:0\% | Read/Write | 0\% $100 \%, 1 / 128 \%$ Units (0~128) |
| 810-024 | M Component | 0~128 | 0: 0\% | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |
| 810-025 | C Component | 0~128 | 0:0\% | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |
| 810-026 | Y Component | 0~128 | 0: 0\% | Read/Write | 0\% $100 \%, 1 / 128 \%$ Units (0~128) |
| 810-027 | M Component | 0~128 | 0: 0\% | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |
| 810-028 | C Component | 0~128 | 0: 0\% | Read/Write | 0\% 100\%, 1/128\% Units (0~128) |
| 810-029 | Y Component | 0~128 | 0: 0\% | Read/Write | 0\% $100 \%, 1 / 128 \%$ Units (0~128) |
| 810-030 | M Component | 0~128 | 0:0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-031 | C Component | 0~128 | 0:0\% | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |
| 810-032 | Y Component | 0~128 | 0: 0\% | Read/Write | 0\% $100 \%, 1 / 128 \%$ Units (0~128) |
| 810-033 | M Component | 0~128 | 0: 0\% | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |
| 810-034 | C Component | 0~128 | 0:0\% | Read/Write | 0\%~100\%, 1/128\% Units (0~128) |
| 810-035 | Y Component | 0~128 | 0: 0\% | Read/Write | 0\% 100\%, 1/128\% Units (0~128) |
| 810-036 | M Component | 0~128 | 0: 0\% | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |
| 810-037 | C Component | 0~128 | 0: 0\% | Read/Write | 0\% ~100\%, 1/128\% Units (0~128) |
| 810-038 | Background Color Suppression | 0~1 | 0: Disable | Read/Write | 1: Enable, 0: Disable |
| 810-039 | Density Adjustment | 0~6 | 2: Lighter 1 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-040 | Color Balance (Y: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-041 | Color Balance (Y: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-042 | Color Balance (Y: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-043 | Color Balance (M: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-044 | Color Balance (M: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-045 | Color Balance (M: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-046 | Color Balance (C: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-047 | Color Balance (C: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-048 | Color Balance (C: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-049 | Color Balance (K: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |

Table 9 Copy Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 810-050 | Color Balance (K: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-051 | $\begin{aligned} & \text { Color Balance (K: High Den- } \\ & \text { sity) } \end{aligned}$ | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-052 | Color Shift | 0~4 | 2: 0 degree | Read/Write | 0:-20 degree, 1: -10 degree, 2: 0 degree, 3: +10 degree, 4: +20 degree |
| 810-053 | Color Saturation | 0~4 | 0: Higher | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-054 | Sharpness | 0~4 | 2: Normal | Read/Write | 0: Sharper, 1: Sharp, 2: Normal, 3: Soft, 4: Softer |
| 810-055 | Contrast | 0~4 | 2: Normal | Read/Write | 0: Sharper, 1: Sharp, 2: Normal, 3: Soft, 4: Softer |
| 810-056 | Background Color Suppression | 0,1 | 0: Disable | Read/Write | 1: Enable, 0: Disable |
| 810-057 | Density Adjustment | 0~6 | 4: Darker 1 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-058 | Color Balance (Y: Low Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-059 | Color Balance (Y: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-060 | Color Balance (Y: High Density) | 0~6 | 6: Darker 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-061 | Color Balance (M: Low Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-062 | Color Balance (M: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-063 | Color Balance (M: High Density) | 0~6 | 6: Darker 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-064 | Color Balance (C: Low Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-065 | Color Balance (C: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-066 | Color Balance (C: High Density) | 0~6 | 6: Darker 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-067 | Color Balance (K: Low Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-068 | Color Balance (K: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-069 | Color Balance (K: High Density) | 0~6 | 6: Darker 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-070 | Color Shift | 0~4 | 2: 0 degree | Read/Write | 0:-20 degree, 1: -10 degree, 2: 0 degree, 3: +10 degree, 4: +20 degree |
| 810-071 | Color Saturation | 0~4 | 1: High | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-072 | Sharpness | 0~4 | 0: Higher | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-073 | Contrast | 0~4 | 0: Higher | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-074 | Background Color Suppression | 0~1 | 1: Enable | Read/Write | 1: Enable, 0: Disable |

Table 9 Copy Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 810-075 | Density Adjustment | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-076 | Color Balance (Y: Low Density) | 0~6 | 1: Lighter 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-077 | Color Balance (Y: Medium Density) | 0~6 | 1: Lighter 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-078 | Color Balance (Y: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-079 | Color Balance (M: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-080 | Color Balance (M: Medium Density) | 0~6 | 4: Darker 1 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-081 | Color Balance (M: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-082 | Color Balance (C: Low Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-083 | Color Balance (C: Medium Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-084 | Color Balance (C: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-085 | Color Balance (K: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-086 | Color Balance (K: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-087 | Color Balance (K: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-088 | Color Shift | 0~4 | 2: 0 degree | Read/Write | 0: -20 degree, 1: -10 degree, 2: 0 degree, 3: +10 degree, 4: +20 degree |
| 810-089 | Color Saturation | 0~4 | 2: Normal | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-090 | Sharpness | 0~4 | 2: Normal | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-091 | Contrast | 0~4 | 2: Normal | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-092 | Background Color Suppression | 0~1 | 1: Enable | Read/Write | 1: Enable, 0: Disable |
| 810-093 | Density Adjustment | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-094 | Color Balance (Y: Low Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-095 | Color Balance (Y: Medium Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-096 | Color Balance (Y: High Density) | 0~6 | 1: Lighter 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-097 | Color Balance (M: Low Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |

Table 9 Copy Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 810-098 | Color Balance (M: Medium Density) | 0~6 | 0: Lighter 3 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-099 | Color Balance (M: High Den- sity) | 0~6 | 1: Lighter 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-100 | Color Balance (C: Low Density) | 0~6 | 4: Darker 1 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-101 | Color Balance (C: Medium Density) | 0~6 | 5: Darker 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-102 | Color Balance (C: High Density) | 0~6 | 5: Darker 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-103 | Color Balance (K: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-104 | Color Balance (K: Medium Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-105 | Color Balance (K: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-106 | Color Shift | 0~4 | 2: 0 degree | Read/Write | 0: -20 degree, 1: -10 degree, 2: 0 degree, 3: +10 degree, 4: +20 degree |
| 810-107 | Color Saturation | 0~4 | 2: Normal | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-108 | Sharpness | 0~4 | 2: Normal | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-109 | Contrast | 0~4 | 2: Normal | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-110 | Background Color Suppression | 0~1 | 1: Enable | Read/Write | 1: Enable, 0: Disable |
| 810-111 | Density Adjustment | 0~6 | 2: Lighter 1 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-112 | Color Balance (Y: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-113 | Color Balance (Y: Medium Density) | 0~6 | 1: Lighter 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-114 | Color Balance (Y: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-115 | Color Balance (M: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-116 | Color Balance (M: Medium Density) | 0~6 | 1: Lighter 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-117 | Color Balance (M: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-118 | Color Balance (C: Low Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-119 | Color Balance (C: Medium Density) | 0~6 | 1: Lighter 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-120 | Color Balance (C: High Density) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |

Table 9 Copy Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 810-121 | Color Balance (K: Low Den- sity) | 0~6 | 3: Normal | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-122 | Color Balance (K: Medium Density) | 0~6 | 1: Lighter 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 Darker 3 |
| 810-123 | Color Balance (K: High Den- sity) | 0~6 | 5: Darker 2 | Read/Write | 0: Lighter 3, 1: Lighter 2, 2: Lighter 1, 3: Normal, 4: Darker 1, 5: Darker 2, 6: Darker 3 |
| 810-124 | Color Shift | 0~4 | 2: 0 degree | Read/Write | 0: -2 degree, 1: -10 degree, 2: 0 degree, 3: +10 degree, 4: +20 degree |
| 810-125 | Color Saturation | 0~4 | 2: Normal | Read/Write | 0: Higher, 1: High, 2: Normal, 3: Low, 4: Lower |
| 810-126 | Sharpness | 0~4 | 2: Normal | Read/Write | 0: Sharper, 1: Sharp, 2: Normal, 3: Soft, 4: Softer |
| 810-127 | Contrast | 0~4 | 1: Sharp | Read/Write | 0: Sharper, 1: Sharp, 2: Normal, 3: Soft, 4: Softer |
| 810-129 | Max. No. of Copy Sheets accumulated | 1~999 | 999 | Read/Write | 1-999: [1~999 pages] |
| 810-132 | Enable/Disable ATS Implementation | 0~2 | 1: APS Only | Read/Write | 1: APS Only, 0: Always (Even for manual tray selection) |
| 810-136 | Availability of Duplex APS Chapters | 0~1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 810-156 | Text Effect Default | 1~3 | 1: Embossed | Read/Write | 1: Embossed, 2: Outline, 3: Text |
| 810-157 | Text Size | 1~125 | 48: 48 points | Read/Write | 48: 48 points, 64: 64 points, 80: 80 points |
| 810-158 | Background Pattern | 1~8 | 8: Fan | Read/Write | 1: Wave, 2: Circle, 3: Stripe, 4: Chain, 5: Beam, 6: Rhombic, 7: Sunflower, 8: Fan |
| 810-159 | Background Color (Text Color) | 9~12 | 9: Black | Read/Write | 9: Black, 11: Magenta, 12: Cyan |
| 810-160 | Density | 7~9 | 8: Normal | Read/Write | 9: Light, 8: Normal, 7: Dark |
| 810-161 | Contrast | 0~13 | 7 | Read/Write | - |
| 810-162 | Printing Pattern (Date) | 1~4 | 1 | Read/Write | 1: $20 \mathrm{yy} / \mathrm{mm} / \mathrm{dd}(\mathrm{hh}: \mathrm{mm}$ ), 2: mm/dd/20yy (hh: mm), 3: dd/mm/20yy (hh: mm), 4: 20yy year mm month dd date (hh hour mm minute) (hh hour mm min) |
| 810-163 | Copy Forced Analog WaterMark Output Settings | 0~1 | 0: Do not print | Read/Write | 0: Do not print, 1: Print |
| 810-164 | Client Print Forced Analog Watermark Output Settings | 0~1 | 0: Do not print | Read/Write | 0: Do not print, 1: Print |
| 810-165 | Device Activation Print Forced Analog Watermark Output Settings | 0~1 | 0: Do not print | Read/Write | 0: Do not print, 1: Print |
| 810-166 | Media Print Forced Analog Watermark Output Settings | 0~1 | 0: Do not print | Read/Write | 0: Do not print, 1: Print |
| 810-212 | Side 2 Print Page Position Fine Adjustment (Horizontal) | 0~400 | 200 | Read/Write | 0~200: Settings $\times 0.5$ (mm) |
| 810-213 | Side 2 Print Page Position Fine Adjustment (Vertical) | 0~400 | 200 | Read/Write | 0~200: Settings $\times 0.5$ (mm) |
| 810-214 | Stamp User Registered Text 1 |  | NULL | Read/Write | 64+1 Bytes (32 double byte characters, 64 single byte characters) |
| 810-215 | Stamp User Registered Text 2 |  | NULL | Read/Write | 64+1 Bytes (32 double byte characters, 64 single byte characters) |
| 810-216 | Stamp User Registered Text 3 |  | NULL | Read/Write | 64+1 Bytes (32 double byte characters, 64 single byte characters) |
| 810-217 | Stamp User Registered Text 4 |  | NULL | Read/Write | 64+1 Bytes ( 32 double byte characters, 64 single byte characters) |
| 810-218 | Stamp User Registered Text 5 |  | NULL | Read/Write | 64+1 Bytes ( 32 double byte characters, 64 single byte characters) |

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Table 9 Copy Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 810-219 | Stamp User Registered Text 6 |  | NULL | Read/Write | 64+1 Bytes (32 double byte characters, 64 single byte characters) |
| 810-220 | Stamp User Registered Text 7 |  | NULL | Read/Write | 64+1 Bytes ( 32 double byte characters, 64 single byte characters) |
| 810-221 | Stamp User Registered Text 8 |  | NULL | Read/Write | 64+1 Bytes ( 32 double byte characters, 64 single byte characters) |
| 810-222 | AWM User Registered Text 1 |  | NULL | Read/Write | 32+1 Bytes (16 double byte characters, 32 single byte characters) |
| 810-223 | AWM User Registered Text 2 |  | NULL | Read/Write | $32+1$ Bytes ( 16 double byte characters, 32 single byte characters) |
| 810-224 | AWM User Registered Text 3 |  | NULL | Read/Write | $32+1$ Bytes ( 16 double byte characters, 32 single byte characters) |
| 810-225 | Font Size (Stamp) | 1~255 | 48 (Points) | Read/Write | 6~64 (Points) |
| 810-226 | Font Size (Date) Default | 1~255 | 10 (Points) | Read/Write | 6~24 (Points) |
| 810-227 | Font Size (Page Number) Default | 1~255 | 10 (Points) | Read/Write | 6~24 (Points) |
| 810-228 | Text Default (Stamp) | 1~71 | 1: CONFIDEN- TIAL | Read/Write | 1: CONFIDENTIAL, 2: VOID, <br> 4: Copy Prohibited, <br> 6: IMPORTANT, <br> 7: Circulate, <br> 8: URGENT, <br> 9: Ignore Side 2, 10: DRAFT, <br> 64: Stamp Custom Text 1, 65: Stamp Custom Text 2, 66: Stamp Custom Text 3, 67: Stamp Custom Text 4, 68: Stamp Custom Text 5, 69: Stamp Custom Text 6, 70: Stamp Custom Text 7, <br> 71: Stamp Custom Text 8 |
| 810-229 | Text Default (AWM) | 1~34 | 4: Copy Prohib- ited | Read/Write | 3: Duplicate, <br> 4: Copy Prohibited, <br> 5: Copy, <br> 32: AWM Custom Text 1, <br> 33: AWM Custom Text 2, <br> 34: AWM Custom Text 3 |

## Chain 800-xxx Chain 806-xxx Print Service

Table 10 Print Service

| Chain-Link | NVM Name | Setup <br> Range | Initial Value | Read/Write | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $800-001$ | Operation when no tray contains the <br> specified paper size | $1 \sim 8$ | 6: Display Add <br> Paper. | Read/Write | 6: Display Add Paper (No SPS), 5: Use Larger Size (No adjustment), 2: <br> Use Nearest Size (Adjust), 7: Oceans2 only, do not use substitute tray <br> (Abort) 8: (Added after Kutani) Feed from Bypass tray |
| $800-006$ | Print Area | $1 \sim 2$ | 1: Normal | Read/Write | 1: Normal, 2: Expand |
| $800-016$ | ID Print | $1 \sim 5$ | 5: Disables ID Print | Read/Write | 1: Prints on upper left, 2: Prints on upper right, 3: Prints on bottom left, 4: <br> Prints on bottom right, 5: Disables ID Print |

Table 10 Print Service

| Chain-Link | NVM Name | Setup <br> Range | Initial Value | Read/Write | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $800-017$ | Security Print Output Operation | $0 \sim 1$ | 1: TRUE: Allow <br> Device Print | Read/Write | 1: TRUE: Allow Device Print, 0: FALSE: Forbid Device Print |
| $800-018$ | Force Extend Print | $0 \sim 2$ | 1: Do not force <br> extend print | Read/Write | 1: Do not force extend print, 2: Force extend print (For Kutani, installed <br> from P/L) |
| $806-996$ | Font Mismatch | $0 \sim 1$ | 0: Use a substitute <br> font | Read/Write | 0: Use a substitute font, 1: End the job |
| $806-997$ | ATCX | $0 \sim 1$ | $0:$ ON | Read/Write | 0: ON, 1: OFF |
| $806-998$ | PS Color Default | $0 \sim 1$ | $1:$ Color | Read/Write | 0: BW, 1: Color |
| $806-999$ | DMS Settings | $0 \sim 1$ | $1:$ Enable | Read/Write | 0: Disable, 1: Enable |

