HP DesignJet T200 T600 and Studio Printer Series
Service Manual

SUMMARY

Official Service Documentation

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For HP-authorized personnel only

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Safety

The procedures described in this manual are to be performed by HP-qualified service personnel only.

Electrical Shock Hazard

Serious shock hazard leading to death or injury may result if you do not take the following precautions:

• Disconnect the printer from the power source prior to performing any maintenance.

• Prevent water or any other liquids from running onto electrical components or circuits, or through openings in the enclosure.

Electrostatic Discharge

See the beginning of Chapter 5's Introduction on page 294 of this manual, for precautions you should take to prevent damage to the printer circuits from electrostatic discharge.

Safety Symbols

General definitions of safety symbols are given immediately after the table of contents.

WARNING

The Warning symbol calls attention to a procedure, practice, or the like, which, if not correctly performed or adhered to, could result in personal injury. Do not proceed beyond a Warning symbol until the indicated conditions are fully understood and met.

CAUTION

The Caution symbol calls attention to an operating procedure, practice, or the like, which, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the printer. Do not proceed beyond a Caution symbol until the indicated conditions are fully understood and met.

Readership

The primary readers of this service manual are HP service engineers, although secondary readership may include resellers.

Using this manual

This service manual contains information necessary to test, maintain, and service the following:

HP DesignJet T210 24-in Printer	8AG32A
HP DesignJet T230 24-in Printer	5HB07A
HP DesignJet T250 24-in Printer	5HB06A
HP DesignJet T630 24-in Printer	5HB09A
HP DesignJet T650 24-in Printer	5HB08A
HP DesignJet T650 GSA 24-in Printer	5HB08G
HP DesignJet T630 36-in Printer	5HB11A
HP DesignJet T650 36-in Printer	5HB10A
HP DesignJet Studio 24-in Printer	5HB12A
HP DesignJet Studio 36-in Printer	5HB14A
HP DesignJet Studio Steel 24-in Printer	5HB12C
HP DesignJet Studio Steel 36-in Printer	5HB14C

For information about using these printers, see the user's guide.

Readership

The procedures described in this service manual are to be performed by HP Certified service personnel only.

Part numbers

Part numbers for printer service parts are located in Parts and diagrams on page 260.

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1 Printer fundamentals

This chapter introduces the printer system.

Overview

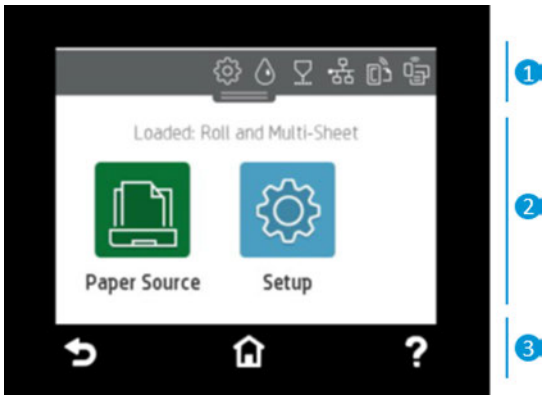
A summary of the various relevant system and software specifications.

Feature	T210	T230	T250	T630	T650	Studio	More information
Paper source	Roll. Multi-sheet tray + ARSS as an accessory			Roll and multi-sheet tray + ARSS			See the user's guide
Hardware differences	Stand and roll cover as an accessory			Stand and roll cover in box		Stand and roll cover in box	
Connectivity	Wi-Fi, Fast Ethernet LAN, USB						Important! LAN and Wi-Fi are not compatible
Web Services	Automatic firmware upgrade Remote printing (through HP Smart App) ePrint (Print by email)						The printer needs to be Internet-connected. Manual firmware upgrade is also available
Speed	45 s per page on A1/D	35 s per page on A1/D	30 s per page on A1/D	30/30* s per page on A1/D * 36in/24in	24/36* s per page on A1/D * 36in/24in		
Resolution	Up to 1200 × 2400 dpi						
Memory and languages	512 MB, PCL3/JPEG			1 GB, HP-GL/2/PCL3/JPEG			
Supplies	HP 712 29 ml Cyan, Magenta, Yellow HP 712 38 ml and 80 ml Black						Ink cartridges and printhead can be replaced by the customer
	One on-axis printhead for all colors						

Front panel

Located on the front left of the printer there is a touch-sensitive screen with a graphical user interface. From it, you can print, view information, change settings, and perform calibrations and tests, etc.

The front panel also displays alerts (warning and error messages) when needed.



The front panel has a large central area to display dynamic information and icons. At the top of the central area there is a dashboard that displays the home screen icons. To interact with these icons swipe down the dashboard status to access the dashboard. On the lower side of the screen you can see up to 3 fixed icons at different times. Normally they are not all displayed at the same time.

Fixed icons

- Tap to return to the home screen.
- Tap to view help about the current screen.
- Tap to go back to the previous screen without discarding changes.

Home screen dynamic icons

The following items are displayed when you tap :

- Tap to load, unload, and change options for roll paper.
- Tap to change options for the multi-sheet tray, or to activate it.
- Tap to load, unload, and change options for single sheets.

NOTE: The active paper source is indicated by a slightly larger icon, with a white tick in a green circle: .

A drop down menu is displayed when you touch .

Dashboard icons

The dashboard icons are located at the top of the central area:

- Tap to change printer settings.
- Tap to view ink information.
- Tap to view printhead information.

- Tap to view connectivity status information and to perform network configuration. If a network cable is connected, is displayed instead.

NOTE: It is not possible to use wireless and wired network connections simultaneously.

- Tap to view information about Wi-Fi Direct.
- Tap to view information and configure ePrint to print from a computer or mobile device, sending an email to the printer.

If the printer is left idle for some time, it goes into sleep mode and switches off the front-panel display. To change the time that elapses before sleep mode, tap , then **Power Management** > **Sleep Mode**. You can set a time between 5 minutes and the maximum time allowed by the current energy savings regulations.

The printer wakes from sleep mode and switches on the front-panel display whenever there is some external interaction with it.

Information about specific uses of the front panel can be found throughout this guide.

Support/Service Menu Overview

There are two types of support menu available for T200, T600, and Studio Printers.

NOTE: The active paper source is indicated by a slightly larger icon, with a white tick in a green circle: .

If the printer is left idle for some time, it goes into sleep mode and switches off the front-panel display. To change the time that elapses before sleep mode, press , then **Printer preferences** > **Sleep**. You can set a time between 5 and 240 minutes.

The printer wakes from sleep mode and switches on the front-panel display whenever there is some external interaction with it.

The following table shows an overview of the support menus available, for more details see Entering the support menus on page 123.

NOTE: The icons mentioned in this table will not be visible in the front panel: you must press the front panel in the places where they normally appear, as shown in the front panel illustration at the start of this section.

Label	Description
Support menu: This can be used by customers under the guidance of phone call agents assisting remotely. Using this menu, customers can perform troubleshooting tasks and access printer information.	From the Home screen, press the following icons one after the other: , , , . If there is a system error, you may not be able to reach the home screen. In this case, press the Home button and hold it down for 15 seconds.
Service Menu: Service engineers only	From the Home screen, press the following icons one after the other: , , , . In the menu that appears, select "Service Menu". Alternatively, you can press and hold the **Home** button for 15 seconds to directly enter the Service Menu. The Service Menu is sometimes also accessible from other screens (for example, from a System Error screen). This menu may not

Label	Description
	be accessible from inside certain workflows (for example, while cleaning a paper jam) or when the printer is hang-up.

Start-up sequence

There are three states between power-on and the Home screen:

1. Electronics initialization
2. Firmware initialization
3. Mechanical initialization

State 1: Electronics initialization

This state precedes Firmware and Mechanical initialization in the startup sequence.

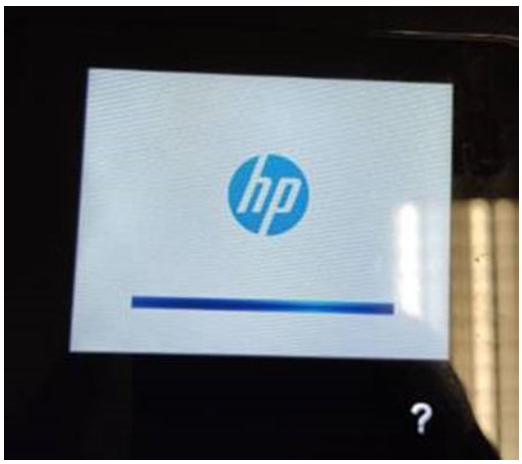
1. The front panel turns white and flashes.
2. The printer reads the firmware.

NOTE: At this stage, if something is broken, it will not be possible to enter the Support menu. To diagnose what is happening, go to the troubleshooting guide Troubleshooting tree for boot up failure on page 42. Subsequently, you can enter the Support menu to troubleshoot if necessary.

State 2: Firmware initialization

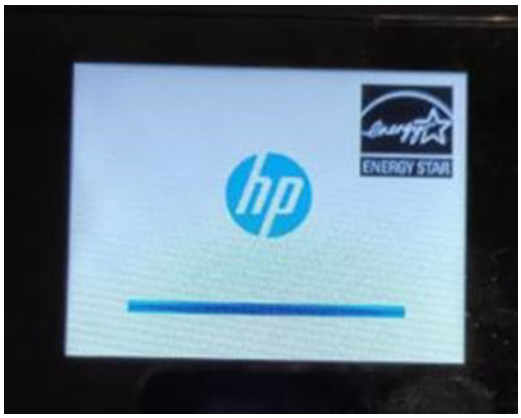
This state occurs between Electronics initialization and Mechanical initialization in the startup sequence.

1. The HP logo appears with a static bar.



2. Bundle board and ASICs are initialized.

3. The HP logo changes.



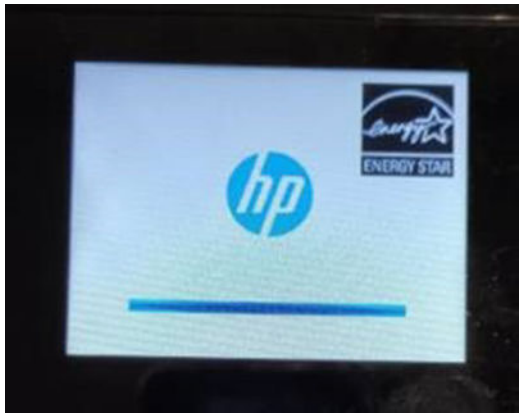
State 3: Mechanical initialization

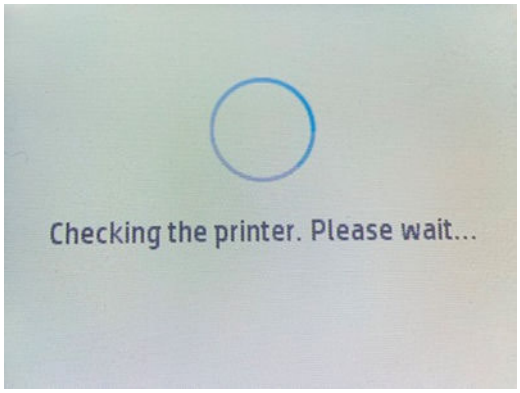
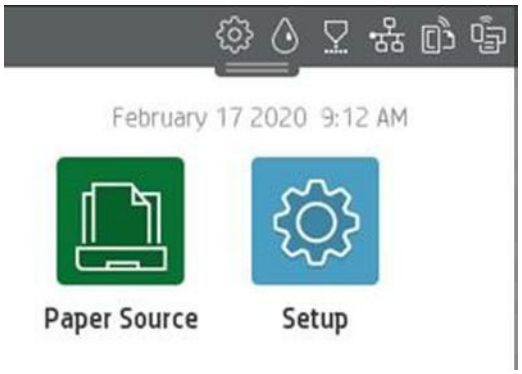
This state follows Electronics and Firmware initialization in the startup sequence.

1. A basic check of servos.
2. A check that the Scan Axis and Paper Axis are unobstructed by scraps of paper or other items.
3. Paper and print system initialization.

Initialization flow summary

Activation of the printer follows this sequence of events.

Time (sec)	Printer state	Visual and acoustic information
0	Power on	Using the Power button
10	Electronics initialization	

Time (sec)	Printer state	Visual and acoustic information
27	Mechanical initialization	
	1. Basic check of servos	Sound of the printer's motors
	2. Scan Axis, Paper Axis check	Carriage movement
	3. Paper and print system initialization	Paper movement
45	Ready state	

NOTE: Initialization lasts around 45 seconds if there was a clean power-off (using the Power button). If there was a dirty power-off, the printer will require more time to inititialize (to ensure that the printhead is in a good state). If we come from a cold reset (user function) it could require a few minutes more to power on.

Subsystems

Covers

Functionality

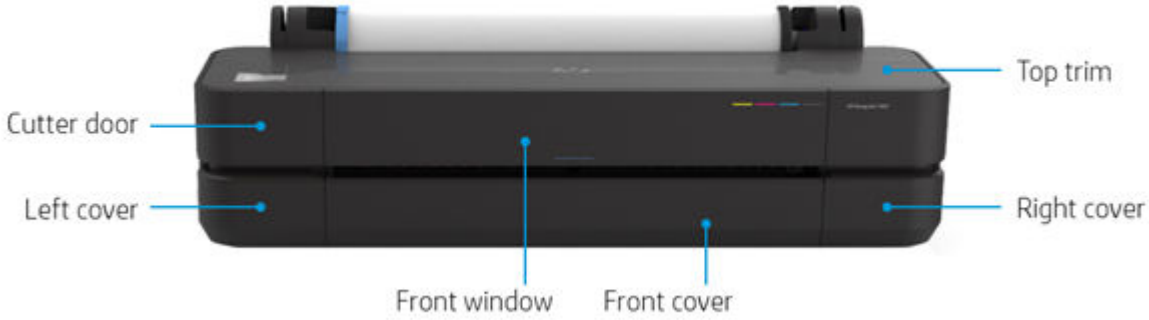
These parts cover the printing mechanism and act as protection from potential knocks or dust. They also prevent the customer from coming into contact with unsafe parts during the operation of the printer. Finally, the covers complement the style and aesthetics of the printer.

The Industrial design parts cover the printing mechanism and act as a protection from potential knocks or dust.

Usability: They also prevent the customer to reach unsafe areas during the operation of the printer and help it to reach parts as ink supplies, cutter, printheads,... that need a maintaince.

Aesthetics: Industrial Design covers are a key factor of the product to fulfill the value propositon. This is why they have a variety of textures, finishes & materials.

Figure 1-1 T210, T230, T250



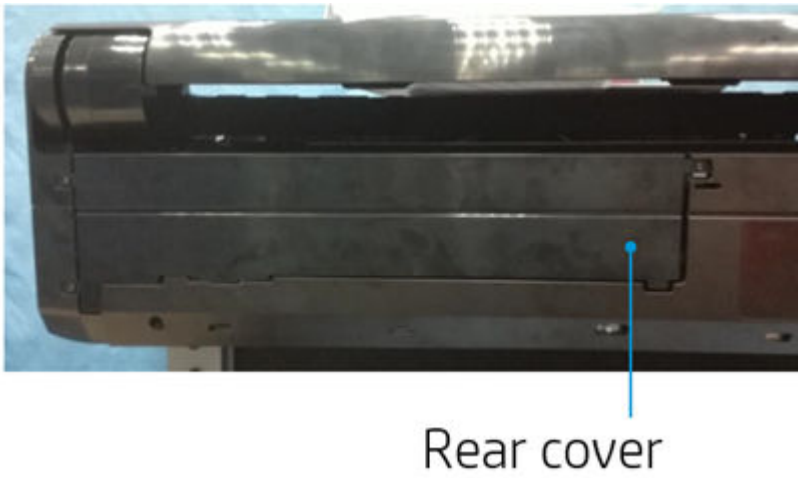


Figure 1-2 T630, T650

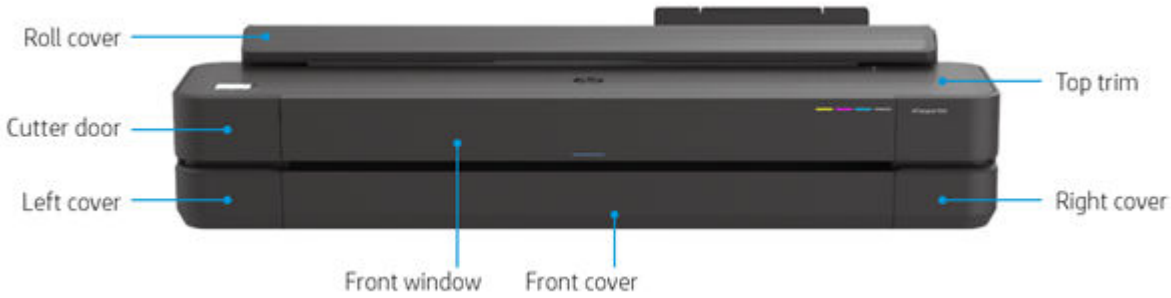
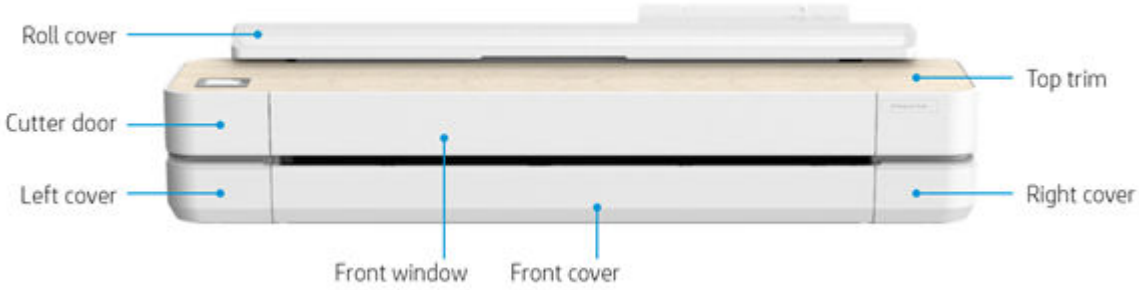


Figure 1-3 Studio

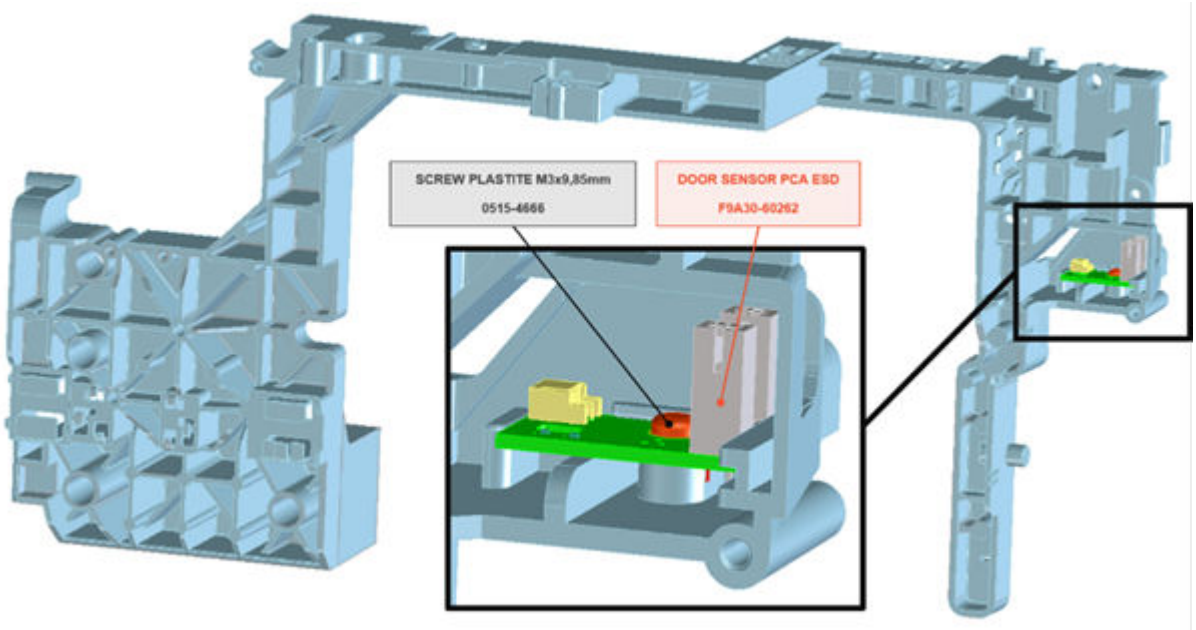


Components

There is one sensor related to Covers subsystem. It is designed to detect the status of the covers: status *opened* or status *closed*.

- **Front window sensor**. It senses whether the Front window is opened or closed. The sensor is hosted in the printer chassis.

  Figure 1-4 Left Arch



Removal and installation

In order to proceed with the removal and installation of the covers, it is important to bear in mind their cosmetic aspects and how accessible different parts of the printer are.

Some surfaces of the covers have a glossy finish, which requires maximum attention as they are very delicate and susceptible to scratches and finger marks. It is recommended that you use gloves for any service operation involving the covers.

Due to the layout of the covers, it is important to bear in mind that some parts require removal before you can remove a specific cover.

- Right Cover requires Front Cover and Top Trim removal.
- Left Cover requires Front Cover, Top Trim, Front Panel Bezel, and Cutter Door removal.
- Front window requires Top trim removal.
- *Studio* Roll Cover SKU requires Left and right covers removal.
- *T630/T650* Roll Cover SKU does not require any cover removal.

Related tests

Sensor tests for the Front window.

See Service Test on page 200.

Electronics

Apart from Front window sensor , there are no electronics related to this subsystem.

Printhead health systems: Service Station, Primer system, and Left Spittoon

Functionality

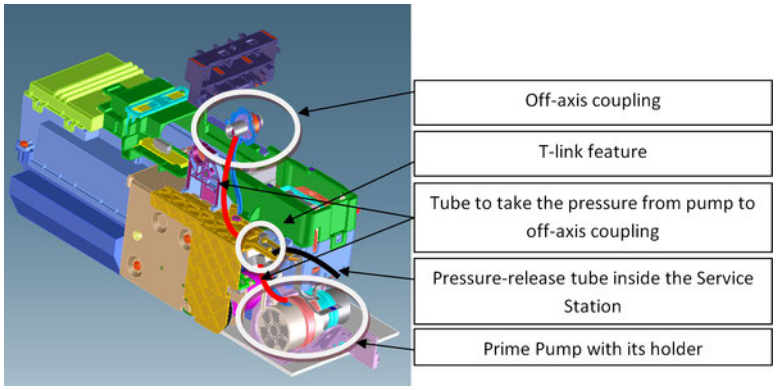
The service station is responsible for printhead maintenance. It takes action to clean ink residues and service ink nozzles, and prevents ink from drying in critical zones by capping the printhead once printing has finished.

The Primer system provides the necessary air pressure to the printhead to perform initialization. This system also provides pressure to the necessary printhead service operations (by boosting air which pushes ink out through the printhead nozzles, cleaning residues of dried ink and other particles).

The Left spittoon is a small container located to the left of the print-zone area, this is the area used by the printhead to “spit” a small amount of ink at the end/beginning of the printing swath in order to ensure correct nozzle heath for left-to-right printing.

Components

A break down of the parts of the printhead.

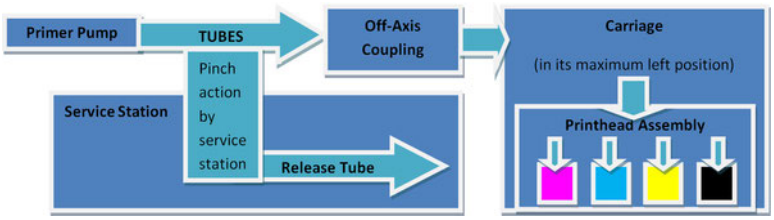


Item	Function
Off-axis coupling assembly	This is a rubber spring link located on the side plate of the scan axis (area where the Carriage moves). It links the primer system with the Carriage when the Carriage is located in its maximum left

Item	Function
	position. This system ensures the pressure from the primer reaches the printhead for nozzle servicing.
Prime Pump	This is an air pump which provides the necessary pressure for printhead servicing and nozzle repair. The Prime Pump is suspended on a rubber holder to minimize the noise that the Prime Pump makes while in operation.
Primer Tubes	The tubes take the air from the Prime Pump to the off-axis coupling. There is a T link feature connected to a tube that goes inside the service station; the purpose of this tube is to release the air pressure from the system. The tube is pinched by the shuttle of the service station when reaching a certain position; this action closes the circuit and allows the system to be pressurized. With the movement of the service station the tube is released, allowing the pressure from the system to escape.

Notes and considerations

Any leakage in the primer system will generate poor or no priming, this will affect nozzle heath (or even cause the printhead startup to fail). Bear in mind that the system is not just for the Prime Pump and tubes, the prime pressure is transmitted via the off-axis coupling to the Carriage and from there to the printhead assembly and from there to the cartridges.



NOTE: There is no pressure sensor in the system. The Prime Pump operates at a certain time to reach a specific pressure level, the system is depressurized by releasing the pinching of the release tube in the Service Station (by moving the service station).

NOTE: It is important to ensure the Carriage reaches the maximum left position; if not, the off-axis coupling will not connect the Prime Pump with the Carriage. Also, the coupling is made of a rubbery material, degradation of the material will affect Primer performance due to air leaks.

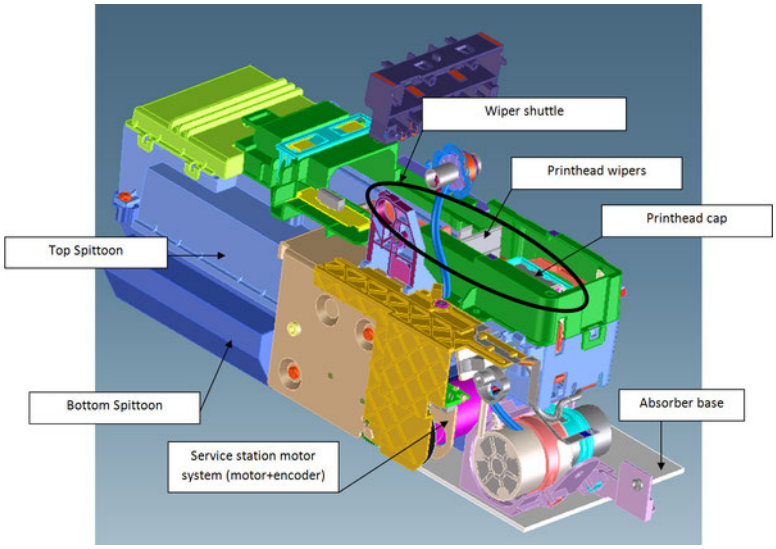
Electronics

The control driver of the Prime Pump is located on the remote controller board located on the right-hand side of the printer. There is no encoder for the Prime Pump. This pump is managed only by a DC motor activated for a certain period of time to create the required priming pressure.

Service Station system

Functionality

A break down of the parts of the service station.



Item	Function
Printhead Wipers	These are rubber paddles that are passed through the nozzle plate of the printhead with the Service Station movement. They clean the excess ink from the nozzle plate with a rubbing action.
Printhead Cap	This caps and protects the nozzles from drying when they are not printing.
Service Station Motor system	This moves the shuttle with the wiper and the cap so that these two items can perform their functions. The system is composed of a DC motor and an encoder disk with an encoder sensor to read the motor position.
Bottom Spittoon	This part acts as an ink reservoir when spitting and nozzle health operations are performed. It contains diapers that prevent the ink becoming liquid.
Top Spittoon	This seals the reservoir and completes the main body of the service station.
Absorber Base	This is made of foam and is located under the service station on top of the printer structure. It works as an additional diaper in case ink spills out of the Service Station.
Wiper Shuttle	This mobile part is propelled by the motor that contains the Wiper and Cap. Depending on the position, spitting, wiping, capping, or priming can take place: **Spitting:** The printhead “spits” a little ink into the spittoon to get the nozzles conditioned and ready for the next swath of printing. **Wiping:** A physical action to pass the rubber wipers through the printhead nozzles. **Capping:** Parking the printhead to maintain nozzle heath during printer inactivity, with a surrounding seal. **Priming:** Squirts ink through the nozzles to clean and unblock them.

Notes and considerations

The service station is offered as a complete service part for full replacement. The failures from this subsystem are usually related to the mobile parts: motor or encoder failures that prevent the shuttle from reaching the positions for capping or uncapping.

With the life primer system, tube pinching can present an issue (although it is designed to function for the life of the printer).

When the Service Station is replaced, it is mandatory to reset the Preventive Maintenance Kit for the Service Station, this will trigger a simple calibration that is done with the Service Station on the next printer startup. The calibration measures the length of the Service Station (shuttle front bump to shuttle rear bump), which ensures a correct capping position.

Electronics

All the controlled movements for the Service Station are done from the remote-controlled board located on the right-hand side of the printer. Issues with the Service Station can also be related to this control board.

Paper path

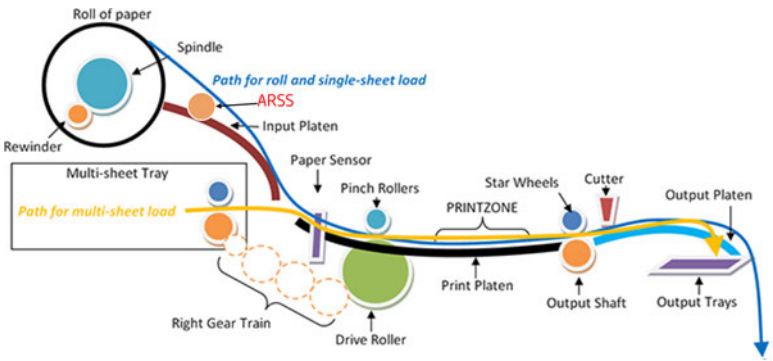
Functionality

The paper path comprises all the elements of the printer in contact with the paper, designed to hold, move, and manage it in a controlled manner in order to print.

Paper can be loaded using a roll, which is mounted on the rear spindle, or single sheets loaded from the Multi-Sheet Tray, or single sheets loaded singly.

The paper passes from its source (Roll, Single Tray, or Multi-Sheet Tray) until it touches the Out-Of-Paper Sensor, when the printer detects the presence of the paper and proceeds to load it.

To perform the paper feed, the printer catches the paper in between the Drive Roller and the Pinch Rollers (Pinch Rollers are spring-loaded pushing the paper down on top of the Drive Roller), then the paper is pushed forwards on top of the Print Platen in the print zone, which is where the printing operation is performed. The paper advance is provided by a motor that moves the Drive Roller. The exact position of the Drive Roller and hence the paper is controlled by an Encoder Disk located on the roller axis.



The printed paper then passes between the Output Shaft and the Starwheels (which keep the paper tension as flat as possible for printing) to exit on the Output Platen, where it is held in case of cut sheet or is cut to fall on the output basket in the case of roll paper.

The Output Shaft is designed to over-advance the Drive Roller movement slightly, and hence create the necessary paper tension to keep the paper as flat as possible. The Starwheels are spring-loaded and are

designed to create force on top of the paper, this is done so as to leave the paper unmarked and at the same time allow the Output Shaft force to be appropriately transmitted.

In the Roll configuration, the rewinder module generates back force while printing to facilitate paper control.

A key electrical element of the paper path is the Paper Sensor (also known as the Out-Of-Paper Sensor or OOPS). This sensor is located at the beginning of the Print Platen; it detects paper insertion for roll load and single-sheet load.

Electronics

In the paper-path driving system, the only electrically active element is the Drive Roller.

The Drive Roller is impelled by the drive roller motor and it contains an Encoder Disk on the axis to determine its position. The Encoder Disk is read by two sensors. One, the “encoder sensor”, designed to read the encoder, counts the Encoder Disk (the Encoder Disk outer marks) and another one, the “encoder index sensor”, determines the start position (the 0 position) of the Drive Roller by reading the inner thicker lines of the Encoder Disk.

NOTE: Every time the printer starts up, it searches for the 0 position of the Drive Roller. If this search fails (which means that the index sensor is faulty), the printer will give a system error and will be unable to initialize.

The roll paper input system

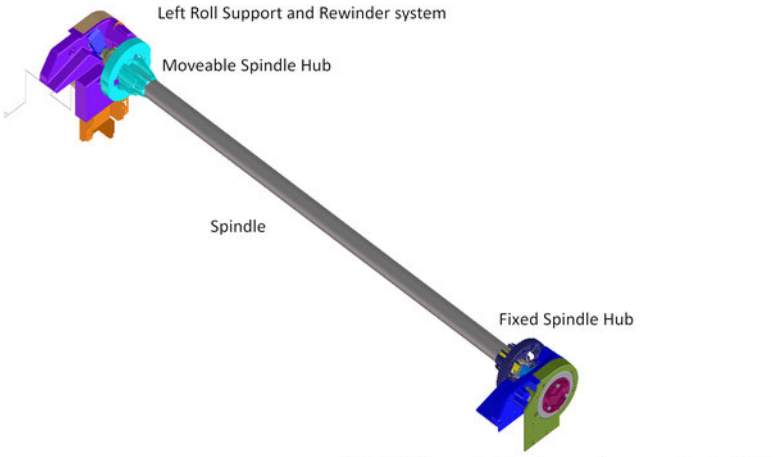
Functionality

This system keeps the roll in place and ensures controlled rotation.

It contains the rewinder, which rewinds the paper for paper ejection, and provides an opposite tension to the paper advance for better paper control.

- The Left Support encloses the Rewinder Motor and Encoder, containing a set of gears that transmit the Rewinder motion to the spindle. There is a V-shaped spring to load and fix the spindle in position.
- The Right Support holds the spindle in position to rotate over passive rollers.
- The spindle is designed to hold the paper rolls, and receive the motion from the rewinder gear in the Left Support. It consists of a central bar and two hubs; the right hub is fixed to determine the right-side loading position of the paper, and the moveable left hub adjusts to the width of the paper.
- The Roll Cover (CQ890, CQ893, 5ZY60B, 5ZY62B only) shields the roll from dust.

NOTE: The Roll Cover is a passive part, with no sensor: the printer does not know its status.



Right Roll Support with roll-cover dumper system in T520

Electronics

The Rewinder Motor and Encoder system are directly controlled by the Main PCA.

The paper output system

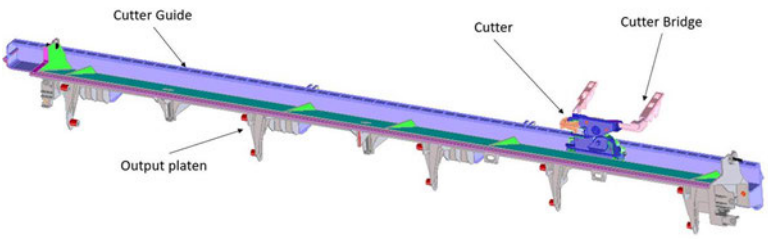
Functionality

This system ensures that the printed paper follows a controlled path and acquires a certain shape in order to be delivered properly to the user. It also has a cosmetic function.

The system includes a set of three telescopic trays, which are extended to collect the cut-sheet paper printed from the Multi-Sheet Tray.

There are two roll-paper control tabs that are deployed automatically when the telescopic trays of the Output Tray are in the closed position. This is a purely mechanical action as the tabs are pushed up by the output trays when closed. The purpose of those tabs is to control the shape of the roll paper when coming out of the paper path.

The Front Cover is located underneath the Output Platen.



Electronics

The only electronic component related to the Output Platen is the Output Tray Sensor located underneath the output trays. The sensor is activated when the three output trays are fully closed. The sensor cable is routed via the front of the machine and is directly connected to the main PCA.

Basket (Studio)

A flexible and adjustable basket for collecting material output from the printer.

Functionality

This section provides functional and structural information relating to the basket.

Expected maximum capacity:

- A0: 3 or 4 plots (depends on media).
- A1: 10 plots.

What to capture:

- Basket can store either roll or cutsheet jobs (cutsheet without stacking in order).
- 36in max format is A0 / 24in max format is A1.

Figure 1-5 Architecture status

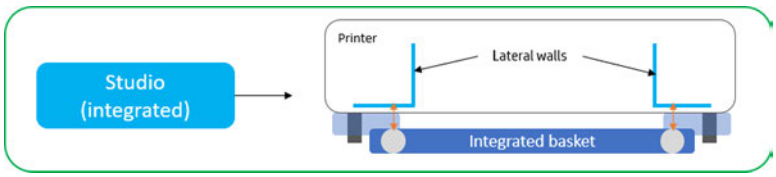


Figure 1-6 General View

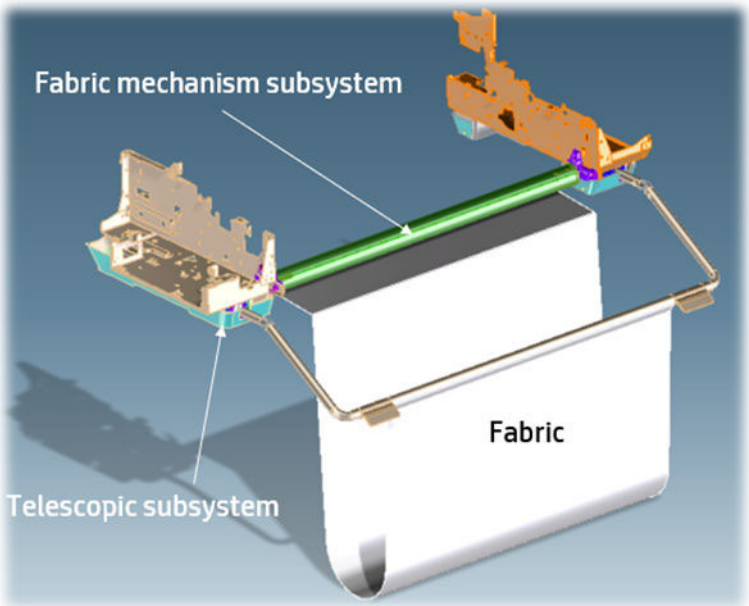


Figure 1-7 Telescopic Subsystem

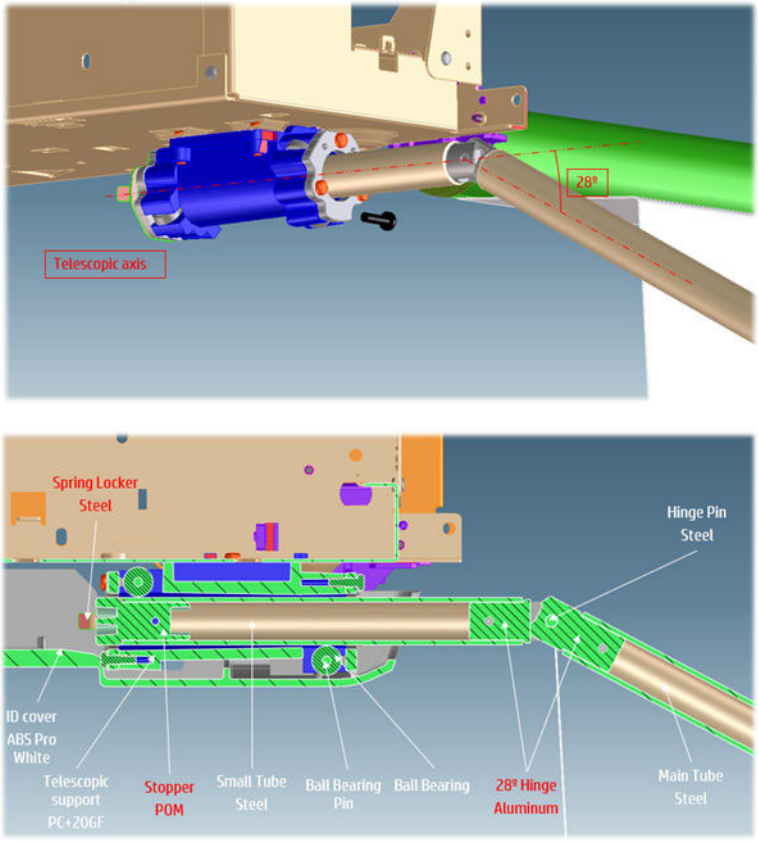


Table 1-1 Parts functionality

Description	Function
Main tube	Structural / geometrical purpose
Hinges (28°)	Articulated tubes join. The aim is to provide a compatible geometry with printer's media output
Hinge pin	Used to articulate hinges
Small tube	Articulated prolongation of main tube
Stopper	Used to define the stopping point of the basket when in out position
Ball bearing	Provide rolling contact to basket's tube. Avoids friction between tubes and telescopic support
Bearing pin	Pins the bearing into the correct position
Telescopic support	Contains the bearings in a strategic distribution and it interfaces with the printer
ID cover	Protects the whole basket system
Fabric Mechanism	Winding mechanism to store the basket's fabric once used
Left mechanism support	Joins the mechanism to the printer
Right mechanism support	Joins the mechanism to the printer
Basket Fabric	Provide a geometry that helps storing the printed plots without being damaged

Table 1-1 Parts functionality (continued)

Description	Function
Handles	Interaction element to pull out the basket

Figure 1-8 Fabric Mechanism Subsystem

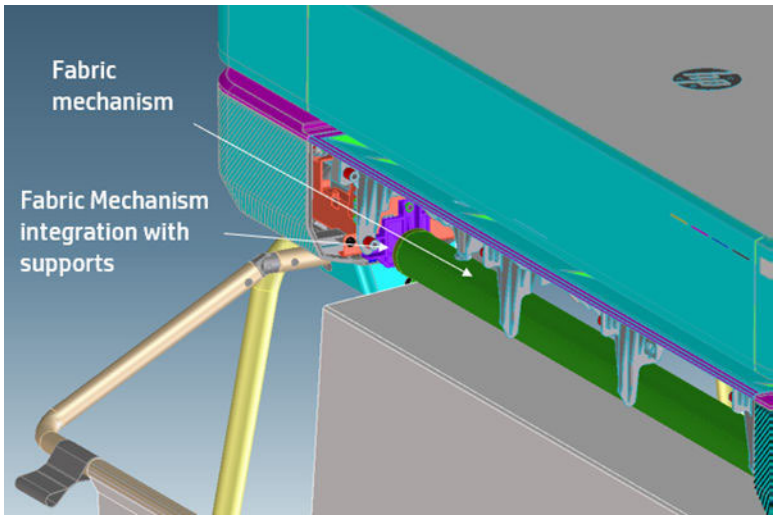


Figure 1-9 Winding Mechanism

Figure 1-10 Bumperfoot

Figure 1-11 Side wall interface

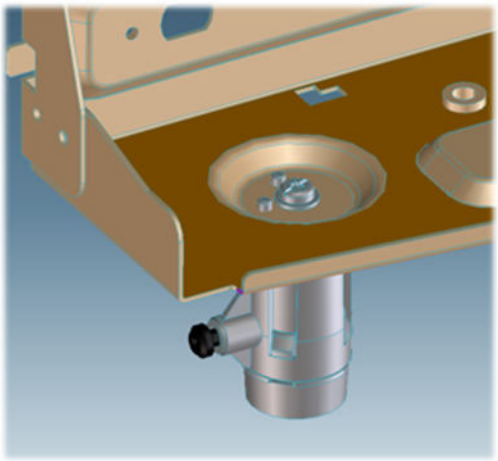


Figure 1-12 Basket ID interface

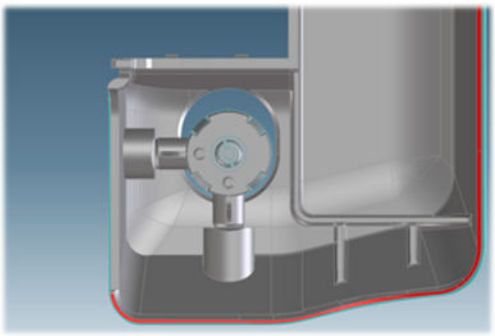


Figure 1-13 Stopper detal

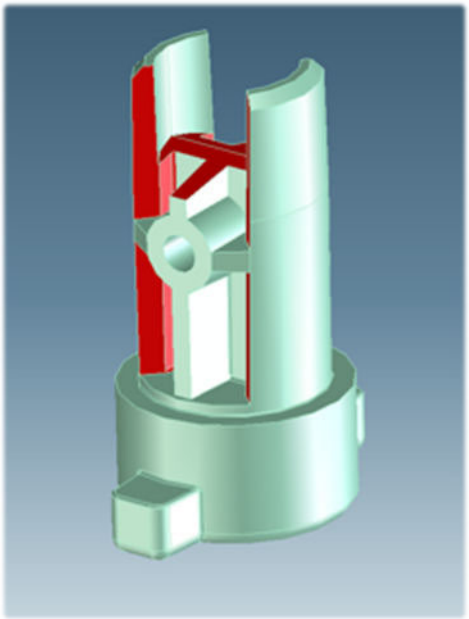


Figure 1-14 Hinge detail

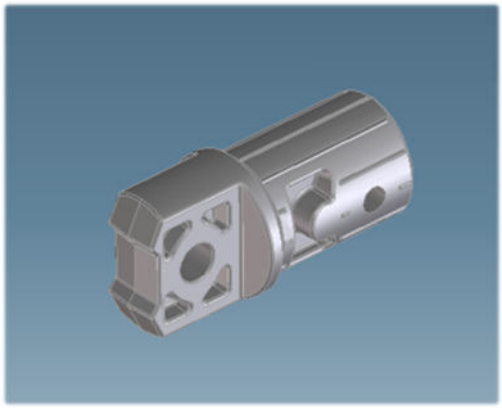
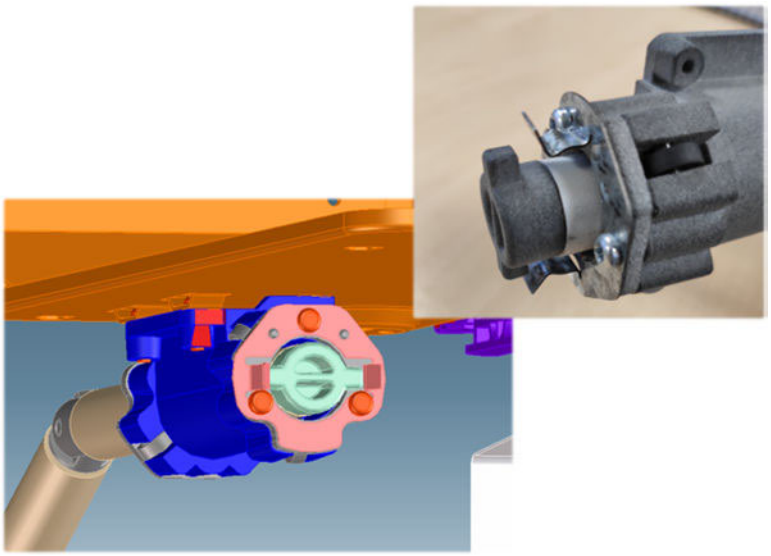


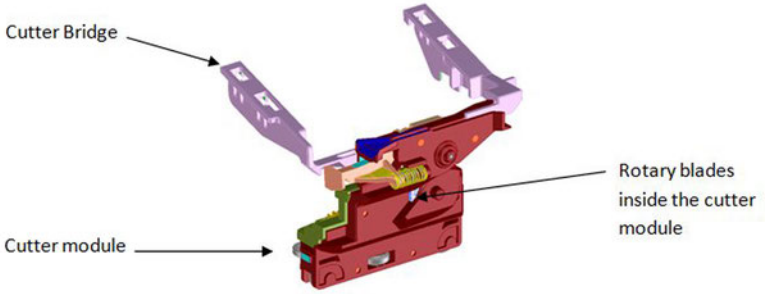
Figure 1-15 Spring locker added



The Cutter system

The Cutter cuts the paper after the print has completed.

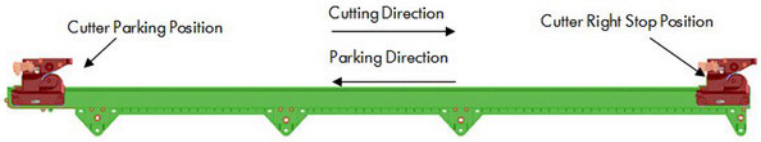
It comprises 1) a cutter module that cuts the paper with two rotary blades, 2) a Cutter Bridge attached to the Carriage that catches and releases the Cutter to perform the cutting operation and then to leave it in capping position, 3) a Cutter Guide that holds the movement of the Cutter along the printer width.



In order to operate the Cutter, it needs to be in the parked position. If not, the Cutter will not be engaged by the Cutter Bridge and the printer will not perform the cutting action.

Whenever the printer initializes, it performs a parking movement with the Carriage to ensure that the Cutter is left in the appropriate position.

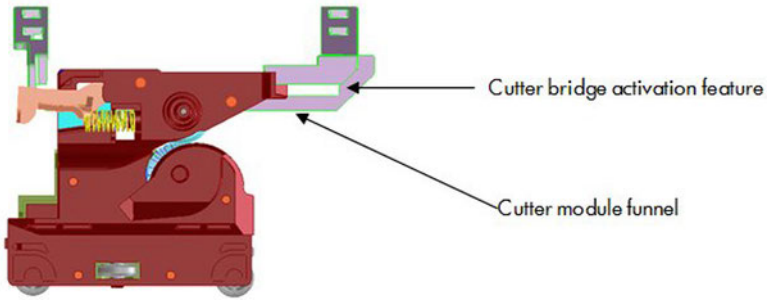
The printer does not have any feedback about the cutter engagement action. Hence, if for any reason the engagement is not performed correctly, the printer will continue operating as if the engagement has occurred.



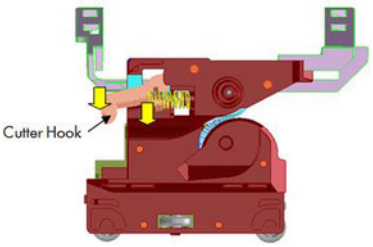
How activation works

This process describes the activation behavior of the cutter.

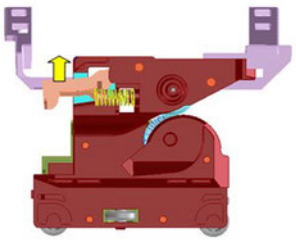
1. Pre-activation phase: The Cutter Engagement Feature of the Bridge gets into the funnel of the Cutter Module grooving the Cutter to ensure the correct position for activation.



2. Hook catching: The cutter bridge continues moving to the left pushing down the cutter hook (in orange), after the left side of the cutter bridge passes the Carriage stops and the cutter hook returns to its position due to its spring motion.

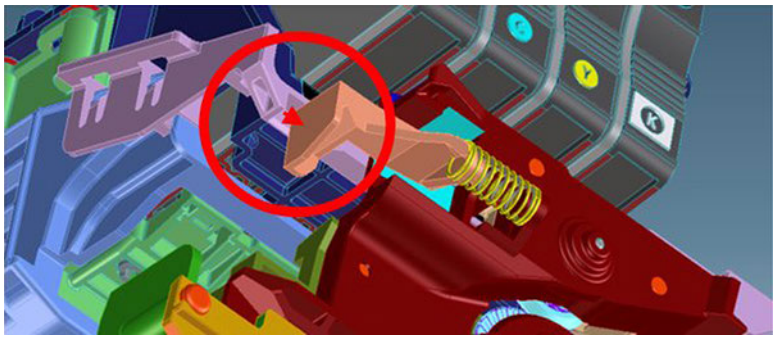


Left feature of the cutter bridge pushes down the cutter hook



After the cutter bridge left feature passes the cutter hook returns to its position

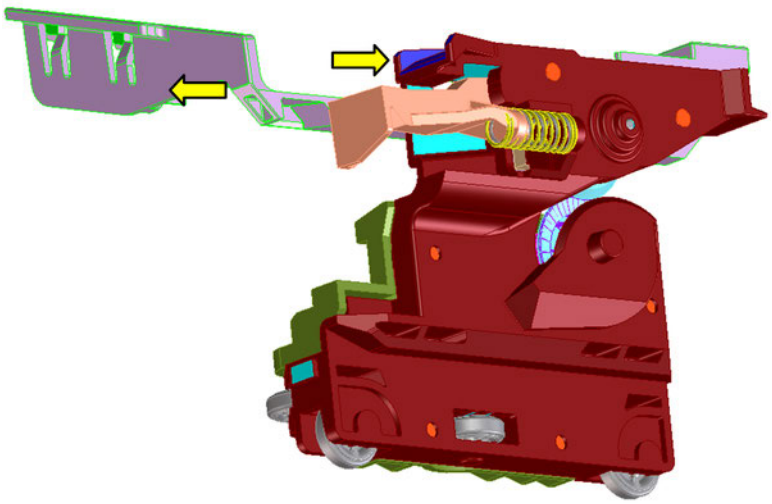
3. Cutter action: The left feature of the cutter bridge pushes the cutter to the left, performing the cutting operation.



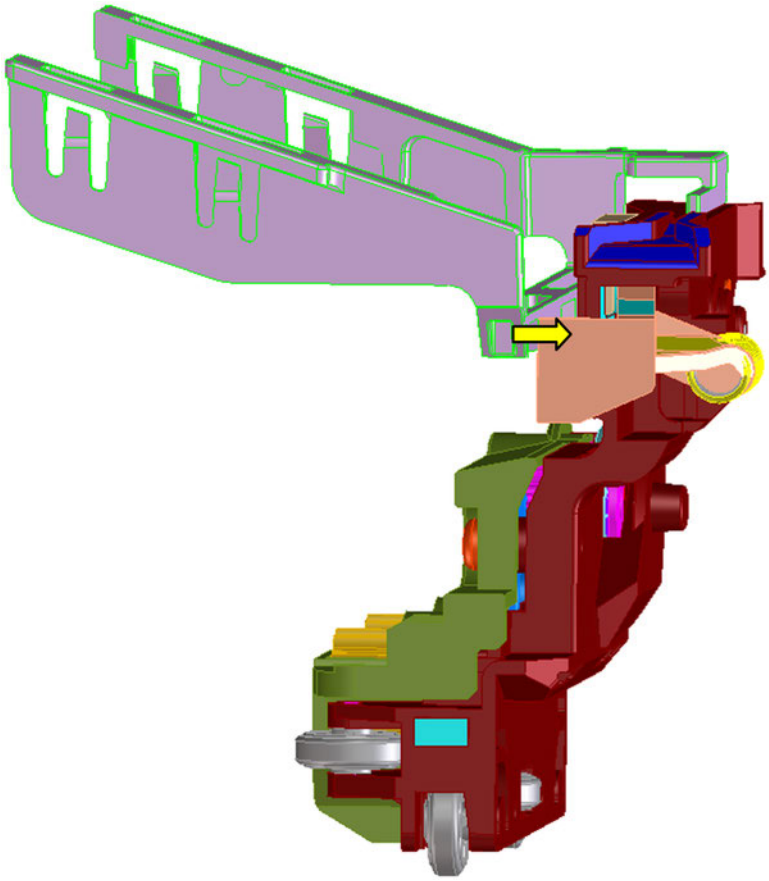
How deactivation works

This process describes the deactivation behavior of the cutter.

1. Disengagement: Hook Bridge changes direction moving now from right to the left, so that Cutter Hook slides out of the Cutter Catch Feature.



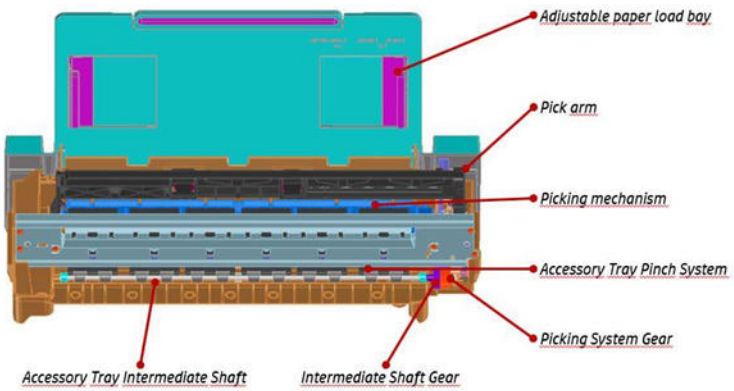
2. Move-away action: the Cutter Hook deactivates from the bridge by passing in front of it.



Accessory Tray and Bridge Platen

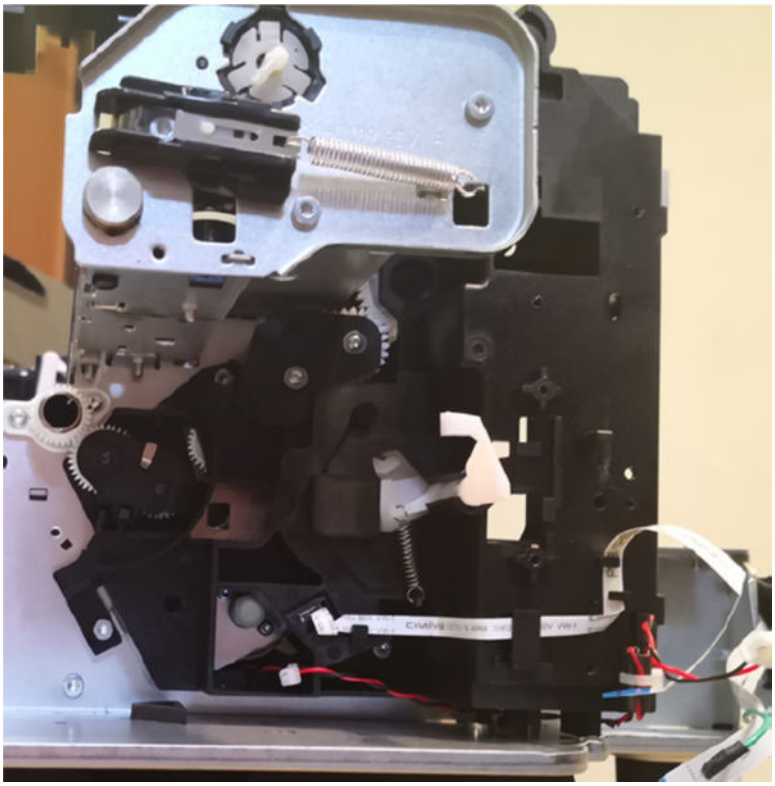
Functionality

The accessory tray holds and loads the cut-sheet paper for the printer. The accessory tray itself is a completely mechanical system with no electronics or motors. All the motion drives for both picking and paper drive are or created or transmitted by the Bridge Platen module located on the right-hand side of the printer, behind the Service Station.



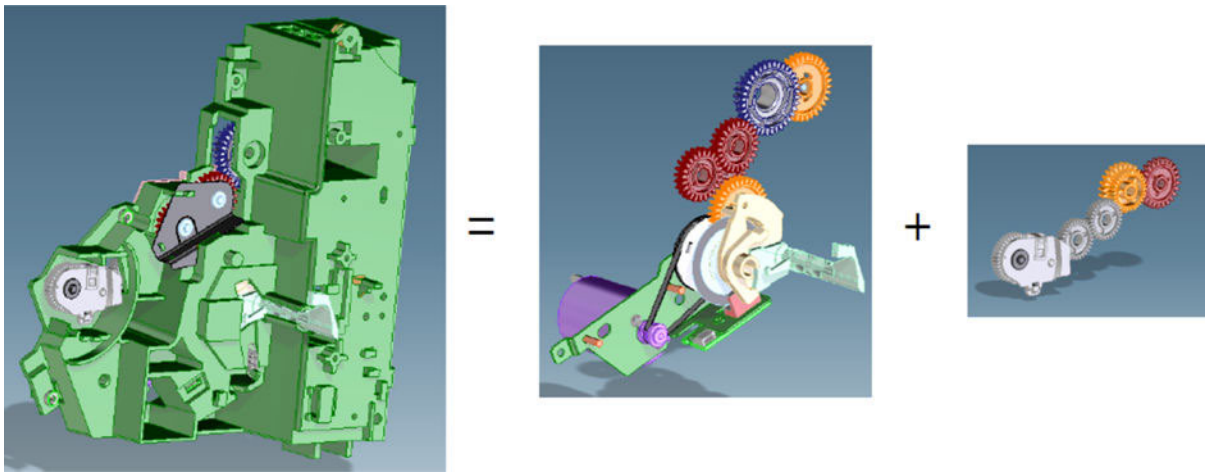
The ARSS accessory loads the Roll for the printer. It consists of 3 sets of swing pick tires which rise to drive the Roll and descend for handoff. All the motion drives are also transmitted by the Bridge Platen.

The Bridge Platen module has two main functions: to drive the Accessory Tray and the ARSS.

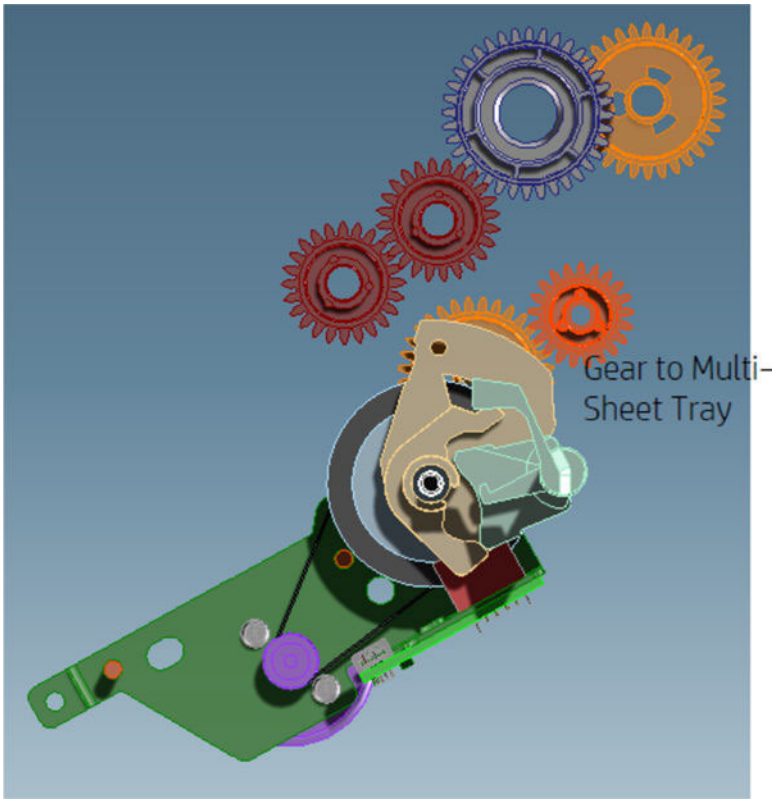


Bridge Platen module functionality

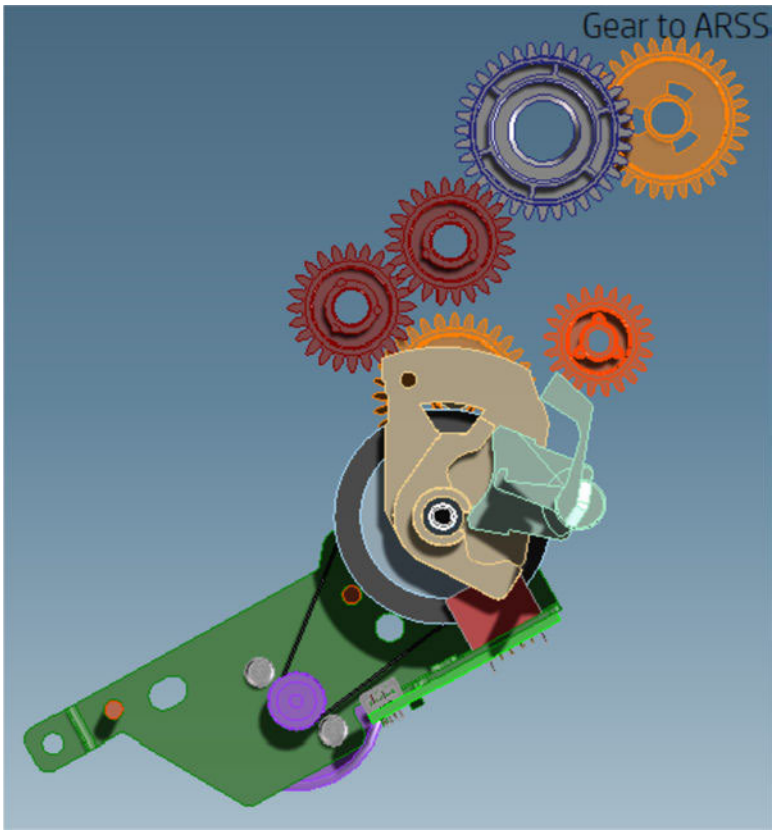
The Bridge Platen module has two gear trains.



- The 1st gear train consists of motor, gears, and the switching mechanism:

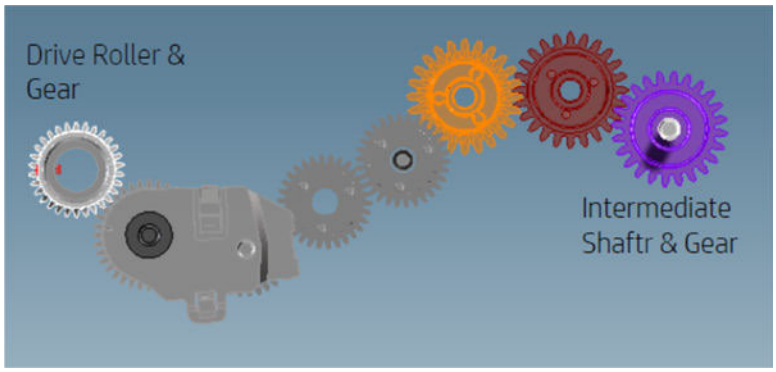


By default, the motor engages with the gear to drive the picking roll of the Multi-Sheet Tray.



When the Service Station's Sled moves to rear home, the switching mechanism forces the motor to engage with the gear to drive the ARSS.

- The 2nd gear train is to link the Drive Roller with the Intermediate Shaft in the Multi-Sheet Tray:



A swing arm engages the gear train when the Drive Roller is driven backwards (as shown in the picture), driving the intermediate shaft forwards. When the Drive Roller is driven forwards, the swing arm disengages from the gear train and the intermediate shaft is not driven. This action is to prevent reverse paper movement being transmitted to the Multi-Sheet Tray.