## Chain 820-xxx Chain 823-xxx Chain 825-xxx FAX Service

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 820-006 | Output Tray of Mail Box Print (Including printing by instruction) | 0~3 | 0: Center Tray | Read/Write | 0: Center Tray, 1: Side Tray, 2: Finisher Tray, 3: Center Tray2, <br> *Options that are not installed cannot be selected |
| 820-010 | Output Tray of Fax Receive Print receive by line 0 (Extension) | 0~3 | 0: Center Tray | Read/Write | 0: Center Tray, 1: Side Tray, 2: Finisher Tray, 3: Center Tray2, <br> *Options that are not installed cannot be selected |
| 820-011 | Output Tray of Fax Receive Print received by line 1 | 0~3 | 0: Center Tray | Read/Write | 0: Center Tray, 1: Side Tray, 2: Finisher Tray, 3: Center Tray2, *Options that are not installed cannot be selected |
| 820-012 | Output Tray of Fax Receive Print received by line 2 | 0~3 | 0: Center Tray | Read/Write | 0: Center Tray, 1: Side Tray, 2: Finisher Tray, 3: Center Tray2, <br> *Options that are not installed cannot be selected |
| 820-013 | Output Tray of Fax Receive Print received by line 3 | 0~3 | 0: Center Tray | Read/Write | 0: Center Tray, 1: Side Tray, 2: Finisher Tray, 3: Center Tray2, <br> *Options that are not installed cannot be selected |
| 820-014 | Output Tray of Fax Receive Print received by line 4 | 0~3 | 0: Center Tray | Read/Write | 0: Center Tray, 1: Side Tray, 2: Finisher Tray, 3: Center Tray2, *Options that are not installed cannot be selected |
| 820-015 | Output Tray of Fax Receive Print received by line 5 | 0~3 | 0: Center Tray | Read/Write | 0: Center Tray, 1: Side Tray, 2: Finisher Tray, 3: Center Tray2, <br> *Options that are not installed cannot be selected |
| 820-016 | 2 Sided print setting (Receive Print/Report Print/Confirmation Print) | 0~2 | 0: 1 Sided | Read/Write | 0:1 Sided, 1:2 Sided |
| 820-019 | When printing cannot be performed due o Forced Polling Selection printer failure, the acting document of the document received and other documents will be taken from the external FAX by Polling. ÆE Refer to Host(FAXCont). | 0~1 | 0: OFF | Read/Write | 0: OFF, 1: Forced Polling |
| 820-024 | Broadcast/Multi-Poll Report Instruction Dis- able | 0~1 | 0: Permit | Read/Write | 0: Permit, 1: Prohibit |
| 820-025 | 90 Degree Rotation Storing at FAX Scan | 0~1 | 1: 90 Degree Rota- tion Storing ON | Read/Write | 0: 90 Degree Rotation Storing OFF, 1: 90 Degree Rotation Storing ON |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 820-026 | Scan Illegal Operation (Operation when there was no specific Timing when an error occurs in storing) | 0~1 | 1: Enable stored documents (Default value before PL2 was 0) | Read/Write | 0: Discard stored documents, 1: Enable stored documents |
| 820-027 | Scan resolution in "G3 Auto" or "International Communication" | 0~2 | 2=Fine (600/400) is Inch series, and others are millimeter series | Read/Write | 0 : Select the resolution for millimeter series 1: Select the resolution for inch series 2: Fine (600/400) is for inch series and others for millimeter series |
| 820-028 | Letter/Legal Scan Instruction (Specify whether to reduce Letter/Legal to A4 to scan) | 0~1 | 0: 100\% | Read/Write | 0: 100\%, 1: Reduce to A4 |
| 820-030 | $0=$ Preparing for use. Checking whether the machine can switch to Ready mode. 1= Can be used 255= Cannot be used | 0~255 | - | Read | 0: Preparing for use. Checking whether the machine can switch to Ready mode. 1: Can be used 255: Cannot be used |
| 820-031 | $0=$ Preparing for use. Checking whether the machine can switch to Ready mode. 2=G3 PSTN can be used $3=$ G3 ISDN can be used $4=$ G4 ISDN can be used $5=$ G3 can be used 255=Cannot be used | 0~255 | - | Read | 0: Preparing for use. Checking whether the machine can switch to Ready mode. 2: G3 PSTN can be used 3: G3 ISDN can be used 4: G4 ISDN can be used 5: G3 can be used 255: Cannot be used |
| 820-032 | 0= Preparing for use. Checking whether the machine can switch to Ready mode. $2=$ G3 PSTN can be used $3=$ G3 ISDN can be used $4=G 4$ ISDN can be used $5=G 3$ can be used 255=Cannot be used | 0~255 | - | Read | 0: Preparing for use. Checking whether the machine can switch to Ready mode. 2: G3 PSTN can be used 3: G3 ISDN can be used 4: G4 ISDN can be used 5: G3 can be used 255: Cannot be used |
| 820-033 | $0=$ Preparing for use. Checking whether the machine can switch to Ready mode. $2=$ G3 PSTN can be used $3=$ G3 ISDN can be used $4=$ G4 ISDN can be used $5=$ G3 can be used $255=$ Cannot be used | 0~255 | - | Read | 0: Preparing for use. Checking whether the machine can switch to Ready mode. 2: G3 PSTN can be used 3: G3 ISDN can be used 4: G4 ISDN can be used 5: G3 can be used 255: Cannot be used |
| 820-034 | $0=$ Preparing for use. Checking whether the machine can switch to Ready mode. 2=G3 PSTN can be used 3=G3 ISDN can be used $4=$ G4 ISDN can be used $5=$ G3 can be used 255=Cannot be used | 0~255 | - | Read | 0: Preparing for use. Checking whether the machine can switch to Ready mode. 2: G3 PSTN can be used 3: G3 ISDN can be used 4: G4 ISDN can be used 5: G3 can be used 255: Cannot be used |
| 820-035 | $0=$ Preparing for use. Checking whether the machine can switch to Ready mode. 2=G3 PSTN can be used $3=$ G3 ISDN can be used $4=$ G4 ISDN can be used $5=$ G3 can be used 255=Cannot be used | 0~255 | - | Read | 0: Preparing for use. Checking whether the machine can switch to Ready mode. 2: G3 PSTN can be used 3: G3 ISDN can be used 4: G4 ISDN can be used 5: G3 can be used 255: Cannot be used |
| 820-036 | $0=$ Preparing for use. Checking whether the machine can switch to Ready mode. 2=G3 PSTN can be used $3=$ G3 ISDN can be used $4=$ G4 ISDN can be used $5=$ G3 can be used 255=Cannot be used | 0~255 | - | Read | 0: Preparing for use. Checking whether the machine can switch to Ready mode. 2: G3 PSTN can be used 3: G3 ISDN can be used 4: G4 ISDN can be used 5: G3 can be used 255: Cannot be used |
| 820-037 | Maximum No. of Storage | ~999 | 999 sheets | Read/Write | 1~999 sheets |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 820-038 | Auto Fax Report Output Tray Selection | 0~3 | 0: Center Tray | Read/Write | 0: Center Tray, 1: Side Tray 2: Finisher Tray, *Options that are not installed cannot be selected |
| 820-039 | User-Select Fax Report Output Tray Selection | 0~3 | 0: Center Tray | Read/Write | 0: Center Tray, 1: Side Tray, 2: Finisher Tray, 3: Center Tray2, *Options that are not installed cannot be selected |
| 820-040 | Mailbox Document Attribute Delivery Prior-ity-0 (Highest) | 0~4 | 0: F code | Read/Write | 0: F code, 1: Caller ID, 2: Remote ID, 3: Remote Name, 4: Dialin Number |
| 820-041 | Mailbox Document Attribute Delivery Prior-ity- 1 | 0~4 | 1: Caller ID | Read/Write | 0: F code, 1: Caller ID, 2: Remote ID, 3: Remote Name, 4: Dialin Number |
| 820-042 | Mailbox Document Attribute Delivery Prior-ity-2 | 0~4 | 2: Remote ID | Read/Write | 0: F code, 1: Caller ID, 2: Remote ID, 3: Remote Name, 4: Dialin Number |
| 820-043 | Mailbox Document Attribute Delivery Prior-ity-3 | 0~4 | 3: Remote Name | Read/Write | 0: F code, 1: Caller ID, 2: Remote ID, 3: Remote Name, 4: Dialin Number |
| 820-044 | Mailbox Document Attribute Delivery Prior-ity-4 (Lowest) | 0~4 | 4: Dial-in Number | Read/Write | 0: F code, 1: Caller ID, 2: Remote ID, 3: Remote Name, 4: Dialin Number |
| 820-045 | Fax Scan Edge Erase Margin Specification - Top/Bottom Edge Erase Margin | 0~50 | 0mm | Read/Write | 0~50 Unit: mm |
| 820-046 | Fax Scan Edge Erase Margin Specification - Left/Right Edge Erase Margin | 0~50 | 0mm | Read/Write | 0~50 Unit: mm |
| 820-047 | FAX Manual Send Menu Display Settings | 0~1 | 1: Display | Read/Write | 0: No display 1: Display |
| 820-048 | Sender Records for I-FAX Off Ramp (Sender Records for iFAX to FAX) | 0~1 | 1: Yes | Read/Write | 0 : No, 1: Yes |
| 820-052 | Immediate Send Shift Memory Threshold | 0~99 | No HDD=20\% HDD=0\% (Do not do Immediate Send) | Read/Write | 0~99\% Step 1\%. |
| 820-053 | Immediate Send Scan Memory Threshold | 0~100 | $\begin{aligned} & \text { No HDD=5\% } \\ & \text { HDD=0\% } \end{aligned}$ | Read/Write | 0~100\% Step 1\%. |
| 820-054 | Immediate Receive Shift Memory Threshold | 0~99 | $\begin{aligned} & \text { No HDD=20\% } \\ & \text { HDD=0\% (Do not do } \\ & \text { Immediate Receive) } \end{aligned}$ | Read/Write | 0~99\% Step 1\%. |
| 820-056 | Print Received Fax Paper Tray Map 1 | 0~500 | 0: OFF | Read/Write | Mailbox Number for Tray 1 |
| 820-057 | Print Received Fax Paper Tray Map 2 | 0~500 | 0: OFF | Read/Write | Mailbox Number for Tray 2 |
| 820-058 | Print Received Fax Paper Tray Map 3 | 0~500 | 0: OFF | Read/Write | Mailbox Number for Tray 3 |
| 820-059 | Print Received Fax Paper Tray Map 4 | 0~500 | 0: OFF | Read/Write | Mailbox Number for Tray 4 |
| 820-120 | Upper Limit for Image Data Amount Allowed in 1 Transmission | 0~255 | :0 (No limit) | Read/Write | 0~255, 0=No limit. Unit: 0.1 Mbyte |
| 820-122 | FAX PL2 DADF Document Scan Mode | 1, 2 | 1: Non-standard Scan | Read/Write | 1: Non-standard Scan, 2: Standard Scan |
| 820-123 | Blank Document Detection Feature | 0, 1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 820-125 | DIS Transmission Bit Disable Settings | 0, 1 | 0: Do not disable | Read/Write | 0: Do not disable <br> 1: Disable |
| 820-126 | Blank Document Detection Reference Value | 0~65535 | 34729 | Read/Write | 34729~52094 |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 820-127 | Blank Data Estimation Correction Coefficient | 0~65535 | 1000 | Read/Write | 1000~1500 |
| 820-128 | Blank Detection Threshold Correction Coefficient | 0~65535 | 250 | Read/Write | 0~500 |
| 820-129 | Resend Unsent Documents | 0, 1 | 0: OFF | Read/Write | $\begin{aligned} & \text { 0: OFF } \\ & \text { 1: ON } \end{aligned}$ |
| 820-130 | Delete Unsent Documents | 0, 1 | 1: Auto delete after 24 hours have passed | Read/Write | 0: Do not auto delete <br> 1: Auto delete after 24 hours have passed |
| 820-131 | Resend Unsent Documents from Job Cancellation | 0, 1 | 0: OFF | Read/Write | $\begin{aligned} & \text { 0: OFF } \\ & 1: \text { ON } \end{aligned}$ |
| 820-132 | Official Stamp Capability (XIPS) Availability | 0, 1 | 0: OFF | Read/Write | $\begin{aligned} & \text { 0: OFF } \\ & 1: \text { ON } \end{aligned}$ |
| 823-001 | Receive Mode Setting | 0~1 | 0: Auto Receive | Read/Write | 0: Auto Receive (Auto Answer Incoming), 1: Manual Receive (No Auto Answer Incoming) |
| 823-002 | DM (Direct Mail) Prevention Function (Only faxes from a registered in the Speed Dial is received) | 0~1 | 0: Do not prevent | Read/Write | 0: Do not prevent, 1: Prevent, 1=Prevent |
| 823-006 | Receive header (CIL) in G4 Receive | 0~1 | 0: No | Read/Write | 0: No, 1: Yes |
| 823-007 | Send Header at Polling (except forced polling). | 0~1 | 1: Yes | Read/Write | 0: No, 1: Yes |
| 823-011 | The maximum user data field length of the data packet used in the Packet Size (Send) G4 Communication/Network Layer. For Ch0 | 0x07~0x0b | 2048bytes | Read/Write | Send Packet Size $0 \times 07: 128$ $0 \times 08: 256$ $0 \times 09: 512$ $0 \times 0 a: 1024$ 0x0b: 2048 |
| 823-012 | Enable/Disable Setting of the Symmetry process to the box that used the service | 0~1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 823-013 | Enable/Disable Setting of the Symmetry process to the box by receive line | 0~1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 823-014 | Telephone Number Box Symmetry priority | 0~1 | Dial-in no. at highest priority | Read/Write | 0: Dial-in no. at highest priority, 1: Dial-out tel. No. at highest priority |
| 823-015 | Line Monitor Settings. You can monitor the dial tone and the other party's response using the speaker from the start of auto dialing until the other party pick up the call. | 0~1 | 1: Line Monitor ON | Read/Write | 0: Line Monitor OFF, 1: Line Monitor ON |
| 823-016 | No. of Redials. The No. of Auto-Dials when there is no response due to line busy etc. after the first Auto-Dial. | 0~9 | 5: 5 times | Read/Write | $0 \sim 9$ times (0: No Redial), step: 1 time |
| 823-017 | Redial Interval | 0~15 | 1: 1 min | Read/Write | $0 \mathrm{~min}(0) \sim 15 \mathrm{~min}(0 \times 0 \mathrm{~F})$, step=1 min |
| 823-018 | Communication Interval (Time between Line opening and automated closing) | 3~255 | $8 \mathrm{sec}(8)$ | Read/Write | 3 second (3) ~ 255 second (0xFF), step=1 second |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 823-019 | Receive Print/Page Composition (2up) | 0~1 | 0: Page Composition OFF | Read/Write | 0: Page Composition OFF, 1: Page Composition ON |
| 823-020 | Page Segmentation Threshold | 0x00~0x7F | 16mm (0x10) | Read/Write | Omm (0) ~127mm (0x7F), step=1mm |
| 823-021 | Auto Reduction Mode (Auto Reduction Receive: If the Receive Information has exceeded the length of paper used for recording but within the threshold limit, you can use variable zoom to reduce the information to fit into a sheet of paper.) | 0~1 | 1: Auto Reduction | Read/Write | 0: Print at 100\%, 1: Auto Reduce |
| 823-022 | Batch Send. If Send reservation for the same address is available after the last page is sent, the Send transmission will continue without disconnecting. | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 823-023 | Sending from LOCAL I.D | 0~1 | 1: ON | Read/Write | 0: Disable, 1: Enable |
| 823-024 | ISDN Local ID Send Setting for Ch0 | 0~1 | 0 : Do not send | Read/Write | 0: Do not send, 1: Send |
| 823-025 | ISDN Local ID Send Setting for Ch1 | 0~1 | 0 : Do not send | Read/Write | 0 : Do not send, 1: Send |
| 823-026 | ISDN Local ID Send Setting for Ch2 | 0~1 | 0 : Do not send | Read/Write | 0 : Do not send, 1: Send |
| 823-027 | ISDN Local ID Send Setting for Ch3 | 0~1 | 0 : Do not send | Read/Write | 0 : Do not send, 1: Send |
| 823-028 | ISDN Local ID Send Setting for Ch4 | 0~1 | 0 : Do not send | Read/Write | 0 : Do not send, 1: Send |
| 823-029 | ISDN Local ID Send Setting for Ch5 | 0~1 | 0 : Do not send | Read/Write | 0 : Do not send, 1: Send |
| 823-030 | Dial Type For Ch0 | 0~2 | 0 | Read/Write | 0: PB (DTMF), 1: DP (10 PPS), 2: DP (20 PPS) |
| 823-031 | Dial Type For Ch1 | 0~2 | 0 | Read/Write | 0: PB (DTMF), 1: DP (10 PPS), 2: DP (20 PPS) |
| 823-032 | Dial Type For Ch2 | 0~2 | 0 | Read/Write | 0: PB (DTMF), 1: DP (10 PPS), 2: DP (20 PPS) |
| 823-033 | Dial Type For Ch3 | 0~2 | 0 | Read/Write | 0: PB (DTMF), 1: DP (10 PPS), 2: DP (20 PPS) |
| 823-034 | [NVM Name] Dial Type For Ch4 | 0~2 | 0 | Read/Write | 0 = PB (DTMF), 1 = DP (10 PPS), 2 = DP (20 PPS) |
| 823-035 | Dial Type For Ch5 | 0~2 | 0 | Read/Write | 0: PB (DTMF), 1: DP (10 PPS), 2: DP (20 PPS) |
| 823-036 | Line Type For Ch0 | 0~1 | 1 | Read/Write | 0: PSTN (Public Telephone Network), 1: PBX (Private Branch Exchange) |
| 823-037 | Line Type For Ch1 | 0~1 | 0 | Read/Write | 0: PSTN (Public Telephone Network), 1: PBX (Private Branch Exchange) |
| 823-038 | Line Type For Ch2 | 0~1 | 0 | Read/Write | 0: PSTN (Public Telephone Network), 1: PBX (Private Branch Exchange) |
| 823-039 | Line Type For Ch3 | 0~1 | 0 | Read/Write | 0: PSTN (Public Telephone Network), 1: PBX (Private Branch Exchange) |
| 823-040 | Line Type For Ch4 | 0~1 | 0 | Read/Write | 0: PSTN (Public Telephone Network), 1: PBX (Private Branch Exchange) |
| 823-041 | Line Type For Ch5 | 0~1 | 0 | Read/Write | 0: PSTN (Public Telephone Network), 1: PBX (Private Branch Exchange) |
| 823-042 | Set the service (for which contract is made) in Ch0. | - | 0: Normal line | Read/Write | Assign the service in Bits and display the service (for which the contract is made) in that disjunction. <br> MSB LSB <br> xxxx xxx1: Local ID Notification Service Line <br> xxxx xx1x: Modem Dial-In Service Line |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 823-043 | Set the service (for which contract is made) in Ch1 | - | 0: Normal line | Read/Write | Assign the service in Bits and display the service (for which the contract is made) in that disjunction. <br> MSB LSB <br> xxxx xxx1: Local ID Notification Service Line <br> xxxx xx1x: Modem Dial-In Service Line |
| 823-044 | Set the service (for which contract is made) in Ch 2 | - | 0: Normal line | Read/Write | Assign the service in Bits and display the service (for which the contract is made) in that disjunction. <br> MSB LSB <br> xxxx xxx1: Local ID Notification Service Line <br> xxxx xx1x: Modem Dial-In Service Line |
| 823-045 | Set the service (for which contract is made) in Ch 3 | - | 0: Normal line | Read/Write | Assign the service in Bits and display the service (for which the contract is made) in that disjunction. <br> MSB LSB <br> xxxx xxx1: Local ID Notification Service Line <br> xxxx xx1x: Modem Dial-In Service Line |
| 823-046 | Set the service (for which contract is made) in Ch 4 | - | 0: Normal line | Read/Write | Assign the service in Bits and display the service (for which the contract is made) in that disjunction. <br> MSB LSB <br> xxxx xxx1: Local ID Notification Service Line <br> xxxx xx1x: Modem Dial-In Service Line |
| 823-047 | Set the service (for which contract is made) in Ch 5 | - | 0: Normal line | Read/Write | Assign the service in Bits and display the service (for which the contract is made) in that disjunction. <br> MSB LSB <br> xxxx xxx1: Local ID Notification Service Line <br> xxxx xx1x: Modem Dial-In Service Line |
| 823-049 | G3 ISDN Transmission Capability Setting | 0~1 | 0: 3.1K Audio | Read/Write | 0:3.1K Audio, 1: Speech |
| 823-050 | Calling frequency for Fax use (Ring Detect) | 0~9 | 0: 0 times | Read/Write | 0~9 (times) |
| 823-051 | Reception Paper Declaration Mode Selection (The Receiving Station performs the Receive Ability (Size) with respect to the Sending Station. With this, the user at receiving side can limit or select the Send document size from the Sender) | 0~1 | 0: Tray Selection | Read/Write | 0: Tray Selection, 1: User Selection |
| 823-052 | Selection of Log Paper in User declaration mode | - | All papers available | Read/Write | 1st byte bit 1: A3SEF, bit 2: A4SEF, bit 5: B4SEF, 2nd byte bit 0: LetterSEF, 3rd byte bit 2: A4LEF, bit 3: A5LEF, bit 6: B5LEF, bit $=0$ : No paper bit=1: Paper detected. |
| 825-001 | 1300HZ Incoming Receive ON/OFF Setting | 0~1 | 1=ON (Receive) | Read/Write | 0: OFF (Reject), 1: ON (Receive) |
| 825-002 | Registers Power Cutoff/Reboot (including emergency) in Activity Report. | 0~1 | 0 : Do not register | Read/Write | 0: Do not register, 1: Register |
| 825-009 | Pause Time. Pause Symbol Wait Time. | 0~12 | 60 (3sec) | Read/Write | $\begin{aligned} & \text { Osec (0) ~ 12sec (240) } \\ & \text { step=50msec } \end{aligned}$ |
| 825-017 | Line Cutoff Detection for Ch0 | 0~1 | 1: Detect disconnection | Read/Write | 0: Do not detect disconnection, 1: Detect disconnection |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-018 | Line Cutoff detection For Ch1 | 0~1 | 1: Detect disconnec- tion | Read/Write | 0: Do not detect disconnection, 1: Detect disconnection |
| 825-019 | Line Cutoff detection For Ch2 | 0~1 | 1: Detect disconnection | Read/Write | 0: Do not detect disconnection, 1: Detect disconnection |
| 825-020 | Line Cutoff detection For Ch3 | 0~1 | 1: Detect disconnection | Read/Write | 0: Do not detect disconnection, 1: Detect disconnection |
| 825-021 | Line Cutoff detection For Ch4 | 0~1 | 1: Detect disconnection | Read/Write | 0: Do not detect disconnection, 1: Detect disconnection |
| 825-022 | Line Cutoff detection For Ch5 | 0~1 | 1: Detect disconnection | Read/Write | 0: Do not detect disconnection, 1: Detect disconnection |
| 825-024 | To determine fallback redial from G4 to G3 when CAUSE \#42 and \#65 were received in ISDN communication. | 0~1 | 0 = Fallback Redial OFF | Read/Write | 0 = Fallback Redial OFF, 1 = Fallback Redial ON |
| 825-025 | Process to determine continuity in the Transmitter when RTN was received. This is meant for ZZF. | 0~1 | 0: Continue | Read/Write | 0: Determine the fallback from the TCF check result and continue sending. 1: Stop transmission. (The document becomes eligible for resend) |
| 825-033 | Timing of tone detection before dialing (PBX). The time required to detect the Tone before dialing. For PBX. | 0~255 | 4 | Read/Write | 0 ~ 255 (Sec) |
| 825-046 | PB Send Level Ch0 | 0~15 | 6 | Read/Write | 0: $0 \mathrm{dBm}(0) \sim-15: 15 \mathrm{dBm}$ step: -1dBm |
| 825-047 | PB Send Level Ch1 | 0~15 | 6 | Read/Write | 0: 0dBm (0) ~-15: 15dBm step: -1dBm |
| 825-048 | PB Send Level Ch2 | 0~15 | 6 | Read/Write | 0: 0dBm (0) ~-15: 15dBm step: -1dBm |
| 825-049 | PB Send Level Ch3 | 0~15 | 6 | Read/Write | 0: 0dBm (0) ~-15: 15dBm step: -1dBm |
| 825-050 | PB Send Level Ch4 | 0~15 | 6 | Read/Write | 0: $0 \mathrm{dBm}(0) \sim-15: 15 \mathrm{dBm}$ step: -1dBm |
| 825-051 | PB Send Level Ch5 | 0~15 | 6 | Read/Write | 0: 0dBm (0) ~-15: 15dBm step: -1dBm |
| 825-052 | PB Send Level (high-pass - low-pass (dB)) For Ch0 | 0~15 | 0 | Read/Write | $\begin{array}{\|l\|} \hline \text { High-pass - Low-pass (dB) 0: 2.0, 1: } \\ \text { 2.52:3.0A3:3.5A4:4.0A5:4.5A6:5.0A7:5.5A8:-2.0A9:-1.5A10:- } \\ \text { 1.0A11:-0.5A12:0 13:0.5A14:1.0A15:1.5 } \end{array}$ |
| 825-053 | PB Send Level (high-pass - low-pass (dB)) For Ch1 | 0~15 | 0 | Read/Write | High-pass - Low-pass (dB) 0: 2.0, 1 : 2.52:3.0A3:3.5A4:4.0A5:4.5A6:5.0A7:5.5A8:-2.0A9:-1.5A10:-1.0A11:-0.5A12:0 13:0.5A14:1.0A15:1.5 |
| 825-054 | PB Send Level (high-pass - low-pass (dB)) For Ch2 | 0~15 | 0 | Read/Write | High-pass - Low-pass (dB) 0: 2.0, 1: 2.52:3.0A3:3.5A4:4.0A5:4.5A6:5.0A7:5.5A8:-2.0A9:-1.5A10:- 1.0A11:-0.5A12:0 13:0.5A14:1.0A15:1.5 |
| 825-055 | PB Send Level (high-pass - low-pass (dB)) For Ch3 | 0~15 | 0 | Read/Write | $\begin{array}{\|l\|} \hline \text { High-pass - Low-pass (dB) 0: 2.0, 1: } \\ \text { 2.52:3.0A3:3.5A4:4.0A5:4.5A6:5.0A7:5.5A8:-2.0A9:-1.5A10:- } \\ \text { 1.0A11:-0.5A12:0 13:0.5A14:1.0A15:1.5 } \end{array}$ |
| 825-056 | PB Send Level (high-pass - low-pass (dB)) For Ch4 | 0~15 | 0 | Read/Write | High-pass - Low-pass (dB) 0: 2.0, 1 : 2.52:3.0A3:3.5A4:4.0A5:4.5A6:5.0A7:5.5A8:-2.0A9:-1.5A10:-1.0A11:-0.5A12:0 13:0.5A14:1.0A15:1.5 |
| 825-057 | PB Send Level (high-pass - low-pass (dB)) For Ch5 | 0~15 | 0 | Read/Write | High-pass - Low-pass (dB) 0: 2.0,1: 2.52:3.0A3:3.5A4:4.0A5:4.5A6:5.0A7:5.5A8:-2.0A9:-1.5A10:- 1.0A11:-0.5A12:0 13:0.5A14:1.0A15:1.5 |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-058 | Busy Tone detection before dialing For Ch0 | 0~1 | 0: Do not detect Busy Tone | Read/Write | 0: Do not detect Busy Tone, 1: Detect Busy Tone |
| 825-059 | Busy Tone detection before dialing For Ch1 | 0~1 | 0: Do not detect Busy Tone | Read/Write | 0: Do not detect Busy Tone, 1: Detect Busy Tone |
| 825-060 | Busy Tone detection before dialing For Ch2 | 0~1 | 0: Do not detect Busy Tone | Read/Write | 0: Do not detect Busy Tone, 1: Detect Busy Tone |
| 825-061 | Busy Tone detection before dialing For Ch3 | 0~1 | 0: Do not detect Busy Tone | Read/Write | 0: Do not detect Busy Tone, 1: Detect Busy Tone |
| 825-062 | Busy Tone detection before dialing For Ch4 | 0~1 | 0: Do not detect Busy Tone | Read/Write | 0: Do not detect Busy Tone, 1: Detect Busy Tone |
| 825-063 | Busy Tone detection before dialing For Ch5 | 0~1 | 0: Do not detect Busy Tone | Read/Write | 0: Do not detect Busy Tone, 1: Detect Busy Tone |
| 825-064 | Dial Tone detection before dialing For Ch0 | 0~1 | 0 : Do not detect dial tone | Read/Write | 0: Do not detect dial tone, 1: Detect dial tone |
| 825-065 | Dial Tone detection before dialing For Ch1 | 0~1 | 0 : Do not detect dial tone | Read/Write | 0: Do not detect dial tone, 1: Detect dial tone |
| 825-066 | Dial Tone detection before dialing For Ch2 | 0~1 | 0 : Do not detect dial tone | Read/Write | 0: Do not detect dial tone, 1: Detect dial tone |
| 825-067 | Dial Tone detection before dialing For Ch3 | 0~1 | 0: Do not detect dial tone | Read/Write | 0: Do not detect dial tone, 1: Detect dial tone |
| 825-068 | Dial Tone detection before dialing For Ch4 | 0~1 | 0 : Do not detect dial tone | Read/Write | 0: Do not detect dial tone, 1: Detect dial tone |
| 825-069 | Dial Tone detection before dialing For Ch5 | 0~1 | 0 : Do not detect dial tone | Read/Write | 0: Do not detect dial tone, 1: Detect dial tone |
| 825-070 | Dial Tone detection before dialing (PBX) | 0~1 | 0 : Do not detect dial tone | Read/Write | 0: Do not detect dial tone, 1: Detect dial tone |
| 825-071 | Timing of tone detection before dialing for Ch0 | 0~255 | 4 | Read/Write | 0~255 (Sec) |
| 825-072 | Timing of tone detection before dialing For Ch1 | 0~255 | 10 | Read/Write | 0~255 (sec) |
| 825-073 | Timing of tone detection before dialing For Ch2 | 0~255 | 10 | Read/Write | 0~255 (sec) |
| 825-074 | Timing of tone detection before dialing For Ch3 | 0~255 | 10 | Read/Write | 0~255 (sec) |
| 825-075 | Timing of tone detection before dialing For Ch4 | 0~255 | 10 | Read/Write | 0~255 (sec) |
| 825-076 | Timing of tone detection before dialing For Ch5 | 0~255 | 10 | Read/Write | 0~255 (sec) |
| 825-077 | Call Restriction For Ch0 | 0~1 | 0: Outgoing/Incoming Call | Read/Write | 0: Outgoing/Incoming Call, 1: Outgoing Call only |
| 825-078 | Call Restriction for Ch1 | 0~1 | 0: Outgoing/Incoming Call | Read/Write | 0: Outgoing/Incoming Call, 1: Outgoing Call only |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-079 | Call Restriction for Ch2 | 0~1 | 0: Outgoing/Incoming Call | Read/Write | 0: Outgoing/Incoming Call, 1: Outgoing Call only |
| 825-080 | Call Restriction for Ch3 | 0~1 | 0: Outgoing/Incoming Call | Read/Write | 0: Outgoing/Incoming Call, 1: Outgoing Call only |
| 825-081 | Call Restriction for Ch4 | 0~1 | 0: Outgoing/Incoming Call | Read/Write | 0: Outgoing/Incoming Call, 1: Outgoing Call only |
| 825-082 | Call Restriction for Ch5 | 0~1 | 0: Outgoing/Incoming Call | Read/Write | 0: Outgoing/Incoming Call, 1: Outgoing Call only |
| 825-103 | RX Gain in G3 Communication Mode | 0~15 | 6 (-6dB) | Read/Write | 0~-15dB |
| 825-104 | TX Gain in ISDN G3 Communication Mode | 0~15 | 0 | Read/Write | 0~-15dB |
| 825-115 | PB Pause Time. PB (DTMF) Dial Inter-digit Pause Time. | 0~255 | 102 | Read/Write | 0~255 (ms) |
| 825-127 | Attenuates analog transmission to attenuated Transmission Analog Output by modem for Channel 0. | 8~15 | 8: 8dBm | Read/Write | 8: 8dBm~15: 15 dBm , step: -1 dBm |
| 825-128 | Attenuates analog transmission to attenuated Transmission Analog Output by modem for Channel 1. | 8~15 | 8: 8dBm | Read/Write | 8: 8dBm~15: 15 dBm , step: -1 dBm |
| 825-129 | Attenuates analog transmission to attenuated Transmission Analog Output by modem for Channel 2. | 8~15 | 8: 8dBm | Read/Write | 8: 8dBm~15: 15 dBm , step: -1 dBm |
| 825-130 | Attenuates analog transmission to attenuated Transmission Analog Output by modem for Channel 3. | 8~15 | 15: 15 dBm | Read/Write | 8: 8dBm~15: 15dBm, step: -1dBm |
| 825-131 | Attenuates analog transmission to attenuated Transmission Analog Output by modem for Channel 4. | 8~15 | 8: 8dBm | Read/Write | 8: 8dBm~15: 15 dBm , step: -1 dBm |
| 825-132 | Attenuates analog transmission to attenuated Transmission Analog Output by modem for Channel 5. | 8~15 | 15: 15dBm | Read/Write | 8: $8 \mathrm{dBm} \sim 15: 15 \mathrm{dBm}$, step: -1 dBm |
| 825-133 | Busy Tone detection (On/Off) setting | 0~1 | 1: Detect Busy Tone | Read/Write | 0: Do not detect Busy Tone, 1: Detect Busy Tone |
| 825-134 | Dial Tone detection (On/Off) setting | 0~1 | 0 : Do not detect dial tone | Read/Write | 0 : Do not detect dial tone, 1: Detect dial tone |
| 825-158 | No. of sheets transmitted in the transmission result report (Cannot be changed because of ROM data) | 0~1 | 0 | Read/Write | 0: Total No. of sheets for resending in the same transmission 1: Total No. of sheets for each connection |
| 825-159 | ECM Capability (Auto Error Resending feature): A feature that starts resending automatically when an error that occurred during transmission has been repaired. | 0~1 | 1: Enable | Read/Write | 0: Disable, 1: Enable |
| 825-160 | Time before the CNG Signal starts to be sent. Time that has elapsed after dialing has completed and when the initial CNG signal starts to be sent | 20~140 | 60: 3000 ms | Read/Write | 20: 1 second 140: 7 seconds, 1:50msec |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-161 | CED Send Frequency: CED signal frequency. | 0~1 | 1:2100Hz | Read/Write | 0: $1080 \mathrm{~Hz}, 1: 2100 \mathrm{~Hz}$ |
| 825-162 | T1 Timer Value at Receive mode | 1~90 | 39sec | Read/Write | 1~90 (sec) |
| 825-163 | Timer Value of no tone timing recommended in T. 30 | 0~1 | 0: 75msec | Read/Write | 0: 75msec, 1sec |
| 825-164 | FSK detection before image information is received (To be referred to at Non-ECM) | 0~1 | 1: Detect | Read/Write | 0: Do not detect, 1: Detect |
| 825-165 | FSK detection before image information is received | 0~1 | 0: Do not detect | Read/Write | 0: Do not detect, 1: Detect |
| 825-166 | G3M CSI Send CSI: Notification signal to the Sender of the ID Code registered at the Receiver. | 0~1 | 0: Transmit | Read/Write | 0: Transmit, 1: OFF |
| 825-168 | Sending of Local Name | 0~1 | 1: ON | Read/Write | 0: OFF, 1: ON |
| 825-169 | To determine resending of the Local Name | 0~1 | 0: Do not resend | Read/Write | 0: Do not resend, 1: Resend |
| 825-170 | ECM Frame Size (The frame is configured from the pixels which are divided into 8 bits for every 1 mm ) | 0~1 | 0: 256bytes | Read/Write | 0: 256 bytes, 1:64 bytes |
| 825-171 | G3M ECM T5 Timer (2 channel common) Timer to the RNR Signal sent out when memory overflow etc. occurs at the Receiver, or when continuous receiving is not possible. | 0~2 | 0: 1 (min) | Read/Write | 0: 1 (min), 1:3 (min), 2: No limit |
| 825-173 | Send Reference of RTN Command (Proportion) RTN: The message is not received properly, indicating that Training is necessary. | 0~3 | 0:5\% | Read/Write | 0: $5 \%, 1: 10 \%, 2: 15 \%, 3: 20 \%$ |
| 825-174 | Send Reference of RTN Command (No. of Continuous Lines) | 0~3 | 2: 6line, | Read/Write | 0: No limit, 1: 3line, 2: 6line, 3: 12line |
| 825-175 | No. of bytes of the DIS/DTC FIF Sending (DTC: Send command in response to DIS) | 0~1 | 0: No limit | Read/Write | 0: No limit, 1: 4bytes System |
| 825-176 | ECM Capability (Auto Error Resending feature): A feature to start resending when an error has been repaired during transmission. (For International communication) | 0~1 | 1: Enable | Read/Write | 0: Disable, 1: Enable |
| 825-177 | CCITT Trellis Capability On/Off and types | 0~2 | 2: V. 17 or later | Read/Write | 0: V. 27 or later, 1: V. 29 or later, 2: V. 17 or later |
| 825-178 | CCITT Trellis Capability On/Off and types (Used in International Communication) | 0~2 | 2: V. 17 or later | Read/Write | 0: V. 27 or later, 1: V. 29 or later, 2: V. 17 or later |
| 825-179 | Ch0 ECM Block Synchronize | 0~2 | 0: 200ms | Read/Write | 0: $200 \mathrm{~ms}, 1: 500 \mathrm{~ms}, 2: 1 \mathrm{sec}$ |
| 825-180 | ECM Block Synchronize for Ch1 | 0~2 | 0: 200ms | Read/Write | 0: $200 \mathrm{~ms}, 1: 500 \mathrm{~ms}, 2: 1 \mathrm{sec}$, |
| 825-181 | ECM Block Synchronize for Ch2 | 0~2 | 0: 200ms | Read/Write | 0: $200 \mathrm{~ms}, 1: 500 \mathrm{~ms}, 2: 1 \mathrm{sec}$, |
| 825-182 | ECM Block Synchronize for Ch3 | 0~2 | 0: 200ms | Read/Write | 0: $200 \mathrm{~ms}, 1: 500 \mathrm{~ms}, 2: 1 \mathrm{sec}$, |
| 825-183 | ECM Block Synchronize for Ch4 | 0~2 | 0: 200ms | Read/Write | 0: $200 \mathrm{~ms}, 1: 500 \mathrm{~ms}, 2: 1 \mathrm{sec}$ |
| 825-184 | ECM Block Synchronize for Ch5 | 0~2 | 0: 200ms | Read/Write | 0: $200 \mathrm{~ms}, 1: 500 \mathrm{~ms}, 2: 1 \mathrm{sec}$, |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-185 | Ch0 ECM CTC Number | 0~7 | 5 | Read/Write | 0: 000 ~ 7: 111 |
| 825-186 | ECM CTC Number for Ch1 | 0~7 | 5 | Read/Write | 0:000 ~ 7: 111 |
| 825-187 | ECM CTC Number for Ch2 | 0~7 | 5 | Read/Write | 0:000 ~ 7: 111 |
| 825-188 | ECM CTC Number for Ch3 | 0~7 | 5 | Read/Write | 0:000 ~ 7: 111 |
| 825-189 | ECM CTC Number for Ch4 | 0~7 | 5 | Read/Write | 0:000 ~ 7: 111 |
| 825-190 | ECM CTC Number for Ch5 | 0~7 | 5 | Read/Write | 0: 000 ~ 7: 111 |
| 825-191 | Ch0 ECM CTC Speed Shift Down (CTC: Instructs to continue resending for the same block and to change the transmission speed where necessary, by the signal capable of transmission for every 3 times of resending) | 0~1 | 1: Shift Down | Read/Write | 0: Not, 1: Shift down |
| 825-192 | Ch1 ECM CTC Speed Shift Down (CTC: Instructs to continue resending for the same block and to change the transmission speed where necessary, by the signal capable of transmission for every 3 times of resending) | 0~1 | 1: Shift Down | Read/Write | 0: Not, 1: Shift down |
| 825-193 | Ch2 ECM CTC Speed Shift Down (CTC: Instructs to continue resending for the same block and to change the transmission speed where necessary, by the signal capable of transmission for every 3 times of resending) | 0~1 | 1: Shift Down | Read/Write | 0: Not, 1: Shift down |
| 825-194 | Ch3 ECM CTC Speed Shift Down (CTC: Instructs to continue resending for the same block and to change the transmission speed where necessary, by the signal capable of transmission for every 3 times of resending) | 0~1 | 1: Shift Down | Read/Write | 0: Not, 1: Shift down |
| 825-195 | Ch4 ECM CTC Speed Shift Down (CTC: Instructs to continue resending for the same block and to change the transmission speed where necessary, by the signal capable of transmission for every 3 times of resending) | 0~1 | 1: Shift Down | Read/Write | 0: Not, 1: Shift down |
| 825-196 | Ch5 ECM CTC Speed Shift Down (CTC: Instructs to continue resending for the same block and to change the transmission speed where necessary, by the signal capable of transmission for every 3 times of resending) | 0~1 | 1: Shift Down | Read/Write | 0: Not, 1: Shift down |
| 825-197 | G3 DIS ignore for Channel 0 (No. of DIS ignored) | 0~1 | 0: Ignore DIS | Read/Write | 0: Ignore DIS 1: Ignore DIS once |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-198 | G3 DIS ignore for Channel 1 (No. of DIS ignored) | 0~1 | 0: Ignore DIS | Read/Write | 0: Ignore DIS 1: Ignore DIS once |
| 825-199 | G3 DIS ignore for Channel 2 (No. of DIS ignored) | 0~1 | 0: Ignore DIS | Read/Write | 0: Ignore DIS 1: Ignore DIS once |
| 825-200 | G3 DIS ignore for Channel 3 (No. of DIS ignored) | 0~1 | 0: Ignore DIS | Read/Write | 0: Ignore DIS 1: Ignore DIS once |
| 825-201 | G3 DIS ignore for Channel 4 (No. of DIS ignored) | 0~1 | 0: Ignore DIS | Read/Write | 0: Ignore DIS 1: Ignore DIS once |
| 825-202 | G3 DIS ignore for Channel 5 (No. of DIS ignored) | 0~1 | 0: Ignore DIS | Read/Write | 0: Ignore DIS 1: Ignore DIS once |
| 825-203 | Channel 0 G3 ECM EOR_Q Command (EOR: Stops resending by the signal capable of transmission for every 3 times of resending) | 0~1 | 1: Continue | Read/Write | 0: Stop, 1: Continue |
| 825-209 | G3 Modem Mode for Ch0 | 0~1 | 1: Auto | Read/Write | 0: CCITT G3, 1: Auto |
| 825-210 | G3 Modem Mode For Ch1 | 0~1 | 1: Auto | Read/Write | 0: CCITT G3, 1: Auto |
| 825-211 | G3 Modem Mode For Ch 2 | 0~1 | 1: Auto | Read/Write | 0: CCITT G3, 1: Auto |
| 825-212 | G3 Modem Mode For Ch 3 | 0~1 | 1: Auto | Read/Write | 0: CCITT G3, 1: Auto |
| 825-213 | G3 Modem Mode For Ch 4 | 0~1 | 1: Auto | Read/Write | 0: CCITT G3, 1: Auto |
| 825-214 | G3 Modem Mode? For Ch 5 | 0~1 | 1: Auto | Read/Write | 0: CCITT G3, 1: Auto |
| 825-215 | G3 RX Modem Speed Receive Transmission Speed Capability (Capability except V.34.) for Channel 0 | 1~8 | 14400bps | Read/Write | 1.~ 8, $14400 \mathrm{bps} / \mathrm{V} .17=1000,12000 \mathrm{bps} / \mathrm{V} .17=0111,9600 \mathrm{bps} /$ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, 4800 bps/V.27=0010, 2400 bps/V.27=0001 |
| 825-216 | G3 RX Modem Speed Receive Transmission Speed Capability (Capability besides V.34.) for Channel 1 | 1~8 | 14400bps | Read/Write | 1.~ 8, 14400 bps/V.17=1000, 12000 bps/V.17=0111, 9600 bps/ V.17=0110, 7200 bps/V.17=0101, 9600 bps/V.29=0100, 7200 bps/V.29=0011, 4800 bps/V.27ter=0010, 2400 bps/V.27ter=0001 |
| 825-217 | G3 RX Modem Speed Receive Transmission Speed Capability (Capability besides V.34.) for Channel 2 | 1~8 | 14400bps | Read/Write | 1. ~ 8, $14400 \mathrm{bps} / \mathrm{V} .17=1000,12000 \mathrm{bps} / \mathrm{V} .17=0111,9600 \mathrm{bps} /$ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010,2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-218 | G3 RX Modem Speed Receive Transmission Speed Capability (Capability besides V.34.) for Channel 3 | 1~8 | 14400bps | Read/Write | 1.~ 8, 14400 bps/V.17=1000, 12000 bps/V.17=0111, 9600 bps/ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010$, $2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-219 | G3 RX Modem Speed Receive Transmission Speed Capability (Capability besides V.34.) for Channel 4 | 1~8 | 14400bps | Read/Write | 1.~ 8, 14400 bps/V.17=1000, 12000 bps/V.17=0111, 9600 bps/ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010$, $2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-220 | G3 RX Modem Speed Receive Transmission Speed Capability (Capability besides V.34.) for Channel 5 | 1~8 | 14400bps | Read/Write | 1. ~ 8, $14400 \mathrm{bps} / \mathrm{V} .17=1000,12000 \mathrm{bps} / \mathrm{V} .17=0111,9600 \mathrm{bps} /$ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, 4800 bps/V.27=0010, 2400 bps/V.27=0001 |
| 825-221 | G3 RX Modem Speed Receive Communication Speed Capability (V. 34 Capability) for Channel 0 | 1~8 | 33600bps | Read/Write | $\begin{aligned} & 1 \sim 14,33600 \mathrm{bps}=1110,31200 \mathrm{bps}=1101,28800 \mathrm{bps}=1100, \\ & 26400 \mathrm{bps}=1011,24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200 \\ & \mathrm{bps}=1000,16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101, \\ & 9600 \mathrm{bps}=0100,7200 \mathrm{bps}=0011,4800 \mathrm{bps}=0010,2400 \\ & \mathrm{bps}=0001 \end{aligned}$ |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-222 | G3 RX Modem Speed Receive Communication Speed Capability (V. 34 Capability) for Channel 1 | 1~8 | 33600bps | Read/Write | $1 \sim 14,33600$ bps=1110, 31200 bps=1101, 28800 bps=1100, 26400 bps=1011, 24000 bps=1010, 21600 bps=1001, 19200 bps=1000, 16800 bps=0111, 14400 bps=0110, 12000 bps=0101, $9600 \mathrm{bps}=0100,7200 \mathrm{bps}=0011,4800 \mathrm{bps}=0010,2400$ bps=0001 |
| 825-223 | G3 RX Modem Speed Receive Communication Speed Capability (V. 34 Capability) for Channel 2 | 1~8 | 33600bps | Read/Write | 1~14, 33600 bps=1110, 31200 bps=1101, 28800 bps=1100, 26400 bps=1011, 24000 bps=1010, 21600 bps=1001, 19200 bps=1000, 16800 bps=0111, 14400 bps=0110, 12000 bps=0101, 9600 bps=0100, 7200 bps=0011, 4800 bps=0010, 2400 bps=0001 |
| 825-224 | G3 RX Modem Speed Receive Communication Speed Capability (V. 34 Capability) for Channel 3 | 1~8 | 33600bps | Read/Write | $1 \sim 14,33600$ bps=1110, 31200 bps=1101, 28800 bps=1100, 26400 bps=1011, 24000 bps=1010, 21600 bps=1001, 19200 bps=1000, 16800 bps=0111, 14400 bps=0110, 12000 bps=0101, 9600 bps=0100, 7200 bps=0011, 4800 bps=0010, 2400 bps=0001 |
| 825-225 | G3 RX Modem Speed Receive Communication Speed Capability (V. 34 Capability) for Channel 4 | 1~8 | 33600bps | Read/Write | $1 \sim 14,33600$ bps=1110, 31200 bps=1101, 28800 bps=1100, 26400 bps=1011, 24000 bps=1010, 21600 bps=1001, 19200 bps=1000, 16800 bps=0111, 14400 bps=0110, 12000 bps=0101, 9600 bps=0100, 7200 bps=0011, 4800 bps=0010, 2400 bps=0001 |
| 825-226 | G3 RX Modem Speed Receive Communication Speed Capability (V. 34 Capability) for Channel 5 | 1~8 | 33600bps | Read/Write | $1 \sim 14,33600$ bps=1110, 31200 bps=1101, 28800 bps=1100, 26400 bps=1011, 24000 bps=1010, 21600 bps=1001, 19200 bps=1000, 16800 bps=0111, 14400 bps=0110, 12000 bps=0101, 9600 bps=0100, 7200 bps=0011, 4800 bps=0010, 2400 bps=0001 |
| 825-227 | Maximum G3 TX Modem Speed (Send) (Capability except V.34) for Channel 0 | 1~8 | 14400bps | Read/Write | 1.~ 8, 14400 bps/V.17=1000, 12000 bps/V.17=0111, 9600 bps/ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010$, $2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-228 | Maximum G3 TX Modem Speed (Send) (Capability except V.34) for Channel 1 | 1~8 | 14400bps | Read/Write | 1.~ 8, $14400 \mathrm{bps} / \mathrm{V} .17=1000,12000 \mathrm{bps} / \mathrm{V} .17=0111,9600 \mathrm{bps} /$ $\mathrm{V} .17=0110,7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, 4800 bps/V.27=0010, 2400 bps/V.27=0001 |
| 825-229 | Maximum G3 TX Modem Speed (Send) (Capability except V.34) for Channel 2 | 1~8 | 14400bps | Read/Write | 1.~ 8, 14400 bps/V.17=1000, 12000 bps/V.17=0111, 9600 bps/ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010$, $2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-230 | Maximum G3 TX Modem Speed (Send) (Capability except V.34) for Channel 3 | 1~8 | 14400bps | Read/Write | 1.~ 8, $14400 \mathrm{bps} / \mathrm{V} .17=1000,12000 \mathrm{bps} / \mathrm{V} .17=0111,9600 \mathrm{bps} /$ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010,2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-231 | Maximum G3 TX Modem Speed (Send) (Capability except V.34) for Channel 4 | 1~8 | 14400bps | Read/Write | 1.~ 8, 14400 bps/V.17=1000, 12000 bps/V.17=0111, $9600 \mathrm{bps} /$ $\mathrm{V} .17=0110,7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ $\mathrm{bps} / \mathrm{V} .29=0011,4800 \mathrm{bps} / \mathrm{V} .27=0010,2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-232 | Maximum G3 TX Modem Speed (Send) (Capability except V.34) for Channel 5 | 1~8 | 14400bps | Read/Write | 1.~ 8, $14400 \mathrm{bps} / \mathrm{V} .17=1000,12000 \mathrm{bps} / \mathrm{V} .17=0111,9600 \mathrm{bps} /$ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010,2400 \mathrm{bps} / \mathrm{V} .27=0001$ |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-233 | Maximum G3 TX Modem Speed (Send) (Capability except V.34.) for Channel 0 (To be referred to in overseas communication) | 1~8 | 4800bps | Read/Write | 1.~ 8, $14400 \mathrm{bps} / \mathrm{V} .17=1000,12000 \mathrm{bps} / \mathrm{V} .17=0111,9600 \mathrm{bps} /$ $\mathrm{V} .17=0110,7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010,2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-234 | Maximum G3 TX Modem Speed (Send) (Capability except V.34.) for Channel 1 (To be referred to in overseas communication) | 1~8 | 4800bps | Read/Write | 1.~ 8, 14400 bps/V.17=1000, 12000 bps/V.17=0111, 9600 bps/ V.17=0110, 7200 bps/V.17=0101, 9600 bps/V.29=0100, 7200 bps/V.29=0011, 4800 bps/V.27=0010, 2400 bps/V.27=0001 |
| 825-235 | Maximum G3 TX Modem Speed (Send) (Capability except V.34.) for Channel 2 (To be referred to in overseas communication) | 1~8 | 4800bps | Read/Write | 1.~ 8, 14400 bps/V.17=1000, 12000 bps/V.17=0111, 9600 bps/ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010$, $2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-236 | Maximum G3 TX Modem Speed (Send) (Capability except V.34.) for Channel 3 (To be referred to in overseas communication) | 1~8 | 4800bps | Read/Write | 1.~ 8, $14400 \mathrm{bps} / \mathrm{V} .17=1000,12000 \mathrm{bps} / \mathrm{V} .17=0111,9600 \mathrm{bps} /$ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, $4800 \mathrm{bps} / \mathrm{V} .27=0010$, $2400 \mathrm{bps} / \mathrm{V} .27=0001$ |
| 825-237 | Maximum G3 TX Modem Speed (Send) (Capability except V.34.) for Channel 4 (To be referred to in overseas communication) | 1~8 | 4800bps | Read/Write | 1.~ 8, 14400 bps/V.17=1000, 12000 bps/V.17=0111, 9600 bps/ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, 4800 bps/V.27=0010, 2400 bps/V.27=0001 |
| 825-238 | Maximum G3 TX Modem Speed (Send) (Capability except V.34.) for Channel 5 (To be referred to in overseas communication) | 1~8 | 4800bps | Read/Write | 1. ~ 8, $14400 \mathrm{bps} / \mathrm{V} .17=1000,12000 \mathrm{bps} / \mathrm{V} .17=0111,9600 \mathrm{bps} /$ V.17=0110, $7200 \mathrm{bps} / \mathrm{V} .17=0101,9600 \mathrm{bps} / \mathrm{V} .29=0100,7200$ bps/V.29=0011, 4800 bps/V.27=0010, 2400 bps/V.27=0001 |
| 825-239 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 0 | 1~14 | 33600bps | Read/Write | $\begin{aligned} & 1 \sim 14,33600 \mathrm{bps}=1110,31200 \mathrm{bps}=1101,28800 \mathrm{bps}=1100, \\ & 26400 \mathrm{bps}=1011,24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200 \\ & \mathrm{bps}=1000,16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101, \\ & 9600 \mathrm{bps}=0100,7200 \mathrm{bps}=0011,4800 \mathrm{bps}=0010,2400 \\ & \mathrm{bps}=0001 \end{aligned}$ |
| 825-240 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 1 | 1~14 | 33600bps | Read/Write | $1 \sim 14,33600 \mathrm{bps}=1110,31200 \mathrm{bps}=1101,28800 \mathrm{bps}=1100$, 26400 bps=1011, $24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200$ bps=1000, $16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101$, 9600 bps=0100, 7200 bps=0011, 4800 bps=0010, 2400 bps=0001 |
| 825-241 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 2 | 1~14 | 33600bps | Read/Write | $\begin{aligned} & 1 \sim 14,33600 \mathrm{bps}=1110,31200 \mathrm{bps}=1101,28800 \mathrm{bps}=1100, \\ & 26400 \mathrm{bps}=1011,24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200 \\ & \mathrm{bps}=1000,16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101, \\ & 9600 \mathrm{bps}=0100,7200 \mathrm{bps}=0011,4800 \mathrm{bps}=0010,2400 \\ & \mathrm{bps}=0001 \end{aligned}$ |
| 825-242 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 3 | 1~14 | 33600bps | Read/Write | 1~14, 33600 bps=1110, 31200 bps=1101, 28800 bps=1100, 26400 bps=1011, 24000 bps=1010, 21600 bps=1001, 19200 bps=1000, $16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101$, 9600 bps=0100, 7200 bps=0011, 4800 bps=0010, 2400 bps=0001 |
| 825-243 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 4 | 1~14 | 33600bps | Read/Write | $\begin{aligned} & 1 \sim 14,33600 \mathrm{bps}=1110,31200 \mathrm{bps}=1101,28800 \mathrm{bps}=1100, \\ & 26400 \mathrm{bps}=1011,24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200 \\ & \mathrm{bps}=1000,16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101, \\ & 9600 \mathrm{bps}=0100,7200 \mathrm{bps}=0011,4800 \mathrm{bps}=0010,2400 \\ & \mathrm{bps}=0001 \end{aligned}$ |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-244 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 5 | 1~14 | 33600bps | Read/Write | $\begin{aligned} & 1 \sim 14,33600 \mathrm{bps}=1110,31200 \mathrm{bps}=1101,28800 \mathrm{bps}=1100, \\ & 26400 \mathrm{bps}=1011,24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200 \\ & \mathrm{bps}=1000,16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101, \\ & 9600 \mathrm{bps}=0100,7200 \mathrm{bps}=0011,4800 \mathrm{bps}=0010,2400 \\ & \mathrm{bps}=0001 \end{aligned}$ |
| 825-245 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 0 (To be referred to in overseas communication) | 1~14 | 33600bps | Read/Write | $\begin{aligned} & 1 \sim 14,33600 \mathrm{bps}=1110,31200 \mathrm{bps}=1101,28800 \mathrm{bps}=1100, \\ & 26400 \mathrm{bps}=1011,24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200 \\ & \mathrm{bps}=1000,16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101, \\ & 9600 \mathrm{bps}=0100,7200 \mathrm{bps}=0011,4800 \mathrm{bps}=0010,2400 \\ & \mathrm{bps}=0001 \end{aligned}$ |
| 825-246 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 1 (To be referred to in overseas communication) | 1~14 | 33600bps | Read/Write | $1 \sim 14,33600$ bps=1110, 31200 bps=1101, 28800 bps=1100, 26400 bps=1011, 24000 bps=1010, 21600 bps=1001, 19200 bps=1000, $16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101$, 9600 bps=0100, 7200 bps=0011, 4800 bps=0010, 2400 bps=0001 |
| 825-247 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 2 (To be referred to in overseas communication) | 1~14 | 33600bps | Read/Write | $\begin{aligned} & 1 \sim 14,33600 \mathrm{bps}=1110,31200 \mathrm{bps}=1101,28800 \mathrm{bps}=1100, \\ & 26400 \mathrm{bps}=1011,24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200 \\ & \mathrm{bps}=1000,16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101, \\ & 9600 \mathrm{bps}=0100,7200 \mathrm{bps}=0011,4800 \mathrm{bps}=0010,2400 \\ & \mathrm{bps}=0001 \end{aligned}$ |
| 825-248 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 3 (To be referred to in overseas communication) | 1~14 | 33600bps | Read/Write | $1 \sim 14,33600$ bps=1110, 31200 bps=1101, 28800 bps=1100, 26400 bps=1011, $24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200$ bps=1000, $16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101$, 9600 bps=0100, 7200 bps=0011, 4800 bps=0010, 2400 bps=0001 |
| 825-249 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 4 (To be referred to in overseas communication) | 1~14 | 33600bps | Read/Write | $\begin{aligned} & 1 \sim 14,33600 \mathrm{bps}=1110,31200 \mathrm{bps}=1101,28800 \mathrm{bps}=1100, \\ & 26400 \mathrm{bps}=1011,24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200 \\ & \mathrm{bps}=1000,16800 \mathrm{bps}=0111,14400 \mathrm{bps}=0110,12000 \mathrm{bps}=0101, \\ & 9600 \mathrm{bps}=0100,7200 \mathrm{bps}=0011,4800 \mathrm{bps}=0010,2400 \\ & \mathrm{bps}=0001 \end{aligned}$ |
| 825-250 | Maximum G3 TX Modem Speed (Send) (V. 34 capability) for Channel 5 (To be referred to in overseas communication) | 1~14 | 33600bps | Read/Write | $1 \sim 14,33600$ bps=1110, 31200 bps=1101, 28800 bps=1100, 26400 bps=1011, $24000 \mathrm{bps}=1010,21600 \mathrm{bps}=1001,19200$ bps=1000, 16800 bps=0111, 14400 bps=0110, 12000 bps=0101, 9600 bps=0100, 7200 bps=0011, 4800 bps=0010, 2400 bps=0001 |
| 825-251 | G3 RX Cable Equalizer for Channel 0 | 0~3 | 1: 4dB | Read/Write | 0: $0 \mathrm{~dB}, 1: 4 \mathrm{~dB}, 2: 8 \mathrm{~dB}, 3: 12 \mathrm{~dB}$ |
| 825-252 | G3 RX Cable Equalizer for Channel 1 | 0~3 | 1: 4dB | Read/Write | 0: $0 \mathrm{~dB}, 1: 4 \mathrm{~dB}, 2: 8 \mathrm{~dB}, 3: 12 \mathrm{~dB}$ |
| 825-253 | G3 RX Cable Equalizer for Channel 2 | 0~3 | 1: 4 dB | Read/Write | 0: 0dB, 1: 4dB, 2: 8dB, 3: 12dB |
| 825-254 | G3 RX Cable Equalizer for Channel 3 | 0~3 | 1: 4 dB | Read/Write | 0: $0 \mathrm{~dB}, 1: 4 \mathrm{~dB}, 2: 8 \mathrm{~dB}, 3: 12 \mathrm{~dB}$ |
| 825-255 | G3 RX Cable Equalizer for Channel 4 | 0~3 | 1: 4dB | Read/Write | 0: $0 \mathrm{~dB}, 1: 4 \mathrm{~dB}, 2: 8 \mathrm{~dB}, 3: 12 \mathrm{~dB}$ |
| 825-256 | G3 RX Cable Equalizer for Channel 5 | 0~3 | 1: 4dB | Read/Write | 0: 0dB, 1: 4dB, 2: 8dB, 3: 12dB |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-257 | Channel 0 G3 TSI/CIG Send TSI: Notification signal of the Sender ID by the signal for the CSI signal from the recipient. CIG: Indicates recognition information of the call station. | 0~255 | 0: Auto | Read/Write | 0~255, 0: Auto, 1: Forced transmit, 10: Not transmit |
| 825-263 | G3 TX Cable Equalizer for Channel 0 | 0~3 | 1: 4dB | Read/Write | 0: 0dB, 1: 4dB, 2: 8dB, 3: 12dB |
| 825-264 | Implications of G3 TX Cable Equalizer for Channel 1 are different depending on machine model and configuration | 0~3 | 1: 4dB | Read/Write | 0: $0 \mathrm{~dB}, 1: 4 \mathrm{~dB}, 2: 8 \mathrm{~dB}, 3: 12 \mathrm{~dB}$ |
| 825-265 | Implications of G3 TX Cable Equalizer for Channel 2 are different depending on machine model and configuration | 0~3 | 1: 4dB | Read/Write | 0: 0dB, 1: 4dB, 2: 8dB, 3: 12dB |
| 825-266 | Implications of G3 TX Cable Equalizer for Channel 3 are different depending on machine model and configuration | 0~3 | 1: 4dB | Read/Write | 0: $0 \mathrm{~dB}, 1: 4 \mathrm{~dB}, 2: 8 \mathrm{~dB}, 3: 12 \mathrm{~dB}$ |
| 825-267 | Implications of G3 TX Cable Equalizer for Channel 4 are different depending on machine model and configuration | 0~3 | 1: 4dB | Read/Write | 0: $0 \mathrm{~dB}, 1: 4 \mathrm{~dB}, 2: 8 \mathrm{~dB}, 3: 12 \mathrm{~dB}$ |
| 825-268 | Implications of G3 TX Cable Equalizer for Channel 5 are different depending on machine model and configuration | 0~3 | 1: 4dB | Read/Write | 0: $0 \mathrm{~dB}, 1: 4 \mathrm{~dB}, 2: 8 \mathrm{~dB}, 3: 12 \mathrm{~dB}$ |
| 825-274 | Error line ends in error when it reaches the specified value. When errors [No. of Lines], error line will send RTN when $1 / 2$ or more of the specified value is reached. Sends RTP when $1 / 4$ or more of the specified value is reached. Sends MCF when less than $1 / 4$ of the specified value is reached. | 0~5 | 0: No limit | Read/Write | 0: No limit, 1: 128line, 2: 256line, 3: 512line, 4: 1024line, 5: 2048line |
| 825-275 | Selection of error determination reference when RTN is sent. | 0~1 | 0: Proportion | Read/Write | 0: Proportion, 1: No. of lines |
| 825-276 | Tone Incoming Detection Level for Ch0 | 0~3 | 1: -43dBm | Read/Write | 0: -48dBm, 1: -43dBm, 2: -38dBm, 3: -33dBm |
| 825-277 | Tone Incoming Detection Level for Ch1 | 0~3 | 1: -43dBm | Read/Write | 0: -48dBm, 1: -43dBm, 2: -38 dBm , 3: -33 dBm |
| 825-278 | Tone Incoming Detection Level for Ch2 | 0~3 | 1: -43 dBm | Read/Write | 0: -48dBm, 1: -43dBm, 2: -38 dBm , 3: -33 dBm |
| 825-279 | Tone Incoming Detection Level for Ch3 | 0~3 | 1: -43 dBm | Read/Write | 0: $-48 \mathrm{dBm}, 1:-43 \mathrm{dBm}, 2:-38 \mathrm{dBm}, 3:-33 \mathrm{dBm}$ |
| 825-280 | Tone Incoming Detection Level for Ch4 | 0~3 | 1: -43 dBm | Read/Write | 0: -48dBm, 1: -43dBm, 2: $-38 \mathrm{dBm}, 3:-33 \mathrm{dBm}$ |
| 825-281 | Tone Incoming Detection Level for Ch5 | 0~3 | 1: -43 dBm | Read/Write | 0: -48dBm, 1: -43dBm, 2: -38dBm, 3: -33dBm |
| 825-285 | Communication declaration paper size | $\begin{aligned} & 0 \times 0000 \sim 0 \times 0 \\ & 200 \end{aligned}$ | 0x014c 0726: A3, A4, B4, A4LEF, A5LEF, B5LEF, Letter, Legal, Ledger, Letter LEF | Read/Write | 0x0000 0002: A3, 0x0000 0004: A4, 0x0000 0020: B4, 0x0000 0100: Letter, $0 \times 0000$ 0200: Legal, 0x0000 0400: Ledger, $0 \times 0000$ 0800: $8.5 \times 13$ inch, $0 \times 0004$ 0000: A4LEF, $0 \times 0008$ 0000: A5LEF, 0x0040 0000: B5LEF, $0 \times 0100$ 0000: Letter LEF, $0 \times 0200$ 0000: Letter Half LEF |
| 825-322 | Set the enabling/disabling of the capability regarding the V34 modulation method. | 0~1 | 1: Enable | Read/Write | 0: Disable, 1: Enable |
| 825-421 | CED Send Start Time | 0~3 | 2: 1.0sec | Read/Write | 0: 2.0sec, 1:0.2sec, 2: 1.0sec, 3: 2.3 sec |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup <br> Range | Initial Value | Read/Write |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $825-422$ | Send Mode depending on the availability of <br> Outside Line Recognition No. (Line 0) | $0 \sim 2$ |  |  |  |
| Description |  |  |  |  |  |

Table 11 NVM 825 FAX Service

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 825-445 | Ringer Threshold for CH2 | 0~1 | 0 | Read/Write | 0: 11~22Vms, 1: 17~33Vms. This is usually adjusted in the hardware to "11~22Vms" |
| 825-446 | Ringer Threshold for CH4 | 0~1 | 0 | Read/Write | $0: 11 \sim 22 \mathrm{Vms}, 1: 17 \sim 33 \mathrm{Vms}$. This is usually adjusted in the hardware to "11~22Vms" |

## Chain 830-xxx iFAX Service

| Chain-Link | NVM Name | PSW Display | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 830-007 | POP User Name (1) | POP User Name |  | NULL | Read/Write | ASCII 64 Characters |
| 830-009 | POP User Name (2) | POP User Name 2 |  | NULL | Read/Write | ASCII 64 Characters |
| 830-011 | POP User Name (3) | POP User Name 3 |  | NULL | Read/Write | ASCII 64 Characters |
| 830-013 | POP User Name (4) | POP User Name 4 |  | NULL | Read/Write | ASCII 64 Characters |
| 830-015 | POP User Name (5) | POP User Name 5 |  | NULL | Read/Write | ASCII 64 Characters |
| 830-022 | SMTP/POP3 Receive Start Up | SMTP / POP3 Receiving Start | 0~1 | $\begin{aligned} & \text { 0: SMTP } \\ & \text { Receive } \end{aligned}$ | Read/Write | 0: "SMTP Receive", 1: "POP Receive" |
| 830-023 | POP Receive Interval | POP Receiving Interval | 1~120 | 10min | Read/Write | 1~120min |
| 830-024 | Deletion after POP is obtained | Delete after POP Receiving | 0~1 | 0: Delete | Read/Write | 1: Do not delete, 0: Delete |
| 830-025 | Print Control of Mail Header and Content in iFAX Receive Print | Target of Mail Header Printing | 0~3 | 1: Print basic headers and contents | Read/Write | : Print all headers and contents, 1: Print basic headers and contents, 2: Do not print headers or contents, 3: Auto print according content |
| 830-026 | Printing of error mail | Error Mail Print Enable | 0~1 | 1: Always print headers and contents | Read/Write | 0: Do not print, 1: Always print headers and contents |
| 830-027 | Sending of error notification mail | Error Mail Send Enable | 0~1 | 0: Do not send | Read/Write | 1: Send, 0: Do not send |
| 830-030 | Mail Receive Limitation | Mail Receiving Limit Enable | 0~2 | 0: Do not limit | Read/Write | 0: Do not limit, 1: Set domains to allow, 2: Set domains to prohibit |
| 830-081 | Fax Transmission Limitation by Address Book (Speed Dial) | FAX Forward Limit Enable by Address Note | 0~1 | 0: Do not limit | Read/Write | 1: Limit, 0: Do not limit |
| 830-083 | SMTP Send Start Up | SMTP Send Enable | 0~1 | 1: Start | Read/Write | 0: Stop 1: Start |
| 830-084 | Profile selection at Broadcast | Profile of Broadcast | 0~2 | 0:TIFF-S | Read/Write | 0: TIFF-S, 1: TIFF-F, 2: TIFF-J |
| 830-085 | Send Mode selection at Broadcast | Sending Mode of Broadcast | 0~2 | 0: G3 Auto | Read/Write | 0: G3 Auto, 1: International Communication, 2: G4 Auto |
| 830-086 | Mail Segmentation Send Threshold - B And W2 Value | Mail Send Page Segmentation Thresh-old-B And W2Bit | 0~999 | 10 | Read/Write | 0~999 pages (No limit when it is 0) |
| 830-087 | Broadcast Delivery Confirmation Selection | Delivery check when broadcast trans | 0~1 | 0: OFF | Read/Write | 0: OFF, 1: ON |
| 830-088 | Delivery Confirmation Method | Delivery check system | 0~1 | 1: MDN | Read/Write | 0: DNS, 1: MDN |
| 830-090 | Upper Limit Size for Fax Transmission | Fax Relay Limit Size | 0~65535 | 8192 | Read/Write | 0~65535KB (0: No limit) |
| 830-091 | POP Authentication (1) | POP Certification (1) | 0~1 | 0 | Read/Write | 0: Panel authentication, 1: APOP authentication |
| 830-092 | POP Server Port No. | POP Server Port Number | 1~65535 | 110 | Read/Write | 1~65535 |
| 830-103 | Print Delivery Confirmation Mail | DNS Return Mail Print | 0~2 | 2 | Read/Write | 0: Do not print, 1: Always print headers and contents, 2: Print only when fail |

Table 12 iFAX Service

| Chain-Link | NVM Name | PSW Display | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 830-109 | Reply MDN Request | Reply MDN Mail | 0~1 | 1 | Read/Write | 0: Never reply, 1: Always reply |
| 830-116 | Ifax Sending Path Specification | IFAX Neto Config Route | 1~2 | 1 | Read/Write | 1: By MTA, 2: By P2P, 3: By user specification (not immediat |
| 830-118 | P2P Ifax Retry Attempts | IFAX Neto Config Retry Coun | 0~5 | 1 | Read/Write | 0: Do not retry, 1-5: Retry attempts |
| 830-119 | P2P Ifax Retry Interval (Unit: Minutes) | IFAX Neto Config Retry Interval | 0~60 | 1 | Read/Write | 0: Immediate retry, 1-60: Interval (Minutes) |
| 830-120 | Print Mode when Receiving IFAX | IFAX Print Mode | 0, 1 | 0: Auto distribute | Read/Write | 0: Auto distribute, 1: Print as IFAX data |

## Chain 850-xxx EP-SV

Table 13 EP-SV

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 850-001 | EP-SV, EP Accessory Connection | 0~1 | 0: OFF | Read/Write | 0: OFF, 1: ON |
| 850-002 | Telephone line connection | 0~1 | 0: OFF | Read/Write | 0: OFF, 1: ON |
| 850-003 | EP Data Send Type (This data is the same as that of EP-DX) | 0~2 | $\begin{aligned} & \text { 0: Send to } \\ & \text { EP-SV } \end{aligned}$ | Read/Write | 0: Send to EP-SV, 1: Send to EP-DX, 2: Send to both |
| 850-004 | Enable Display at bundling (This data is the same as that of EP-DX) | 0~1 | 0: Prohibit | Read/Write | 0: Prohibit, 1: Implement |
| 850-007 | Types of accessories | 0~12 | - | Read/Write | 0: Off, 1: CopyLyzer (Addition), 2: CopyLyzer (Subtraction), 3: Dispenser, 4: Coin Kit5, 5: Combination of CopyLyzer and Copy Dispenser, 6: Combination of CopyLyzer and Coin Kit 5, 7: Combination of Dispenser and Coin Kit 5, 10: IC Card Gate |
| 850-009 | Print Control Function | 0~1 | 0: Do not control operation | Read/Write | 0: Do not control operation, 1: Control operation |
| 850-010 | Interrupt operation when connected to subtraction type | 0~1 | 1: Interrupt Off | Read/Write | 0: Interrupt On, 1: Interrupt Off |
| 850-011 | CRU Replacement Notification Enable/Disable | 0~1 | 0: Prohibit | Read/Write | 0: Prohibit, 1: Permit |
| 850-012 | CRU Warning Notification Enable/ Disable | 0~1 | 0: Prohibit | Read/Write | 0: Prohibit, 1: Permit |
| 850-015 | Scan/Fax/l-Fax Control Feature | 0~1 | 0: Do not control operation | Read/Write | 0: Do not control operation, 1: Control operation |
| 850-016 | Operation for Disable Receive when connected to subtraction type | 0~1 | 0: Cancel Job (Cancel) | Read/Write | 0: Cancel Job (Cancel), 1: Pause Job |
| 850-017 | Use Card Number in Print Control | 0~1 | 1: Use Card No. | Read/Write | 0: Do not use Card No., 1: Use Card No. |
| 850-018 | Paper feeding mode for 2 Sided Printing when connected to the conventional subtraction type accessory | 0~1 | 1: One sheet mode | Read/Write | 0: Clear one sheet mode and speed up, 1: One sheet mode |

Table 14 EP-DX

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $860-011$ | Remote Center Call Feature OFF/ON | 1 | $1:$ ON | Read/Write | $0:$ OFF, 1: ON |
| $860-012$ | Alert Call Feature ON/OFF | 1 | 0: OFF | Read/Write | $0:$ OFF, $1:$ ON |
| $860-032$ | No. of CRU Replacements | $0 \sim 0 x F F F F F F F F$ | 0 | Read/Write | $0 \sim 0 x F F F F F F F F$ |

## Chain 870-xxx Chain 900-xxx Diag

Table 15 Diagnostics

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $870-010$ | XERO: CRU \#1 Wear Reduction Cur- <br> rent Value | $0 \sim 99999999$ | - | Read | - |
| $870-011$ | XERO: CRU \#2 Wear Reduction Cur- <br> rent Value | $0 \sim 99999999$ | - | Read | - Read $^{2}$ |

Table 15 Diagnostics

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 870-027 | Xfer: IBT Belt (IMPS) | 0~99999999 | - | Read | - |
| 870-028 | Xfer: IBT Belt (CYCLE) | 0~99999999 | - | Read | - |
| 870-029 | Xfer: 1st BTR | 0~99999999 | - | Read | - |
| 870-030 | Xfer: Backup Roll | 0~99999999 | - | Read | - |
| 870-031 | Xfer: 2nd BTR Unit | 0~99999999 | - | Read | - |
| 870-032 | Xfer: Bearing BTR | 0~99999999 | - | Read | - |
| 870-033 | Xfer: Trim within Transfer Module | 0~99999999 | - | Read | - |
| 870-034 | Xfer: Belt Cleaner Blade | 0~99999999 | - | Read | - |
| 870-035 | Xfer: Belt Cleaner Film Seal | 0~99999999 | - | Read | - |
| 870-036 | PH: No. of 1 Tray Feed | 0~99999999 | - | Read | - |
| 870-037 | PH: No. of MSI Feed | 0~99999999 | - | Read | - |
| 870-038 | PH: No. of 3TM 2Tray Feed | 0~99999999 | - | Read | - |
| 870-039 | PH: No. of 3TM 3Tray Feed | 0~99999999 | - | Read | - |
| 870-040 | PH: No. of 3TM 4Tray Feed | 0~99999999 | - | Read | - |
| 870-041 | PH: No. of 1TM 2Tray Feed | 0~99999999 | - | Read | - |
| 870-042 | PH: No. of TTM 2Tray Feed | 0~99999999 | - | Read | - |
| 870-043 | PH: No. of TTM 3Tray Feed | 0~99999999 | - | Read | - |
| 870-044 | PH: No. of TTM 4Tray Feed | 0~99999999 | - | Read | - |
| 870-045 | Fuser, NOHAD: PV (CV) Counter for checking the replacement Life of the Filter used for ROS contamination | 0~99999999 | - | Read | - |
| 870-200 | Input Tray Settings | 0~9 | 1: Tray 1 | Read/Write | 0: Auto, 1: Tray 1, 2: Tray 2, 3: Tray 3, 4: Tray 4, 5: Tray 5, 6: SMH, 7: HCF1, 8: HCF2, 9: Interposer |
| 870-201 | Output Tray Settings | 0~255 | 1: Main Tray | Read/Write | 0: Auto, 1~255: Bin No |
| 870-202 | Copies (Output Sheet Count) Settings | 1~65535 | 1:1 set | Read/Write | 1~65535 sets |
| 870-203 | 1 Sided Output/2 Sided Output Settings | 0~2 | 0:1 Sided | Read/Write | 0: 1 Sided, 1:2 Sided (Head to Head), 2: 2 Sided (Head to Bottom) |
| 870-204 | Paper Type Settings | 0~66 | 0: Plain Paper | Read/Write | 0: Plain Paper, 1: Recycled Paper, 2: Bond paper, 3: Lightweight, 4: Heavyweight 1, 5: Heavyweight 2, 6: Heavyweight 1 Side 2, 7: Heavyweight 2 Side 2, 8: Super Heavyweight, 9: Super Heavyweight Side 2, 10: Transparency, 11: Tacked Paper, 12: Labels, 13~31: Plain Paper A~S, 32: Heavyweight 1A, 33: Heavyweight 1B, 34: Heavyweight 1S, 35: Heavyweight 1 (Side 2) A, 36: Heavyweight 1 (Side 2) B, 37: Heavyweight 1 (Side 2) S, 38: Heavyweight 2A, 39: Heavyweight 2B, 40: Heavyweight 2S, 41: Heavyweight 2 (Side 2) A, 42: Heavyweight 2 (Side 2) B, 43: Heavyweight 2 (Side 2) S, 44: Heavyweight 1C, 45: Heavyweight 1C (Side 2), 46: Heavyweight 2C, 47: Heavyweight 2C (Side 2), 48: Heavyweight 2D, 49: Heavyweight 2D (Side 2), 50: Coated Paper 1, 51: Coated Paper 1 (Side 2), 52: Coated Paper 2, 53: Coated Paper 2 (Side 2), 54: Coated Paper 1 Special (Special Glossy Paper), 55~59: Custom Paper 1~5, 60: Tracing Paper, 61: Backing Paper, 62: Tab Paper Heavyweight 1, 63: Tab Paper Heavyweight 2, 64: Labels 1, 65: Labels 2, 66: Perforated (Punched) |
| 870-205 | Color Mode Settings | 0~3 | 0: 4 Colors | Read/Write | 0: 4 Colors, 1:3 Colors, 2: Mono Color, 3: BW |
| 870-206 | Single Color Settings | 0~6 | 0: Black | Read/Write | 0: Black, 1: Yellow, 2: Magenta, 3: Cyan, 4: Red, 5: Green, 6: Blue |

Table 15 Diagnostics

| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 870-207 | Screen Settings | 0~10 | 0: Text | Read/Write | 0: Text, 1: Photo, 2: Binary ED, 3: 24ED, 4: 300DACS, 5: 600, 6: 300, 7: 200c 8: 200R, 9: 150, 10: Fine <br> 200C, 8: 200R, 9: 150, 10: Fine |
| 870-208 | LUT Settings | 0~3 | 3: IOT And Ctrack On | Read/Write | 0: All Off, 1: IOT On, 2: Ctrack On, 3: IOT And Ctrack On |
| 870-209 | Density Settings | 0~100 | 0:0\% | Read/Write | 0~100\% |
| 870-210 | Resolution Settings | 0~4 | 0: 1200x1200 | Read/Write | 0: 1200x1200, 1: 1200x600, 2: 600x600, 3: 300×300 |
| 870-211 | Paper Size (Standard) Settings | 0~50 | 5: A4LEF | Read/Write | 0: A6SEF, 1: A6LEF, 2: A5SEF, 3: A5LEF, 4: A4SEF, 5: A4LEF, 6: A3SEF, 7: B6SEF, 8: B6LEF, 9: B5SEF, 10: B5LEF, 11: B4SEF, 12: 5.5×8.5 (Statement) SEF, 13: 5.5x8.5 (Statement) LEF, 14: 7.25x10.5 (Executive) SEF, 15: 7.25×10.5 (Executive) LEF, 16: 8×10SEF, 17: 8×10LEF, 18: LetterSEF, 19: LetterLEF, 20: 8.46x12.4 (Spanish) SEF, 21: 8.5×13 (Legal13) SEF, 22: 8.5x14 (Legal14) SEF, 23: 11x15SEF, 24: 11x17 (Ledger) SEF, 25: A4CoverLEF, 26: 9x11 (LetterCover) LEF, 27: 12.0x18.0SEF, 28 : 12.6x17.7 (SRA3) SEF, 29: $12.6 \times 19.2 S E F, 30: 13 \times 18$ SEF, 31: 13x19SEF, 32: 16K (TFX) SEF, 33: 16K (TFX) LEF, 34: 8K (TFX) SEF, 35: 16K (GCO) SEF, 36: 16K (GCO) LEF, 37: 8K (GCO) SEF, 38: Official Postcard SEF, 39: Official Postcard LEF, 40: Return Postcard SEF, 41: PostCard (4×6) SEF, 42: PostCard (4x6) LEF, 43: PostCard (5x7) SEF, 44: Envelope SEF, 45: Envelope LEF, 46: Com10LEF, 47: MonarchLEF, 48: DL LEF, 49: Envelope SEF, 50: Envelope LEF |
| $\begin{array}{\|l\|} \hline 900- \\ 001 ~ 999 \end{array}$ | Tag 1V~Tag 999V | 0~1 | 0 | Read/Write | Tag Information 1V ~999V[0: OFF, 1: ON] |


| Chain-Link | NVM Name | Setup Range | Initial Value | Read/Write | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 880-001 | Job Flow Sheet Pool Server Usage | 0, 1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 880-002 | Port Number | 1~65535 | 80 | Read/Write | 1~65535 |
| 880-003 | Connection Schema | 1,2 | 1: HTTP | Read/Write | 1:HTTP 2:HTTPS |
| 880-004 | Device Specific Authentication Information Usage | 0, 1 | 0: Disable | Read/Write | 0: Disable, 1: Enable |
| 880-005 | Time-Out Time | 1~300 | 60 | Read/Write | 1~300 |
| 880-006 | Job Flow Sheet Repository | 0, 1 | 0: Device | Read/Write | 0: Device, 1: Pool Server |
| 880-007 | Job Flow Sheet Search Keyword 1 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-008 | Job Flow Sheet Search Keyword 2 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-009 | Job Flow Sheet Search Keyword 3 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-010 | Job Flow Sheet Search Keyword 4 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-011 | Job Flow Sheet Search Keyword 5 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-012 | Job Flow Sheet Search Keyword 6 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-013 | Job Flow Sheet Search Keyword 7 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-014 | Job Flow Sheet Search Keyword 8 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-015 | Job Flow Sheet Search Keyword 9 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-016 | Job Flow Sheet Search Keyword 10 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-017 | Job Flow Sheet Search Keyword 11 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-018 | Job Flow Sheet Search Keyword 12 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-019 | Job Flow Sheet Search Keyword 13 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-020 | Job Flow Sheet Search Keyword 14 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |
| 880-021 | Job Flow Sheet Search Keyword 15 |  | NULL | Read/Write | Single-byte symbols, double-byte Katakana, Hiragana, Chinese characters, Max. 6 characters (Local); ASCII Max. 12 characters (M/N) |

Table 1 Analog Monitor Code List

| Chain-Link | Nvm Name | PSW Display | Function Description |
| :--- | :--- | :--- | :--- |
| $010-200$ | Heat Roll NC Sensor: Inf |  | NC Sensor Detection AD Value at the center of Heat Roll |
| $010-201$ | Heat Roll NC Sensor: temp |  | NC Sensor Compensation AD Value at the center of Heat Roll |
| $010-202$ | Heat Roll NC Sensor: Diff |  | NC Sensor Difference AD Value at the center of Heat Roll |
| (Compensation AD Value - Detection AD Value) x 14.333 |  |  |  |

## Serial Number/Billing Meter Data

## Purpose

Displays the Serial Number, Product Number, and Billing Data. 1

## Procedure

1. Enter UI Diagnostic Mode.
2. Select Adjustment/Others.
3. Select Machine ID/Billing Data

NOTE: Serial Numbers, the Product Number, and Billing Data is displayed for IOT, Sys1, and Sys2.

## CAUTION

Failure to perform GP 4 Replacing Billing PWBs, if the MCU PWB, or the MCU PWB EPROM, or the ESS PWB or the ESS PWB EPROM is replaced could result in NVM corruption and disabling the machine. Refer to REP 9.1.1 MCU PWB or REP 9.1.2 MCU PWB EPROM or REP 9.2.1 ESS PWB or REP 9.2.2 ESS PWB EPROM before installing a new MCU PWB, MCU PWB EPROM, ESS PWB, or ESS PWB EPROM.

NOTE: GP 4 Replacing Billing PWBs, procedure is used to serialize components and load billing data on the new MCU PWB, or MCU PWB EPROM, or ESS PWB, or ESS PWB EPROM.

NOTE: Machine Serial Number Plate is located on side frame below rear yellow Fuser mounting screw.