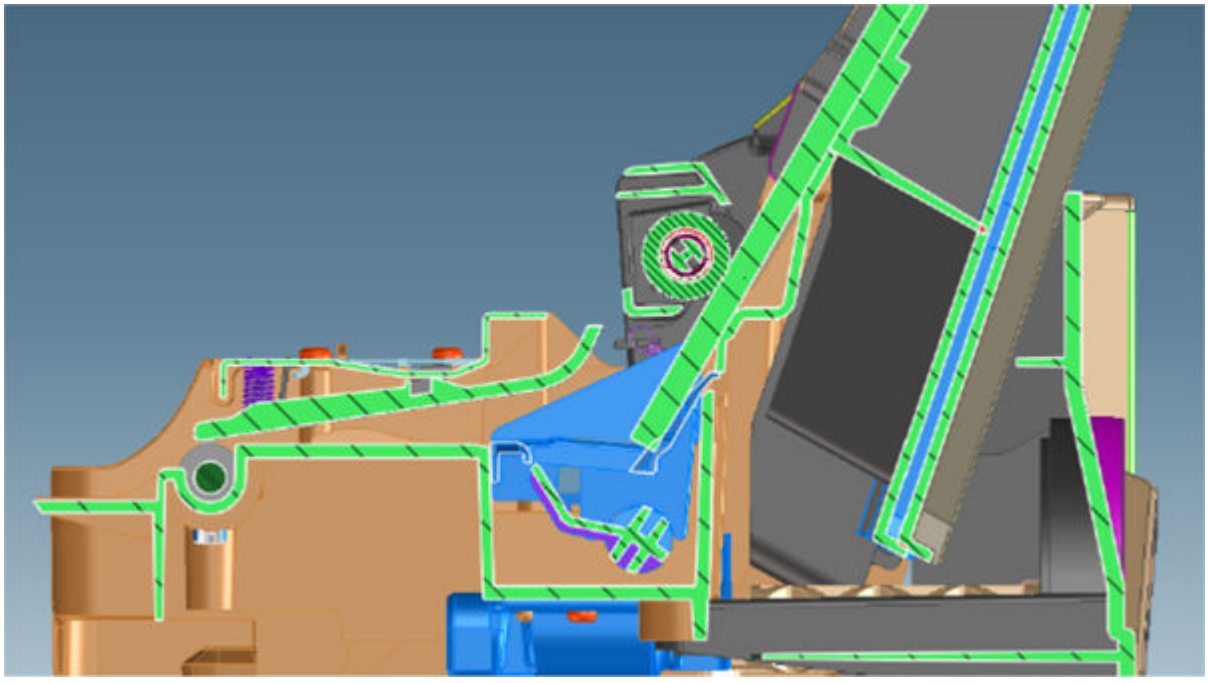
Multi-Sheet Tray functionality

The function of the Multi-Sheet Tray is to pick and feed the cut-sheet paper until the paper is grabbed by the drive roller (drive roller and pinch system).

The actions performed for those operations are (1) sheet pick and (2) sheet input.

1. Sheet pick

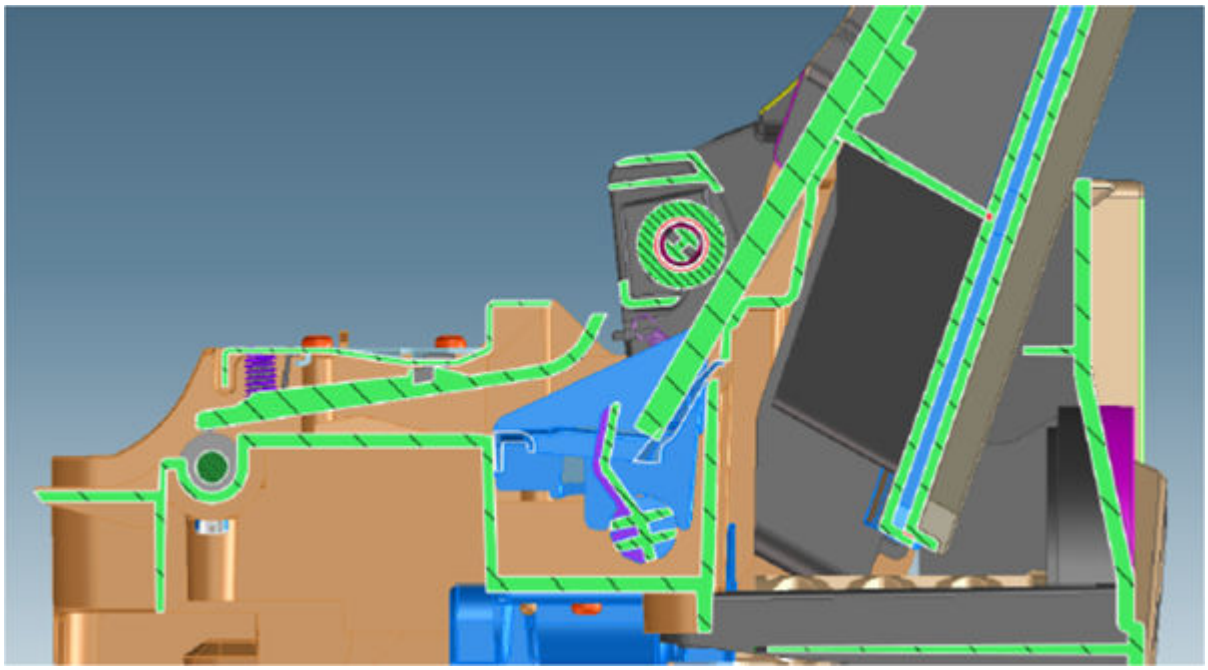
This movement is transmitted through a lateral gear chain in the Multi-Sheet Tray towards the swing arm, which is pushed towards the paper, and the picking mechanism located at the bottom of the Multi-Sheet Tray, which separates the top sheet from the stack of pages.



Standby:

- Swing Arm moves to left

- Hard Stop lifts up



Picking:

- Swing Arm moves to right
- Hard Stop lifts down

2. Sheet input

Once the paper is in the intermediate shaft area, the printer attempts to load it via the following process.

NOTE: The printer considers the load successful if, after the picking and sheet input procedures, the sheet is detected by the printer's Paper Sensor. Hence, a correct function of the Paper Sensor is required also for the accessory tray loading action.

NOTE: It is possible to reproduce the picking and loading motions by extracting the Multi-Sheet Tray and rotating the gears with the hand, to validate module performance and troubleshoot any possible mechanical issues.

NOTE: Different elements of the Multi-Sheet Tray are not serviceable, the whole module requires replacement in case of failure.

Functionality

The function of the ARSS is to pick and feed the Roll until the paper is grabbed by the drive roller.

Figure 1-16 ARSS

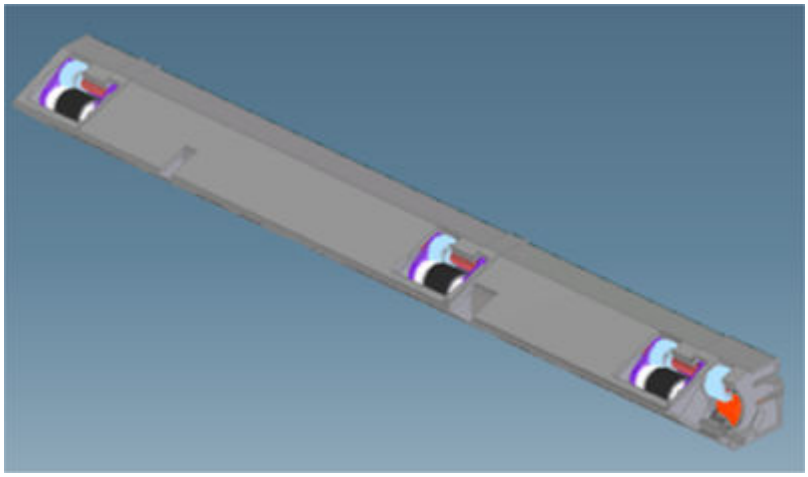


Figure 1-17 ARSS components

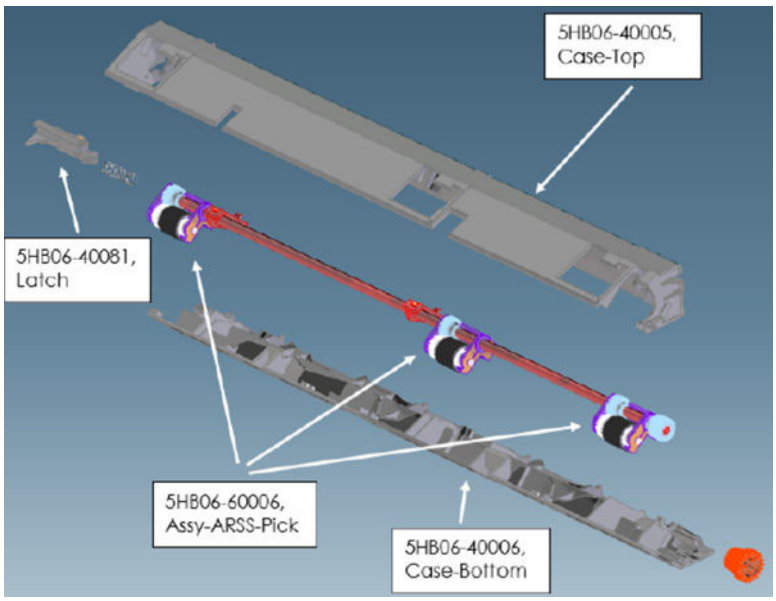


Figure 1-18 Picking: Swing-Arms and tires lift up

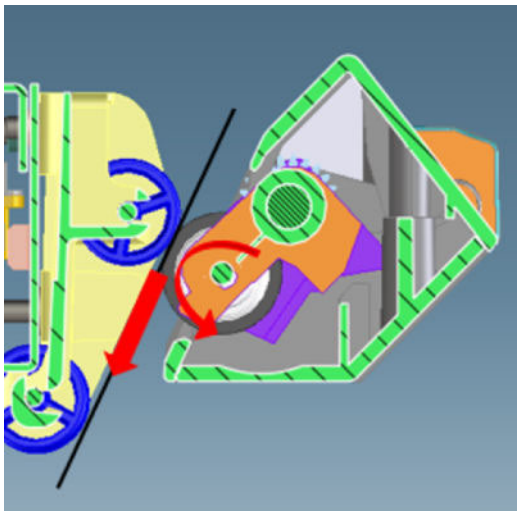
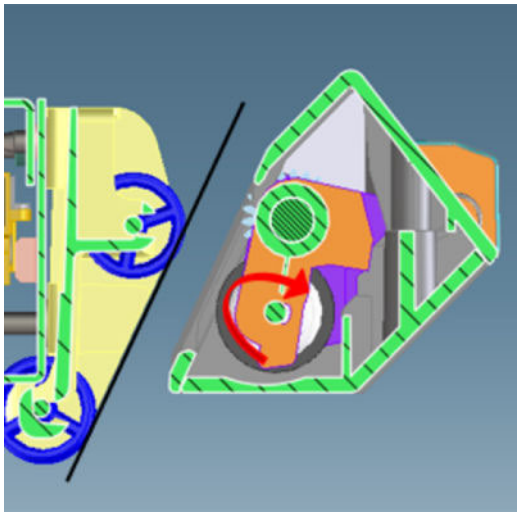


Figure 1-19 Handoff: Swing-Arms and tires lift down



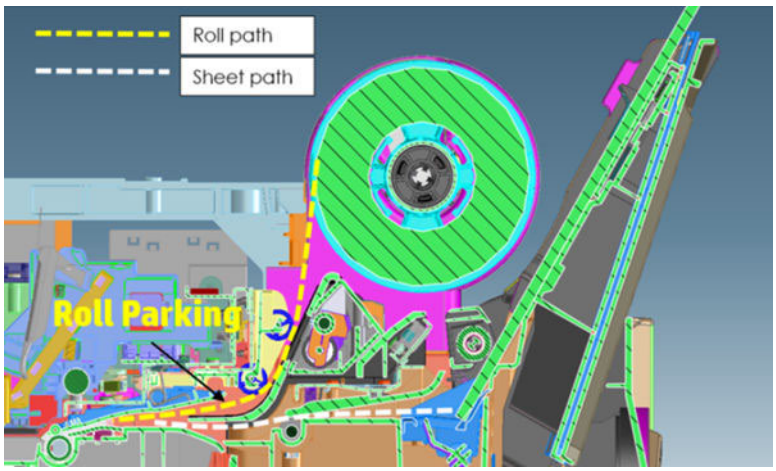
Cycle to switch printing on Roll to Sheet to Roll

Roll standby on print zone

Roll rewind and top form move back to parking position

Multi-Sheet Tray pick and load Sheet to print zone for printing

ARSS load Roll from parking position to print zone for printing



Electronics

Both the encoder and motor-drive system are managed by the Bundle PCA located on the right-hand side of the printer.

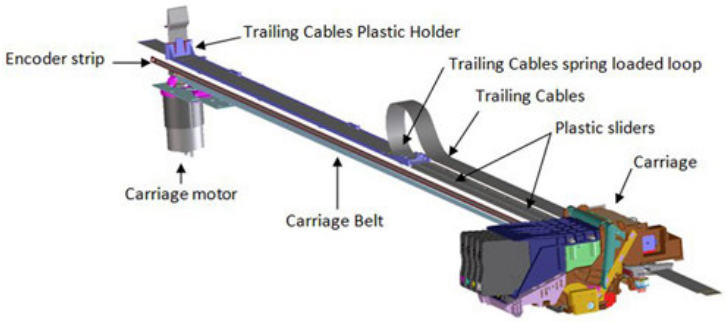
Scan Axis system: Carriage and Carriage impelling

This system moves the Carriage from left to right and right to left over the paper in a controlled manner to perform printing, cutting, paper detection, and any other Carriage movements for servicing and the final capping process.

The system comprises the Carriage sliding on the scan axis rod, on which rotates and whose position is determined by a cam mounted on the Carriage, which slides touching the bottom surface of the anti-rotation rail.

There are two trailing cables mounted one on top of the other, which connect the Carriage with the main electronics control board. A scan-axis encoder strip is needed for the Carriage to determine its position, and a Carriage Motor which impels the Carriage via a belt.

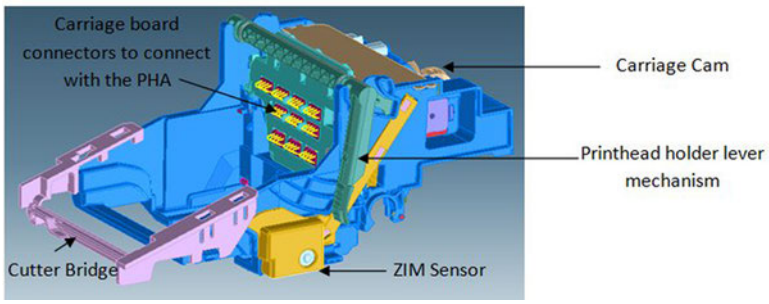
The trailing cable is held in position by a plastic holder, which clips onto the scan axis structure. A spring-loaded loop ensures follow-up action of the cables with the Carriage movement. Two plastic cable sliders are also placed to ensure minimum contact of the trailing cables with the scan axis structure. The plastic sliders are greased to prevent ink spray (aerosol) deposits from accumulating on them, generating a sticky surface which could retain the cables and then be damaged by Carriage movement.



Greased cable sliders (2 in the 24" machine and 3 in the 36")

The Encoder Strip Sensor is located inside the Carriage, once the Carriage is assembled the Encoder Strip crosses the Carriage, passing by the detection area of the sensor inside the Carriage.

The main function of the Carriage is to hold the printhead in position, to enable cartridge insertion, and to move the printhead in a controlled manner in order to print.



The Carriage holds all the necessary interface electronics for the main board to interact with the printhead via the trailing cables. A set of spring-loaded connectors are the main interface Carriage-printhead.

NOTE: It is very important that the contacts are clean, free of dust/ink to ensure a correct connection between printhead and Carriage, as high-speed data are transmitted through this connection, and dust could cause sporadic system errors. This is particularly important when replacing the printhead, as the removal of the old printhead (extraction with a rotary movement) can cause the nozzle plate to touch those contacts and create contamination that could cause problems with the new printhead. However, manual cleaning of the contacts is not recommended.

The Carriage also has additional functionality:

1. Transmits the pressure from the Prime Pump via off-axis coupling to each of the four cartridges

   - Off-axis coupling connects with the Carriage via the side connection bay:

   - An internal passage of the Carriage transmits the air pressure towards the printhead.
   - The rear hole of the printhead receives the air pressure which is distributed towards the four air ports inside the printhead.

   - Each of the air ports transmits the air pressure to the cartridges, and the air pushes the inner chambers, expelling the ink during the priming operation.

   - Host ink cartridges are supplied with the printer. The ink cartridges appear in the delivery box secured with a plastic ribbon (not in a plastic bag).

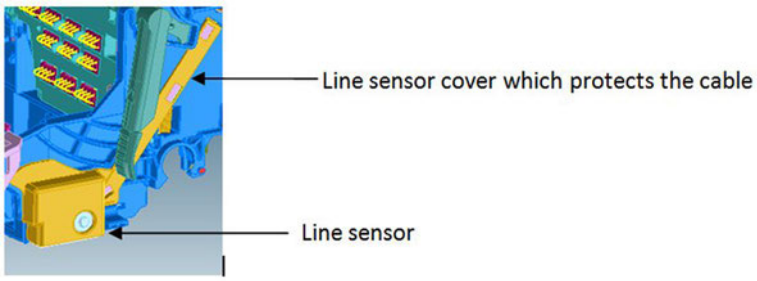
Remember that the printhead is already installed in the printer.

2. Holds the cutter bridge

   The cutter bridge impels the Cutter for cutter operations (see additional information in the cutter section).

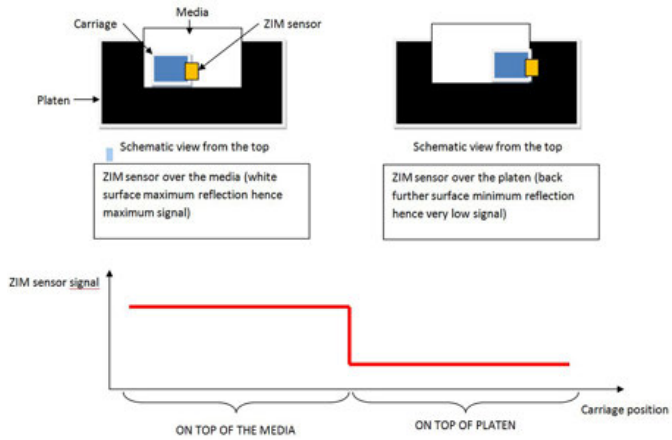
3. Holds the Carriage Line Sensor

   The Carriage Line Sensor (also known as the ZIM Sensor) is located on the right of the printer and is used to detect the edges of the paper to determine the paper dimensions and start position. This sensor is also the tool used to detect the position of printed lines to perform calibrations (Paper Advance calibration and printhead alignment).

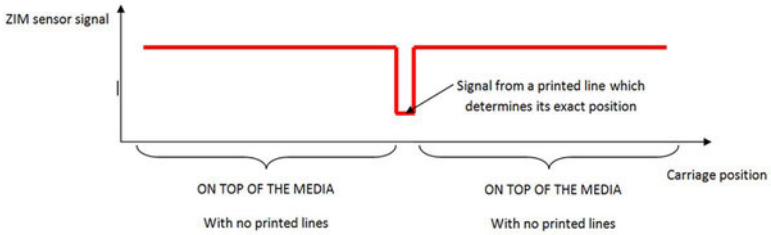


The Line Sensor is a reflective tool that generates a beam of LED light, whose reflection is detected by a luminance sensor. The signal from this sensor is used to determine the position of lines or paper edge according to the position of the Carriage.

NOTE: Both LED emitter and receiver sensor inside the line sensor are protected by a transparent plastic cover. If this cover becomes dirty, the signal to detect edges or lines will be affected, which could cause intermittent issues during the paper load.



It can also detect printed lines from short signals when the sensor crosses the lines:



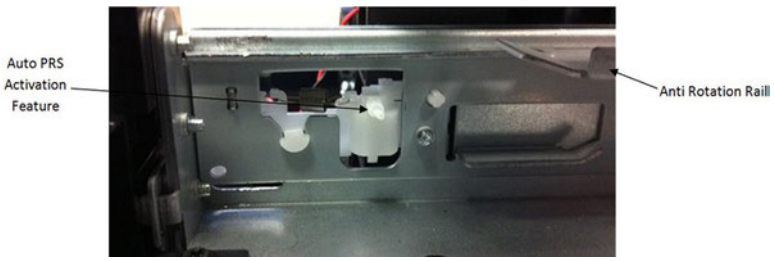
Carriage CAM and Auto PPS adjustment

At the back of the Carriage there is a sliding cam that determines the PRS (Print to platen Rib Space) of the Carriage.

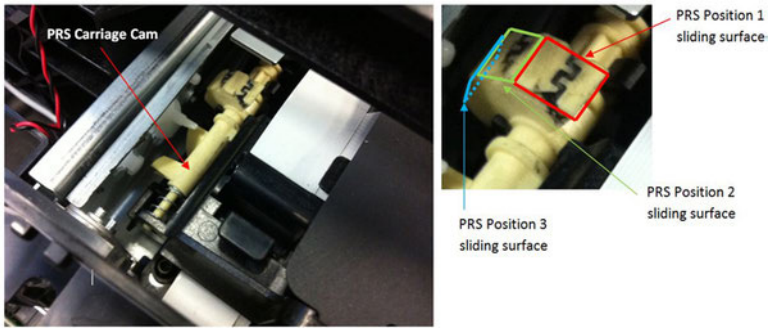
In manufacturing, the anti-rotation rail (area in which the PRS cam slides) is adjusted to calibrate the nozzle plate position of the printhead, at around 1.6 mm all along the scan axis width. This calibration is not service-adjustable and should remain constant throughout the printer's life.

As there are different paper thicknesses, the printer is able to rotate this sliding cam automatically to three different positions, changing the PRS distance to accommodate it to the appropriate printing distance.

This rotation is performed by taking the Carriage to a feature on the left-hand side of the scan axis, different side movements of the Carriage at different speeds allow this feature to grab and rotate the cam accordingly. The Cam has three different areas for three different PRS adjustments.



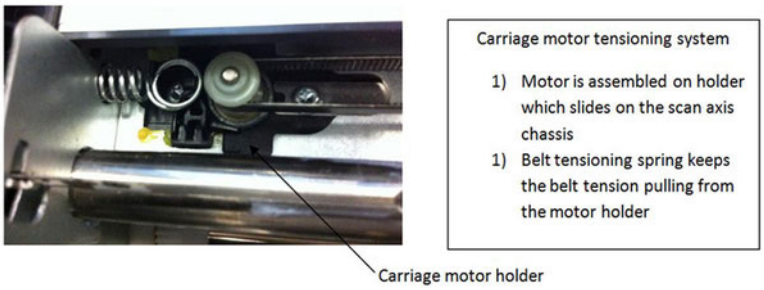
Auto-PRS feature located on the left-hand side of the scan axis.

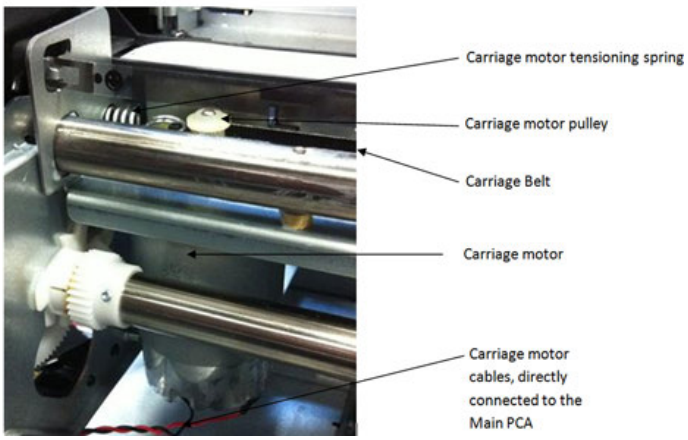


Back part of the Carriage with auto-PPS cam, after being activated in position 1.

Carriage impelling system

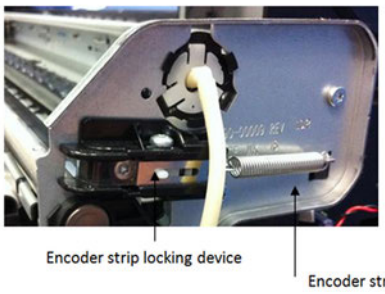
This describes the actions and identifies the parts of the carriage impelling system.





Carriage encoder system

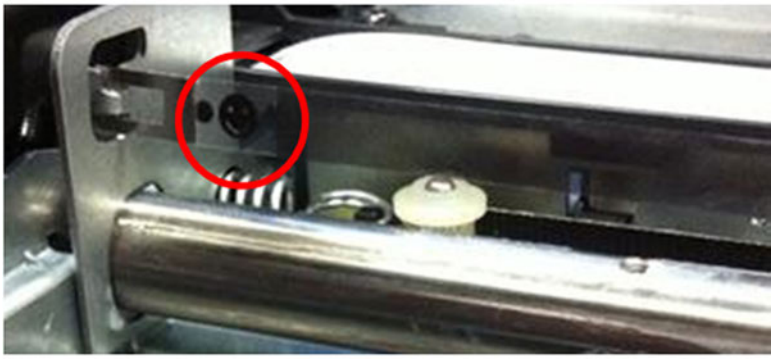
The encoder strip tension is also fixed by a tensioning spring. However, there is a mechanism to hold it in position after the spring places the strip at one specific tension. This is to prevent the spring from continually applying force over the encoder strip; which, over time and temperature changes, could make it creep.



Encoder strip tensioning system.

2) Encoder strip is tensioned by the spring force
3) After the encoder strip tension is set by the spring, it is then possible to lock the encoder position by the locking feature placed on the right plate of the scan axis to prevent long term creep created by the constant spring force

NOTE: When assembling the encoder strip, ensure that it is placed in the right orientation using the smiling symbol located on the sides of the encoder strip.

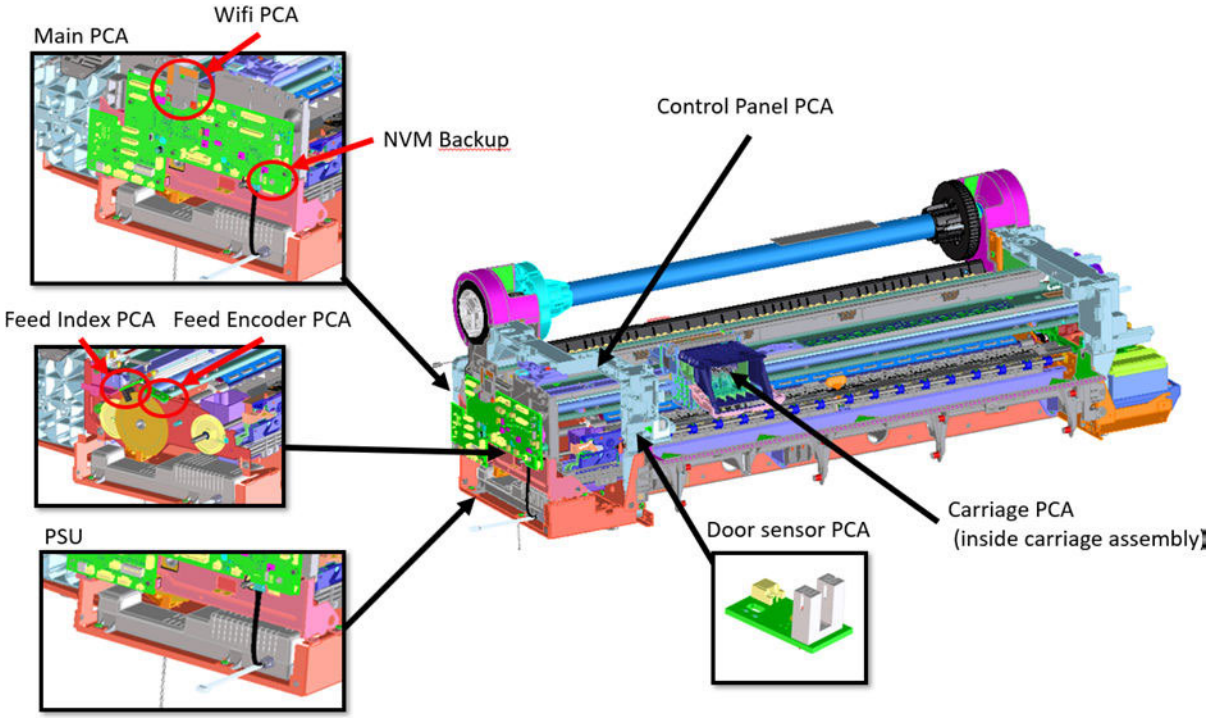


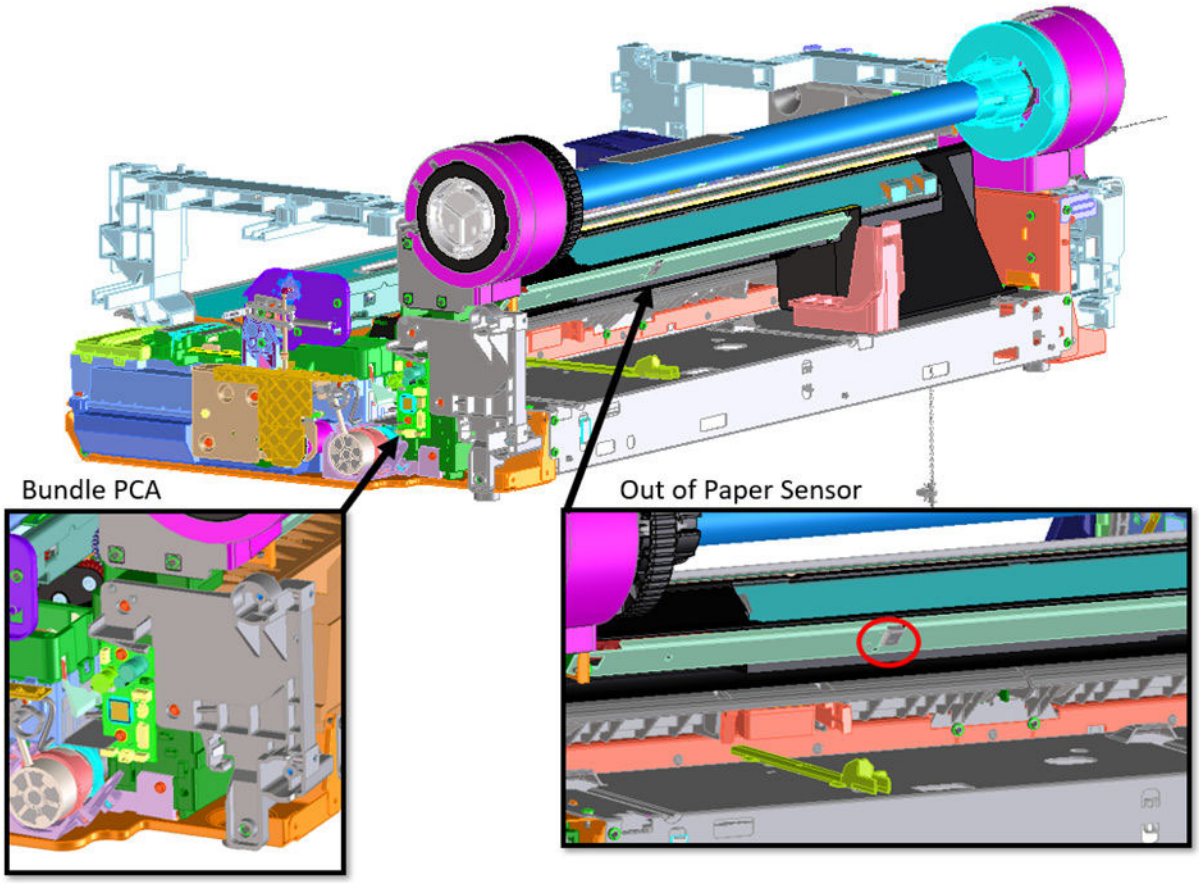
NOTE: Due to the proximity of the encoder strip to the greased sliding rod, grease can easily transfer to the strip when performing any repair operation in the area. Please clean any grease from the encoder strip if necessary. A dry cloth can be used for this purpose, to prevent any deformation or strain on the encoder strip while performing the cleaning.

Printer electronics, power supply, and cables

The printer contains several electronics boards and electrical and electronic components in different locations.

- There are two main active boards (Main PCA and Bundle PCA).
- One WiFi Module, which provides the WiFi functionality to the printer.
- One interface board (Carriage PCA), which provides and converts the appropriate signals for the Carriage (printhead interface and line sensor signaling) .
- Two on/off sensor PCAs (Front Door Sensor, Out Of Paper Sensor or OOPS), which indicate the open/closed status of the different elements.
- One NVM Back up memory PCA for storing all factory calibration values.
- One encoder sensor and a feed index sensor (other than the encoder sensors located inside the Rewinder, the Right Gear Module, and the Service Station).
- One Power Button. Located at rear of MPCA. It is used to power the printer on and off.
- One Power Supply (PSU), which converts the AC power line (110–240 V AC) into the DC power needed by the printer (32 V and 12 V).


Wifi PCA
Main PCA
NVM Backup
Control Panel PCA
Feed Index PCA
Feed Encoder PCA
PSU
Door sensor PCA
Carriage PCA
(inside carriage assembly)


Bundle PCA
Out of Paper Sensor

The standard wiring used in the printer is Flat Flexible Cables (FFCs), to interconnect all boards (including sensors and encoders) and distributed cables for power signals to the motors.

NOTE: It is important to bear in mind that FFCs are relatively delicate, so please ensure cable connectors are not touched or dirtied during manipulation for assembly and disassembly operations.

NOTE: Ensure that you are properly grounded for any electronics or wiring manipulation.

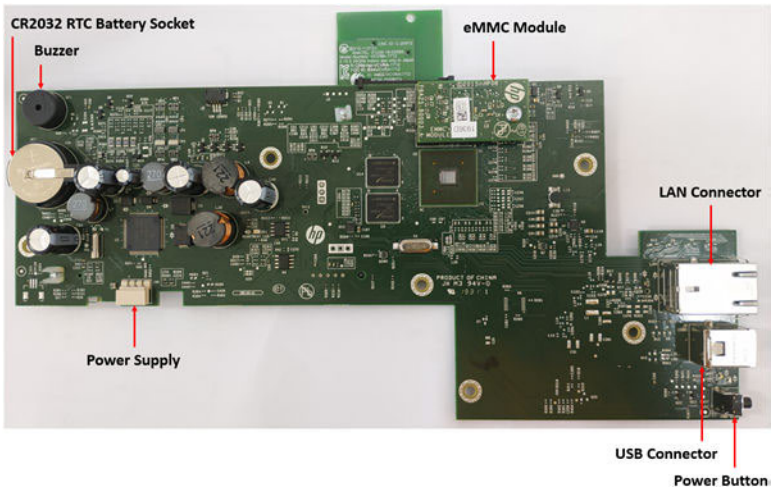
The Main PCA

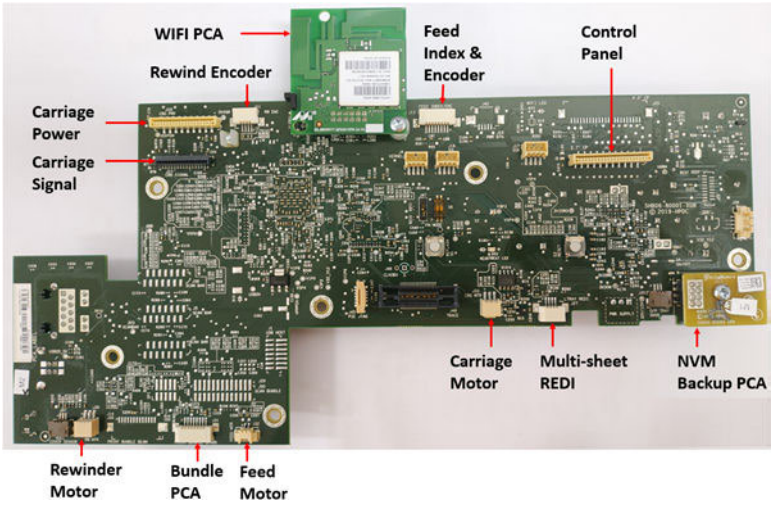
The Main PCA is located on the left-hand side of the printer. This board is the “brain” of the printer: where all the processing and printer management occurs; control of the overall machine (digital and mechatronics) with the battery for the Real-Time Clock.

There are nine different versions depending on memory size and printer version: 3 Basic (512 MB) for the T210, T230, and T250, and 7 Pro (1 GB) for the T630, T650, T650 GSA, Studio 24-in, T630, T650, and Studio 36-in.

The Main PCA also contains other elements with the following functions:

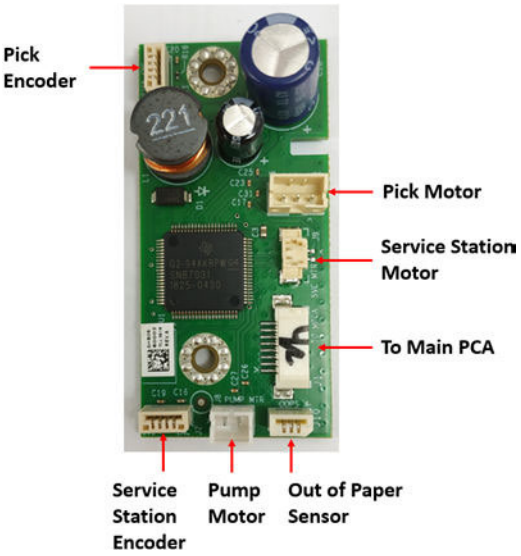
- Battery: To maintain the internal clock up and running. The internal clock is used to remember the actual date, used for cartridge life counting and warranty accounting.
- WiFi module: Attached to the top of the board with some plastic locators, provides WiFi functionality to the printer.
- eMMC module: Where the firmware of the printer is stored.
- Buzzer: To provide acoustic signals to the user.





The Bundle Board

The Bundle Board is located on the right-hand side of the printer, this board includes a driver ASIC to control and manage the motor, encoder, and sensors located on the right-hand side of the printer.

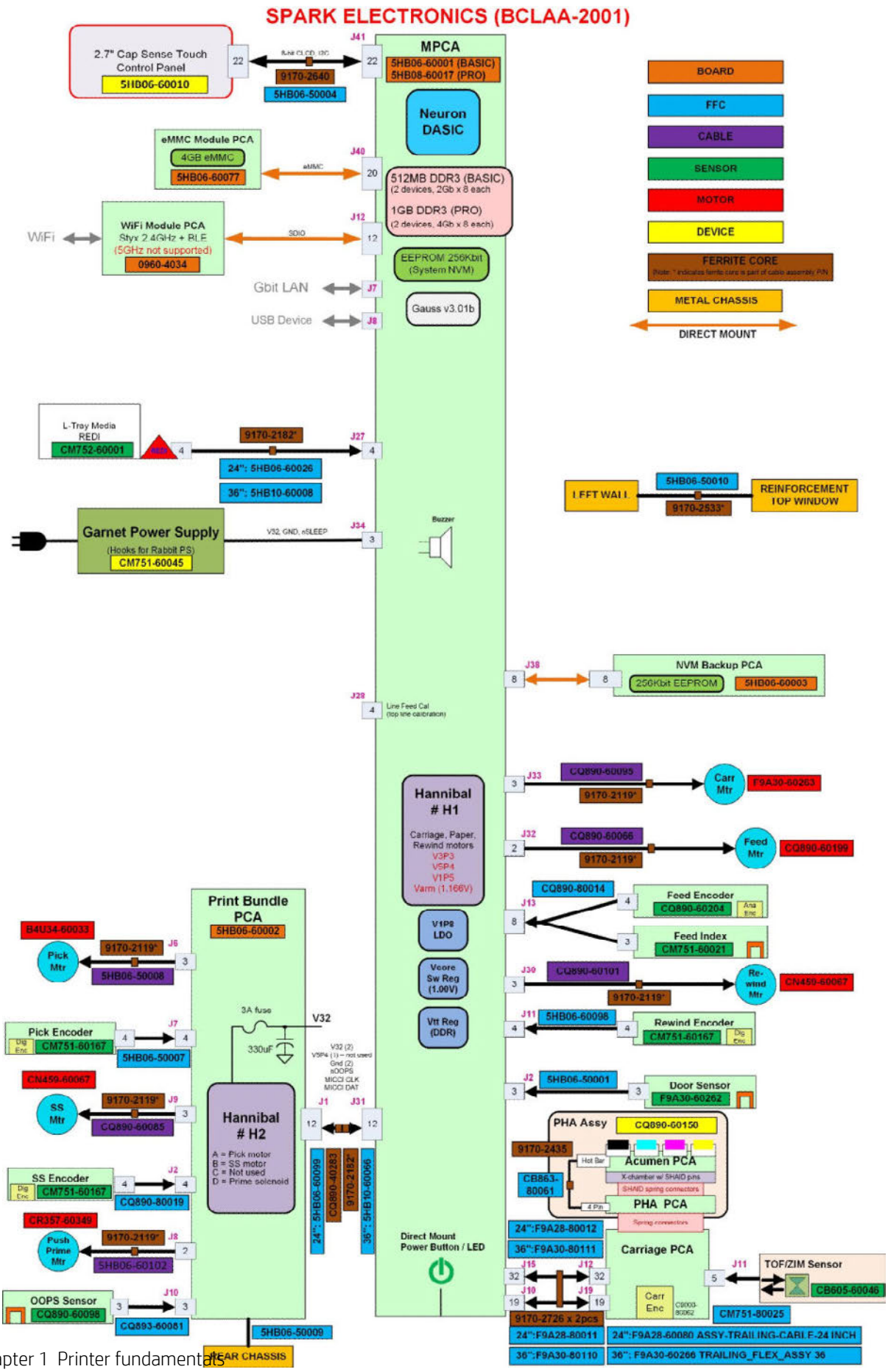


IMPORTANT: The pick encoder and Service Station cables are not poka-yoke cables: it is possible to connect them incorrectly, in which case a system error will result.

Electrical system

The relationship between the components and electronic boards of the printer are detailed here.

The following diagram describes the connections between components and electronic boards, the voltage, and the type of data line.

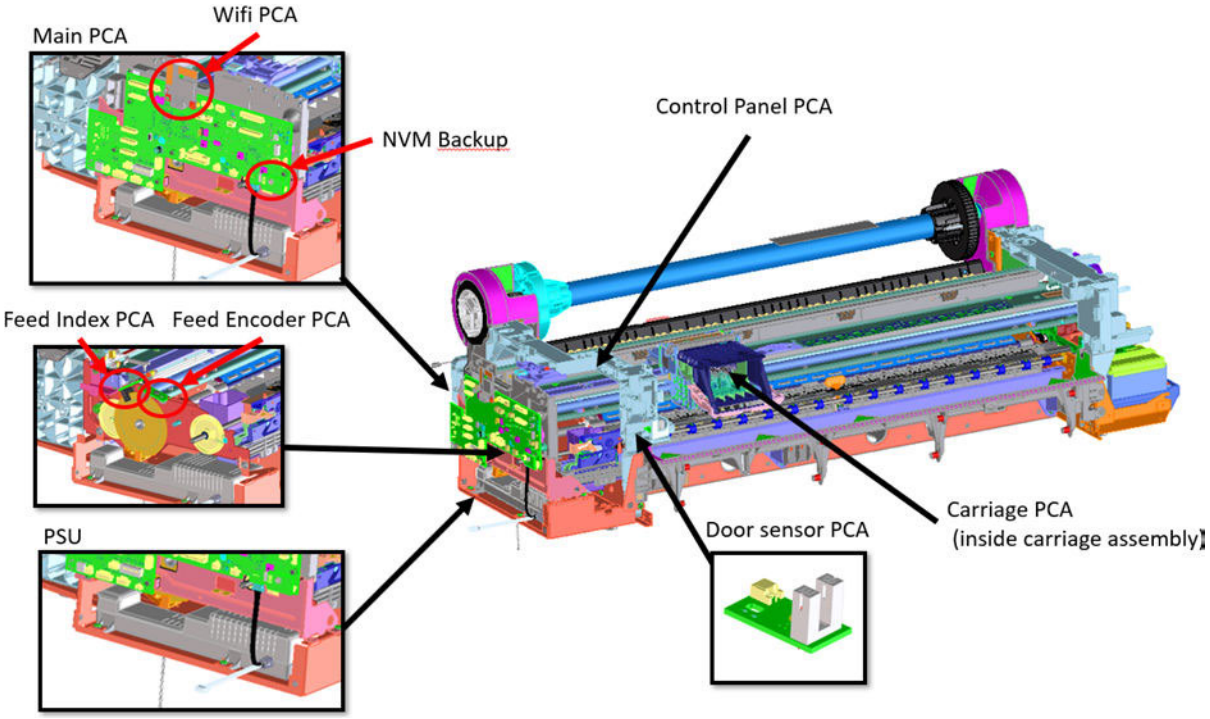

SPARK ELECTRONICS (BCLAA-2001)
2.7" Cap Sense Touch Control Panel
5HB06-60010
9170-2640
5HB06-50004
MPCA
5HB06-60001 (BASIC)
5HB08-60017 (PRO)
Neuron DASIC
eMMC Module PCA
4GB eMMC
5HB06-60077
512MB DDR3 (BASIC)
(2 devices, 2Gb x 8 each
1GB DDR3 (PRO)
(2 devices, 4Gb x 8 each)
WiFi
WiFi Module PCA
Styx 2.4GHz + BLE
(5GHz not supported)
0960-4034
SDIO
EEPROM 256Kbit
(System NVM)
Gbit LAN
Gauss v3.01b
USB Device
BOARD
FFC
CABLE
SENSOR
MOTOR
DEVICE
FERRITE CORE
METAL CHASSIS
DIRECT MOUNT
L-Tray Media REDi
CM752-60001
9170-2182"
24": 5HB06-60026
36": 5HB10-60008
LEFT WALL
5HB06-50010
9170-2533"
REINFORCEMENT TOP WINDOW
Garnet Power Supply
(Hooks for Rabbit PS)
CM751-60045
V32, GND, nSLEEP
Buzzer
NVM Backup PCA
256Kbit EEPROM
5HB06-60003
Line Feed Cal
(top line calibration)
Hannibal # H1
Carriage, Paper, Rewind motors
V3P3
V5P4
V1P5
Varm (1.166V)
V1P8 LDO
Vcore Sw Reg (1.00V)
Vtt Reg (DDR)
CQ890-60095
9170-2119"
Carr Mtr
F9A30-60263
CQ890-60066
Feed Mtr
CQ890-60199
CQ890-80014
Feed Encoder
CQ890-60204
Feed Index
CM751-60021
CQ890-60101
Re-wind Mtr
CN459-60067
5HB06-60098
Rewind Encoder
CM751-60167
5HB06-50001
Door Sensor
F9A30-60262
PHA Assy
CQ890-60150
9170-2435
Acumen PCA
CB863-80061
PHA PCA
24":F9A28-80012
36":F9A30-80111
Carriage PCA
TOF/ZIM Sensor
CB605-60046
CM751-80025
9170-2726 x 2pcs
24":F9A28-80011
24":F9A28-60080 ASSY-TRAILING-CABLE-24 INCH
36":F9A30-80110
36": F9A30-60266 TRAILING_FLEX_ASSY 36
Print Bundle PCA
5HB06-60002
B4U34-60033
Pick Mtr
9170-2119"
5HB06-50008
Pick Encoder
CM751-60167
5HB06-50007
CN459-60067
SS Mtr
CQ890-60085
SS Encoder
CQ890-80019
CR357-60349
Push Prime Mtr
5HB06-60102
OOPS Sensor
CQ890-60098
CQ893-60081
3A fuse
V32
330uF
Hannibal # H2
A = Pick motor
B = SS motor
C = Not used
D = Prime solenoid
24": 5HB06-60099
CQ880-40283
9170-2182"
36": 5HB10-60066
Direct Mount Power Button / LED
5HB06-50009
REAR CHASSIS

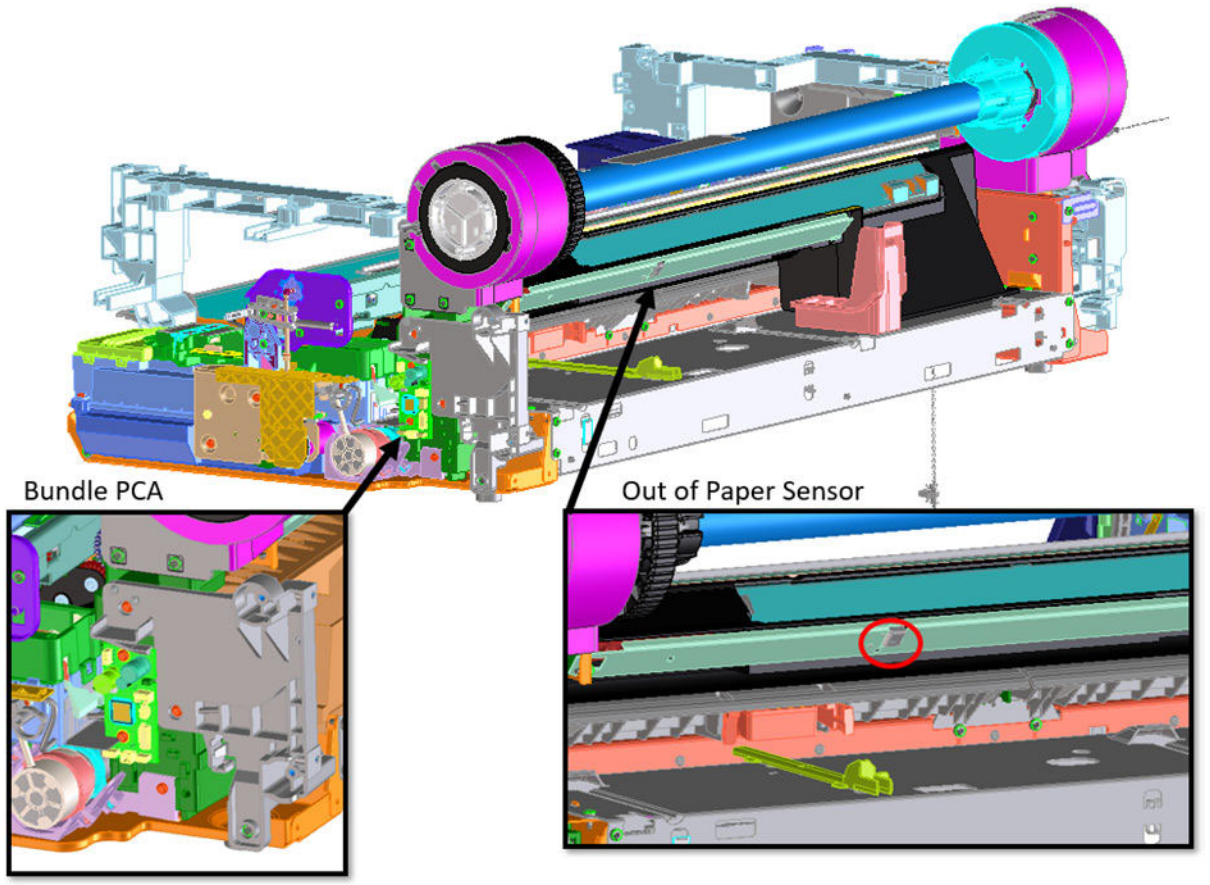
- The printer contains a total of 15 printed circuit boards (PCA).
- The Pick Encoder, Service Station Encoder, and Rewind Encoder are exactly the same board.
- The WiFi PCA, although included in the Main PCA Service Kit, is a different board used in other products.

Part	Brief technical function
Main PCA (PRO/BASIC)	Two versions depending on memory size and printer version.
Bundle Board	Mechatronics driver for the right part of the machine motors and encoder
Front Panel and Rear Power Button	Tactile color visual screen with buzzer for machine power up and down, control, and user interface
Carriage PCA => Part of Carriage assembly	Carriage control and feed for printhead spitting
OOPS	Paper presence detection
Front door sensor	Front door state control (open or closed)
Feed index	Encoder to detect the paper placement (absolute)
Feed encoder	Encoder to control the exact advance of the paper (relative)
Wifi PCA	Radio module (including antenna) to give wireless capabilities (802.11 a/b/g/n + Bluetooth)
eMMC Module	Store the firmware
NVM Backup PCA	Store the backup memory for all factory calibration values

Locations of the PCAs

This topic provides a full set of reference information for this subject.


Wifi PCA
Main PCA
NVM Backup
Control Panel PCA
Feed Index PCA
Feed Encoder PCA
PSU
Door sensor PCA
Carriage PCA
(inside carriage assembly)

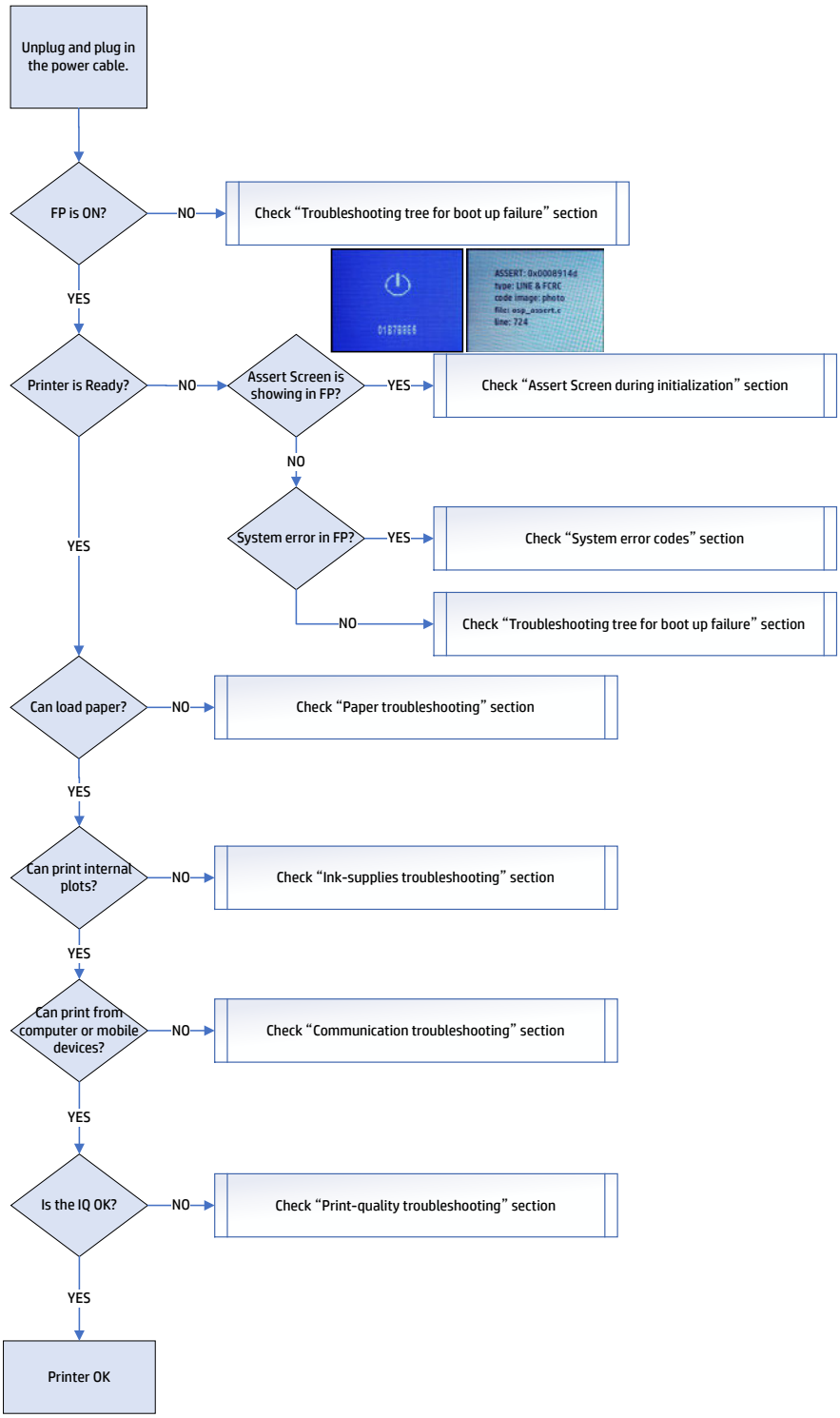

Bundle PCA
Out of Paper Sensor

2 Troubleshooting

This chapter provides a comprehensive breakdown of problematic situations, their causes, and recommended actions for the user to take when confronted with them.

Printer troubleshooting flowchart

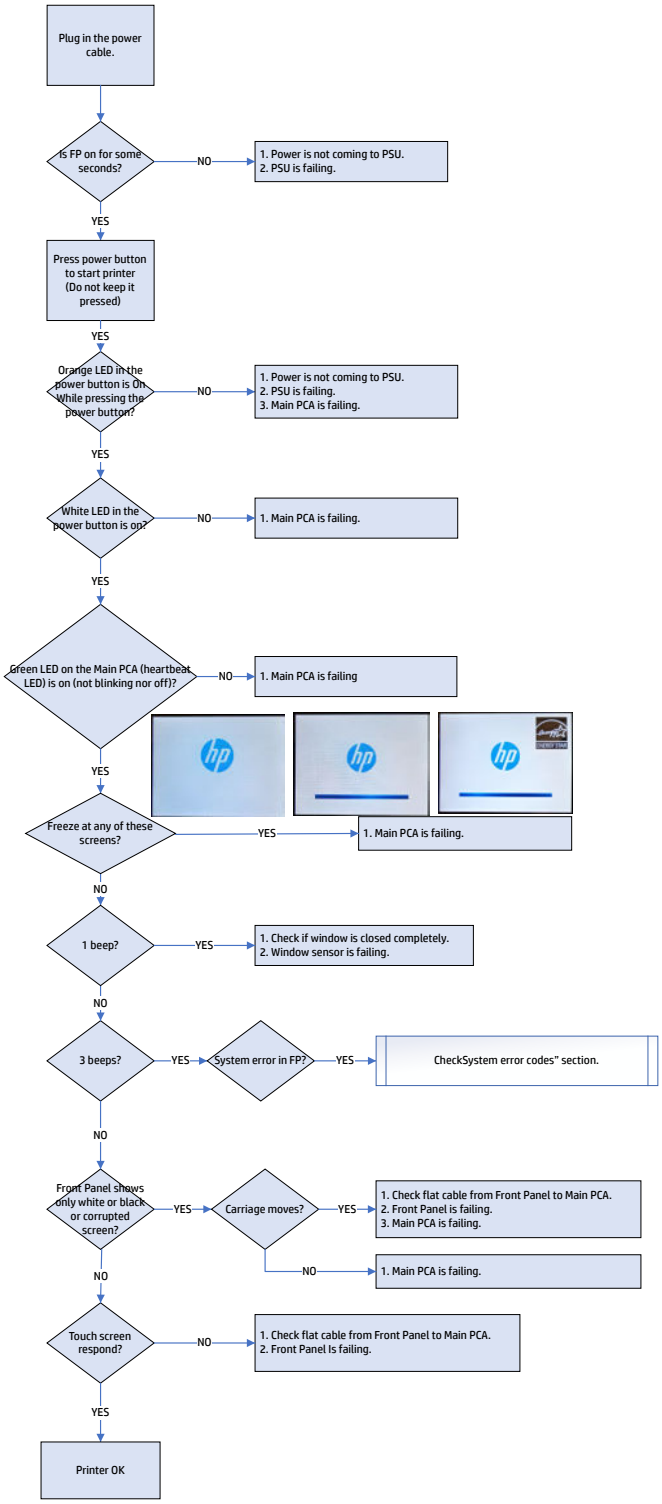
Use the following as a guide to troubleshooting issues with the printer:



Troubleshooting tree for boot up failure

Follow this troubleshooting tree when the printer doesn't boot up without showing a system error.

TIP: All these steps can be checked with customers over the phone. Follow the steps to identify what component is failing before going onsite.



Basic printer troubleshooting

This section presents fundamental troubleshooting situations and responses.

The printer does not print

If all is in order (paper loaded, all ink components installed, and no file errors), there are still reasons why a file you have sent from your computer may not start printing when expected:

1. You may have an electrical power problem. If there is no activity at all from the printer, and the front panel does not respond, check that the power cord is connected correctly and that there is power available at the socket.
2. You may be experiencing unusual electromagnetic phenomena, such as strong electromagnetic fields or severe electrical disturbances, which can cause the printer to behave strangely or even stop working. In this case, turn off the printer using the power key on the front panel and unplug the power cord, wait until the electromagnetic environment has returned to normal, then turn it on again. If you still experience problems, please contact your customer service representative.
3. You may not have installed in your computer the correct driver for your printer.
4. If you are printing on a sheet, you must specify **Automatic**, **Sheet** or **Tray** as the paper source in your printer driver. This printer has auto roll switching support.

No power comes to the printer

Perform the following steps if experiencing this issue.

1. Check that the power socket is working by connecting another device to it and checking if the device functions correctly.
2. Check that the customer is not using a power transformer which might cause an issue. Check the printer without the transformer connected.
3. Ensure the cable is inserted correctly at both ends; proceed with a reinsertion to ensure correct connection especially on the printer side, where sometimes the full insertion requires a bit of force. Ensure the customer is using the correct power cord for the printer. In some regions, more than 1 power cord is supplied in the printer box.

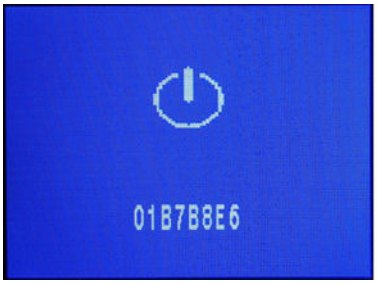
Front Panel is frozen

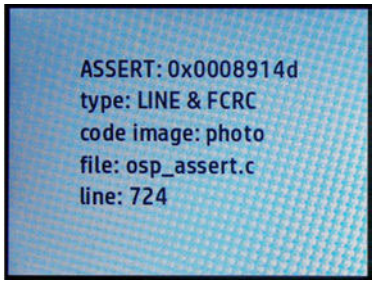
If the Front Panel display is blocked, and clearly shows that it has frozen while performing a process, follow these steps.

1. Remove all jobs from the computer's spooler.
2. Reboot the printer through the power cord.
3. Perform **Setup > Restore > Cold Reset** from the front panel.
4. Manually upgrade the printer to the latest firmware using the HP Printer Utility (Windows)/HP Utility (Mac).
5. If the issue remains, arrange a service engineer visit to replace the Main PCA.

Basic printer troubleshooting

If you see the assert screen during initialization, try the following options before replacing the Main PCA.

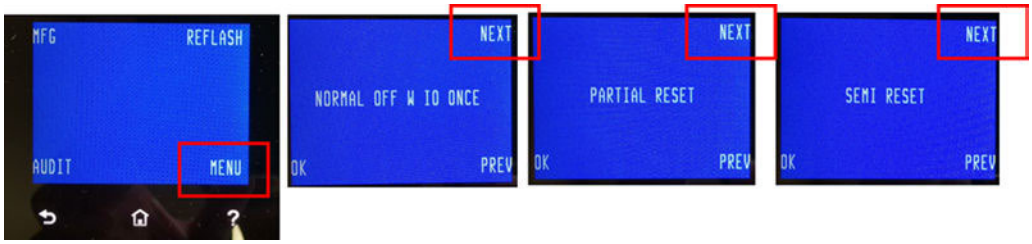




Phone

Follow this procedure for dealing with the Assert Screen issue by phone.

1. Record or take the photo of the front panel screen.
2. Remove the ethernet and USB cables. If Wi-Fi is used, disconnect it from the access point if possible.
3. Perform “FULL RESET” from low-level menu:
   a. Unplug the power cable.
   b. Press and hold the power button while plugging in the power cable until the **Home** and **back** buttons light up.
   c. Press **Home** > **Back** > **Home** > **Home**.
   d. The printer will boot to a blue screen menu.
   e. Press **MENU**.
   f. At the NORMAL OFF W IO ONCE screen, press **NEXT**.
   g. At the PARTIAL RESET screen, press **NEXT**.
   h. At the SEMI RESET screen, press **NEXT**.



   i. At the FULL RESET screen, press **OK** to perform a Full Reset.
   j. After pressing **OK**, the printer will reboot. If the Full Reset has been successful, the printer will boot successfully and run through the entire OOBE configuration.

Onsite

Follow this procedure for dealing with the Assert Screen issue when onsite.

1. Reseat all the cables to the Main PCA and reseat all the cables to the Bundle PC.
2. Reseat the NVM PCA.
3. Reseat the Main PCA.

Where to find the LEDs

The following images demonstrate the locations of the LEDs associated with the Power Button, the Main PCA, and the Network Port.

Power Button LEDs

There are two LEDs associated with the Power Button.

Figure 2-1 LED 1 - Orange

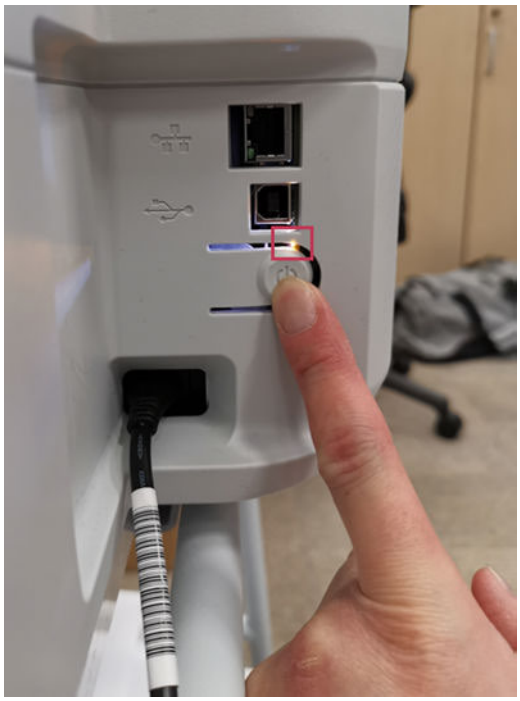
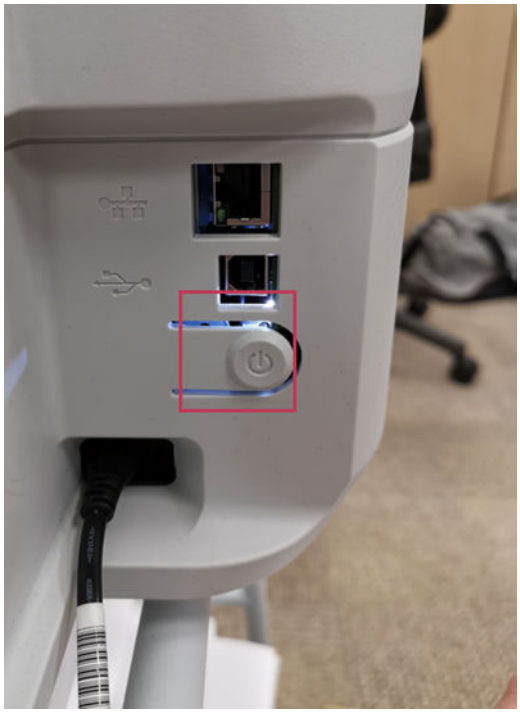


Figure 2-2 LED 2 - White

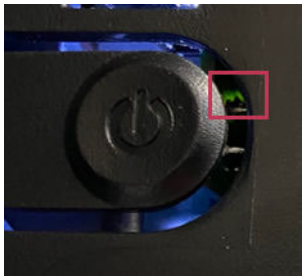


Main PCA LED ("Heartbeat LED")

There is one LED associated with the Main PCA. The customer and the engineer will pay different attention to it.