## Printing HFSI

## Procedure

1. Enter UI Diagnostic Mode).
2. Select NVM Read/Write.
3. Refer to Table 1 and enter a counter number for any High Frequency Service Item (HFSI) counters to be checked.
Table 1 High Frequency Service Items

| Counter | Name | Threshold | Service Action to be performed |
| :--- | :--- | :--- | :--- |
| 954-800 <br> Reset <br> only | Tray 1 Feed counter | 300 K | Replace the Feed Roll, Retard Roll, Nudger <br> Roll. |
| $954-801$ | Tray 2 Feed counter | 300 K | Replace the Feed Roll, Retard Roll, Nudger <br> Roll. |
| $954-802$ | Tray 3 Feed counter | 300 K | Replace the Feed Roll, Retard Roll, Nudger <br> Roll. |
| $954-803$ | MSI Feed Roll / <br> Retard Pad | 50 K | Replace the Feed Roll, Retard Pad |
| $954-824$ | IBT Unit | 480 K | Information not available at this time |
| $954-825$ | IBT Cleaner Unit | 100 K | Information not available at this time |
| $954-826$ | BTR2 Unit | 300 K | Replace the Bias Transfer Roll. |
| $954-830$ | Developer time K | 420 K | Replace K Developer Housing. |
| $954-831$ | Developer time Y | 420 K | Replace Y Developer Housing. |
| $954-832$ | Developer time M | 420 K | Replace M Developer Housing. |
| $954-833$ | Developer time C | 420 K | Replace C Developer Housing. |
| $955-837$ | Xerographic Module | 10 M | Replace the Xero Module |
| $954-842$ | Fuser Assembly | 10 M | Replace the Fuser Assembly |

## Initialize HFSI Counters

## Purpose

Initialize the HFSI Counter.

## Procedure

## Reading and resetting HFSI

2. Select Adjustment/Other.
3. Select Initialize HFSI Counter.
4. Reset Correct Value
a. Enter the Chain-Link No.
b. Select Reset Correct Value. Diagnostics routine completed will be displayed NOTE: Diagnostics routine completed will be displayed. The HFSI Counter is reset.
5. Enter UI Diagnostic Mode.

Table 1 IOT HFSI

| Chain-Link | Name | Initial Value | Value | 1Count | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 954-807 | Last 2Digits of Fuser discharging Number | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-807 | 5th\&6thDigits of Fuser discharging Number | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-807 | 3rd\&4thDigits of Fuser discharging Number | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-807 | First 2Digits of Fuser discharging Number | 0 | 0~3 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-800 | Tray1 Last 2Digits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-800 | Tray1 5th\&6thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-800 | Tray1 3rd\&4thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-800 | Tray1 First 2Digits of Feed Capacity (8 Digits) | 0 | 0~3 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-801 | Tray2 Last 2Digits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-801 | Tray2 5th\&6thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-801 | Tray2 3rd\&4thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('O clearance' means all bytes changes 0 at the same time.) |
| 954-801 | Tray2 First 2Digits of Feed Capacity (8 Digits) | 0 | 0~3 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-802 | Tray3 Last 2Digits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-802 | Tray3 5th\&6thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-802 | Tray3 3rd\&4thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-802 | Tray3 First 2Digits of Feed Capacity (8 Digits) | 0 | 0~3 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-804 | HCF Last 2Digits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |

Table 1 IOT HFSI

| Chain-Link | Name | Initial Value | Value | 1Count | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 954-804 | HCF 5th\&6thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-804 | HCF 3rd\&4thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('O clearance' means all bytes changes 0 at the same time.) |
| 954-804 | HCF First 2Digits of Feed Capacity (8 Digits) | 0 | 0~3 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-805 | MSI Last 2Digits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-805 | MSI 5th\&6thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-805 | MSI 3rd\&4thDigits of Feed Capacity (8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-805 | MSI First 2Digits of Feed Capacity (8 Digits) | 0 | 0~3 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-808 | Last 2Digits of the number of Sheets Reaching BIAS transfer Roll(8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-808 | 5th\&6thDigits of the number of Sheets Reaching BIAS transfer Roll(8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('O clearance' means all bytes changes 0 at the same time.) |
| 954-808 | 3rd\&4thDigits of the number of Sheets Reaching BIAS transfer Roll(8 Digits) | 0 | 0~99 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |
| 954-808 | First 2Digits of the number of Sheets Reaching BIAS transfer Roll(8 Digits) | 0 | 0~3 | 1 | Only 0 clearance is possible in the write mode.('0 clearance' means all bytes changes 0 at the same time.) |

Table 2 IIT HFSI

| Chain-Link | Name | Initial Value | Setting Range | Count Condition | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 956-802 | IIT Scan | 0 | 0~6,881,175 | Scan Count (including pre-Scan) Counts up with each scan. HFSI to Scan count after clearing HFSI Counter Recycle to Total Scan count without clearing | 1 time increments Max count value=above 6,000,000 times Only count Platen Scans, not CVT Scans. |
| 956-803 | Lamp ON Time | 0 | 0~7,864,200 | Lamp ON Time <br> Starts timing when the lamp turns on. Stops timing when the lamp turns off. Writes to the NVM during CRG Initialize. HFSI to Lamp ON time after clearing HFSI Counter <br> Recycle to Total Lamp ON time without clearing | Lamp Life 2000 hours <br> 1 time increments <br> Max count value $=7,200,000 \mathrm{sec}$ and above <br> Times the total duration when the lamp is on (including AGOC, Lamp Check). |
| 956-804 | Lamp ON Count | 0 | 0~6,881,175 | Lamp ON count after clearing HFSI Counter Counts up when the lamp turns on. Writes to the NVM during CRG Initialize. | Lamp Life 6,000,000 times <br> 1 time increments <br> Max count value=above 6,000,000 times <br> Counts the no. of times the lamp turns on (including AGOC, Lamp Check). |
| 956-808 | Platen Open/Close Count (Platen models) | 0 | 0~1,966,050 | Counts up when the Angle Sensor is forced fully open. | 1 time increments Max count value=above 1,000,000 times |
| 955-806 | Document Feed (CVT, DADF models) | 0 | 0~5,000,000 | Counts up when the Feed Sensor turns on. HFSI to Document Feed count after clearing HFSI Counter <br> Recycle to Total Document Feed count without clearing | No. of sheets fed from the CVT Tray The NVM is controlled by the CVT. |
| 955-807 | Document Feed Simp (CVT, DADF models) | 0 | 0~5,000,000 | Counts the no. of document sheets fed in Simplex mode. | The NVM is controlled by the CVT. * Life is common to 955-808. |
| 955-808 | Document Feed Dup (CVT, DADF models) | 0 | 0~5,000,000 | Counts the no. of document pages fed in Duplex mode. <br> Counts up when Invert Sensor turns off during Duplex transport. | The NVM is controlled by the CVT. <br> * Life is common to 955-807. |
| 955-810 | Platen Open/Close Count (CVT, DADF models) | 0 | 0~1,000,000 | Counts up when the Platen Interlock is open. | Belt/CVT judgement is processed in the IISS. The NVM is controlled by the CVT. |
| 955-829 | Invert Solenoid ON Count | 0 | 0~5,000,000 | Counts up when the Invert Solenoid turns on. HFSI to Invert Solenoid ON count after clearing the counter <br> Recycle to Total Invert Solenoid ON count without clearing | CVT(PF2) <br> The NVM is controlled by the CVT. |

## Adjust Toner Density

## Purpose

To perform manual adjustment for toner density.

## Procedure

1. Select Maintenance/Diagnostics.
2. Select Max Setup.
3. Select Adjust Toner Density.
4. The following current value data will be displayed at the current value area.
a. ATC Target Value: Numeric display.
b. ATC Measured: Numeric display.
5. Select and adjustment value by entering a quantity between -99 and +99 .
6. Select Start.
7. Exit Diag. and check the copy quality.
8. Repeat step 4 to 9 until copy quality meet with specification or customer desired level.

## MSI Guide Adjustment

## Purpose

This guide adjustment item is provided for the following purposes:

- To check that size detection of the MSI Guide width detection is properly performed.
- To set the sensor output values for the maximum and minimum positions for the MSI Guide using NVM.
- To display the detected size in the width direction of the MSI Guide.


## Procedure

1. Select Maintenance/Diagnostics.
2. Select Adjustment/Others.
3. Select MSI Guide Adjustment.
4. Set the MPT Guide on the machine at the minimum position.
5. Select Minimum Size Position, then push Start button.
6. Result appears in Result column.

When "OK": The minimum position is set by the NVM.
When NG: Repeat the procedure.
7. Set the MSI Guide on the machine at the maximum position.
8. Select Maximum Position.
9. Result appears in Result column.

When "OK": Set the value of the maximum position by the NVM.
When NG: Repeat the procedure.
10. Select Close].

## Initialize NVM

## Purpose

This procedure may be needed when the machine is unrecoverable, including problems such as producing blank copies/prints, continuous system faults, etc. It is also required as part of the software upgrade process.

Fax configured machine only
NOTE: The fax module must be started up (the fax icon must be displayed) before the initialization is performed.
If the initialization is performed with the fax module off, the initialization will not finish.
(The fax module requires powering off then on.)

## Initial Actions

- Disconnect any Foreign Interface devices.
- Obtain all of the following information:
- NVM value factory setting report Log Book Storage (typically it is located in the Inner Cover pocket)
- Any customer setting Auditron account from the system administrator
- Any setting changes (specifically NVM settings) shown on the machine's service log. - Any customer settings in the Tools mode.


## Procedure

1. Access Diagnostic Routines.
a. Enter UI Diagnostics (Entering UI Diagnostics in UII Diagnostic Mode).
b. Access Diagnostic Routines (Accessing Diagnostic Routines in UI Diagnostic Mode).
2. Select Maintenance/Diagnostics.
3. Select Initialize NVM.
4. Select the desired item, then press the Start button.
5. After initialization is complete, use the data accumulated in Initial Actions to restore the machine to its previous configuration.

| Name | Description |
| :---: | :---: |
| IOT | The following NVM locations will be initialized: <br> - Chain - Link 740-001, 022 through 31, 062, 090 <br> - Chain - Link 741-001 <br> - Chain - Link 742-001 through 012, 015, 018, 027 through 030, 075, 083, 084, 086, 098 through 101 <br> Chain - Link 744-005, 006, 010, 043, 045, 046, 061, 065, 077, 078, $080,081,086,133$ through 135,180 through $184,220,301$ through 306 <br> Chain - Link 746-500, 502 through 516 <br> Chain - Link 749-001 through 003, 006, 007, 009 through 016, 516, 521 through 524, 527 <br> Chain - Link 751-010, 011, 034 through 037, 511, 560, 631, 699, 701, $703,710,718$ through $748,750,752,754,756,758,760,762,764$ through 792, 794, 796, 798, 800, 802, 804, 806, 808 through 836, 838, 840, 842, 844, 846, 848 through 850, 881 through 889 <br> Chain - Link 752-003, 509, 893 through 895 <br> Chain - Link 753-003, 008, 009, 612, 619, 645, 705, 716, 717, 724 through 726, 729, 731 <br> Chain - Link 760-001 through 003, 005 through 012, 016 through 029, 031 through 040 <br> Chain - Link 764-001, 002, 005, 100 through 104, 112 |
| IIT/IPS | The following NVM locations will be initialized: <br> - Chain - Link 710-501, 550, 551, 554 through 568, 600 through 612 <br> - Chain - Link 715-013, 017, 018, 023 through027, 050 through 096, 102 through 108, 110 through 113, 201, 241 through 244, 280 through 293, 299 through 311, 344 through 349, 362, 363, 418, 550 through 555, 560, 600 through 622, 630 through 649, 660 through 664, 668, 669, 680 through 691, 702 through 705, 720 through 726, 780 through 791 <br> - Chain - Link 716-001 through 030, 032, 033, 035, 037 through 047, 050 through 064, 070 through 081, 100 through 102, 110, 112, 113, 120 through 122, 126 through 128 <br> Chain - Link 717-001 through 015 |

Table 1 NVM Initialization

| Name | Description |
| :---: | :---: |
| SYS-System | The following NVM locations will be initialized: <br> - Chain - Link 700-071, 075, 076, 078, 080 through 088, 127, 128, 368, 389, 390, 396, 398, 410 through 412 <br> Chain - Link 780-072, 073, 141, 145 <br> - Chain - Link 790-003 <br> - Chain - Link 800-018 <br> - Chain - Link 810-130 <br> - Chain - Link 820-003, 024, 026, 038 through 047, 052 through 054, 060 through 119, 121 <br> - Chain - Link 823-042 through 047 <br> - Chain - Link 830-081, 090 <br> - Chain - Link 850-001 through 004, 007, 009 through 012, 015 through 018 <br> - Chain - Link 870-010 through 045 |
| SYS-User | All user settable NVM locations in the following chains will be reset: <br> - Chain - Link 700-071, 075, 076, 078, 080 through 088, 368, 389, 390 |

## Component Control

## Purpose

The purpose of the Component Control is to display the logic state of input signals and to energize output components

NOTE: Refer to Table 1, Table 3, Table 5 for a list of all Input Components listed by Chain/Link ID number. Refer to Table 2, Table 4, Table 6 for a list of all Output Components listed by Chain/Link ID number.

## Procedure

1. Enter UI Diagnostic Mode.
2. Select Maintenance/Diagnostics.
3. Select IO Check.
4. Select Component Control.
5. Input Enter number, then select Chain Link.

- In case of INPUT Component:

Indicates current status in Status column.
Count up (+1) when switching. (High to Low, Low to High)

- In case of OUTPUT Component

Activates component
6. Press Stop button after confirming.

## Stacking Component Codes

NOTE: Some components cannot be energized at the same time as another component. If you activate such a combination of components, the first component switched on will be automatically switched off.

1. When perform multiple component checking. input new Chain-Link number after one (or several) component(s) is (are) in operating.
NOTE: Only latest Chain-Link number indicates.
2. When confirm the status of another component still in progress, select Enter Number then input Chain-Link number of applicable component.
3. Select Stop key after confirming.

Stop operation of component indicated on screen.
NOTE: There are no Cyclic Component in below category:

- IIT Input Component.
- IIT Output Component.
- IOT Input Component.

Table 1 Input Component Control Codes IOT

| Chain-Link | Name | Connector Level | Meaning | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| 012-110 | Registration Clutch ON | H | IOT Regi Clutch ON |  |
| 012-111 | IOT Exit Sensor | H | with paper |  |
| 012-150 | Compile Exit Sensor | H | with paper |  |
| 012-151 | Compile Tray No Paper Sensor | H | with paper |  |
| 012-190 | H-Transport Ent. Sensor | H | with paper |  |
| 012-191 | H-Transport Exit Sensor | H | with paper |  |
| 012-220 | Front Tamper Home Sensor | H | other than home position |  |
| 012-221 | Rear Tamper Home Sensor | H | other than home position |  |
| 012-240 | Stapler Move Home Sensor | H | other than home position |  |
| 012-241 | Stapler Move Position Sensor | H | other than home position |  |
| 012-242 | Low Staple Sensor | H | without pin |  |
| 012-243 | Self Priming Sensor | H | Not Ready |  |
| 012-244 | Staple Home Sensor | H | other than home position |  |
| 012-250 | Eject Clamp Home Sensor | H | other than home position |  |
| 012-251 | Set Clamp Home Sensor | H | other than home position |  |
| 012-260 | Upper Limit Sensor | H | upper limit position |  |
| 012-262 | Stacker No Paper Sensor | H | without finisher |  |
| 012-267 | Stacker Height Sensor | H | With Paper |  |
| 012-268 | Stacker Stock A Sensor | H | Cover Position |  |
| 012-269 | Stacker Stock B Sensor | H | Cover Position |  |
| 012-280 | Compiler Cover Safety Switch | H | Compiler Upper Chute Open |  |
| 012-301 | Top Cover Switch | H | Top Cover is closed |  |
| 012-302 | Finisher Front Cover Switch | H | Finisher Front Cover is closed |  |
| 012-303 | H-Transport Interlock Sensor | H | H-Transport is closed |  |
| 042-200 | Belt Home Position Sensor | L | Same as Name | - |
| 047-200 | FACE UP TRAY DETECTED | L | Detected | EXIT |
| 047-201 | OCT2 DETECTED | L | Detected | EXIT |
| 047-205 | OCT1 HOME POSITION SENSOR | L | OCT1 is at its home position | EXIT |
| 047-206 | OCT2 HOME POSITION SENSOR | L | OCT2 is at its home position | EXIT |
| 061-200 | Polygon Motor Lock | L | PLYGON_MOT_LOCK signal is displayed. |  |
| 061-201 | ROS Motor Fan | H | ROS_FAN_FAIL signal is displayed. |  |

Table 1 Input Component Control Codes IOT

| Chain-Link | Name | Connector Level | Meaning | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| 071-100 | \#1 Pre-Feed Sensor | L | with paper |  |
| 071-101 | \#1 No Paper Sensor | L | with paper |  |
| 071-102 | \#1 Level Sensor | H | with paper |  |
| 071-103 | \#1 Tray Paper Size Sensor | H | with paper |  |
| 072-100 | \#2 Pre-Feed Sensor | L | with paper |  |
| 072-101 | \#2 No Paper Sensor | L | with paper |  |
| 072-102 | \#2 Level Sensor | L | with paper |  |
| 072-103 | \#2 Feed Out Sensor | H | with paper |  |
| 072-104 | \#2 Tray Paper Size Sensor | H | with paper |  |
| 073-100 | \#3 Pre-Feed Sensor | L | with paper |  |
| 073-101 | \#3 No Paper Sensor | L | with paper |  |
| 073-102 | \#3 Level Sensor | H | with paper |  |
| 073-103 | \#3 Feed Out Sensor | H | with paper |  |
| 073-104 | \#3 Tray Paper Size Sensor | H | with paper |  |
| 075-100 | MSI No Paper Sensor | H | Same as Name |  |
| 077-100 | Regi Sensor | L | Same as Name |  |
| 077-101 | \#1 Feed Out Sensor | L | Same as Name |  |
| 077-102 | \#2 Exit Sensor | L | Same as Name |  |
| 077-103 | \#2 OCT Home Position Sensor | L | Same as Name |  |
| 077-104 | Dup Wait Sensor | L | Same as Name |  |
| 077-105 | \#1 Exit Sensor | H | Same as Name |  |
| 077-106 | Dup Regi Sensor | - | Same as Name |  |
| 077-107 | Dup Regi CL | - | Dup Regi Clutch Hotline |  |
| 077-200 | \#2 Exit Unit Detect Line | - | Same as Name |  |
| 077-201 | Face Up Tray Detect Switch | - | Same as Name |  |
| 077-300 | Left Hand Interlock Switch | - | Same as Name |  |
| 077-301 | Left Hand Low Cover Switch | - | Same as Name |  |
| 077-302 | Left Hand High Cover Switch | - | Same as Name |  |
| 077-303 | Front Interlock Switch | - | Same as Name |  |
| 077-305 | Dup Cover Switch | - | Same as Name |  |
| 077-306 | TM Left Hand Interlock Switch | - | Same as Name |  |
| 089-100 | Registration SENSOR | L | with paper |  |
| 089-101 | Registration SENSOR (DM) | H | with paper Sensor level detected by DM | DM |
| 089-200 | Registration CLUTCH (DM) | L | in ON state Signal detected by DM MODULE | DM |
| 089-201 | Registration CLUTCH(EXIT) | L | in ON state Signal detected by EXIT MODULE | EXIT |
| 091-200 | Waste Toner Bottle Sensor | - | Same as Name |  |
| 091-201 | Waste Toner Bottle Near Full Sensor | - | Same as Name |  |
| 093-200 | Rotary Home Position Sensor |  | Same as Name |  |
| 094-200 | 2nd BTR Retract Sensor | - | 2nd BTR Retract Sensor on/off is detected. [I/O]2nd BTR Retract Sensor |  |

Table 1 Input Component Control Codes IOT

| Chain-Link | Name | Connector <br> Level | Meaning | Remarks |
| :--- | :--- | :--- | :--- | :--- |
| $094-201$ | IBT CLN Retract Sensor | - | BTR CLN Retract Sensor on/off is detected. <br> $[/ / O]$ |  |
| $094-202$ | TRO Sensor | - | Same as Name |  |
| $094-203$ | POB Sensor | - | Same as Name |  |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name | Connector Level | Meaning | Timer Off | Cycle Operation | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 010-001 | Fuser Motor (Normal Speed) | H | Fuser motor rotation at $158 \mathrm{~mm} / \mathrm{sec}$. [I/O] Fuser Motor On [I/O] Fuser Gain1 | X | X |  |
| 010-002 | Fuser Motor (Half Speed) | L | Fuser motor rotation at $79 \mathrm{~mm} / \mathrm{sec}$. [ [/O] Fuser Motor On [I/O] Fuser Gain1 | X | X |  |
| 012-020 | Front Tamper Motor Low FRONT ON/OFF | - | Same as Name | X | X |  |
| 012-021 | Front Tamper Motor Middle FRONT ON/ OFF | - | Same as Name | X | X |  |
| 012-022 | Front Tamper Motor High FRONT ON/ OFF | - | Same as Name | X | X |  |
| 012-023 | Front Tamper Motor Low REAR ON/OFF | - | Same as Name | X | X |  |
| 012-024 | Front Tamper Motor Middle REAR ON/ OFF | - | Same as Name | X | X |  |
| 012-025 | Front Tamper Motor High REAR ON/OFF | - | Same as Name | X | X |  |
| 012-026 | Rear Tamper Motor Low FRONT ON/OFF | - | Same as Name | X | X |  |
| 012-027 | Rear Tamper Motor Middle FRONT ON/ OFF | - | Same as Name | X | X |  |
| 012-028 | Rear Tamper Motor High FRONT ON/OFF | - | Same as Name | X | X |  |
| 012-029 | Rear Tamper Motor Low REAR ON/OFF | - | Same as Name | X | X |  |
| 012-030 | Rear Tamper Motor Middle REAR ON/ OFF | - | Same as Name | X | X |  |
| 012-031 | Rear Tamper Motor High REAR ON/OFF | - | Same as Name | X | X |  |
| 012-040 | Stapler Move Motor Low FRONT ON/OFF | - | Same as Name | X | X |  |
| 012-042 | Stapler Move Motor High FRONT ON/OFF | - | Same as Name | X | X |  |
| 012-043 | Stapler Move Motor Low REAR ON/OFF | - | Same as Name | X | X |  |
| 012-045 | Stapler Move Motor High REAR ON/OFF | - | Same as Name | X | X |  |
| 012-046 | Staple Motor FORWARD ON/OFF | H | Same as Name | X | X |  |
| 012-047 | Staple Motor REVERSE ON/OFF | H | Same as Name | X | X |  |
| 012-051 | Set Clamp Paddle | - | Same as Name | X | X |  |
| 012-060 | Stacker Motor UP ON/OFF | H | Same as Name | X | X |  |
| 012-061 | Stacker Motor DOWN ON/OFF | H | Same as Name | X | X |  |
| 012-080 | Main Drive Motor ON/OFF | L | Same as Name | X | X |  |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name | Connector Level | Meaning | Timer Off | Cycle Operation | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 012-081 | Eject Motor FORWARD ON/OFF | - | Same as Name | X | X |  |
| 012-082 | Eject Motor REVERSE ON/OFF | - | Same as Name | X | X |  |
| 012-083 | Eject Clamp Low DOWN | - | Same as Name | X | X |  |
| 012-084 | Eject Clamp Middle DOWN | - | Same as Name | X | X |  |
| 012-085 | Eject Clamp UP | - | Same as Name | X | X |  |
| 012-086 | Set Clamp Paddle Solenoid ON | L | Same as Name | X | X |  |
| 042-001 | Main Motor ON (Normal Speed) | L | Main motor rotation at normal process speed. <br> [I/O] Main Motor <br> [I/O] Main Motor Gain1 <br> [I/O] Main Motor Gain2 <br> [I/O] Main Motor Clock <br> (normal process speed is determined depending on combination on Main Motor Gain 1, Main Motor Gain 2, and Main Motor Clock). | - | X |  |
| 042-002 | Main Motor ON (Half Speed) | L | Main motor rotation speed at half process speed. <br> [I/O] Main Motor <br> [//O] Main Motor Gain1 <br> [//O] Main Motor Gain2 <br> [//O] Main Motor Clock <br> (half process speed is determined depending on combination o Main Motor Gain 1, Main Motor Gain 2, and Main Motor Clock). | - | X |  |
| 042-003 | Auger Motor | L | Auger motor rotation [I/O] Auger Motor [I/O] Auger Motor CLK | - | X |  |
| 042-004 | Developer Motor | L | Developer motor rotation <br> [I/O] Deve Motor <br> [//O] Deve Motor CLK | - | X |  |
| 042-005 | Fuser Fan | L | Fuser fan rotation <br> Fuser fan rotates at high speed per start command. <br> Fuser fan rotates at low speed per stop command | - | X |  |
| 042-006 | Rear Fan | L | Rear fan rotation | - | X |  |
| 047-001 | OFFSET MOTOR1 FORWARD ROTATION | - | Same as Name | X | X | EXIT |
| 047-003 | OFFSET MOTOR2 FORWARD ROTATION | - | Same as Name | X | X | EXIT |
| 047-004 | OFFSET MOTOR2 REVERSE ROTATION | - | Same as Name | X | X | EXIT |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name | Connector Level | Meaning | Timer Off | Cycle Operation | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 047-005 | OFFSET MOTOR1 REVERSE ROTATION | - | Same as Name | X | X | EXIT |
| 047-022 | EXIT DRIVE MOTOR FORWARD (Eject Paper out) | - | Same as Name | X | X | Not Available |
| 047-023 | EXIT DRIVE MOTOR REVERSE (send paper into Dup) | - | Same as Name | X | X | Not Available |
| 047-024 | Exit Gate Solenoid | H | Switch Gate to Exit2/FUT | X | X | Not Available |
| 047-025 | FACE UP GATE SOLENOID | L | Switch FUT Gate to Face Up Tray | X | X | EXIT |
| 047-026 | EXIT 2 FAN | - | Exit 2 FAN rotating | X | X | Not Available |
| 061-001 | ROS Motor ON | - | Send a pulse to PLYGON_MOT_CLK (this pulse is generated when ROS main task is initiated). | X | X |  |
| 061-002 | ROS Fan ON | - | ROS Fan is activated | X | X |  |
| 071-001 | Tray 1 Feed/Lift Up Motor (CW2) | - | Turn Lift Up Motor on for two seconds when Tray 1 Level Sensor is "L"(lifted down). Lifter Motor will not rotate when Tray 1 Level Sensor is "H"(lifted up). | 0 | X |  |
| 071-002 | Tray 1 Feed/Lift Up Motor (CCW2) | - | Turn Lift Up Motor on for two seconds when Tray 1 Level Sensor is "L"(lifted down). Lifter Motor will not rotate when Tray 1 Level Sensor is "H"(lifted up). | O | X |  |
| 071-003 | Tray 1 Feed/Lift Up Motor (CW12) | - | Turn Lift Up Motor on for two seconds when Tray 1 Level Sensor is "L" (lifted down). Lifter Motor will not rotate when Tray 1 Level Sensor is "H"(lifted up). | O | X |  |
| 071-004 | Tray 1 Feed/Lift Up Motor (CCW12) | - | Turn Lift Up Motor on for two seconds when Tray 1 Level Sensor is "L"(lifted down). Lifter Motor will not rotate when Tray 1 Level Sensor is "H"(lifted up). | 0 | X |  |
| 072-001 | Tray 2 Feed/Lift Up Motor (CW) | - | Turn Lift Up Motor on for two seconds when Tray 2 Level Sensor is "L"(lifted down). Lifter Motor will not rotate when Tray 2 Level Sensor is "H"(lifted up). | O | X |  |
| 072-002 | Tray 2 Feed/Lift Up Motor (CCW) | - | Turn Lift Up Motor on for two seconds when Tray 2 Level Sensor is "L"(lifted down). Lifter Motor will not rotate when Tray 2 Level Sensor is "H"(lifted up). | O | X |  |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name | Connector Level | Meaning | Timer Off | Cycle Operation | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 073-001 | Tray 3 Feed/Lift Up Motor (CW) |  | Turn Lift Up Motor on for two seconds when Tray 3 Level Sensor is "L"(lifted down). Lifter Motor will not rotate when Tray 3 Level Sensor is "H"(lifted up). | 0 | X |  |
| 073-002 | Tray 3 Feed/Lift Up Motor (CCW) | - | Turn Lift Up Motor on for two seconds when Tray 3 Level Sensor is "L"(lifted down). Lifter Motor will not rotate when Tray 3 Level Sensor is "H"(lifted up). | 0 | X |  |
| 075-001 | MSI Feed Solenoid | - | MSI Feed Solenoid is turned on for 200mseconds. | X | X | DM |
| 077-001 | Take Away Clutch |  | Take Away Clutch is turned on. [I/O]TA Clutch (doubled as MSI TA clutch) <br> [Component] By combining with Main Drive Motor [042-001], Take Away Clutch can be driven by \#1 Take Away Roll and MSI Take Away Roll. | 0 | X | Stack Code:042-001-Main Drive Motor |
| 077-002 | Regi Clutch |  | Registration Clutch is turned on.? [I/O]TA Clutch (doubled as MSI TA clutch) <br> [Component] By combining with Main Drive Motor[042-001], Regi Clutch can be driven by Regi Roll. | 0 | X | Stack Code:042-001-Main Drive Motor |
| 077-003 | Exit Gate Solenoid |  | Exit Gate is turned off/on. Off: Printed sheets are ejected to Exit 1 <br> On: Printed sheets are ejected to Exit2. [//O] Exit Gate Solenoid | 0 | X |  |
| 077-004 | Face Up Gate Solenoid | - | Face Up Gate is turned off/on. Off: Printed sheets are ejected to Exit2. <br> On: Printed sheets are ejected to Face Up Tray. <br> [I/O] Face Up Gate Solenoid | 0 | X |  |
| 077-005 | \#2 Exit Motor Fan | - | Air is sent to Exit 2 Drive Motor. [I/O] Exit MOTOR FAN | 0 | X |  |
| 077-006 | DUP Motor | - | Duplex Unit Feed Roll is driven. [//O] DUP MOTOR | 0 | X |  |
| 077-007 | Exit 2 Drive Motor (Full Speed CW) | - | Same as Name | 0 | X |  |
| 077-008 | Exit 2 Drive Motor (Full Speed CCW) | - | Same as Name | 0 | X |  |
| 077-009 | Exit 2 Drive Motor (Half Speed CW) | - | Same as Name | 0 | X |  |
| 077-011 | OCT 2 Motor (CW) | - | Same as Name | 0 | X |  |
| 077-012 | OCT 2 Motor (CCW) | - | Same as Name | 0 | X |  |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name | Connector <br> Level | Meaning | Timer Off | Cycle Operation | Remarks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name | Connector <br> Level | Meaning | Timer Off | Cycle Operation | Remarks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name | Connector <br> Level | Meaning | Timer Off | Cycle Operation | Remarks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name |  | Connector <br> Level | Meaning | Timer Off | Cycle Operation |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | Remarks | Rer |
| :--- |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name | Connector <br> Level | Meaning | Timer Off | Cycle Operation | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 094-004 | 2st BTR Contact |  | 2nd BTR contact motion. <br> 2nd BTR contact motion stops when 2nd BTR Retract Sensor detects that 2nd BTR is in the contact position. 1) I/O]2nd BTR Retract Clutch is turned on. <br> 2) [ $1 / O] 2$ nd BTR Retract Clutch is turned off within a period of time specified by the timer (nxfr_2ndCntStpTime) after 2nd BTR Retract Sensor is turned on. [Component] Auger Mot needs to be activated in advance. | 0 | 0 | The BCR AC, BCR DC, DEVE DC and BTR output simultaneously. * $\mathrm{CF}=53-45$ (CL=751560 ) to 1 (single output) enables independent outputs. |
| 094-005 | 2st BTR Retract | - | 2nd BTR retract motion. 2nd BTR retract motion stops when 2nd BTR Retract Sensor detects that 2nd BTR is in retract position. <br> 1) $[1 / O] 2 n d$ BTR Retract Clutch is turned on. <br> 2) $[1 / O] 2 n d$ BTR Retract Clutch is turned off within a period of time specified by the timer (nxfr_2ndRetStpTime) after 2nd BTR Retract Sensor is turned off. [Component] Auger Mot needs to be activated in advance. | 0 | 0 | The BCR AC, BCR DC, DEVE DC and BTR output simultaneously. * CF=53-45(CL=751560) to 1 (single output) enables independent outputs. |
| 094-006 | IBT CLN Contact | - | IBT cleaner contact motion. IBT cleaner retract motion stops when IBT Cleaner Retract Sensor detects that IBT cleaner is in contact position. <br> 1) $[/ / O]$ IBT CLN Retract Clutch is turned on. <br> 2) [//O]IBT CLN Retract Clutch is turned off within a period of time specified by the timer (nxfr_CInCntStpTime) after IBT Cleaner Retract Sensor is turned on. [Component] Auger Mot needs to be activated in advance. | 0 | 0 | The BCR AC, BCR DC, DEVE DC and BTR output simultaneously. * CF=53-45(CL=751560) to 1 (single output) enables independent outputs. |

Table 2 Output Component Control Codes IOT

| Chain-Link | Name | Connector Level | Meaning | Timer Off | Cycle Operation | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 094-007 | IBT CLN Retract |  | IBT cleaner contact motion. IBT cleaner retract motion stops when IBT Cleaner Retract Sensor detects that IBT cleaner is in contact position. <br> 1) [//O]IBT CLN Retract Clutch is turned on. <br> 2) [//O]IBT CLN Retract Clutch is turned off within a period of time specified by the timer (nxfr_CInCntStpTime) after IBT Cleaner Retract Sensor is turned on. [Component] Auger Mot needs to be activated in advance. | 0 | 0 | The BCR AC, BCR DC, DEVE DC and BTR output simultaneously. * CF=53-45(CL=751560) to 1 (single output) enables independent outputs. |
| 094-008 | IBT CLN Auger Clutch |  | BT CLN Auger Clutch is turned on/ off. | 0 | 0 |  |
| 094-009 | 2nd BTR Retract Clutch | - | 2nd BTR Retract Clutch is turned on/ off. <br> [//O]2nd BTR Retract Clutch | 0 | 0 |  |
| 094-010 | IBT CLN Retract Clutch | - | BTR CLN Retract Clutch is turned on/off. [I/O]BTR CLN Retract Clutch |  |  |  |

Table 3 Input Component Control Codes IIT

| Chain-Link | Name | Connector Level | Meaning | Remarks |
| :--- | :--- | :--- | :--- | :--- |
| $005-102$ | Document Sensor | H | No paper detected by Document Sensor |  |
| $005-110$ | Regi Sensor (Belt DADF/CVT) | L | Paper detected by Regi Sensor |  |
| $005-205$ | DADF Feed Out Sensor | H | Paper detected by Feed Out Sensor |  |
| $005-206$ | DADF Pre-Reg.Sensor | P | Paper detected by Pre-Reg. Sensor |  |
| $005-211$ | DADF Invert Sensor | Feeder Cover by Inverter Sensor |  |  |
| $005-212$ | DADF Feeder Cover Interlock Switch | - | Platen Interlock open |  |
| $005-213$ | DADF Platen Interlock Switch | H | Light is not blocked by the actuator |  |
| $005-215$ | DADF \#1 Tray APS Sensor | L | Light is not blocked by the actuator |  |
| $005-216$ | DADF \#2 Tray APS Sensor | L | paper detected by APS No.1 Sensor |  |
| $005-217$ | DADF \#3 Tray APS Sensor | p | paper detected by APS No.1 Sensor |  |
| $005-218$ | DADF \#1 APS Sensor | paper detected by APS No.1 Sensor |  |  |
| $005-219$ | DADF \#2 APS Sensor | paper detected by Tray Size SNR No.1 |  |  |
| $005-220$ | DADF \#3 APS Sensor | paper detected by Tray Size SNR No.2 |  |  |
| $005-221$ | DADF Tray Size SNR No.1 | L | Scan Start Signal ON |  |
| $005-222$ | DADF Tray Size SNR No.2 | L |  |  |
| $005-224$ | Scan Start | H | The Nudger Roll is at UP position. |  |
| $005-225$ | Nudger Position Snr | Document Regist |  |  |
| $062-201$ | Sheet Abort | L |  |  |

Table 3 Input Component Control Codes IIT

| Chain-Link | Name | Connector Level | Meaning | Remarks |
| :--- | :--- | :--- | :--- | :--- |
| $062-212$ | IIT Regi Sensor | L | De-actuation of Regi Sensor |  |
| $062-240$ | ADF Exist | H | DADF is not installed |  |
| $062-251$ | APS Sensor1 | APS SNR1:L APS ON: H | Document detected |  |
| $062-253$ | APS Sensor3 | APS SNR3:L APS ON: H | Document detected |  |
| $062-272$ | Scan Start | Scan available |  |  |
| $062-280$ | CCD Fan Fail | H | Same as Name |  |
| $062-281$ | IPS Fan Fail | S | Same as Name |  |
| $062-280$ | Lamp Fan Fail | Same as Name |  |  |
| $062-300$ | Platen I/L Switch | Platen closed |  |  |
| $062-301$ | Angle Sensor | Platen opened |  |  |

Table 4 Output Component Control Codes IIT

| Chain-Link | Name | Connector Level | Meaning | Timer Off | Multiple Output Prohibited Items | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 005-001 | DADF Feed Motor(Speed1) | - | ON for 50sec -> Auto OFF | 0 | 005-002~005-014 |  |
| 005-002 | DADF Feed Motor(Speed2) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001 } \\ & \text { 005-003~005-014 } \end{aligned}$ |  |
| 005-003 | DADF Feed Motor(Speed3) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001~005-002 } \\ & 005-004 \sim 005-014 \end{aligned}$ |  |
| 005-004 | DADF Feed Motor(Speed4) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001~005-003 } \\ & 005-005 \sim 005-014 \end{aligned}$ |  |
| 005-005 | DADF Feed Motor(Speed5) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001~005-004 } \\ & 005-006 \sim 005-014 \end{aligned}$ |  |
| 005-006 | DADF Feed Motor(Speed6) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001~005-005 } \\ & \text { 005-007~005-014 } \end{aligned}$ |  |
| 005-007 | DADF Feed Motor(Speed7) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001~005-006 } \\ & 005-008 \sim 005-014 \end{aligned}$ |  |
| 005-008 | DADF Feed Motor(Speed8) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001~005- } \\ & 007005-009 \sim 005- \\ & 014 \end{aligned}$ |  |
| 005-009 | DADF Feed Motor(Speed9) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001~005-008 } \\ & 005-010 \sim 005-014 \end{aligned}$ |  |
| 005-010 | DADF Feed Motor(Speed10) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001~005-009 } \\ & \text { 005-013~005-014 } \end{aligned}$ |  |
| 005-013 | DADF Feed Motor(Speed11) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-001~005-010 } \\ & \text { 005-014 } \end{aligned}$ |  |
| 005-014 | DADF Feed Motor(Reverse) | - | ON for 50sec -> Auto OFF | 0 | 005-001~005-013 |  |
| 005-026 | DADF Reg.Motor(Speed1) | - | ON for 50sec -> Auto OFF | 0 | 005-027~005-036 |  |
| 005-027 | DADF Reg.Motor(Speed2) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-026 } \\ & \text { 005-028~005-036 } \end{aligned}$ |  |
| 005-028 | DADF Reg.Motor(Speed3) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-026~005-027 } \\ & 005-029 \sim 005-036 \end{aligned}$ |  |

Table 4 Output Component Control Codes IIT

| Chain-Link | Name | Connector Level | Meaning | Timer Off | Multiple Output Prohibited Items | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 005-029 | DADF Reg.Motor(Speed4) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-026~005-028 } \\ & 005-030 \sim 005-036 \end{aligned}$ |  |
| 005-030 | DADF Reg.Motor(Speed5) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & 005-026 \sim 005-029 \\ & 005-031 \sim 005-036 \end{aligned}$ |  |
| 005-031 | DADF Reg.Motor(Speed6) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \hline 005-026 \sim 005-030 \\ & 005-032 \sim 005-036 \end{aligned}$ |  |
| 005-032 | DADF Reg.Motor(Speed7) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & \text { 005-026~005-031 } \\ & 005-033 \sim 005-036 \end{aligned}$ |  |
| 005-033 | DADF Reg.Motor(Speed8) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & 005-026 \sim 005-032 \\ & 005-034 \sim 005-036 \end{aligned}$ |  |
| 005-034 | DADF Reg.Motor(Speed9) | - | ON for 50sec -> Auto OFF | 0 | $\begin{aligned} & 005-026 \sim 005-033 \\ & 005-035 \sim 005-036 \end{aligned}$ |  |
| 005-036 | DADF Reg.Motor(Reverse) | - | ON for 50sec -> Auto OFF | 0 | 005-026~005-036 |  |
| 005-072 | Nip Release Solenoid | L | 3 sec on | 0 | - |  |
| 005-083 | Doc Ready | L | Turn ON the Doc Ready signal. | X | - |  |
| 005-084 | Doc Set LED | L | Belt: Turn ON the DOC SET LED | X(Belt) O(DADF) | - |  |
| 005-088 | Image Area | H | ON for 5sec | 0 | - |  |
| 005-090 | Nudger initialize | - | Performs Nudger Roll initialization. | 0 | - |  |
| 062-002 | IIT Exposure Lamp | L | Turn the Lamp ON for 180sec -> Auto OFF | 0 | - | Turn it OFF when Stop command is received before Auto OFF. |
| 062-004 | IPS Cooling Fan (Low speed) | L | Same as name | 0 | - |  |
| 062-005 | IIT Scan Motor (Scan) | Each has 4 phases. H/L Switching | Move it 50 mm from current position in Scan direction -> Auto OFF | 0 | 062-006 | Stop command is not accepted before Auto OFF. |
| 062-006 | IIT Scan Motor (Return) | Each has 4 phases. H/L Switching | Move it 50 mm from current position in Return direction -> Auto OFF | 0 | 062-005 | Stop command is not accepted before Auto OFF. |
| 062-014 | IPS Cooling Fan (High speed) | H | Same as name | 0 | - |  |
| 062-015 | Lamp Cooling Fan | H | Same as name | 0 | - |  |
| 062-017 | CCD Cooling Fan | H | Same as name | 0 | - |  |
| 062-086 | IIT Image Area | (Differential) H | IMAGE-AREA Signal Output | X | - |  |
| 062-091 | Exchange To ADF | L | Turn ON the document exchange command signal to the DADF | X | - |  |

Table 5 Input Component Control Codes A-Finisher

| Chain-Link | Name | Connector Level | Meaning | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| 012-110 | Regi Clutch ON | Low | IOT Regi Clutch status | Clutch ON |
| 012-111 | IOT Exit SNR | High | IOT Exit SNR status (Hot Line) | Paper exists. |
| 012-140 | Ent SNR | High | Paper Detection by Ent SNR SNR | Paper exists. |
| 012-150 | Compile Exit SNR | High | Paper Detection by Compiler Exit SNR | Paper exists. |
| 012-220 | Front Tamper Home SNR | High | Detection of Front Tamper Position | Not Home (receiving light) |
| 012-221 | Rear Tamper Home SNR | High | Detection of Rear Tamper | Not Home (receiving light) |
| 012-242 | Low Staple SNR | High | Detection of staples in Stapler and of Staple Cartridge | No staples |
| 012-243 | Self Priming SNR | High | Detection of the status where Stapler Staple is ready | Not Ready |
| 012-244 | Staple Home SNR | High | Detection of Staple Head Position | Not Home |
| 012-251 | Set Clamp Home SNR | High | Detection of Set Clamp Position | Not Home (receiving light) |
| 012-252 | Eject Home SNR | High | Detection of Eject Belt Position | Not Home (receiving light) |
| 012-267 | Stack Height Sensor | Low | Detection of paper on Stacker Tray | Detects Stacker height. |
| 012-278 | Stack Sensor1 | High | $\begin{aligned} & \text { Detection of Stacker Tray } \\ & \text { Position } \end{aligned}$ | Shield exists. |
| 012-279 | Stack Sensor2 | High | $\begin{aligned} & \text { Detection of Stacker Tray } \\ & \text { Position } \end{aligned}$ | Shield exists. |
| 012-300 | Top Cover Interlock | High | Detection of Open/Closed Top Cover | Open |
| 012-302 | Finisher Front Door SW | High | Detection of Open/Closed Front Door | Open |

Table 6 Output Component Control Codes A-Finisher

| Table 6 Output Component Control Codes A-Finisher |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Chain-Link Name Connector Meaning Time Off | Multiple Output <br> Prohibited Items |  |  |  |  |
| $012-013$ | Sub Paddle Solenoid ON/OFF | L: ON H: OFF | Sub Paddle rotation | 660 ms | $012-014$ |

Table 6 Output Component Control Codes A-Finisher

| Chain-Link | Name | Connector | Meaning | Time Off | Multiple Output Prohibited Items |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 012-014 | Sub Paddle Rotation | $\begin{aligned} & \text { equal to 012-13 and 012- } \\ & 95 \end{aligned}$ | Sub Paddle makes one rotation. <br> (Rotates Transport Motor FORWARD at the same time as Sub Paddle Solenoid turns ON.) | Mot: 3162 <br> Pulse Sol: 660ms | 012-013 $012-095$ $012-096$ $012-097$ |
| 012-017 | Set Clamp Motor ON/OFF | Pulse: ON <br> H: OFF | Set Clamp Motor rotates forward. | 250 pulses | 012-061 |
| 012-020 | Front Tamper Mot Low FRONT ON/OFF | $\begin{aligned} & \text { Pulse: ON } \\ & \text { H: OFF } \end{aligned}$ | Front Tamper moves to Front at low speed. | 100 pulses | $012-021$ $012-022$ $012-023$ $012-024$ $012-025$ |
| 012-021 | Front Tamper Mot Middle FRONT ON/ OFF | Pulse: ON <br> H: OFF | Front Tamper moves to Front at medium speed. | 100 pulses | $012-020$ $012-022$ $012-023$ $012-024$ $012-025$ |
| 012-022 | Front Tamper Mot High FRONT ON/OFF | Pulse: ON <br> H: OFF | Front Tamper moves to Front at high speed. | 100 pulses | $012-020$ $012-021$ $012-023$ $012-024$ $012-025$ |
| 012-023 | Front Tamper Mot Low REAR ON/OFF | Pulse: ON <br> H: OFF | Front Tamper moves to Rear at low speed. | 100 pulses | $012-020$ $012-021$ $012-022$ $012-024$ $012-025$ |
| 012-024 | Front Tamper Mot Middle REAR ON/OFF | $\begin{aligned} & \text { Pulse: ON } \\ & \text { H: OFF } \end{aligned}$ | Front Tamper moves to Rear at medium speed. | 100 pulses | $012-020$ $012-021$ $012-022$ $012-023$ $012-025$ |
| 012-025 | Front Tamper Mot High REAR ON/OFF | Pulse: ON <br> H: OFF | Front Tamper moves to Rear at high speed. | 100 pulses | $012-020$ $012-021$ $012-022$ $012-023$ $012-024$ |
| 012-026 | Rear Tamper Mot Low FRONT ON/OFF | $\begin{aligned} & \text { Pulse: ON } \\ & \text { H: OFF } \end{aligned}$ | Rear Tamper moves to Front at low speed. | 100 pulses | $012-027$ $012-028$ $012-029$ $012-030$ $012-031$ |

Table 6 Output Component Control Codes A-Finisher

| Chain-Link | Name | Connector | Meaning | Time Off | Multiple Output Prohibited Items |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 012-027 | Rear Tamper Mot Middle FRONT ON/ OFF | Pulse: ON H: OFF | Rear Tamper moves to Front at medium speed. | 100 pulses | 012-026 $012-028$ $012-029$ $012-030$ $012-031$ |
| 012-028 | Rear Tamper Mot High FRONT ON/OFF | Pulse: ON H: OFF | Rear Tamper moves to Front at high speed. | 100 pulses | $012-026$ $012-027$ $012-029$ $012-030$ $012-031$ |
| 012-029 | Rear Tamper Mot Low REAR ON/OFF | $\begin{aligned} & \text { Pulse: ON } \\ & \text { H: OFF } \end{aligned}$ | Rear Tamper moves to Rear at low speed. | 100 pulses | $012-026$ $012-027$ $012-028$ $012-030$ $012-031$ |
| 012-030 | Rear Tamper Mot Middle REAR ON/OFF | $\begin{aligned} & \text { Pulse: ON } \\ & \text { H: OFF } \end{aligned}$ | Rear Tamper moves to Rear at medium speed. | 100 pulses | $012-026$ $012-027$ $012-028$ $012-029$ $012-031$ |
| 012-031 | Rear Tamper Mot High REAR ON/OFF | Pulse: ON H: OFF | Rear Tamper moves to Rear at high speed. | 100 pulses | $012-026$ <br> $012-027$ <br> $012-028$ <br> $012-029$ <br> $012-030$ |
| 012-046 | Staple Motor FORWARD ON/OFF | H: ON L: OFF | Staple MOT rotates forward. | Staple Home OFF then ON makes the motor stop. (a little longer when a failure occurs) | 012-047 |
| 012-047 | Staple Motor REVERSE ON/OFF | H: ON L: OFF | Staple MOT reverses. | 180 ms | 012-046 |
| 012-054 | Eject Motor Low FORWARD ON/OFF | Pulse: ON <br> H: OFF | Eject MOT rotates forward at low speed. | 2000 pulses | $\begin{aligned} & 012-055 \\ & 012-056 \\ & 012-057 \end{aligned}$ |
| 012-055 | Eject Motor High FORWARD ON/OFF | Pulse: ON H: OFF | Eject MOT rotates forward at high speed. | 2000 pulses | $\begin{aligned} & 012-054 \\ & 012-056 \\ & 012-057 \end{aligned}$ |
| 012-056 | Eject Motor Low REVERSE ON/OFF | Pulse: ON H: OFF | Eject MOT reverses at low speed. | 2000 pulses | $\begin{aligned} & \hline 012-054 \\ & 012-055 \\ & 012-057 \end{aligned}$ |
| 012-057 | Eject Motor High REVERSE ON/OFF | Pulse: ON H: OFF | Eject MOT reverses at high speed. | 2000 pulses | $\begin{aligned} & \hline 012-054 \\ & 012-055 \\ & 012-056 \end{aligned}$ |
| 012-060 | Stacker Motor UP ON/OFF | H: ON L: OFF | Stacker Tray goes up. | 80ms | 012-061 |
| 012-061 | Stacker Motor DOWN ON/OFF | H: ON L: OFF | Stacker Tray goes down. | 80ms | 012-060 |

Table 6 Output Component Control Codes A-Finisher

| Chain-Link | Name | Connector | Meaning | Time Off | Multiple Output <br> Prohibited Items |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 012-095 | Transport Motor Low ON/OFF | Pulse: ON <br> H: OFF | Transport Mot rotates for- <br> ward at low speed (equal <br> to full IOT speed). | 012-014 <br> $012-096$ <br> $012-097$ |  |
| $012-096$ | Transport Motor Hi ON/OFF | Pulse: ON <br> H: OFF | Transport Mot rotates for- <br> ward at high speed (trans- <br> port speed in Finisher). | 012-014 <br> $012-095$ <br> $012-097$ |  |
| 012-097 | Transport Motor Half Speed ON/OFF | Pulse: ON <br> H: OFF | Transport Mot rotates for- <br> ward at half speed (equal <br> to half IOT speed). | 012-014 <br> $012-095$ <br> $012-096$ |  |

## Hard Disk Diagnostic Program

## Purpose

NOTE: HDD initialization using the UI-Diagnostic is only for Partition A.

## Procedure

1. Access Diagnostic Routines.
a. Enter UI Diagnostics (Entering UI Diagnostics in UI Diagnostic Mode).
b. Access Diagnostic Routines (Accessing Diagnostic Routines in UI Diagnostic Mode).
2. Select Sub System
3. Select Initialize Hard Disk and select Partition A
4. Press the Start button and select Yes.
5. When Partition A has been initialized is displayed, select Confirm.

NOTE: After the above procedure, Partition A will be initialized.

## Test Pattern Print

## Purpose

Prints the test patterns in the machine, to help identify Image Quality problems.

## Procedure

1. Enter UI Diagnostic Mode.
2. Select Print Test Pattern.
3. Enter Pattern Number. Select a Test Pattern number from Table 1.
4. Select Paper Supply
5. Select Paper Tray.
6. Select Save.
7. Select Output Color.

Ensure that the Output Color is 4C.
8. Select Save.
9. Select Quantity.

Enter the number of print desired by pressing the Up/Down arrows.
10. Select $\mathbf{C i n} \%$. The higher the percentage, the darker the image will be.

NOTE: Choose $20 \%$ to $50 \%$ initially for good image visibility.
11. Press Start.

NOTE: If IOT Subsystem Fail occurs during Test Print, IOT and subsequent Diagnostics cannot be processed causing an error. Test Print cannot be canceled and the power must be turned Off/On (However, it is possible to exit Diagnostics).
If Not Ready states such as Device Error, Jam and No Paper are the cause of the error, Diagnostics can be processed and Test Print can be canceled.
As the MC competes with the contents of the instructions from the UI, the machine may print the specified test pattern or use the priority tray, or it may not print and send a message indicating that a conflict occurred.
The UI receives this message from the MC and displays a message indicating that an error occurred and printing is possible due to a conflict in the operation.
When a jam occurs, the machine stops processing (do not continue or process again). The Clear Jam screen appears and a message asking the user to clear the jam will be displayed on the UI.

## Test Patterns

For details on the test pattern generation location and output path, see Table 1.
Table 1 Pattern Outline

| No. | Pattern Name | Output Color and paper size available for this <br> pattern | Built-in Image <br> Sub |
| :--- | :--- | :--- | :--- |
| 1 | YCMK Grid Pat- <br> tern | 4C 11×17" paper | IOT |
| 51 | Grid Pattern | 4C | IOT |
| 52 | Total Chart-MT-K1 | 4C | IOT |
| 53 | Process Control | 4C | IOT |

Table 1 Pattern Outline

| No. | Pattern Name | Output Color and paper size available for this <br> pattern | Built-in Image <br> Sub |
| :--- | :--- | :--- | :--- |
| 54 | Process Control | 4C | IOT |
| 55 | HT-Chart1-K2 | 4C | IOT |
| 56 | HT-Chart2-K2 | 4C | IOT |
| 57 | HT-Chart3-K2 | 4 C | IOT |
| 58 | K Grid Pattern | 4C | IOT |
| 59 | HT Page | 4C, 4C, K, Y, C, M, R, G, B Half Tone Density Set <br> by Cin\% | IOT |
| 60 | HT stripe and ROS <br> lines | 4 C | IOT |
| 61 | Color Regi Chart <br> Rev. 72 | 4 C | IOT |
| 91 | Process Control | 4 C | IOT |
|  |  |  |  |

NOTE: •(*1): Displays 294mmx17inch (A3 breadth x Ledger length) (means that A3 and Ledger are both supported sizes)

- Prints only from the specified tray. (ATS and APS are not processed.)
- If there was an invalid print specification in 1, an error occurs
- Prints in the paper size of the selected tray. (Print areas outside the paper size will not be printed)
- If the Finisher is installed, No Paper Run cannot be processed. No Paper Run is controlled by dummy $8.5 \times 11 L E F$ timing regardless of whether there is paper or paper size.
- If IOT Built-in PG is specified, 2 Sided (Dup) is prohibited when specifying MSI.
(*1):Length is longer than A4 length and breadth is longer than Letter breadth.


## Webpage Administrator Password

Required to change settings on machine.
User Name: (five one's) 11111
Password: x-admin

## Center Tray Offsetting

This procedure enables offsetting in Center Tray.

## Procedure

Customer can perform following steps if system admin is accessible with code (five one's) 11111, or code is available.

1. Press the Log In / Out Button on the Control Panel and enter (five one's) 11111 using the number keypad and select Confirm.
2. Select System Settings.
3. Select System Settings again.
4. Select Common Settings.
5. Select Other Settings.
6. Select Offset Stacking and select Change Setting.
7. Select Offset per Set.
8. Select Save.
9. Select Close
10. Select Close again.
11. Select Close again.
12. Select Exit. Power off and on if the setting is not active.

## E-Mail Icon

This procedure restores E-Mail icon in display on machines with this capability.

## Procedure

Customer can perform following steps if system admin is accessible with code (five one's) 11111, or code is available.

1. Press the Log In / Out Button on the Control Panel and enter (five one's) 11111 using the number keypad and select Confirm.
2. Select System Settings.
3. Select System Settings again.
4. Select Network Settings.
5. Select Port Settings.
6. Select down arrow and scroll to Send E-mail.
7. Select Send E-mail and select Change Setting, twice.
8. Select Enabled and select Save.
9. Select Close.
10. Select Close again.
11. Select Close again.
12. Select Close again.
13. Select Exit. Power off and on if the setting is not active.

## FAX Output Separation

This procedure provides a method for customer to easily identify FAX output.

## Procedure

If colored paper is available, load colored paper in Tray 1 SEF.
NOTE: FAX and FAX reports are printed on SEF by default.
To prevent the machine from feeding Short Edge Paper (Color), when copying Short Edge Documents (on Platen Glass or DADF) set the Tray 1 Paper Attributes as'Custom1' and Paper Type Priority as' Second'.

Customer can perform following steps if system admin is accessible with code (five one's) 11111, or code is available.

1. Press the Log In / Out Button on the Control Panel and enter (five one's) 11111 using the number keypad and select Confirm.
2. Select System Settings.
3. Select System Settings again.
4. Select Common Settings.
5. Select Paper Tray Attributes.
6. Select Paper Type Priority.
7. Select Custom Paper 1.
8. Select Change Setting and select Second.
9. Select Save.
10. Select Close.
11. Select Paper Type.
12. Select 1. Tray 1 and select Change Settings.
13. Select Custom 1.
14. Select Save.
15. Select Close
16. Select Close again.
17. Select Close again.
18. Select Close again.
19. Select Exit. Power off and on if the setting is not active.

## GP 1 Intermittent Problem RAP

The purpose of this RAP is to provide guidance for resolving an intermittent problem. This is not an exact procedure, but a set of recommended actions that use the resources of the service manual to help locate the cause of an intermittent problem.

## Procedure

1. Check the service log. Recent service actions may provide information about the problem. For example, a component that was recently replaced to correct another problem may be the cause of the new intermittent problem.
2. Run the machine in a mode that vigorously exercises the function that is suspected. The machine may fail more frequently or may fail completely under these conditions. Look for signs of failure or abnormal operation.
An intermittent problem can usually be associated with a RAP, since when it does fail, it results in a fault code, a jam code, or some other observable symptom.
3. Using the RAP that is associated with the symptom of the intermittent problem, examine all of the components that are referenced in the RAP. Look for:

- Contamination, such as a feed roller that has a build up of dirt or toner
- Wear, such as gear teeth that are rounded or have excessive backlash
- HFSI, even if they are not near or have not exceeded the SPEC LIFE or COPY COUNT value
- Wires chafing against components of the machine, especially against moving components
- Misaligned, mis-adjusted, or incorrectly installed components
- Slow or slipping clutches; slow or binding solenoids
- Damaged components
- Excessive heat, or symptoms of excessive heat, such as the discoloration of a component
- Loose cables or wires

4. Using the RAP that is associated with the symptom of the intermittent problem, perform all of the adjustments for the components or functions that are referenced in the RAP. Check to ensure that the adjustment can be made and that there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem. For example, a component can be adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may be an indication of the cause of the problem.
5. Operate all of the components in the appropriate RAP that is associated with the symptom of the intermittent problem with Component Control. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
6. Check that the AC and DC power are within specifications.
7. Get technical advice or assistance where appropriate. This will depend upon the situation and the established local procedures.
8. Examine the components that are not in the RAP, but are associated with the function that is failing. Refer to the BSDs. Look for:

- Contamination, such as a feed roller that has a build up of dirt or toner
- Wear, such as gear teeth that are rounded or have excessive backlash
- HFSI, even if they are not near or have not exceeded the SPEC LIFE or COPY COUNT value
- Wires chafing against components of the machine, especially against moving components
- Misaligned, mis-adjusted, or incorrectly installed components
- Slow or slipping clutches; slow or binding solenoids
- Damaged components
- Excessive heat, or symptoms of excessive heat, such as the discoloration of a component
- Loose cables or wires

9. Perform the adjustments for the components that are not in the RAP, but are associated with the function that is failing. Refer to the BSDs. Check to ensure that the adjustment CAN BE MADE and that there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem. For example, a component can be adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may be an indication of the cause of the problem
10. Operate all of the components that are not in the RAP, but are associated with the function that is failing with Component Control. Refer to the BSDs. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
11. Replace any components or consumable that are known to be a frequent cause of the problem. When doing this, consider the cost and time required. If the suspected item is inexpensive, can be installed quickly, and has a high probability of resolving the problem, then it is reasonable to replace it.
12. Leave an accurate and detailed record of your actions in the service log. Describe what you have observed, what actions you took, and what else needs to be done.

## GP 2 Fax Diagnostics

## Purpose

This procedure describes the process for running fax diagnostic tests found in UI Diagnostic Mode.

## Procedure

## To Access Fax Diagnostics:

1. Enter UI Diagnostic Mode.
2. Press the Log In/Out button on the Control Panel
3. On the display, select System Settings, then Common Settings, then Maintenance/ Diagnostics.
4. Select Sub System.
5. Select Fax Diagnostics.

There are two tests for Fax Diagnostics, the Signal Sending Test and the Relay On/Off Test

## Signal Sending Test

This test checks the ability of the Fax system to generate and transmit a specific signal.
To run this test:

1. From the Fax Diagnostics screen, select Signal Sending Test.
2. Select the line number you wish to test (standard line is $\mathbf{1}$. Lines $\mathbf{3}$ and $\mathbf{5}$ are for optional additional lines, $\mathbf{0}, \mathbf{2}$, and $\mathbf{4}$ are for FX use only).
3. Enter the Signal Number you wish to test and select Send Signals. Refer to Table 1 for the list of signal numbers.
4. An audio tone or tones corresponding to the selected signal should be heard. This verifies communication from the UI to the ESS PWB, and demonstrates the ability of the system to generate the specific signal being tested.
If an error occurs, a Fault Code will be displayed.
5. To stop the test, select Cancel Sending.

## Relay On/Off Test

This test turns on/off various relays that are used in the NCU.
To run this test:

1. From the Fax Diagnostics screen, select Relay On/Off Test.
2. Select the Line Number and select Relay On

If an error occurs, a Fault Code will be displayed. Listen for the Relay to pick up the Line.
3. To stop the test, select Relay Off.

Table 1 Fax Diagnostic signal numbers

| Signal No. | Output | Description |
| :--- | :--- | :--- |
| 011 | Tonal Signal Output | 462 Hz |
| 012 | Tonal Signal Output | 1080 Hz |
| 013 | Tonal Signal Output | 1100 Hz |
| 014 | Tonal Signal Output | 1300 Hz |

Table 1 Fax Diagnostic signal numbers

| Signal No. | Output | Description |
| :---: | :---: | :---: |
| 015 | Tonal Signal Output | 1650 Hz |
| 016 | Tonal Signal Output | 1850 Hz |
| 017 | Tonal Signal Output | 2100 Hz |
| 019 | DTMF Signal Output | Dual Tone 1 |
| 020 | DTMF Signal Output | Dual Tone 2 |
| 021 | DTMF Signal Output | Dual Tone 3 |
| 022 | DTMF Signal Output | Dual Tone 4 |
| 023 | DTMF Signal Output | Dual Tone 5 |
| 024 | DTMF Signal Output | Dual Tone 6 |
| 025 | DTMF Signal Output | Dual Tone 7 |
| 026 | DTMF Signal Output | Dual Tone 8 |
| 027 | DTMF Signal Output | Dual Tone 9 |
| 028 | DTMF Signal Output | Dual Tone 0 |
| 029 | DTMF Signal Output | Dual Tone * |
| 030 | DTMF Signal Output | Dual Tone \# |
| 031 | DTMF Signal Output | Dual Tone A |
| 032 | DTMF Signal Output | Dual Tone B |
| 033 | DTMF Signal Output | Dual Tone C |
| 034 | DTMF Signal Output | Dual Tone D |
| 035 | V. 21 (H) Signal Output | HDLC Flag |
| 036 | V.27ter Signal Output | 2400 bps (HDLC Flag) |
| 037 | V.27ter Signal Output | 4800 bps (HDLC Flag) |
| 038 | V. 29 Signal Output | 7200 bps (HDLC Flag) |
| 039 | V. 29 Signal Output | 9600 bps (HDLC Flag) |
| 040 | V. 17 Signal Output | 7200 bps (HDLC Flag) |
| 041 | V. 17 Signal Output | 9600 bps (HDLC Flag) |
| 042 | V. 17 Signal Output | 12000 bps (HDLC Flag) |
| 043 | V. 17 Signal Output | 14400 bps (HDLC Flag) |
| 080 | V. 8 Signal Output | ANSam |
| 081 | V. 8 Signal Output | CM |
| 082 | V. 8 Signal Output | JM |
| 083 | V. 8 Signal Output | INFOc |
| 084 | V. 8 Signal Output | INFOa |
| 085 | V. 8 Signal Output | PPh+ALT |
| 096 | V. 34 Signal Output | 2400/2400 (HDLC Flag) |
| 097 | V. 34 Signal Output | 4800/2400 (HDLC Flag) |
| 098 | V. 34 Signal Output | 7200/2400 (HDLC Flag) |
| 099 | V. 34 Signal Output | 9600/2400 (HDLC Flag) |
| 100 | V. 34 Signal Output | 12000/2400 (HDLC Flag) |
| 101 | V. 34 Signal Output | 14400/2400 (HDLC Flag) |
| 102 | V. 34 Signal Output | 16800/2400 (HDLC Flag) |

## General procedures information <br> GP 2

| Table 1 Fax Diagnostic signal numbers |  |  |
| :--- | :--- | :--- |
| Signal No. | Output | Description |
| 103 | V.34 Signal Output | $19200 / 2400$ (HDLC Flag) |
| 104 | V.34 Signal Output | $21600 / 2400$ (HDLC Flag) |
| 106 | V.34 Signal Output | $4800 / 2743$ (HDLC Flag) |
| 107 | V.34 Signal Output | $7200 / 2743$ (HDLC Flag) |
| 108 | V.34 Signal Output | $9600 / 2743$ (HDLC Flag) |
| 109 | V.34 Signal Output | $12000 / 2743$ (HDLC Flag) |
| 110 | V.34 Signal Output | $14400 / 2743$ (HDLC Flag) |
| 111 | V.34 Signal Output | $16800 / 2743$ (HDLC Flag) |
| 112 | V.34 Signal Output | $19200 / 2743$ (HDLC Flag) |
| 113 | V.34 Signal Output | $21600 / 2743$ (HDLC Flag) |
| 114 | V.34 Signal Output | $24000 / 2743$ (HDLC Flag) |
| 117 | V.34 Signal Output | $4800 / 3000$ (HDLC Flag) |
| 118 | V.34 Signal Output | $7200 / 3000$ (HDLC Flag) |
| 119 | V.34 Signal Output | $9600 / 3000$ (HDLC Flag) |
| 120 | V.34 Signal Output | $12000 / 3000$ (HDLC Flag) |
| 121 | V.34 Signal Output | $14400 / 3000$ (HDLC Flag) |
| 122 | V.34 Signal Output | $16800 / 3000$ (HDLC Flag) |
| 123 | V.34 Signal Output | $19200 / 3000$ (HDLC Flag) |
| 124 | V.34 Signal Output | $21600 / 3000$ (HDLC Flag) |
| 125 | V.34 Signal Output | $24000 / 3000$ (HDLC Flag) |
| 126 | V.34 Signal Output | $26400 / 3000$ (HDLC Flag) |
| 127 | V.34 Signal Output | $28800 / 3000$ (HDLC Flag) |
| 129 | V.34 Signal Output | $4800 / 3200$ (HDLC Flag) |
| 130 | V.34 Signal Output | $7200 / 3200$ (HDLC Flag) |
| 131 | V.34 Signal Output | $9600 / 3200$ (HDLC Flag) |
| 132 | V.34 Signal Output | $12000 / 3200$ (HDLC Flag) |
| 133 | V.34 Signal Output | $14400 / 3200$ (HDLC Flag) |
| 134 | V.34 Signal Output | $16800 / 3200$ (HDLC Flag) |
| 135 | V.34 Signal Output | $19200 / 3200$ (HDLC Flag) |
| 136 | V.34 Signal Output | $21600 / 3200$ (HDLC Flag) |
| 137 | V.34 Signal Output | $24000 / 3200$ (HDLC Flag) |
| 138 | V.34 Signal Output | $26400 / 3200$ (HDLC Flag) |
| 139 | V.34 Signal Output | $28800 / 3200$ (HDLC Flag) |
| 140 | V.34 Signal Output | $31200 / 3200$ (HDLC Flag) |
| 142 | V.34 Signal Output | $4800 / 3429$ (HDLC Flag) |
| 143 | V.34 Signal Output | $7200 / 3429$ (HDLC Flag) |
| 144 | V.34 Signal Output | $9600 / 3429$ (HDLC Flag) |
| 145 | V.34 Signal Output | $12000 / 3429$ (HDLC Flag) |
| 146 | V.34 Signal Output | $14400 / 3429$ (HDLC Flag) |
| 147 | V.34 Signal Output | $16800 / 3429$ (HDLC Flag) |
| 148 | V.34 Signal Output | $19200 / 3429$ (HDLC Flag) |

Table 1 Fax Diagnostic signal numbers

| Signal No. | Output | Description |
| :--- | :--- | :--- |
| 149 | V.34 Signal Output | $21600 / 3429$ (HDLC Flag) |
| 150 | V.34 Signal Output | $24000 / 3429$ (HDLC Flag) |
| 151 | V.34 Signal Output | $26400 / 3429$ (HDLC Flag) |
| 152 | V.34 Signal Output | $28800 / 3429$ (HDLC Flag) |
| 153 | V.34 Signal Output | $31200 / 3429$ (HDLC Fag) |
| 154 | V.34 Signal Output | $33600 / 3429$ (HDLC Flag) |
| 160 | DTMF Signal Output | Signal Tone 697Hz |
| 161 | DTMF Signal Output | Signal Tone 770 Hz |
| 162 | DTMF Signal Output | Signal Tone 852 Hz |
| 163 | DTMF Signal Output | Signal Tone 941 Hz |
| 164 | DTMF Signal Output | Signal Tone 1209 Hz |
| 165 | DTMF Signal Output | Signal Tone 1336 Hz |
| 166 | DTMF Signal Output | Signal Tone 1477 Hz |
| 167 | DTMF Signal Output | Signal Tone 1633 Hz |

## GP 3 Resetting the Administrator Password

## Purpose

The purpose of this procedure is to allow the CSE to recover the Administrator Password in sit uations where the customer has changed the password from the default value, and subsequently lost or forgotten the password.