For the customer

The customer should observe the Main PCA/Heartbeat LED at the following location.



NOTE: The customer will notice the reflection of the Heartbeat LED and half of the real LED.

For the onsite service engineer

The Main PCA/Heartbeat LED can be observed at the following location with the Cutter Door removed.

▲ Remove the Cutter door.

Network Port LEDs

There are two LEDs associated with the Network Port.

System error codes

Understanding system error codes

Error messages are generally used to report internal system errors. The following pages contain a list of system error codes and their respective descriptions and recommended corrective actions. Try only one recommended action at a time, in the order that they appear, and check whether the error code has disappeared.

Text messages and numerical error codes

Occasionally you may see one of the following messages appear on the front-panel display. If so, follow the advice in the Recommendation column.

If you see an error message that does not appear here, and you feel in doubt about the correct response, or if the recommended action does not seem to solve the problem, contact HP Support.

Table 2-1 Text messages

Message	Recommendation
[Color] cartridge has expired	Replace the cartridge. See Replace an ink cartridge on page 94

Table 2-1 Text messages (continued)

Message	Recommendation
The indicated cartridges are low. You do not have to replace the cartridge(s) now	HP recommends you have a replacement available for when the cartridge is depleted and will need to be replaced.
[Color] cartridge is very low on ink	Ensure that you have a new cartridge of the same color ready.
Depleted cartridges must be replaced to resume printing	Replace the cartridges as needed. See Replace an ink cartridge on page 94
Maintenance kit 1 required	Contact HP Support.
Maintenance kit 2 required	Contact HP Support.
Cartridge Problem (animation)	Insert cartridges of the correct color as needed. See Replace an ink cartridge on page 94
Paper jam animation + Open the print zone access window and clear any paper jam or obstruction	See Roll has jammed on page 70 or Multi-sheet tray has jammed on page 72.
The width of the paper is smaller than the minimum size supported by the selected media source. Loading cancelled.	Remove the paper and load paper of the correct size.
Loaded paper is too wide. Manual unload required.	Remove the paper manually and load paper of the correct size.
The paper is too far from the lateral load line. Try loading the paper again.	Remove and reload the paper.
Please manually unload roll paper and try again.	Rewind the roll manually.
The currently loaded paper has too much skew and cannot be corrected automatically. Touch "Remove" , and then load the paper again.	Remove and reload the paper.
The roll is out of paper, and the current job has been cancelled. Load another roll, and then send the job again.	Load a new roll.
You are printing a multipage job. Load another sheet to continue printing or cancel the job.	Load another single sheet.
Multi-sheet tray is out of paper. Load paper in multi-sheet tray and press OK to continue printing or cancel the job. Actual message specifies media source, for example: "Universal Heavyweight Coated Paper, A4 (210x297mm)"	Load paper into the multi-sheet tray.
End of roll has been reached. It is not possible to load the roll.	Load a new roll.
Missing or failed printhead.	Remove and reinsert the same printhead, or try cleaning the electrical connections. If necessary, insert a new printhead. See the chapter "Replace the printhead" in the User Guide. **NOTE:** The error message does not permit returning to the home screen to start the printhead replacement. Instead, press **Show more**.
Refilled or depleted cartridge detected	Check the cartridge.
Used cartridges might not have enough ink to complete start-up. Open ink door to replace the cartridges.	A new printhead has been inserted without a new set of ink cartridges. Replace the cartridges not marked as new. See Replace an ink cartridge on page 94.
Wrong file format.	The file format is incorrect or not supported. The printer cannot process the job, which will be discarded.

Table 2-2 Numerical error codes

Error code	Recommendation
0001-0082	The battery of the real-time clock has expired; contact HP Support.
0021-0017	Service station error. There may be a paper or carriage jam. Check and clear the paper path if necessary and restart the printer.
0041-0017, 0042-0117	There may be a paper or carriage jam. Check and clear the paper path if necessary.
0085-XXXX	Feeding paper problem. Restart the printer.
0086-0008	There may be a paper or carriage jam. Check and clear the paper path if necessary. Also clean the carriage encoder strip.

Severe error codes

Severe error messages inform you of a device failure. Some of these messages can be cleared by pressing the power button to turn off the printer, and then pressing it again to turn the printer back on. If a severe error persists, service is required.

System Error Code (DAXX-YYZZ)	Service Part (XX.YY)	Error Cause (ZZ)
0001-0082	01.00. Main PCA	82. Battery or Real time clock ran down
0004-0001	04.00. Print bundle PCA	01. MALFUNCTION_ERROR_STATUS_OR_STATE
0021-0017	21.00. Service station assy	17. MOVEMENT_BLOCKED
0041-0017	41.00. Paper motor	17. MOVEMENT_BLOCKED
0042-0117	42.01. Carriage motor	17. MOVEMENT_BLOCKED
0043-0017	43.00. Pick motor	17. MOVEMENT_BLOCKED
0045-0017	45.00. Rewinder motor	17. MOVEMENT_BLOCKED
0059-0190	59.01. Main PCA NVM or NVM Backup PCA	90. NVM_CONFLICT_MAIN_VS_BACKUP
0059-0191	59.01. Main PCA NVM or NVM Backup PCA	91. NVM_DEFAULT_IN_BOTH_MAIN_AND_BACKUP
0059-0289	59.02. NVM Backup PCA	89. BACKUP_NVM_MISSING
0085-0101	85.01. Feed index PCA	01. MALFUNCTION_ERROR_STATUS_OR_STATE
0085-0201	85.02. Feed encoder PCA	01. MALFUNCTION_ERROR_STATUS_OR_STATE
0087-0001	87.00. Encoder strip	01. MALFUNCTION_ERROR_STATUS_OR_STATE
0153-0302	53.03. Multisheet tray sensor	02. CHECK_FAILURE_PRESENCE_INITIALIZATION_ERROR
0721-0078	21.00. Service station assy	78. UPDATE_OR_MAINTENANCE_NEEDED
0942-0188	42.01. Carriage motor	88. Carriage homing problem
0955-0050	55.00. Carriage Zim sensor SV	50. UNABLE_TO_READ_GET_VALUE

Silent error codes

Silent error codes help with specific troubleshooting. They are accessible only through the error log and don't appear in the front panel.

System Error Code (DAXX-YYZZ)	Service Part (XX.YY)	Error Cause (ZZ)
0000-0059	00.00. Unknown Service Part	59. MOTOR_SERVO_SHUTDOWN
0027-0001	27.00. Printhead	"Generic PHA error"
0027-0002	27.00. Printhead	"PHA error: not responding at all"
0027-0004	27.00. Printhead	"PHA error: Watchdog fault"
0027-0020	27.00. Printhead	"PHA error: VPP short"
0027-0021	27.00. Printhead	"PHA error: VPP short"
0027-0022	27.00. Printhead	"PHA error: VPP short"
0027-0023	27.00. Printhead	"PHA error: VPP short"
0027-0024	27.00. Printhead	"PHA error: VPP short test"
0027-0025	27.00. Printhead	"PHA error: VPP short"
0027-0033	27.00. Printhead	"PHA error: VPP bleed failed"
0027-0046	27.00. Printhead	"PHA error: VPP on"
0027-0049	27.00. Printhead	"PHA error: VPP bleed failed"
0027-0050	27.00. Printhead	"PHA error: VPP bleed failed"
0027-0051	27.00. Printhead	"PHA error: VPP bleed failed"
0027-0053	27.00. Printhead	"PHA error: VPP bleed failed"
0027-0054	27.00. Printhead	"PHA error: VPP bleed failed"
0027-0055	27.00. Printhead	"PHA error: VPP bleed failed"
0027-0056	27.00. Printhead	"PHA error: VPP expected on"
0027-0059	27.00. Printhead	"PHA error: missing"
0027-0060	27.00. Printhead	"PHA error: wrong part"
0027-0061	27.00. Printhead	"Power on with Filled PHA Change"
0027-0062	27.00. Printhead	"Power on with Empty PHA Change"
0027-0063	27.00. Printhead	"PHA change with Filled PHA"
0027-0064	27.00. Printhead	"PHA change with Empty PHA"
0027-0065	27.00. Printhead	"Out of cap with Filled PHA Change"
0027-0066	27.00. Printhead	"Out of cap with Empty PHA Change"
0027-0067	27.00. Printhead	"Fake PHA Change"
0043-0059	43.00. Pick motor	59. MOTOR_SERVO_SHUTDOWN
0045-0059	45.00. Rewinder motor	59. MOTOR_SERVO_SHUTDOWN

How to interpret severe error codes

Error codes use the “two groups” error code format **DAXX-YYZZ**. The fields are briefly described in the table below:

Field	Description
D	**Device Type:** 1-digit number from 0 to 9.
A	**Action:** 1-digit number from 0 to 9.
XX	**Module:** 2-digit number from 00 to 99.
YY	**Service Part**: 2-digit number from 00 to 99.
ZZ	**Error Cause:** 2-digit numbers from 00 to 99.

See below example as reference:

Key	Example: 0041-0017
D: Device Type	0: Printer
A: Actions	0: Replace
XX-YY: Module – Service Part	41-00: Paper motor
ZZ: Error Causes	17: Movement blocked

Specific error codes for startup and opto trip failures

Here is provided a table referencing the service part and error cause for specific error codes.

System Error Code (DAXX-YYZZ)	Service Part (XX.YY)	Error Cause (YY)
0024-1000	24. IDS startup	Out of ink ,faulty or missing cartridge
0024-1100	24. IDS startup	Out of ink detected in altered supplies

How to interpret error codes for startup and opto trip failures

Error codes use the “two groups” error code format **DAXX-YYZZ**., but with slightly different coding to include the information of the color that is failing. The fields are briefly described in the table below:

Field	Description
D	**Device Type:** 1-digit number from 0 to 9.
A	**Action:** 1-digit number from 0 to 9.
XX	**Printer function that is failing:** 24 (startup) /26 (opto trip failure).
YY	**Error Cause:** 2-digit numbers from 00 to 99.

See below example as reference:

Key	Example: 0041-0017
D: Device Type	0: Printer
A: Actions	0: Replace

Key	Example: 0041-0017
XX-YY: Module – Service Part	41-00: Paper motor
ZZ: Error Causes	17: Movement blocked

System error code troubleshooting

This section describes each of the severe errors that may be encountered while using the printer, and provides the diagnostic method and the actions required to solve the problem detected.

In general, each error is explained for two different situations:

1. For a call agent to solve remotely with the customer
2. If necessary, for an on-site service engineer to solve

NOTE: When more than one component could be affected by the system error, replace one component at a time and check whether the error has gone before replacing another component. **Do not replace two electronic parts at same time!** Using this procedure you will be able to determine exactly which component failed.

System error:	**0001-0082**
Problem description:	Real Time Clock (RTC) Battery ran down.
Other potential parts associated:	None
How to solve.	**How to solve. Remote troubleshooting (call agent)** 1. The call agent asks the customer to go to the **Support Menu** by pressing the **Power key** continuously for 15 seconds. 2. Go to the **Diagnostics Menu** and select RTC Battery Status to check whether the RTC Battery has actually expired, see ARSS Test on page 171. 3. If yes, the call agent should arrange a service engineer visit to replace the RTC battery by replacing the Main PCA, see Main PCA (5HB06-67018 & 5HB08-67008) on page 329. • Main PCA **Onsite troubleshooting and solution (service engineer)** 1. Replace the Main PCA, see Main PCA (5HB06-67018 & 5HB08-67008) on page 329. 2. Switch on the printer and go to **Extended Support Menu** o **Extended Support Menu**. Select **RTCBattery Expired** option from the **Reset Menu in order to** reset the RTC battery expired flag. 3. Go back and select **Set Date and Time** from the **Service Menu** Set the correct date and time.

System error:	**0004-0001**
Problem description:	Printer Bundle Board communication failure or malfunction
Other potential parts associated:	Bundle FFC, Main PCA
How to solve.	**How to solve. Remote troubleshooting (call agent)** 1. Switch the power off and disconnect the power cord. Reconnect the power cord and power on the printer. 2. The call agent should arrange a service engineer visit to change the Bundle PCA and follow steps below on Onsite Troubleshooting:

- Printer Bundle Board

3. If a different system error is displayed then the call agent should perform the applicable troubleshooting procedure.

Onsite troubleshooting and solution (service engineer)

1. Remove covers and check that all the cables in the Bundle PCA and associated parts are correctly connected, and that none of them is damaged. If any cable is disconnected then reconnect it, and power on the printer again to check whether the system error has disappeared. **Important note:** If any cable is damaged then order a Cable Service Kit:

   - Cables Sk

2. Replace the Bundle PCA, see Removal on page 340.

   - Printer Bundle Board

3. Replace the Bundle FFC cable, see Assy PBB to MPCA FFC 36in (5HB10-60066) / Assy PBB to MPCA FFC 24in (5HB06-60099) on page 403.

4. Replace the Main PCA (MPCA See Main PCA (5HB06-67018 & 5HB08-67008) on page 329)

   - Main PCA

System error:	**0021-0017**
Problem description:	Service station is not able to move all the way
Other potential parts associated:	Print Bundle PCA

Corrective action:	**How to solve. Remote troubleshooting (call agent)**
	1. Switch the power off and disconnect the power cord.
	2. Open the PHA door and look for paper remains that could be blocking the SVS movement.
	3. Reconnect the power cord and power on the printer.
	4. The call agent should arrange a service engineer visit to change the Service Station, and follow the Onsite troubleshooting below:
	   - Service station assembly
	5. If a different system error is displayed then the call agent should perform the applicable troubleshooting procedure.
	Onsite troubleshooting and solution (service engineer)
	1. Remove covers and check that the cables from the Service Station to the Bundle PCA are correctly connected and not damaged. Important note: If any cable is disconnected then reconnect it, and power on the printer again to check whether the system error has disappeared. If any cable is damaged then order a Cable Service Kit.
	   - Cables Sk – CQ890-67021
	2. Make sure that the Service Station path is clear. Remove any visible obstacles (screws, plastic parts, etc.) restricting the movement of the Service Station.
	3. Go to **Support Menu**, see Entering the support menus on page 123 and run the Service Station diagnostic test, see Test Service Station on page 137 to check whether the system error has disappeared.
	4. Replace the Service Station, see Service Station Assembly (CQ890-67045) on page 342.
	   - Service station assembly

5. Replace the Bundle Board, see Removal on page 340.

   - Bundle board

System error:	**0024-1000**
Problem description:	Out of ink, faulty or missing cartridge during the PHA startup process
Other potential parts associated:	Supplies
Corrective action:	**How to solve. Remote troubleshooting (call agent)** 1. This error appears when, during the PHA startup process, the printer detects that one of the cartridges is out of ink. First, reboot the printer and check if the PHA process is able to finish without further intervention. 2. Open the front window and verify that all the cartridges are properly installed. A leakage due to an improperly inserted cartridge could cause this issue. 3. If all the supplies were well inserted, ask the customer to try the process again with a new supply. It is not required to replace the PHA as the same one can be used to retry the process. 4. If the supply was prematurely detected as OOI, the call agent will arrange a shipment for the faulty HP supply replacement.

System error:	**0024-1100**
Problem description:	Out of ink detected in altered supplies during the startup process
Other potential parts associated:	PHA
Corrective action:	**How to solve. Remote troubleshooting (call agent)** ▲ Ask the customer to try the process again with a new unused HP supply. It is not required to replace the PHA as the same one can be used to retry the process.

System error:	**0027-00XX**
Problem description:	PHA problem
Other potential parts associated:	Carriage PCA, Trailing Cable, Main PCA
Corrective action:	**How to solve. Remote troubleshooting (call agent)** 1. Remove, clean and reseat PHA kit. Also, check if ink tubes latch and PHA latch are properly closed (Green Lock). 2. The last 2 ciphers of the error code indicate the specific PHA failure. The call agent will note the complete system error. for later failure analysis. 3. If the PHA is still in warranty, the call agent will arrange a shipment with a PHA replacement.

System error:	**0041-0017**
Problem description:	Unable to move Paper Servo or no feedback received.
Other potential parts associated:	Feed Encoder Sensor PCA, Feed Index Sensor PCA, Feed Encoder Disk
Corrective action:	**How to solve. Remote troubleshooting (call agent)**

1. Switch the power off and disconnect the power cord. Reconnect the power cord and power on the printer.
2. The call agent asks the customer to go to **Support Menu** by pressing the **Power key** continuously for 15 seconds.
3. Go to **Diagnostic Men**u, see Entering the support menus on page 123 and run **Paper Servo** diagnostic, see Paper Servo on page 164.
4. After running the diagnostic the printer will show one of these system errors:
   - 0081-0008 arrange a service engineer to replace Paper/Feed motor and follow the Onsite Troubleshooting explained below, see Paper Motor (CQ890-67036) on page 366.
     - Paper Motor
   - 0085-0101 need to replace Feed encoder sensor PCA and follow the Onsite troubleshooting and solution (service engineer) explained for error 0085-0201.
   - 0085-0201 need to replace Feed encoder sensor PCA and follow the Onsite troubleshooting and solution (service engineer) explained for error 0085-0201.
5. The call agent should arrange a service engineer visit to replace the right part depending on the system error.

Onsite troubleshooting and solution (service engineer)

1. Remove covers and check that all the cables are well connected to the Main PCA, specially the paper motor cable, and none of them are damaged. If any of the cables is not connected, then reconnect it, and power on the printer again to check whether the system error has disappeared. Check that there are no debris, media or foreign objects preventing drive shaft movement.

   IMPORTANT: If any cable is damaged then order a Cable Service Kit:

   - Cables Sk
2. Run Paper Servo diagnostic, see Paper Servo on page 164. After running the diagnostic check for the following system errors:

   After running the diagnostic the printer will show one of these system errors:

   - 0081-0008 arrange a service engineer to replace Paper/Feed motor and follow the Onsite Troubleshooting explained below, see Paper Motor (CQ890-67036) on page 366.
     - Paper Motor
   - 0085-0101 need to replace Feed encoder sensor PCA and follow the Onsite troubleshooting and solution (service engineer) explained for error 0085-0201.
   - 0085-0201 need to replace Feed encoder sensor PCA and follow the Onsite troubleshooting and solution (service engineer) explained for error 0085-0201.
3. If the 0041-0017 error continues then the Paper/Feed motor should be replaced. See Paper Motor (CQ890-67036) on page 366.
   - Paper Motor
4. Replace the Main PCA, see Main PCA (5HB06-67018 & 5HB08-67008) on page 329.
   - Main PCA

System error:	**0042-0117**
Problem description:	Unable to move Carriage Servo or no feedback received.
Other potential parts associated:	Trailing Cables, Carriage Board, Carriage Motor, Carriage Belt, Encoder Strip

Corrective action:	**How to solve. Remote troubleshooting (call agent)** 1. Switch the power off and disconnect the power cord. Reconnect the power cord and power on the printer. 2. The call agent asks the customer to go to **Support Menu** by pressing the **Power key** continuously for 15 seconds. 3. Go to **Diagnostic Men**u, see Entering the support menus on page 123 and run **Carriage Servo** diagnostic, see Test Carriage on page 136. 4. If the carriage it is not held by the service station, move the carriage and check if there is to much friction. **CAUTION:** Do not damage the encoder strip. 5. The call agent should arrange a service engineer visit to change the carriage motor. **Onsite troubleshooting and solution (service engineer)** 1. Check that the Carriage Motor belt is not broken or out of place, and the pulley on the SVS side turns freely and horizontal. 2. If the belt and pulley are OK, then the Carriage Motor should be replaced, see Carriage Motor (5HB06-67003) on page 391. • Carriage Motor 3. If the belt or pulley were damaged, they should be changed. Order the belt service kit, see Removal on page 374. • Belt (36)

System error:	0043-0017
Problem description:	Unable to move Pick Servo or no feedback received.
Other potential parts associated:	None
Corrective action:	**How to solve. Onsite troubleshooting and solution (service engineer)** 1. Remove the covers and check that all the cables are well connected to the Printer Bundle Board (right side of the unit), especially the pick motor cable, and none of them are damaged. If any cable is not connected, then reconnect it, and power on the printer again to check whether the system error has disappeared. Check right hand gear train for blockage or damage. **IMPORTANT:** If any cable is damaged, then order a Cable Service Kit: • Cables Sk 2. Replace the Right Gear Train module.

System error:	0045-0017
Problem description:	Unable to move Rewind Servo or no feedback received.
Other potential parts associated:	Main PCA
Corrective action:	**How to solve. Remote troubleshooting (call agent)** 1. Switch the power off and disconnect the power cord. Reconnect the power cord and power on the printer.

2. Remove the spindle, check the spindle gear and gear cap position. Check rewinder gears for damage. Finally, boot the unit without the spindle.

3. The call agent should arrange a service engineer visit to change the Rewinder module, and follow the Onsite troubleshooting below:

   - Left Roll Support

4. If a different system error is displayed then the call agent should perform the applicable troubleshooting procedure.

Onsite troubleshooting and solution (service engineer)

1. Remove the covers and check that the cables of the rewinder module are correctly connected to the Main PCA, and that none of them are damaged. If any cable is disconnected then reconnect it, and power on the printer again to check whether the system error has disappeared.

   IMPORTANT: If any cable is damaged then order a Cable Service Kit:

   - Cables Sk

2. Replace the Left Roll Support. See Left Roll Support with Rewinder and Cover (5HB08-67004 & 5HB12-67016) on page 313.

   - Left Roll Support

3. Replace the Main PCA, see Main PCA (5HB06-67018 & 5HB08-67008) on page 329.

   - Main PCA

System error:	**0059-0190**
Problem description:	Conflict found between NVM main and backup
Other potential parts associated:	None
Corrective action:	**How to solve. Onsite troubleshooting and solution (service engineer)** 1. The error appears if during a service operation, the Main PCA or the NVM backup PCA are replaced by a reused part (not a new spare part). 2. To recover, repair using HP genuine new spare parts.

System error:	**0059-0191**
Problem description:	Default data found in both NVM main and backup
Other potential parts associated:	None
Corrective action:	**How to solve. Onsite troubleshooting and solution (service engineer)** 1. The error appears if during a service operation, the Main PCA and the NVM backup PCA are replaced at the same time. 2. To recover, repair by changing first one component (use the old component for this printer), then power the printer off and on, and change the other.

System error:	**0059-0289**
Problem description:	NVM backup is missing or does not work correctly (NVM location).
Other potential parts associated:	Main PCA

Corrective action:	How to solve. Remote troubleshooting (call agent) ▲ Restart the unit. If the problem persists, then: Onsite troubleshooting and solution (service engineer) 1. Remove left cover, and ensure NVM backup cable is properly connected to it and to the Main PCA. 2. Replace the NVM backup. 3. If the issue persists, replace the Main PCA.

System error:	0085-0101
Problem description:	Feed index encoder sensor does not work properly
Other potential parts associated:	Feed Encoder Disk, Main PCA
Corrective action:	How to solve. Remote troubleshooting (call agent) 1. Switch off the printer, and disconnect the power cord. Reconnect the power cord and power on the printer. 2. The call agent should arrange a service engineer visit to change the Feed Index PCA and follow onsite troubleshooting below. ● Feed Index encoder sensor PCA 3. If a different system error is displayed then the call agent should perform the applicable troubleshooting procedure. Onsite troubleshooting and solution (service engineer) 1. Remove the covers and check that all the cables are well connected to the Main PCA, and none of them are damaged. If any cable is not connected then reconnect it, and power on the printer again to check whether the system error has disappeared. IMPORTANT: If any cable is damaged then order a Cable Service Kit: ● Cables Sk 2. Replace the Feed Index Encoder Sensor PCA, see Encoder PCA (CQ890-60204) and Index (CM751-60021) on page 396 ● Feed Index encoder sensor PCA 3. Check that the Encoder Disk is not dirty or damaged. If the Encoder Disk is damaged, it should be replaced, see Encoder Disk (CQ890-67033) on page 337. ● Encoder Disk

System error:	0085-0201
Problem description:	Feed encoder sensor does not work properly
Other potential parts associated:	Feed encoder Disk, Main PCA
Corrective action:	How to solve. Remote troubleshooting (call agent) 1. Switch off the printer, and disconnect the power cord. Reconnect the power cord and power on the printer. 2. The call agent should arrange a service engineer visit to change the Feed encoder sensor PCA. ● Feed Encoder Sensor PCA

3. If a different system error is displayed then the call agent should perform the applicable troubleshooting procedure.

Onsite troubleshooting and solution (service engineer)

1. Remove the covers and check that all the cables are well connected to the Main PCA, and none of them are damaged. If any cable is not connected then reconnect it, and power on the printer again to check whether the system error has disappeared.

   IMPORTANT: If any cable is damaged then order a Cable Service Kit:

   - Cables Sk

2. Replace the Feed Encoder Sensor PCA, see Encoder PCA (CQ890-60204) and Index (CM751-60021) on page 396.

   - Feed Encoder Sensor PCA

3. Check that the Encoder Disk is not dirty or damaged. If the Encoder Disk is damaged it should be replaced, see Encoder Disk (CQ890-67033) on page 337.

   - Encoder Disk

System error:	**0087-0001**
Problem description:	Encoder Strip failure
Other potential parts associated:	Carriage (encoder sensor)

Corrective action:	**How to solve. Remote troubleshooting (call agent)**
	1. Switch off the printer, and disconnect the power cord. Reconnect the power cord and power on the printer.
	2. The call agent should arrange a service engineer visit to change the Encoder Strip and follow onsite troubleshooting below.
	   - Encoder Strip (36)
	3. If a different system error is displayed then the call agent should perform the applicable troubleshooting procedure.
	Onsite troubleshooting and solution (service engineer)
	1. Remove the covers and check that Encoder Strip is not broken or dirty.
	   - Cables Sk
	2. If the Encoder Strip is dirty, follow the procedure in this manual to clean it, see Clean the Encoder Strip on page 440.
	3. If the Encoder strip is damaged or does not work, it should be replaced, see Encoder Strip (CQ890-67096 & CQ893-67029) on page 376.
	4. If this fails to solve the issue, the problem might be due to the encoder sensor within the carriage. In that case, replace the carriage, see Carriage Assembly with Belt and Trailing Cable (5HB06-67001 & 5HB10-67001) on page 380.

System error:	**0153-0302**
Problem description:	Multi-Sheet Tray presence not detected
Other potential parts associated:	MPCA
Corrective action:	**How to solve. Remote troubleshooting (call agent)**

▲ Ensure that the Multi-Sheet Tray is properly placed and the latch is closed.

Onsite troubleshooting and solution (service engineer)

▲ Ensure that the Multi-Sheet Tray sensor cable is correclty connected to the MPCA, checking the J27 connector in the MPCA.

System error:	**0942-0188**
Problem description:	Carriage homing problem
Other potential parts associated:	None
Corrective action:	**How to solve. Remote troubleshooting (call agent)** 1. Reboot the unit. If the problem persists, clean the encoder strip, see Clean the Encoder Strip on page 440. 2. If the issue is not solved, open the PHA door and check if there's any paper strips blocking either the carriage or the SVS. 3. Go to **Diagnostic Menu**, see Entering the support menus on page 123 and run **Carriage Servo** diagnostic, see Test Carriage on page 136. **Onsite troubleshooting and solution (service engineer)** 1. Check encoder strip, scan axis and service station parts. 2. Depending on the failing subsystem, any one of them may need replacing.

System error:	**0955-0050**
Problem description:	Line sensor failure
Other potential parts associated:	Carriage PCA, Trailing Cable, Main PCA
Corrective action:	**How to solve. Remote troubleshooting (call agent)** 1. Switch off the printer, and disconnect the power cord. Reconnect the power cord and power on the printer. 2. The call agent asks the customer to go to **Support Menu** by pressing the **Power key** continuously for 15 seconds. 3. Go to **Diagnostic Menu** and run the **Line Sensor** diagnostic, see Line Sensor (Zim/Spot) on page 166. 4. The call agent should arrange a service engineer visit to change the Line Sensor assembly; follow the onsite troubleshooting below. • Line Sensor 5. If a different system error is displayed then the call agent should perform the applicable troubleshooting procedure. **Onsite troubleshooting and solution (service engineer)** 1. Go to **Support Menu** (see Entering the support menus on page 123) and run the **Line Sensor** diagnostic, see Line Sensor (Zim/Spot) on page 166.

2. Remove the covers and check that the cable of the line sensor is connected to the Carriage PCA and it is not damaged. If the cable is not connected then reconnect it, and power on the printer again to check whether the error has disappeared.

   IMPORTANT: If the cable is damaged then replace the Line Sensor, see Carriage Line Sensor (ZIM sensor) (CQ890-67001) on page 387.

   - Line Sensor

3. Clean the Line Sensor and try again, see Clean the Carriage Line Sensor on page 439.

4. Replace the Carriage Assembly, see Carriage Assembly with Belt and Trailing Cable (5HB06-67001 & 5HB10-67001) on page 380.

   - Carriage assembly w/belt (36)

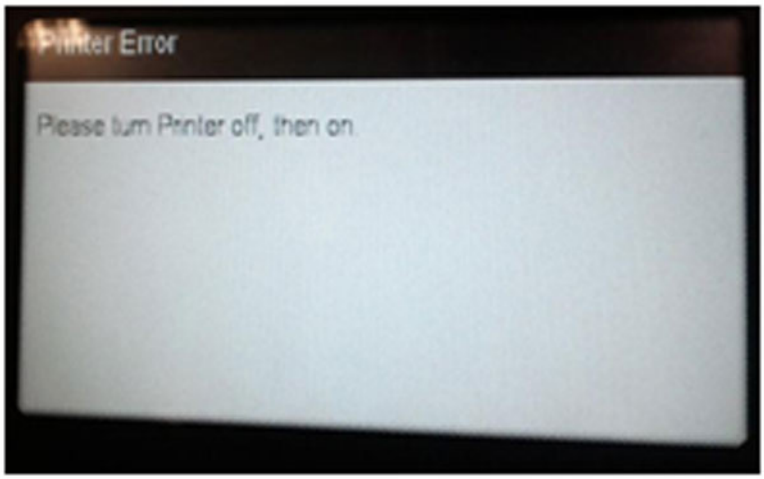
5. Replace the Main PCA, see Main PCA (5HB06-67018 & 5HB08-67008) on page 329

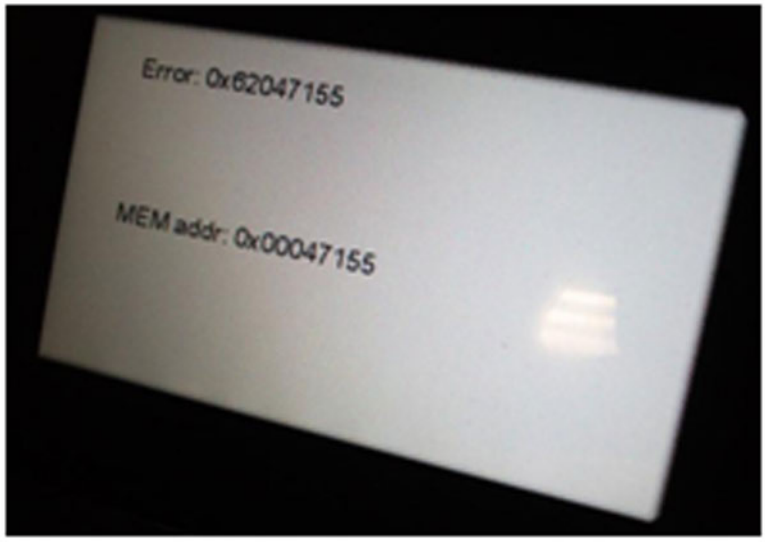
   - Main PCA

Other possible errors

Although infrequent, there are errors and asserts that can be displayed in the Front Panel in a different format. Usually these errors are solved by turning the printer off and on.

Examples of these errors are shown here:



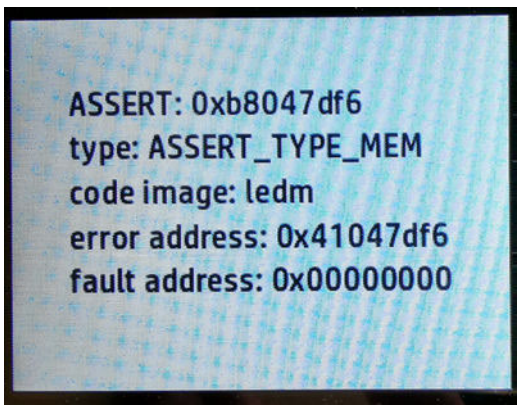


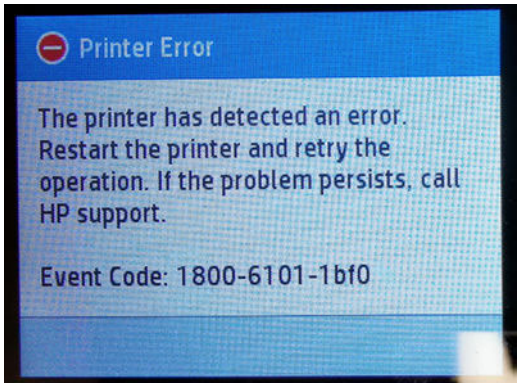
Assert codes

In certain circumstances, an assert error code can be displayed on the Front Panel. Assert error codes are displayed in unexpected and uncontrollable FW conditions (equivalent to a blue screen in Windows).

Assert codes have 3 equivalent codifications: 0xAAAABBBB, 1800-AAAA-BBBB, or AAAABBBB. For example, assert code 1800-6101-1bf0 is equivalent to assert 0x61011bf0 and to assert code 61011bf0. The code will be shown in one format or the other depending on the place where it is shown (Front Panel, error log, etc.).

Assert codes can be displayed in the Front Panel in several ways: blue screens with a code, white screens with a code, normal screens with the error code, etc.





It is the assert code that the printer will display when an unknown exception occurs that cannot be pointed to by any specific subsystem of the printer. Since the trigger is an unknown exception, the number of possible causes behind it is large. The majority can be grouped, however, into the following groups.

- Job-related
- Data-related
- User-interaction related
- Hardware-related
- Network-related
- Random

Assert error codes are rarely related to hardware issues with a printer component. Replacing PCAs or other components of the printer due to assert error codes is discouraged, unless this is part of the troubleshooting defined for an specific assert code.

When encountering an assert error code that appears consistently, check if there is a specific troubleshooting in the following table of "known assert error codes and solutions".

For assert error codes without a specific troubleshooting, the following procedure is recommended:

1. Capture all the information related to the error situation (when did the error appear: during boot-up, printing, during physical intervention with the printer, etc.). If the error reappears in similar situations (for example, sending a plot of a certain format from a certain application), avoid this work-flow as a workaround until the issue is fixed in a future FW release.
2. Ensure the latest FW and drivers are being used. Newer FW releases contain fixes for most common asserts seen in the printers.

Here are some known assert codes and the solutions.

Assert code	When	Corrective action
B8000000	After sending a job or during initialization	**How to solve: Remote troubleshooting (call agent)**
B80383B2		1. Remove all jobs from computer's spooler
0005fbb6		2. Ensure latest FW and drivers are being used.
C4EB0400	During physical user intervention (for example, when accessing ink cartridge door, ink cartridge, etc.)	**Onsite troubleshooting and solution (service engineer)** 1. Remove covers and check that all the cables in the Bundle PCA and associated parts are fully connected.

		2. Refer to System error 0004–0001.
0x0af7ffc1 0af7ffc1 1800-0af7-ffc1	Booting up/Anytime	Reboot. If problem persists install a new Main PCA.
0x01B6B8E6 01B6B8E6 1800-01B6-B8E6	Booting up/Anytime	Reboot. If problem persists install a new Main PCA.

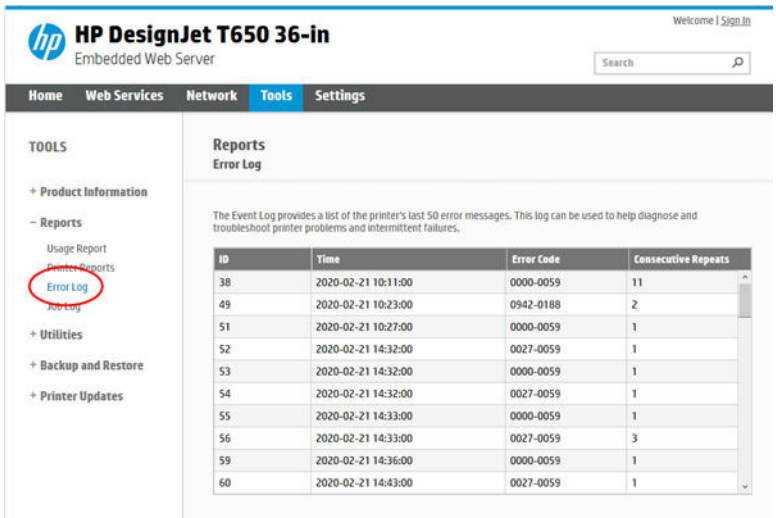
How to get the system error log

The last 50 system errors can be viewed on the Front Panel.

To see the error log, go to the Service Menu, enter the Information Menu, and request the error history; see Assert History on page 191.

To print the error history, go to the Service Menu, enter the Reports Menu, and request the error history; see Error history on page 183.

To check the error log by EWS go to **Tools** > **Reports** > **Error Log**.



Paper troubleshooting

Use the following section to troubleshoot paper-related issues when the problem has not been solved by following the troubleshooting of paper issues in the user's guide.

For every paper issue, first make sure you have reviewed the paper supported by the product (type and size). Also make sure the customer has followed the user's guide instructions to load the paper. In summary, check that the customer is:

- Using supported paper
- Using appropriate paper path

- Following the front-panel instructions

For further detailed information about HP Large-Format Printing Supplies, see http://www.hp.com/go/designjet/supplies.

Paper specifications:

	Minimum	Maximum
Roll width	279 mm ((11 in))	610 mm ((24 in))or 914 mm ((36 in))
Roll length		46 m (150 feet)
Roll diameter		100 mm ((3.9 in))
610 mm ((24 in))roll weight		4.1 kg ((9 lb))
914 mm ((36 in))roll weight		6.2 kg ((14 lb))
Sheet width	210 mm ((8.27 in))	610 mm ((24 in))or 914 mm ((36 in))
Sheet length	279 mm ((11 in))	1676 mm ((66 in))
Paper thickness		0.3 mm ((0.01 in))
Paper weight	60 g/m²	280 g/m² (220 g/m² in multi-sheet tray)
Multi-sheet tray stacking capacity		5 mm height

Paper cannot be loaded successfully

Remote troubleshooting (call agent)

- Check that the customer has followed the paper troubleshooting included in the user's guide, if not, help the customer to do it.
- If the problem persists, ask the customer to restart the printer.
- If the paper still cannot be loaded after restarting, follow the next recommendations depending on the type of paper the user is trying to load (roll, single sheet, or from the Multi-Sheet Tray).

Unsuccessful roll load

Follow these recommendations if confronted with this situation.

1. Ensure that the Output Tray is closed. If the Output Tray is open, ask the customer to close it and try to load the roll again.
2. Check spindle hubs and roll directionality feed under or over.
3. Ask the customer to try to print from the Multi-Sheet Tray. If he can print from the Multi-Sheet Tray, it means that the OOP sensor and the paper motor work correctly. Ask the customer to re-check that there are no pieces of paper stuck in the paper path.
4. If no anomalies are detected, ask the customer to cut 10 cm of the paper roll or use a new roll (if possible) and try to load the roll again.
5. If no anomalies are detected, ask the customer to run the OOP sensor diagnostics. If they fail the OOP sensor should be replaced, arrange the shipment of an OOP sensor (CSR A part) to the customer.
6. If the OOP sensor diagnostics pass, arrange a service engineer visit to diagnose the issue.

Unsuccessful sheet load

Follow these recommendations if confronted with this situation.

1. Ensure that the Output Tray is closed. If the Output Tray is open, ask the customer to close it and try to load the sheet again.
2. Ask the customer to try to print from the Multi-Sheet Tray. If he can print from the Multi-Sheet Tray, it means that the OOP sensor and the paper motor work correctly. Ask the customer to re-check that there are no pieces of paper stuck in the paper path.
3. If no anomalies are detected, ask the customer to try to load a different paper type (roll or single sheet). If the load is successful, check with the customer that the type of paper failing to load is a supported paper.
4. If the paper is supported, ask the customer to run the OOP sensor diagnostics. If the diagnostics fail, the OOP sensor should be replaced, arrange the shipment of an OOP sensor (CSR A part) to the customer.
5. If the OOP sensor diagnostics pass, arrange a service engineer visit to diagnose the issue.

Unsuccessful load from the Multi-Sheet Tray

Follow these recommendations if confronted with this situation.

1. Ask the customer to remove all the sheets from the Multi-Sheet Tray, and load only one sheet (A4 or A3). Try to print. If the load is correct, ensure that the customer has not loaded too many sheets into the tray, also that the paper is supported.
2. Ask the customer to ensure that the Multi-Sheet Tray is well positioned.
3. If one sheet works OK, but it fails with several, it could mean that there is a problem with the Multi-Sheet Tray. To check this, ask the customer if roll or single sheet can be loaded successfully. If yes, the Multi-Sheet Tray should be replaced, arrange the shipment of a Multi-Sheet Tray (CSR A part) to the customer.
4. If it is impossible to load a sheet through the Multi-Sheet Tray, and neither roll nor single sheet can be loaded, ask the customer to remove the Multi-Sheet Tray and re-check whether there is any piece of paper stuck in the tray.
5. If no anomalies are detected, ask the customer to run the OOP sensor diagnostics. If they fail, the OOP sensor should be replaced, arrange the shipment of an OOP sensor (CSR A part) to the customer.
6. If the OOP sensor diagnostics pass, arrange a service engineer visit to diagnose the issue.

Onsite troubleshooting

The service engineer should first follow the paper troubleshooting procedure in the user's guide, and also the instructions in this manual given to the customer by the call agent to double-check that the troubleshooting has been done correctly. In most cases the problem can be solved by following these instructions. If the problem persists, try the following:

1. Remove covers and check that there is no broken part in the following:
   - Starwheel rail
   - Pinchwheels
   - Strange noise in motor or Drive Roller
   - Upper paper guide is out of place or broken

- Out-Of-Paper Sensor is badly positioned

2. If any defective or broken part is found, it should be replaced.

Multisheet Tray Sensor issues: Printer displays wrong status for Multisheet Tray

Follow these recommendations if confronted with this situation.

Onsite troubleshooting

In case front panel messages do not match actual tray status the issue may be related with the Multisheet Tray sensor.

1. If the printer informs that the tray is detached when it is not: Clean the mirror in the tray or check whether it is missing. Ultimately, replace the Multisheet Sensor.
2. If the printer informs media is present when it is not: Clean the mirror in the tray or check for media pieces obstructing the sensor.
3. If the printer informs media is not present when it is: The printer will trigger the loading action anyway after a job is sent, if the media is there, it will be picked up and moved to the Out of Paper sensor that will detect the media.

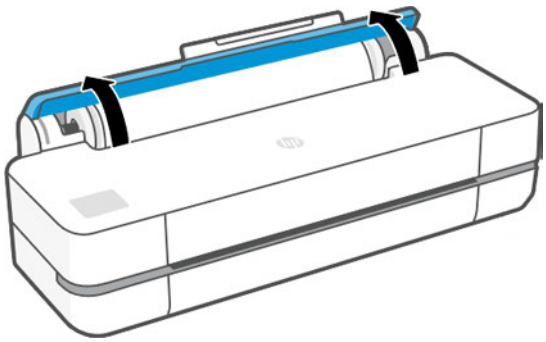
Media jam removal

When a paper jam occurs, you normally see a message about it in the front-panel display.

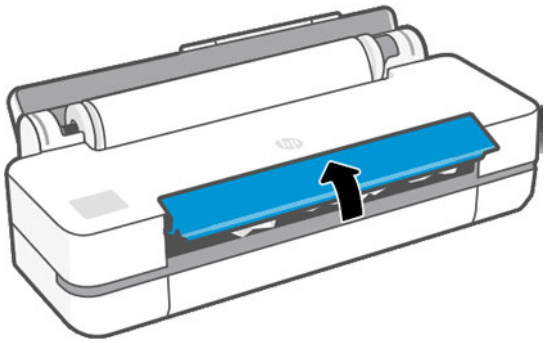
Roll has jammed

When a paper jam occurs, you normally see a message about it in the front-panel display.

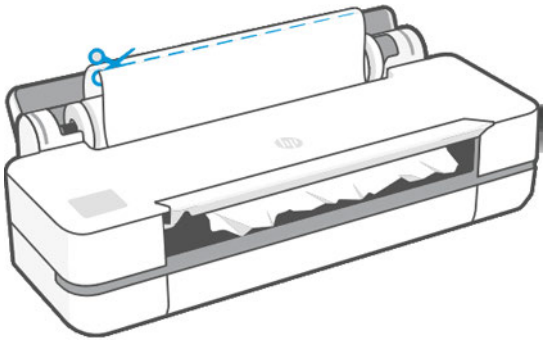
1. Open the roll cover.



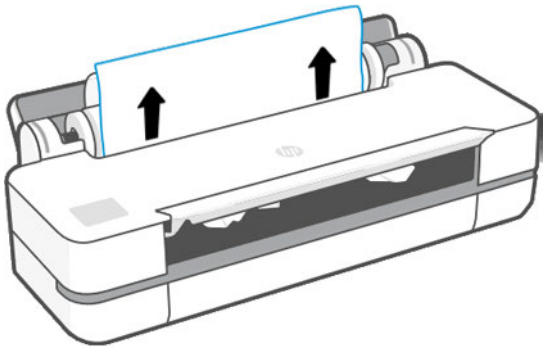
2. Open the main window.



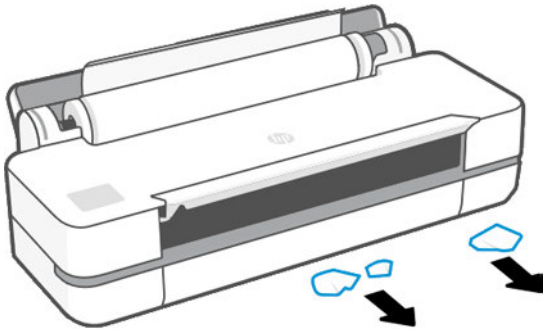
3. Rewind the roll to create a loop. Cut the paper, if needed.



4. Carefully remove any of the jammed paper that you can from the top of the printer.



5. Carefully remove any of the jammed paper from the front window.



6. Reload the roll, or load a new sheet.

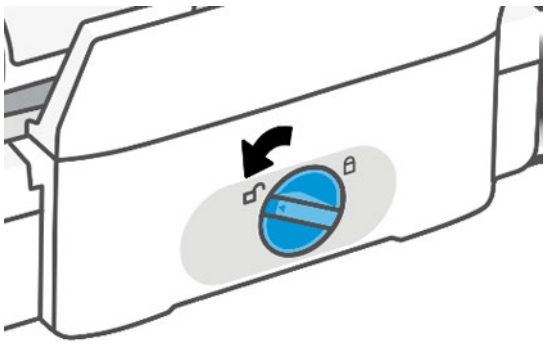
NOTE: If you find that there is still some paper causing an obstruction within the printer, restart the procedure and carefully remove all pieces of paper. You may need to remove the multi-sheet tray (see Multi-sheet tray has jammed on page 72).

Multi-sheet tray has jammed

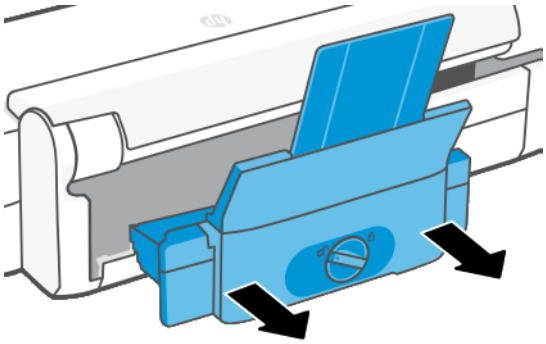
Paper can jam in the multi-sheet tray for a variety of reasons and there are steps to follow to correct an issue.

Proceed as follows:

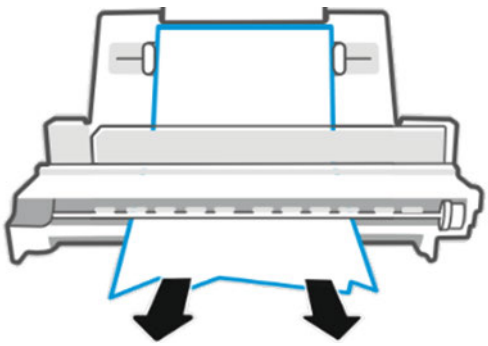
1. Remove as much paper as you can from the multi-sheet tray.
2. Push down the multi-sheet tray extensions, which will make the tray easier to handle.
3. Unlock the tray, using the rotary switch behind it.



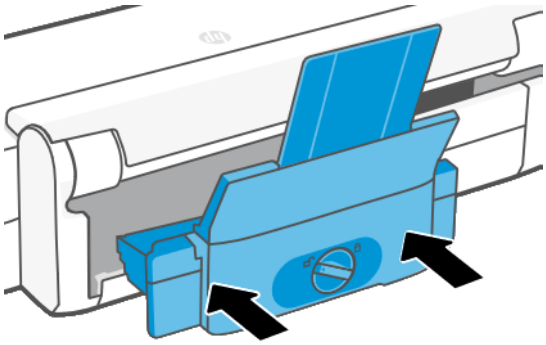
4. Pull out the tray.



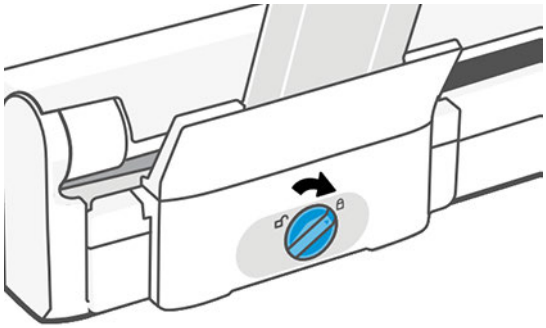
5. Remove all paper from the tray.



6. Put the tray in again.



7. Lock the tray.



ARSS: Paper Troubleshooting

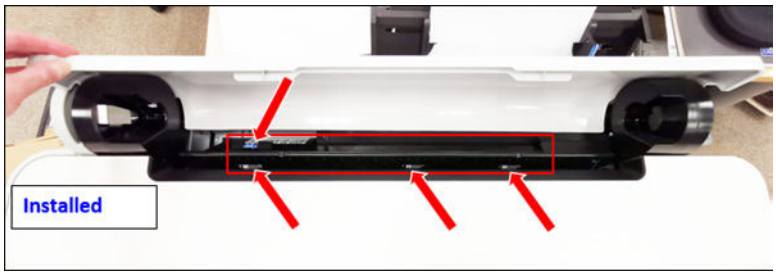
Use the following section presents a guide to helping the customer identify which part is failing and how to fix it.

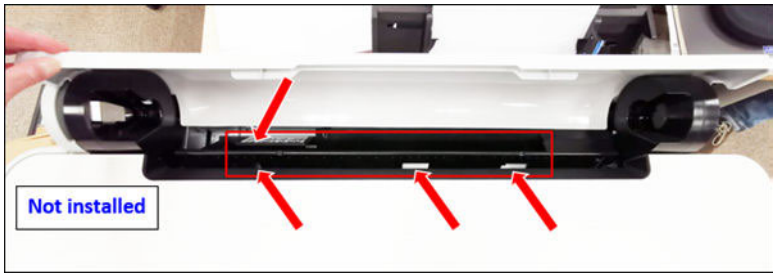
Troubleshooting - Remote Support

The following steps represent over-the-phone customer support for the ARSS.

1. Check if ARSS is installed.

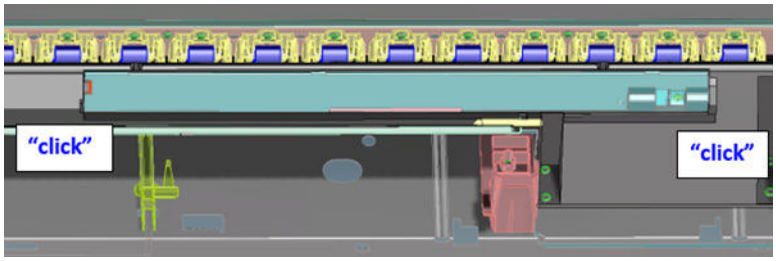
   Check if ARSS is installed with the printer by visual check. If ARSS is not installed, the issue is not related to ARSS. Remember that the printer has no sensor to detect the ARSS. Front panel or EWS doesn't show the information.





2. Check if ARSS is correctly installed.

   Install the ARSS by following the assembly instructions to ensure it has completely inserted and Multi-sheet tray. Heard “click” on both sides during reseat ARSS. Outer surface is even with Guide-Roll.



3. Check if ARSS is correctly working.

   a. Load cut sheets in the Multi-sheet tray.

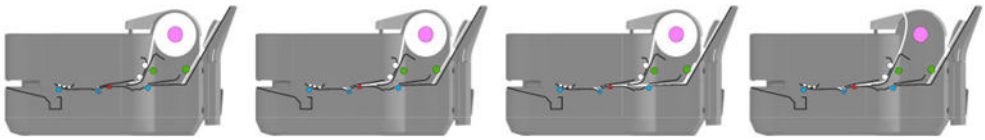
   b. Load a roll.

   c. Print "Printer Status Report" (FP > User menu > Report > Printer Status Report).

   d. Printer rewinds the roll and move the leading edge to the parking position (Condition A).

   e. Printer picks a cut sheet from the Multi-sheet tray and print the job.

   f. After between 30 seconds and several minutes, the printer automatically loads the roll, the line sensor checks the media, then moves it to standby position under the pinch rollers (Condition B).



Paper source	Condition A	Condition B	Condition C	Condition D
Roll	Parking	Standby	Parking	na
Multi-sheet tray	Parking	Parking	Standby	Parking
Single sheet	na	na	na	Standby

4. Check if the issue depends on media type/condition.

   Deformation of the roll can brock the behavior of picking roll. Too curly especially at the end of roll, high/low humidity, long time no use, specific media type, etc).

5. Perform “ARSS Test” (Support Menu > Print diagnostics > ARSS Test).

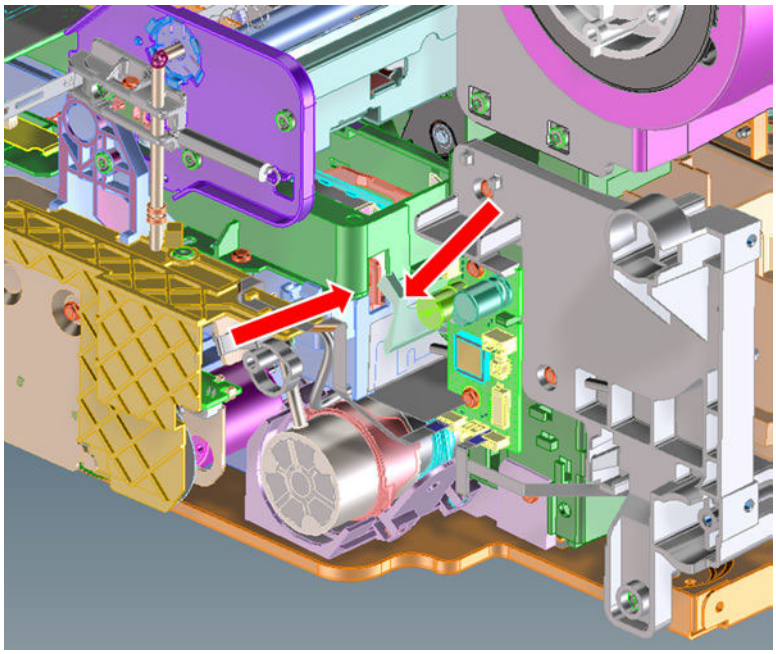
Troubleshooting - Onsite Support

This guide is for use by the engineer when onsite with the customer.

Service Station

Troubleshooting for onsite engineers:

1. Open the Right Cover.
2. Perform **Support Menu > Service Tests > ARSS Test** to move the Service Station forward and backward.
3. Visually check if the Service Station Sled pushes and releases the trigger (white lever) in the Bridge Plate Module.



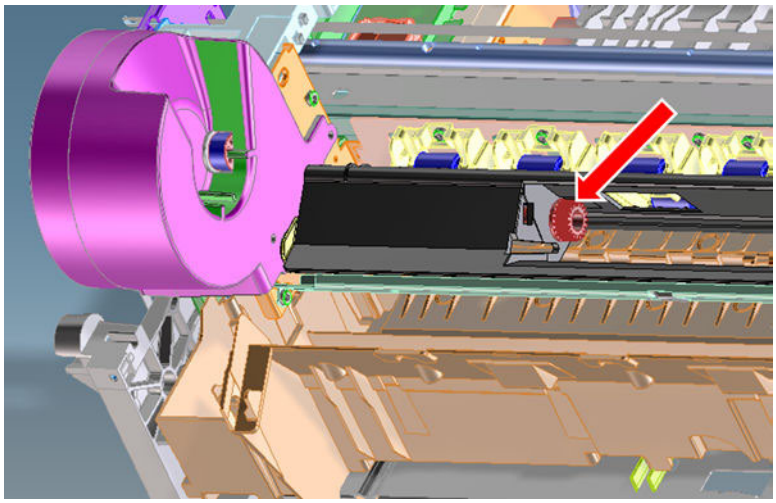
4. If it doesn’t work, reseat or replace the Service Station.

Bridge Plate Module and ARSS

Troubleshooting for onsite engineers:

1. Remove the Multi-sheet tray and the ARSS.

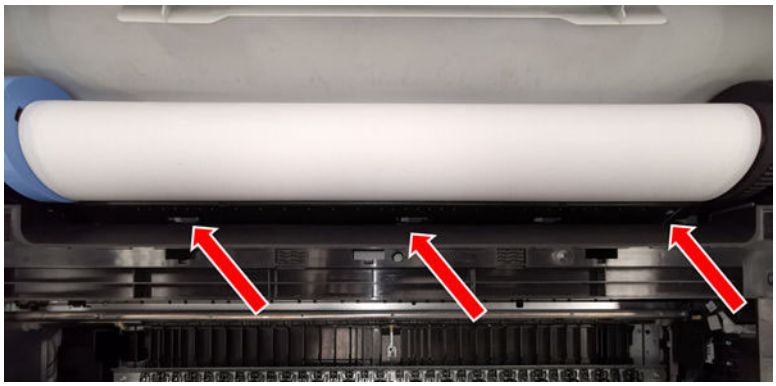
2. Visually check if the ARSS Gear link is installed correctly.



3. Perform **Support Menu > Service Tests > ARSS Test** to rotate this gear. Ignore the result of the ARSS Test on the FP.
4. If the gear doesn't work, reseat the ARSS Gear link then replace the Bridge Plate Module.
5. Install ARSS.
6. Perform **Support Menu > Service Tests > ARSS Test** to raise and lower the ARSS pickup rollers. Ignore the result of the ARSS Test on the FP.
7. To observe the pickup rollers, slacken the paper during the test.
   a. Perform the ARSS Test.
   b. Load a roll.
   c. Printer moves the roll to the parking position.

d. Create a slackness in the paper to expose the pickup rollers for visual inspection:

e. Observe the pickup rollers as the printer raises and lowers them.



8. If the pickup rollers do not perform as described, replace the ARSS.

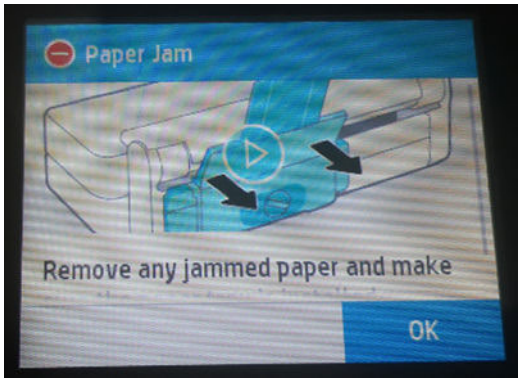
Symptoms related to ARSS failure and corrective actions

This section details ARSS failure warning signs and the appropriate actions to take.

You would see the following symptoms if ARSS fails: Printer fails to pick up or move the roll from parking position to ready position, and the front panel shows the following screens after printing from the multi-sheet tray.

Issue #1: Paper Jam

Root cause: PWM of Pick Motor in the Bridge Plate Module is over its limit.



How this happens: A paper jam occured and the paper is blocking the movement of the Pick Motor.

- ARSS was wrongly installed. The movement of the ARSS link Gear and/or the gears of the Bridge Plate Module are blocked.

Corrective actions - for Customer over the phone

Perform the following steps to complete this procedure.

1. Check if ARSS is installed in the printer with a visual check. If ARSS is not installed, the issue is not related to ARSS.
2. Remove the multi-sheet tray, roll, and ARSS.
3. Clean any paper jam from the paper path for the Multi-sheet tray if needed.
4. Install the ARSS by following the assembly instructions to ensure it and the multi-sheet tray have been completely and correctly inserted.
5. Load the roll manually.

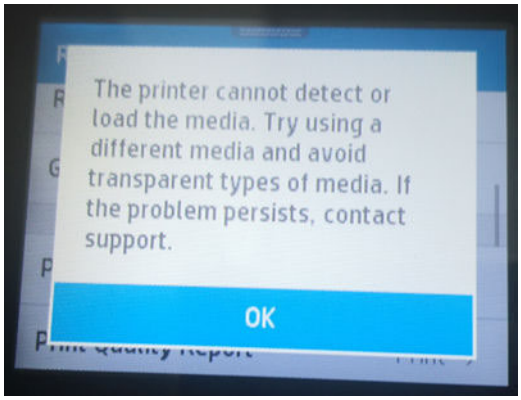
Corrective actions - for Onsite Engineer at customer's site

Perform the following steps to complete this procedure.

1. Check if there is any paper jam in the printer.
2. Reseat the ARSS link Gear.
3. Replace the Bridge Plate Module.

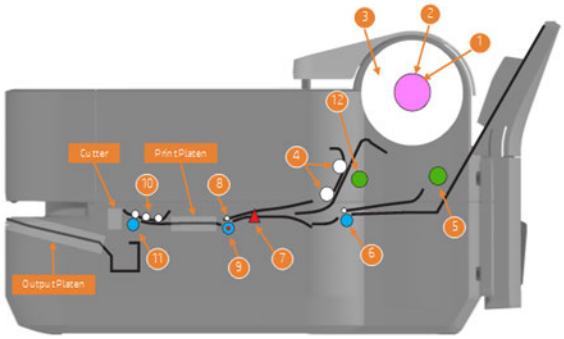
Issue #2: The printer cannot detect or load the media

Root cause: The line sensor cannot detect the media.



How this happens:

1. Printer successfully picks up the roll from the parking position.
2. Then the leading edge of the roll passes over the OOPS.
3. However, it doesn't reach the feed shaft (feed roller).
4. The feed shaft drives but it doesn't carry the media.
5. Finally, the printer tries to detect the media presence on the print platen with the line sensor, but it doesn't detect it because the media didn't reach the print platen. It's still located before feed shaft.



* Pick motor is located in Bridge Plate Module

Nº	Name	Drive source			Which service part it is included
		Rewinder motor	Feed motor	Pick motor*	
1	Spindle	v			Spindle module
2	Rewinder	v			Left Roll Support
3	Roll	v	v		na
4	Roller Roll Guide				Pinch Wheel Assembly
5	Pick Rollers Multi-sheet tray			v	Multi-sheet tray
6	Inter Mediate rollers		v		Multi-sheet tray
7	OOPS	na	na	na	Out-Of-Paper Sensor
8	Pinch Wheels				Pinch Wheel Assembly
9	Feed shaft		v		na
10	Starwheels				Starwheel Assembly
11	Output Shaft		v		Starwheel Assembly
12	Pick Rollers ARSS			v	ARSS

Corrective actions - for Customer over the phone

Perform the following steps to complete this procedure.

1. Check if ARSS is installed in the printer with a visual check. If ARSS is not installed, the issue is not related to ARSS.
2. Unload the roll and then load it manually.
3. If the issue repeats quite frequently, replace the roll to mitigate any possible deformation.

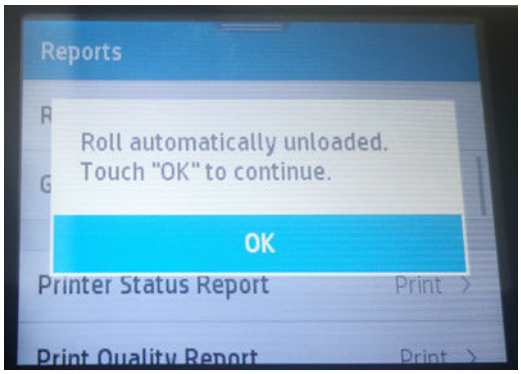
Corrective actions - for Onsite Engineer at customer's site

Perform the following steps to complete this procedure.

- ▲ Check if the roll shows any deformation (too curly, especially at the end of roll; could be due to high or low humidity, going a long time without use, the specific media type, etc.). If yes and the issue repeats, replace the roll.

Issue #3: Roll automatically unloaded

Root cause: OOPS didn't detect the media presence within expected time.



How this happens:

1. The leading edge of the roll escaped from the area where the pick rollers of ARSS can reach or pick up. Potential causes include:
   a. User accidently rewound the roll manually.
   b. Deformation of the roll (too curly, especially at the end of roll; high or low humidity; long time without use; specific media type; etc.).
   c. Roll was over-rewound by the rewinder for some reason.
2. ARSS was wrongly installed. It doesn't engage with the ARSS link gear.
3. ARSS link gear is missing or failing.
4. Bridge Plate Module is failing.
5. Service station doesn't push the trigger (white lever) of the Bridge Plate Module.

Corrective actions - for Customer over the phone

Perform the following steps to complete this procedure.

1. Check if ARSS is installed in the printer with a visual check. If ARSS is not installed, the issue is not related to ARSS.
2. Remove the multi-sheet tray, roll, and ARSS.
3. Install the ARSS by following the assembly instructions to ensure it and the multi-sheet tray have been completely and correctly inserted.
4. Load the roll manually.
5. If the issue repeats quite frequently, replace the roll to mitigate any possible deformation.

Corrective actions - for Onsite Engineer at customer's site

Perform the following steps to complete this procedure.

1. Check if the roll ahows any deformation (too curly, especially at the end of the roll; could be due to high or low humidity, going a long time without use, the specific media type, etc.). If yes and the issue repeats, replace the roll.
2. Check that the ARSS link gear is not missing.
3. Reseat the ARSS link Gear.
4. Replace the Bridge Plate Module.
5. Replace the Service Station.

Printer displays out of paper when paper is available

Follow these recommendations if confronted with this situation.