## Procedure

1. Enter UI Diagnostic Mode.
2. Press the Log In/Out button on the Control Panel
3. Select System Settings.
4. Select Common Settings.
5. Select Diagnostics / Maintance.
6. Select NVM Read/Write.
7. Enter location 700-171 and press Confirm/Change. This is the current password. You can provide this number to the customer, or set the location to the default value five one's (11111) and allow the customer to enter a new number from Tools mode.

## GP 4 Replacing Billing PWBs

## Purpose

This procedure is used to maintain serial number, product number, and billing data integrity when PWBs with billing data must be replaced.

## Procedure

## PART 1

1. Gather the NVM information.
a. Service log settings
b. Factory settings
2. Document the Settings in Access Mode.

NOTE: These are the customer settings that should be reinstalled at the end of this procedure.
3. Do a Save and Restore (GP 9) with the PWS Tool.
4. Replace the PWB in question and return to this procedure.

## PART 2

## CAUTION

To maintain the integrity of the serial number and billing data never replace all of the PWBs at once. If any of the following billing data PWBs needs replacing, replace them ONE AT A TIME and perform this procedure after each one is replaced:

- ESS PWB.
- MCU PWB.

Ensure that the correct version of software is installed on the PWBs before and after PWB replacement. Print the System Settings List (GP 5), and compare the ROM values to the table in the software installation instructions on the current software upgrade CD.

1. Enter UI Diagnostic Mode.
2. Press the Log In/Out button on the Control Panel
3. Select System Settings.
4. Select Common Settings.
5. Select Maintenance/Diagnostics.
6. Select Adjustment/Others.
7. Select Machine ID/Billing Data.
8. Select the PWB that has not been replaced.
9. Press the Start button.

## CAUTION

Perform GP 4 Part 2 after each PWB is replaced. To maintain the integrity of the serial number and billing data never replace all of the PWBs at once. Replacing all PWBs at once will cause unrecoverable NVM corruption. If a PWB needs replacing, only replace ONE AT A TIME and perform this procedure after each one is replaced. If the problem is not resolved, reinstall the original PWB and re-enter the serial number (if necessary) before attempting to replace a different PWB.
10. Check that all Serial Numbers match each PWB listed and is a match to the data plate.
11. Check that all Billing Data match each PWB listed.
12. Check that the Product Number match each PWB listed.
13. If any PWB will not synchronize, replace that PWB and re-synchronize.
14. Restore all Service Log Settings, Factory Settings and Customer Settings (GP 9)

## GP 5 Printing Reports

## Description

This procedure describes how to print reports.

## Procedure

Refer to types of reports below

## System Settings List

Printing the System Settings List (Configuration Report) without entering Diagnostics Mode.
NOTE: Other report titles are also listed for your information
NOTE: If paper size errors occur when attempting to print reports, check that NVM location 700-397 is set for the appropriate paper size (44 = $8.5 \times 11$ in.; $5=$ A4) (refer to NVM Read/ Write).

1. Press the Machine Status button on the Control Panel.
2. Select Billing Meter/Print Report tab on the display.
3. Select Print Report/List.
4. Select the following tabs to print the selected reports.

- Job Status/Activity Report
- Job History Report
- Activity Report
- Error History Report
- Stored Documents List
- Scan Mode Settings
- Settings List
- Job Template List
- Address Book
- Copy Mode Settings
- Settings List-Common Items
- FAX Mode Settings
- Settings Lis
- Address Book
- Comments List
- Print Mode Settings
- $\quad$ Settings List-Common Items (will be selected in next step)
- PCL Settings List
- PCL Form List
- PDF Settings List
- TIFF Settings List
- TIFF Logical Printers List
- PS Logical Printers List
- Fonts List
- PostScript Fonts List

5. Select Settings List-Common Items.
6. Press the Start button

## Other Reports

The following reports can be printed from the UI Diagnostic Mode:

1. Enter the Diagnostic Mode (Entering UI Diagnostics).
2. Press the Machine Status button on the Control Panel.
3. Select the Billing Meter/Print Reports tab on the display.
4. Select the Print Reports/List button.
5. Select the scroll down arrow.
6. Select the CE button.
7. The following reports can be printed.
a. Debug Log Report
b. HFSI Report
c. Jam Report
d. Shutdown Report
e. Failure Report
f. Protocol Monitor Report
8. Select the requested log button and press the Start button. The selected log will be printed.

## GP 6 Special Boot Modes

## Purpose

This procedure describes methods of recovering from certain uncertain faults.

## Procedure

Some boot-up failures, as well as some uncertain fault codes, may be caused by software corruption, or by structural flaws in a command sent to the machine. In these cases, it is sometimes possible to bypass or delete the offending code during the startup process.

## CAUTION

There are four special boot modes. Each mode performs a different set of initializations to bypass a specific set of problems. There is information lost in each procedure, thus, they should not be used unless specific directions are given. The following list gives these procedures, in the order from least-invasive to most-invasive. If you are instructed to perform a specific initialization, perform only that procedure. If you are asked to perform the entire series, perform the steps in the order given, until the problem is resolved.

## Log Initialization

This step will delete any print or copy job that is in process, and then perform a reboot.
To execute: Simultaneously press and hold the 1, the Stop, and the Power Save buttons on the Control Panel while switching on the power. Hold the buttons down until the boot up screen appears and the second segment of the progress bar appears.

## Spool Initialization

This step will delete all pending print or copy jobs in the job queue, and then perform a reboot.
To execute: Simultaneously press and hold the 6, the Stop, and the Power Save buttons on the Control Panel while switching on the power. Hold the buttons down until the boot up screen appears and the second segment of the progress bar appears.

## HDD Initialization

This step will delete all pending print or copy jobs in the IOT job queue, initializes the IOT HDD, and will and then perform a reboot. All customer data on the HDD will be deleted.

To execute: Simultaneously press and hold the 4, the Stop, and the Power Save buttons on the Control Panel while switching on the power. Hold the buttons down until the boot up screen appears and the second segment of the progress bar appears.

## ESS NVM Initialization

## CAUTION

This routine will set all IOT ESS NVM values to default. Do not attempt this procedure unless there is a usable Machine Settings floppy, an accurate Configuration Report and/or other data that will enable you to reload the correct NVM values for this machine.
This step will initialize the IOT ESS NVM (SYS-System and SYS-User) and then perform a reboot

To execute: Simultaneously press and hold the 3, the Stop, and the Power Save buttons on the Control Panel while switching on the power. Hold the buttons down until the boot up screen appears and the second segment of the progress bar appears.

## GP 7 Country Code Setting

## Purpose

To input country code.

## Procedure

1. Access Diagnostic Routines.
a. Enter UI Diagnostic Mode.
2. Select NVM Read Write.
3. Perform NVM Read/Write on Chain Link 700-165.

0 : No customer setting (default)
1: Customer setting for other than North America.
2: Customer setting for North America.
4. Select Close and Exit.

Change country code at Customer site.

1. Enter System Administrator mode.
a. Press Log In/Out button on Control Panel.
b. Enter (five one's) 11111.
2. Select System Setting $->$ Common Settings $->$ Other Settings.
3. In the menu, 15. Country to be selected.

This menu shall appear only when Chain-Link 700-840 is set to 1 or 2.
4. Select Change Settings.
5. Country menu appears.
6. Select the country.
7. Select Save.
8. Select Close 3 times and Exit.

## GP 8 Firmware Version

## Description

This procedure describes how to determine firmware version of machine subsystems that are administered by Firmware Version designations.

## Procedure

Firmware Version of Controller+PS ROM, IOT ROM, Finisher ROM, IIT ROM, ADF ROM, and FAX ROM

NOTE: If paper size errors occur when attempting to print reports, check that NVM location $700-397$ is set for the appropriate paper size ( $44=8.5 \times 11$ in.; $5=$ A4) (refer to NVM Read/ Write).

1. Press the Machine Status button on the Control Panel.
2. Select Billing Meter/Print Report tab on the display.
3. Select Print Report/List.
4. Select Print Mode Settings.
5. Select Settings List-Common Items.
6. Press the Start button.

NOTE: Page 1 of the report will list Firmware Version of Controller+PS ROM, IOT ROM, Finisher ROM, IIT ROM, ADF ROM, and FAX ROM

## Firmware Version of Duplex, and TTM/2TM

NOTE: Obtaining the Firmware Level for the Duplex Module, and the TTM (Tandem Tray Module)/ 2TM (2 Tray Module) requires reading two NVM locations, adding a decimal point behind the first read, adding a leading zero if the second read is a single digit, and combining the second read behind the decimal point to formulate a Firmware Level.

1. Enter UI Diagnostic Mode.
2. Select Maintenance/Diagnostics.
3. Select NVM Read/Write.
4. To check Duplex go to step 5 .

To check TTM/2TM go to 6 .
5. Perform following to check Duplex.
a. Enter 742-227 using number keypad and select Confirm/Change.
b. Record the Current Value. Place a decimal point after the value.
c. Select Cancel.
d. Enter 742-228 using number keypad and select Confirm/Change.
e. Record the Current Value. If Current Value is a single digit, add a leading zero and record behind decimal from first read. This is the Duplex Firmware Version.
f. Select Cancel as required to exit or proceed to next step.
6. Perform following to check TTM/2TM.
a. Enter 742-229 using number keypad and select Confirm/Change.
b. Record the Current Value. Place a decimal point after the value.
c. Select Cancel.
d. Enter 742-230 using number keypad and select Confirm/Change.
e. Record the Current Value. If Current Value is a single digit, add a leading zero and record behind decimal from first read. This is the Duplex Firmware Version.
f. Select Cancel as required to exit.

## GP 9 Save and Restore

## Description

The purpose of this procedure is to use the Save and Restore Tool to Save and Restore NVM values.

## Procedure

## Save Machine Settings

1. Remove the cover from the USB Diagnostic port (Figure 1).
2. Connect the USB cable to the IOT USB Diagnostic port (on the ESS Controller) and to the PWS laptop.
3. Close all applications, including virus scan and Bus Station.
4. Insert a blank formatted floppy (storage media) in your floppy drive.
5. Ensure that the machine is in the ready to copy mode.
6. On the PWS laptop, select Start / Programs / Xerox Applications / PWS Diagnostic Tools / Xerox Workcentre 7132 PWS Diagnostics Tool.
7. Select Enter Diagnostics.
8. Select dC351.
9. Select the All radio button, then Save Machine Settings.
10. When Save is complete, then Close Diagnostic Tool by selecting File then Exit.
11. When Save As dialog box opens, save file to default location (C:\Xerox $\backslash$ PWS Diagnostic Tool \Data \WC_7132 \Backup).

## Restore Machine Settings

1. When the machine is Ready to Copy, select Start / Programs / Xerox Applications / PWS Diagnostic Tools / Xerox Workcentre 7132 PWS Diagnostics Tool.
2. Check Use Saved Database box.
3. Select Enter Diagnostics.
4. Select the File that was saved when the NVM's were saved, then select Open.
5. Select dC351.
6. Select the All radio button then Restore Machine Settings.
7. Select Yes when the dC351 Restore Conform Dialog box opens.
8. When Restore is complete, then close Diagnostic Tool by selecting File then Exit.
9. Select Cancel when Save As dialog box opens.

## GP 10 Loading And Upgrading Software

## Description

This procedure enables updating the machine software (ESS, FAX, IISS, IOT) or when rein stallation of the software is required due to a failure. The WC 7132 PWS Diagnostic tool for software download comes with the system software disc.

## CAUTION

This procedure is generic in nature and is intended as an overview only. Always follow the instructions that come with the software. There may be additional steps added, or other special requirements that vary from version to version.

## Procedure

1. Using the instructions on the pull out sheet that comes with the system software disc, load the WC 7132 software download tool on you PWS.
2. Make a copy of the color test pattern 82E13120 and check for Image Quality problems Resolve any problems before performing the software loading.
3. Print a copy of the Systems Settings List.
4. Switch off the WC 7132.
5. Disconnect the RJ45 Network Connector to the customer's network.
6. Connect the PWS to the USB 1.1 port on the WC 7132.

7. Switch on the WC 7132.
8. The Found New Hardware wizard will appear. It will ask to install the Fuji Xerox PWS USB Interface Driver for 2nd Generation. Select Install the Software Automatically and select Next. Follow the prompts to complete the driver installation.
9. Go to Product Tools and start the WC 7132 PWS Diagnostic Tool.

NOTE: The actual instructions that accompany the software may have additional steps here, such as a list of NVM values that need to be recorded.
10. When the tool is connected, select Enter Diagnostics.
11. Select dC 351, ensure that the All button is selected
12. Select Save Machine Settings. When the upload is complete select File and Exit the Diagnostics Tool. When prompted, save the Machine Data file
13. Switch off the WC 7132.
14. Switch on the power while pressing the Power Saver switch. Download Mode will be displayed on the UI.
NOTE: A new hardware wizard may appear and you will be asked to install the Fuji Xerox Firmware Download Device on your PWS. Select Cancel.
15. Start the WC 7132 PWS Diagnostic Tool. When connected select Enter Software Download.

NOTE: The actual instructions will list the files that need to be selected.
Generally the Add all 1 File selection is used when upgrading to a newer version of the software. Use the Add All 1 File (Postscript) selection if a PostScript module is installed.
NOTE: The presence of the PostScript module can be verified from the System Settings List under Software Version. If the statement "Controller+PS ROM" appears, the PostScript module is installed. Alternatively you can remove the ESS cover and verify if a PostScript module is installed on the Printer PWB.
If there is no PostScript module, used the Add All 1 File (Standard)
If reinstalling software at the same version, use individual files as the Add All 1 File option as this will not overwrite a file of the same version.
16. Select the appropriate file(s) for download.
17. Select Start Download... the screen will display Processing (Load time is approximately 15 minutes).
18. When the download is completed, the machine will reboot. Exit the PWS tool.

Perform any additional steps or procedures per the actual instructions that accompany the software.
19. Print a new copy of the System Settings List and verify that the software has been upgraded or reloaded to the correct version.
20. Reconnect the customer's network to the RJ45 port on the WorkCentre 7132.

## GP 11Software Option Installation and Removal

## Description

This procedure provides the steps necessary for installing one or more of the following Software Options:

- Email
- Network Scanning
- Internet Fax
- Data Security
- Network Accounting

This procedure also provides the steps necessary for verifying or determining what Software Options are installed in a machine as well as the procedure for removing all of the installed Software Options all at once.

## Install Software Options:

NOTE: The Internet Fax option requires the 1 Line Fax kit or the 3 Line Fax kit be installed before it can be installed. The Email and Network Scanning options do not require any additional kits or hardware.

1. Switch the machine on.
2. Press the <Log In 1 Out> button on the machine Control Panel.
3. Enter the User ID on the numeric keypad on the Control Panel or the keyboard screen, then select [Confirm]

NOTE: The default Key Operator ID is (five one's) 11111. If the Auditron feature is enabled, you may be required to enter the Key Operator ID and the password. The default password is $x$-admin (lower case letters).
4. Select [System Settings] on the [System Administration menu] screen.
5. Select [System Settings] on the [System Settings] screen.
6. Select [Common Settings] on the [System Settings] screen.
7. Select [Maintenance] on the [Common Settings] screen.
8. Select [Software Options] on the [Maintenance] screen.
9. Select [Keyboard], then type in the Password for the Software Option that is being installed and select [Save].
NOTE: The Password can be found inside the front cover of the Software Option booklet(s) that are provided to the customer at machine install based on the Software Options that the customer purchased.
NOTE: The Password must be typed into the machine exactly as it appears in the booklet. The Password may contain upper and lower case letters, numbers and characters such as dashes or stars.

NOTE: If the customer purchased more than one Software Option, then each of the Passwords can be typed in and saved individually prior to rebooting the machine.
10. Select [Reboot] once all of the Passwords have been typed in.
11. Use the procedure "Determine what Software Options are installed:" to confirm that the Software Options have been installed.

## Determine what Software Options are installed:

1. Press the <Log In\Out> button on the machine Control Panel.
2. Enter the correct User ID using the numeric keypad on the Control Panel or the keyboard screen, then select [Confirm].

NOTE: The default Key Operator ID is (five one's) 11111. If the Auditron feature is enabled, you may be required to enter the Key Operator ID and the password. The default password is $x$-admin (lower case letters).
3. Select [System Settings] on the [System Administration menu] screen.
4. Select [System Settings] on the [System Settings] screen.
5. Select [Common Settings] on the [System Settings] screen.
6. Select [Screen/Button Settings] on the [Common Settings] screen.
7. Select [All Services], then select [Change Settings] on the [Screen/Button Settings] screen.
8. Select one of the buttons labeled [Not Set] and the list of installed Software Options will be displayed.
NOTE: It may be necessary to scroll to the next screen by selecting the Down Arrow button to find a button labeled [Not Set].
NOTE: The default items that will be listed if no Software Options have been installed are: Copy, Check Mailbox and Stored Programming. The Fax option will also be listed if the Fax hardware kit is installed.
9. Select [Cancel], then select [Close] several times and then select [Exit] to exit out of Tools mode.

NOTE: If $x x x$ is installed, then $x x x$ is also installed, but does not show on the display.

## Uninstall Software Options:

NOTE: This procedure will uninstall all Software Options at once; there is no way to select specific Software Options to uninstall.
NOTE: Be sure that the Software Option booklet(s) are available because if any of the uninstalled Software Options need to be reinstalled, the Passwords located in the booklets will be required.

1. Press the <Log In\Out> button on the machine Control Panel.
2. Enter the correct User ID using the numeric keypad on the Control Panel or the keyboard screen, then select [Confirm]

NOTE: The default Key Operator ID is (five one's) 11111. If the Auditron feature is enabled, you may be required to enter the Key Operator ID and the password. The default password is $x$-admin (lower case letters).
3. Select [System Settings] on the [System Administration menu] screen.
4. Select [System Settings] on the [System Settings] screen.
5. Select [Common Settings] on the [System Settings] screen.
6. Select [Maintenance] on the [Common Settings] screen.
7. Select [Software Options] on the [Maintenance] screen.
8. Select [Keyboard], then type in ClearAllFlag (all one word and case sensitive) and select [Save].
9. Select [Reboot] to reboot the machine.
10. Use the procedure "Determine what Software Options are installed:" to confirm that the Software Options have been uninstalled.

NOTE: The default items that will be listed when all Software Options have been removed are: Copy, Check Mailbox and Stored Programming. The option Fax will also be listed if the Fax hardware is installed.
11. Use the procedure "Uninstall Software Options:" to reinstall the Software Options that the customer has purchased.

## Elan Boot Sequence



Figure 1 Elan Boot Sequence

## GP 13 Network Scanning Template Removal and Repository Reset Procedure

## Procedure

This procedure provides the steps necessary for removing Network Scanning Templates from a machine when all other removal methods were unsuccessful.

## Network Scanning Template Removal:

NOTE: The following procedure will remove all displayed Network Scanning Templates as well as any Fonts, Forms and Logos that the customer may have downloaded to the machine. Inform the customer of this prior to proceeding with this procedure.

1. Switch the machine on.
2. Press the <Log In\Out> button on the machine Control Panel.
3. Enter the correct User ID using the numeric keypad on the Control Panel or the keyboard screen, then select [Confirm].

NOTE: The default Key Operator ID is (five one's) 11111. If the Auditron feature is enabled, you may be required to enter the Key Operator ID and the password. The default password is $x$-admin (lower case letters).
4. Select [System Settings] on the [System Administration menu] screen.
5. Select [System Settings] on the [System Settings] screen.
6. Select [Common Settings] on the [System Settings] screen.
7. Select [Maintenance] on the [Common Settings] screen.
8. Select [Initialize Hard Disk] on the [Maintenance] screen
9. Select [Partition A], then select [Start], then select [Yes] to confirm that you want to perform this operation.
10. Select [Confirm] once the procedure has completed.
11. Select [Close] several times, then select [Exit]. The machine will reboot automatically.

## Network Scanning Repository Reset Procedure:

NOTE: This procedure will reset all 5 Network Scanning Repositories to factory defaults. As a result, all Templates that utilize the Repositories will no longer function.

NOTE: NOTE: This procedure will also delete the following settings:

-     * 
-     * 
- 
-     * 

1. Switch the machine on.
2. Enter UI Diagnostic Mode. The Touch screen background should turn black.
3. Press the <Log In/Out> button.
4. Select [System Settings] on the [System Administration menu] screen.
5. Select [Common Settings] on the [System Settings] screen.
6. Select [Maintenance / Diagnostics] on the [Common Settings] screen.
7. Select [Initialize NVM] on the [Maintenance] screen.
8. Select [Sys_SYSTEM], then select [Start], then select [Yes] to confirm that you want to perform this operation.
9. Select [Confirm] once the procedure has completed.
10. Select [Exit (Keep Log)] then select [Yes] to confirm your choice.
11. Select [Close] several times, then select [Exit]. The machine will reboot automatically

## GP 14 Setup and Scan to PWS

## Procedure

This procedure is intended to provide instructions for setting up the PWS and WC 7132 to enable scanning to the PWS. Once the PWS is configured, it can be used as a tool to confirm that a WC 7132 can scan and deliver a file via a network connection. Future attempts to verify scanning to the PWS can be done by configuring the PWS to Obtain an IP Address Automatically. Then simply enter the Scan folder name, User name, and Password into the WC 7132 as described in the following procedures (Preparing the WC 7132).

The first part of this procedure provides instructions to configure the PWS. For the PWS to accept scanned files from the machine, it must be configured with an authorized user account that the machine will use to log in with. The PWS also needs a shared folder that will be used as a target location to copy the file into.

## Preparing the PWS

Select the PWS Network Settings;

1. Select Start/Settings/Network Connections/Local Area Connections.
2. Access Properties. Scroll down and select Internet Protocol (TCPIP).
3. Select Properties and then select Obtain an IP Address Automatically.
4. Click on the Advanced button. Select the WINS tab.
5. Select Default inside the NetBIOS setting area of the window.
6. Select OK twice and Close to exit the windows.

## Create a User Account for Scanning;

1. Right-Click My Computer on the PWS desktop and select Manage.
2. Select Local Users and Groups and then double-click the Users folder.
3. Select the Action menu item and select New User (Figure 1).


Figure 1 (new user)
4. Enter a new User Name and Password in the appropriate fields.

- You can put a statement such as Password is ....... in the Description field to remind you if you forget the password some day. The password is case sensitive so be accurate.

5. Uncheck User must change password at next logon.
6. Select Password Never Expires.
7. Select Create, then Close.
8. The new user will be displayed in the list - Close the Computer Management window.

## Create and configure the Shared folder on the PWS;

1. Create a new folder on your C:/ drive (Named Scan in these examples).
2. Right-click the new folder and select Sharing and Security from the menu.
3. Compare the next two illustrations with the screen displayed on your PWS. Use the instructions associated with the screen that matches your PWS.

If you see Figure 2;

- Select Share the folder on the network and Allow network users to change my files.


Figure 2 (Scan Properties (Sharing))

## If not successful;

a. Select the Scan folder and then select Tools at the top of the screen.
b. Select Folder Options and then select the View tab.
c. Uncheck Use simple file sharing (Recommended) from the list and click the Apply and OK buttons.
d. Continue to step 4.

If you see Figure 3;
a. Select the Scan folder and then select Tools at the top of the screen
b. Select Folder Options and then select the View tab
c. Uncheck Use simple file sharing (Recommended) from the list and click the Apply and OK buttons.
d. Continue to step 4.


Figure 3 (Scan Properties (General))
4. Select the Sharing Tab, select the Share this folder radio button and click the Permissions button. (If the Sharing tab is not displayed, go to 10) (Figure 4)


Figure 4 (Scan Properties (Sharing))
5. Select the Add button and then select the Advanced button.
6. Select Find Now. When the user list is displayed, highlight the user that you just created (Figure 5).

- If your User is not in the list, Select the Locations button, find the name of your PWS, (normally the top item) highlight it and select OK. Return to step 6. (Remember your PWS name for later.)


Figure 5 (Select Users or Groups)
7. Select OK twice
8. You should be at the Permissions window for your folder. Check the box(es) to allow Change and Read permissions for your user account (Figure 6).


Figure 6 (Permission for Scan)
9. Select Apply and then OK.
10. Click the Security tab in the Scan folder properties window.
11. If your new user account is visible in the upper text box, Highlight it and then check the boxes to allow all permissions to the folder.
12. If your user account is not listed,
a. Select Add, Advanced, and Find Now.
b. Select your new user from the list displayed.

- If your user is not displayed, Select Locations, find the name of your PWS, (top item in list) highlight it and select OK. Select Find Now - your new user should now be in the list. Highlight the user.
c. Select OK twice and then check the Full Control box to allow all permissions to the folder.

13. Select Apply and OK.
14. The Scan folder should now be available to accept Scanned files via the SMB protocol.

## Preparing the WC 7132

## TCP/IP Configuration

Print and save a system settings list to determine the IP configuration of the machine and to use for restoring the settings later. The TCP/IP settings can be found on page 3 under the heading Communication Settings in the TCP/IP section.

If the selection for Get IP Address is set to DHCP/Autonet, go to step 5
If the selection for Get IP Address is not set to DHCP/Autonet, start at step 1.

1. On the Machine UI, press the Login button and enter the tools password five one's (11111) and press Confirm on the touch screen.
2. Select System Settings/System Settings/Network Settings/Protocol Settings on the LCD touch screen.
3. Select Get IP Address and then Change Settings.
4. Select the button for DHCP/Autonet. Select Save, then Close several times and then Exit to leave the tools mode.
5. Power off the WC 7132 and disconnect the customer's network cable from the machine. Power the machine back on.
6. Connect the PWS to the machine via a network crossover cable. Ensure the PWS is powered on.
7. Wait a minute or so for the two devices to establish a connection before proceeding to the next section.

## Scan to the PWS via SMB

1. From the machine UI, press the All Services button.
2. Select Scan to FTP/SMB on the touch screen:

- If the selection is not available, it can be programmed in tools in the following path; System Settings/ System Settings/Common Settings/Screen-Button Settings/ All Services.

3. The Scan to FTP/SMB window displays the Transfer Protocol to be used for scanning. If it is set to SMB continue to step 4. If set to FTP perform step a.
a. Press the FTP button. In the next screen, press SMB and press Save.
4. Select Browse
a. If a communication error occurs, exit out of Scan to FTP/SMB, wait 30 seconds and start from step 1 again.
5. When the connection is established, the window will display any available workgroups found on the network. Select the PWS's workgroup and press Next.

- To find the PWS workgroup name, right-click MyComputer, select Properties and click the Computer Name tab.

6. Computers registered within the selected workgroup will be displayed on the next screen. Select your PWS Name and press Next.
7. Enter the User name by selecting the User Name button. The LCD will display a Keyboard to be used for input. When finished, press Save. Enter the Password in the same fashion.
a. The user name and password are the same as the user name and password that was created on the PWS earlier in this procedure.
b. The User name and Password are case-sensitive.
c. You can enter any special characters by selecting the button for More Characters on the keyboard for entering the Password.
8. Select Confirm in the window displaying your selections.
9. A window may be displayed showing any shared folders on the PWS, select your scan folder and press Save.
10. When the Ready to Scan message is displayed, insert a document in the Document handler and press the green Start button.

## Confirm the File Transfer

To confirm that the file transfer worked;

1. Browse to your scan folder on the PWS.
2. A new folder should be displayed in the Scan folder
3. Open the folder to see the contents. Most image files (PDF, Jpeg, tiff) can be opened by double-clicking them. Open the file and compare it to the document that was scanned.
The existence of the image file in the scan folder demonstrates the ability of the machine to scan the document, convert the scanned image into a file, and transport the file via a network connection to a location external to the machine. Though this procedure verifies SMB transfer, the basic functions are the same for FTP and E-mail.

At this point, scan problems that occur when connected to the customer's network are most likely to be caused by configuration or setup problems that should be supported via the customer IT personnel, the Xerox Customer Support Center, or Xerox Network Analysts.

Remember to change the WC 7132 network configuration back to the settings shown on the saved System Settings list. Use the procedure shown in Preparing the WC 7132 to find the entry point for making the changes.

## GP 15 Clearing a 092-310 Fault Code (ADC fail)

## Procedure

The following NVM locations that are related to 092-310 Fault Code (ADC fail):

| NVM location | Description |
| :---: | :--- |
| $752-095$ | ADC Sensor failure |
| $752-096$ | ADC shutter is kept opened (a failure reported when ADC shutter does not <br> close) |
| $752-097$ | ADC shutter is kept closed (a failure reported when ADC shutter does not <br> open) |
| $752-098$ | A failure related to Yellow TC (Toner Concentration) patch |
| $752-099$ | A failure related to Magenta TC (Toner Concentration) patch |
| $752-100$ | A failure related to Cyan TC (Toner Concentration) patch |
| $752-101$ | A failure related to Black TC (Toner Concentration) patch |
| $752-102$ | A failure related to Yellow ADC patch |
| $752-103$ | A failure related to Magenta ADC patch |
| $752-104$ | A failure related to Cyan ADC patch |
| $752-105$ | A failure related to Black ADC patch |
| $752-106$ | A failure related to Yellow patch density while performing long setup opera- <br> tion |
| $752-107$ | A failure related to Magenta patch density while performing long setup <br> operation |
| $752-108$ | A failure related to Cyan patch density while performing long setup opera- <br> tion |
| $752-109$ | A failure related to Black patch density while performing long setup opera- <br> tion |
| $752-121$ | The count of ADC fails |
| $752-094$ | ADC Sensor failure (a failure reported when the count of ADC related fails <br> is reached to a specified number of times) |

1. The NVM location 752-121 is incriminated by 1 each time any failures of $752-095$ to 752 109 occurs. When the count of 752-121 exceeds " 3 ", the fault code 092-310 (ADC fail) is displayed on the UI and the machine stops. The fault code 092-310 can be cancelled by machine power off/on. After the fault code 092-310 is cleared, the machine will allow print ing of 100 more pages and performs ADC setup operations. If there are no ADC related failures occurring while printing 100 pages, then the machine will be resumed. However, the count of 752-121 will not be cleared. If there is an ADC related failure occurring while printing 100 pages, then the machine will display the fault code 092-310, and fault code 092-310 will not be cleared by machine power off/on.
2. If the toner condition is normal status (i.e. when toner is not empty status): when the count of NVM value 752-121 exceeds "50", then the machine stops, and the fault code 092-310 cannot be cleared. Then, "1" will be set to the NVM location 752-094

If toner condition is pre-near status (i.e. order toner status): when the count of 752-121 exceeds " 8 ", then the machine stops, the fault code $92-310$ cannot be cleared. Then, " 1 " will be set to the NVM location 752-094

When " 1 " is set to $752-094$, the NVM $752-121$ needs to be cleared to " 0 ". When, NVM $752-121$ is cleared to " 0 ", NVM 752-094 will be automatically cleared to " 0 ". Then, the fault code 092-310 can be cleared.
However, to resolve the fault code 092-310 completely, you need to find out the cause of any failure of NVM locations 752-095 to 752-109.

## Procedure Diagram

(Figure 1)


Figure 1 Procedure Diagram

## Space Requirements

Installation space requirements are shown in Figure 1 (WorkCentre 7132 w/out Finisher), Figure 2 (WorkCentre 7132 w/Finisher).



Figure 2 Space Requirement - WorkCentre 7132 w/Finisher

Figure 1 Space Requirement - WorkCentre 7132 w/out Finisher

## Product Specs.

## Product Codes

Table 1 Product Codes WorkCentre 7132

| No. | Item | Product Code |
| :--- | :--- | :--- |
| 1 | IOT/IIT 110V With OCT, 520 sheet tray, MSI, Duplex | AYX |
| 2 | IOT/IIT GSA 110V WITH OCT, 520 sheet tray, MSI, Duplex | AYXN |
| 3 | IOT/IIT 110V With DADF + TTM | AYW |
| 4 | IOT/IIT 110V With DADF + Stand | AYV |
| 5 | IOT/IIT 110V With Platen + Stand | AYU |
| 6 | IOT/IIT 220V WITH OCT, 520 sheet tray, MSI, Duplex | AYN |
| 7 | IOT/IIT 220V With DADF + TM | AAP |
| 5 | 2 TM | $59 F$ |
| 6 | TTM | $00 G$ |
| 7 | Finisher | 00 H |

## Component Weights

| Table 2 Component Weights |  |
| :--- | :--- |
| Component | Weight (approx.) |
| DC (Platen) | $60 \mathrm{~kg}(132 \mathrm{lb})$. |
| IIT and Platen | $15 \mathrm{~kg}(33 \mathrm{lb})$. |
| 2 Tray Module | $23 \mathrm{~kg}(51 \mathrm{lb})$. |
| Tandem Tray Module | $31 \mathrm{~kg}(68 \mathrm{lb})$. |
| Exit2 | $2 \mathrm{~kg} \mathrm{(4} \mathrm{lb)}$. |
| Duplex Module | $1.8 \mathrm{~kg} \mathrm{(4lb)}$. |
| DADF | $9.8 \mathrm{~kg}(30 \mathrm{lb})$. |
| Finisher | $30 \mathrm{~kg}(66 \mathrm{lb})$. |

## Paper Capacities

| Specification | Paper Trays 1-3 | Tray 5 (Bypass) |
| :---: | :---: | :---: |
| Paper Sizes | - Min: 139.7W x 182L <br> - Max: 297W x 432Lmm | Paper <br> - Min: $89 \mathrm{~W} \times 98.4 \mathrm{~L}$ mm (postcard) <br> - Max: $297 \mathrm{~W} \times 431.8 \mathrm{~L} \mathrm{~mm} / 12 \times 19 \mathrm{in}$. |
| Paper Weights | $\begin{aligned} & \hline \text { Range: 60-216 gsm (Tray } 2 \\ & \text { and 3) } \\ & \text { Tray 1: 60-105 gsm } \\ & \hline \end{aligned}$ | Range: 60-216 gsm |

Table 3 Paper Capacities

| Specification | Paper Trays 1-3 | Tray 5 (Bypass) |
| :---: | :---: | :---: |
| Capacities 20 lb . (80 gsm) | TTM: 2620 sheets total: <br> Tray 1: 520 sheets <br> Tray 2: 900 sheets <br> Tray 3: 1200 sheets <br> 2TM: 1560 sheets total: <br> Tray 1: 520 sheets <br> Tray 2: 520 sheets <br> Tray 3: 520 sheets | 100 sheets |

## Copy Speed

- Plain paper; simplex; fed from Tray 1-3
- Letter size LEF: 8/32ppm
- Letter size SEF: 8/16ppm
- Legal size: 8/32ppm
- $\quad$ A3/11x17 in.: 4/16ppm


## FCOT/FPOT

First Copy Output Time (original on platen); 8.5" x 11" (A4); Tray 1;

- 27 sec . or less for color
- 16 sec. or less for monochrome

First Print Output Time (does not include ESS process time for prints); 8.5" x 11" (A4); Tray 1;

- 26 sec. max for color
- 15 sec . max for monochrome


## Voltage Requirements

- Single phase (two wires plus ground)
- $110-127 \mathrm{VAC} / 60 \mathrm{~Hz}(99-135 \mathrm{VAC}, 50 / 60+/-3 \mathrm{~Hz})$
- 220-240 VAC/50 Hz (198 to 254 VAC, $50 / 60+/-3 \mathrm{~Hz}$ )


## Power Consumption (5 minute average)

- Machine Running: 1.33 kVA - NASG; 1.92 kVA ESG max.
- off Mode 1.5W~3.2W (Reference)


## Environmental Data and Requirements

Ambient Temperature and Humidity requirement:

- Minimum: $10^{\circ} \mathrm{C} / 50^{\circ} \mathrm{F}$ at $15 \%$ humidity
- Maximum: $32^{\circ} \mathrm{C} / 90^{\circ} \mathrm{F}$ at $70 \%\left(28^{\circ} \mathrm{C} / 82^{\circ} \mathrm{F}\right.$ at $85 \%$ humidity) humidity

IIT/DADF Specifications

Table 4 DADF Specifications

| Table 4 DADF Specifications |  |
| :--- | :--- |
| Document Size: Platen | Max size: $297 \times 420 \mathrm{~mm}, 11 \times 17 \mathrm{in}$. <br> Max scannable area: $297 \times 420 \mathrm{~mm}$ |

Table 4 DADF Specifications

| Document Size: DADF | $\begin{aligned} & 5.5^{" ~} \times 8.5 " \text { (A5) LEF to } 11^{\prime \prime} \times 17^{\prime \prime} \text { SEF (A3) } \\ & \text { Max: } 297 \times 432 \mathrm{~mm} \\ & \text { Min: } 139.7 \times 210 \mathrm{~mm} \end{aligned}$ |
| :---: | :---: |
| Document Weight: DADF | Min: $50 \mathrm{gsm} / 16 \mathrm{lb}$ Max: $128 \mathrm{gsm} / 32 \mathrm{lb}$ (Duplex mode) |
| Document Capacity: DADF | 50 sheets 90 gsm . |
| R/E Capability: | Variable Percentages: $25 \%$ to $400 \%$ in $1 \%$ increments Preset Percentages: <br> - $25 \%$ <br> - $50 \%$ <br> - $64.7 \%$ ( $11 \times 17$ in. to $8.5 \times 11$ in.) <br> - $78.5 \%$ ( $8.5 \times 14$ in. to $8.5 \times 11$ in.) <br> - $100 \%$ <br> - $129.4 \%$ ( $8.5 \times 11$ in. to $11 \times 17$ in.) <br> - $220 \%$ ( $3.5 \times 5$ in. to $8.5 \times 11$ in.) <br> - $400 \%$ <br> Presets can be changed in Tools mode. |

## Common Tools

| Table 1 Common Tools |
| :--- |
| Description Part Number <br> Screw Driver (-) 3 x 50 600 T 40205 <br> Screw Driver (+) $\times 100$ 600 T 01989 <br> Screw Driver (+) NO.1 499 T 00356 <br> Stubby Driver (+) (-) 600 T 40210 <br> Screw Driver (-) 100MM 499 T 00355 <br> Spanner and Wrench 5.5 x 5.5 600 T 40501 <br> Spanner and Wrench 7x 7 600 T 40502 <br> Hex Key Set 600 T 02002 <br> Box Driver 5.5MM 600 T 01988 <br> Side Cutting Nipper 600 T 40903 <br> Round Nose Pliers 600 T 40901 <br> Digital Multi-meter Set 600 T 02020 <br> Interlock Cheater 600 T 91616 <br> Silver Scale 150MM 600 T 41503 <br> CE Tool Case 600 T 01901 <br> Magnetic Screw Pick-up Tool 600 T 41911 <br> Scriber Tool 600 T 41913 <br> Magnetic pickup 600 T 41911 <br> Loupe 600 T 42008 <br> Flash Light 600 T 01824 <br> Brush 600 T 41901 <br> Tester Lead Wire (red) 600 T 09583 <br> Tester Lead Wire (black) 600 T 02030 <br> Spring Hook (T Style) 600 T 41907 |

Product Tools and Test Patterns
Table 1 Tools and Test Patterns

| Description | Part Number |
| :---: | :---: |
| Geometric Test Pattern | 082E 08220 |
| HVPS test probe (1/10X) | 600T 01653 |
| HVPS test probe adapter | 600T 01996 |
| Copy Paper Carrying Case | 600 T 01999 |
| Copy Paper Zip Lock Bag | 600T 02000 |
| Colotech +-90 gsm - A3 | 003R 94642 |
| Service and Machine NVM Log | 700P 97436 |
| Serial cable | 600T 02058 |
| USB cable, 6 ft //2 meter Firmware Upload | 600 T 02231 |
| Network Interface (Crossover) cable | 600 T 02252 |
| Parallel printer cable | 117E 19340 |
| PWS power cord adapter | 600T 02018 |
| L Probe | 600 T 02177 |
| Machine Resident Disk Kit (Machine Settings Floppy) | 300 K 63850 |
| A3 (11" x 17") Test Pattern | 082E 02000 |
| A3 Test Pattern | 082P 521 |
| A4 Test Pattern | 082E 02010 |
| 8.5 " $\times 11^{\prime \prime}$ Test Pattern | 082E 02020 |
| 8.5 " $\times 14^{\prime \prime}$ Test Pattern | 082P 524 |
| SIR 542.00 Solid area density Scale | 082E 08230 |
| SIR 494.00 Visual Scale | 082P 00448 |

## Log Book Storage

A protected out-of-sight space exists at the left front corner, to the left of the center output tray. Fold the log and insert into this space.


Figure 1 Log Book Storage Compartment

## Cleaning Materials

Table 1 Cleaning Materials

| Description | NASG Part <br> Number | ESG Part <br> Number |
| :--- | :--- | :--- |
| Cleaning fluid <br> (8oz., Formula A) | 043P 00048 | 008R 90034 |
| Film remover (8 oz.) | 043P 00045 | 008R 90176 |
| Lens/mirror cleaner | 043P 00081 | 008R 90178 |
| Lint-free (white) cleaning cloth | 019P 03025 | 019P 03025 |
| Lint-free Optics cleaning cloth | 499T 90417 | 499T 90417 |
| Cleaning towels | 035P 03191 | 600S 04372 |
| Drop cloth | 035P 01737 | 035P 01737 |
| Cotton Swab | 035P 02162 | 035P 02162 |

## Machine Consumables

| Table 1 Toner Cartridge |
| :--- |
| Name Part Number <br> Black Toner (Metered) 006R 01262 World wide <br> Yellow Toner (Metered) 006R 01263 World wide <br> Magenta Toner (Metered) 006R 01264 World wide <br> Cyan Toner (Metered) 006R 01265 World wide <br> Black Toner (Sold) 006R 01266 NA/ESG <br> Yellow Toner (Sold) 006R 01267 NA/ESG <br> Magenta Toner (Sold) 006R 01268 NA/ESG <br> Cyan Toner (Sold) 006R 01269 NA/ESG <br> Black Toner (Sold) 006R 01270 DMO/W <br> Yellow Toner (Sold) 006R 01271 DMO/W <br> Magenta Toner (Sold) 006R 01272 DMO/W <br> Cyan Toner (Sold) 006R 01273 DMO/W |

Table 2 (Xero) Drum Cartridge

| Part Number |
| :---: |
| $013 R 00622$ |

Table 3 Staple Cartridge

| Part Number |
| :---: |
| 008R 12915 |

Table 4 Waste Toner Bottle

| Part Number |
| :---: |
| $008 R 13021$ |


| Table 5 Fuser 110V |
| :---: |
| Part Number |
| $008 R 13022$ |


| Table 6 IBT Belt Cleaner |
| :---: |
| Part Number |
| $001 R 00588$ |

Table 7 2nd BTR

| Part Number |
| :---: |
| $008 R 13026$ |

Table 8 Odor Filter Kit

## Part Number

 008R13025
## Glossary of Terms

Table 1

| Term | Description |
| :--- | :--- |
| A3 | Paper size 297 millimeters (11.69 inches) x 420 millimeters (16.54 inches). |
| A4 | Paper size 210 millimeters (8.27 inches) x 297 millimeters (11.69 inches). |
| AC | Alternating Current is type of current available at power source for machine. |
| ACT | Advanced Customer Training: teaches customers to perform some of service that is <br> normally performed by Xerox Service Representative. |
| A/D | Analog to Digital refers to conversion of signal. |
| ADJ | Adjustment Procedure |
| ARZ | Argentina |
| Bit | Binary digit, either 1 or 0, representing an electrical state. |
| CCD | Charge Coupled Device (Photoelectric Converter) |
| CD | $1:$ Circuit Diagram; 2: Compact Disc |
| Chip | Integrated Circuit (IC) |
| CRU | Customer Replaceable Unit |
| CVT | Constant Velocity Transport |
| DADF | Duplexing Automatic Document Feeder |
| DC | Direct Current is type of power for machine components. Machine converts AC <br> power from power source to DC power. |
| dC | Diagnostics Code. |
| DHCP | Dynamic Host Configuration Protocol |
| DIS | Disconnect |
| DMA | Direct Memory Access |
| DMM | Digital Multimeter is generic name for meter that measures voltage, current, or elec- <br> trical resistance. |
| ESMTP | Extended Simple Mail Transfer Protocol |
| FIFO | First In First Out |
| FS | Fast Scan (direction) - Inboard to Outboard |
| DMO | Developing Markets Operations potential. |
| DNS | Domain Name System |
| DPI | Dots Per Inch |
| DSL | Digital Subscriber Line - Digital telephone line signal in non-voice frequency range |
| DSN | Database Source Name |
| DTMF | Dual-tone multifrequency, also known as Touch Tone |
| Duplex | 2 -sided printing or copying |
| EHLO | Extended HELLO |
| EME | Electromagnetic Emissions are emitted from machine during normal operation and |

Table 1

| Term | Description |
| :---: | :---: |
| FTT | Fail To Train - Sent by receiving Fax - request to reduce send rate |
| GND | Ground |
| HDD | Hard Drive |
| HFSI | High Frequency Service Item |
| HELLO | Hello (HELO) identifies sender-SMTP to the receiver-SMTP |
| HVPS | High Voltage Power Supply |
| Hz | Hertz (Cycles per second) |
| IIT | Image Input Terminal - Scanner/CCD portion of the machine |
| I/O | Input/Output |
| IOT | Image Output Terminal - ROS/Xero/paper handling/fusing portion of the machine |
| IQ | Image Quality |
| JBIG | Joint Bi-level Image Experts Group, an image compression scheme |
| JCL | Job Control Language |
| KBPS | Kilo Bites Per Second |
| KC | 1000 copies |
| KO | Key Operator |
| LCD | Liquid Crystal Display |
| LDAP | Lightweight Directory Access Protocol |
| LE | Lead Edge of copy or print paper, with reference to definition of term TE |
| LED | Light Emitting Diode |
| LEF | Long Edge Feed |
| LTR | Letter size paper (8.5 x 11 inches) |
| LUT | Look Up Table - array of NVM locations that store process control data |
| LVPS | Low Voltage Power Supply |
| LZW | Lempel, Ziv, Welchan, an image compression scheme |
| MF | Multi-Function |
| MN | Multinational |
| NIC | Network Interface Card |
| NA | North America |
| NAAO | North American Agent Operations |
| NARS | North American Reseller Sales |
| NG | Not Good, No Good |
| NO | Number |
| NVM | Non Volatile Memory |
| OEM | Original equipment manufacturer |
| OGM | On-going Maintenance |
| Panther | Continuous data protection protocol or utility |
| PC | Personal Computer |
| PCL | Printer Control Language |
| PDF | Portable Document Format |
| PDL | Page Description Language |

Table 1

| Term | Description |
| :---: | :---: |
| $\begin{aligned} & \text { Phase A, } \\ & \text { B, C, D, E } \end{aligned}$ | Phase A is Fax call set up, Phase B is pre-message processing, Phase C is message transmission, Phase D is post message protocols, Phase E is Release Fax call |
| PJ | Plug Jack (electrical connections) |
| PJL | Printer Job Language |
| PL | Parts List |
| PO | Part of (Assembly Name) |
| POP | Post Office Protocol |
| PWB | Printed Wiring Board |
| PWS | Portable Workstation for Service |
| RAM | Random Access Memory |
| RAP | Repair Analysis Procedure for diagnosis of machine status codes and abnormal conditions. |
| R/E | Reduction/Enlargement refers to features selection or components that enable reduction or enlargement. |
| REP | Repair Procedure for disassembly and reassembly of component on machine |
| RIS | Raster Input Scanner |
| ROM | Read Only Memory |
| ROS | Raster Output Scanner. Device that transfers digitally processed image, using laser light, to photoreceptor. |
| SAD | Solid Area Density |
| SCP | Service Call Procedure |
| SEF | Short Edge Feed |
| Self-test | An automatic process that is used to check Control Logic circuitry. Any fault that is detected during self-test is displayed by fault code or by LEDs on PWB. |
| SIMM | Single Inline Memory Module used to increase printing capacity |
| SMB | Server Message Block |
| SMTP | Simple Mail Transfer Protocol |
| Simplex | Single sided copies |
| SSL | Secure Socket(s) Link |
| SUB | Sub-addressed - indicates that the following facsimile information field (FIF) information is sub-addressed in the called subscriber's domain. |
| SW | Software |
| TCP/IP | Transmission Control Protocol/Internet Protocol |
| TE | Trail Edge of copy or print paper, with reference to definition of term LE |
| TIFF | Tag Image File Format |
| UM | Unscheduled Maintenance |
| UI | User Interface |
| USB | Universal Serial Bus |
| V. 8 | A part of the initial Fax transmission phase when attributes are worked between sending and receiving fax machines |
| W/ | With - indicates machine condition where specified condition is present |
| W/O | Without - indicates machine condition where specified condition is not present |

Table 1

| Term | Description |
| :--- | :--- |
| XBRA | Xerox Brazil |
| XE | Xerox Europe - also referred to as ESG (European Solutions Group) |
| XING | Xerox International Group |
| XLA | Xerox Latin America |
| XMEX | Xerox Mexico |
| XOG | Xerox Office Group |
| XPJL | X Printer Job Language |

## Change Tag Introduction

Important modifications to the copier are identified by a tag number which is recorded on a tag matrix. The tag matrix for the IOT (Processor) is molded into the inside of the Front Door.

This section describes all of the tags associated with the copier, as well as multinational applicability, classification codes, and permanent or temporary modification information.

## Classification Codes

A tag number may be required to identify differences between parts that cannot be interchanged, or differences in diagnostic, repair, installation, or adjustment procedures.

A tag number may also be required to identify the presence of optional hardware, special nonvolatile memory programming, or whether mandatory modifications have been installed. Each tag number is given a classification code to identify the type of change that the tag has made The classification codes and their descriptions are listed in the table below.

Table 1

| Table 1 |  |
| :--- | :--- |
| Classification Code | Description |
| M | Mandatory tag |
| N | Tag not installed in the field |
| O | Optional tag |
| R | Repair tag |

TAG: 1
CLASS: M
USE:

## MFG SERIAL NUMBERS:

## NAME: Front Auger

PURPOSE: To replace the defective Front Auger.
KIT NUMBER: 605K91980
PARTS LIST ON: PL 6.1
Plug/Jack LocationsPlug/Jack Locations7-3
7.1 Plug/Jack Locations-a-finisher
7.1.1 Plug/Jack Locations7-35
7.1.2 Plug/Jack Illustrations ..... 7-36
Wirenets
7.3.1 Wire Net AC POWER (HOT) ..... 7-39
7.3.2 Wire Net AC POWER (NUT) ..... 7-40
7.3.3 Wire Net +3.3VDC (Standby, Standby RTN) ..... -41
7.3.4 Wire Net +3.3VDC (Main, Main RTN) ..... 7-42
7.3.5 Wire Net +5VDC (Standby, Standby RTN) ..... -43
7.3.6 Wire Net +5VDC (Main)-1 ..... 7-44
7.3.7 Wire Net +5VDC (Main)-2 ..... $7-45$ ..... -45
7.3.8 Wire Net +5VDC-3
7.3.8 Wire Net +5VDC-3
7.3.9 Wire Net +5VDC-4 ..... 7-47
7.3.10 Wire Net +5VDC-5 ..... 7-48
3.11 Wire Net +5VDC-6 ..... -49
7.3.12 Blank ..... 7-50 ..... -50
7.3.13 Blank
7.3.14 Wire Net DC COM (+5VRTN)-1 ..... -52
7.3.15 Wire Net DC COM (+5VRTN)-2 ..... -53
7.3.16 Wire Net DC COM (+5VRTN)-3 ..... 7-54
7.3.17 Wire Net DC COM ( +5 VRTN) -4 ..... 7-54
$7-55$
7.3.18 Wire Net DC COM (+5VRTN)-5 ..... -56
7.3.19 Wire Net DC COM (+5VRTN)-6 ..... 7-57
7.3.20 Wire Net DC COM (+5VRTN)-7 ..... 7-58
7.3.21 Blank ..... 7-59
7.3.22 Wire Net +24VDC-1 ..... 7-60
7.3.23 Wire Net +24VDC-2 ..... 7-61
7.3.24 Wire Net +24VDC-3 ..... 7-62
7.3.25 Wire Net +24VDC-4 ..... 7-63
7.3.26 Wire Net +24VDC-5 ..... 7-64
7.3.27 Wire Net +24VDC-6 ..... 7-65
7.3.28 Wire Net DC COM (+24VRTN)-1 ..... 7-66
7.3.29 Wire Net DC COM (+24VRTN)-2 ..... 7-67
7.3.30 Wire Net DC COM (+24VRTN)-3 ..... -68
7.3.31 Blank ..... 7-69
7.32 Finisher Wire Net +5VDC ..... 7-70
7.3.33 Finisher Wire Net DC COM(+5VRTN) ..... 7-71
7.3.34 Finisher Wire Net +24VDC ..... -72
7.3.35 Finisher Wire Net DC COM (+24VRTN) ..... 7-73
7.2 Wirenets-a-finisher
7.2.36 A-Finisher Wire Net +5VDC ..... 7-75
7.2.37 A-Finisher Wire Net DC COM(+5VRTN) ..... 7-76
7.2.38 A-Finisher Wire Net +24VDC
7-77
7-77
7.2.39 A-Finisher Wire Net DC COM (+24VRTN) ..... 7-78
BSDs
Chain 1 Standby Power ..... 7-79
Chain 2 User Interface ..... -84
Chain 3 Machine Run Control ..... 7-88
Chain 4 Start Print Power. ..... 7-95
Chain 5 Document Transportation ..... 7-103
Chain 6 Imaging ..... 7-109
Chain 7 Paper Supply ..... 7-114
Chain 8 Paper Feed and Transportation ..... 7-125
Chain 9 Xerographics ..... 7-132
Chain 10 Copy Transportation and Fusing ..... 7-142
Chain 12 Finishing ..... 7-149
Chain 13 Nohad ..... 7-158
Chain 16 Printer ..... 7-159
Chain 17 FAX ..... 7-160
7.3 BSDs-a-finisher
Chain 15 Finisher-A
CH15.1 A-Finisher DC Power and Interlock Switching ..... 7-161
CH15.2 PWBS Communication (IOT-A-Finisher). ..... 7-162
CH15.3 A-Finisher Transportation ..... 7-163
CH15.4 Tamping and Offset ..... 7-164
CH15.5 Staple Control ..... 7-165
CH15.6 Set Eject (1 OF 2) ..... 7-166
CH15.7 Set Eject (2 OF 2) ..... 7-167
CH15.8 Stacker Tray Control ..... 7-168

## Plug/Jack Locations

## How to use the Plug/Jack Location List

The Plug/Jack Location List below is provided to locate plugs, jacks, or other terminating devices. Locate the desired termination device in the first column (Connector Number) of the list. Refer to the second column (Figure Number) to determine the figure number of the electrical termination device. Refer to the (Item Number) column to determine the item number in the adjacent Figure Number column. The fourth column supplies the title of the Figure.

NOTE: Connectors numbered "CN" and "FS" are listed after the " $P$ and J " connectors.

| Connector Number | Figure Number | Item Number | Figure Title |
| :---: | :---: | :---: | :---: |
| P/J1 | Figure 1 | 8 | Control Panel |
| P/J1 | Figure 16 |  | Power Unit |
| P/J2 | Figure 16 |  | Power Unit |
| P/J2 | Figure 25 | 10 | Finisher Rear Location |
| P/J3 | Figure 16 |  | Power Unit |
| P/J4 | Figure 16 |  | Power Unit |
| J11/T11 | Figure 16 |  | Power Unit |
| J12/T12 | Figure 16 |  | Power Unit |
| P/J50 | Figure 15 |  | AC Input |
| P/J56 | Figure 3 |  | IOT Front View |
| P/J57 | Figure 3 |  | IOT Front View |
| P/J68 | Figure 3 |  | IOT Front View |
| P/J69 | Figure 3 |  | IOT Front View |
| FS72 | Figure 15 |  | AC Input |
| FS73 | Figure 15 |  | AC Input |
| FS74 | Figure 15 |  | AC Input |
| FS75 | Figure 15 |  | AC Input |
| P/J100 | Figure 9 | 2 | L/H Lower, Tray 1 Feeder |
| P/J101 | Figure 9 | 3 | L/H Lower, Tray1 Feeder |
| P/J101A | Figure 17 | 2 | Tray2/3 Feeder(2TM) |
| P/J101A | Figure 19 | 2 | Tray2/3 Feeder(TTM) |
| P/J101B | Figure 17 | 2 | Tray2/3 Feeder(2TM) |
| P/J101B | Figure 19 | 2 | Tray2/3 Feeder(TTM) |
| P/J102A | Figure 17 | 3 | Tray2/3 Feeder(2TM) |
| P/J102A | Figure 19 | 3 | Tray2/3 Feeder(TTM) |
| P/J102B | Figure 17 | 3 | Tray2/3 Feeder(2TM) |
| P/J102B | Figure 19 | 3 | Tray2/3 Feeder(TTM) |
| P/J103A | Figure 17 | 12 | Tray2/3 Feeder(2TM) |
| P/J103A | Figure 19 | 9 | Tray2/3 Feeder(TTM) |

Table 1 Plug/Jack List

| Connector Number | Figure Number | Item Number | Figure Title |
| :---: | :---: | :---: | :---: |
| P/J103B | Figure 17 | 12 | Tray2/3 Feeder(2TM) |
| P/J103B | Figure 19 | 9 | Tray2/3 Feeder(TTM) |
| P/J103 | Figure 11 |  | Sensor Bar, WasteContainer, IOT Left Side |
| P/J105 | Figure 9 | 4 | L/H Lower, Tray1 Feeder |
| P/J105 | Figure 9 | 9 | L/H Lower, Tray1 Feeder |
| P/J106 | Figure 8 |  | Regi Sensor, Regi Clutch |
| P/J107 | Figure 7 | 9 | Duplex Unit, MSI |
| P/J108 | Figure 7 | 10 | Duplex Unit, MSI |
| P/J109 | Figure 8 |  | Regi Sensor, Regi Clutch |
| P/J111 | Figure 5 | 8 | Exit2 |
| P/J112 | Figure 5 | 6 | Exit2 |
| P/J115 | Figure 5 |  | Exit2 |
| P/J116 | Figure 5 | 2 | Exit2 |
| P/J117 | Figure 13 |  | IOT Rear Location |
| P/J118 | Figure 13 |  | IOT Rear Location |
| P/J119 | Figure 9 | 7 | L/H Lower, Tray1 Feeder |
| P/J120 | Figure 6 | 1 | No. 1 OCT, Fuser Assembly |
| P/J121 | Figure 6 |  | Fuser |
| P/J123 | Figure 7 | 2 | Duplex Unit, MSI |
| P/J124 | Figure 7 | 1 | Duplex Unit, MSI |
| P/J125 | Figure 11 |  | Sensor Bar, WasteContainer, IOT Left Side |
| P/J126 | Figure 11 |  | Sensor Bar, Waste Container |
| P/J127 | Figure 3 |  | IOT Front View |
| P/J128 | Figure 14 |  | MCU PWB |
| P/J133 | Figure 9 | 10 | L/H Lower, Tray1/2 Feeder |
| P/J134 | Figure 3 |  | IOT Front View |
| P/J135 | Figure 6 |  | Fuser |
| P/J136 | Figure 11 |  | Sensor Bar, WasteContainer, IOT Left Side |
| P/J137 | Figure 11 |  | Sensor Bar, WasteContainer, IOT Left Side |
| P/J138 | Figure 3 |  | IOT Front View |
| P/J139 | Figure 3 |  | IOT Front View |
| P/J140 | Figure 4 |  | ROS Unit |
| P/J141 | Figure 3 |  | IOT Front View |
| P/J142 | Figure 3 |  | IOT Front View |
| P/J143 | Figure 3 |  | IOT Front View |
| P/J144 | Figure 3 |  | IOT Front View |
| P/J160 | Figure 4 |  | ROS Unit |
| P/J200 | Figure 11 |  | Sensor Bar, WasteContainer, IOT Left Side |
| P/J201 | Figure 9 | 1 | L/H Lower, Tray1 Feeder |
| P/J202 | Figure 8 |  | Regi Sensor, Regi Clutch |


| Connector Number | Figure Number | Item Number | Figure Title |
| :---: | :---: | :---: | :---: |
| P/J203 | Figure 11 |  | Sensor Bar, WasteContainer, IOT Left Side |
| P/J205 | Figure 7 | 7 | Duplex Unit, MSI |
| P/J207 | Figure 5 | 4 | Exit2 |
| P/J208 | Figure 5 | 5 | Exit2 |
| P/J209 | Figure 5 | 7 | Exit2 |
| P/J210 | Figure 5 | 3 | Exit2 |
| P/J211 | Figure 13 |  | IOT Rear Location |
| P/J212 | Figure 7 | 6 | Duplex Unit, MSI |
| P/J213 | Figure 13 |  | IOT Rear Location |
| P/J214 | Figure 13 |  | IOT Rear Location |
| P/J215 | Figure 13 |  | IOT Rear Location |
| P/J217 | Figure 13 |  | IOT Rear Location |
| P/J218 | Figure 13 |  | IOT Rear Location |
| P/J219 | Figure 4 |  | ROS Unit |
| P/J220 | Figure 5 | 1 | Exit 2 |
| P/J220A | Figure 17 | 1 | Tray2/3 Feeder(2TM) |
| P/J220A | Figure 19 | 1 | Tray2/3 Feeder(TTM) |
| P/J220B | Figure 17 | 1 | Tray2/3 Feeder(2TM) |
| P/J220B | Figure 19 | 1 | Tray2/3 Feeder(TTM) |
| P/J221 | Figure 13 |  | IOT Rear Location |
| P/J222 | Figure 13 |  | IOT Rear Location |
| P/J226 | Figure 13 |  | IOT Rear Location |
| P304 | Figure 10 |  | ESS |
| J330 | Figure 10 |  | ESS |
| J331 | Figure 10 |  | ESS |
| J333 | Figure 10 |  | ESS |
| J334 | Figure 10 |  | ESS |
| P/J136 | Figure 11 |  | Sensor Bar, WasteContainer, IOT Left Side |
| P/J137 | Figure 11 |  | Sensor Bar, WasteContainer, IOT Left Side |
| J338 | Figure 10 |  | ESS |
| J340 | Figure 10 |  | ESS |
| J343 | Figure 10 |  | ESS |
| J344 | Figure 10 |  | ESS |
| P351 | Figure 10 |  | ESS |
| P380 | Figure 10 |  | ESS |
| P353 | Figure 12 | 2 | Fax Box Assembly |
| P354 | Figure 12 | 3 | Fax Box Assembly |
| P356 | Figure 12 | 4 | Fax Box Assembly |
| P/J380 | Figure 12 | 1 | Fax Box Assembly |
| J356 | Figure 12 | 4 | Fax Box Assembly |


| Connector Number | Figure Number | Item <br> Number | Figure Title |
| :---: | :---: | :---: | :---: |
| J359 | Figure 12 | 5 | Fax Box Assembly |
| J360 | Figure 12 | 6 | Fax Box Assembly |
| P/J380 | Figure 12 |  | FAX Box |
| P382 | Figure 10 |  | ESS |
| P/J387 | Figure 10 |  | ESS |
| P/J388 | Figure 10 |  | ESS |
| P/J389 | Figure 14 |  | MCU PWB |
| P/J390 | Figure 14 |  | MCU PWB |
| P/J400 | Figure 14 |  | MCU PWB |
| P/J401 | Figure 14 |  | MCU PWB |
| P/J402 | Figure 14 |  | MCU PWB |
| P/J405 | Figure 14 |  | MCU PWB |
| P/J406 | Figure 14 |  | MCU PWB |
| P/J407 | Figure 14 |  | MCU PWB |
| P/J408 | Figure 14 |  | MCU PWB |
| P/J409 | Figure 14 |  | MCU PWB |
| P/J410 | Figure 14 |  | MCU PWB |
| P/J411 | Figure 14 |  | MCU PWB |
| P/J412 | Figure 14 |  | MCU PWB |
| P/J413 | Figure 14 |  | MCU PWB |
| P/J415 | Figure 14 |  | MCU PWB |
| P/J416 | Figure 14 |  | MCU PWB |
| J416 | Figure 25 | 8 | Finisher Rear Location |
| P/J417 | Figure 14 |  | MCU PWB |
| P/J420 | Figure 14 |  | MCU PWB |
| P/J421 | Figure 14 |  | MCU PWB |
| P/J422 | Figure 14 |  | MCU PWB |
| P/J423 | Figure 14 |  | MCU PWB |
| P/J424 | Figure 14 |  | MCU PWB |
| P/J425 | Figure 14 |  | MCU PWB |
| P/J426 | Figure 14 |  | MCU PWB |
| P/J450 | Figure 14 |  | MCU PWB |
| P/J451 | Figure 14 |  | MCU PWB |
| P/J452 | Figure 14 |  | MCU PWB |
| P/J453 | Figure 14 |  | MCU PWB |
| P/J500 | Figure 3 |  | HVPS, IOT Front View |
| P/J502 | Figure 25 | 11 | Finisher Rear Location |
| P/J505 | Figure 25 | 12 | Finisher Rear Location |
| P/J510 | Figure 16 |  | Power Unit |
| P/J511 | Figure 16 |  | Power Unit |


| Connector Number | Figure Number | Item Number | Figure Title |
| :---: | :---: | :---: | :---: |
| P/J512 | Figure 16 |  | Power Unit |
| P/J513 | Figure 16 |  | Power Unit |
| P/J514 | Figure 16 |  | Power Unit |
| P/J540 | Figure 7 | 3 | Duplex Unit, MSI |
| P/J541 | Figure 7 | 4 | Duplex Unit, MSI |
| P/J541 | Figure 18 | 2 | 2TM Rear Location |
| P/J541 | Figure 20 | 1 | TTM Rear Location |
| P/J542 | Figure 7 | 5 | Duplex Unit, MSI |
| P/J548 | Figure 18 | 1 | 2TM Rear Location |
| P/J548 | Figure 20 | 11 | TTM Rear Location |
| P/J549 | Figure 18 | 7 | 2TM Rear Location |
| P/J549 | Figure 18 | 9 | 2TM Rear Location |
| P/J549 | Figure 20 | 10 | TTM Rear Location |
| P/J549 | Figure 20 | 12 | TTM Rear Location |
| P/J552 | Figure 18 | 8 | 2TM Rear Location |
| P/J552 | Figure 20 | 9 | TTM Rear Location |
| P/J554 | Figure 18 | 3 | 2TM Rear Location |
| P/J554 | Figure 20 | 2 | TTM Rear Location |
| P/J223 | Figure 13 | 5 | IOT Rear Location |
| P/J601 | Figure 11 |  | Sensor Bar, WasteContainer, IOT Left Side |
| P/J611 | Figure 9 | 6 | L/H Lower, Tray1 Feeder |
| P/J603 | Figure 3 |  | HVPS, IOT Front View |
| P/J604 | Figure 3 |  | HVPS, IOT Front View |
| P/J605 | Figure 8 |  | Regi Sensor, Regi Clutch |
| P606 | Figure 5 | 10 | Exit 2 |
| P/J612 | Figure 9 | 5 | L/H Lower, Tray1 Feeder |
| P/J609 | Figure 7 | 8 | Duplex Unit, MSI |
| P/J610 | Figure 7 | 11 | Duplex Unit |
| P/J611 | Figure 9 |  | L/H Lower, Tray1 Feeder |
| P/J612 | Figure 9 |  | L/H Lower, Tray1 Feeder |
| P/J613 | Figure 9 |  | L/H Lower, Tray1 Feeder |
| P/J614 | Figure 6 |  | Fuser |
| P/J616 | Figure 2 |  | IIT |
| P/J617 | Figure 3 |  | HVPS, IOT Front View |
| P/J619 | Figure 16 |  | LVPS |
| P/J618 | Figure 4 |  | ROS Unit |
| P/J621 | Figure 6 |  | Fuser |
| P/J661A | Figure 17 | 8 | Tray2/3 Feeder(2TM) |
| P/J661A | Figure 20 | 4 | TTM Rear Location |
| P/J661B | Figure 17 | 9 | Tray2/3 Feeder(2TM) |