Remote troubleshooting

- Check if the customer has followed the paper troubleshooting included in the user's guide. If not, help him or her to do it.
- If the problem persists, ask the customer to unload paper, restart the printer and ask to load paper again. If everything is OK, it is likely the printer has an old firmware version, ask the customer to do an firmware upgrade.
- If there is a problem with the printer, it is likely that the customer cannot load paper after restarting the printer, in this case see Paper cannot be loaded successfully on page 68.

Onsite troubleshooting

The service engineer should first follow the paper troubleshooting in the user's guide, and also the instructions in this manual given to the customer by the call agent to double-check that the troubleshooting has been done correctly. In most cases the problem can be solved by following these instructions. If the problem persists:

1. Remove the covers and check that the OOP sensor is well placed and the flag is not broken.
2. Check the cables to see whether any of them is broken or disconnected (especially the OOPS cable and the cable in the Bundle Board).
3. If everything is OK, replace the Bundle Board (see Removal on page 340).
4. If the problem persists, replace the Main PCA (see Main PCA (5HB06-67018 & 5HB08-67008) on page 329).

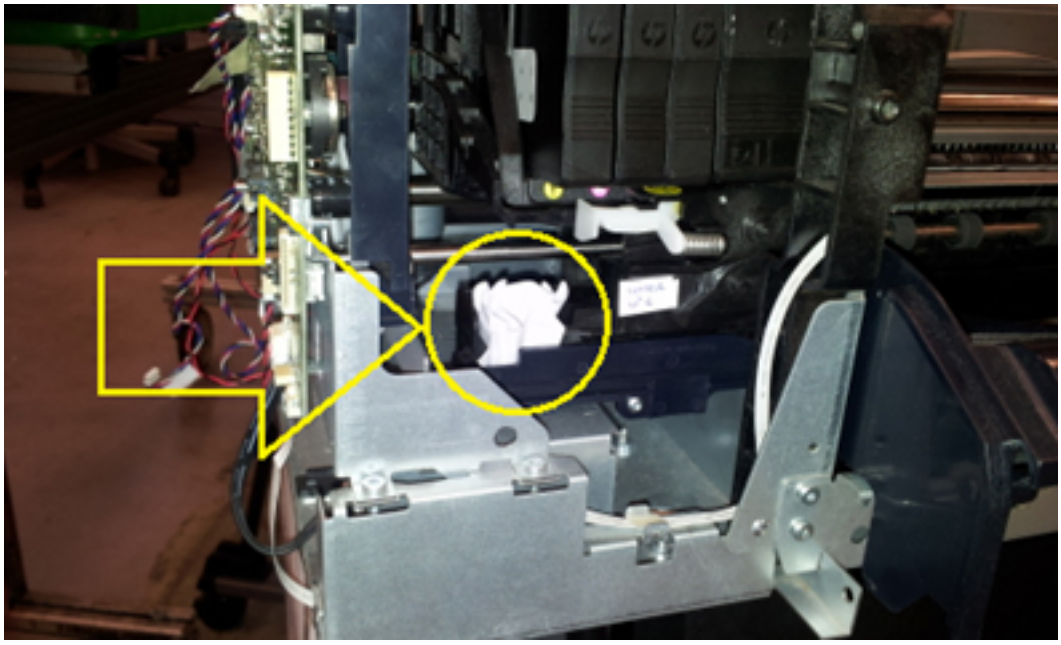
Cutter does not cut, or does not cut well

Follow these recommendations if confronted with this situation.

Remote troubleshooting

- Check that the customer has followed the paper troubleshooting included in the user's guide. If not, help him or her to do it.
- If the problem persists, ask the customer to check whether the cutter has been disabled in the front panel and/or in the driver.
- Ask to try a different paper, and try to cut it using Form Fit and Cut from the front panel menu.

- If is still not cutting, ask the customer to check that the cutter is engaged and that it moves together with the Carriage. If the cutter is not activated, ask the customer to open the Ink Cartridge Cover and check whether there is a strip of paper in the parking position causing the cutter not to activate.

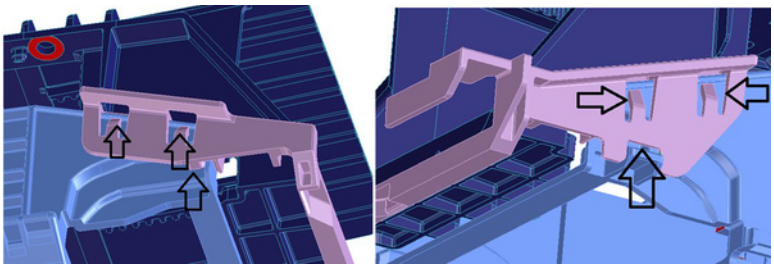


- If this does not solve the issue, arrange a service engineer visit to replace the cutter assembly.

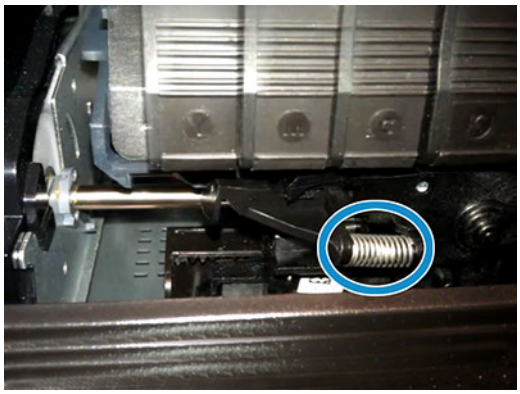
Onsite troubleshooting

The service engineer should first follow the paper troubleshooting in the user's guide, and also the instructions in this manual given to the customer by the call agent, to double-check that the troubleshooting has been done correctly. In most cases the problem can be solved by following these instructions. However, if the problem persists, try the following steps:

1. If the cutter is not engaged, check that the cutter bridge is well assembled.



2. Check the cutter spring is in place.



3. If the cutter bridge is well assembled and the cutter is not activated while cutting, the cutter assembly should be changed..

4. Check whether there is noise due to high friction during the cut. If this occurs, the cutter assembly should be changed. The high friction could be due to one of the following circumstances:

   a. Worn-out blades as a consequence of many cuts.

   b. Dirty blades. Likely to hold some sticky glue after cutting vinyl.

   c. Hard points in blades. Whenever the cutter has suffered an impact, such as falling onto the floor, the blades mark themselves creating a hard point.

   d. Excessive friction in the mechanism of the cutter.

Paper has jammed

Remote troubleshooting

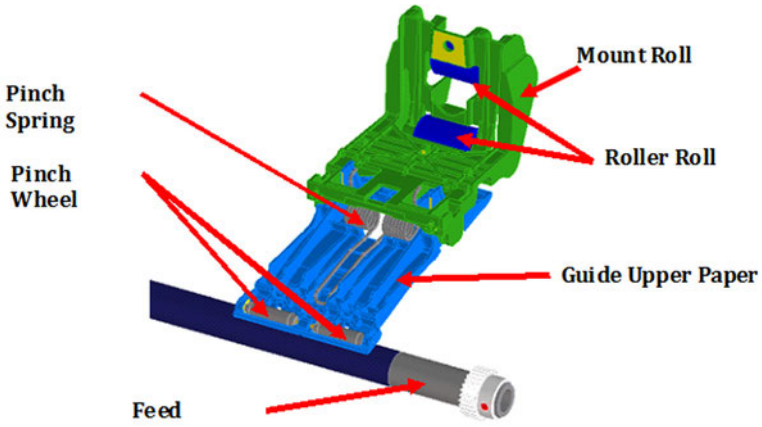
- Check that the customer has followed the paper troubleshooting procedures described in the user's guide. If not, help him or her to do it.
- If the jam occurs with roll or single sheet, check with the customer that the output tray is closed. The printer does not allow printing or loading roll or single sheet with the Output Tray open (a message appears on the Front Panel). However if this is the case it is likely that the Output Tray Sensor is broken. Ask the customer to run the Output Tray Sensor diagnostics. If the diagnostics fail, arrange a service engineer visit to replace the Output Tray Sensor.
- If the jam occurs with roll, and the output tray is closed, check with the customer whether the jam occurs at the beginning of the print, because due to the paper curling the paper is stopped into the Output Tray (does not fall into the basket), provoking a paper jam. If this is the case, check with the customer whether the ribs in the Output Tray have risen or not. If these ribs are not up while printing from roll, it can cause paper jams at the beginning of the plot. If this is the case, arrange a service engineer visit to replace the Output Tray.
- If the problem persists it is probably a mechanical problem that should be diagnosed by a service engineer. Arrange a service engineer visit to diagnose the issue.

Onsite troubleshooting

The service engineer should first follow the paper troubleshooting in the user's guide, and also the instructions in this manual given to the customer by the call agent, to double-check that the troubleshooting has been done

correctly. In most cases the problem can be solved by following these instructions. However, if the problem persists, remove the covers and try the following steps:

1. Check that all the Pinchwheels are all present and well assembled; check also that all the pinchwheel springs are in place.



2. Check that the starwheel rail is correct.
3. Check that the spindle is not broken or inserted incorrectly, and that the spindle gear is OK.

Communication troubleshooting

Please follow these suggestions to diagnose remote communication issues.

General troubleshooting

A selection of potential issues and recommendations for user response.

1. Check the following symptoms:
   - The front-panel display does not show the **Printing** message when an image has been sent to the printer.
   - The computer displays an error message instead of printing.
   - The computer or printer hangs (stays idle), while communication is taking place.
   - The printed output shows random or inexplicable errors (misplaced lines, partial graphics, etc.).
2. To solve a communication problem:
   - Ensure that the correct printer has been selected in the application.
   - Ensure that the printer works correctly when printing from other applications.
   - Remember that very large prints may take some time to receive, process, and print.
   - If the printer is connected to a network, check the printer connectivity status: the printer should have an IP address and it should match the IP address specified in the printing computer. If the addresses do not match, then configure it correctly; if the issue persists, check the network configuration.
   - Try WiFi.

- If the printer is connected to a wireless network, try moving the printer closer to the wireless router. Alternatively, try connecting the printer by network.
- If the printer is connected to a wireless network, you can request a diagnostic report from the front panel: Scroll down the dashboard and press , then scroll down the menu and press **Network Set Up** > **Print Reports** >.**Wireless Test Report**. Alternatively, try moving the printer closer to the wireless router, or try connecting the printer by wired network.

When a network device automatically configures itself by receiving an IP address from the DHCP service, this IP address may change from the last time the device is powered off to the next time it is powered on, which may lead to the device being shown as "offline" when driver port settings are configured with the original IP address. There are at least three possible ways to avoid this:

- Increase the lease time of the DHCP server device.
- Set a fixed IP address for the printer so that it will not change by DHCP.
- Configure the printer and driver to refer to the hostname instead of the numeric IP address.

Wired network issues

Follow these steps if software installation is impeded.

▲ If the HP software provided with the printer cannot be installed, check that:

- All cable connections to the computer and the printer are secure.
- The network is operational and the network hub is turned on.
- All applications, including virus protection programs, spyware protection programs, and firewalls, are closed or disabled for computers running Windows.
- The printer is installed on the same subnet as the computers that use the printer.

If the installation program cannot discover the printer, print the Network Configuration Page, and enter the IP address manually in the installation program.

Although assigning a static address to the printer is not recommended, some installation problems (such as a conflict with a personal firewall) may be resolved by doing so.

Network port created does not match printer IP address (Windows)

If the computer is running Windows, make sure that the network ports created in the printer driver match the printer's IP address.

1. Print the printer’s Network Configuration Page.
2. From **Start** > **Set up**, and then click **Printers** or **Printers and Faxes**. - or - From **Start** > **Front Panel**, and then double-click **Printers**.
3. Right-click the printer icon, click **Properties**, and then click the **Ports** tab.
4. Select the TCP/IP port for the printer, and then click **Configure Port**.
5. Compare the IP address listed in the dialog box and make sure it matches the IP address listed on the Network Configuration Page. If the IP addresses are different, change the IP address in the dialog box to match the address on the Network Configuration Page..
6. Click OK twice to save the settings and close the dialog boxes.

Wireless network issues

The following steps should assist the user when confronted with issues regarding wireless network connectivity.

1. Make sure the wireless (802.11) light at the top left of the front panel is turned on .

   If the blue light is not lit, the wireless capabilities may not have been turned on. Swipe down the dashboard and press , then scroll down the menu and press **Network Set Up** > **Wireless Settings** > **On**.

2. Make sure that an Ethernet cable has not been connected to the printer. Connecting an Ethernet cable turns off the printer's wireless capabilities.

3. Restart components of the wireless network.

   Turn off the router and the printer, and then turn them back on in this order: the router first, and then the printer. Then run the Wireless Setup wizard in the front panel and select your network. If you still are unable to connect, turn off the router, printer, and computer. Sometimes, turning off the power and then turning it back on recovers a network communication issue.

4. Run the Wireless Network Test.

   For wireless networking issues, run the Wireless Network Test. To print a Wireless Network Test page, scroll down the dashboard and press , then scroll down the menu and press **Network Set Up** > **Print Reports** > **Wireless Test Report**. If a problem is detected, the printed test report includes recommendations that could help to solve the problem.

5. If required, print the Network Configuration Page to check deep network status information.

NOTE: The wireless connection can be affected by the location of the network router and the device. In order to improve your wireless connection, consider the following additional steps:

6. If possible, try to position the wireless access point in a more central position of the office as shown in figure no 2 below. Try and place away from dense materials; metal, concrete, double thick walls are the hardest to penetrate, wood and plasterboard are easier. Consider these when positioning your printer.

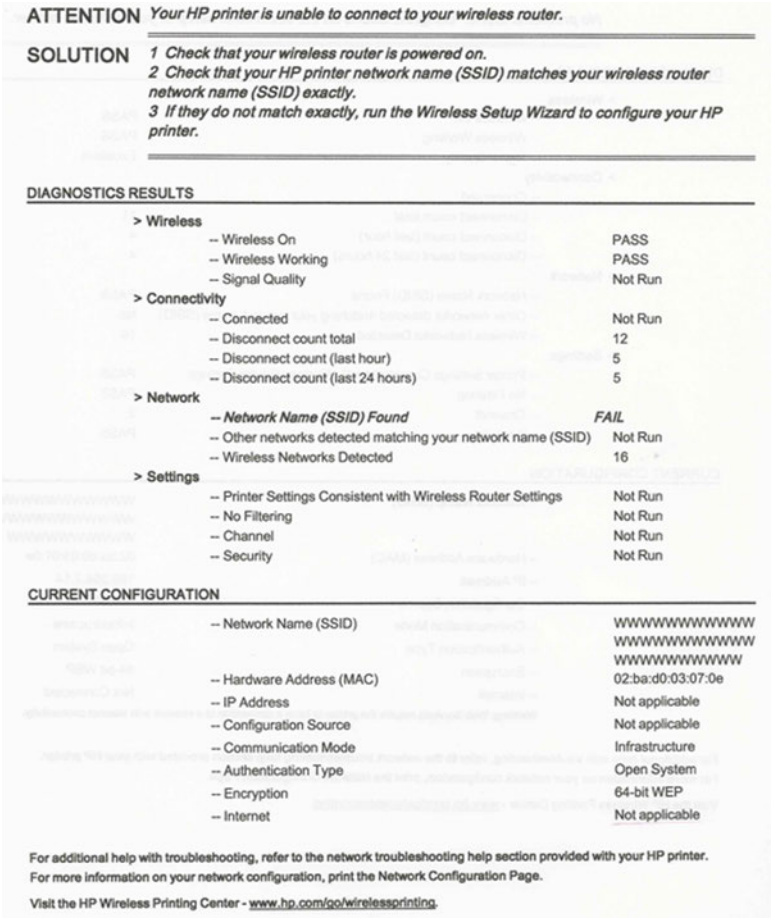
7. Change the wireless channel to one that's not being used preferably; 1, 6 or 11 as these are non overlapping channels.

8. Extend the range of the wireless network by using a simple wireless extender or adding more wireless access points as shown in figures 3 and 4 below.

Wireless Network Troubleshooting Report

This report consists of a top-level assessment of whether any wireless connection problems exist between the printer (STA) and the home network's wireless router, followed by more detailed sections showing the result of various diagnostic tests as well as a configuration summary.

1. Print the Wireless Network Troubleshooting Report (WNTR). From the front panel: Swipe down the dashboard and press , then scroll down the menu and press **Network Set Up** > **Print Reports** >.**Wireless Test Report**.



ATTENTION *Your HP printer is unable to connect to your wireless router.*

SOLUTION
1 Check that your wireless router is powered on.
2 Check that your HP printer network name (SSID) matches your wireless router network name (SSID) exactly.
3 If they do not match exactly, run the Wireless Setup Wizard to configure your HP printer.

DIAGNOSTICS RESULTS

> Wireless	
-- Wireless On	PASS
-- Wireless Working	PASS
-- Signal Quality	Not Run
> Connectivity	
-- Connected	Not Run
-- Disconnect count total	12
-- Disconnect count (last hour)	5
-- Disconnect count (last 24 hours)	5
> Network	
-- Network Name (SSID) Found	*FAIL*
-- Other networks detected matching your network name (SSID)	Not Run
-- Wireless Networks Detected	16
> Settings	
-- Printer Settings Consistent with Wireless Router Settings	Not Run
-- No Filtering	Not Run
-- Channel	Not Run
-- Security	Not Run

CURRENT CONFIGURATION

-- Network Name (SSID)	WWWWWWWWWW WWWWWWWWWW WWWWWWWWW
-- Hardware Address (MAC)	02:ba:d0:03:07:0e
-- IP Address	Not applicable
-- Configuration Source	Not applicable
-- Communication Mode	Infrastructure
-- Authentication Type	Open System
-- Encryption	64-bit WEP
-- Internet	Not applicable

For additional help with troubleshooting, refer to the network troubleshooting help section provided with your HP printer.
For more information on your network configuration, print the Network Configuration Page.
Visit the HP Wireless Printing Center - www.hp.com/go/wirelessprinting.

For more information about the contents of the Wireless Network Troubleshooting Report, see Error case table on page 469. There is only one situation that requires on-site repair: when the Wireless PCA is defective. To replace the Wireless PCA, you must replace the Main PCA; see Main PCA (5HB06-67018 & 5HB08-67008) on page 329.

2. If you are not using a unique network name (SSID), then it is possible that the computer could be connected to the wrong network. See How to check whether your computer is connected to your network on page 465.

Network Configuration Page

The network configuration page provides easy access to a range of significant information for the benefit of the user and call agents.

1. Make sure that the computer's wireless networking has been turned on. For more information, see the documentation that came with the computer.

2. Print the **Network Configuration Page**. From the front panel: press , then **Internal Prints** > **User Information Prints** > **Network Configuration Page**.

   This contains important wireless configuration information at a glance. Detailed configuration and status information is also included, such as MAC address, wireless channel and signal strength, IP settings,

Ports/Services status, and a list of wireless networks in range of the printer. The Network Configuration Page contains important details for Wireless Direct including SSID name, IP address and security pass code.

HP Network Configuration Page

General Information	
Network Status	Ready
Active Connection Type	None
URL(s) for Embedded Web Server	http://HP23478E http://192.168.0.92 http://192.168.223.1
Firmware Revision	MUL2FA1049BR
Hostname	HP23478E
Serial Number	CN08O2V51805MQ
802.11 Wireless	
Hardware Address (MAC)	02:ba:d0:23:47:8e
Status	Connected
Communication Mode	Infrastructure
Network Name (SSID)	Betalab-CSat
Access Point HW Address	00:24:a8:9b:6e:f3
Signal Quality (1 – 5)	5
Channel	1
Authentication Type	WPA-PSK
Encryption	Automatic (AES or TKIP)
IPv4	
IP Address	192.168.0.92
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1
Configuration Source	DHCP
Primary DNS Server	209.18.47.61
Secondary DNS Server	209.18.47.62
Total Packets Transmitted	171
Total Packets Received	1948

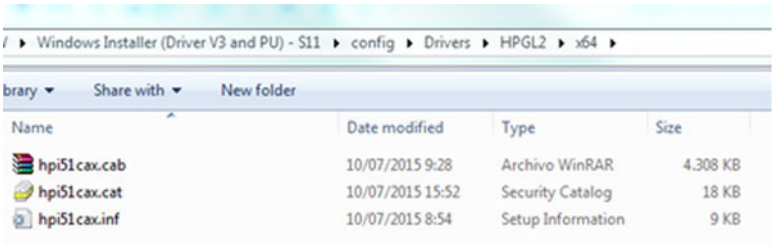
Manual driver installation

If there are issues installing the drive with the installer provided, it is necessary to perform a manual set up.

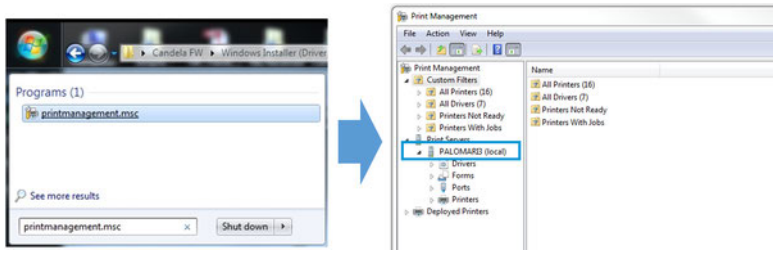
Pre-installation

In order to perform a manual driver installation, several steps must first be taken.

1. Connect printer to the PC.
2. Unzip the driver package in the Config folder >Drivers:
   - X64 folder for 64-bit OS [hpi51cax.inf]
   - X86 folder for 32-bit OS [hpi51cah.inf]



3. Open the **Print Management Console** (In the Start menu, type “printmanagement.msc” -> In the **Print Management Console**, go to Print Servers/Local):



Setting up the driver, port, and printing queue

In order to set up the driver for the printer, required are one driver, one port, and one printing queue.

1. **Driver Set Up:**

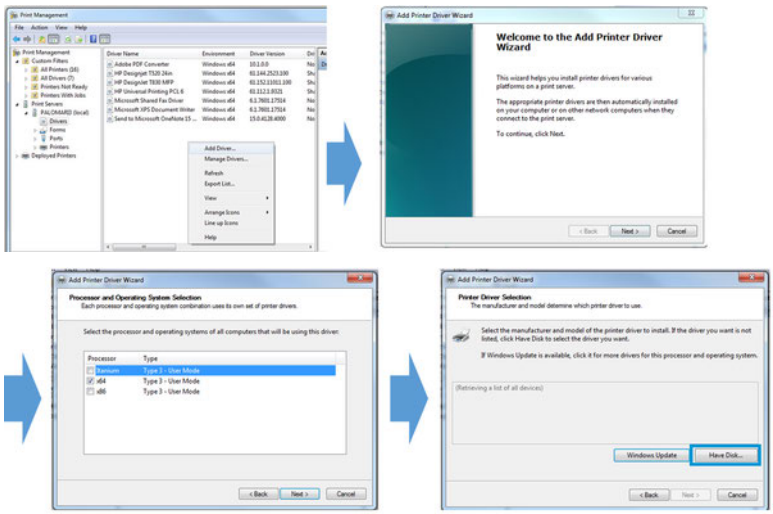
   a. Select the drivers section and right click on a blank area.

   b. Select **Add Drive**r.

   c. Follow the steps.

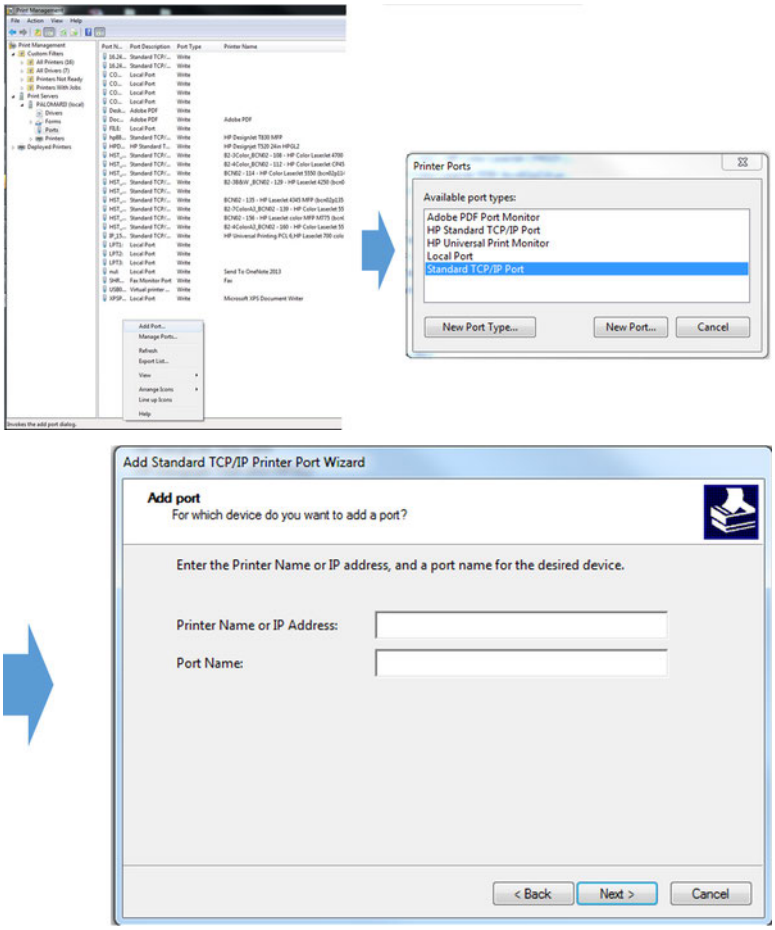
   d. Select “**Have Disk**...”.

   e. Browse to the location of the driver.



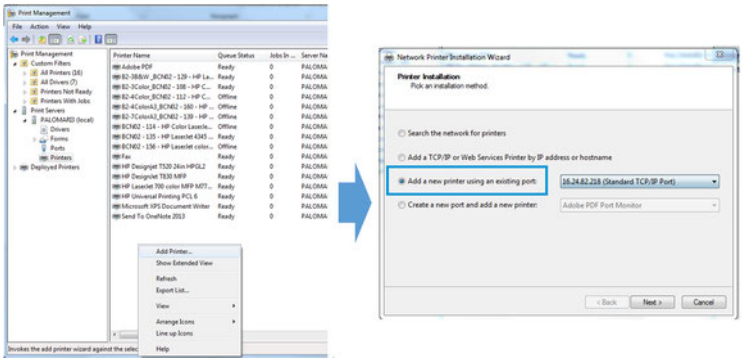
2. **Port Set Up:**

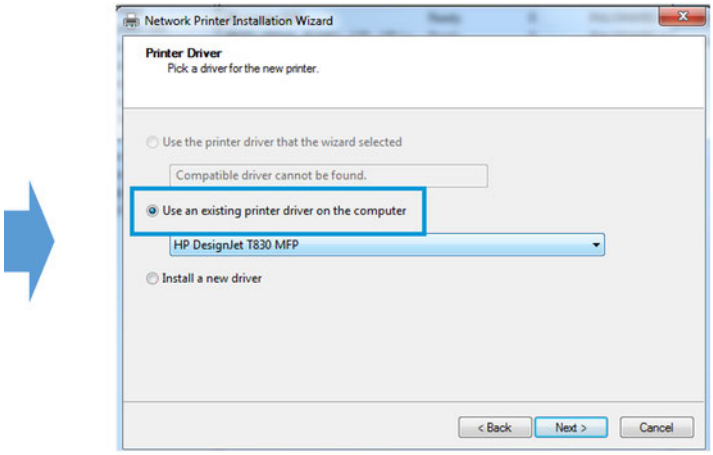
   Select port section and right click on a blank area “**Add Port**...”



3. Printer/Printing Queue Set Up:

Select port section and right click on a blank area “**Add Printer**...”





Drivers Troubleshooting

When reporting a customer issue, it is very important to have the following information:

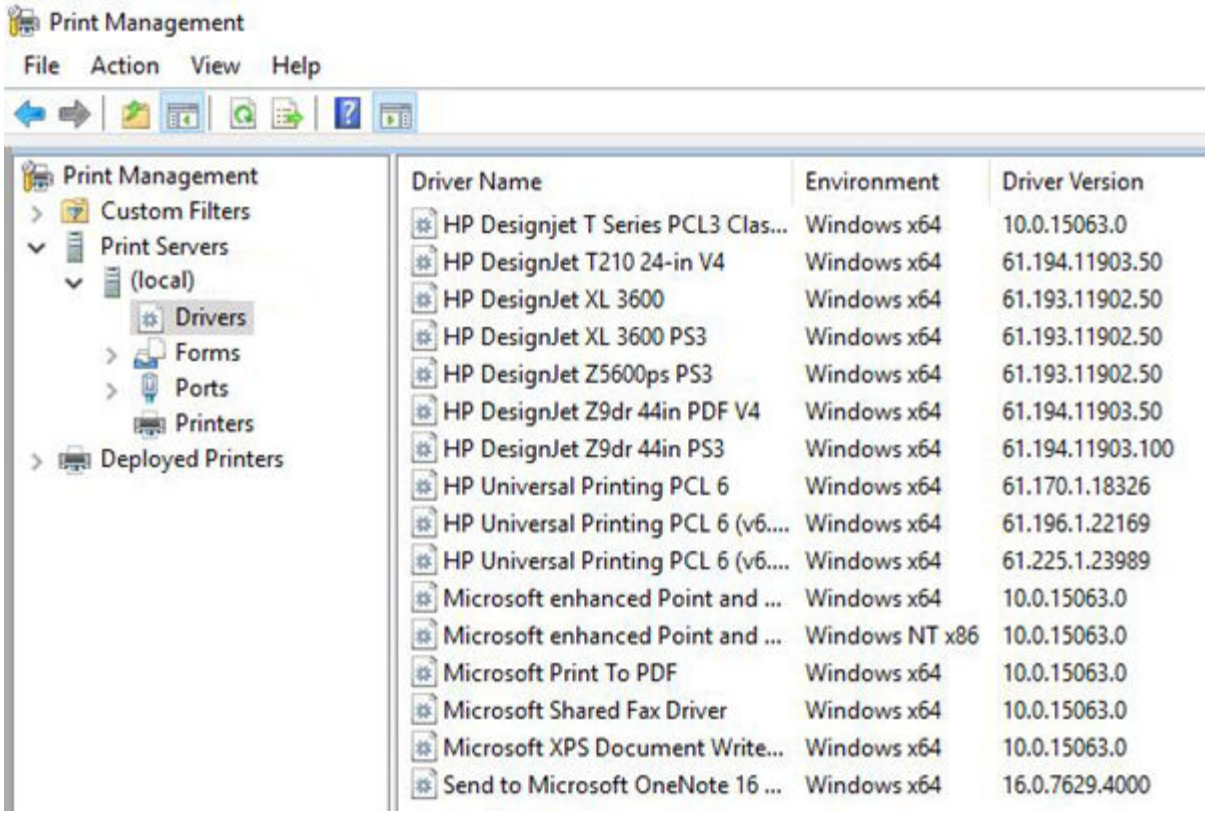
- Printer Model
- Operating system version (Client/Server?)
- Driver version
- Application causing problems and version
- Full list of driver settings used
- Killer plots
- PRN

Identifying the driver version

The driver version is obtained from “**Print Management**”.

1. Go to **Print Management > Print Server > YOURCOMPUTERNAME (local) > Drivers**

2. See the driver version in “Driver Version” column.



PRN File

The PRN is a file containing driver information generated before the spooler sends it to the printer.

1. From “**Devices and Printers**”, right-click on the printer and select “**Printer properties**” and then go to the “**Ports**” tab.
2. Click “**Add Port**”, select “**Local Port**” type and “**New Port**”, and enter the full path (including file name) where the PRN will be generated, for example:
   - C:\Users\<username>\Desktop\issue.prn

     After creating the new port, it will be assigned to the Printer Queue automatically.

NOTE: Every time the user prints to this printer, a PRN file will be generated with the driver’s job information.

Table 2-3 Driver features

Feature	V3 (W7) - PCL3GUI	V4 (W10) - PCL3GUI	V4 Class Driver - PCL3GUI	MacOS- PCL3GUI
Document Size (A4, A, ...)	X	X	X	X
Margins: STD, Oversize, Clip content by margins	X	X		X
Custom page size	X	X	OS	X
Paper Source: Tray, Roll, Manual feed	X	X	X	X

Table 2-3 Driver features (continued)

Feature	V3 (W7) - PCL3GUI	V4 (W10) - PCL3GUI	V4 Class Driver - PCL3GUI	MacOS- PCL3GUI
Paper Source: including Automatic when Automatic Roll Switch Support	X	X	X	
Paper type: Actual media types, not Generics	X	X		X
Quality: Fast / Normal / Best	X	X	X	X
Economode	X	X	X	X
Max detail	X	X		X
Resize: % , Fit to ...	X	X		OS
Disable cutter	X	X		X
Remove top/bottom blank areas	X	X		X
Rotate 0, 90, 180, 270 degrees	X	X		
Autorotate	X	X		
Print on Color/Mono/Grayscale	X	X		X
Max Application resolution	X	X	X	
Page order: Front to Back, Back to Front	X	X		OS
Bi-directionality	X	X		X
Copies	X	X	X	OS
Collate	X	X		OS
Presets	X	X	X	
HP Print Preview	X	X	X	

Ink-supplies troubleshooting

Handling ink cartridges and printhead

There are 4 replaceble ink cartridges that supply the printhead. You can check status information, and easily change an ink cartridge when required.

About the ink cartridges

Ink cartridges store the ink and are connected to the printhead, which distributes the ink on the paper.

⚠ CAUTION: Observe precautions when handling ink cartridges because they are ESD-sensitive devices. Avoid touching pins, leads and circuitry.

Storage of anonymous usage information

Each ink cartridge contains a memory chip that assists in the operation of the printer.

The memory chip stores a limited set of anonymous information about the usage of the printer, which can include the following: the date when the cartridge was first installed, the date when the cartridge was last used,

the number of pages printed using the cartridge, the page coverage, the frequency of printing, the printing modes used, any printing errors that may have occurred, and the product model. This information helps HP to design future products to meet our customers' printing needs.

The data collected by the memory chip does not include information that could be used to identify a customer or user of the cartridge or printer.

HP collects a sample of the memory chips from ink cartridges returned to HP's free return and recycling program (HP Planet Partners: http://www.hp.com/recycle). The sampled memory chips are read and studied in order to improve future HP products.

HP partners who assist in recycling ink cartridges may also have access to the data. Any third party possessing the cartridge may be able to access the anonymous information on the memory chip. If you prefer to not allow access to this information, you can render the chip inoperable. However, after you render the memory chip inoperable, the cartridge cannot be used in an HP printer.

If you are concerned about providing this anonymous information, you can turn off the memory chip's ability to collect printer usage information. To do so, access the front panel and tap , then **Preferences** > **Automatically send printer data**, or access the Embedded Web Server, and click **Settings** > **Preferences** > **Data Collection settings**. This does not prevent the cartridge from working normally in other respects. However, if you change your mind later, you can restore the factory defaults to resume collecting printer usage information.

Check ink cartridge status

Information about the evolution of the ink cartridges.

To view the ink levels of your ink cartridges, swipe down the dashboard and tap on the front panel. For more information, tap the specific cartridge.

- You can also get this information from the HP Utility (Windows only). Go to the Supplies tab to see each cartridge's status.
- In the EWS go to **Home** > **Estimated Cartridges Levels** or **Tools** > **Supply Status**.

Ink cartridge status messages

There are ink cartridge status messages to alert you to an issue.

- **OK**: The cartridge is working normally, with no known problems.
- **Missing** or **Damaged**: There is no cartridge present, or it is not correctly connected to the printer (shown with an X on the status screen).
- **Low**: The ink level is low.
- **Out of ink**: The cartridge is empty.
- **Not genuine HP**: The cartridge is not a genuine HP cartridge.
- **Wrong slot**: The cartridge has been inserted into the wrong slot.
- **Incompatible**: The cartridge is incompatible with this printer.

Replace an ink cartridge

There are two occasions when you need to replace an ink cartridge.

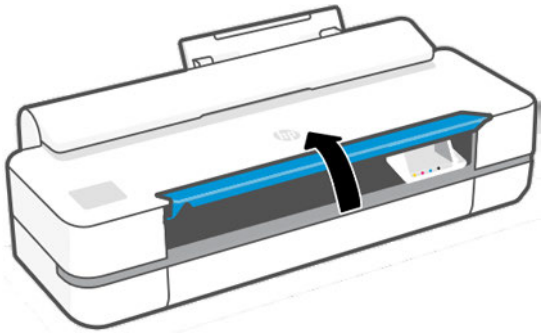
- The ink cartridge is very low and you want to replace it with a full cartridge for unattended printing (you can use up the remaining ink in the first cartridge at a more convenient time).
- The ink cartridge is empty or faulty, and you must replace it to continue printing.

CAUTION: Do not try to remove an ink cartridge while printing.

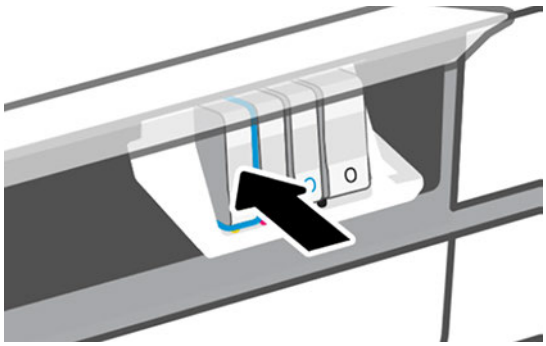
CAUTION: Remove an ink cartridge only if you are ready to insert another one.

NOTE: When a cartridge runs out of ink, the current job is cancelled.

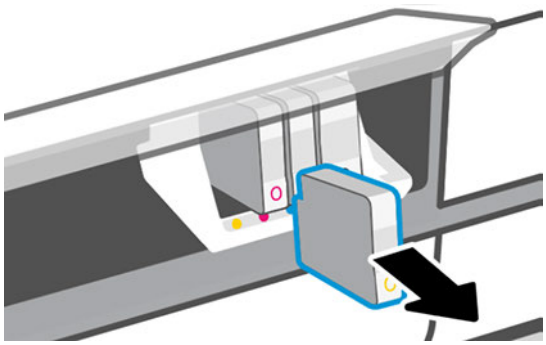
1. Make sure the printer is turned on.
2. If your printer is on a stand, make sure the printer wheels are locked (the brake lever is pressed down) to prevent the printer from moving.
3. Open the window.



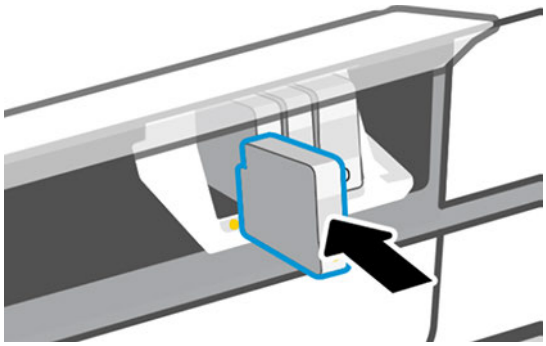
4. Press the ink cartridge to unlock it.



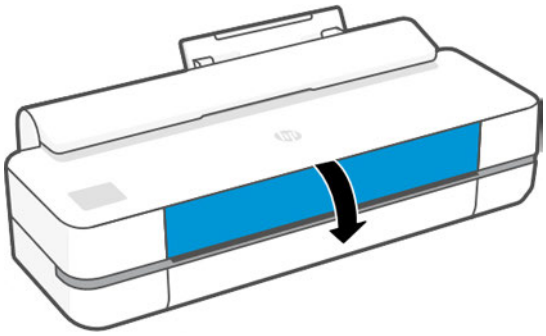
5. Remove the ink cartridge.



6. Insert the new ink cartridge. Make sure that you insert the ink cartridge into the slot that has the same colored letter as the cartridge you are installing.



7. Close the window.



About the printhead

The printhead, which is supplied installed in the printer, is connected to the ink cartridges and jets ink onto the paper.

⚠ CAUTION: Observe precautions when handling the printhead, because it is an ESD-sensitive device. Avoid touching pins, leads, and circuitry.

For information on replacing printheads, see the chapter "Replace the printhead" in the User Guide.

Solving ink-supply problems

Most of the problems that you may encounter when working with the ink supplies are solved with guidance from the Front Panel. A full list of Front Panel messages is supplied in the user's guide.

You cannot insert the Ink Cartridge

If an Ink Cartridge refuses to be inserted into the carriage, perform the following checks.

1. Check that you have the correct HP no.713 printhead.
2. Check that the colored label on the cartridge is the same color as the label on the slot.
3. Check that the cartridge is correctly oriented, with the letter or letters marking the cartridge label right-side up and readable.

⚠ CAUTION:

You cannot insert the printhead

If a printhead refuses to be inserted into the carriage, perform the following checks.

1. Ensure that you have the correct HP no. 713 Printhead.
2. Ensure that the Printhead is in the correct orientation.
3. Check that you have correctly latched the Printhead.

The Front Panel says to reset or replace a printhead

Perform the following steps if you encounter this situation.

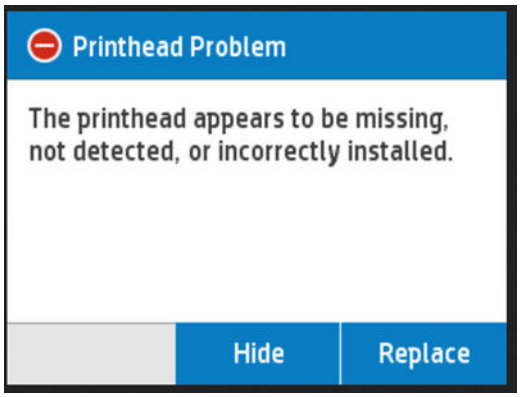
1. From the Front Panel, turn the power off then on.
2. Check the Front Panel display message, if it shows the ready message, the printer is ready to print. If the problem remains continue with the next step.
3. Remove the printhead using the correct procedure. It is important that the ink cartridges are removed before removing the printhead, this is in order to avoid damaging the printhead or contaminating the Carriage contacts with ink.
4. Clean the electrical connections on the backside of the printhead with a lint-free cloth. You can carefully use distilled water if moisture is needed to remove residue. Do not use water.

   This is a delicate process and may damage the printhead. Do not touch the nozzles on the bottom side of the printhead, especially not with alcohol.
5. Reinsert the printhead.
6. Check the Front Panel display message. If the problem remains, try a new printhead.

Ink system hardware troubleshooting

There are four hardware elements which could impact ink delivery in the event of a failure. Identifying the correct one is essential to efficient troubleshooting.

A potential ink system hardware failure can be reported to the user in the following way:



The printer is unable to determine whether the error is caused by a real hardware failure or which part may be failing (possible candidates: ink cartridges, Prime Pump, Carriage Assembly, Trailing Cable).

Follow these steps to check which parts to repair to solve the problem:

1. Perhaps the printer will recover automatically. Restart the printer and print a test page such as the print-quality diagnostic report (see General print-quality troubleshooting on page 103). If the error persists, proceed to the next step.
2. Restart the printer. When the printer is ready, start a printhead replacement (see the chapter "Replace the printhead" in the User Guide) and follow the first two steps shown on the Front Panel to remove the ink cartridges and the printhead.
3. Inspect both the ink cartridges and the Carriage, looking for evidence of ink leaks. If you find none, move to step 5. If an ink cartridge is leaking, please order new ones for the customer and do the following:
    a. Clean the electrical contacts in the Carriage slot inside the printer with a clean, dry, soft, lint-free cloth; slide the cloth up and down vertically.
    b. Put the printhead back into the Carriage.
    c. Insert a set of non-leaky ink cartridges.
    d. Print a test page.
4. If there are no ink leaks, replace the Carriage Assembly (see Carriage Assembly with Belt and Trailing Cable (5HB06-67001 & 5HB10-67001) on page 380).

Printhead troubleshooting

A printhead hardware failure can be reported to the user in the following ways.

A. The printhead appears to be missing, not detected, or incorrectly installed

Perform the following action in the event of encountering this issue.

- ▲ Press the “Show me...” button appearing on the screen to launch the replacement/reseat wizard process.

B. System error 0027:XXXX is displayed

Perform the following process in the event of encountering this situation.

- ▲ Turn the printer off. See System Error 0027-00XX on page 57.

C. There is a problem with the printer or ink system

The printer is unable to determine whether the error is caused by a real hardware failure and which might be the failing part.

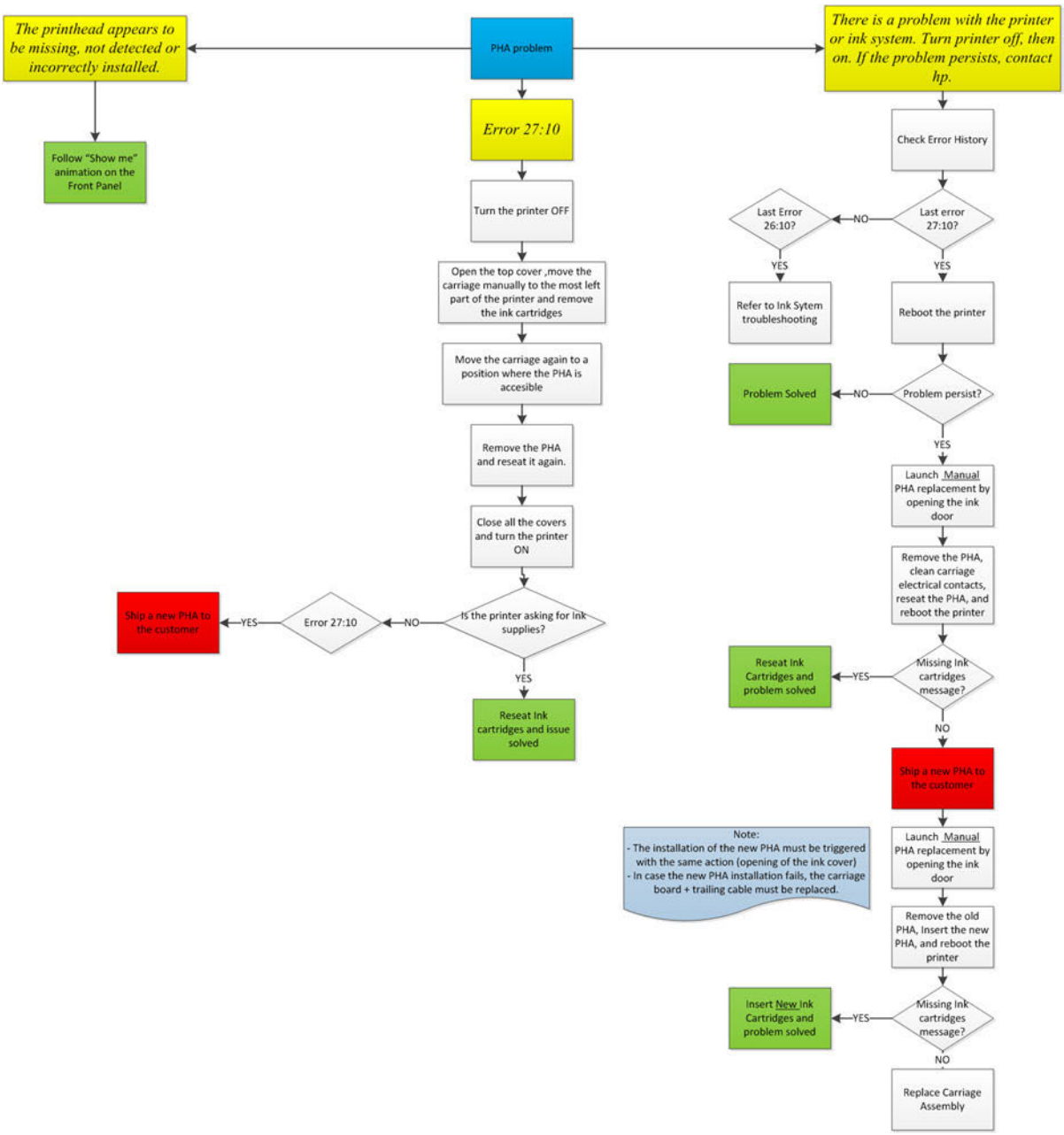
Possible candidates: Printhead, Carriage Board, Trailing Cable.

1. Turn the printer off and on again.
2. Wait until the Carriage stops moving, then open the ink cartridge cover.
3. After hearing the audio alert, remove the ink cartridges. See Replace an ink cartridge on page 94.
4. Clean the electrical contacts in the Carriage slot inside the printer with a clean, dry, soft, and lint-free cloth; ensure that this is done by sliding the cloth vertically.
5. Reinsert the printhead assembly (ensure that the Carriage Lifter is properly lowered once the assembly has been reinserted).
6. Move the Carriage to a position on the platen where you can access the printhead.

7. Replace / Reseat the printhead (ensure that the Carriage Lifter is lowered once the printhead assembly has been reinserted).
8. Restart the printer.
9. Re-insert the supplies when prompted by the front panel. The printer should show a “missing cartridges” message.
10. If the problem persists, the printhead must be replaced (a printhead replacement kit must be provided to the user).
11. If the problem persists, the Carriage assembly must be replaced. See Belt and Pulley (CQ890-67112 & F9A30-67068) on page 374.

Printhead troubleshooting flowchart

Follow this troubleshooting flowchart when encountering issues with the printhead.



Not enough ink message issue procedure

This section outlines the procedure to follow if, during a new printhead installation, the message "Printhead Startup Failure. Not enough ink to complete startup" appears.

This issue can be solved without the use of additional parts or an onsite visit with the new service Reset to force printhead initialization found in firmware version **AXP2CN1249BR**.

Conditions to use the reset

There are two conditions in which the reset can be employed.

- Printer shows **Printhead Startup Failure. Not enough ink to complete startup** message.

IMPORTANT: Do not use in other circumstances.

- Printer firmware version is AXP2CN1249BR or newer. If the printer has an older firmware version, reset is unavailable. In case the printer is still in the OOBE phase, a special firmware upgrade procedure is required (see following information).

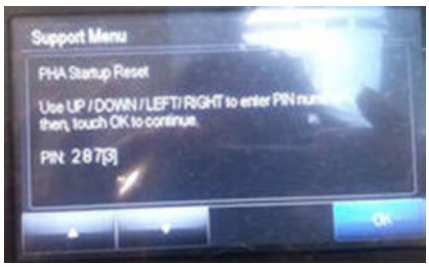
NOTE: To check the firmware version, press the **Power** button for 15 seconds, and access the Support Menu (**1. Information > 1.3 Firmware Version**).

Performing the reset

Customers can perform all these steps themselves.

1. Printer shows **Printhead startup failure. Not enough ink to complete startup**.
2. Remotely guide the customer to enter into the support menu by pressing the **Home** button for 15 seconds.
3. Access **3.5 Reset PHA Startup Condition**.

4. Type 'PIN' number **2873**, and select **OK**.



5. Ask the customer to check the Front Panel message after pressing **OK**. Either **success** or **fail** will appear, and the printer will automatically reboot.

NOTE: If **success** appears, the printer will beep. If **fail** appears, no beep will occur.

6. If **success** appears, and the printer continues with the initialization steps, the issue is fixed. If **success** appears but the printer shows another ink system failure; ask the customer for the message, and escalate the case to GCC for further instructions.
7. If **fail** appears, the cartridges are low on ink (less than 80% on each color). This fails to prevent printhead damage. Ask the customer to add new ink cartridges.
8. Perform a pump test.
9. If the test fails, send onsite engineer with PHA kit, bundle board, and pump motor. Replace the pump motor, and then run the pump test. If the test fails again, replace the bundle board and perform pump test. If

test passes, perform PHA reset. Restart printer. Initialize PH replacement, and remove printhead and ink cartridges from the printer.

10. Restart the printer. When the printer prompts for new ink cartridges and printhead, without pressing anything on touch panel, install new Printhead and ink cartridge, check.

Special firmware firmware upgrade procedure, only during OOBE phase

As the printer IP is not shown in the front panel, perform the following steps.

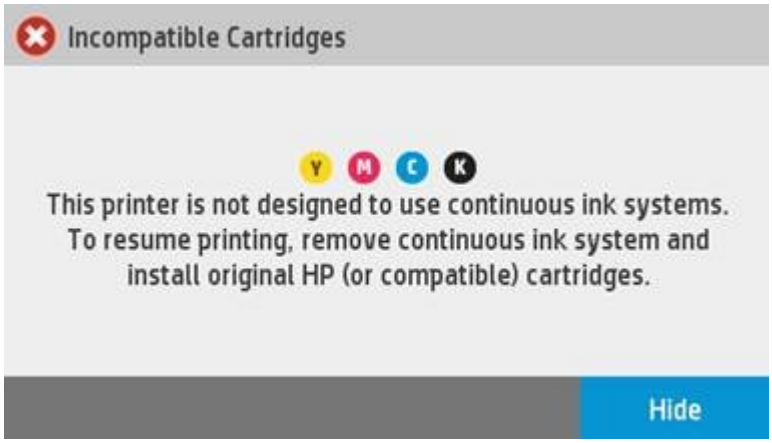
1. Connect the printer via LAN or USB.
2. Execute the driver installer. The installer searches the printer connected to the network or USB. The printer installs.
3. Download the latest printer firmware version from hp.com.
4. Download and install the HP DesignJet Utility (Windows OS) & HP Utility (Mac). When installed, use this application to upgrade the printer firmware to the latest version.

Safe Stop: printer behavior in the face of a Continuous Ink System

All DesignJet printers include this feature to detect when unsupported supply systems are used in the unit.

The printer expects an ink supply with finite volume. After an expected ink volume is extracted from the supply, an Out of Ink event must happen. If this event does not happen, the printer evaluates that the customer is using a continuous ink system.

If customers are using a continuous ink system, the printer will show the following message:



There are comments included in the User guide to inform the customer about this unsupported operation:

- *The printer is not designed to use continuous ink systems. To resume printing, remove continuous ink system and install genuine HP (or compatible) cartridges.*
- *This printer is designed for ink cartridges to be used until they are empty. Refilling cartridges prior to depletion might cause your printer to fail. If this happens, insert a new cartridge (either genuine HP or compatible) to continue printing.*

There is also a clause in the warranty statement where this is clearly stated:

- *5. HP's limited warranty is void in the event the printer is attached to an aftermarket apparatus or system that modifies the printer's functionality such as a continuous ink system.*

In the event the customer is using a continuous ink system:

- Do not replace cartridges under warranty. (Instruct customer to replace the incompatible cartridges with HP or compatible cartridges.)
- Do not replace or repair the printer under warranty!
- This error can also occur when customers refill supplies, never allowing them to become depleted.

The following messages are proposals of communication from Call Agent to Customer:

- "This printer is not designed to use continuous ink systems. To resume printing, remove continuous ink system and install genuine HP (or compatible) cartridges."
- "This printer is designed for ink cartridges to be used until they are empty. Refilling cartridges prior to depletion might cause your printer to fail. If this happens, insert a new cartridge (either genuine HP or compatible) to continue printing."
- "HP's limited warranty is void in the event the printer is attached to an aftermarket apparatus or system that modifies the printer's functionality such as a continuous ink system."

Print-quality troubleshooting

General print-quality troubleshooting

These procedures should help with streaked or faded prints, prints without black or other colors, prints with blurred or fuzzy text, prints with ink streaks or smears, and many other problems.

Try the following solutions in the order presented in order to resolve the common issues described above. When one of the solutions resolves the issue, there is no need to continue troubleshooting.

Use genuine HP ink cartridges

Utilizing a trustworthy source of ink is essential to ensuring the best quality output, and minimizing the possibility of compromising future printer performance.

▲ HP recommends that you use genuine HP ink cartridges. HP cannot guarantee the quality or reliability of non-HP cartridges. If you are not using genuine HP ink cartridges, the following solutions might not resolve your print-quality issue.

Check the paper

Not all types of paper can be used effectively on the same job.

▲ Make sure that the paper is appropriate for the print job.

Check the print settings

The location of the Print settings option differs between Windows and Mac OS systems.

▲ **Windows:** Open the Windows driver and go to the Basic section. Adjust **Print Quality, Document Size**, and **Margins-Layout**.

Mac OS: Open the Mac OS Print dialog and go to the **Paper/Quality** tab. **Adjust Quality Options, Paper Size, Format**, and **Margins/Layout**.

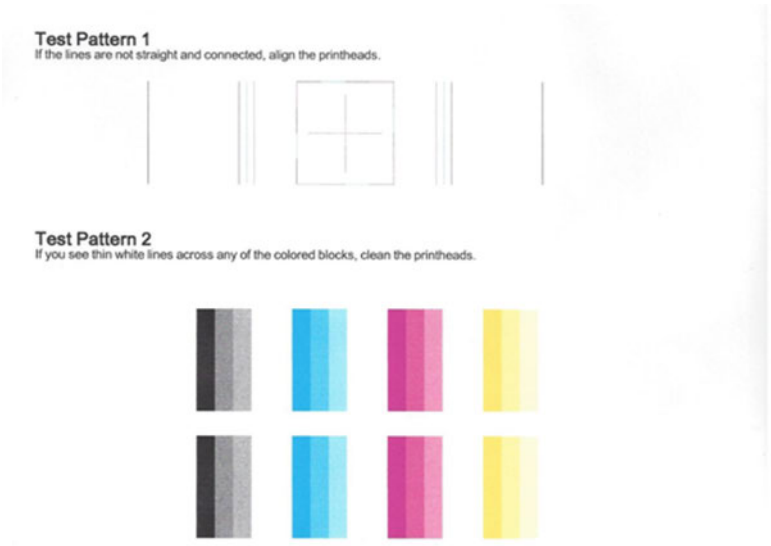
Print and evaluate a print-quality diagnostic report and troubleshoot defects

In addition to describing the print-quality diagnostic report process, see also advised actions to resolve any discovered issues.

NOTE: Never use demo plots to check image quality as they are optimized for settings that may not match the customer's scenario.

Use the following procedure to print, and then evaluate a print-quality diagnostic report.

1. Print a print-quality diagnostic page.
   a. Make sure there is plain white loaded in the printer.
   b. Swipe down the dashboard and press , then scroll down the menu and press **Reports** >.**Print Quality Report**. The print-quality diagnostic page prints.



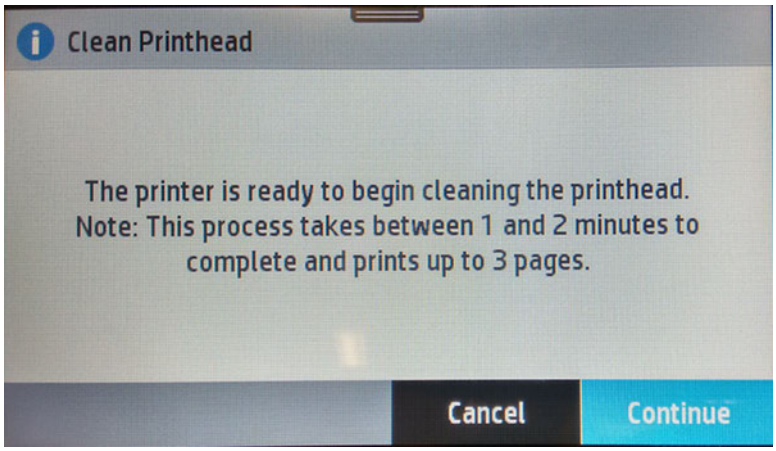
2. If the lines in Test Pattern 1 are not straight and connected, follow these steps to align the printer:
   a. Make sure there is plain white paper loaded in the printer.
   b. Swipe down the dashboard and press , then scroll down the menu and press **Printer Maintenance** >.**Align Printhead**. The printhead alignment procedure will begin.
   c. At the end of the process a page prints, which may be discarded.

3. Examine the Test Pattern 2. Shown here is a good example of the test pattern.

If any of the colored blocks in Test Pattern 2 show white lines, or are faded or missing completely, follow these steps to clean the printhead.

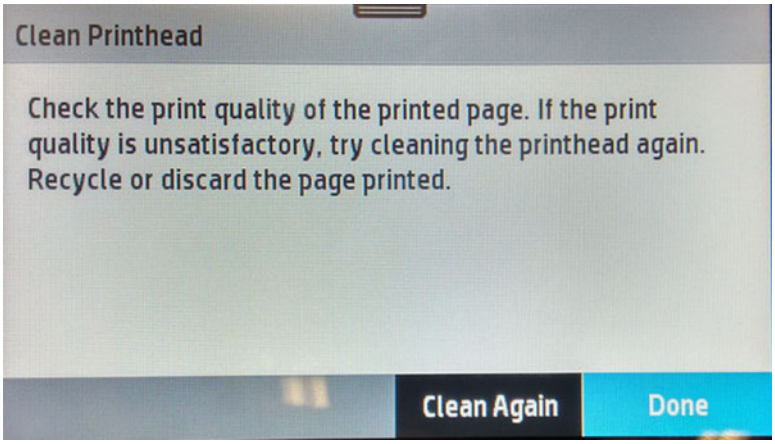
a. Make sure there is plain white paper loaded in the printer.

b. Swipe down the dashboard and press , then scroll down the menu and press **Printer Maintenance** >.**Clean Printhead**. The printhead cleaning process will begin.



c. At the end of the process a page prints. Examine that page to see if more cleaning is required.

d. If there are defects on the page that prints after cleaning, try cleaning the printhead by pressing the Yes button on the Front Panel for second level cleaning. Repeat the cleaning for the third level cleaning if it is still not resolved.



e. If the problem is still not resolved after third-level cleaning, proceed to the next step (check print quality), before replacing the printhead.

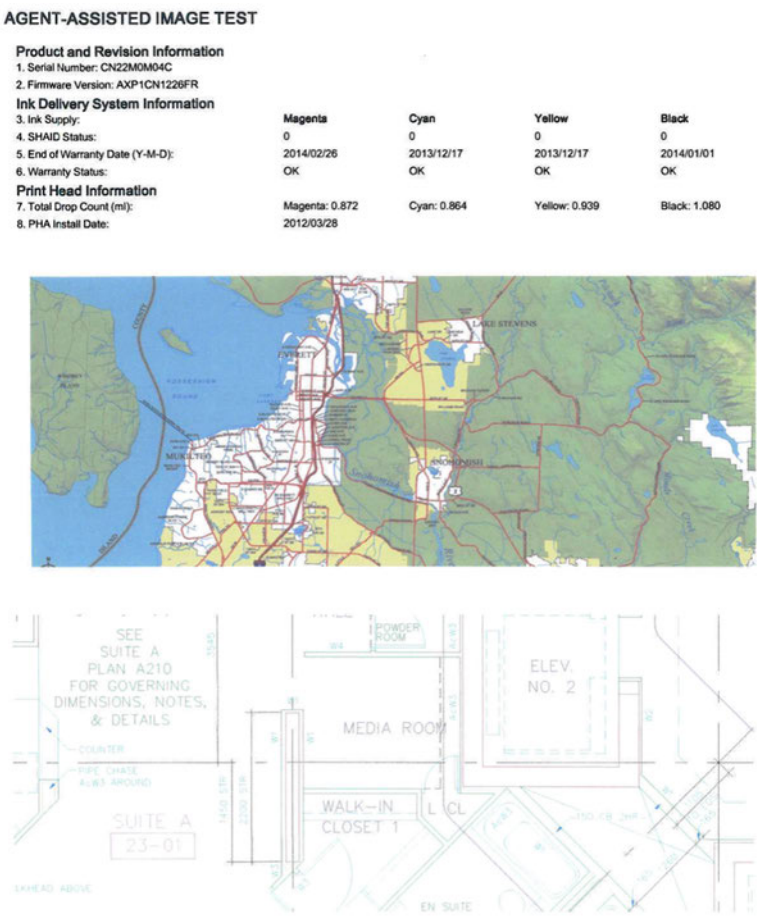
NOTE: To avoid problems that require printhead cleaning, always use the Power button to turn the printer off. Always replace any missing cartridges as soon as possible to avoid print-quality issues and possible extra ink usage or damage to the ink system. Never turn off the printer when the ink cartridges are missing.

Check print quality

If you see no defects on the print-quality report, you can double-check the print quality with the Diagnostic Image.

a. Make sure there is plain white paper loaded in the printer.

b. Press four times on the Back Key. The Support Menu will appear. Go to **Reports** > **Agents Assisted Image Test**.



AGENT-ASSISTED IMAGE TEST

Product and Revision Information

1. Serial Number: CN22M0M04C
2. Firmware Version: AXP1CN1226FR

Ink Delivery System Information

3. Ink Supply:	Magenta	Cyan	Yellow	Black
4. SHAID Status:	0	0	0	0
5. End of Warranty Date (Y-M-D):	2014/02/26	2013/12/17	2013/12/17	2014/01/01
6. Warranty Status:	OK	OK	OK	OK

Print Head Information

7. Total Drop Count (ml):	Magenta: 0.872	Cyan: 0.864	Yellow: 0.939	Black: 1.080
8. PHA Install Date:	2012/03/28			

If the Agent Assisted Images both look OK, then the print mechanism and ink supplies are working correctly. Ask the customer to use a higher quality print mode.

Print-quality defects

Within this section, a variety of print-quality defects are described alongside recommended actions for resolving them.

Horizontal lines across the image (banding)

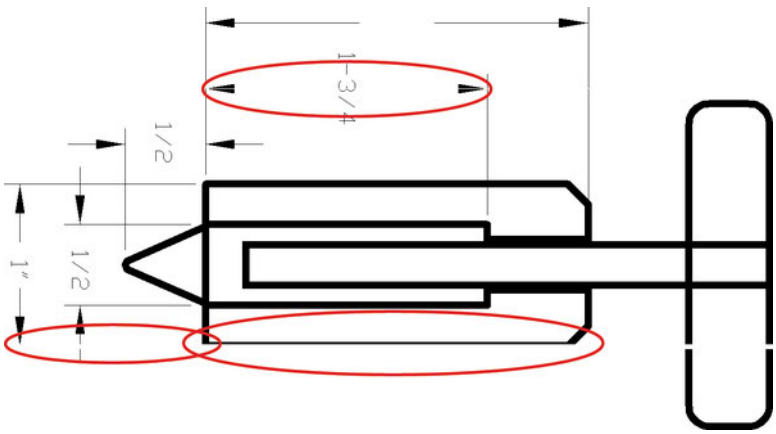
Providing solutions for if printed images suffer from added horizontal lines as shown (the color may vary).

1. Check that the paper type loaded corresponds to the paper type selected in the front panel and in the software.
2. Check that the customer is using appropriate print-quality settings for the purpose. In some cases, you can overcome a print-quality problem merely by selecting a higher print-quality level. For instance, if you have set the Print Quality setting to **Fast**, try setting it to **Best**.
3. Print the print-quality report. See General print-quality troubleshooting on page 103.
4. If the printhead is working correctly, perform paper advance calibration, see the user's guide.

If the problem persists despite all the above actions, contact your customer service representative for further support.

Lines are too thick, too thin or missing

Providing solutions for if lines are too thick, too thin or missing when printed.



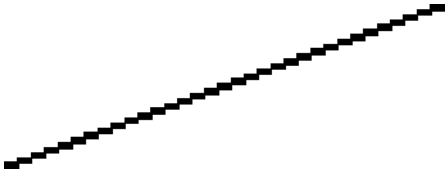
1. Check that the paper type you have loaded corresponds to the paper type selected in the front panel and in your software.
2. Check that you are using appropriate print-quality settings for your purposes. Try turning on the **Maximum detail** option (if available).

3. If the resolution of your image is greater than the printing resolution, you may notice a loss of line quality. You can find the **Max. Application Resolution** option in the driver preferences dialog.
4. If lines are too thin or missing, print the print-quality report. See General print-quality troubleshooting on page 103.
5. If the problem remains, align the printhead. See the chapter "Align the printhead" in the User Guide.
6. If the problem remains, perform paper advance calibration, see the user's guide.

If the problem persists despite all the above actions, contact your customer service representative for further support.

Lines appear stepped or jagged

Providing solutions for if lines in your image appear stepped or jagged when printed.

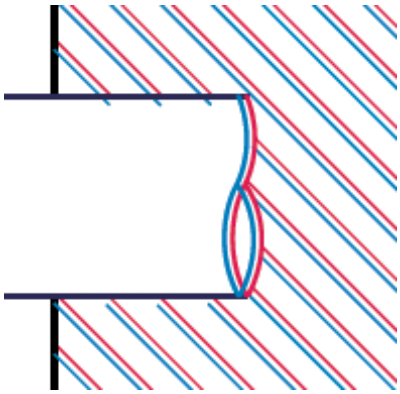


1. The problem may be inherent in the image. Try to improve the image with the application you are using to edit it.
2. Check that you are using appropriate print-quality settings, see the user's guide.
3. Turn on the **Maximum detail** option in the driver (if available).

Lines print double or in the wrong colors

This problem can have various visible symptoms, including color seperation and irregular or inaccurate lines.

- Colored lines are printed double, in different colors.



- The borders of colored blocks are wrongly colored.

To correct this kind of problem, align the printhead. See the chapter "Align the printhead" in the User Guide.

Lines are discontinuous

Line discontinuity implies that unwanted gaps appear in what is intended to be a single unbroken element of the printed output.

If your lines are broken in the following way:

1. Check that you are using appropriate print-quality settings, see the user's guide.
2. Align the printhead. See the chapter "Align the printhead" in the User Guide.

Lines are blurred

Humidity can cause ink to soak into the paper, making the lines blurred and fuzzy.

Try the following solutions:

1. Check that your environmental conditions (temperature, humidity) are suitable for high-quality printing.
2. Check that the paper type selected in the front panel is the same as the paper type you are using.
3. Try changing to a heavier paper type, such as HP Heavyweight Coated Paper.
4. Select a paper type that is slightly thinner than the paper you have loaded; this will persuade the printer to use less ink. Here are some example paper types in ascending order of thickness: Plain Paper, Coated Paper, Heavyweight Coated Paper.
5. If you are using glossy paper, try changing to a different type of glossy paper.
6. Align the printhead. See the chapter "Align the printhead" in the User Guide.

Line lengths are inaccurate

If you have measured your printed lines and find that the lengths are not sufficiently accurate for your purposes, there are potential solutions to this issue.

Attempt the following to improve line length accuracy:

1. Print on HP Matte Film, for which your printer's line length accuracy is specified.

   Polyester film is about ten times more dimensionally stable than paper. However, using film that is thinner or thicker than HP Matte Film will reduce line length accuracy.
2. Set the Print Quality to **Best**.
3. Maintain the room at a steady temperature between 10 and 30°C (50 and 86°F).
4. Load the roll of film and let it rest for five minutes before printing.
5. If you are still not satisfied, try recalibrating the paper advance.

The whole image is blurry or grainy

There are potential solutions available in the event that the printed image suffers from overall quality issues.

1. Check that the paper type you have loaded corresponds to the paper type selected in the front panel and in your software.
2. Check that you are printing on the correct side of the paper.
3. Check that you are using appropriate print-quality settings. In some cases, you can overcome a print-quality problem merely by selecting a higher print-quality level. For instance, if you have set the Print Quality slider to **Fast**, try using **Best**.
4. If the problem remains, align the printhead. See the chapter "Align the printhead" in the User Guide.
5. If the problem remains, perform paper advance calibration.

If the problem persists despite all the above actions, contact your customer service representative for further support.

The paper is not flat

If the paper does not lie flat when it comes out of the printer, but has shallow waves in it, you are likely to see defects in the printed image, such as vertical stripes.

This can happen when you use thin paper that becomes saturated with ink.

1. Check that the paper type you have loaded corresponds to the paper type selected in the front panel and in your software.
2. Try changing to a thicker paper type, such as HP Heavyweight Coated Paper.
3. Select a paper type that is slightly thinner than the paper you have loaded; this will persuade the printer to use less ink. Here are some example paper types in ascending order of thickness: Plain Paper, Coated Paper, Heavyweight Coated Paper.

The print is scuffed or scratched

The black ink pigment can be scuffed or scratched when touched by a finger, a pen or some other object. This is particularly noticeable on coated paper.

Glossy paper may be extremely sensitive to the basket or to anything else that it contacts soon after printing, depending on the amount of ink used and the environmental conditions at the time of printing.

To reduce the risk of scuffs and scratches:

- Handle prints carefully.
- Avoid stacking prints on top of each other.
- Catch your prints as they are cut from the roll and do not let them fall into the basket. Alternatively, leave a sheet of paper in the basket so that freshly printed sheets do not make direct contact with the basket.
- Increase the drying time. At the front panel, press , then **Print Settings** > **Drying time** > **Extended**.

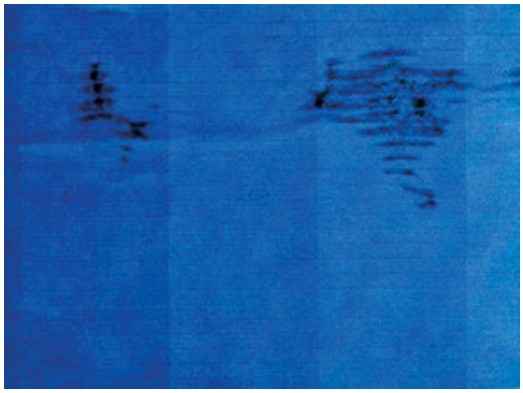
Ink marks on the paper

This problem can occur for several different reasons.

Horizontal smears on the front of coated paper

If a lot of ink is used on plain or coated paper, the paper absorbs the ink quickly and expands. As the printhead moves over the paper, the printhead may come into contact with the paper and smear the printed image.

This problem is normally seen only on cut sheets of paper (not on roll paper).



Whenever you notice this problem, cancel the printing job immediately. Press ✕ and also cancel the job from your computer application. Soaked paper can damage the printhead.

Try the following suggestions to avoid this problem:

1. Check that the paper type you have loaded corresponds to the paper type selected in the front panel and in your software.
2. If using sheet paper, try rotating the sheet 90 degrees. The orientation of the paper fibers may affect performance.
3. Try changing to a thicker paper type, such as HP Heavyweight Coated Paper.
4. Select a paper type that is slightly thinner than the paper you have loaded; this will persuade the printer to use less ink. Here are some example paper types in ascending order of thickness: Plain Paper, Coated Paper, Heavyweight Coated Paper.
5. Try to increase the margins by relocating the image to the center of the page using your software application.

Ink marks on the back of the paper

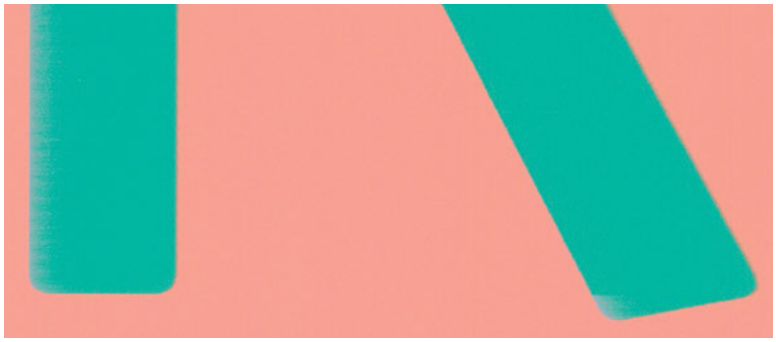
Clean the platen with a soft cloth. Clean each rib separately.

Black ink comes off when you touch the print

This problem may be caused by printing with matte black ink on glossy paper. The printer will not use matte black ink if it knows that the paper will not retain it. To be sure of avoiding matte black ink, you can select Photo Glossy Paper as the paper type (in the Photo Paper category).

Edges of objects are stepped or not sharp

This issue is when the edges of objects, or lines in general, appear to be poorly defined or lighter in density.



If you have already set the print-quality in the driver dialog, select the custom print-quality options, and try setting the quality level to **Normal**.

Edges of objects are darker than expected

Unwanted edge darkness can be encountered even when settings have been selected to give preferrence to output quality over speed.

If edges of objects seem darker than expected, and you have already set the print-quality in the driver dialog, select **Fast** quality.

Vertical lines of different colors

There are a number of potential solutions available if your print shows vertical bands of different colors.

Try the following:

1. Use thicker paper, choosing from the recommended paper types such as HP Heavyweight Coated Paper.
2. Use higher print-quality settings. For instance, if you have set the Print Quality slider to **Fast**, try setting it to **Best**.

White spots on the print

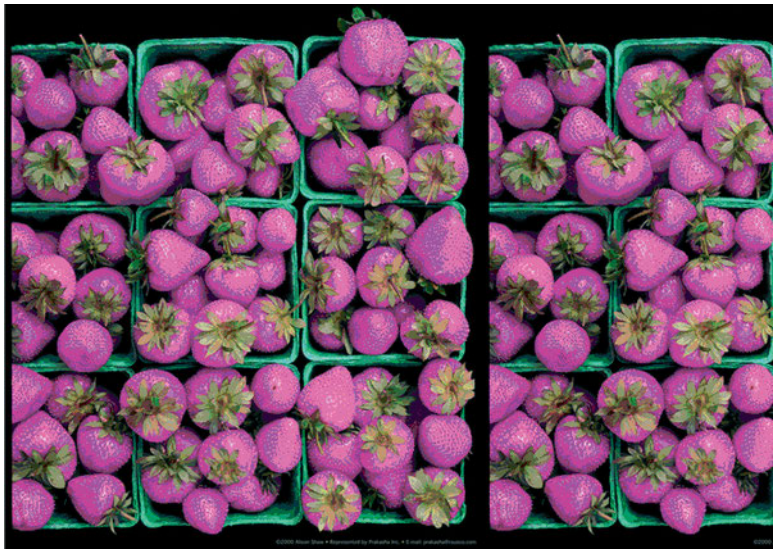
White spots on the print are probably due to paper fibers, dust, or loose coating material.

To avoid this problem:

1. Try cleaning the paper manually with a brush before printing, to remove any loose fibers or particles.
2. Always keep the cover of your printer closed.
3. Protect your paper rolls and sheets by storing them in bags or boxes.

Colors are inaccurate

If the colors of your print do not match your expectations, there are a number of potential solutions available.



Try the following:

1. Check that the paper type you have loaded corresponds to the paper type selected.
2. Check that you are printing on the correct side of the paper.
3. Check that you are using appropriate print-quality settings. For the most accurate colors, select **Best** quality.
4. Print the print-quality report. See General print-quality troubleshooting on page 103.

Colors are fading

If you print on instant-dry photo paper, your prints will fade rapidly. If you plan to display the prints for more than two weeks, you should laminate them to achieve longer life.

Prints on swellable coated papers will fade much less rapidly. However, lamination will increase the life of prints (depending on the type of lamination) with all paper types. For more information, consult your laminate provider.

The image is incomplete (clipped at the bottom)

There are a number of alternative explanations for the production of an incomplete image. Investigate the following possibilities and actions for remedying the situation.

- Did you press ✕ before all the data was received by the printer? If so, you have interrupted the data transmission and will have to print the page again.
- There may be a communications problem between your computer and the printer. Check your USB or network cable, or your Wi-Fi connection.
- Check to make sure that your software settings are correct for your current page size (for example, long-axis prints).
- If you are using network software, make sure it has not timed out.

The image is clipped

Clipping normally indicates a discrepancy between the actual printable area on the loaded paper and the printable area as understood by your software.

- Check the actual printable area for the paper size you have loaded.

  printable area = paper size – margins

- Check what your software understands to be the printable area (which it may call "printing area" or "imageable area"). For example, some software applications assume standard printable areas that are larger than those used in this printer.
- If you have defined a custom page size with very narrow margins, the printer may impose its own minimal margins, clipping your image slightly. You may want to consider using a larger paper size.
- If your image contains its own margins, you may be able to print it successfully by using the **Clip Contents by Margins** option.
- If you are trying to print a very long image on a roll, check that your software is capable of printing an image of that size.
- You may have asked to rotate the page from portrait to landscape on a paper size that is not wide enough.
- If necessary, reduce the size of the image or document in your software application, so it fits between the margins.

If you try to print an image larger than this from these applications, the bottom of the image may be clipped. To print the whole image, try these suggestions:

- The driver dialog includes an option called **Max. application resolution**, which enables you to print successfully in this situation. You will not normally need to change the default setting, which is **Auto**. However, you can find the option in the preferences dialog.
- Save the file in another format, such as TIFF or EPS, and open it with another application.
- Use a RIP to print the file.

Some objects are missing from the printed image

Large quantities of data may be necessary to print a large-format print job, and in some specific workflows there may be an issue that can lead to some objects missing from the printed image.

Issue

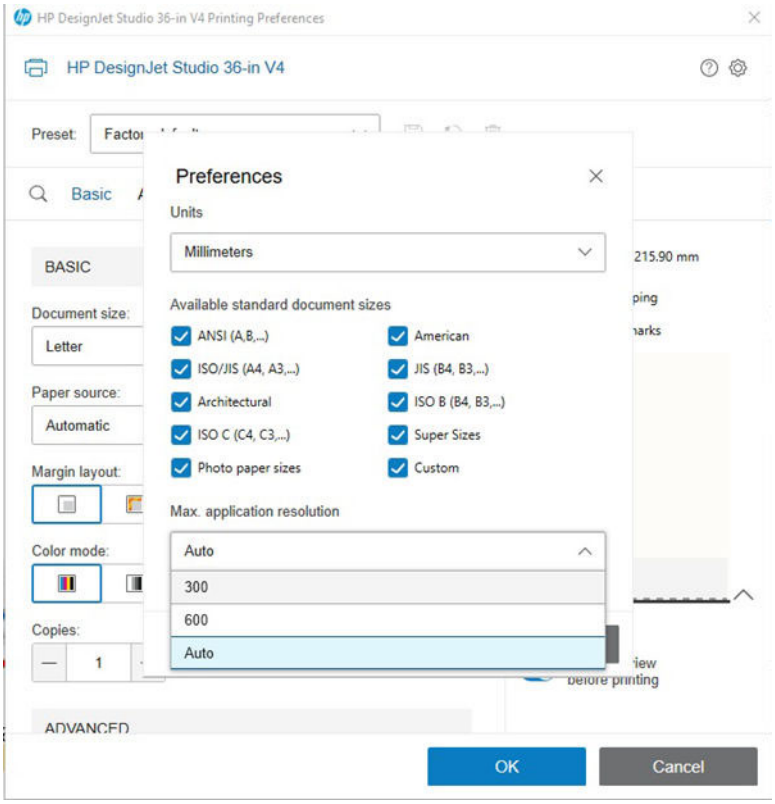
Some objects are missing from the printed image.

NOTE: Print jobs which might be affected are files containing complex objects such as objects with multiple layers, objects with gradients or/and the file size is relatively big in most of case. Usually this kind complex job is made by CAD applications (For example AutoCAD).

Solutions

1. Update the printer's firmware to the latest version. It can be downloaded and installed from **hp.com**.
2. Use the latest driver. It can be downloaded and installed from **hp.com**.

▲ Select **Max. Application resolution: 300**.



3. Select a smaller page size and enlarge it to the desired final page size in the driver or in the front panel.
4. Reduce the resolution of bitmap images in your application software.
5. Select a lower print quality in order to reduce the resolution of the printed image.
6. Update the application software to the latest version.
7. If the source file is a PDF:
   a. Regenerate the PDF file: Open the PDF file with the printing application, then save it again as PDF format. This could reduce the file complexity.
   b. Use an alternative PDF reader to discard application issues.
8. Save the file in another format, such as TIFF or PDF, and print it from another application.
9. Try another software to print the file.
10. Use a RIP to print the file.

NOTE: If you are working under Mac OS, not all of these options are available.

Some options may adversely affect the final output quality or the time necessary to generate the print job. Therefore, they should be cancelled if they do not help to solve the problem.

Links to download firmware and drivers

- HP DesignJet T600 Printer series: https://www.hp.com/go/HP-DesignJet-T600-Printer-series/firmware

- HP DesignJet T200 Printer series: https://www.hp.com/go/HP-DesignJet-T200-Printer-series/firmware
- HP DesignJet Studio Printer series: https://www.hp.com/go/HP-DesgnJet-Studio-Printer-series/firmware

A PDF file is clipped or objects are missing

In older versions of Adobe Acrobat or Adobe Reader, large PDF files could be clipped or lose some objects when printing with the driver at high resolution.

In order to avoid such problems, upgrade your Adobe Acrobat or Adobe Reader software to the latest version. From version DC onwards, these problems should be solved.

Print mode summary table

The following table details information about media families which can be viewed in the Front Panel.

Table 2-4 Simplified PM Chart 1.1

Media Family in Front Panel	Bond and Coated Paper	Bond and Coated Paper & Adhesive Paper	Bond and Coated Paper	Bond and Coated Paper
Media type in the Front Panel	Plain Paper HP Bright White Inkjet Paper HP Universal Bond Paper	Coated Paper HP Coated Paper HP Universal Coated Paper Ahesive Paper HP Universal Adhesive Vinyl	Heavyweight Coated Paper HP Heavyweight Coated Paper HP Universal Heavyweight Coated Paper	Plain Paper for Graphics
fast (-2)	1p bidi 30ips	1p L2R 30ips, 40ips retrace	N/A	1p L2R 30ips, 40ips retrace
econo fast (-1)	1p bidi 40ips	1p L2R 30ips, 40ips retrace	N/A	1p bidi 40ips
normal (0)	K/C: 1p/2pNUA 30ips	4p bidi 30ips	6p bidi 30ips	4p L2R 30ips, 40ips retrace
best (+1)	6p L2R 30ips, 40ips retrace	6p L2R 30ips, 40ips retrace	8p L2R 20ips, 40ips retrace	6p L2R 30ips, 40ips retrace
max dpi (+2)	N/A	N/A	N/A	N/A

Table 2-5 Simplified PM Chart 1.2

Media Family in Front Panel	Technical Paper	Photo Paper & Adhesive Paper	Film
Media type in the Front Panel	HP Natural Tracing Paper Natural Tracing Paper Rubber Resistant Natural Tracing Paper < 65gr	Photo Gloss Paper Photo Semi-Gloss/Satin Paper Polypropylene Satin HP Universal Gloss Photo Paper	Transparent/Clear Film Matte Film HP Clear Film HP Matte Film

Table 2-5 Simplified PM Chart 1.2 (continued)

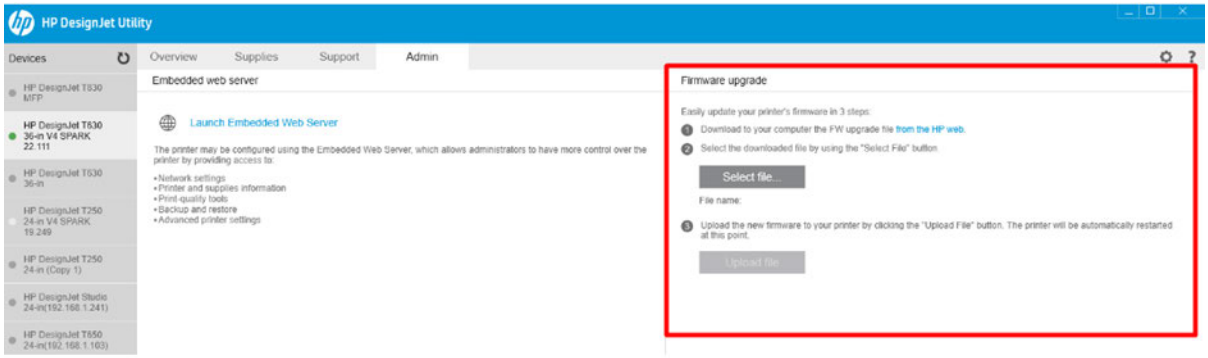
Media Family in Front Panel	Technical Paper	Photo Paper & Adhesive Paper	Film
	Natural Tracing Paper > 65gr	HP Universal Saatin Photo Paper HP Universal Instant-dry Gloss Photo Paper HP Universal Instant-dry Satin Photo Paper Adhesive Polipropylene Gloss HP Everyday Adhesive Gloss Polypropylene	Specal Clear Film High KOD
fast (-2)	1p bidi 30ips	N/A	1p bidi 30ips
econo fast (-1)	1p bidi 30ips	N/A	1p bidi 30ips
normal (0)	K/C: 1p/2pNUA 30ips	8p bidi 20ips	K/C: 1p/2pNUA 30ips
best (+1)	4p L2R 30ips, 40ips retrace	10p L2R 20ips, 40ips retrace	4p L2R 30ips, 40ips retrace
max dpi (+2)	N/A	12p L2R 18ips, 40ips retrace	N/A

Firmware Update

There are various ways to download and install firmware updates. Choose the one you find most convenient.

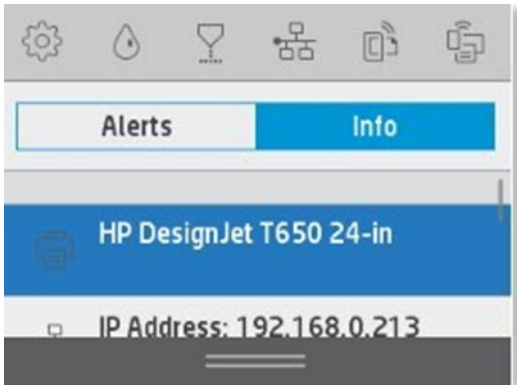
NOTE: A firmware update package can be large; you may want to consider whether there are any implications for your network or Internet connection.

- Using the front panel, tap , then **Printer Maintenance** ► **Update the Printer** ► **Check Now** to check whether new firmware is available. If new firmware is available, you are given the opportunity to download and install it.
- Using the Embedded Web Server, click **Tools** ► **Printer Updates** ► **Firmware Updates** ► **Check Now**.
- Using the HP DesignJet Utility under Windows, select your printer, the Support tab, then **Firmware Update**. Follow the instructions on the screen.



The printer restarts to finish the firmware upgrade, and the printer status report is printed.

Check that the firmware version is the latest from the front panel:



NOTE: The firmware includes a set of the most commonly used paper presets.

3 Support Menus, Diagnostic Plots & Calibrations

This chapter provides a detailed exploration of the Support Menu and the Extended Support Menu, as well as examples of the diagnostic plots that can be printed for calibration purposes.

Support menus

All the service options and utilities under the Support Menu are available to customers under the assistance of an HP call agent.

Entering the support menus

There are two different menus: the Support Menu, for use by customers, and the Service Menu, which is accessible only by service engineers.

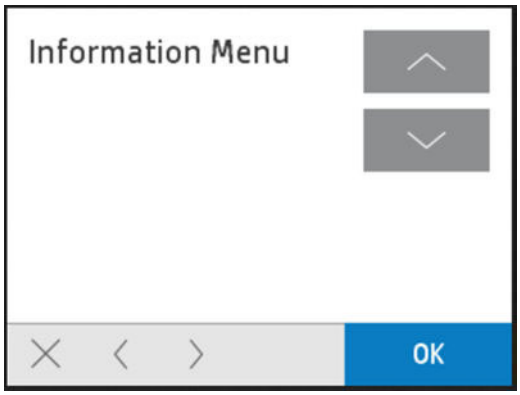
The Support Menu is for customers following instructions by phone assisted by a **call agent** in order to troubleshoot an issue, and/or to access printer information when a customer has contacted HP for assistance. The Service Menu is used by **service engineers** for troubleshooting, diagnosis during repair, calibrations, reset, and accessing printer information during a service operation.

Entering the Support Menu for customers

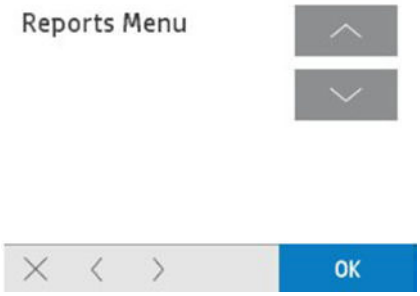
Use the following procedure to enter into the Support menu.

1. The Support Menu for the customer is accessible from the Home screen by pressing: Back / Back / Back / Back. The Support Menu is sometimes also accessible from other screens (for example, from a System Error screen). This menu may not be accessible from inside certain workflows (for example, while clearing a paper jam) or if the printer hangs-up.
2. The following screen will display, select **Support Menu**.

3. The following screen will display:



4. Navigate through the menu using the Up ( ) and Down ( ) arrows in the Front Panel display.



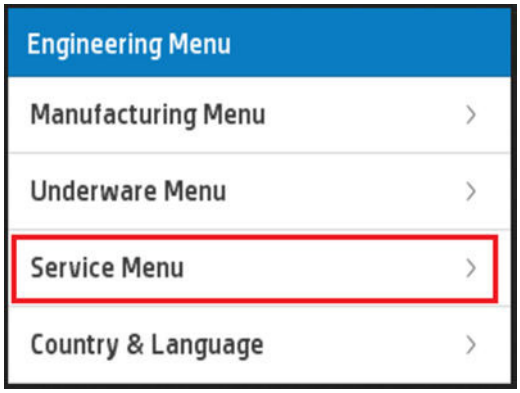
5. To go back to the previous level, use the Cancel ( ) key.

Entering the Service Menu for service engineers

Use the following procedure to enter into the service engineer's Service Menu:

1. The Service menu is only for use by the service engineer, and is accessible from the Home screen pressing home button for 15 seconds.

2. The Service menu can also be accessed by pressing **Home** / **Back** / **Home** / **Home** and selecting the option **Service menu** in the list that appears.



3. The Service Menu is sometimes also accessible from other screens (for example, from a System Error screen). This menu may not be accessible from inside certain workflows (for example, while clearing a paper jam) or if the printer hangs-up.

Support and Service menu trees

Here you will find a complete list of the Support and Service menu options.

Support menu

The following tables present the sub-menu options of the Support menu.

Table 3-1 **Information Menu**

Model number
Serial number
Region/Language
Counters
Firmware version
Assert history
Printer region
Pen supply region
Pen supply serial number (SN)
Pen supply level of ink (LOI)
Relocks remaining
Relock attempts remaining
Gather/Scramble Scheme
Check sum for Relock Data
NHO
IRO

Table 3-1 Information Menu (continued)

Wireless region
SS

Table 3-2 Reset Menu

Country/Language reset
Partial reset
Semi-full reset
OOBE reset

Table 3-3 Systems Configuration Menu

Set boot mode to user mode

Table 3-4 Service Test

Test Carriage
Test Service Station
Test Keys
Test LEDs
Test Display
Printhead rec level 1
Printhead rec level 2
Printhead rec level 3
PHA/IDS Diagnostics
Ink Supplies Report
Nozzle test
Paper Servo
Line Sensor (Zim/Spot)
RTC battery status
Rewinder motor
ARSS Test

Table 3-5 Connectivity Diagnostic Menu

Connectivity Report
Wireless Diagnostic Test
Print Wireless Metrics

Table 3-6 Reports Menu

Printer Status Report
Extended Self Test
Print Quality Report
Print-mech Button Tap
Network Security Page
Counter Report
Error history
Agent assisted image test

Service menu

The following tables present the sub-menu options of the Service menu.

Table 3-7 System Configuration Menu

Enter Ethernet MAC Address
Enter Wireless MAC Address

Table 3-8 Resets Menu

Country & Language Reset
Partial Reset
Semi-full Reset
OOBe reset
PMK 1
PMK 2
Linefeed Mfg Calibration
RTC Battery expired

Table 3-9 Service Test

Test Carriage
Test Service Station
Test Keys
Test LEDs
Test Display
Test Sensors
Cont_print_pick
Infinite H`s Test

Table 3-9 Service Test (continued)

Infinite Color H`s Test
Printhead rec level 1
Printhead rec level 2
Printhead rec level 3
PHA/IDS Diagnostics
Ink Supplies Report
Nozzle test
ByPass Pen Alignment
Paper Servo
Line Sensor (Zim/Spot)
RTC battery status
Rewinder motor
ARSS Test

Table 3-10 Special/Service/Support Reports

Printer Status Report
Extended Self-test
Print Quality Report
Network Security Page
Counter
Print-Mech Button Tap
Error History
Agent Assisted Image Test

Service Menu

This section contains a detailed breakdown of the Service Menu options.

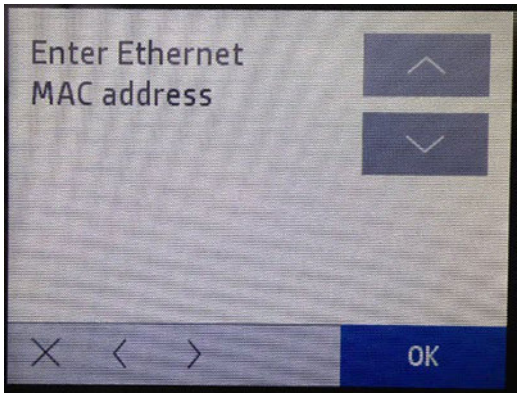
System Configuration

This menu contains items to set up the ethernet and wireless MAC address.

Enter Ethernet MAC Address

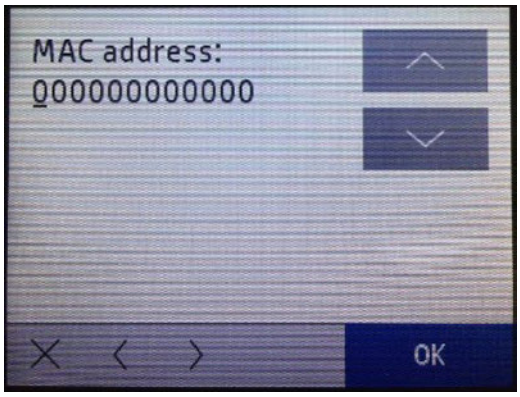
This item lets you modify the Printer's Ethernet MAC Address through the main button: [top, low, left, and right keys].

Once you modify it, the number will be changed regardless of whether you cancel or continue.



NOTE: Use this item when the Ethernet MAC address is lost, or when you see every digit is set to zero.

TIP: If the MAC address was not set, navigate to **Setup > Network Setup > Restore Network Settings** to set the MAC address to default.

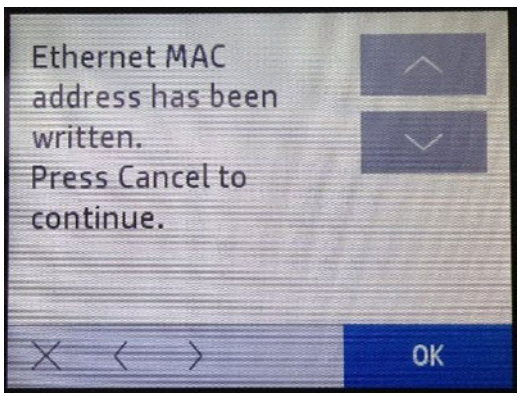


The diagnostic allows you to write 12 digits. You do not need to write any dots (.) or dashes (-), only letters or numbers. In order to set-up the new MAC Address, use the top, bottom, left, and right keys.

Here is an example of an Ethernet MAC Address: **B8-BB-DA-BA-DB-AD**

To correctly enter this address, you would input: **B8BBDABADBAD**

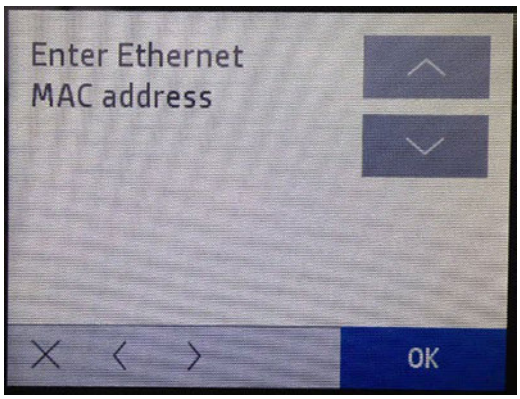
Once you finish, press the **OK** button and you will see the screen below:



Enter Wireless MAC Address

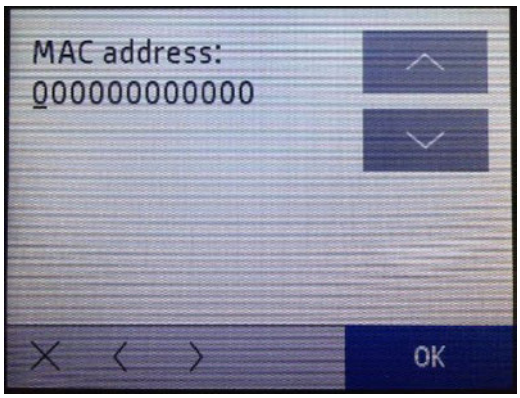
This item lets you modify the Printer's Wireless MAC Address through the main button: [top, low, left, and right keys].

Once you modify it, the number will be changed regardless of whether you cancel or continue.



NOTE: Use this item when the Wireless MAC address is lost, or when you see every digit is set to zero.

TIP: If the MAC address was not set, navigate to **Setup > Network Setup > Restore Network Settings** to set the MAC address to default.

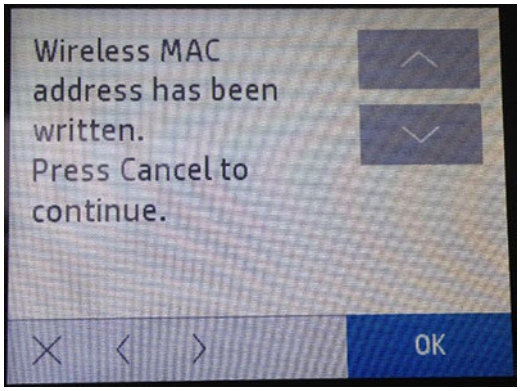


The diagnostic allows you to write 12 digits. You do not need to write any dots (.) or dashes (-), only letters or numbers. In order to set-up the new MAC Address, use the top, bottom, left, and right keys.

Here is an example of an Ethernet MAC Address: **B8-BB-DA-BA-DB-AD**

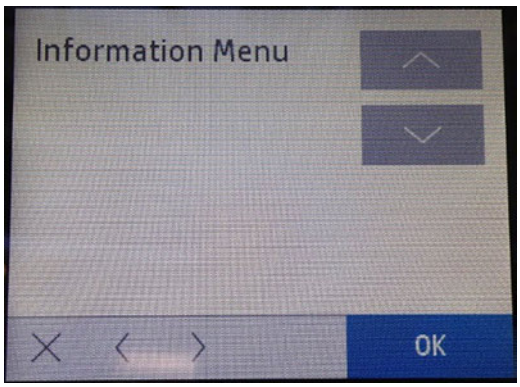
To correctly enter this address, you would input: **B8BBDABADBAD**

Once you finish, press the **OK** button and you will see the screen below:



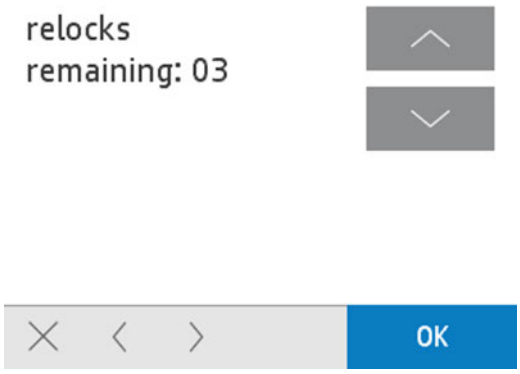
Information menu

This menu has several items which give you information about printer, cartridges, connections and printer's components status.



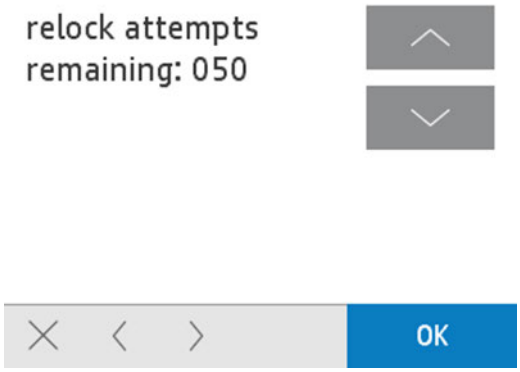
Relocks remaining

This test is only used for manufacturing purposes.



Relock attempts remaining

This test is only used for manufacturing purposes.

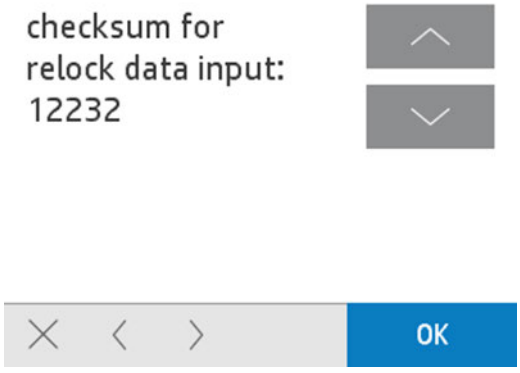


Gather/Scramble Scheme

This test is only used for manufacturing purposes.

Checksum for Relock Data

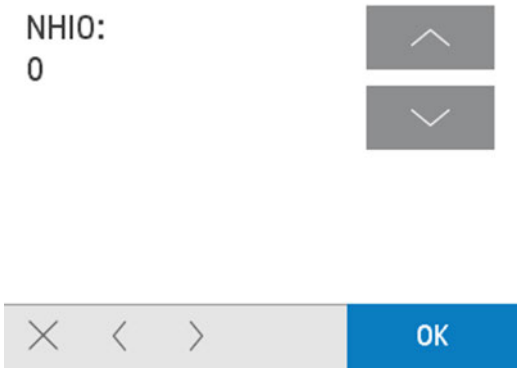
This test is only used for manufacturing purposes.



NIHO

This test shows whether a non-HP cartridge has been installed in the printer.

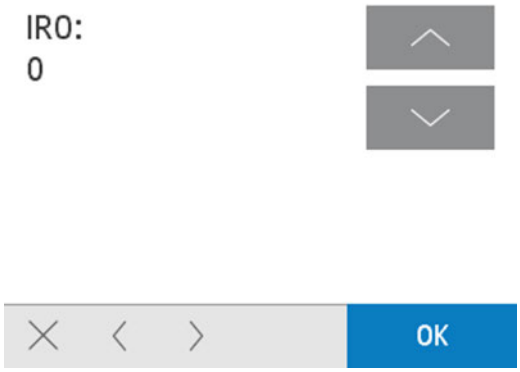
0 means the cartridge is an original HP supply, 1 means it is a cloned cartridge.



IRO

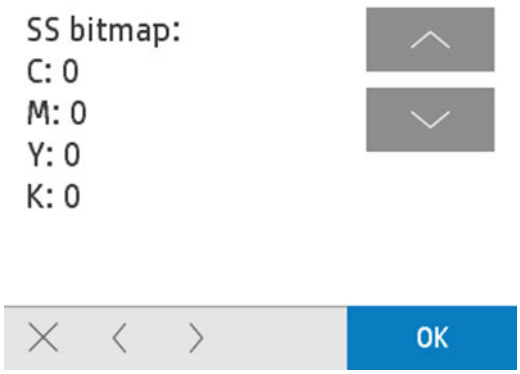
This test shows whether an altered cartridge (refilled) has been installed in the printer.

0 means the cartridge has not been altered, 1 means it has.



SS

This test is only used for manufacturing purposes.



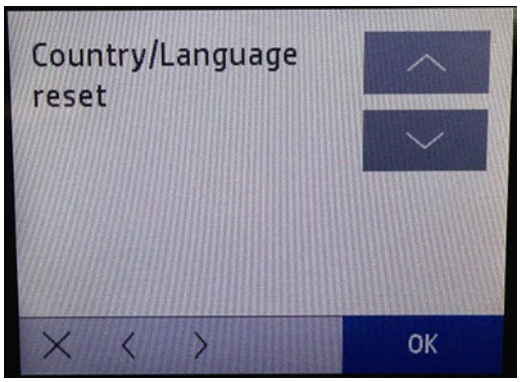
Resets Menu

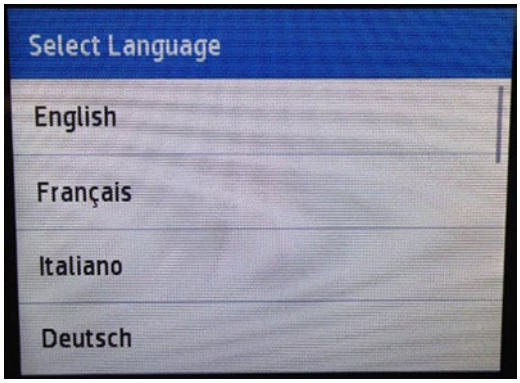
This menu has several items which let you reset printer characteristics to default. The printer will turn off after executing each one of these items.

Country/Language reset

Erases country and language settings.

When selected, the printer will shut down and restart. When it boots up, the printer asks for selecting “Language” and “Country”.





Partial reset

This test performs a partial reset of the printer to factory defaults.

After its execution, user will be prompted to reconfigure some settings (country, language, etc.).

Semi-full reset

This test performs a semi-full reset of the printer to factory defaults (more extensive than a partial reset, less than an OOBE reset).

After its execution, users will be prompted to reconfigure some settings (country, language, etc.).

OOBE reset

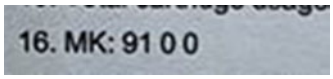
This test resets the printer to factory defaults and starts the out of the box experience.

⚠ CAUTION: Do not perform this reset as an initial tool for troubleshooting purposes when printer is not in good condition. The printer can go to an unexpected state (showing the HP logo or a Blue screen). Please check the front panel message to determine the standard corrective action.

PMK1 reset

Use this option to reset the counters after installing the Print Maintenance Kit 1 or if replacing the Carriage Assembly/Carriage Belt/Cutter/Encoder Strip.

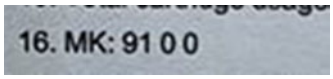
NOTE: To check the status of PMK1, print the Printer Status Report. Check the row 16 “MK”, the first 2 numbers that appear are the % for the PMK1 and PMK2.



PMK2 reset

Use this option to reset the counters after installing the Print Maintenance Kit 2 or if replacing the Service Station.

NOTE: To check the status of PMK1, print the Printer Status Report. Check the row 16 “MK”, the first 2 numbers that appear are the % for the PMK1 and PMK2.



RTC Battery expired

Use this option to reset the RTC battery flag after replacing the RTC battery.

Service Test

This menu provides access to extensive service testing options.

Test Carriage

Select this test to check if the carriage moves correctly.

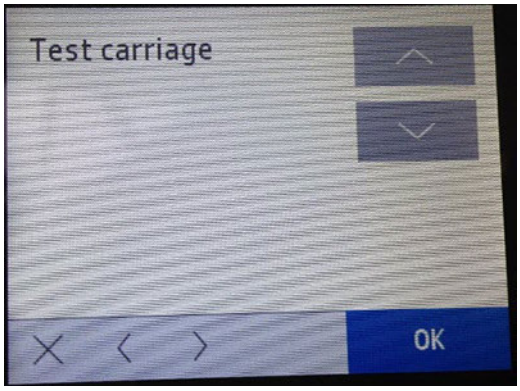
The carriage will reproduce several moves getting out from the service station, depending on how many cycles you set (from 0 until 65535 cycles).

Associated errors

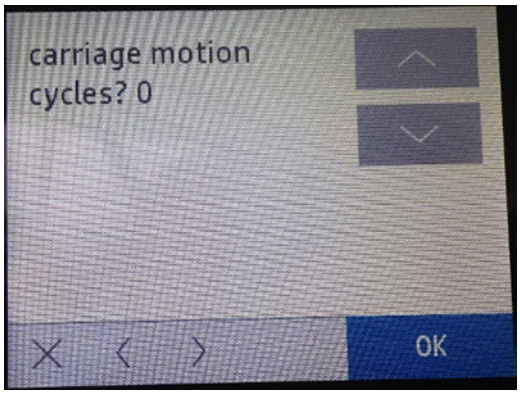
When the following errors occur in the printer, this diagnostics procedure must be performed:

- System error 0042-0017
- Paper jam error

1. Navigate to **Support menu > Service Test > Test carriage** and then press **OK**.

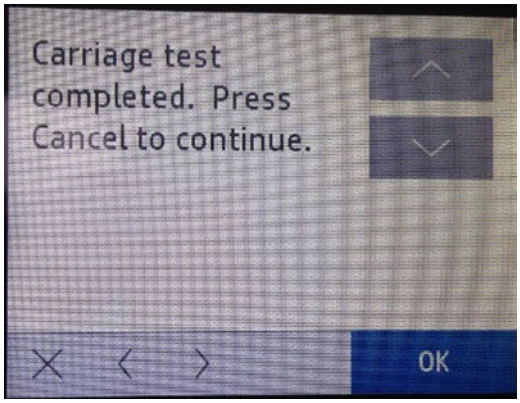


2. At the following screen you can set up the number of cycles the carriage will perform (from 0 to 65535 cycles). The movement does not complete the entire SCAN AXIS, just checks that the carriage can move properly.



NOTE: If any issue is found during the diagnostic performance, please reboot the printer and a system error will prompt during the restart.

3. Once the test finishes, if everything it is okay, you will see the following screen. Press **Cancel** in order to go back to the main menu or **Continue** to perform the test again.



Test Service Station

Select this test to check if the service station moves correctly.

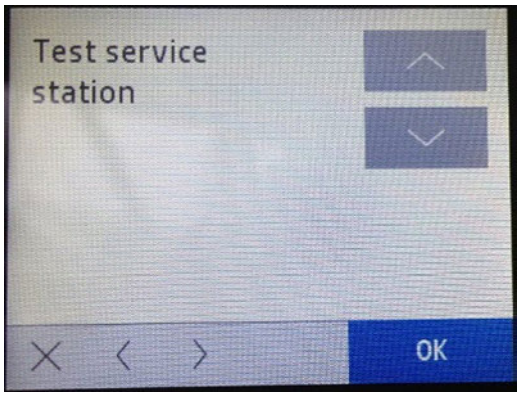
The service station will reproduce several moves completing a bump to bump, depending on how many cycles you set (from 0 until 65535 cycles).

Associated errors

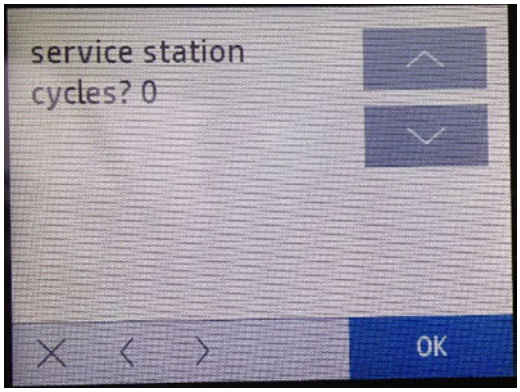
When the following errors occur in the printer, this diagnostics procedure must be performed:

- System error 0021-0017
- System error 0042-0017
- Paper jam error

1. Navigate to **Support menu > Service Test > Test service station** and then press **OK**.

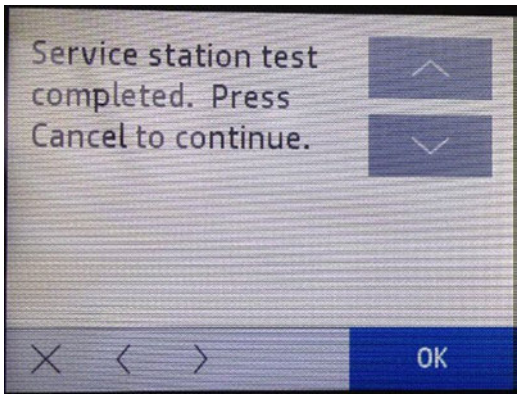


2. At the following screen you can set up the number of cycles the carriage will perform (from 0 to 65535 cycles). The movement completes the entire service station's stroke, in order to check that the service station can move properly.



NOTE: If any issue is found during the diagnostic performance, please reboot the printer and a system error will prompt during the restart.

3. Once the test finishes, if everything it is okay, you will see the following screen. Press **Cancel** in order to go back to the main menu or **Continue** to perform the test again.



Test Keys

This test verifies the functioning of all the keys in the Front Panel frame: Home, Help, Back, and the Power key located on the back of the Front Panel side.

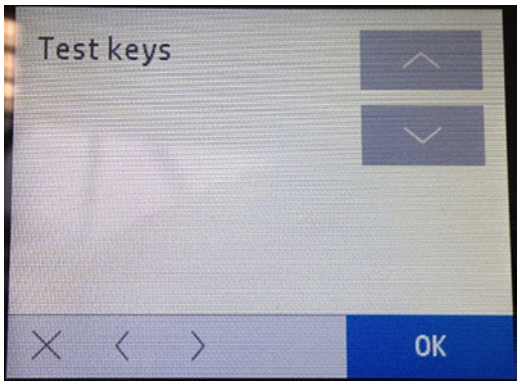
When this test is done you are asked to press these keys one by one to check whether any are damaged.

Associated errors

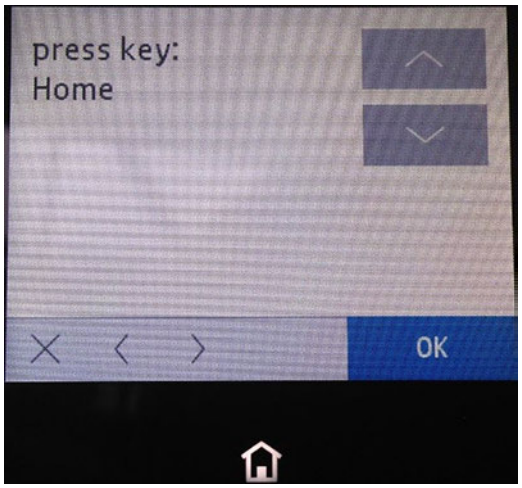
When the following error occurs in the printer, this diagnostics procedure must be performed:

- One or more keys are unresponsive.

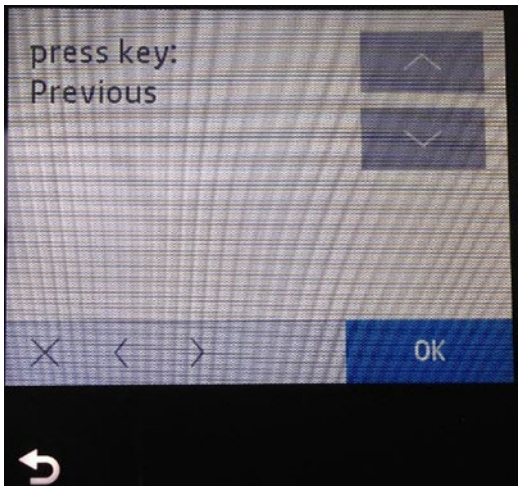
1. Navigate to **Support menu > Service Test > Test keys** and then press **OK**.

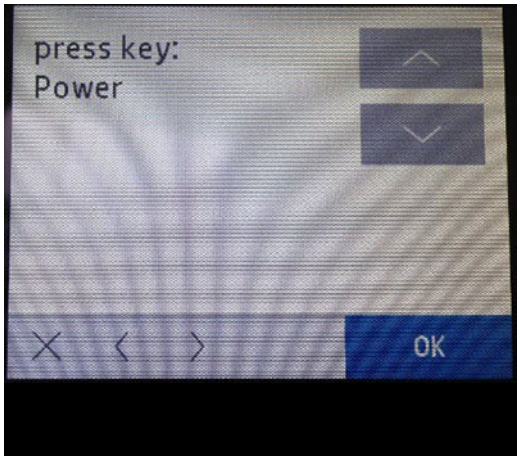


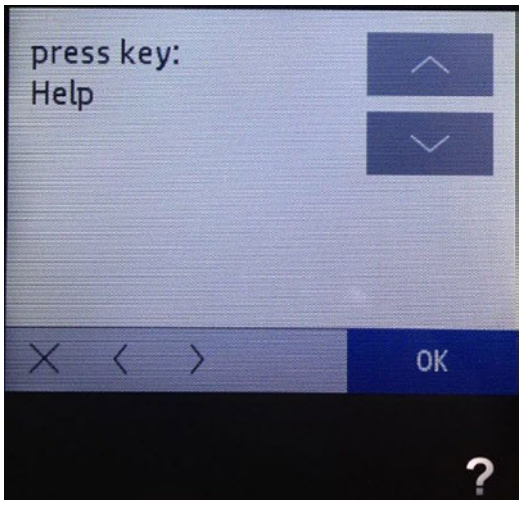
2. The following screen will display:



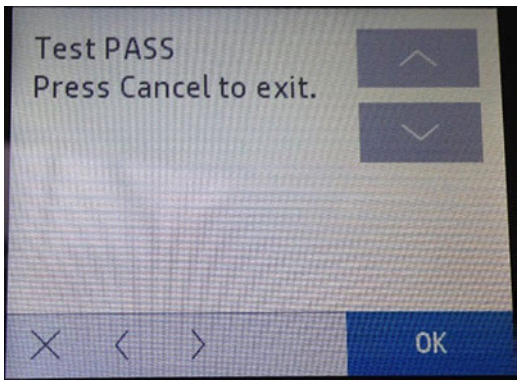
3. Check the Home key is on (the icon should be illuminated), press this key and then one by one through all the keys. The last one is the Help key. The screens below will appear in the following order:

- 

- 

- 

4. 4. If you press all the keys and they work correctly you will see:



5. If any key does not work, the diagnostic will not pass to the next key, and will stay always in the screen of the failing key therefore the front panel should be changed. To recover the printer, restart it by switching it off and on with the power key.

Test LEDs

This test verifies all the keys' LEDs in the Front Panel frame: Home, Help, and Back.

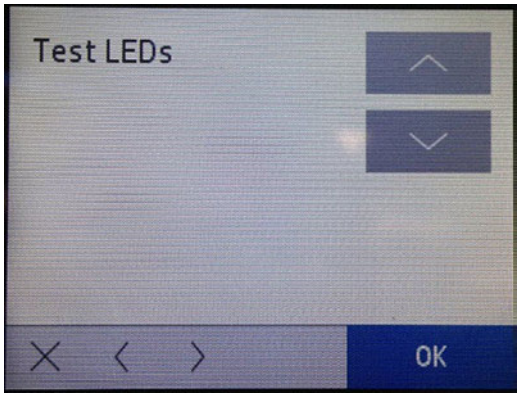
When this test is done you are asked to press the **OK** key one by one to check whether any are damaged.

Associated errors

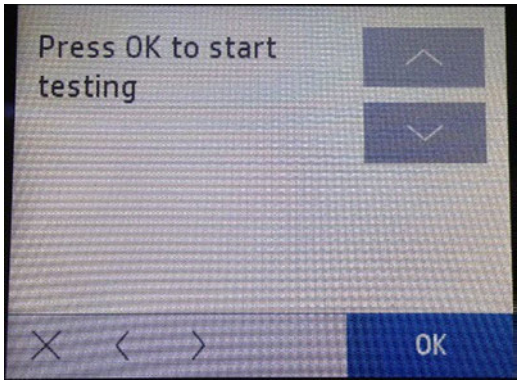
When the following error occurs in the printer, this diagnostics procedure must be performed:

- One or more keys are not shining.

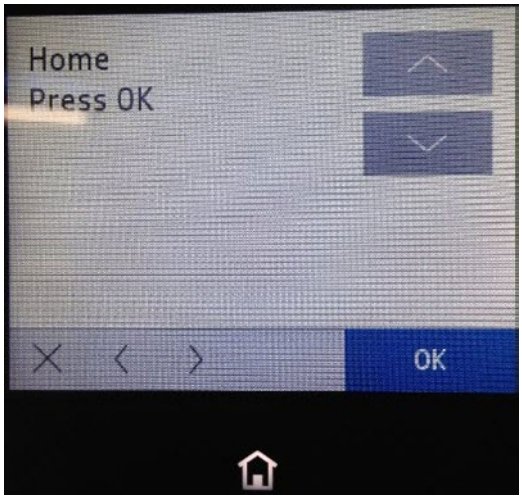
1. Navigate to **Support menu > Service Test > Test LEDs** and then press **OK**.

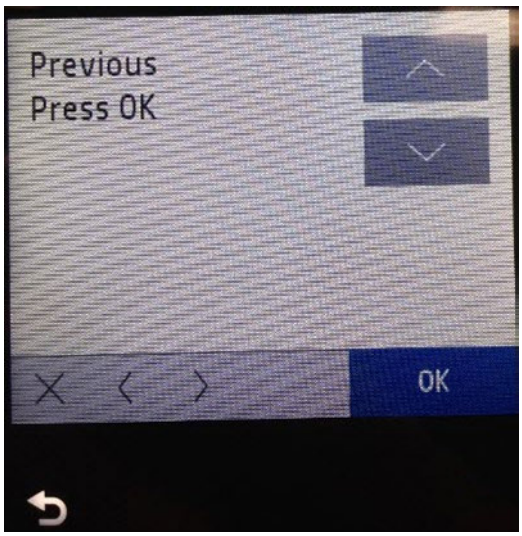


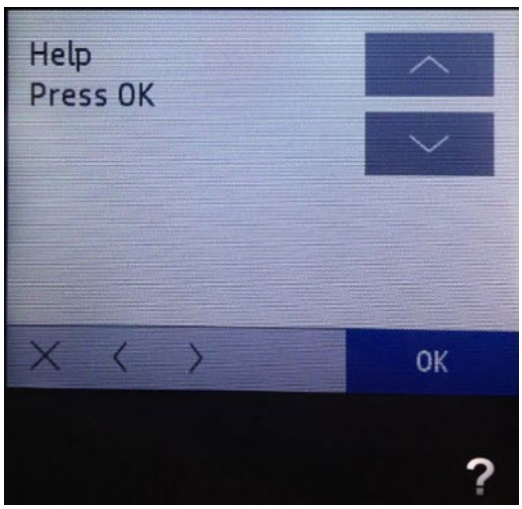
2. The following screen will display, press **OK** in order to start the test.



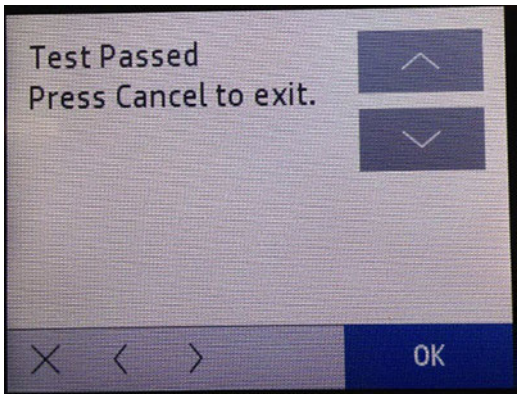
3. Check the **Home** key LED is on (the icon should be illuminated), then press **OK**. Go through the other keys one by one to check their LED functionality. The last one is the **Help** LED. The screens will appear in the following order:

- 

- 

- 

4. If you press all the keys and they work correctly you will see the following:



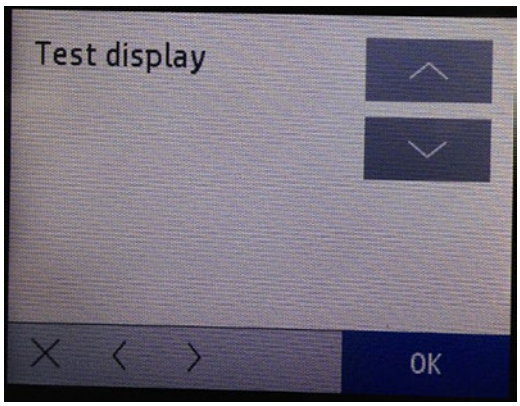
Test Display

This test verifies that the Front Panel display works properly.

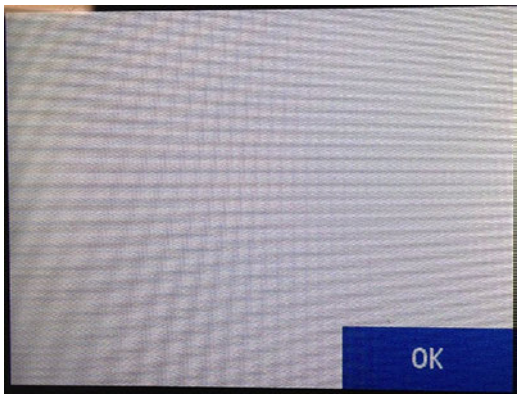
Associated errors

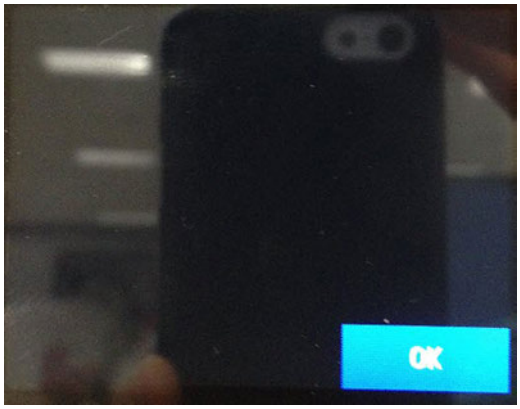
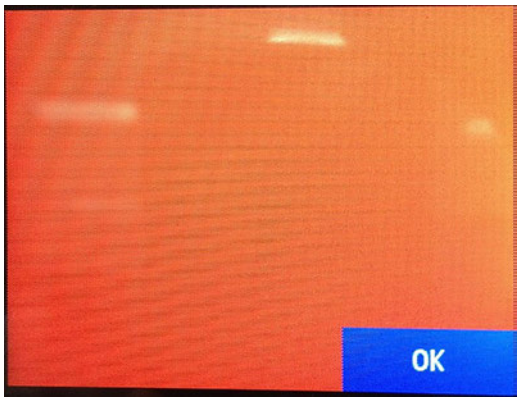
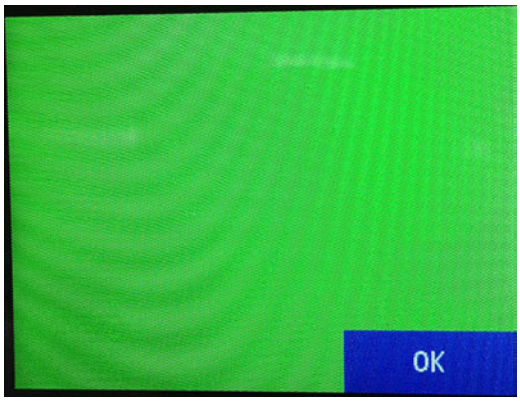
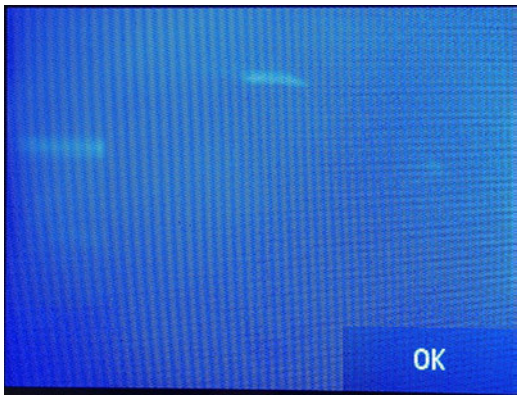
There is no specific error associated with a failure of some pixels or the backlight of the Front Panel. This diagnostic should be run when you want to check if the front panel display is okay, or if the Front Panel does not respond.

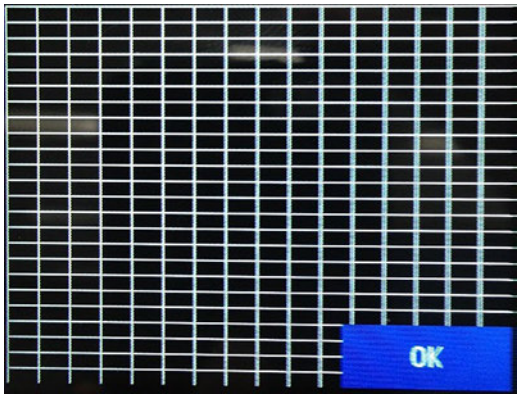
1. Navigate to **Support menu > Service Test > Test display** and then press **OK**.



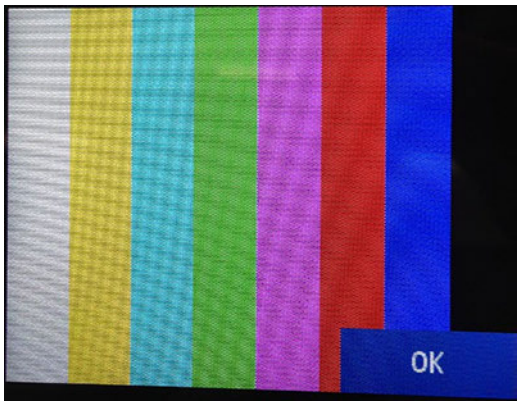
2. The test will display the following screens, press **OK** in order to continue through the test. Each time **OK** is pressed, the display color will change.

- 

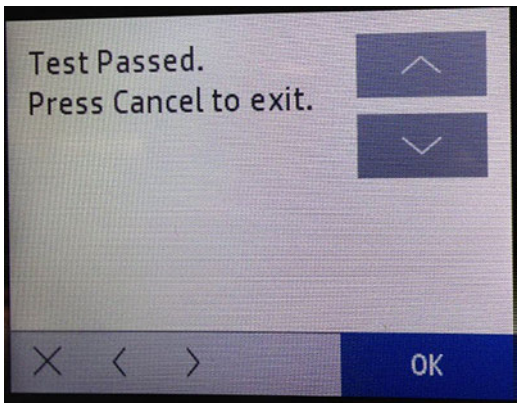
- 
OK
- 
OK
- 
OK
- 
OK

- 

-

- 

3. Once the test is finished you will see the screen below:



Cont_print_pick

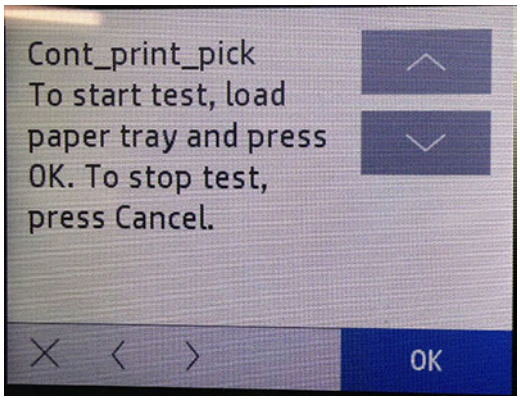
This test prints infinite plots with marked with 4 dots (2 dots on the left side and 2 dots in the right side of the paper).