| Connector Number | Figure Number | Item <br> Number | Figure Title |
| :---: | :---: | :---: | :---: |
| P/J661B | Figure 19 | 7 | TTM Rear Location |
| P/J700 | Figure 2 | 11 | IIT |
| P/J702 | Figure 2 | 6 | IIT |
| P/J703 | Figure 2 | 5 | IIT |
| P/J710 | Figure 2 | 14 | IIT |
| P/J719 | Figure 2 | 4 | IIT |
| P/J720 | Figure 2 | 9 | IIT |
| P/J721 | Figure 2 | 1 | IIT |
| P/J722 | Figure 2 | 13 | IIT |
| P/J723 | Figure 2 | 8 | IIT |
| P/J725 | Figure 2 | 2 | IIT |
| P/J727 | Figure 2 | 15 | IIT |
| P/J728 | Figure 2 | 7 | IIT |
| J750 | Figure 2 | 3 | IIT |
| P750 | Figure 22 | 15 | DADF 2 of 2 |
| P/J751 | Figure 22 | 16 | DADF 2 of 2 |
| P/J752 | Figure 22 | 14 | DADF 2 of 2 |
| P/J753 | Figure 22 | 13 | DADF 2 of 2 |
| P/J754 | Figure 22 | 12 | DADF 2 of 2 |
| P/J755 | Figure 22 | 11 | DADF 2 of 2 |
| P/J756 | Figure 22 | 5 | DADF 2 of 2 |
| P/J757 | Figure 22 | 4 | DADF 2 of 2 |
| P/J758 | Figure 22 | 3 | DADF 2 of 2 |
| P/J759 | Figure 22 | 2 | DADF 2 of 2 |
| P/J760 | Figure 22 | 1 | DADF 2 of 2 |
| P/J761 | Figure 22 | 17 | DADF 2 of 2 |
| P/J764 | Figure 22 | 9 | DADF 2 of 2 |
| P/J765 | Figure 22 | 10 | DADF 2 of 2 |
| P/J766 | Figure 21 | 3 | DADF 1 of 2 |
| P/J767 | Figure 21 | 18 | DADF 1 of 2 |
| P/J769 | Figure 22 | 8 | DADF 2 of 2 |
| P/J770 | Figure 22 | 7 | DADF 2 of 2 |
| P/J771 | Figure 21 | 14 | DADF 1 of 2 |
| P/J772 | Figure 21 | 15 | DADF 1 of 2 |
| P/J774 | Figure 21 | 13 | DADF 1 of 2 |
| P/J775 | Figure 21 | 16 | DADF 1 of 2 |
| P/J776 | Figure 21 | 17 | DADF 1 of 2 |
| P/J777 | Figure 21 | 7 | DADF 1 of 2 |
| P/J778 | Figure 21 | 6 | DADF 1 of 2 |
| P/J779 | Figure 21 | 5 | DADF 1 of 2 |


| Connector Number | Figure Number | Item Number | Figure Title |
| :---: | :---: | :---: | :---: |
| P/J780 | Figure 21 | 12 | DADF 1 of 2 |
| P/J781 | Figure 21 | 11 | DADF 1 of 2 |
| P/J782 | Figure 21 | 10 | DADF 1 of 2 |
| P/J785 | Figure 22 | 18 | DADF 2 of 2 |
| P/J786 | Figure 22 | 6 | DADF 2 of 2 |
| P/J787 | Figure 21 | 9 | DADF 1 of 2 |
| P/J788 | Figure 21 | 8 | DADF 1 of 2 |
| P/J791 | Figure 21 | 4 | DADF 1 of 2 |
| P/J820 | Figure 17 | 4 | Tray2/3 Feeder(2TM) |
| P/J820 | Figure 19 | 5 | Tray2/3 Feeder(TTM) |
| P/J821 | Figure 17 | 7 | Tray2/3 Feeder(2TM) |
| P/J821 | Figure 19 | 6 | Tray2/3 Feeder(TTM) |
| P/J822 | Figure 18 | 5 | 2TM Rear Location |
| P/J822 | Figure 20 | 7 | TTM Rear Location |
| P/J824 | Figure 17 | 5 | Tray2/3 Feeder(2TM) |
| P/J824 | Figure 19 | 4 | Tray2/3 Feeder(TTM) |
| P/J825 | Figure 17 | 6 | Tray2/3 Feeder(2TM) |
| P/J825 | Figure 20 | 3 | TTM Rear Location |
| P/J826 | Figure 18 | 6 | 2TM Rear Location |
| P/J826 | Figure 20 | 8 | TTM Rear Location |
| P/J841 | Figure 18 | 4 | 2TM Rear Location |
| P/J841 | Figure 20 | 5 | TTM Rear Location |
| P/J842 | Figure 17 | 10 | Tray2/3 Feeder(2TM) |
| P/J842 | Figure 20 | 6 | TTM Rear Location |
| P/J869 | Figure 25 | 13 | Finisher Rear Location |
| P/J871 | Figure 24 | 16 | Finisher Front Location |
| P/J7261 | Figure 2 | 10 | IIT |
| P/J7262 | Figure 2 | 12 | IIT |
| P/J8379 | Figure 23 | 2 | H-Transport Assembly |
| P/J8380 | Figure 23 | 1 | H-Transport Assembly |
| P/J8381 | Figure 23 | 3 | H-Transport Assembly |
| P/J8382 | Figure 23 | 4 | H-Transport Assembly |
| P/J8390 | Figure 26 | 4 | Finisher PWB |
| P/J8800 | Figure 25 | 7 | Finisher Rear Location |
| P/J8801 | Figure 25 | 6 | Finisher Rear Location |
| P/J8802 | Figure 25 | 4 | Finisher Rear Location |
| P/J8803 | Figure 25 | 3 | Finisher Rear Location |
| P/J8805 | Figure 24 | 1 | Finisher Front Location |
| P/J8806 | Figure 24 | 4 | Finisher Front Location |
| P/J8807 | Figure 24 | 5 | Finisher Front Location |


| Coble 1 Plug/Jack List |  |  |  |
| :--- | :--- | :--- | :--- |
| Connector <br> Number | Figure <br> Number | Item <br> Number | Figure Title |
| P/J8808 | Figure 24 | 6 | Finisher Front Location |
| P/J8809 | Figure 24 | 17 | Finisher Front Location |
| P/J8810 | Figure 24 | 7 | Finisher Front Location |
| P/J8811 | Figure 24 | 11 | Finisher Front Location |
| P/J8812 | Figure 24 | 12 | Finisher Front Location |
| P/J8813 | Figure 24 | 14 | Finisher Front Location |
| P/J8814 | Figure 25 | 2 | Finisher Rear Location |
| P/J8815 | Figure 25 | 1 | Finisher Rear Location |
| P/J8817 | Figure 24 | 10 | Finisher Front Location |
| P/J8818 | Figure 24 | 8 | Finisher Front Location |
| P/J8819 | Figure 24 | 9 | Finisher Front Location |
| P/J8820 | Figure 24 | 15 | Finisher Front Location |
| P/J8822 | Figure 25 | 5 | Finisher Rear Location |
| P/J8823 | Figure 24 | 3 | Finisher Front Location |
| P/J8824 | Figure 24 | 2 | Finisher Front Location |
| P/J8825 | Figure 24 | 13 | Finisher Front Location |
| P/J8827 | Figure 25 | 9 | Finisher Rear Location |
| P/J8843 | Figure 26 | 7 | Finisher PWB |
| P/J8844 | Figure 26 | 6 | Finisher PWB |
| P/J8846 | Figure 26 | 3 | Finisher PWB |
| P/J8847 | Figure 26 | 5 | Finisher PWB |
| P/J8848 | Figure 26 | 1 | Finisher PWB |
| P/J8849 | Figure 26 | 2 | Finisher PWB |
| P/J8850 | Figure 26 | 10 | Finisher PWB |
| P/J8851 | Figure 26 | 8 | Finisher PWB |
| P/J8852 | Figure 26 | 9 | Finisher PWB |
| CN1 | Figure 1 | 5 | Control Panel |
| CN2 | Figure 1 | 9 | Control Panel |
| CN3 | Figure 1 | 4 | Control Panel |
| CN4 | Figure 1 | 6 | Control Panel |
| CN5 | Figure 1 | 3 | Control Panel |
| CON CN3 | Figure 1 | 11 | Control Panel |
| CP CN1 | Figure 1 | 7 | Control Panel |
| F1 | Figure 21 | 2 | DADF 1 of 2 |
| F2 | Figure 21 | 1 | DADF 1 of 2 |
| FS812 | Figure 17 | 11 | Tray2/3 Feeder(2TM) |
| FS812 | Figure 19 | 8 | Tray2/3 Feeder(TTM) |
| FS813 | Figure 17 | 11 | Tray2/3 Feeder(2TM) |
| FS813 | Figure 19 | 8 | Tray2/3 Feeder(TTM) |
| INV CN1 | Figure 1 | 10 | Control Panel |


| Table 1 Plug/Jack List |  |  |
| :--- | :--- | :--- | :--- |
| Connector <br> Number Figure <br> Number Item <br> Number <br> FigV CN2 Title   <br> Figure 1 1 Control Panel <br> LCD CN1 Figure 1 2 <br> Control Panel   <br> SJ1 Figure 5 9 | Exit 2 |  |



## Figure 1 Control Panel (j0st7201)




j0st7204

Figure 4 ROS Unit (j0st7204)

j0st7205
Figure 5 Exit 2 ( $\mathrm{j} 0 \mathrm{st7205)}$


Figure 6 Fuser Assembly (j0st7206)


Figure 7 Duplex Unit, MSI (j0st7207)


Figure 8 Regi. Sensor, Regi. Clutch (j0st7208)


Figure 9 L/H Lower, Tray1/2 Feeder (j0tp7209)


Figure 10 ESS (j0tp7210)


Figure 11 Left Side of IOT (j0st72bb)

j0st7212
Figure 12 Fax Box Assembly (j0st7212)

jOtp7213
Figure 13 IOT Rear Location (j0tp7213)


j0st7215

Figure 15 AC Input (j0st7215)


Figure 16 LVPS (j0st7216)


Figure 17 Tray 2/3 Feeder (2TM) (j0tp7217)

j0tp7218
Figure 18 2TM Rear Location (j0tp7218)


Figure 19 Tray 2/3 Feeder (TTM) (j0tp7219)


Figure 20 TTM Rear Location (j0tp7220)


Figure 21 DADF 1 of 2 (j0st7221)


Figure 22 DADF 2 of 2 (j0st7222)


Figure $\mathbf{2 3} \mathrm{H}$-Transport Assembly (j0st7223)


Figure 24 Finisher Front Location (j0st7224)

j0st7225

Figure 25 Finisher Rear Location (j0st7225)


Figure 26 Finisher PWB (j0tp7226)

### 7.1.1 Plug/Jack Locations

## How to use the Plug/Jack Location List

The Plug/Jack Location List below is provided to locate plugs, jacks, or other terminating devices. Locate the desired termination device in the first column (Connector Number) of the list. Refer to the second column (Figure Number) to determine the figure number of the electrical termination device. Refer to the (Item Number) column to determine the item number in the adjacent Figure Number column. The fourth column supplies the title of the Figure.

NOTE: Connectors numbered "CN" and "FS" are listed after the "P and J" connectors.

## Plug/Jack Location List

| Connector Number | Figure Number | Item Number | Figure Title |
| :---: | :---: | :---: | :---: |
| P/J8700 | Figure 28 | 2 |  |
| P/J8701 | Figure 28 | 1 |  |
| P/J8702 | Figure 28 | 11 |  |
| P/J8703 | Figure 28 | 10 |  |
| P/J8704 | Figure 28 | 13 |  |
| P/J8705 | Figure 28 | 12 |  |
| P/J8706 | Figure 28 | 8 |  |
| P/J8707 | Figure 28 | 3 |  |
| P/J8708 | Figure 28 | 17 |  |
| P/J8709 | Figure 28 | 16 |  |
| P/J8710 | Figure 28 | 9 |  |
| P/J8711 | Figure 28 | 4 |  |
| P/J8721 | Figure 29 | 2 |  |
| P/J8722 | Figure 29 | 1 |  |
| P/J8723 | Figure 29 | 6 |  |
| P/J8724 | Figure 27 | 1 |  |
| P/J8725 | Figure 29 | 11 |  |
| P/J8726 | Figure 27 | 7 |  |
| P/J8727 | Figure 27 | 9 |  |
| P/J8728 | Figure 27 | 8 |  |
| P/J8729 | Figure 27 | 6 |  |
| P/J8730 | Figure 27 | 2 |  |
| P/J8731 | Figure 27 | 4 |  |
| P/J8732 | Figure 27 | 3 |  |
| P/J8733 | Figure 28 | 14 |  |
| P/J8734 | Figure 28 | 15 |  |
| P/J8735 | Figure 27 | 5 |  |
| P/J8736 | Figure 29 | 5 |  |
| J8737A | Figure 29 | 9 |  |


| Table 1 Plug/Jack List (A-Finisher) |  |  |  |
| :--- | :--- | :--- | :--- |
| Connector <br> Number Figure <br> Number Item <br> Number <br> Figure Title   <br> J8737B Figure 29 9 <br>    <br> J8738A Figure 29 10 <br>    <br> J8738B Figure 29 10 <br>    <br> P/J8739 Figure 28 7 <br>    <br> P/J8740 Figure 28 5 <br>    <br> P/J8741 Figure 28 6 <br>    <br> J8742A Figure 29 7 <br> J8742B Figure 29 8 <br> CN3 Figure 29 4 <br> CN4 Figure 29 3 |  |  |  |

### 7.1.2 Plug/Jack Illustrations




Figure 2 A-Finisher PWB Location (jOfa71002)
Figure 1 A-Finisher Front Location (jOfa71001)


Figure 3 A-Finisher Bottom Location (j0fa71003)

### 7.3.1 Wire Net AC POWER (HOT)

7.3.1 WIRE NET AC POWER (HOT)
220/249 VDC MODEL ONLY
(2) optional heater

## Figure 1 Wire Net AC POWER (HOT)

### 7.3.2 Wire Net AC POWER (NUT)

7.3.2 WIRE NET AC POWER (NEUTRAL)

(1) optional heater

Figure 1 Wire Net AC POWER (NUT)

### 7.3.3 Wire Net +3.3VDC (Standby, Standby RTN)

WIRE NET +3.3VDC (STANDBY)


WIRE NET +3.3VDC (STANDBY RTN)


### 7.3.4 Wire Net +3.3VDC (Main, Main RTN)

WIRE NET +3.3VDC (MAIN)


WIRE NET +3.3VDC (MAIN RTN)


Figure 1 Wire Net +3.3VDC (Main, Main RTN)

### 7.3.5 Wire Net +5VDC (Standby, Standby RTN)

WIRE NET +5.0VDC (STANDBY)


WIRE NET +5.0VDC (STANDBY RTN)


Figure 1 Wire Net +5VDC (Standby, Standby RTN)

### 7.3.6 Wire Net +5VDC (Main)-1

WIRE NET +5 VDC (MAIN) -1


Figure 1 Wire Net +5VDC (Main)-1

### 7.3.7 Wire Net +5VDC (Main)-2

WIRE NET +5VDC (MAIN) - 2


### 7.3.8 Wire Net +5VDC-3

WIRE NET +5VDC (MAIN) $\mathbf{- 3}$


Figure 1 Wire Net +5VDC-3

### 7.3.9 Wire Net +5VDC-4

WIRE NET +5VDC (MAIN) - 4
( FROM WIRE NET +5VDC (MAIN) - 3)

(SEE WIRE NET +5VDC (MAIN) -5 )

Figure 1 Wire Net +5VDC-3

### 7.3.10 Wire Net +5VDC-5

## WIRE NET + 5VDC (MAIN) - 5



Figure 1 Wire Net +5VDC-5

### 7.3.11 Wire Net +5VDC-6

WIRE NET + 5VDC (MAIN) - 6
(FROM WIRE NET +5VDC (MAIN) -5)


### 7.3.12 Blank

## This Frame Intentionally Left as Blank

Figure 1 Blank

### 7.3.13 Blank

## This Frame Intentionally Left as Blank

Figure 1 Blank

### 7.3.14 Wire Net DC COM (+5VRTN)-1

WIRE NET DC COM (+5VRTN) - 1


Figure 1 Wire Net DC COM (+5VRTN)-1

### 7.3.15 Wire Net DC COM (+5VRTN)-2

WIRE NET DC COM (+5VRTN) - 2


### 7.3.16 Wire Net DC COM (+5VRTN)-3

Wire Net DC COM (+5VRTN) - 3
(FROM WIRENET DC COM (+5VRTN) -1)


Figure 1 Wire Net DC COM (+5VRTN)-3

### 7.3.17 Wire Net DC COM (+5VRTN)-4

WIRE NET DC COM (+5VRTN) - 4
( FROM WIRE NET DC COM ( +5 VRTN) - 3 )

(SEE WIRE NET DC COM (+5VRTN) -5 )

Figure 1 Wire Net DC COM (+5VRTN)-4

### 7.3.18 Wire Net DC COM (+5VRTN)-5

WIRE NET DC COM (+5VRTN)-5


Figure 1 Wire Net DC COM (+5VRTN)-5

### 7.3.19 Wire Net DC COM (+5VRTN)-6

WIRE NET DC COM (+5VRTN) - 6


### 7.3.20 Wire Net DC COM (+5VRTN)-7

WIRE NET DC COM ( + SVRTN) - 7
( FROM WIRE NET DC COM (+5VRTN) -6)


### 7.3.21 Blank

# This Frame Intentionally Left as Blank 

## Figure 1 Blank

### 7.3.22 Wire Net +24VDC-1

WRE NET +24VDC-1


Figure 1 Wire Net +24VDC-1

### 7.3.23 Wire Net +24VDC-2

WIRE NET + 24VDC-2


### 7.3.24 Wire Net +24VDC-3

WIRE NET + $24 \mathrm{VDC}-3$


T720024A-ELN

Figure 1 Wire Net +24VDC-3

### 7.3.25 Wire Net +24VDC-4

WIRE NET + $24 \mathrm{VDC}-4$


Figure 1 Wire Net +24VDC-4

### 7.3.26 Wire Net +24VDC-5

WIRE NET + $24 \mathrm{VDC}-5$
(FROM WIRE NET +24VDC-4)


### 7.3.27 Wire Net +24VDC-6

## WIRENET + 24 VDC -6



Figure 1 Wire Net +24VDC-6

### 7.3.28 Wire Net DC COM (+24VRTN)-1

WIRE NET DC COM ( +24 VRTN )-1


Figure 1 Wire Net DC COM (+24VRTN)-1

### 7.3.29 Wire Net DC COM (+24VRTN)-2

WIRE NET DC COM (+24VRTN)-2


Figure 1 Wire Net DC COM (+24VRTN)-2

### 7.3.30 Wire Net DC COM (+24VRTN)-3

WIRENET DC COM (+24VRTN) -3


### 7.3.31 Blank

## This Frame Intentionally Left as Blank

### 7.3.32 Finisher Wire Net +5VDC

FINISHER WIRE NET +5VDC



Figure 1 Finisher Wire Net +5VDC

### 7.3.33 Finisher Wire Net DC COM(+5VRTN)

FINISHER WIRE NET DC COM $(+5 \mathrm{VRTN})$

(A)


Figure 1 Finisher Wire Net DC COM(+5VRTN)

### 7.3.34 Finisher Wire Net +24VDC

FINISHER WIRE NET +24VDC


### 7.3.35 Finisher Wire Net DC COM (+24VRTN)

FINISHER WIRE NET DC COM (+24VRTN)


### 7.2.36 A-Finisher Wire Net +5VDC

2.36 A-Finisher Wire Net +5VDC


### 7.2.37 A-Finisher Wire Net DC COM(+5VRTN)

2.37 A-Finisher Wire Net DC COM ( +5 VRTN )


Figure 1 A-Finisher Wire Net DC COM(+5VRTN)

### 7.2.38 A-Finisher Wire Net +24VDC

### 2.38 A-Finisher Wire Net +24VDC



Figure 1 A-Finisher Wire Net +24VDC

### 7.2.39 A-Finisher Wire Net DC COM (+24VRTN)

2.39 A-Finisher Wire Net DC COM (+24VRTN)


## Chain 1 Standby Power



Figure 1 1.1 MAIN POWER ON (t701701a-eln)


Figure 2 1.2ADC POWER DISTRIBUTION (t701702a-eln)


NOTE:
(1) Optional Equipment

| CONN NO. | PIN NO. | VOLTAGE |
| :---: | :---: | :--- |
| P510 | $1-5$ | 24 V |
|  | $6-10$ | 24 V RTN |
| P511 | $1-2$ | 3.3 V MAIN |
|  | $3-4$ | 3.3 V MAIN RTN |
|  | 5 | 3.3 V STBY RTN |
|  | 6 | 3.3 S STBY |
| P512 | $1-2$ | 5 V STBY |
|  | $3-4$ | $5 V$ STBY RTN |
|  | $5-7$ | 5 V MAIN |
|  | $8-10$ | 5 V MAIN RTN |
| P514 | 1 | 24 V RTN |
|  | 2 | 24 V |

Figure 3 1.2B DC POWER DISTRIBUTION (t701703a-eln)


Figure 4 1.3 POWER INTERLOCK SWITCHING (t701704a-eln)


Figure 5 1.4 INTERLOCK SWITCHING (7701705a-eIn)


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Figure 1 2.1 CONTROL PANEL (LEFT) (t702711a-eIn)

t702712a-eln
Figure $\mathbf{2}$ 2.2 CONTROL PANEL SWITCHES(RIGHT) (t702712a-eIn)


Figure 3 2.3 CONTROL PANEL(LENS) (t702713a-eln)


Figure 4 2.4 LCD CONTROL (t702714a-eln)

## Chain 3 Machine Run Control



Figure 1 3.1 PWBS COMMUNICATION (ESS-IOT, ESS-IIT/IPS) (t703721a-eIn)


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Figure 2 3.2 PWBS COMMUNICATION(ESS-UI) (t703722a-eln)

(1) Dip Switch is used to distinguish between 2-Tray Module and Tandem Tray Module.
(2) Diag display (High/Low) is the opposite of voltage level.

| 2-Tray Module | Tandem Tray Module |
| :---: | :---: |
| $\begin{aligned} & \text { ON } \underset{\text { OFF }}{\text { OFI }} \text { In } \end{aligned}$ |  |
| ON OFF |  |

Figure 3 3.3 PWBS COMMUNICATION (OPTION:IOT-TRAY MODULE, IOT-DUPLEX) (7703723a-eIn)

t703724a-eln
Figure 4 3.4 PWBS COMMUNICATION (OPTION:IOT-FINISHER) (t703724a-eIn)


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Figure 5 3.5 PWBS COMMUNICATION (IIT/IPS-DADF) (t703725a-eln)

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Figure 6 3.6 ELECTRIC BILLING (t703726a-eln)


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Figure 73.7 Accessory Foreign Interface


Figure 1 4.1A FUSER DRIVE / MAIN DRIVE CONTROL (t704731a-eln)



T704732A-ELN
Figure 2 4.1B FUSER DRIVE / MAIN DRIVE (t704732a-eln)


Figure 3 4.2A DRUM / IBT AUGER DRIVE CONTROL (Motor Control) (t704733a-eln)


Figure 4 4.2B DRUM / IBT AUGER DRIVE CONTROL (Motor Control) (t704734a-eln)


Figure 5 4.2C DRUM / IBT AUGER DRIVE CONTROL (Clutch Control) (t704735a-eln)


Figure 6 4.2D DRUM / IBT AUGER DRIVE CONTROL (t704736a-eIn)


Figure 7 4.3A DEVELOPER DRIVE CONTROL (t704737a-eIn)


Figure 8 4.3B DEVELOPER DRIVE CONTROL (t704738a-eIn)

## Chain 5 Document Transportation



Figure 15.1 DOCUMENT SIZE SENSING (t705741a-eln)


Figure 25.2 DOCUMENT SETTING (t705742a-eln)


Figure 35.3 DOCUMENT FEED AND TRANSPORTATION (1 OF 2) (j0st90503)

(1) Diag display (High/Low) is the opposite of voltage level.

Figure 4 5.4 DOCUMENT FEED AND TRANSPORTATION (2 OF 2) (t705744a-eln)

t705745a-eln
Figure 5 5.5 DOCUMENT FEED AND TRANSPORT MECHANISN (t705745a-eln)

t705746a-eln
Figure 6 5.6 DOCUMENT EXIT TRANSPORTATION (t705746a-eln)

## Chain 6 Imaging


t706751a-eln
Figure 1 6.1 PLATEN DOCUMENT SETTING (t706751a-eln)


T706752A-ELN
Figure $\mathbf{2}$ 6.2 IMAGE INPUT (t706752a-eln)


Figure 3 6.3 CARRIAGE SCAN (t706753a-eln)


Figure 4 6.4 LASER CONTROL AND SCANING (t706754a-eln)


Figure 5 6.5 ROS MOTOR CONTROL (t706755a-eln)

## Chain 7 Paper Supply

- 1. Paper Size Switch senses paper size based on voltage corresponding to combined resistance. ON/OFF combination patterns, voltage values corresponding to paper sizes each are as follows.
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| Paper size | S1 | S2 | S3 | S4 | S5 | Voltage value(V) J412-3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NO TRAY | OFF | OFF | OFF | OFF | OFF | $4.66 \pm 0.05$ |
| A5 S/5.5" $\times 8.5^{\prime \prime} \mathrm{S}$ | OFF | OFF | ON | OFF | OFF | $4.01 \pm 0.05$ |
| B5 S | OFF | OFF | ON | ON | ON | $3.69 \pm 0.05$ |
| $8.5^{\prime \prime} \times 13^{\prime \prime} \mathrm{S}$ | OFF | ON | OFF | ON | OFF | $3.07 \pm 0.05$ |
| $8.5^{\prime \prime} \times 14^{\prime \prime} \mathrm{S}$ | OFF | ON | OFF | ON | ON |  |
| A4 S | OFF | ON | ON | OFF | OFF | $2.75 \pm 0.05$ |
| $8.5^{\prime \prime} \times 11^{\prime \prime} \mathrm{S}$ | OFF | ON | ON | OFF | ON |  |
| A4 L | ON | OFF | ON | OFF | OFF | $1.52 \pm 0.05$ |
| A3 | ON | OFF | ON | ON | OFF | $1.21 \pm 0.05$ |
| B5 L/Executive L | ON | ON | OFF | OFF | ON | $0.91 \pm 0.05$ |
| 8K S (GCO), (TFX) | ON | ON | OFF | ON | OFF | $0.60 \pm 0.05$ |
| B4 | ON | ON | OFF | ON | ON |  |
| $8.5^{\prime \prime} \times 11^{\prime \prime} \mathrm{L}$ | ON | ON | ON | OFF | OFF | $0.30 \pm 0.05$ |
| $16 \mathrm{~K} \mathrm{~S} \mathrm{(GCO)}, \mathrm{(TFX)}$ | ON | ON | ON | OFF | ON |  |
| $11^{\prime \prime} \times 17^{\prime \prime}$ | ON | ON | ON | ON | ON | $0.00 \pm 0.05$ |


(2) Diag display (High/Low) is the opposite of voltage level.

Figure 1 7.1 TRAY 1 PAPER SIZE SENSING (t707761a-eIn)


Figure 2 7.3 TRAY 2 PAPER SIZE SENSING (t707763a-eIn)


Figure 3 7.4 TRAY 3 PAPER SIZE SENSING (t707764a-eIn)


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Figure 4 7.5 TRAY 2 PAPER SIZE SENSING (OPTION:TANDEM TRAY MODULE) (t707765a-eln)


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Figure 5 7.6 TRAY 3 PAPER SIZE SENSING (OPTION:TANDEM TRAY MODULE) (t707766a-eln)


Figure 6 7.7 TRAY 1 PAPER STACKING (t707767a-eln)


Figure 7 7.9 TRAY 2 PAPER STACKING (OPTION:2TRAY MODULE) (t707769a-eln)


Figure 8 7.10 TRAY 3 PAPER STACKING (OPTION:2TRAY MODULE) (t707770a-eln)


Figure 9 7.11 TRAY 2 PAPER STACKING (OPTION:TANDEM TRAY MODULE) (t707771a-eln)


Figure 10 7.12 TRAY 3 PAPER STACKING (OPTION:TANDEM TRAY MODULE) (t707772a-eln)


Figure 11 7.13 MPT PAPER STACKING (OPTION:MPT) (7707773a-eln)

## Chain 8 Paper Feed and Transportation


t708781a-eln
Figure 1 8.1 TRAY1-4 AND MPT PAPER FEEDING (t708781a-eln)


Figure 28.2 TRAY2 TRANSPORTATION (t708782a-eln)


Figure 38.3 2TRAY MODULE TRANSPORTATION (OPTION:2TRAY MODULE) (t708783a-eln)



Figure 5 8.5 TANDEM TRAY MODULE TRANSPORTATION (OPTION:TANDEM TRAY MODULE) (t708785a-eln)

t708786a-eln
Figure 6 8.6 TANDEM TRAY MODULE PAPER TRANSPORT DRIVE CONTROL (OPTION:TANDEM TRAY MODULE) (t708786a-eln)


Figure 7 8.7 REGISTRATION (t708787a-eln)

## Chain 9 Xerographics


t709791a-eln
Figure 19.1 CRU LIFE CONTROL (t709791a-eIn)


Figure 2 9.2 CHARGING AND EXPOSURE (t709798a-eIn)


Figure 3 9.3 DEVELOPER HOUSING/TONER CARTRIDGE POSITIONING (t709795a-eln)


Figure 4 9.4A DEVELOPMENT AND TONER DISPENSE CONTROL (t709799a-eIn)


Figure 5 9.4B DEVELOPMENT AND TONER DISPENSE CONTROL (T709793a-eln)


Figure 6 9.5 FIRST IMAGE TRANSFER (t709794a-eln)


Figure 7 9.6 PR DRUM CLEANING (t709800a-eln)


Figure 8 9.7 SECOND IMAGE TRANSFER AND STRIPPING (t709796a-eln)


Figure 9 9.8 IBT CLEANING (t709797a-eln)


Figure 10 9.9 WASTE TONER REMOVAL (t709801a-eln)

Chain 10 Copy Transportation and Fusing


Figure 1 10.1 UNFUSED PRINT (t710808a-eln)


Figure 2 10.2 FUSING HEAT CONTROL (t710801a-eln)


Figure 3 10.3 FUSING (t710802a-eIn)


Figure 4 10.4 EXIT TRANSPORTATION (t710803a-eIn)

### 10.5 EXIT TRANSPORTATION MECHANISM



Figure 5 10.5EXIT TRANSPORTATION MECHANISM (t710804a-eln)


Figure 6 10.6 DUPLEX (OPTION:DUPLEX) (t710805a-eln)


Figure 7 10.7 OFFSET CONTROL (EXIT2) (t710807a-eln)

## Chain 12 Finishing


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t712811a-eln
Figure 1 12.1 FINISHER DC POWER AND INTERLOCK SWITCHING (t712811a-eln)


Figure $\mathbf{2}$ 12.2 HORIZONTAL TRANSPORTATION (t712812a-eln)


Figure 3 12.3 FINISHER TRANSPOETATION (t712813a-eIn)


Figure 4 12.4 TAMPING AND OFFSET (t712814a-eIn)


Figure 5 12.5 STAPLE POSITIONING (t712815a-eln)


Figure 6 12.6 STAPLE CONTROL (t712816a-eln)


Figure 7 12.7 SET EJECT (t712817a-eln)


Figure 8 12.8 STACKER TRAY CONTROL (1 OF 2) (t712818a-eln)


Figure 9 12.9 STACKER TRAY CONTROL (2 OF 2) (t712819a-eln)

## Chain 13 Nohad



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Figure 1 13.1 Nohad (t713801a-eln)

## Chain 16 Printer



Figure 1 16.1 PRINTER (t716821a-eln)

## Chain 17 FAX



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## CH15.1 A-Finisher DC Power and Interlock Switching



Figure 1 A-Finisher DC Power and Interlock Switching (j0fa731501)

## CH15.2 PWBS Communication (IOT-A-Finisher)



4 FAIL CODE
024-916 Mix Stack Full

- 024-917 Stacker Tray Staple Set Over Count 024-928 Scratch Sheet Compile

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Figure 1 PWBS Communication (IOT-A-Finisher) (j0fa731502)

## CH15.3 A-Finisher Transportation



Figure 1 A-Finisher Transportation (j0fa731503)

## CH15.4 Tamping and Offset



Figure 1 Tamping and Offset (j0fa731504)

## CH15.5 Staple Control



Figure 1 Staple Control (j0fa731505)

## CH15.6 Set Eject (1 OF 2)



Figure 1 Set Eject (1 OF 2) (j0fa731506)

## CH15.7 Set Eject (2 OF 2)



Figure 1 Set Eject (2 OF 2) (j0fa731507)

## CH15.8 Stacker Tray Control



Figure 1 Stacker Tray Control (j0fa731508)

### 8.1 Fax Kit

For the FAX Kit Installation Instructions, go to the 0900 Install Information location of the SGS and select FAX Kit Installation Guide.

### 8.2 Foreign Interface

For the Foreign Interface Installation Instructions, go to the 0900 Install Information location of the SGS and select Foreign Interface Installation and Setup Guide.