Associated errors

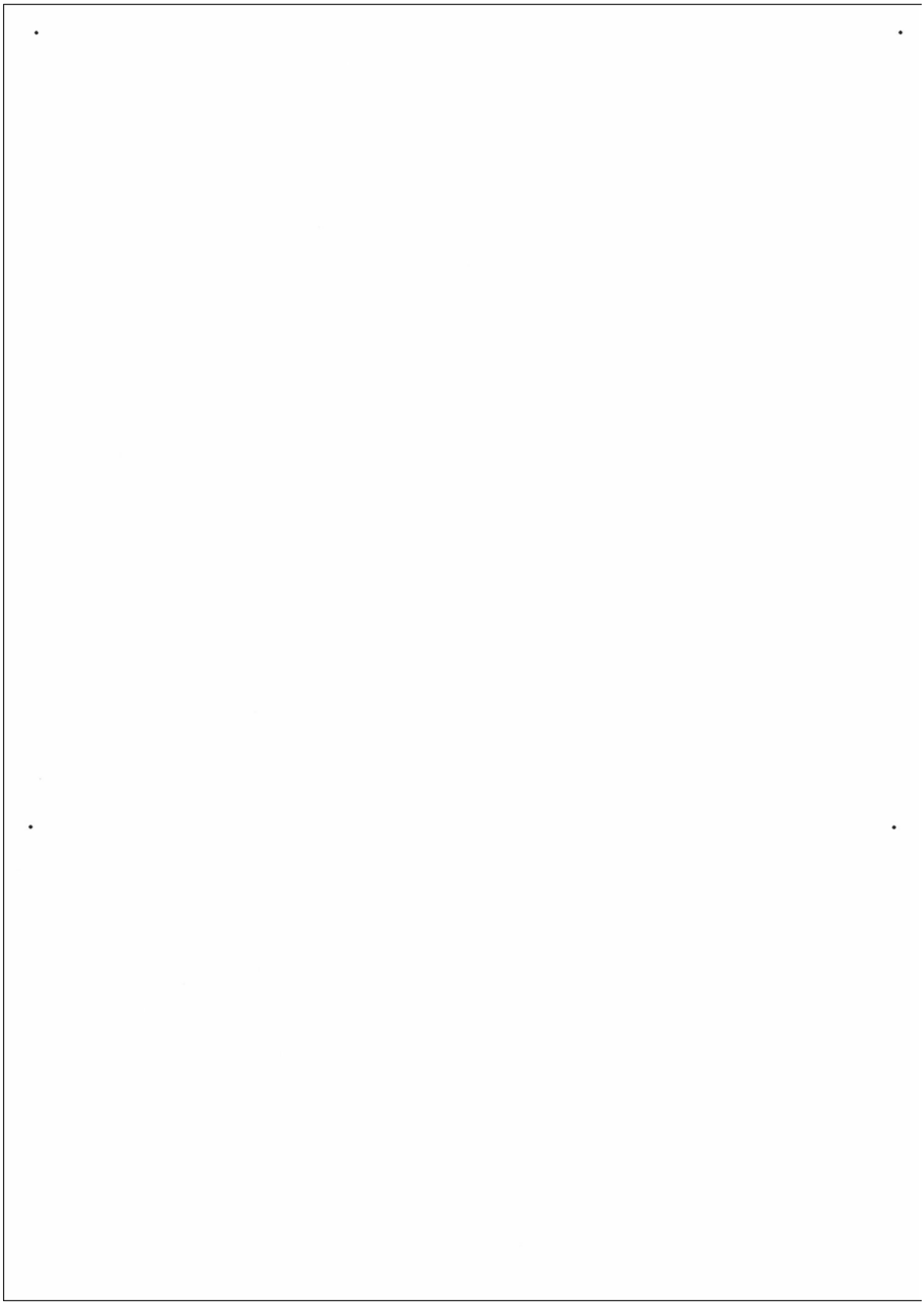
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- Use it to check the media paper advance.
- Use it to check the skew paper.

1. Navigate to **Support menu > Service Test > Cont_print_pick** and then press **OK**.



2. The printed report is the following. Press **Cancel** when you would like to stop printing plots.



Infinite H's Test

This test prints infinite plots filled with black H's.

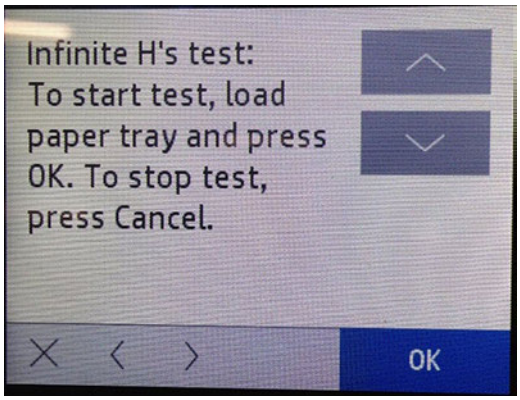
Use it to see the print quality in order to know if the printer needs calibrations, printhead cleaning, or purges.

Associated errors

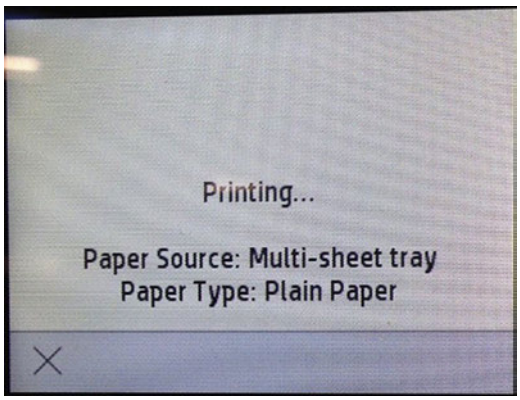
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

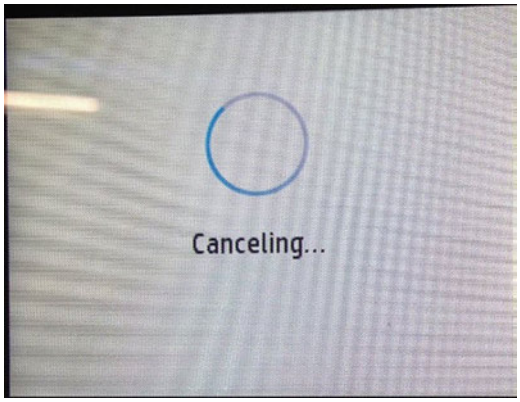
- Use it to check the paper media advance calibration is correct.
- Use it to check the printhead calibrations quality.

1. Navigate to **Support menu > Service Test > Infinite H's Test** and then press **OK**.

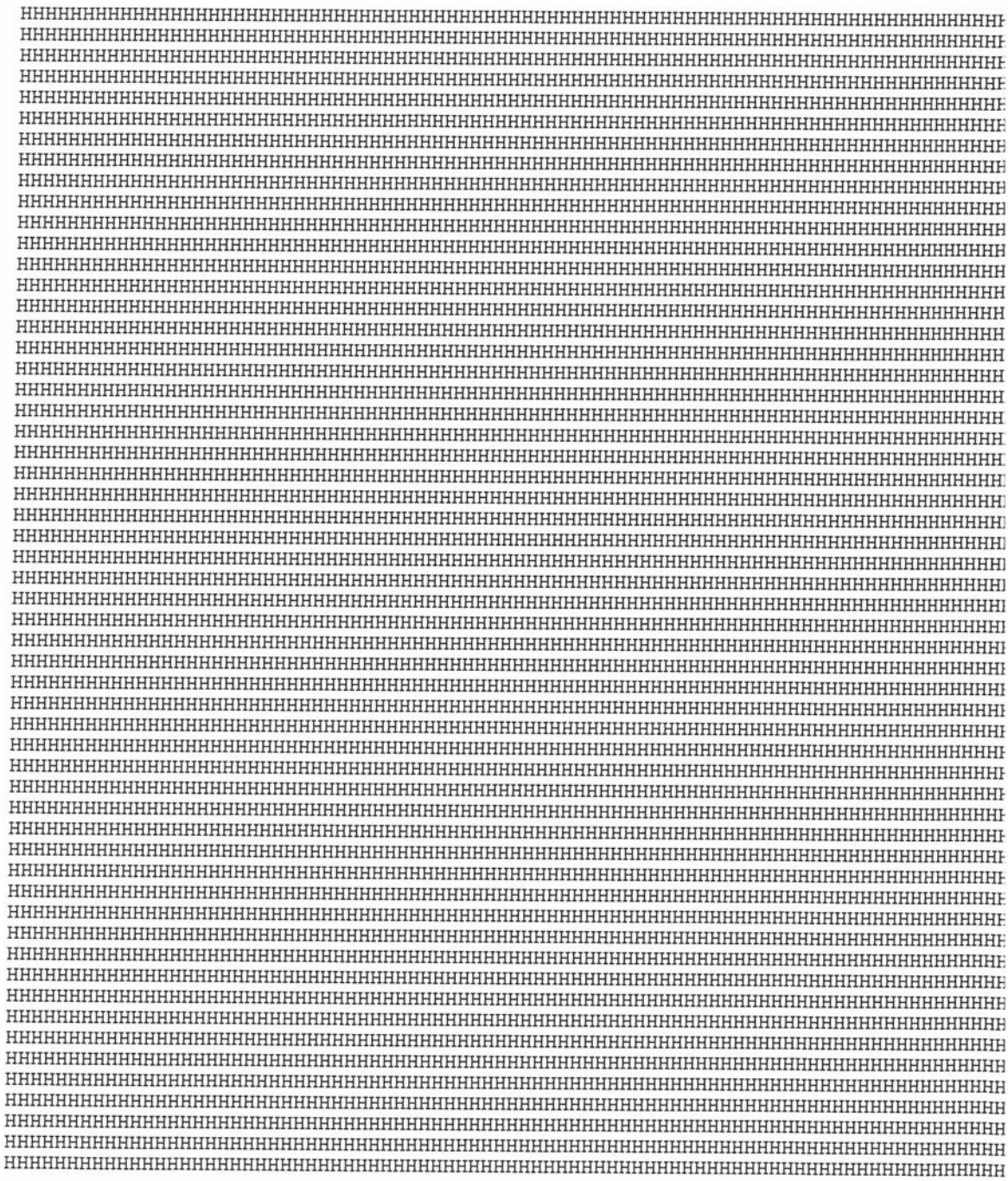


2. Press **Cancel** button when you would like to stop printing plots.

- 

- 

The printed report is the following. Press **Cancel** button when you would like to stop printing plots.



Infinite Color H's Test

This test prints infinite plots filled with H's in color (black, magenta, yellow and cyan).

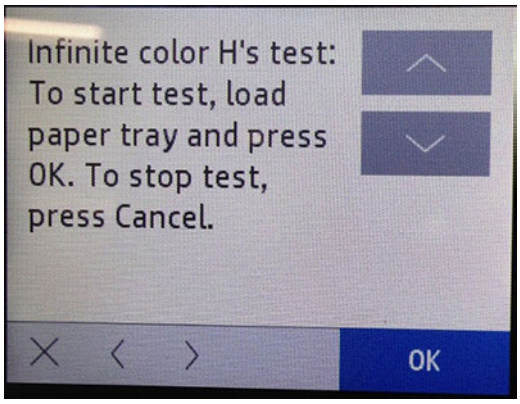
Use it to see the print quality in order to know if the printer needs calibrations, printhead cleaning, or purges.

Associated errors

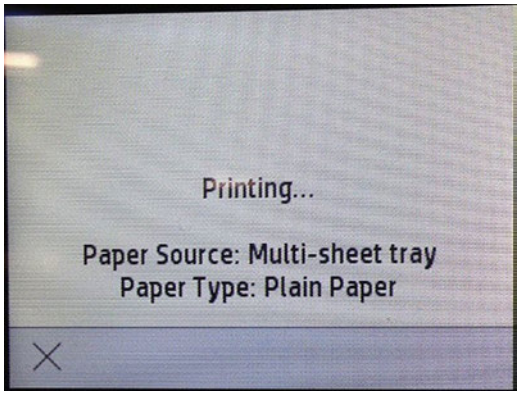
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

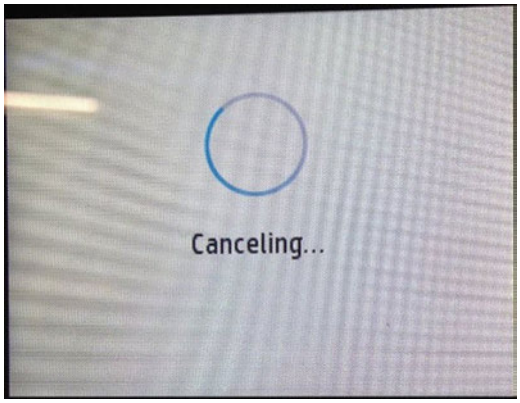
- Use it to check the paper media advance calibration is correct.
- Use it to check the printhead calibrations quality.

1. Navigate to **Support menu > Service Test > Infinite color H's Test** and then press **OK**.

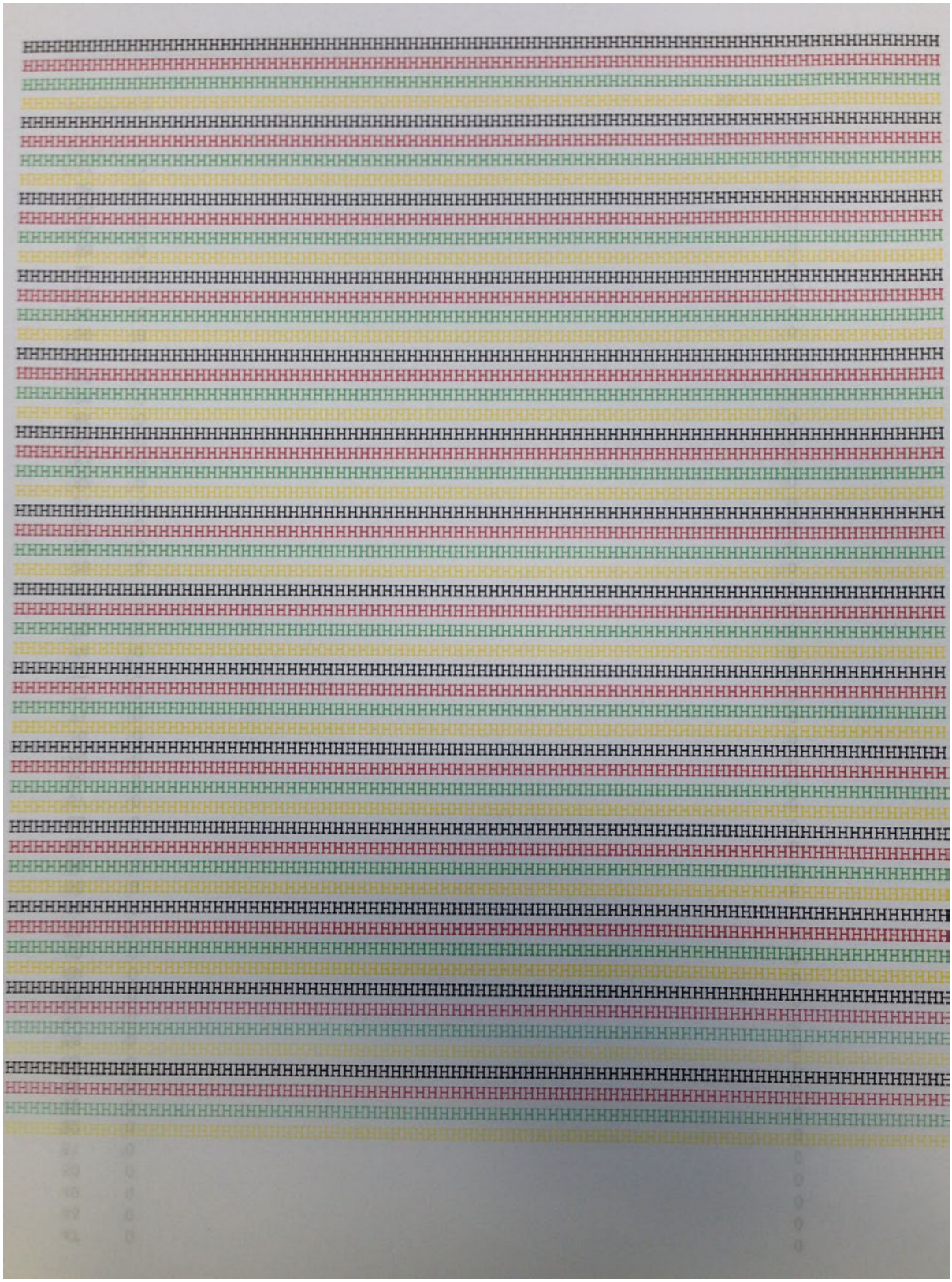


2. Press **Cancel** button when you would like to stop printing plots.



- 

The printed report is the following:



Print head rec level 1

This test is used to clear the printhead, spitting several times with a soft strength.

This test consumes a low quantity of ink, diminishing the cartridges levels a little bit.

Associated errors

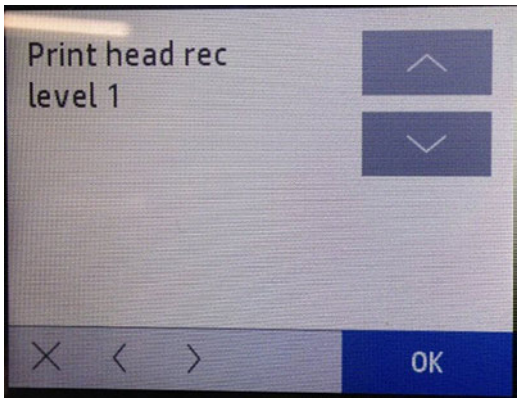
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- Use it when the plot quality is low even when calibrations have been performed.
- When some of the main colors were missing in plots (Printhead's dies are blocked).

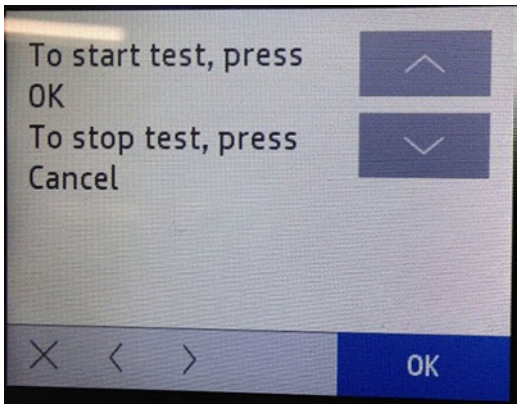
TIP: Before using the upper levels of **Print head rec** diagnostic, first try the lower one, then print in order to check whether it was enough or not. If you do not see any improvement, go to the diagnostic's next levels.

NOTE: Expends a moderate amount of cartridge ink.

1. Navigate to **Support menu > Service Test > Print head rec level 1** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



3. When the test is finished it automatically goes to the menu.

Print head rec level 2

This test is used to clear the printhead, spitting several times with a medium strength.

This test consumes a moderate quantity of ink, diminishing the cartridges levels.

Associated errors

When any of the following errors occur in the printer, this diagnostics procedure must be performed:

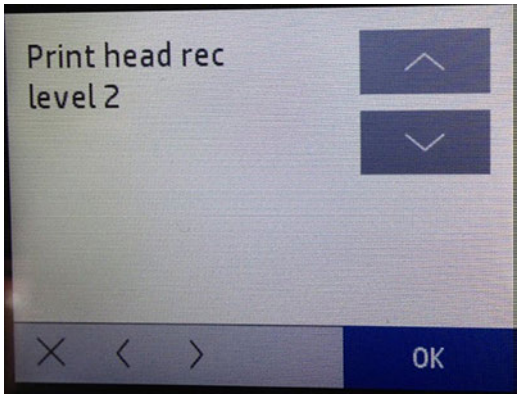
- Use it when the plot quality is low even when calibrations have been performed.
- When some of the main colors were missing in plots (Printhead's dies are blocked).

TIP: Before using the upper levels of **Print head rec** diagnostic, first try the lower one, then print in order to check whether it was enough or not. If you do not see any improvement, go to the diagnostic's next levels.

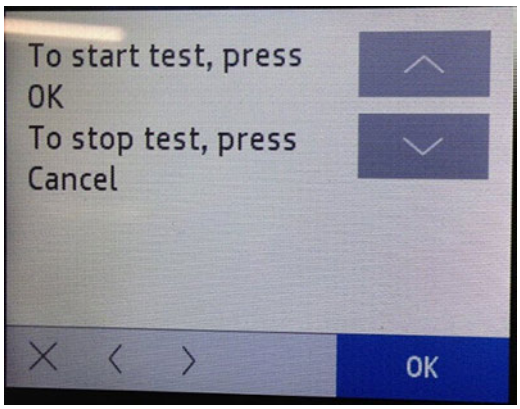
NOTE: Use only if you have performed **Print head rec level 1** without seeing any improvement.

NOTE: Expends a high amount of cartridge ink.

1. Navigate to **Support menu** > **Service Test** > **Print head rec level 2** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



3. When the test is finished it automatically goes to the menu.

Print head rec level 3

This test is used to clear the printhead, spitting several times with a hard strength.

This test consumes a high quantity of ink, diminishing the cartridges levels very much.

Associated errors

When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- Use it when the plot quality is low even when calibrations have been performed.

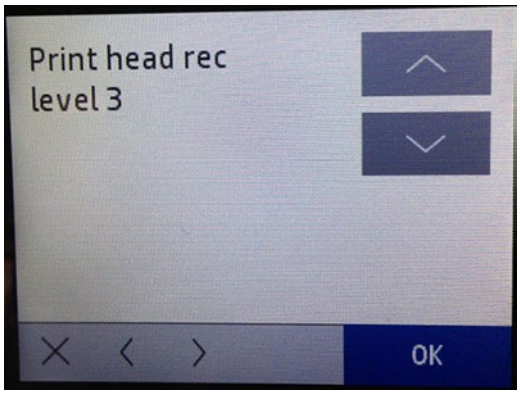
- When some of the main colors were missing in plots (Printhead's dies are blocked).

TIP: Before using the upper levels of **Print head rec** diagnostic, first try the lower one, then print in order to check whether it was enough or not. If you do not see any improvement, go to the diagnostic's next levels.

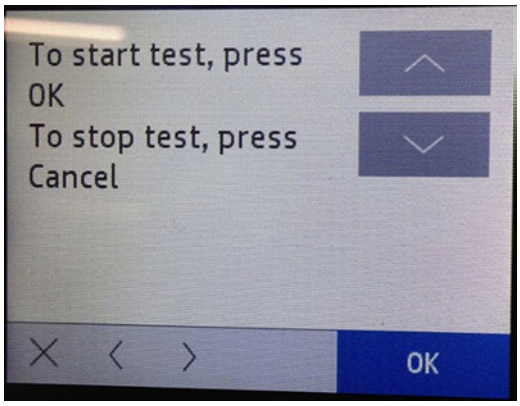
NOTE: Use only if you have performed **Print head rec level 1** and **2** without seeing any improvement.

NOTE: Expends a high amount of cartridge ink, between **15% and 20% of the cartridge's total ink level**. Take care to have additional cartridges available in case performing the test consumes the current cartridge entirely.

1. Navigate to **Support menu** > **Service Test** > **Print head rec level 3** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



3. When the test is finished it automatically goes to the menu.

PHA/IDS Diagnostics

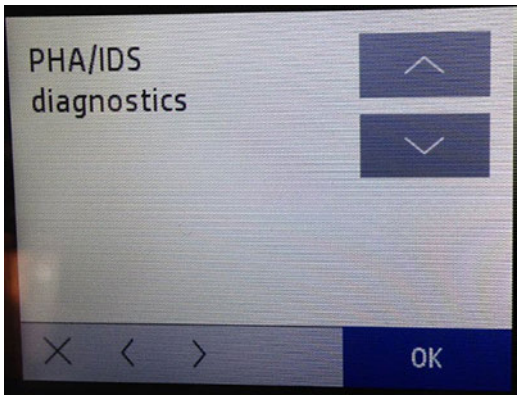
This test prints a printhead health pattern in order to show possible wrong calibrations or printhead errors.

Associated errors

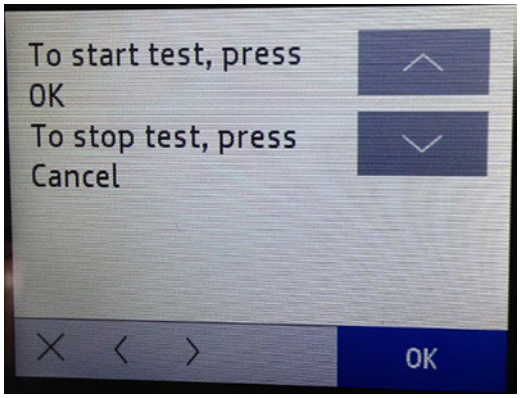
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- Use it to check the plot quality.
- Use it after calibrating the printhead to check the results.

1. Navigate to **Support menu > Service Test > PHA/IDS diagnostics** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



The printed report is as follows:

Ink Supplies Report

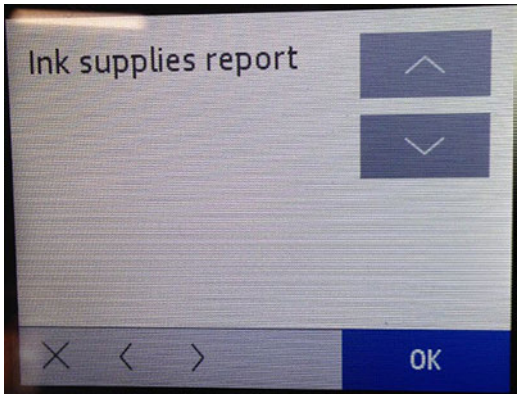
This test prints a report on the ink supplies information.

Associated errors

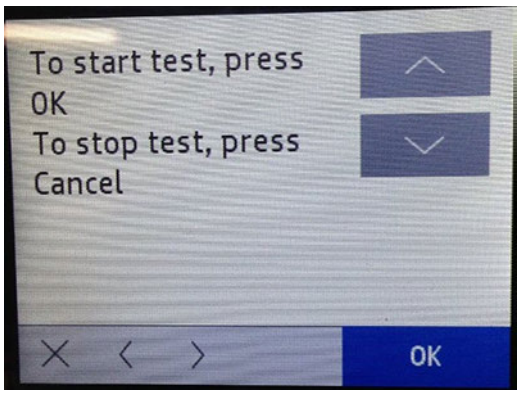
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

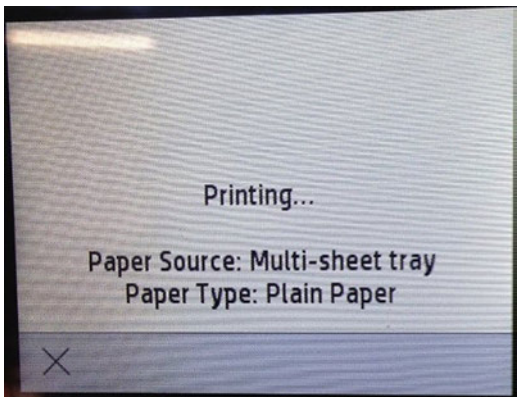
- Use it to check the plot quality.
- Use it after calibrating the printhead to check the results.

1. Navigate to **Support menu > Service Test > Ink supplies report** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.

- 

- 

The printed report is as follows:

Ink Supply Report

Color	Status	Error	
YELLOW	0x00010100	0	(REJECTION_REASON_NONE)
MAGENTA	0x00010100	0	(REJECTION_REASON_NONE)
CYAN	0x00010100	0	(REJECTION_REASON_NONE)
BLACK	0x00010100	0	(REJECTION_REASON_NONE)

Error History (newest on top):

	Error	Data	Epoch_Time	Sec_Since	
0	YELLOW 4	0	1571812737	1928186	REJECTION_REASON_CHECK_PRESENT_DEVICE_ABSENT
1	YELLOW 52	3	1571812736	1928187	REJECTION_REASON_LISCB_DEV_ABS

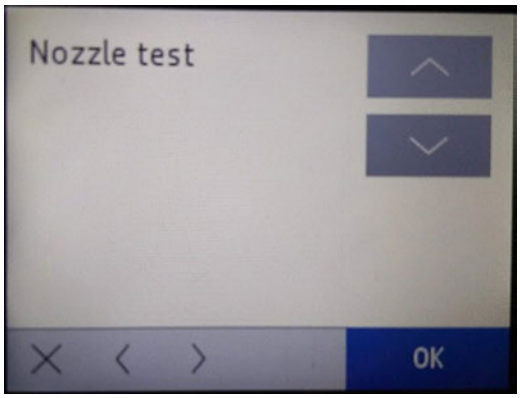
YELLOW MAGENTA CYAN BLACK

Nozzle Test

Prints the nozzle health pattern.

While performing this test, paper is needed in the Multi-sheet tray. Also, it is required to be an A4 or Letter Size paper, otherwise there will be a paper size mismatch message. There will be the option to print anyway.

▲ Navigate to **Support menu > Service Test > Nozzle test** and then press **OK**.

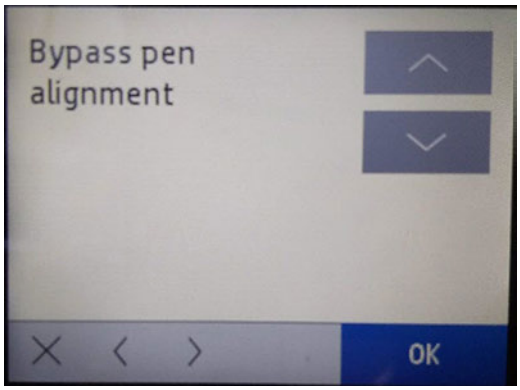


The printed report is as follows:

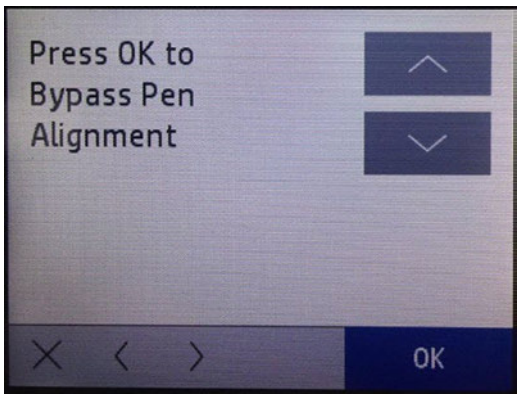
Bypass Pen Alignment

Skips printhead alignment during start up or printhead replacement. This can be useful for some troubleshooting.

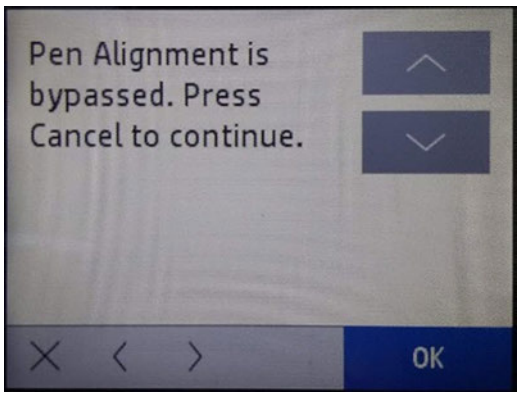
1. Navigate to **Support menu > Service Test > Bypass pen alignment** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



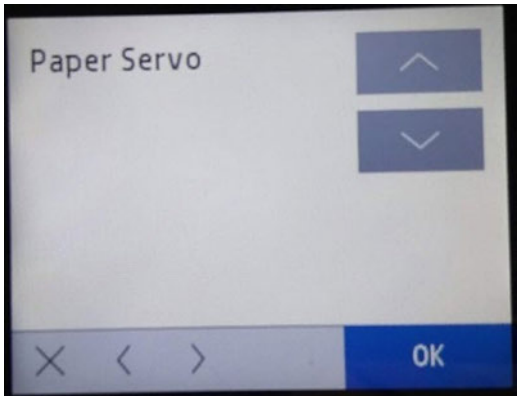
3. The following screen will be displayed. The Pen Alignment is bypassed now. Press **Cancel** to continue and go back to the main menu.



Paper Servo

This test verifies all the components associated with the Paper Servo Subsystem: Paper Motor, Feed Encoder Disk, Feed Encoder PCA, and Index Encoder PCA.

When the test is done, the feed roller is moved a small distance in both directions in order to check that all the components work properly or demonstrate if any are damaged.

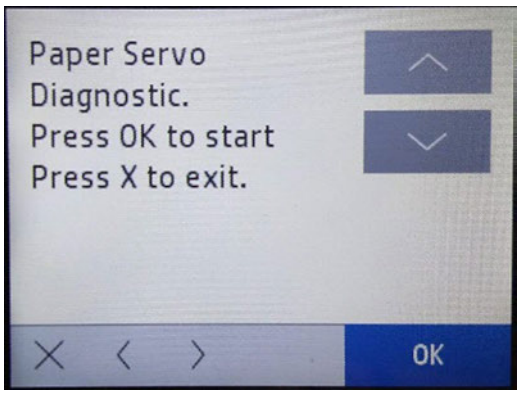


Associated errors

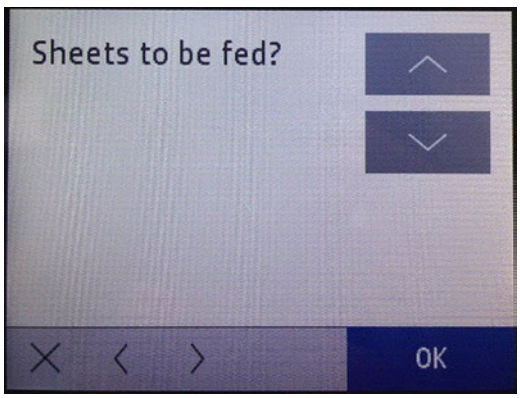
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- System error 0041-0017.
- Paper jam error.

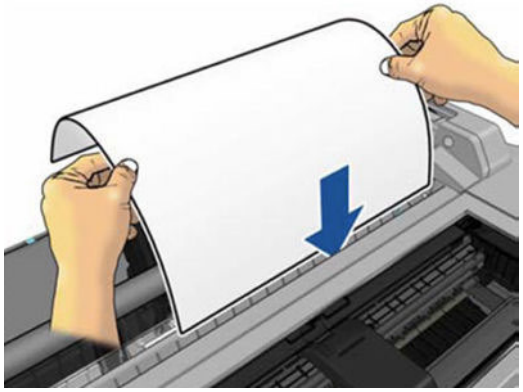
1. Navigate to **Support menu > Service Test > Paper Servo** and then press **OK**.



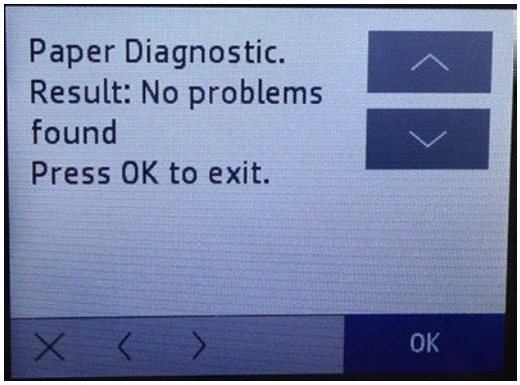
2. Take care that the multi sheet tray is properly connected and load A4 paper. Roll paper could also work!



TIP: If there is no roll paper loaded and in order to check easily if the feed roller is moving or not, you can introduce a paper sheet into the top input slot (where single sheets are loaded, see the following image). If the feed roller moves correctly you will see the paper moving up and down.



3. The feed roller will be moved a bit in both directions. If everything is fine, the following screen will be displayed:



4. If any issue is found one of these system errors should prompt: 0041-0017, 0085-0101, 0085-0201.

Line Sensor (Zim/Spot)

This test verifies the Line Sensor.

When this test is done you will be asked to load paper into the Multi-Sheet Tray in order to check that the sensor is not damaged.

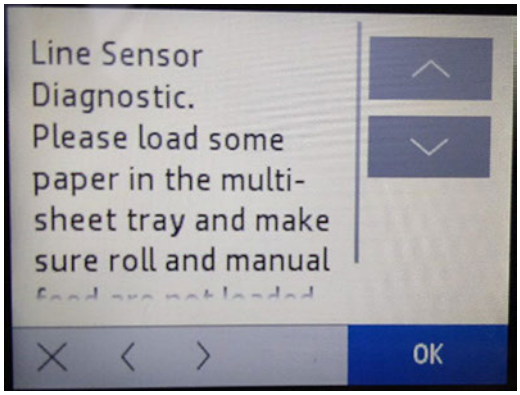
Associated errors

When the following error occurs in the printer, this diagnostics procedure must be performed:

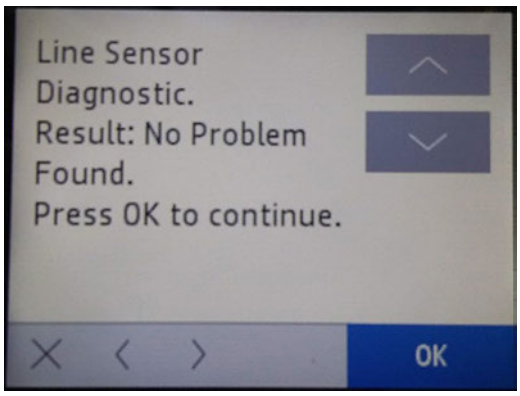
- The printer is unable to complete the load because it cannot detect the paper.

1. Navigate to **Support menu > Service Test > Line Sensor (Zim/Spot)** and then press **OK**.

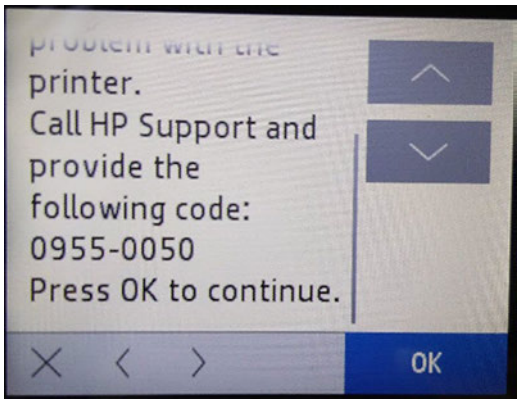
2. The following screen will be displayed, press OK again to start the test.



3. Check that there is paper in the Multi-Sheet Tray and the roll is unloaded and press OK. Then one sheet will be loaded to perform the test. If the test is correctly done you will hear 3 beeps, and the paper will be unloaded to finish the test, and the following will be displayed:



4. If the sensor is not working properly (broken, dirty or disconnected) the system error 0955-0050 will appear. The Line Sensor should be replaced. If the test fails, the screen below will be prompted.



5. If the test fails, check that there is no paper jam preventing the sheet loading process. Remove the Multi-Sheet Tray if necessary.

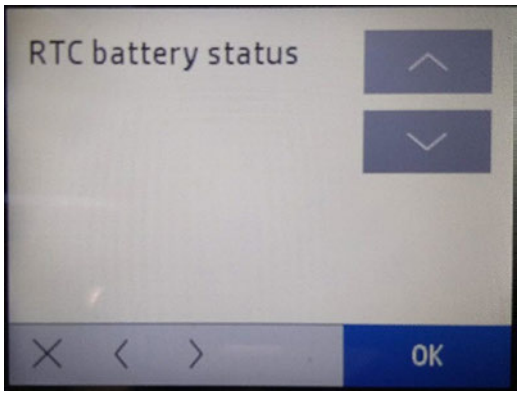
RTC Battery Status

This test checks whether the Real-Time Clock's battery has expired.

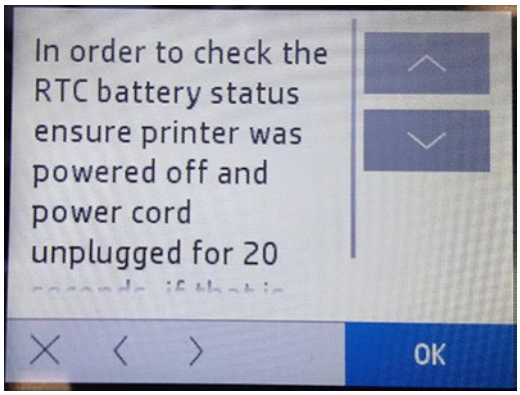
Associated errors

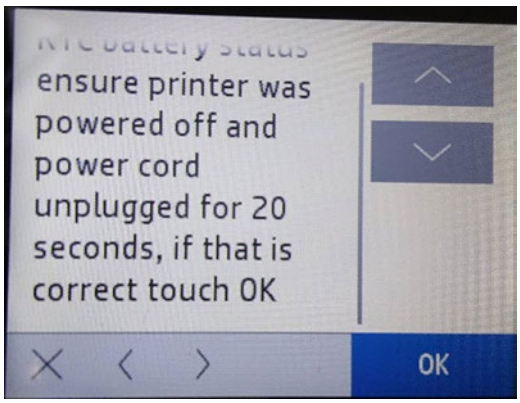
There is no error. The symptom is that the date and time is lost when the power cord is disconnected. To check that the battery is okay, perform this diagnostic by following the procedure below.

1. Switch off the printer and remove the power cable.
2. Wait for 20 seconds.
3. Reconnect the power cord and turn on the printer.
4. Navigate to **Support menu > Service Test > RTC Battery Status** and then press **OK**.

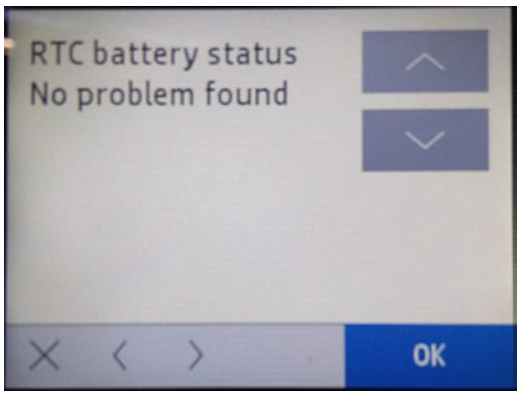


5. The following screen is displayed:

- 

- 

6. If the test passes, the following screen is shown:



7. If the battery is exhausted, the following message is displayed:

Problem found: Battery expired or RTC problem. Call HP support and provide the following code: 0001-0082

Rewinder motor

This test verifies all the components associated with the Rewinder motor and Rewinder Encoder Disk.

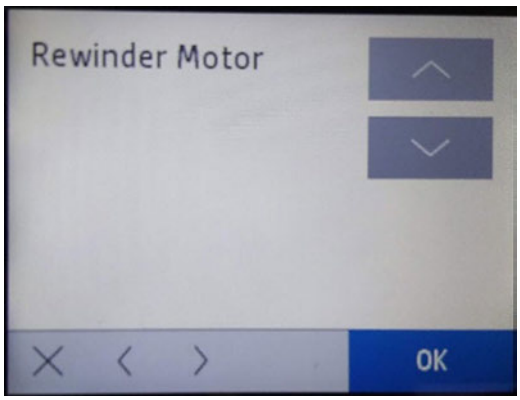
When the test is done the rewinder motor turns a small distance in both directions in order to check that all the components work properly or if any are damaged.

Associated errors

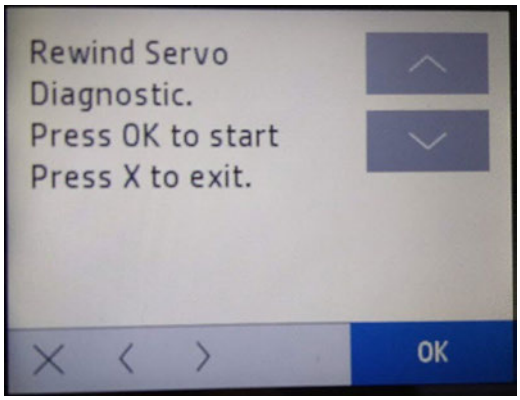
This test should be conducted when there are issues unloading the roll, or media advance problems affecting IQ.

NOTE: Remember to retire the roll bar (with media paper roll) before executing this diagnostic in order to properly check the components. In any other case, the diagnostic could fail.

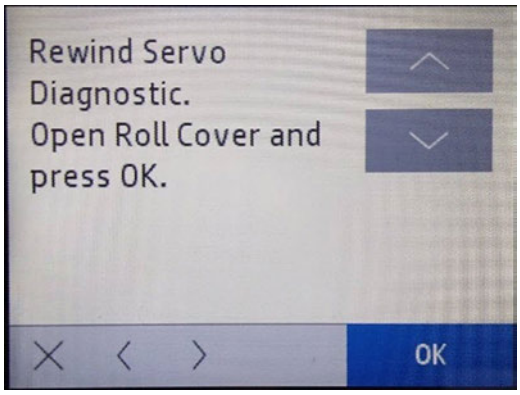
1. Unload roll.
2. Navigate to **Support menu > Service Test > Rewinder Motor** and then press **OK**.



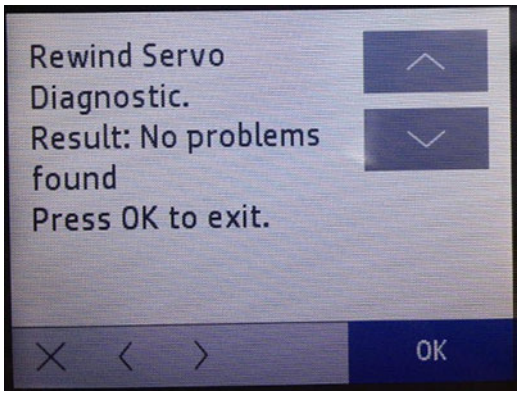
3. The following screen will display, press **OK** in order to start the diagnostic.



4. The following screen will appear. Open the roll cover and press **OK** to continue with the diagnostic.



5. The rewinder will move in both directions. If everything is fine the following screen will be displayed:



ARSS Test

This test verifies that the ARSS mechanical components are not damaged.

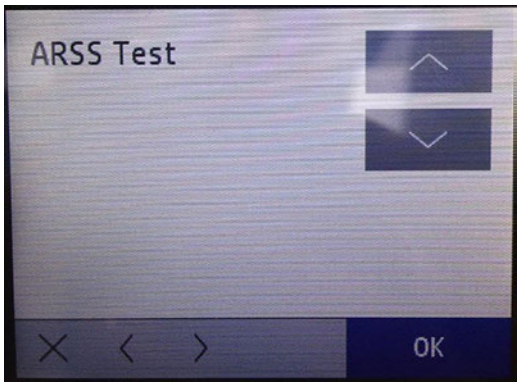
Associated errors

This test should be conducted when there are issues changing the media type between roll media and multi-sheet tray in case the roll media was loaded.

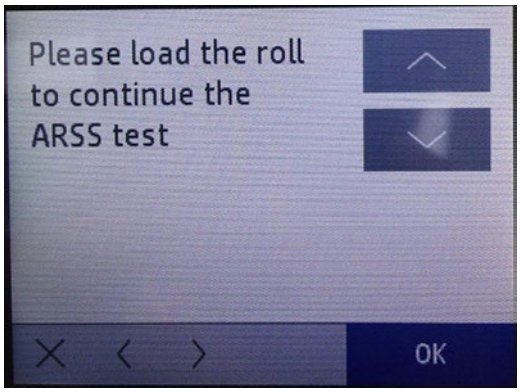
NOTE: You need to have installed the multi-sheet tray and the roll paper in your printer in order to perform this test.

First, you should manually load the roll paper in printer mode or load it during the test. The following paragraphs describe the test and its steps.

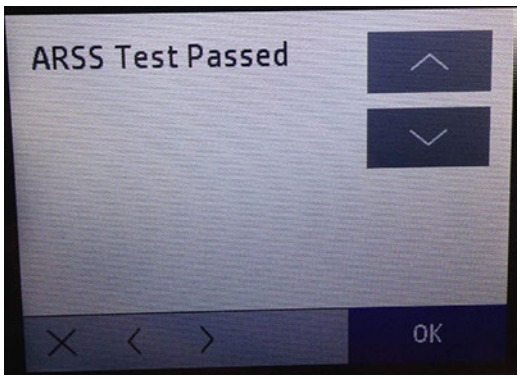
1. Navigate to **Support menu > Service Test > ARSS Test** and then press **OK**.



2. Load the roll paper (in case it is not already loaded) and press **OK** to continue.



3. Once the roll is loaded, the rewinder will unload the roll paper.
4. The printer will activate the ARSS mechanically in order to change between roll paper and multi-sheet tray.
5. The test will display the result on-screen, reporting **Pass** or **Failure**depending on whether or not ARSS moves correctly.



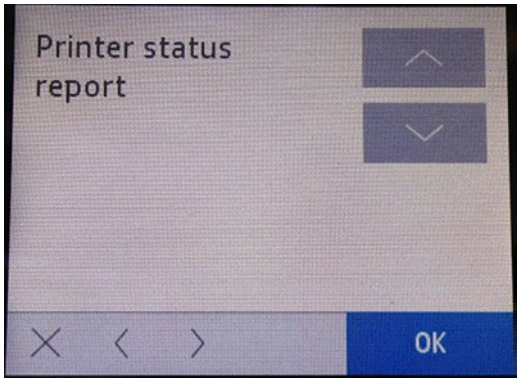
Special/Service/Support Reports

This menu contains options for printing various printer status reports.

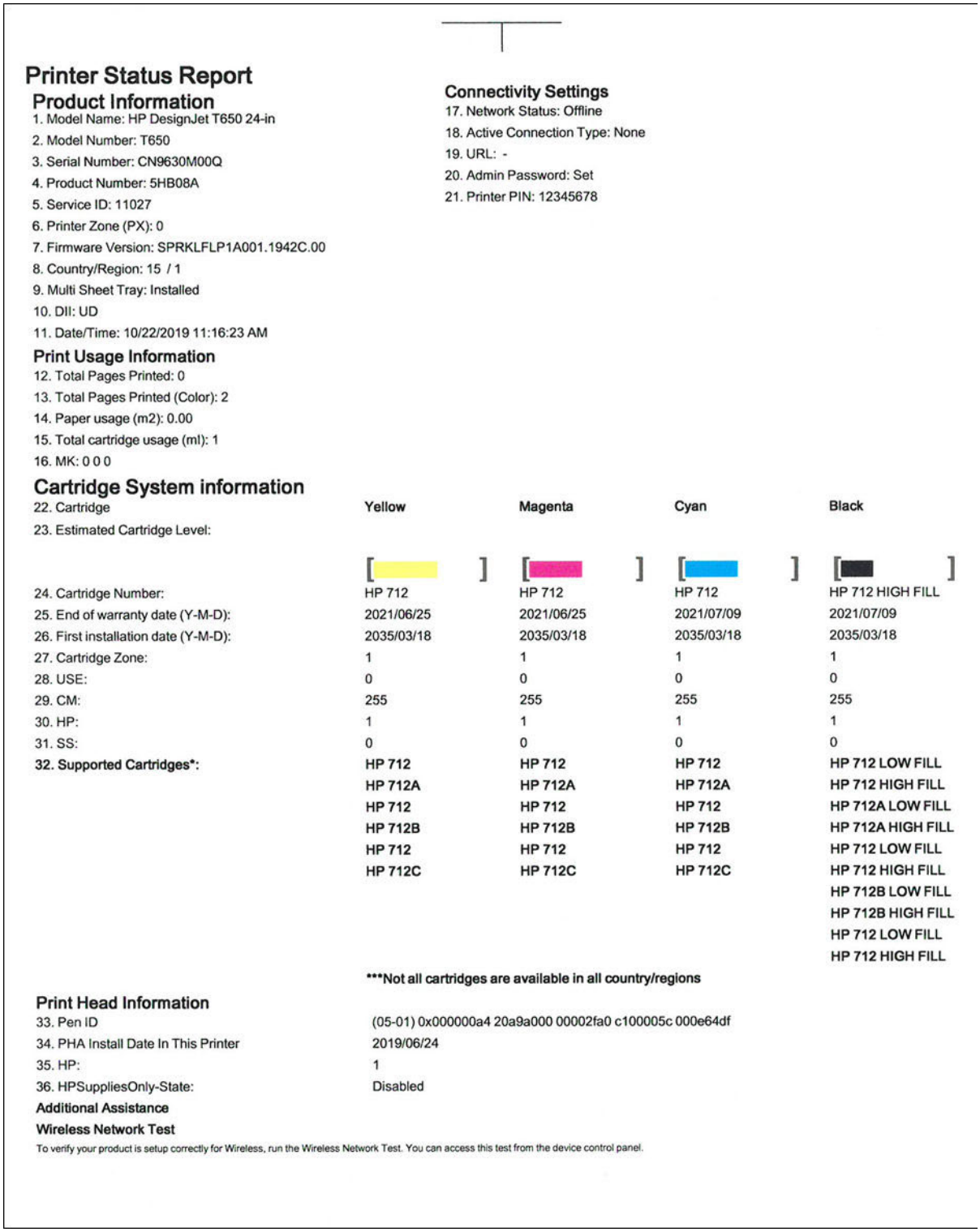
NOTE: In some cases, there is a delay between the moment when you press **OK** in the support menu and when the printer starts to print the report. Please be patient.

Printer status report

A high-level view of the product status.



The printed report is as shown below:



Printer Status Report

Product Information

1. Model Name: HP DesignJet T650 24-in
2. Model Number: T650
3. Serial Number: CN9630M00Q
4. Product Number: 5HB08A
5. Service ID: 11027
6. Printer Zone (PX): 0
7. Firmware Version: SPRKLFLP1A001.1942C.00
8. Country/Region: 15 / 1
9. Multi Sheet Tray: Installed
10. DII: UD
11. Date/Time: 10/22/2019 11:16:23 AM

Connectivity Settings

17. Network Status: Offline
18. Active Connection Type: None
19. URL: -
20. Admin Password: Set
21. Printer PIN: 12345678

Print Usage Information

12. Total Pages Printed: 0
13. Total Pages Printed (Color): 2
14. Paper usage (m2): 0.00
15. Total cartridge usage (ml): 1
16. MK: 0 0 0

Cartridge System information

22. Cartridge	Yellow	Magenta	Cyan	Black
23. Estimated Cartridge Level:	[ ]	[ ]	[ ]	[ ]
24. Cartridge Number:	HP 712	HP 712	HP 712	HP 712 HIGH FILL
25. End of warranty date (Y-M-D):	2021/06/25	2021/06/25	2021/07/09	2021/07/09
26. First installation date (Y-M-D):	2035/03/18	2035/03/18	2035/03/18	2035/03/18
27. Cartridge Zone:	1	1	1	1
28. USE:	0	0	0	0
29. CM:	255	255	255	255
30. HP:	1	1	1	1
31. SS:	0	0	0	0
32. Supported Cartridges*:	**HP 712** **HP 712A** **HP 712** **HP 712B** **HP 712** **HP 712C**	**HP 712** **HP 712A** **HP 712** **HP 712B** **HP 712** **HP 712C**	**HP 712** **HP 712A** **HP 712** **HP 712B** **HP 712** **HP 712C**	**HP 712 LOW FILL** **HP 712 HIGH FILL** **HP 712A LOW FILL** **HP 712A HIGH FILL** **HP 712 LOW FILL** **HP 712 HIGH FILL** **HP 712B LOW FILL** **HP 712B HIGH FILL** **HP 712 LOW FILL** **HP 712 HIGH FILL**

*****Not all cartridges are available in all country/regions**

Print Head Information

33. Pen ID	(05-01) 0x000000a4 20a9a000 00002fa0 c100005c 000e64df
34. PHA Install Date In This Printer	2019/06/24
35. HP:	1
36. HPSuppliesOnly-State:	Disabled

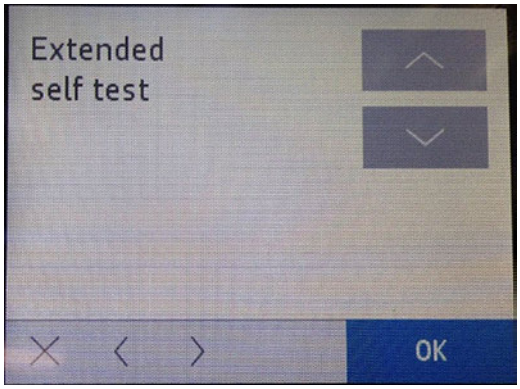
Additional Assistance

Wireless Network Test

To verify your product is setup correctly for Wireless, run the Wireless Network Test. You can access this test from the device control panel.

Extended self-test

Includes printhead specific information.



The printed report is as shown below:

Extended Self-Test Report

Model Name: HP DesignJet T650 24-in
Serial #: CN9630M00Q
Service ID #: 11027
Language: 1
Country/Region: 15
Device: 7, 0
Vertical Cartridge-to-Cartridge Alignment Setting: 32767
Horizontal Cartridge-to-Cartridge Alignment Setting: 32767
Black Bidirectional Printing Alignment Setting: 32767, 32767, 32767
Color Bidirectional Printing Alignment Setting: 32767, 32767, 32767

Cyan Magenta Yellow Violet Green Red

Total Page Count: 1

System Events (sequence number, id, repetitions, buffer – most recent first, left to right)

-- 5 Pt Font--
Extended Self Test Report
Product Number: 5HB08A
Last System Error Code: 01541D4B

Other PCA Revision(s): Not Available

-- 5 Pt Font--

Number Power Cycles: 888
Pen Ambient Temp: 260
Main PCA Revision: 0x70e6
counts at off = 3

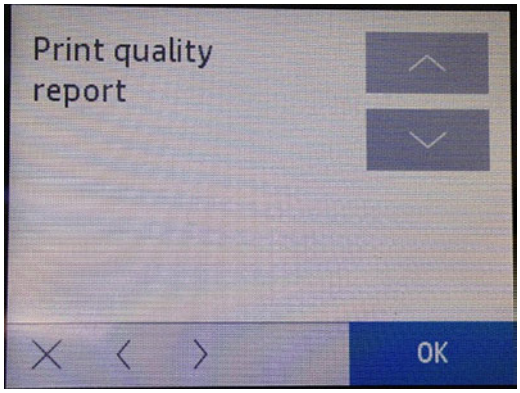
-- 5 Pt Font--

-- 5 Pt Font--

Total Engine Page Count: 1
Firmware Version: SPRKLFLP1A001.1942C.00
Other ASIC Revision(s): Not Available
SPOT Sensor Value =128

Print Quality report

Standard print quality report available from the customer UI.



The printed report is as shown below:

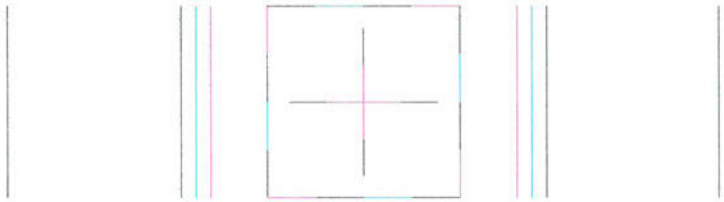
HP DesignJet T650 24-in Series
Print Quality Diagnostic Page

Printer Information

Product Model Number: 5HB08A
Product Serial Number: CN9630M00Q
Service ID: 11027
Firmware Version: SPRKLFLP1A001.1942C.00
Pages printed: Tray 1=2, Tray 2=0, Total=2
Ink cartridge level*: K=20, Y=60, M=50, C=50
*Estimates only. Actual ink levels may vary.

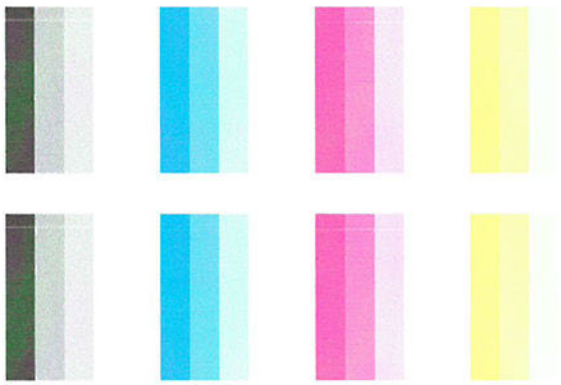
Test Pattern 1

If the lines are not straight and connected, align the printheads.



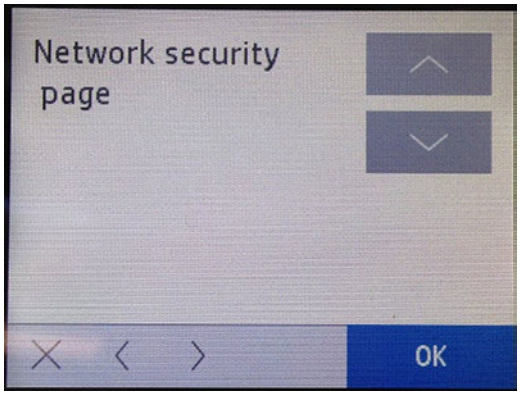
Test Pattern 2

If you see thin white lines across any of the colored blocks, clean the printheads.

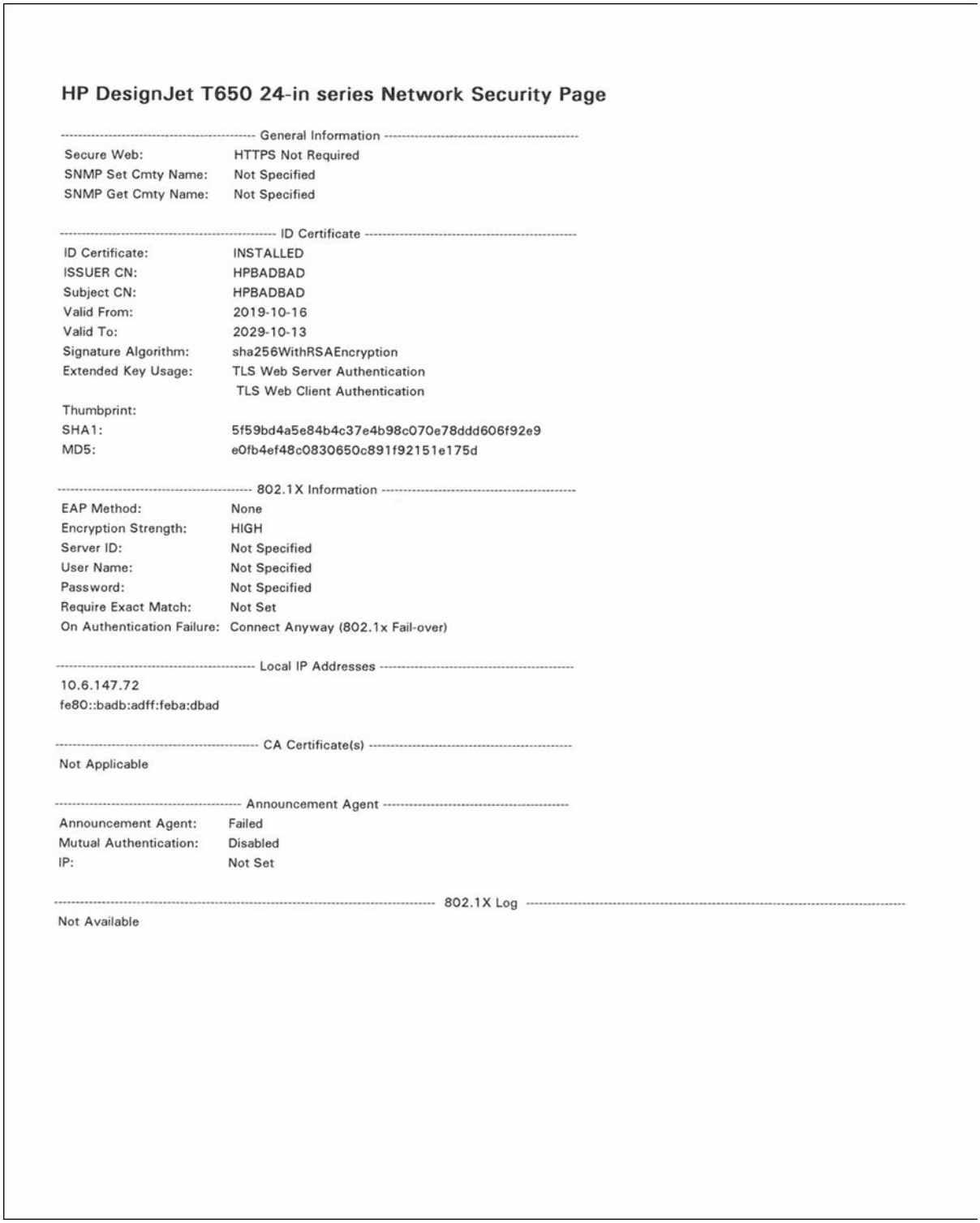


Network Security Page

Network report which contains printer connection info and the security information.



The printed report is as shown below:



HP DesignJet T650 24-in series Network Security Page

General Information

Secure Web:	HTTPS Not Required
SNMP Set Cmty Name:	Not Specified
SNMP Get Cmty Name:	Not Specified

ID Certificate

ID Certificate:	INSTALLED
ISSUER CN:	HPBADBAD
Subject CN:	HPBADBAD
Valid From:	2019-10-16
Valid To:	2029-10-13
Signature Algorithm:	sha256WithRSAEncryption
Extended Key Usage:	TLS Web Server Authentication TLS Web Client Authentication
Thumbprint:	
SHA1:	5f59bd4a5e84b4c37e4b98c070e78ddd606f92e9
MD5:	e0fb4ef48c0830650c891f92151e175d

802.1X Information

EAP Method:	None
Encryption Strength:	HIGH
Server ID:	Not Specified
User Name:	Not Specified
Password:	Not Specified
Require Exact Match:	Not Set
On Authentication Failure:	Connect Anyway (802.1x Fail-over)

Local IP Addresses

10.6.147.72
fe80::badb:adff:feba:dbad

CA Certificate(s)

Not Applicable

Announcement Agent

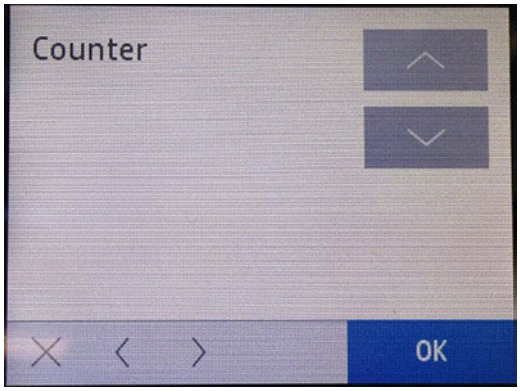
Announcement Agent:	Failed
Mutual Authentication:	Disabled
IP:	Not Set

802.1X Log

Not Available

Counter

Select this item to print an unlimited number of pages which count from zero to infinite. You can stop the plot whenever you want.



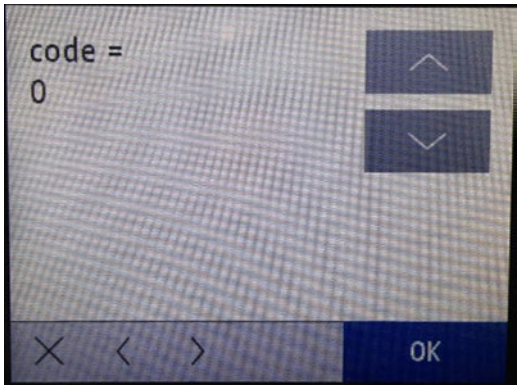
The printed report is as shown below:

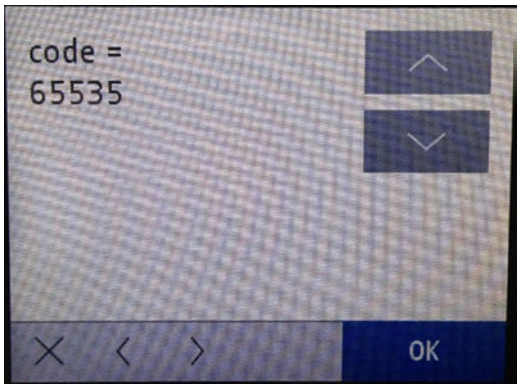
HP DesignJet T650 24-in **Counters Report**

Service ID #	11027
Serial #	CN9630M00Q
0	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	0
32	0
33	0
34	0
35	0
36	0
37	0
38	0
39	0
40	0
41	0
42	0
43	0
44	0
45	0
46	0

Print-Mech Button Tap

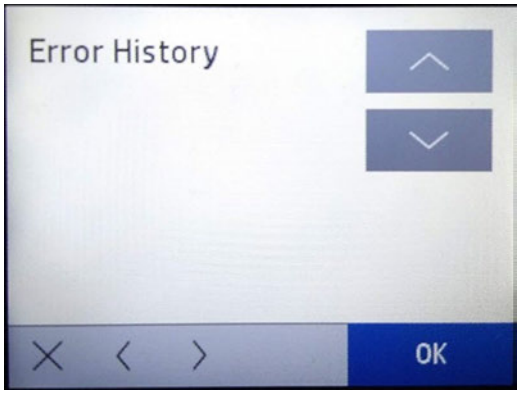
Advanced testing for manufacturing purposes. Only certain code numbers work.



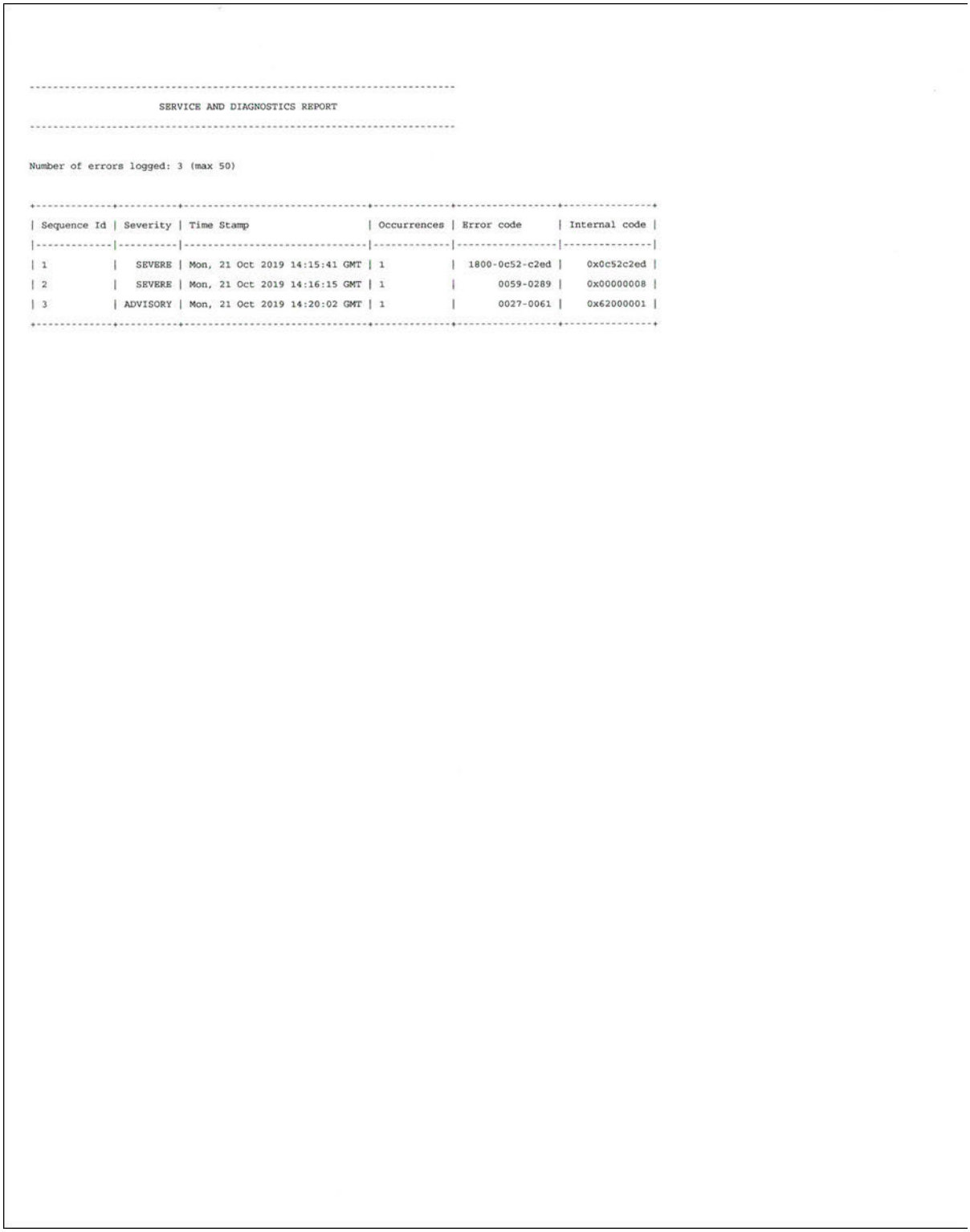


Error history

Prints the error log, a list with the latest 50 SE detected.



The printed report is as shown below:



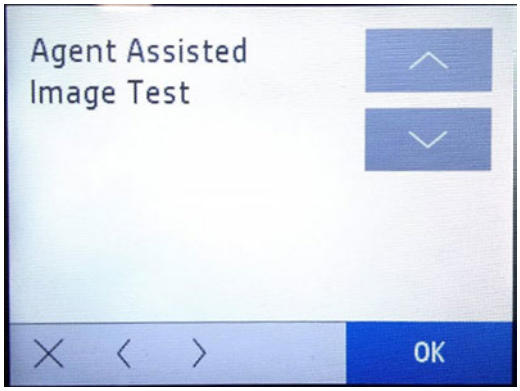
```
------------------------------------------------------------------------
                    SERVICE AND DIAGNOSTICS REPORT
------------------------------------------------------------------------

Number of errors logged: 3 (max 50)

+-------------+----------+-------------------------------+-------------+-----------------+---------------+
| Sequence Id | Severity | Time Stamp                    | Occurrences | Error code      | Internal code |
|-------------|----------|-------------------------------|-------------|-----------------|---------------|
| 1           |   SEVERE | Mon, 21 Oct 2019 14:15:41 GMT | 1           | 1800-0c52-c2ed |    0x0c52c2ed |
| 2           |   SEVERE | Mon, 21 Oct 2019 14:16:15 GMT | 1           |       0059-0289 |    0x00000008 |
| 3           | ADVISORY | Mon, 21 Oct 2019 14:20:02 GMT | 1           |       0027-0061 |    0x62000001 |
+-------------+----------+-------------------------------+-------------+-----------------+---------------+
```

Agent Assisted image test

Prints IQ troubleshooting page. It is recommended to use Plain paper (>85gsm).

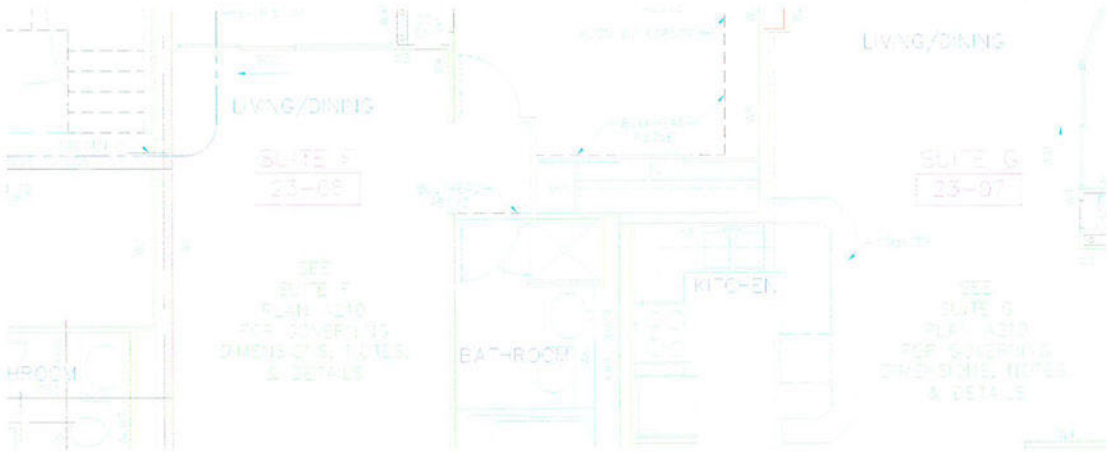


The printed report is as shown below:

AGENT-ASSISTED IMAGE TEST

Product and Revision Information

1. Serial Number: CN9630M00Q
2. Firmware Version: SPRKLFLP1A001.1942C.00



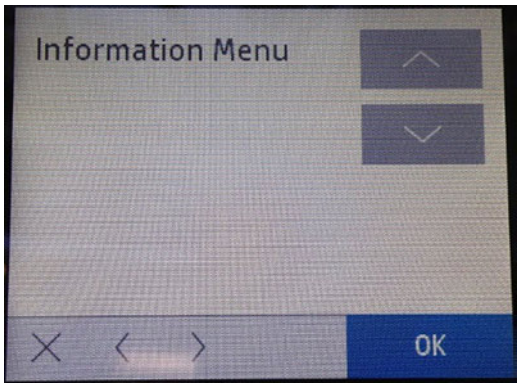
Support menu

In this section of the service manual you will find an explanation in detail of each of the menus included on the Support Menu.

All these service options and utilities are available to customers under the assistance of an HP call agent. For a diagram of the menu tree, see Menu options on page 463.

Information menu

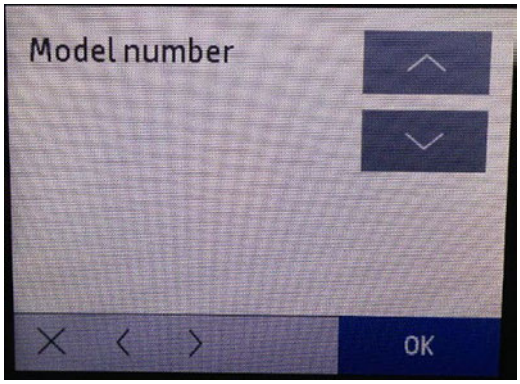
This menu has several items which give you information about printer, cartridges, connections and printer's components status.

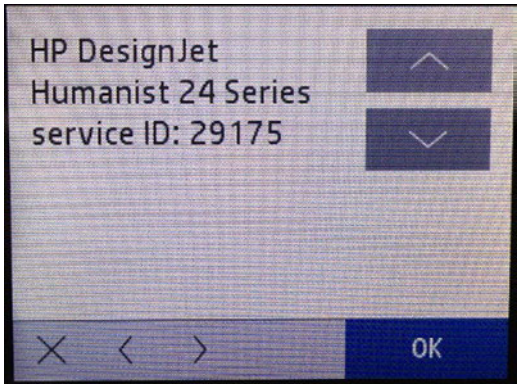


Model number

Select this to get the printer's Model Number.

You will see the following screens:

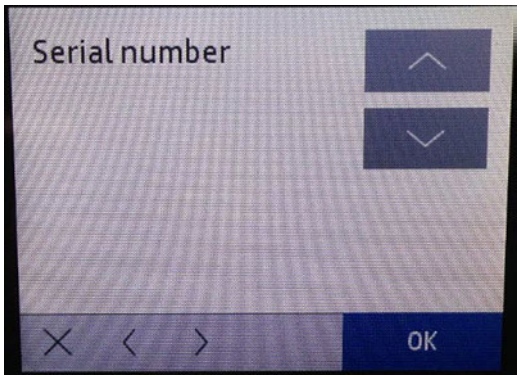


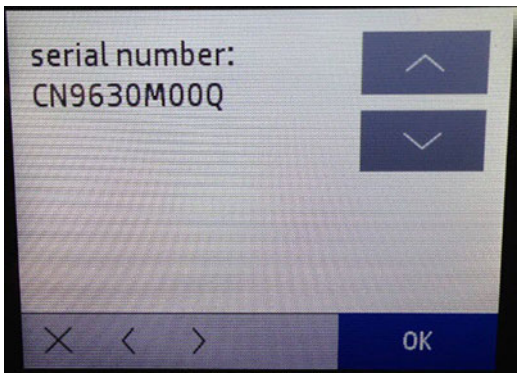


Serial number

Select this to get the printer's Serial Number.

You will see the following screens:

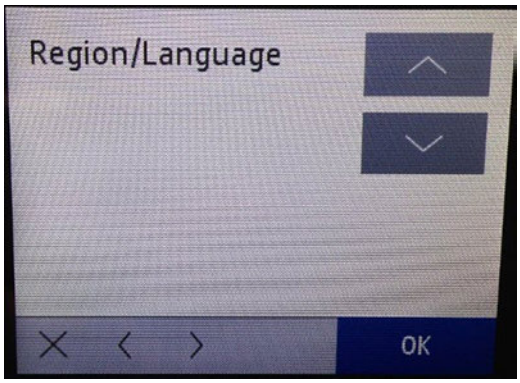


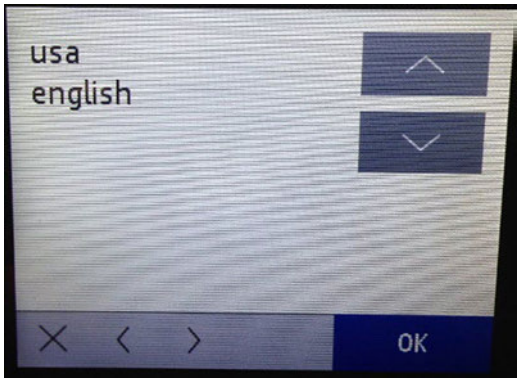


Region/Language

Select this to get the printer's country location and language setting.

You will see the following screens:

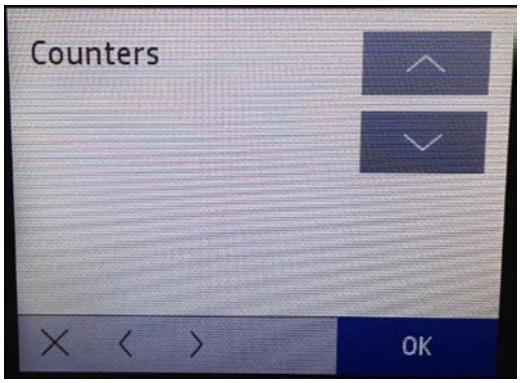


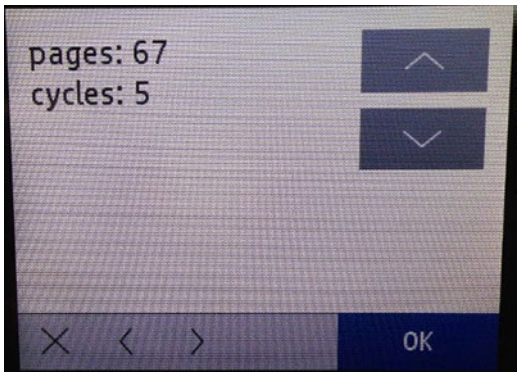


Counters

Select this to get information about the number of pages printed and Carriage cycles.

You will see the following screens:



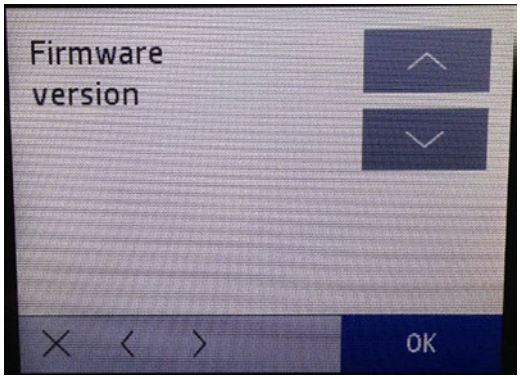


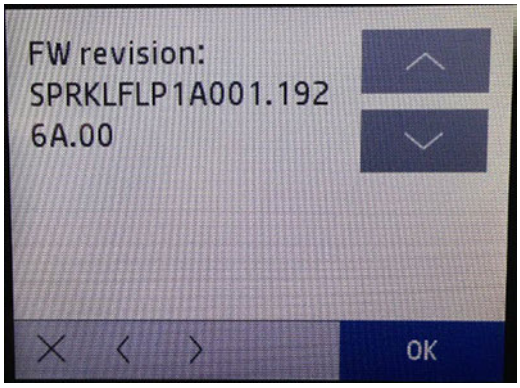
Firmware version

Select this to get the printer's Firmware Version.

The firmware version is identified by the week and year it is released. For example: **FW name: xxxxxxxxx.1941F.xxxx**, where:

- 19 = Year
- 41 = Week
- F = Minor weekly revision

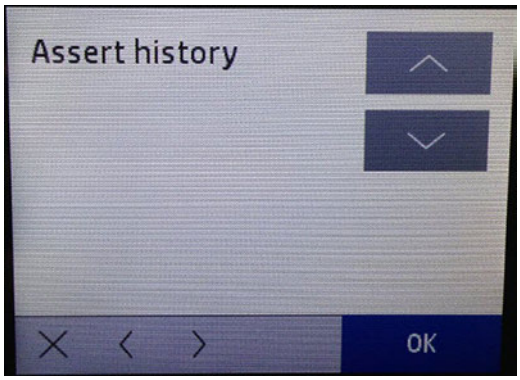


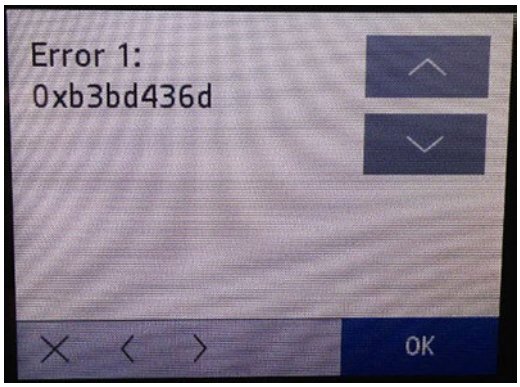


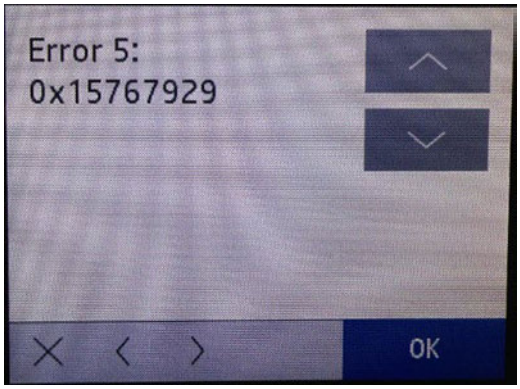
Assert History

Select this to get the printer's information about the last five asserts which have appeared on it.

You will only see the assert's codes, for example:



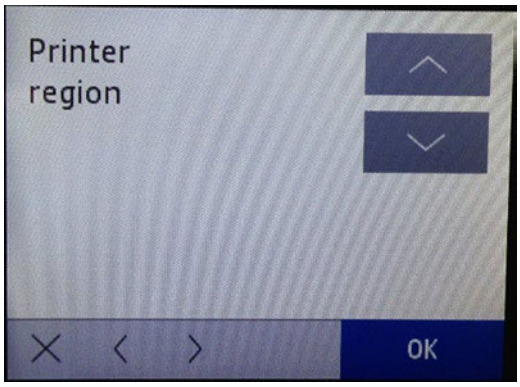


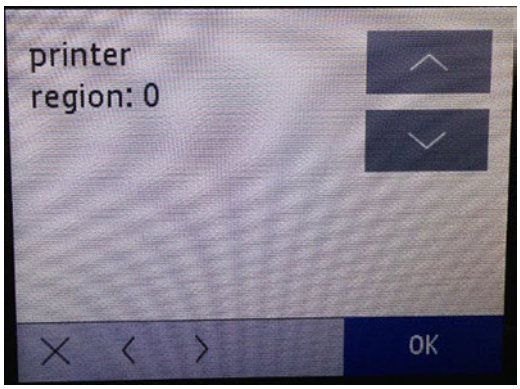


Printer Region

Select this to get the printer region.

Printer region is always "0":

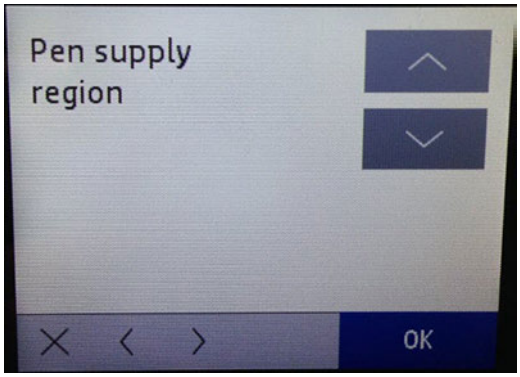


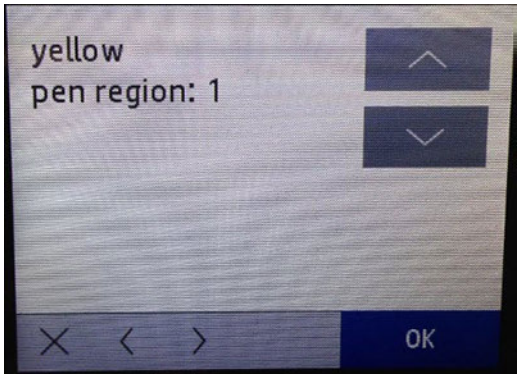


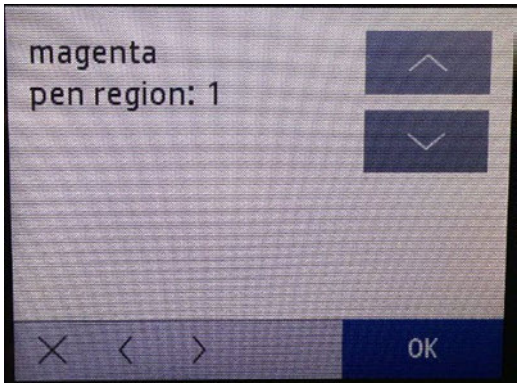
Pen supply region

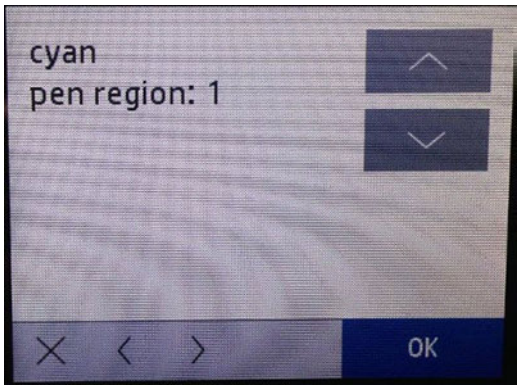
Select this to get the pen and Ink supply region.

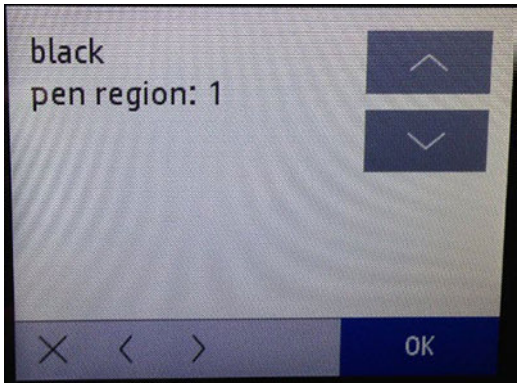
Supply region is always "1".


Pen supply
region
OK


yellow
pen region: 1
OK

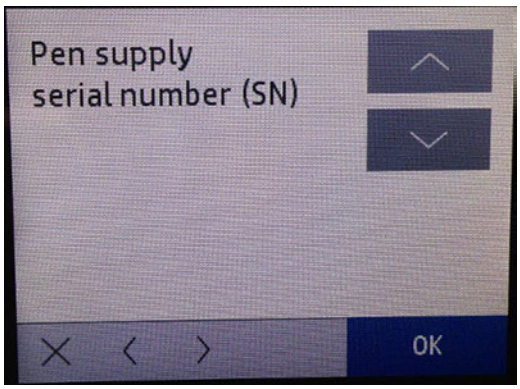

magenta
pen region: 1
OK

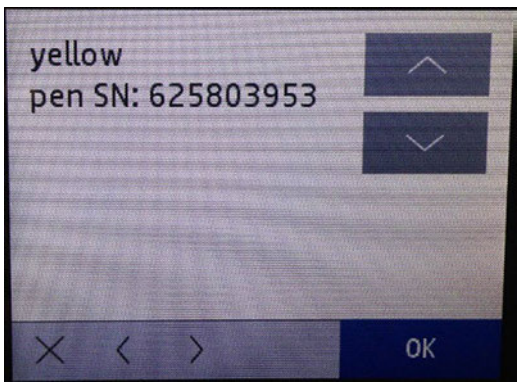

cyan
pen region: 1
OK

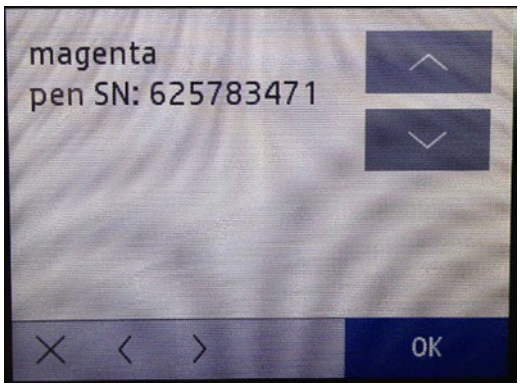


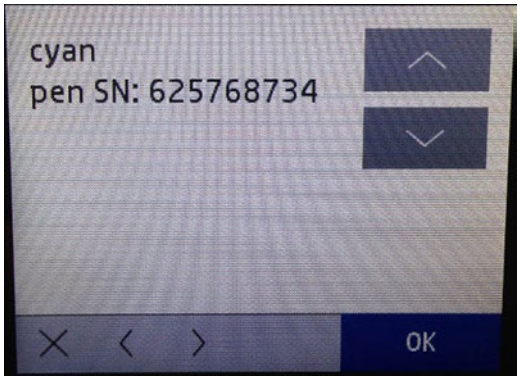
Pen supply serial number

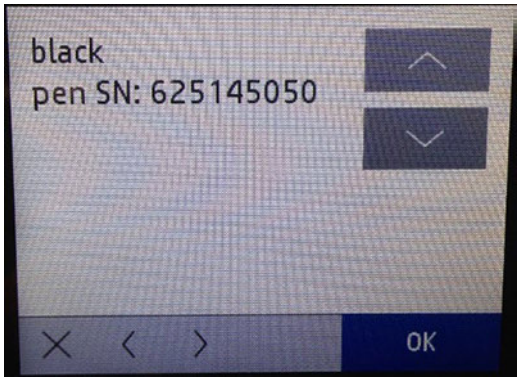
Select this option to check the pen and ink supply serial number.







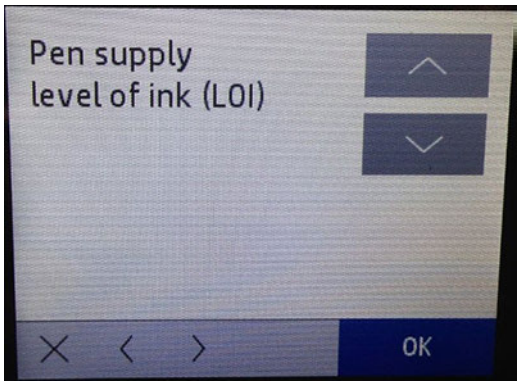


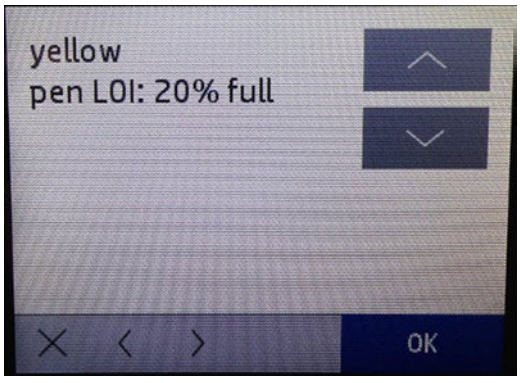


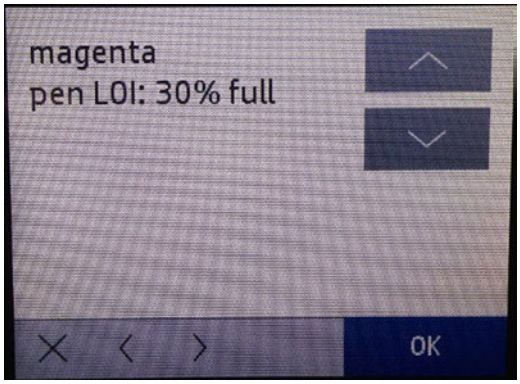
Pen supply level of ink (LOI)

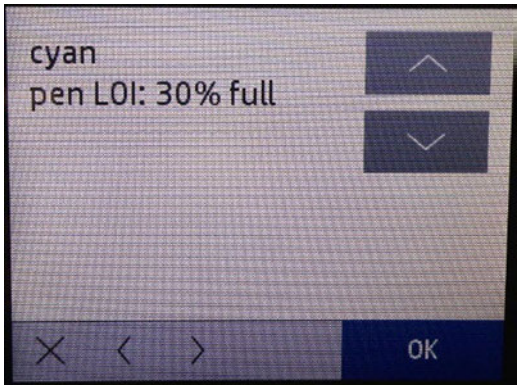
Select this option to check the status of the ink supply.

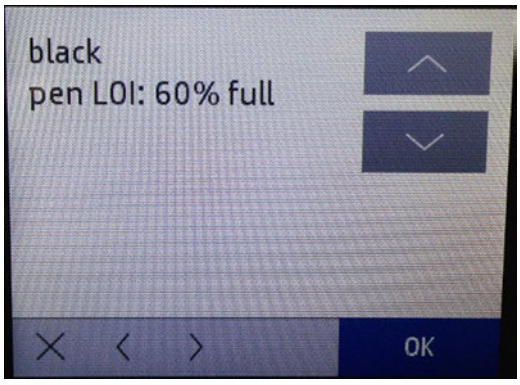
Pen refers to the cartridge.OK means cartridge is okay for use.











Extra Printhead information (not included in the Service Menu)

Printhead install date and Printhead drop count can be retrieved from the standard menu. Simply go to the dashboard and key on the PHA icon.

Check this to get the PHA installation date, and use it to find out the PHA warranty.

Check printhead drop count to display the amount of ink fired (ml) by the printhead for each color. Also shows printhead warranty status.

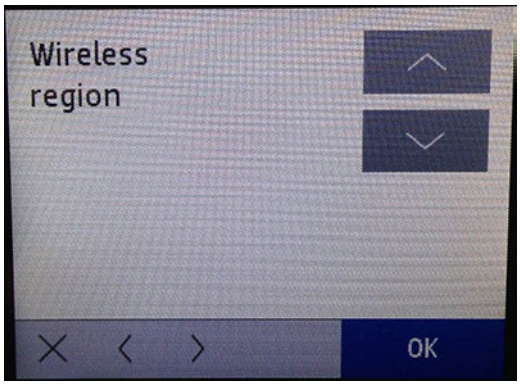
*Warranty Info Status can be:

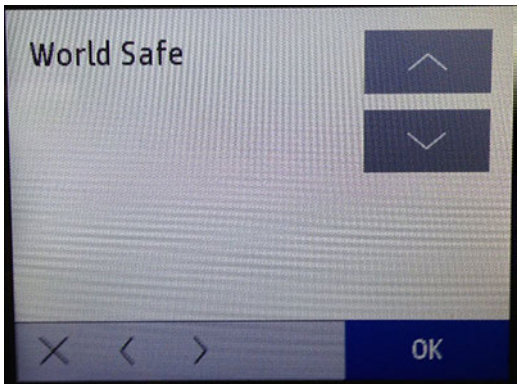
- In Warranty
- Out of Warranty

Wireless region

Select this to verify the wireless region.

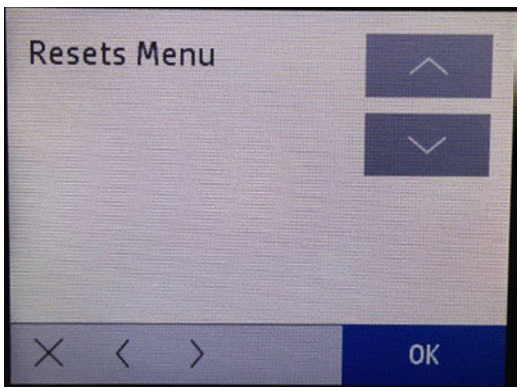
By default, the Wireless region is configured to **WorldSafe**.





Resets menu

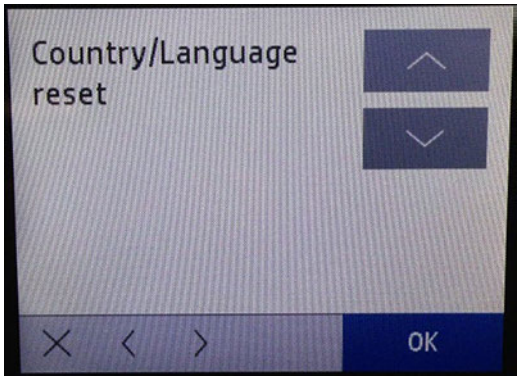
This menu has several items which let you reset printer characteristics to default.

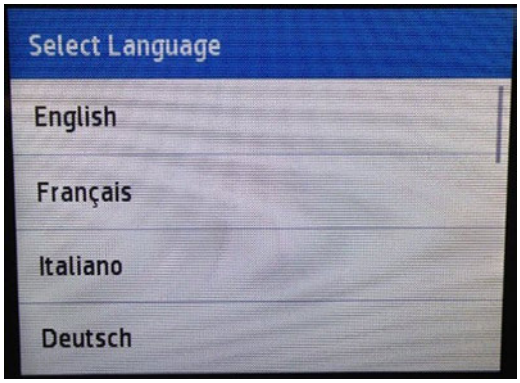


Country/Language reset

Erases country and language settings.

When selected, the printer will shut down and restart. When it boots up, the printer asks for selecting “Language” and “Country”.


Country/Language
reset
OK


Select Language
English
Français
Italiano
Deutsch

Select Language
You have selected "English" as your language.
Cancel
Confirm
Deutsch

Select Your Country/Region
USA
Canada
UK
Australia

Linefeed Mfg Calibration (NEW&FOTO)

Deletes user media advance calibrations.

Restores the manufacturing ones. Unit will power down and reboot.

Support Menu Resets

This menu has several items which let you reset printer characteristics to default.

Partial reset

This test performs a partial reset of the printer to factory defaults.

After its execution, user will be prompted to reconfigure some settings (country, language, etc.).

Semi-full reset

This test performs a semi-full reset of the printer to factory defaults (more extensive than partial reset, less than OOBE reset).

After its execution, user will be prompted to reconfigure some settings (country, language, etc.).

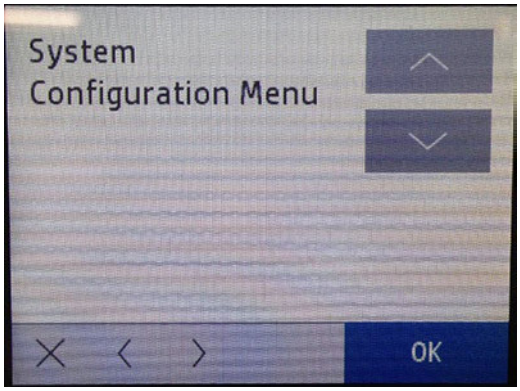
OOBE reset

This test resets the printer to factory defaults and starts the out of the box experience.

⚠ CAUTION: Do not perform this reset as an initial tool for troubleshooting purposes when printer is not in good condition. The printer can go to an unexpected state (showing the HP logo or a Blue screen). Please check the front panel message to determine the standard corrective action.

System Configuration Menu

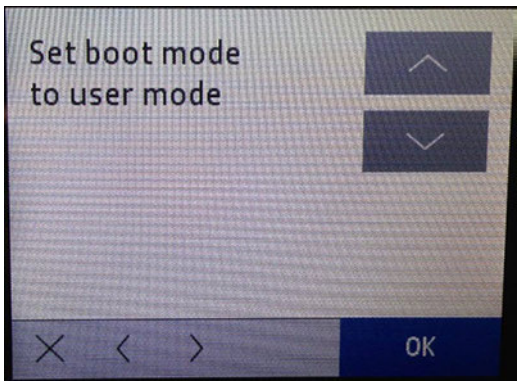
This menu contains an item which let you set up the printer to user mode.

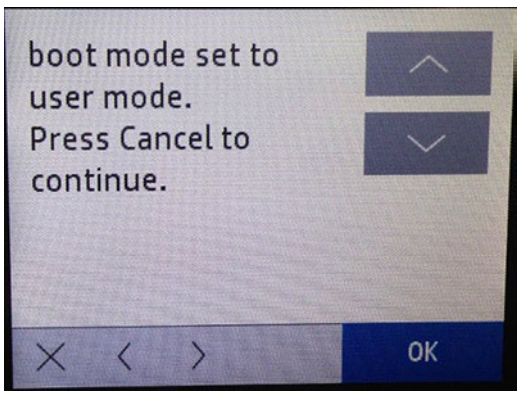


Set boot mode to user mode

Sets the unit from manufacturing mode to “user mode”.

This option should only be used if Front Panel shows a white grid (manufacturing mode).





Service Test

This menu contains options for checking the functionality of different modules, plus printhead tests and reports.

Test Carriage

Select this test to check if the carriage moves correctly.

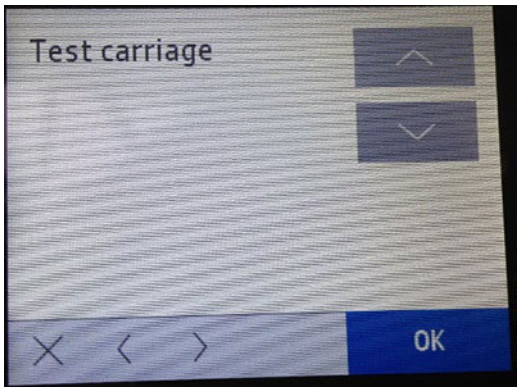
The carriage will reproduce several moves getting out from the service station, depending on how many cycles you set (from 0 until 65535 cycles).

Associated errors

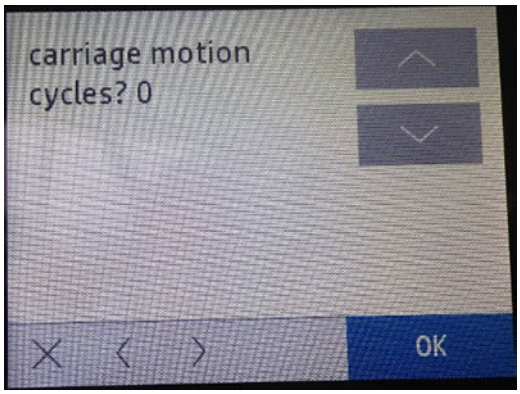
When the following errors occur in the printer, this diagnostics procedure must be performed:

- System error 0042-0017
- Paper jam error

1. Navigate to **Support menu > Service Test > Test carriage** and then press **OK**.

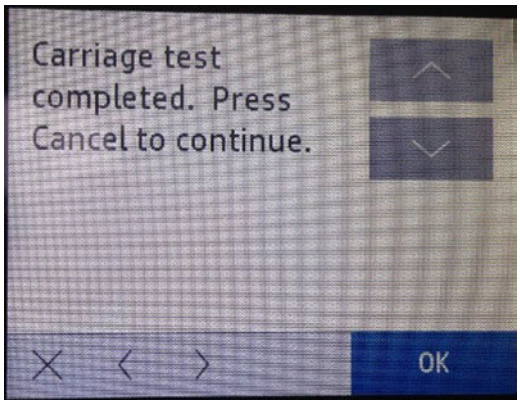


2. At the following screen you can set up the number of cycles the carriage will perform (from 0 to 65535 cycles). The movement does not complete the entire SCAN AXIS, just checks that the carriage can move properly.



NOTE: If any issue is found during the diagnostic performance, please reboot the printer and a system error will prompt during the restart.

3. Once the test finishes, if everything it is okay, you will see the following screen. Press **Cancel** in order to go back to the main menu or **Continue** to perform the test again.



Test Service Station

Select this test to check if the service station moves correctly.

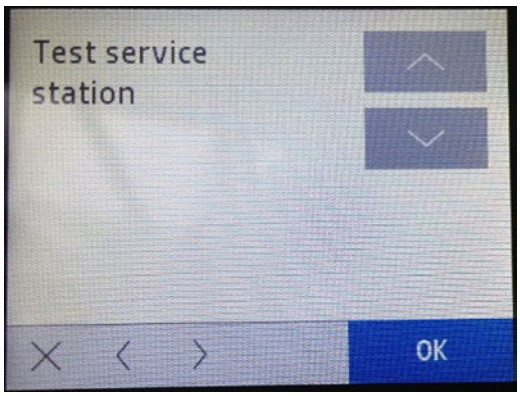
The service station will reproduce several moves completing a bump to bump, depending on how many cycles you set (from 0 until 65535 cycles).

Associated errors

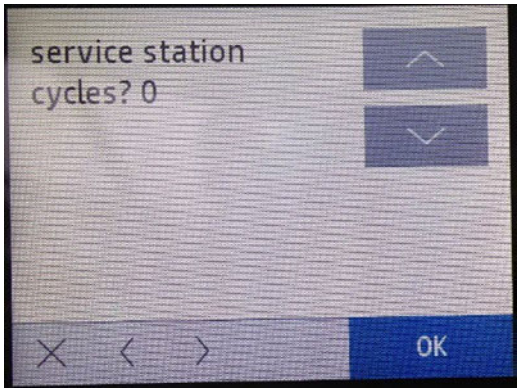
When the following errors occur in the printer, this diagnostics procedure must be performed:

- System error 0021-0017
- System error 0042-0017
- Paper jam error

1. Navigate to **Support menu > Service Test > Test service station** and then press **OK**.

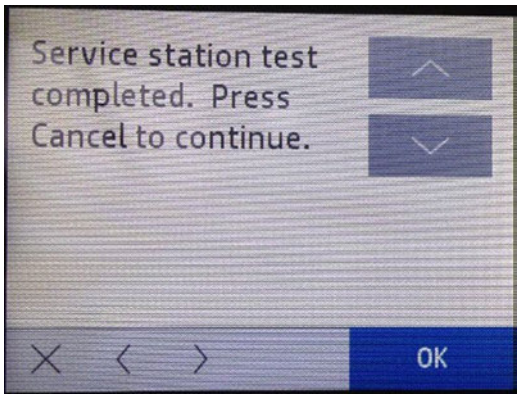


2. At the following screen you can set up the number of cycles the carriage will perform (from 0 to 65535 cycles). The movement completes the entire service station's stroke, in order to check that the service station can move properly.



NOTE: If any issue is found during the diagnostic performance, please reboot the printer and a system error will prompt during the restart.

3. Once the test finishes, if everything it is okay, you will see the following screen. Press **Cancel** in order to go back to the main menu or **Continue** to perform the test again.



Test Keys

This test verifies the functioning of all the keys in the Front Panel frame: Home, Help, Back, and the Power key located on the back of the Front Panel side.

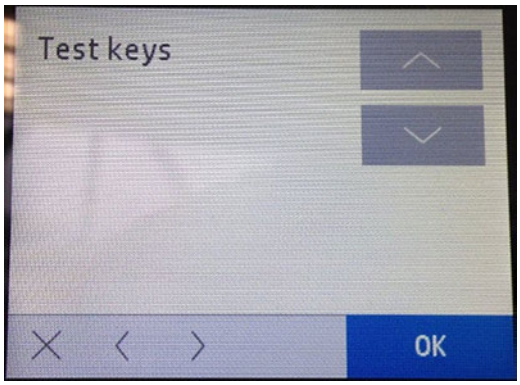
When this test is done you are asked to press these keys one by one to check whether any are damaged.

Associated errors

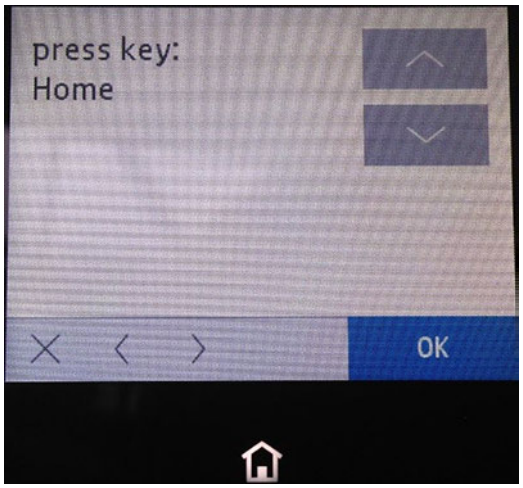
When the following error occurs in the printer, this diagnostics procedure must be performed:

- One or more keys are unresponsive.

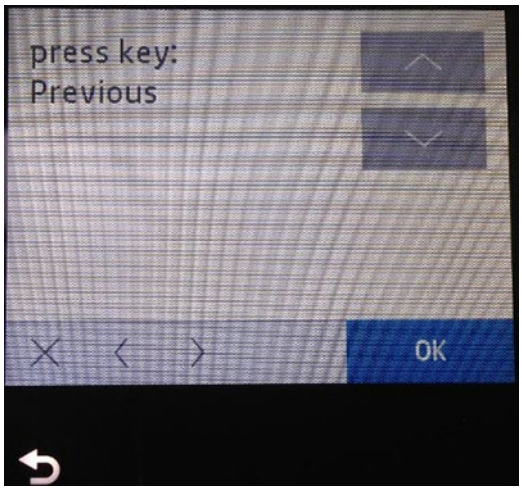
1. Navigate to **Support menu > Service Test > Test keys** and then press **OK**.

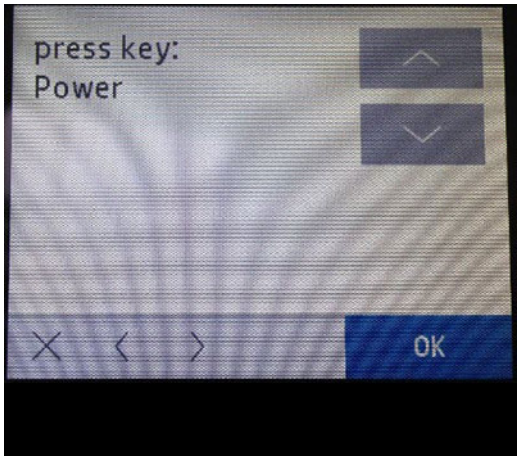


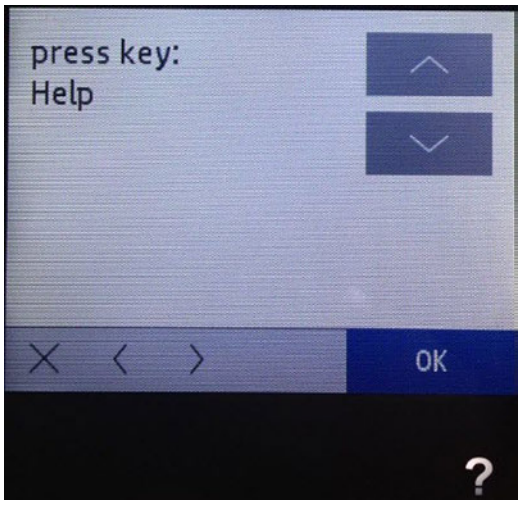
2. The following screen will display:



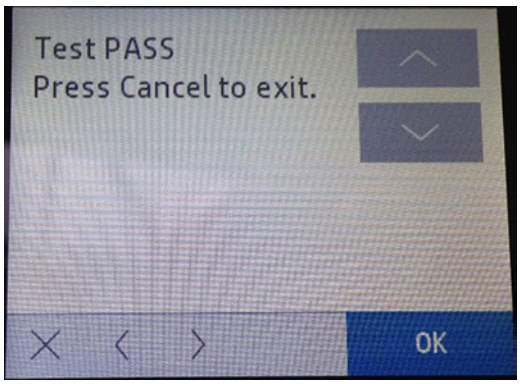
3. Check the Home key is on (the icon should be illuminated), press this key and then one by one through all the keys. The last one is the Help key. The screens below will appear in the following order:

- 

- 

- 

4. 4. If you press all the keys and they work correctly you will see:



5. If any key does not work, the diagnostic will not pass to the next key, and will stay always in the screen of the failing key therefore the front panel should be changed. To recover the printer, restart it by switching it off and on with the power key.

Test LEDs

This test verifies all the keys' LEDs in the Front Panel frame: Home, Help, and Back.

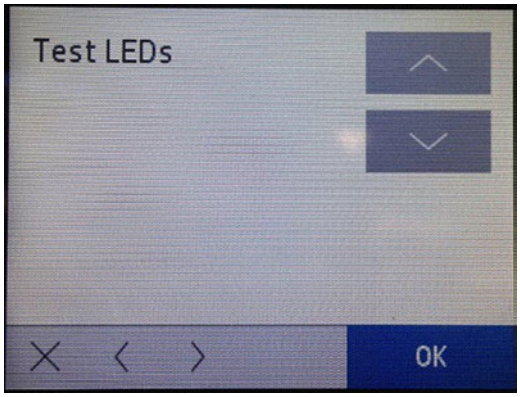
When this test is done you are asked to press the **OK** key one by one to check whether any are damaged.

Associated errors

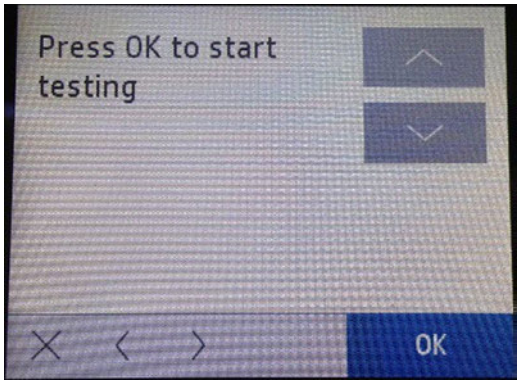
When the following error occurs in the printer, this diagnostics procedure must be performed:

- One or more keys are not shining.

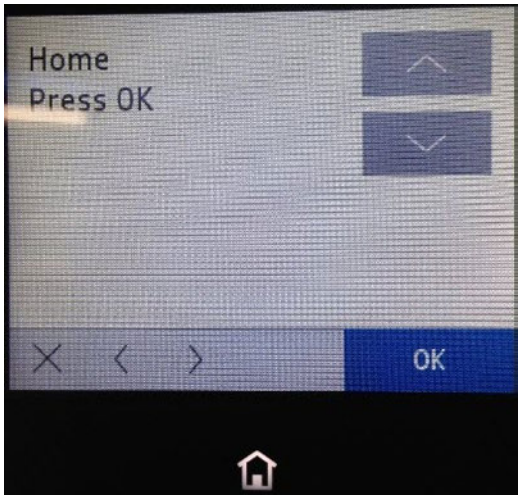
1. Navigate to **Support menu > Service Test > Test LEDs** and then press **OK**.

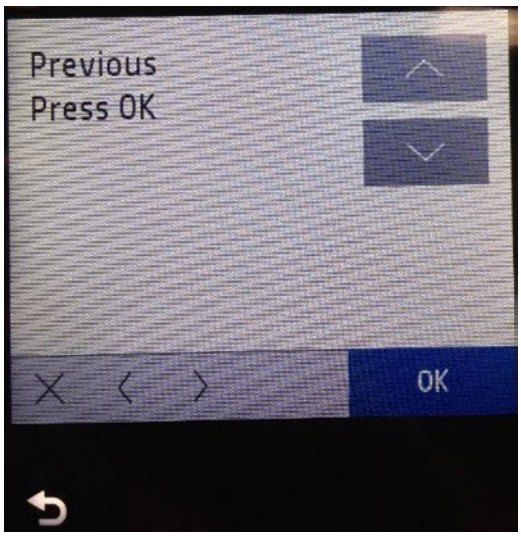


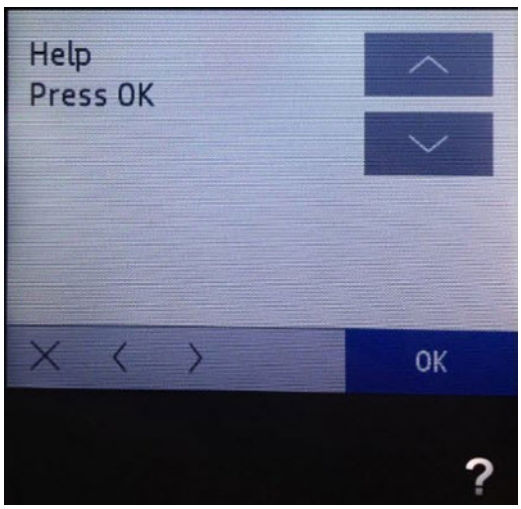
2. The following screen will display, press **OK** in order to start the test.



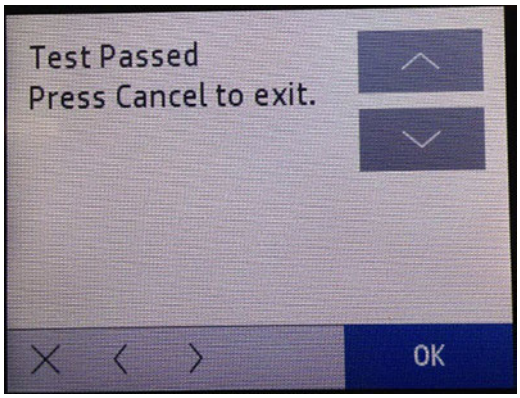
3. Check the **Home** key LED is on (the icon should be illuminated), then press **OK**. Go through the other keys one by one to check their LED functionality. The last one is the **Help** LED. The screens will appear in the following order:

- 

- 

- 

4. If you press all the keys and they work correctly you will see the following:



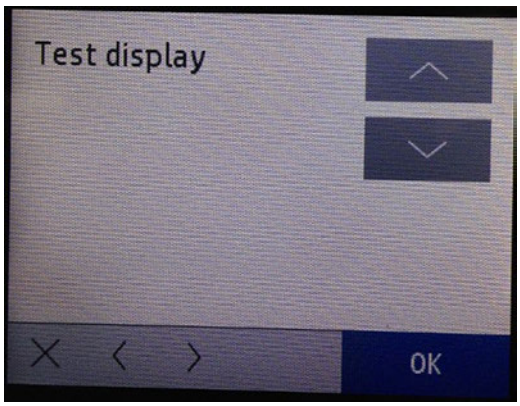
Test Display

This test verifies that the Front Panel display works properly.

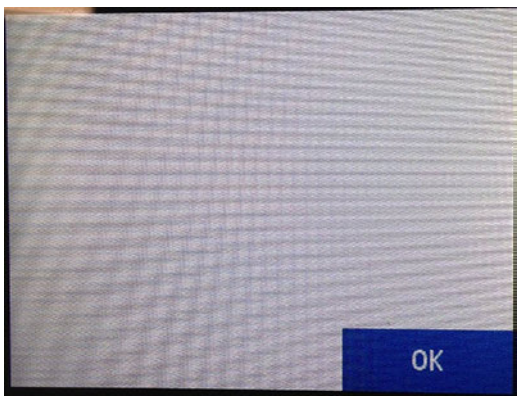
Associated errors

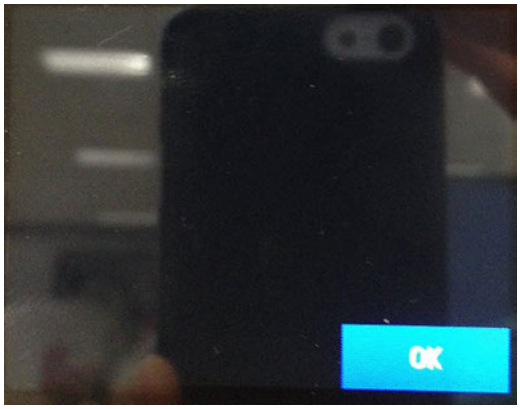
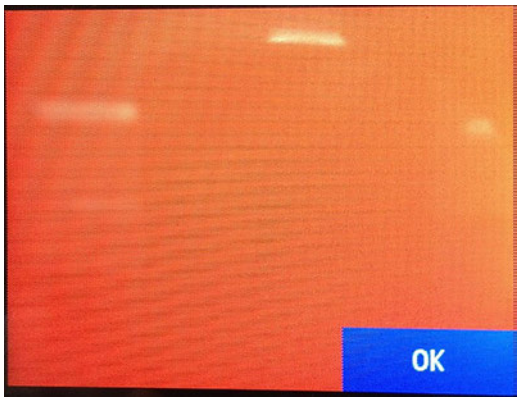
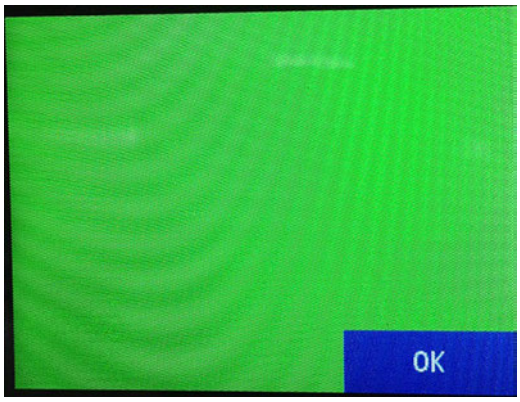
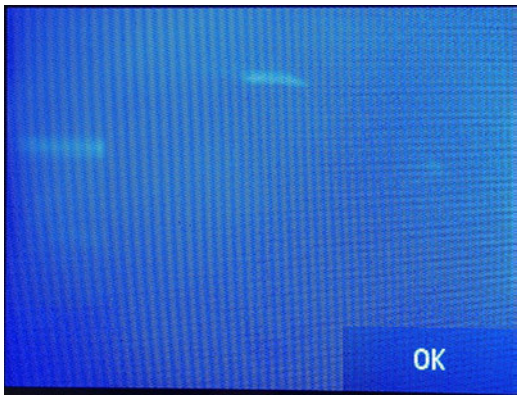
There is no specific error associated with a failure of some pixels or the backlight of the Front Panel. This diagnostic should be run when you want to check if the front panel display is okay, or if the Front Panel does not respond.

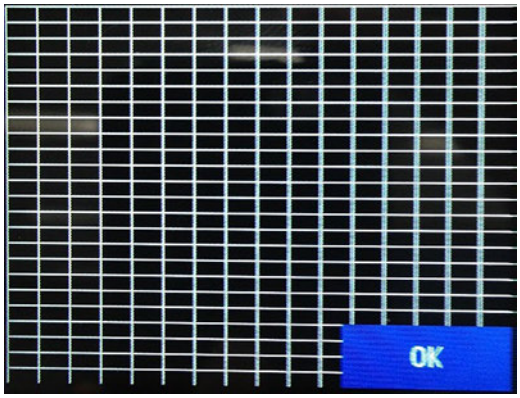
1. Navigate to **Support menu > Service Test > Test display** and then press **OK**.



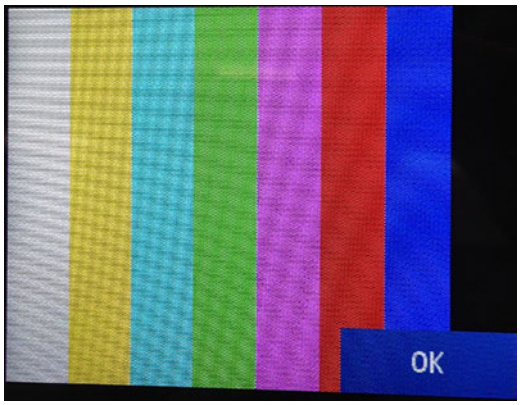
2. The test will display the following screens, press **OK** in order to continue through the test. Each time **OK** is pressed, the display color will change.

- 

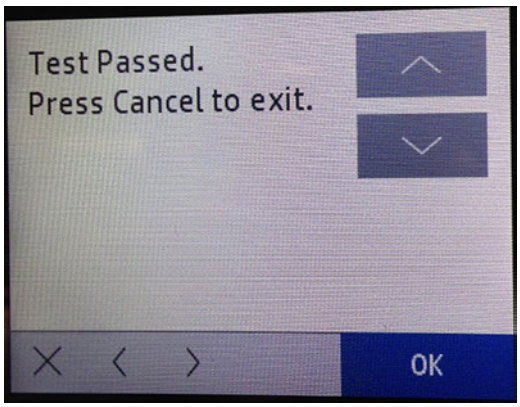
- 
OK
- 
OK
- 
OK
- 
OK

- 

-

- 

3. Once the test is finished you will see the screen below:



Cont_print_pick

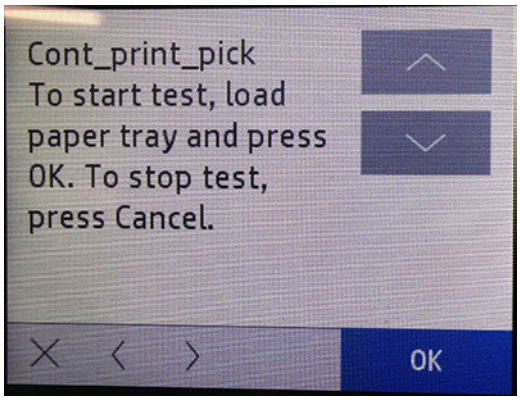
This test prints infinite plots with marked with 4 dots (2 dots on the left side and 2 dots in the right side of the paper).

Associated errors

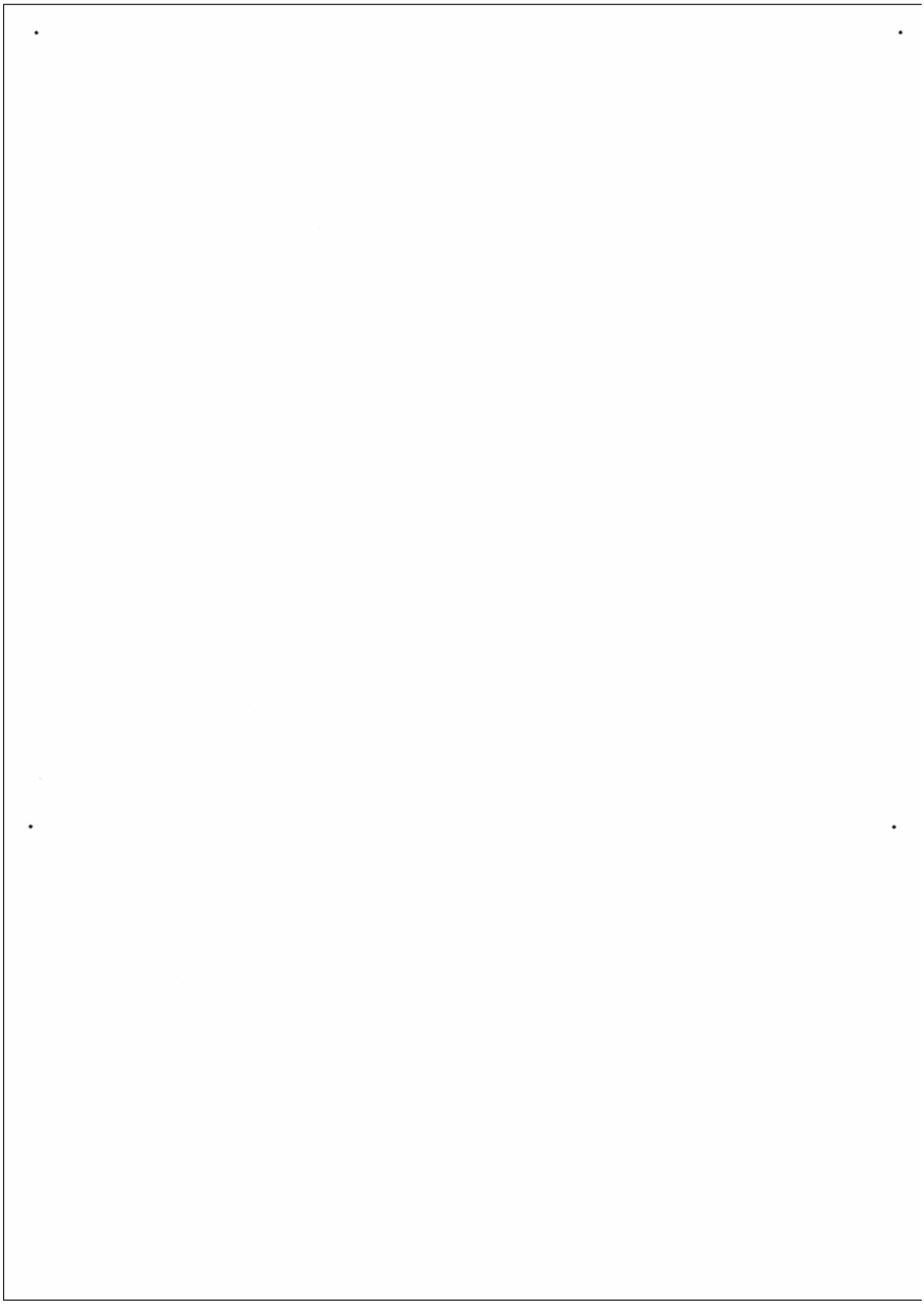
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- Use it to check the media paper advance.
- Use it to check the skew paper.

1. Navigate to **Support menu > Service Test > Cont_print_pick** and then press **OK**.



2. The printed report is the following. Press **Cancel** when you would like to stop printing plots.



Infinite H's Test

This test prints infinite plots filled with black H's.

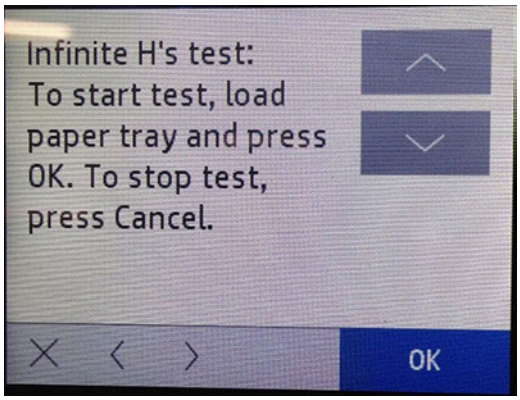
Use it to see the print quality in order to know if the printer needs calibrations, printhead cleaning, or purges.

Associated errors

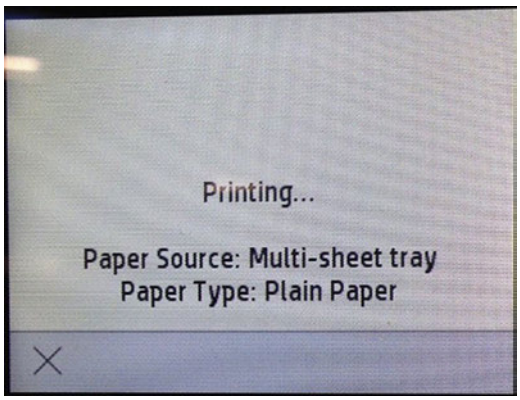
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

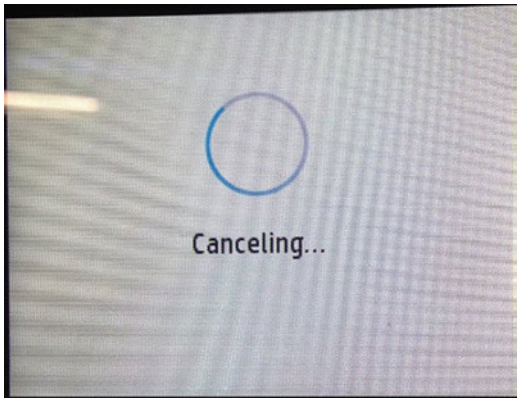
- Use it to check the paper media advance calibration is correct.
- Use it to check the printhead calibrations quality.

1. Navigate to **Support menu > Service Test > Infinite H's Test** and then press **OK**.

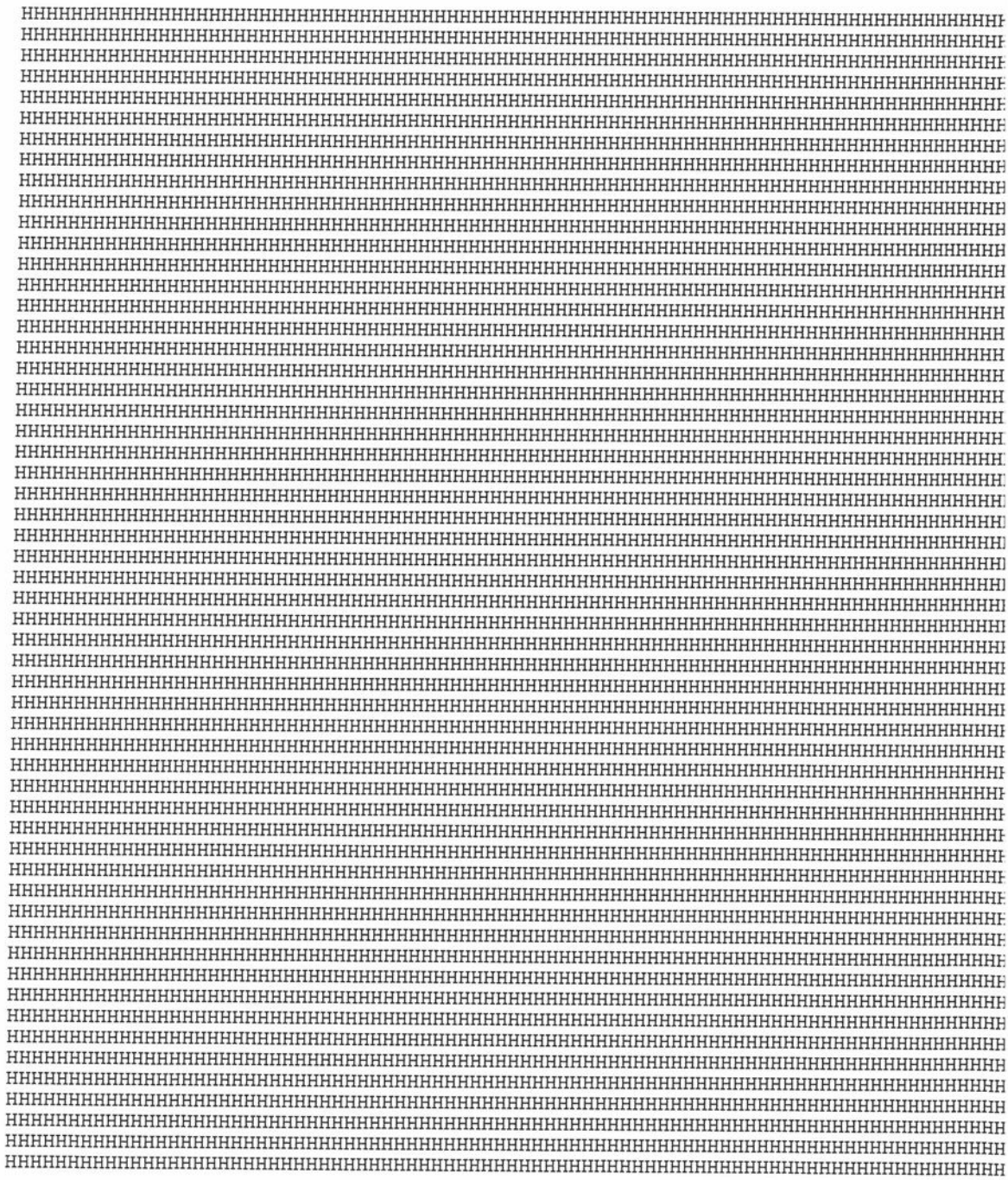


2. Press **Cancel** button when you would like to stop printing plots.



- 

The printed report is the following. Press **Cancel** button when you would like to stop printing plots.



Infinite Color H's Test

This test prints infinite plots filled with H's in color (black, magenta, yellow and cyan).

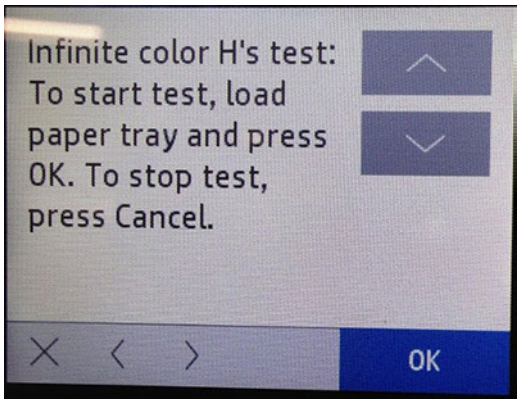
Use it to see the print quality in order to know if the printer needs calibrations, printhead cleaning, or purges.

Associated errors

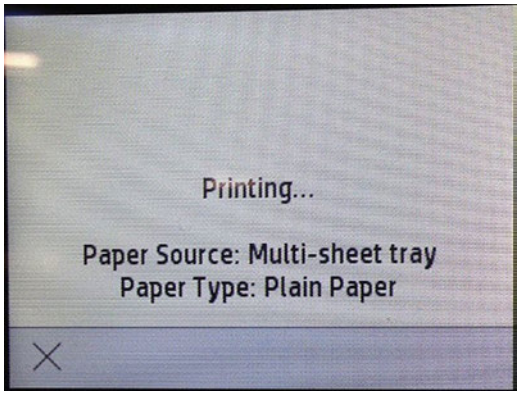
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

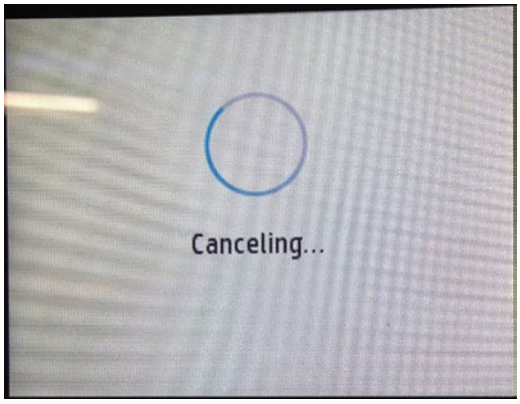
- Use it to check the paper media advance calibration is correct.
- Use it to check the printhead calibrations quality.

1. Navigate to **Support menu > Service Test > Infinite color H's Test** and then press **OK**.

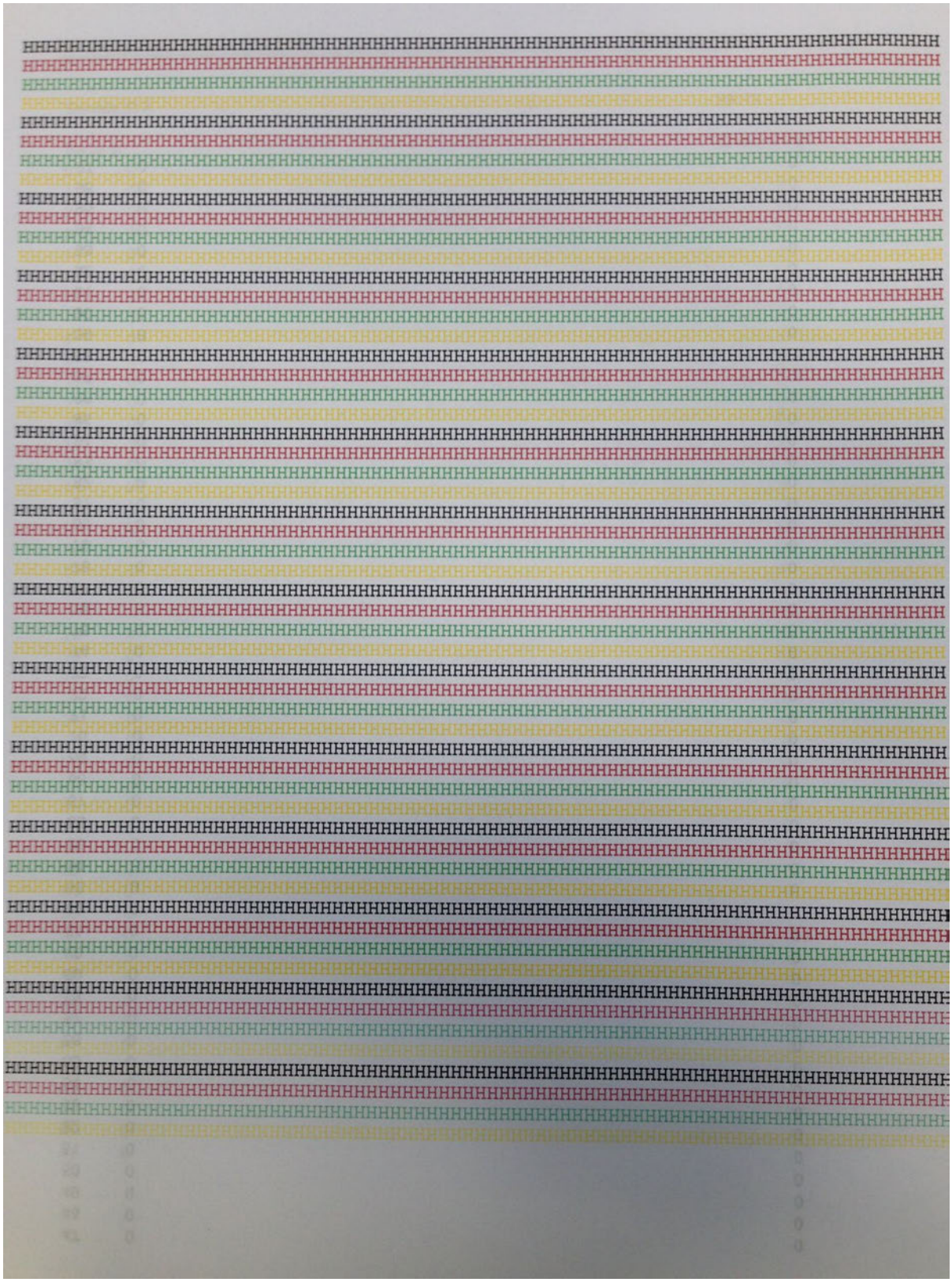


2. Press **Cancel** button when you would like to stop printing plots.

- 

- 

The printed report is the following:



Print head rec level 1

This test is used to clear the printhead, spitting several times with a soft strength.

This test consumes a low quantity of ink, diminishing the cartridges levels a little bit.

Associated errors

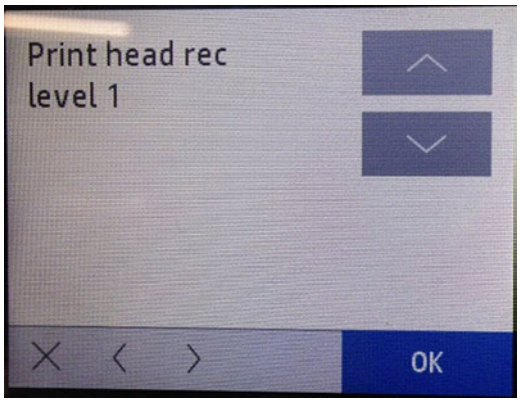
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- Use it when the plot quality is low even when calibrations have been performed.
- When some of the main colors were missing in plots (Printhead's dies are blocked).

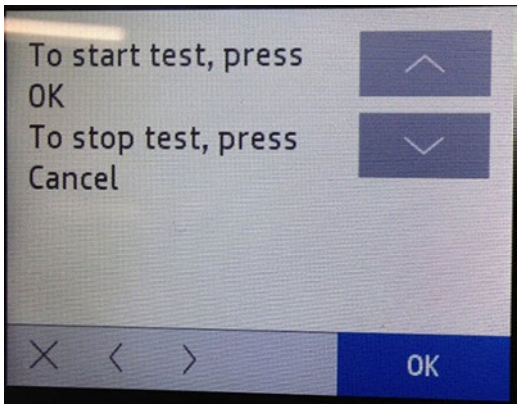
TIP: Before using the upper levels of **Print head rec** diagnostic, first try the lower one, then print in order to check whether it was enough or not. If you do not see any improvement, go to the diagnostic's next levels.

NOTE: Expends a moderate amount of cartridge ink.

1. Navigate to **Support menu > Service Test > Print head rec level 1** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



3. When the test is finished it automatically goes to the menu.

Print head rec level 2

This test is used to clear the printhead, spitting several times with a medium strength.

This test consumes a moderate quantity of ink, diminishing the cartridges levels.

Associated errors

When any of the following errors occur in the printer, this diagnostics procedure must be performed:

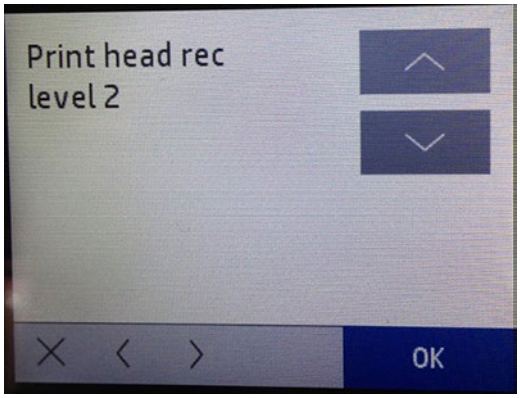
- Use it when the plot quality is low even when calibrations have been performed.
- When some of the main colors were missing in plots (Printhead's dies are blocked).

TIP: Before using the upper levels of **Print head rec** diagnostic, first try the lower one, then print in order to check whether it was enough or not. If you do not see any improvement, go to the diagnostic's next levels.

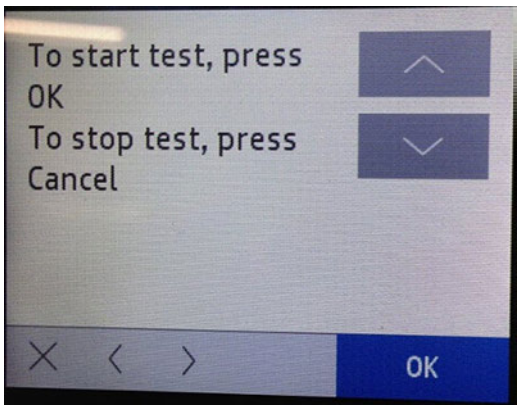
NOTE: Use only if you have performed **Print head rec level 1** without seeing any improvement.

NOTE: Expends a high amount of cartridge ink.

1. Navigate to **Support menu** > **Service Test** > **Print head rec level 2** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



3. When the test is finished it automatically goes to the menu.

Print head rec level 3

This test is used to clear the printhead, spitting several times with a hard strength.

This test consumes a high quantity of ink, diminishing the cartridges levels very much.

Associated errors

When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- Use it when the plot quality is low even when calibrations have been performed.

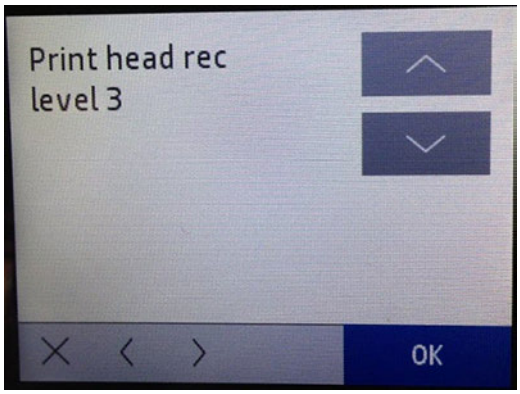
- When some of the main colors were missing in plots (Printhead's dies are blocked).

TIP: Before using the upper levels of **Print head rec** diagnostic, first try the lower one, then print in order to check whether it was enough or not. If you do not see any improvement, go to the diagnostic's next levels.

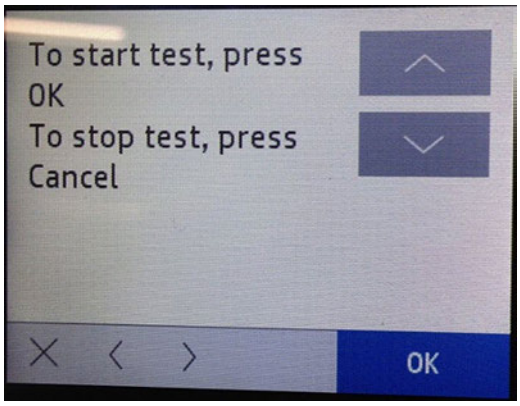
NOTE: Use only if you have performed **Print head rec level 1** and **2** without seeing any improvement.

NOTE: Expends a high amount of cartridge ink, between **15% and 20% of the cartridge's total ink level**. Take care to have additional cartridges available in case performing the test consumes the current cartridge entirely.

1. Navigate to **Support menu > Service Test > Print head rec level 3** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



3. When the test is finished it automatically goes to the menu.

PHA/IDS Diagnostics

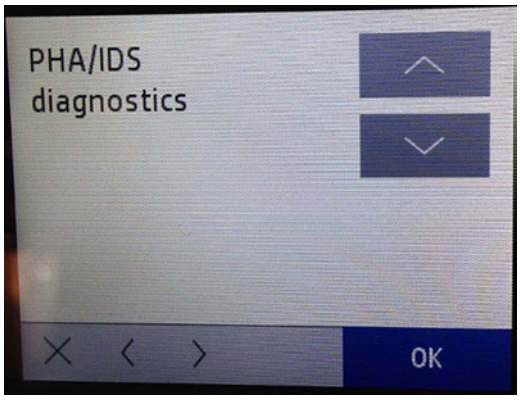
This test prints a printhead health pattern in order to show possible wrong calibrations or printhead errors.

Associated errors

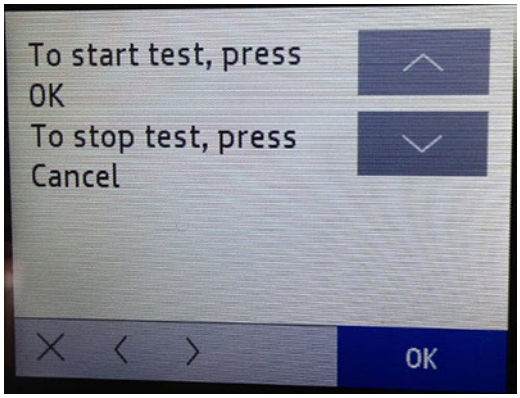
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- Use it to check the plot quality.
- Use it after calibrating the printhead to check the results.

1. Navigate to **Support menu > Service Test > PHA/IDS diagnostics** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



The printed report is as follows:

Ink Supplies Report

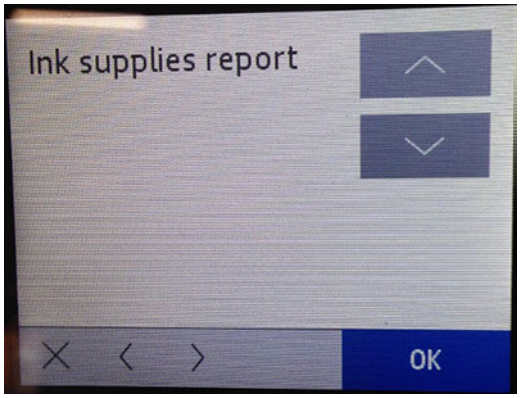
This test prints a report on the ink supplies information.

Associated errors

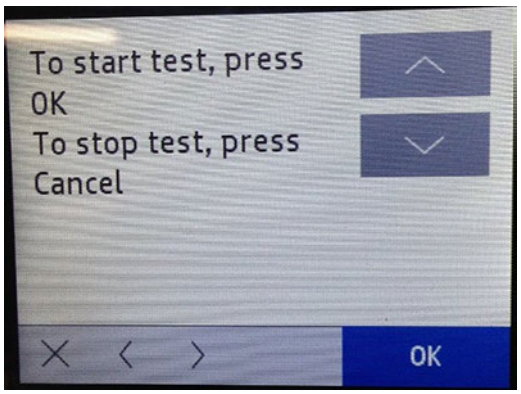
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

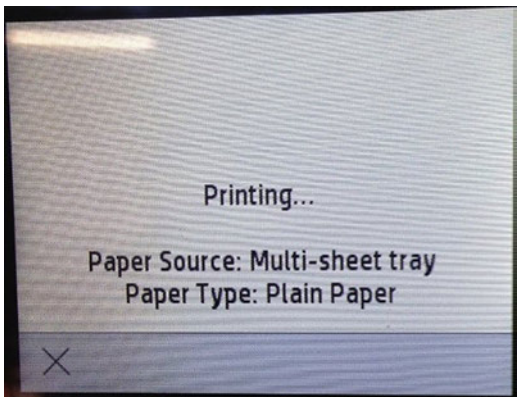
- Use it to check the plot quality.
- Use it after calibrating the printhead to check the results.

1. Navigate to **Support menu > Service Test > Ink supplies report** and then press **OK**.

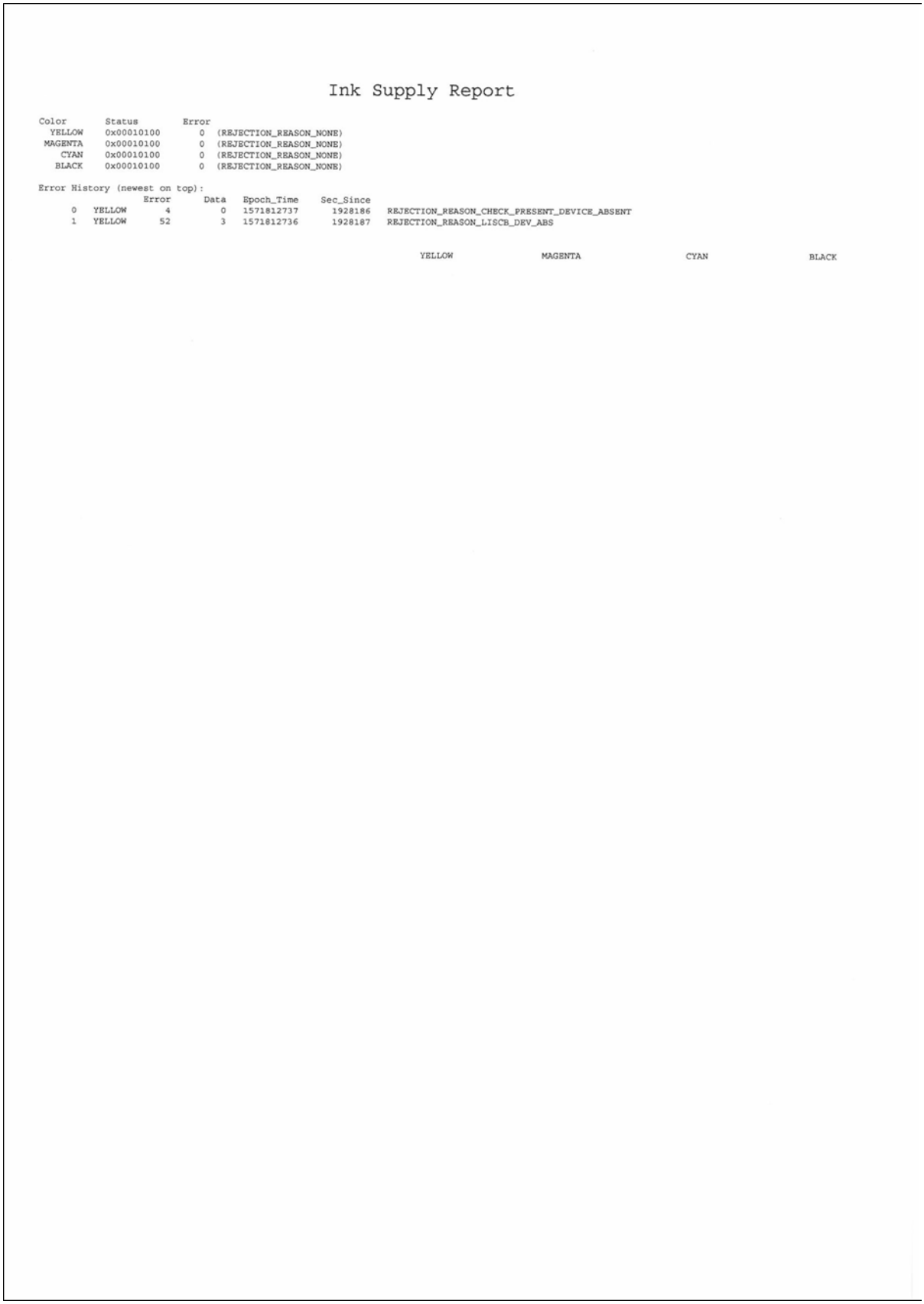


2. The following screen will display, press **OK** in order to start the test.

- 

- 

The printed report is as follows:



Ink Supply Report

Color	Status	Error	
YELLOW	0x00010100	0	(REJECTION_REASON_NONE)
MAGENTA	0x00010100	0	(REJECTION_REASON_NONE)
CYAN	0x00010100	0	(REJECTION_REASON_NONE)
BLACK	0x00010100	0	(REJECTION_REASON_NONE)

Error History (newest on top):

	Error		Data	Epoch_Time	Sec_Since	
0	YELLOW	4	0	1571812737	1928186	REJECTION_REASON_CHECK_PRESENT_DEVICE_ABSENT
1	YELLOW	52	3	1571812736	1928187	REJECTION_REASON_LISCB_DEV_ABS

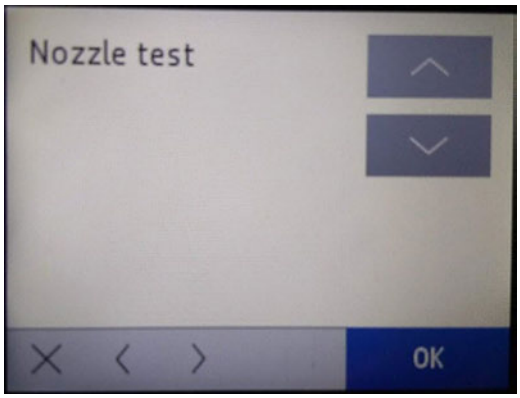
YELLOW MAGENTA CYAN BLACK

Nozzle Test

Prints the nozzle health pattern.

While performing this test, paper is needed in the Multi-sheet tray. Also, it is required to be an A4 or Letter Size paper, otherwise there will be a paper size mismatch message. There will be the option to print anyway.

▲ Navigate to **Support menu > Service Test > Nozzle test** and then press **OK**.

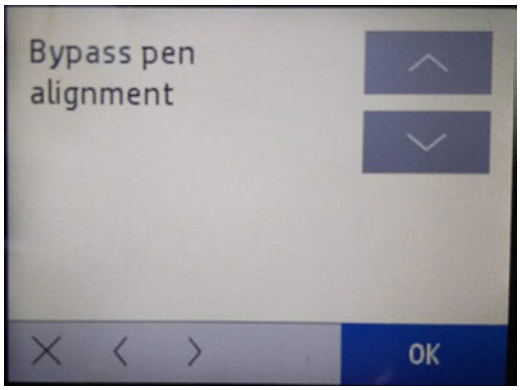


The printed report is as follows:

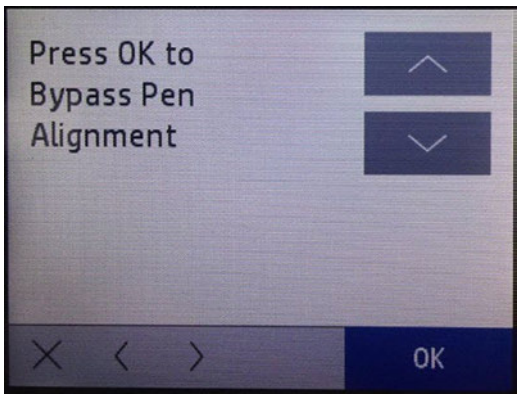
Bypass Pen Alignment

Skips printhead alignment during start up or printhead replacement. This can be useful for some troubleshooting.

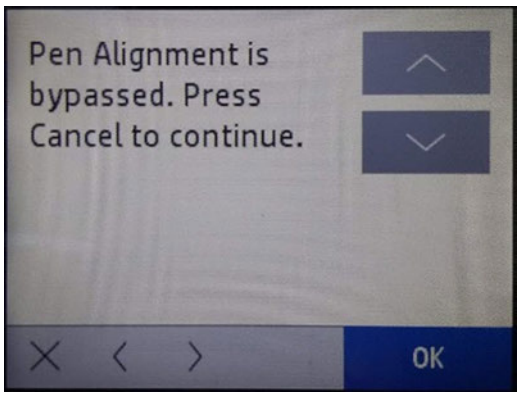
1. Navigate to **Support menu > Service Test > Bypass pen alignment** and then press **OK**.



2. The following screen will display, press **OK** in order to start the test.



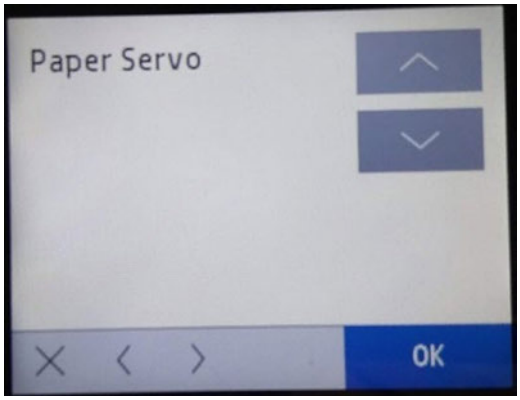
3. The following screen will be displayed. The Pen Alignment is bypassed now. Press **Cancel** to continue and go back to the main menu.



Paper Servo

This test verifies all the components associated with the Paper Servo Subsystem: Paper Motor, Feed Encoder Disk, Feed Encoder PCA, and Index Encoder PCA.

When the test is done, the feed roller is moved a small distance in both directions in order to check that all the components work properly or demonstrate if any are damaged.

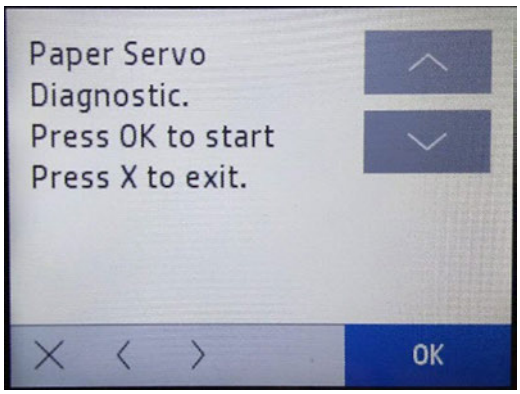


Associated errors

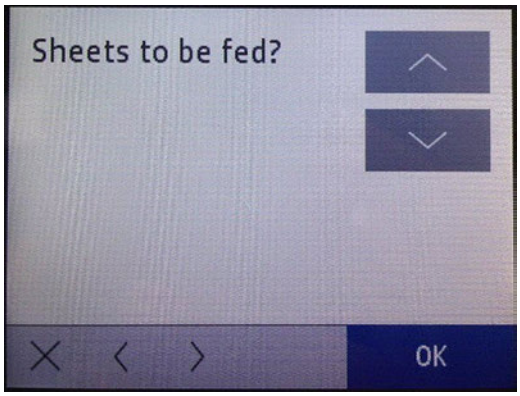
When any of the following errors occur in the printer, this diagnostics procedure must be performed:

- System error 0041-0017.
- Paper jam error.

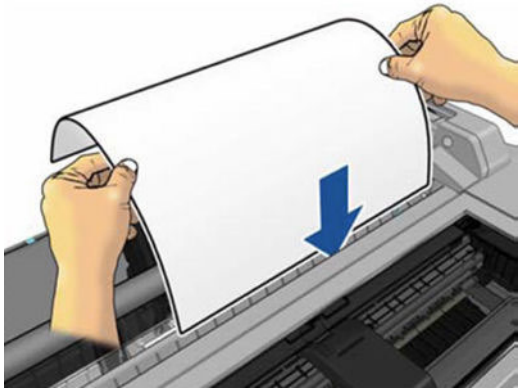
1. Navigate to **Support menu > Service Test > Paper Servo** and then press **OK**.



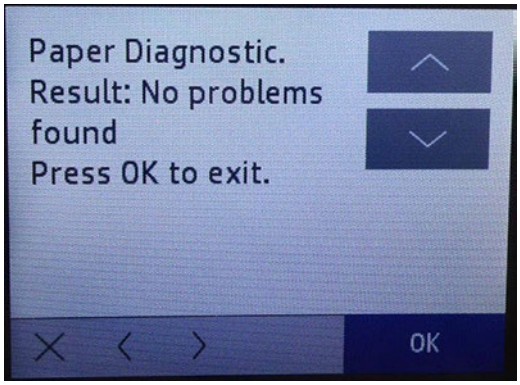
2. Take care that the multi sheet tray is properly connected and load A4 paper. Roll paper could also work!



TIP: If there is no roll paper loaded and in order to check easily if the feed roller is moving or not, you can introduce a paper sheet into the top input slot (where single sheets are loaded, see the following image). If the feed roller moves correctly you will see the paper moving up and down.



3. The feed roller will be moved a bit in both directions. If everything is fine, the following screen will be displayed:



4. If any issue is found one of these system errors should prompt: 0041-0017, 0085-0101, 0085-0201.

Line Sensor (Zim/Spot)

This test verifies the Line Sensor.

When this test is done you will be asked to load paper into the Multi-Sheet Tray in order to check that the sensor is not damaged.

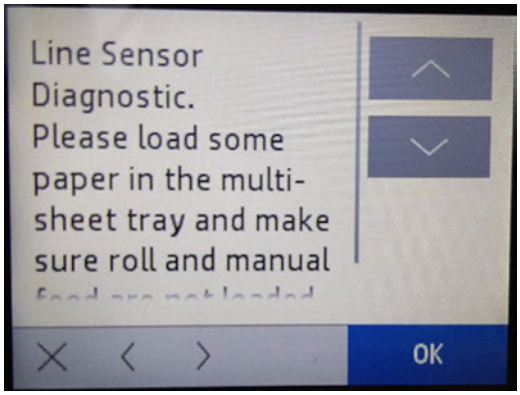
Associated errors

When the following error occurs in the printer, this diagnostics procedure must be performed:

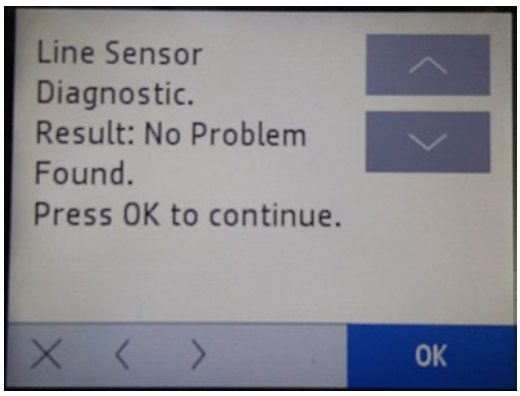
- The printer is unable to complete the load because it cannot detect the paper.

1. Navigate to **Support menu > Service Test > Line Sensor (Zim/Spot)** and then press **OK**.

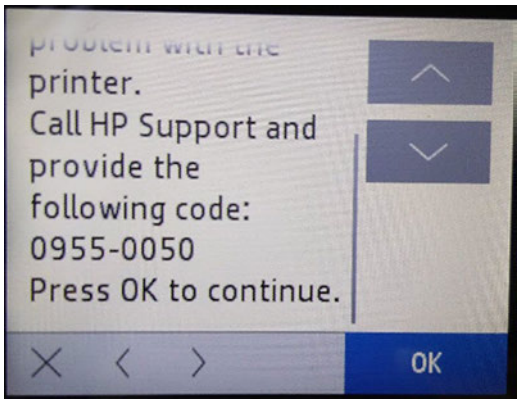
2. The following screen will be displayed, press OK again to start the test.



3. Check that there is paper in the Multi-Sheet Tray and the roll is unloaded and press OK. Then one sheet will be loaded to perform the test. If the test is correctly done you will hear 3 beeps, and the paper will be unloaded to finish the test, and the following will be displayed:



4. If the sensor is not working properly (broken, dirty or disconnected) the system error 0955-0050 will appear. The Line Sensor should be replaced. If the test fails, the screen below will be prompted.



5. If the test fails, check that there is no paper jam preventing the sheet loading process. Remove the Multi-Sheet Tray if necessary.

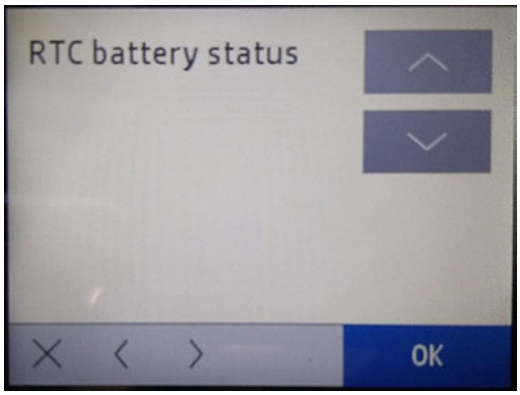
RTC Battery Status

This test checks whether the Real-Time Clock's battery has expired.

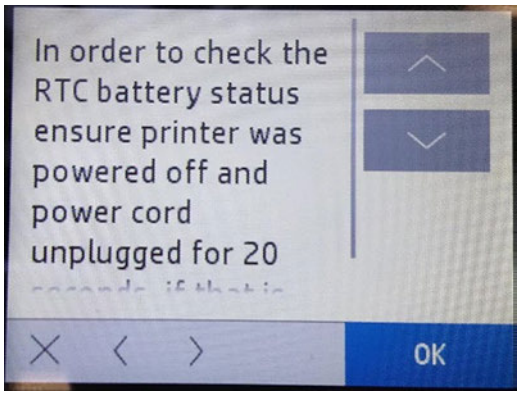
Associated errors

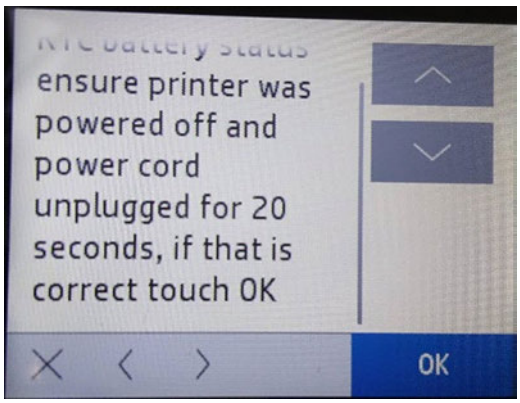
There is no error. The symptom is that the date and time is lost when the power cord is disconnected. To check that the battery is okay, perform this diagnostic by following the procedure below.

1. Switch off the printer and remove the power cable.
2. Wait for 20 seconds.
3. Reconnect the power cord and turn on the printer.
4. Navigate to **Support menu > Service Test > RTC Battery Status** and then press **OK**.

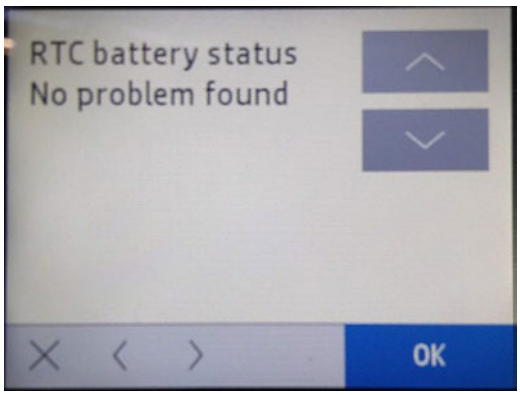


5. The following screen is displayed:

- 

- 

6. If the test passes, the following screen is shown:



7. If the battery is exhausted, the following message is displayed:

Problem found: Battery expired or RTC problem. Call HP support and provide the following code: 0001-0082

Rewinder motor

This test verifies all the components associated with the Rewinder motor and Rewinder Encoder Disk.

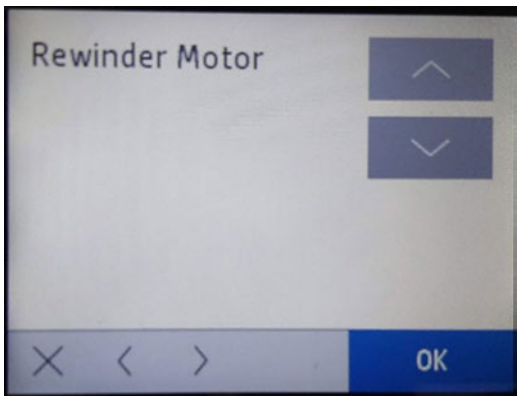
When the test is done the rewinder motor turns a small distance in both directions in order to check that all the components work properly or if any are damaged.

Associated errors

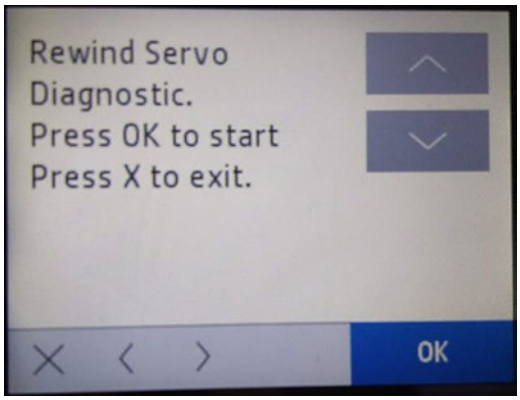
This test should be conducted when there are issues unloading the roll, or media advance problems affecting IQ.

NOTE: Remember to retire the roll bar (with media paper roll) before executing this diagnostic in order to properly check the components. In any other case, the diagnostic could fail.

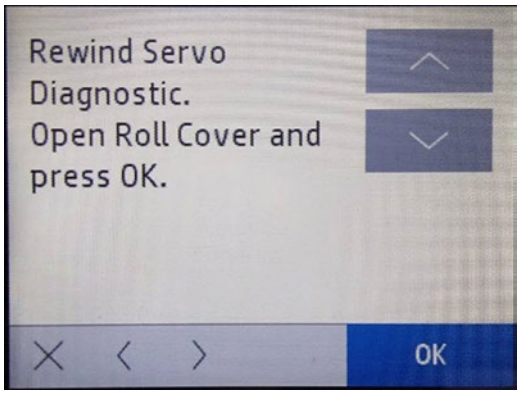
1. Unload roll.
2. Navigate to **Support menu > Service Test > Rewinder Motor** and then press **OK**.



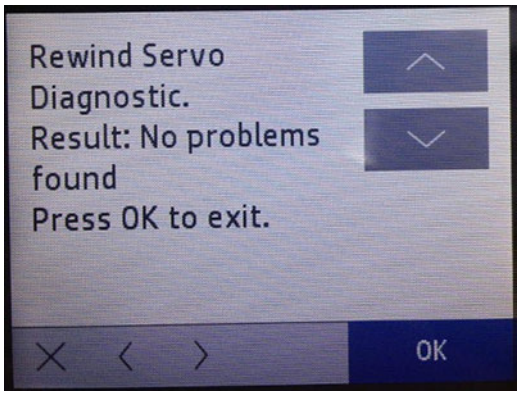
3. The following screen will display, press **OK** in order to start the diagnostic.



4. The following screen will appear. Open the roll cover and press **OK** to continue with the diagnostic.



5. The rewinder will move in both directions. If everything is fine the following screen will be displayed:



ARSS Test

This test verifies that the ARSS mechanical components are not damaged.

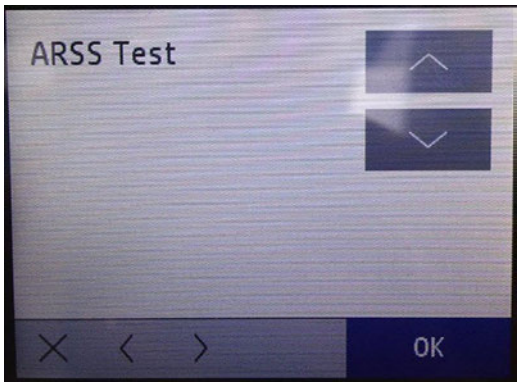
Associated errors

This test should be conducted when there are issues changing the media type between roll media and multi-sheet tray in case the roll media was loaded.

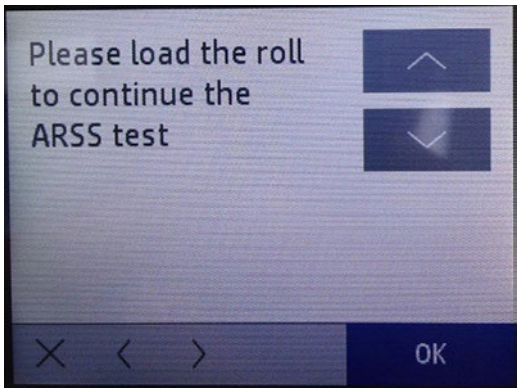
NOTE: You need to have installed the multi-sheet tray and the roll paper in your printer in order to perform this test.

First, you should manually load the roll paper in printer mode or load it during the test. The following paragraphs describe the test and its steps.

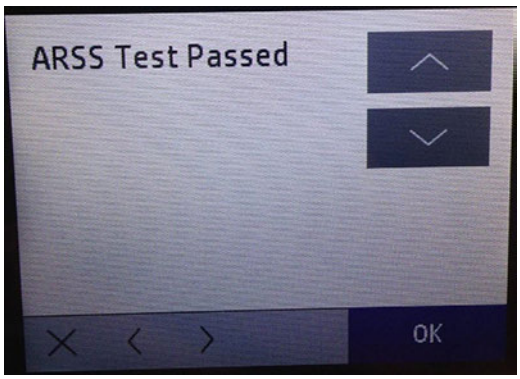
1. Navigate to **Support menu > Service Test > ARSS Test** and then press **OK**.



2. Load the roll paper (in case it is not already loaded) and press **OK** to continue.

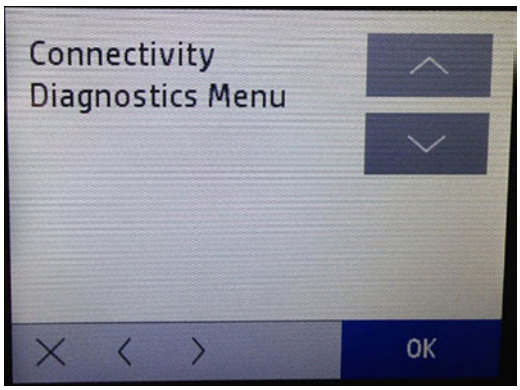


3. Once the roll is loaded, the rewinder will unload the roll paper.
4. The printer will activate the ARSS mechanically in order to change between roll paper and multi-sheet tray.
5. The test will display the result on-screen, reporting **Pass** or **Failure**depending on whether or not ARSS moves correctly.



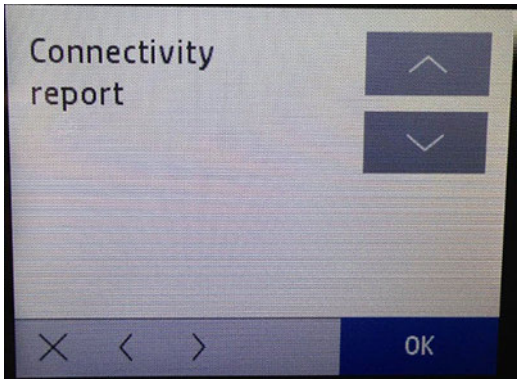
Connectivity Diagnostics Menu

This menu contains options for printing different connectivity reports.



Connectivity report

Prints a report that contains all the various Connectivity settings.



The printed report is as follows:

HP DesignJet T650 24-in series
Connectivity Status

Serial Number: CN9630M00Q

[Networking]

Printer Name: HPBADBAD; Active DNS Server(s): 10.6.2.20 10.6.130.17; Active Default Gateway: 10.6.144.1; MAC Policy: Multiple Hot Multiple MAC

---- Network Interface Adaptor Summary ----------

Name	Type	Status	MAC Address
eth0	Wired (802.3)	100TX FullDplx	b8:db:ad:ba:db:ad
wlan0	Wireless (802.11)	Off	b8:db:ad:ba:db:ad
wlan1	Wireless AP (802.11)	Connected	ba:db:ad:ba:5b:ad

---- IP Status ----------

Name	Type	Addr. Source	IP Address	Subnet Mask	Gateway	DNS Server(s)
eth0	Wired (802.3)	DHCP	10.6.147.72	255.255.248.0	10.6.144.1	10.6.2.20 10.6.130.17
wlan0	Wireless (802.11)	Off				
wlan1	Wireless AP (802.11)	DHCP	192.168.223.1	255.255.255.0		10.6.2.20 10.6.130.17

Note: Automatic or manual IP address assignment only occurs for an adaptor if it is currently connected.

Wired (802.3) Adaptor Information Detail

==========

---- Configuration ----------

Enabled at power on: yes
Auto Crossover: On
Auto or Manual DNS Server: Automatic
Link Config: Auto link speed
Auto or Manual IP Address: Automatic

---- Status ----------

Adaptor Name: eth0
Adaptor Connection Active: True
Link Status: 100 Mbs Full Duplex
Adaptor State: Connected
Adaptor MAC Address: b8:db:ad:ba:db:ad

Wireless (802.11) Adaptor Information Detail

==========

---- Configuration ----------

SSID: not set
Regulatory Domain: Unconfigured - legal everywhere
Authentication: Open
High Speed Mode: Disabled
RTS Threshold: 2347 (default is 2347)
Beacon Period: 100ms
IBSS Always Up: off
Ad hoc 802.11b only: off
Auto or Manual DNS Server: Automatic
Mode: Infrastructure, disabled at power on
Max. Power Level: 1000mw
Encryption: None
Fragmentation Threshold: 2346 (default is 2346)
Max. Transmit Rate: Automatic
ATIM Window: 0ms
Infrastructure 802.11b only: off
Auto or Manual IP Address: Automatic

---- Status ----------

Adaptor Name: wlan0
Adaptor Connection Active: False
Radio Hardware Status: Radio Detected
Board Rev: 00000000 Board ID: 00000000
Association Attempt Info: None Since Last Configuration Change
Association State: Not trying to associate
Adaptor State: Off
Adaptor MAC Address: b8:db:ad:ba:db:ad
Permanent MAC Address: 00:00:00:00:00:00
Radio Firmware Revision: 00.00.00.00
Completion Time: 00:00:00.0
WPS Status: Ready To Run

UnDirected Scan - Wireless networks found = 0

==========

No dot11 networks found.

UnDirected Scan - Wireless networks found = 0

==========

No dot11 networks found.

[Network Troubleshooting Agent (version 2006.0)]

Key to messages:

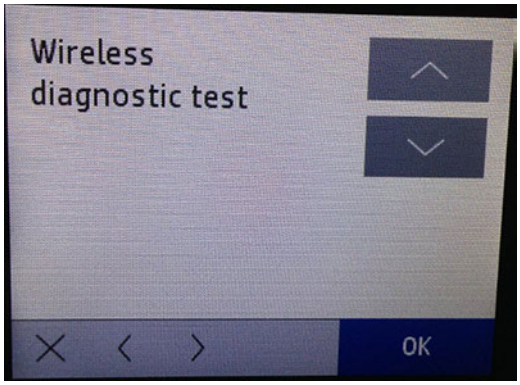
I - Informational: The condition MAY be IGNORED but might be of interest.
W - Warning: The condition MUST be UNDERSTOOD because it MIGHT be a problem.
F - Fatal: The condition MUST be CORRECTED because it WILL prevent network connectivity with the printing device.

I 00002: wlan0 The wireless network interface in the printing device (wlan0) is not enabled. You cannot connect to a wireless network until this is turned on.

If you want to connect to a wireless network, consult the documentation that came with the printing device on how to enable the wireless interface.

Wireless diagnostics test

Performs the same Wireless Diagnostics Test as in the "Customer UI", through the Front Panel of the printer. This diagnostic tool tests the wireless setup of the product.



The printed report is as follows:

WIRELESS NETWORK TEST RESULTS

Model : HP DesignJet T650 24-in

ATTENTION *The wireless radio on your HP printer is currently turned OFF.*

SOLUTION *1 To connect wirelessly, you must turn ON the wireless radio on your HP printer. Refer to the Setup Guide that came with your HP printer.*

DIAGNOSTICS RESULTS

> Wireless	
-- Wireless On	*FAIL*
-- Wireless Working	Not Run
-- Signal Strength	Not Run
-- Signal Quality	Not Run
> Connectivity	
-- Connected	Not Run
-- Disconnect count total	0
-- Disconnect count (last hour)	0
-- Disconnect count (last 24 hours)	0
> Network	
-- Network Name (SSID) Found	Not Run
-- Other networks detected matching your network name (SSID)	Not Run
-- Wireless Networks Detected	0
> Settings	
-- Printer Settings Consistent with Wireless Router Settings	Not Run
-- No Filtering	Not Run
-- Channel	Not Run
-- Security	Not Run

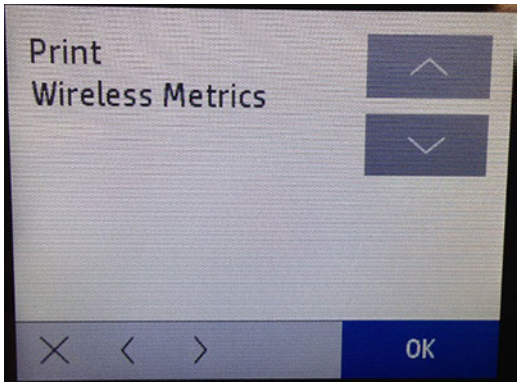
CURRENT CONFIGURATION

-- Network Name (SSID)	Not Set
-- Hardware Address (MAC)	b8:db:ad:ba:db:ad
-- IP Address	Not applicable
-- Configuration Source	Not applicable
-- Communication Mode	Infrastructure
-- Authentication Type	Open System
-- Encryption	None
-- Internet	Not applicable

For additional help with troubleshooting, refer to the network troubleshooting help section provided with your HP printer.
For more information on your network configuration, print the Network Configuration Page.
Visit the HP Wireless Printing Center - www.hp.com/go/wirelessprinting.

Print wireless metrics

Prints details on disconnect counts, disconnect duration, signal strength, noise levels, wifi frame lost details etc.



The printed report is as follows:

WIRELESS METRICS DATA REPORT
HP DesignJet T650 24-in series

Firmware Revision: SPRKLFLP1A001.1946B.00

Connectivity Details (In Nos)

Disconnect count total	0
Disconnect count (last hour)	0
Disconnect count (last 24 hours)	0

Disconnect Duration for Last 24 Hour (In Seconds)

Minimum Disconnect Duration	NA
Average Disconnect Duration	NA
Maximum Disconnect Duration	NA

Signal Strength Details (In RSSI)

Range: -200(very very weak) to 20(strong)

Minimum RSSI Value (Last One hour)	0
Average RSSI Value (Last One hour)	0
Maximum RSSI Value (Last One hour)	0
Minimum RSSI Value (Last 24 hour)	0
Average RSSI Value (Last 24 hour)	0
Maximum RSSI Value (Last 24 hour)	0
Current RSSI Value	0

Signal Noise Level Details

Minimum Noise Value (Last One hour)	NA
Average Noise Value (Last One hour)	NA
Maximum Noise Value (Last One hour)	NA
Minimum Noise Value (Last 24 hour)	NA
Average Noise Value (Last 24 hour)	NA
Maximum Noise Value (Last 24 hour)	NA
Current Noise Value	NA

Wireless Frame Lost Details

Frame Lost Count (Last One hour)	0
Frame Lost Count (Last 24 hour)	0

Regulatory Domain: Unconfigured - legal everywhere

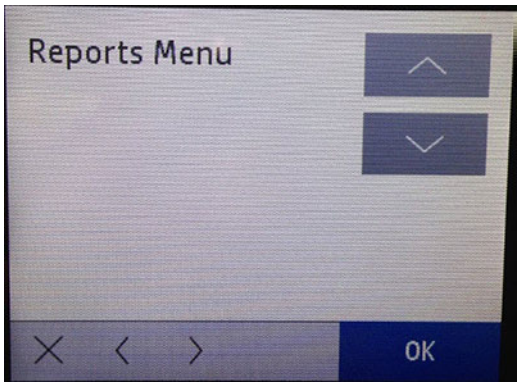
IP Address Usage History (Recent First)

IP Address	Channel	Config Mode	Duration	Allocation Time

Reports

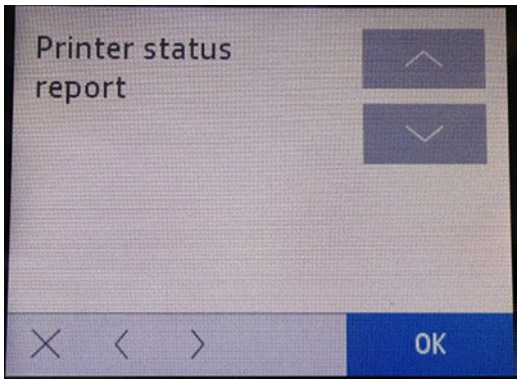
This menu contains options for printing various printer status reports.

In some cases there is a delay between the moment when you press OK in the support menu and when the printer starts to print the report. Please be patient.

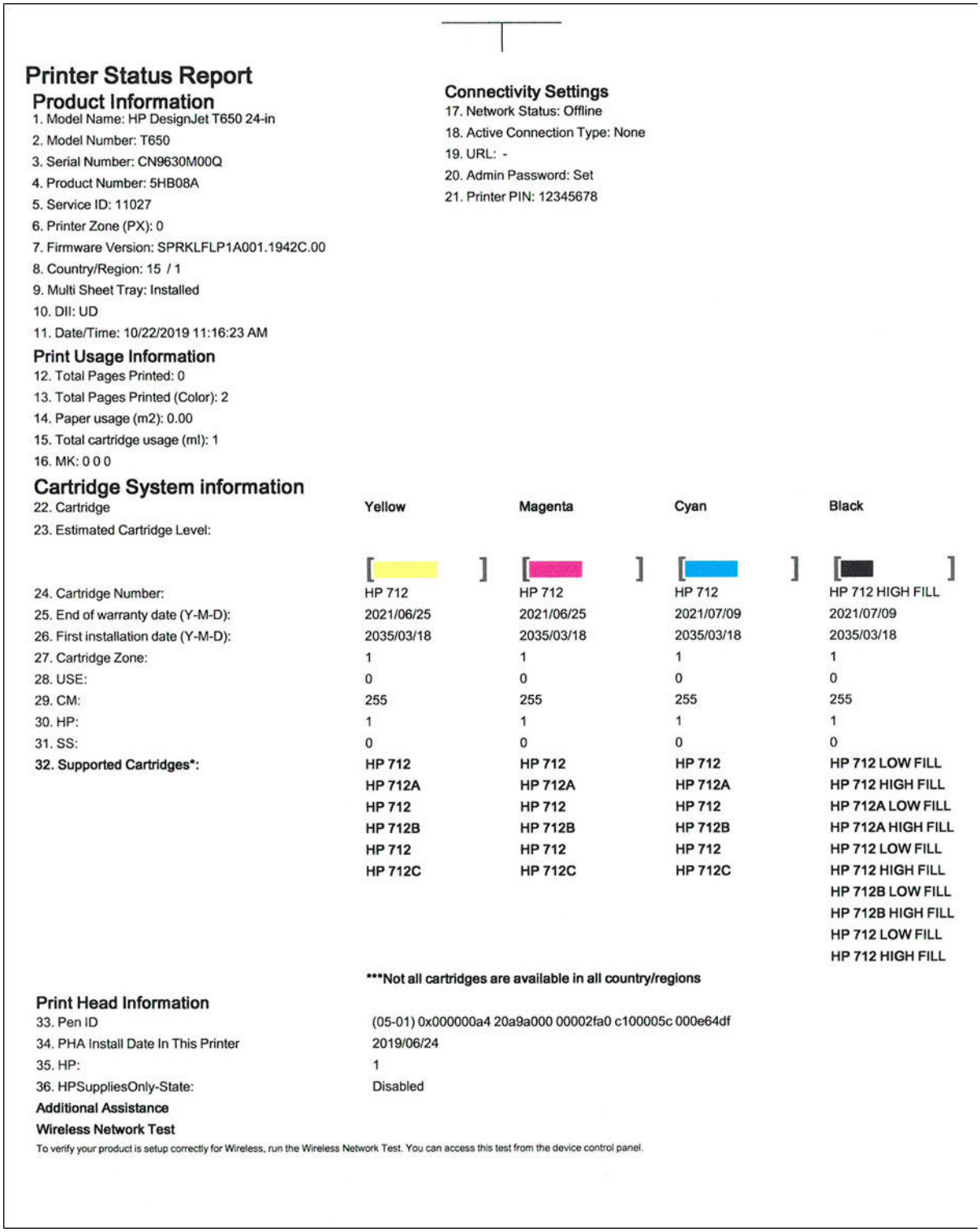


Printer status report

A high-level view of the product status.



The printed report is as shown below:



Printer Status Report

Product Information

1. Model Name: HP DesignJet T650 24-in
2. Model Number: T650
3. Serial Number: CN9630M00Q
4. Product Number: 5HB08A
5. Service ID: 11027
6. Printer Zone (PX): 0
7. Firmware Version: SPRKLFLP1A001.1942C.00
8. Country/Region: 15 / 1
9. Multi Sheet Tray: Installed
10. DII: UD
11. Date/Time: 10/22/2019 11:16:23 AM

Connectivity Settings

17. Network Status: Offline
18. Active Connection Type: None
19. URL: -
20. Admin Password: Set
21. Printer PIN: 12345678

Print Usage Information

12. Total Pages Printed: 0
13. Total Pages Printed (Color): 2
14. Paper usage (m2): 0.00
15. Total cartridge usage (ml): 1
16. MK: 0 0 0

Cartridge System information

22. Cartridge	Yellow	Magenta	Cyan	Black
23. Estimated Cartridge Level:	[ ]	[ ]	[ ]	[ ]
24. Cartridge Number:	HP 712	HP 712	HP 712	HP 712 HIGH FILL
25. End of warranty date (Y-M-D):	2021/06/25	2021/06/25	2021/07/09	2021/07/09
26. First installation date (Y-M-D):	2035/03/18	2035/03/18	2035/03/18	2035/03/18
27. Cartridge Zone:	1	1	1	1
28. USE:	0	0	0	0
29. CM:	255	255	255	255
30. HP:	1	1	1	1
31. SS:	0	0	0	0
32. Supported Cartridges*:	**HP 712** **HP 712A** **HP 712** **HP 712B** **HP 712** **HP 712C**	**HP 712** **HP 712A** **HP 712** **HP 712B** **HP 712** **HP 712C**	**HP 712** **HP 712A** **HP 712** **HP 712B** **HP 712** **HP 712C**	**HP 712 LOW FILL** **HP 712 HIGH FILL** **HP 712A LOW FILL** **HP 712A HIGH FILL** **HP 712 LOW FILL** **HP 712 HIGH FILL** **HP 712B LOW FILL** **HP 712B HIGH FILL** **HP 712 LOW FILL** **HP 712 HIGH FILL**

*****Not all cartridges are available in all country/regions**

Print Head Information

33. Pen ID	(05-01) 0x000000a4 20a9a000 00002fa0 c100005c 000e64df
34. PHA Install Date In This Printer	2019/06/24
35. HP:	1
36. HPSuppliesOnly-State:	Disabled

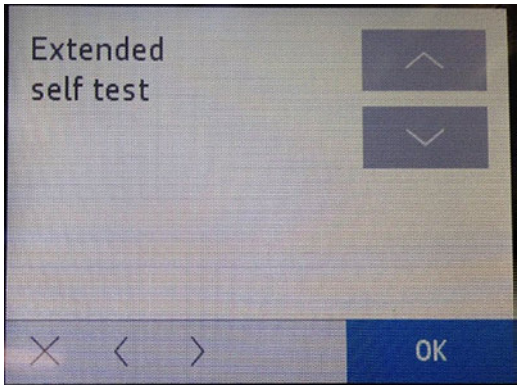
Additional Assistance

Wireless Network Test

To verify your product is setup correctly for Wireless, run the Wireless Network Test. You can access this test from the device control panel.

Extended self-test

Includes printhead specific information.



The printed report is as shown below:

Extended Self-Test Report

Model Name: HP DesignJet T650 24-in
Serial #: CN9630M00Q
Service ID #: 11027
Language: 1
Country/Region: 15
Device: 7, 0
Vertical Cartridge-to-Cartridge Alignment Setting: 32767
Horizontal Cartridge-to-Cartridge Alignment Setting: 32767
Black Bidirectional Printing Alignment Setting: 32767, 32767, 32767
Color Bidirectional Printing Alignment Setting: 32767, 32767, 32767

Cyan Magenta Yellow Violet Green Red

Total Page Count: 1

System Events (sequence number, id, repetitions, buffer – most recent first, left to right)

-- 5 Pt Font--
Extended Self Test Report
Product Number: 5HB08A
Last System Error Code: 01541D4B

Other PCA Revision(s): Not Available

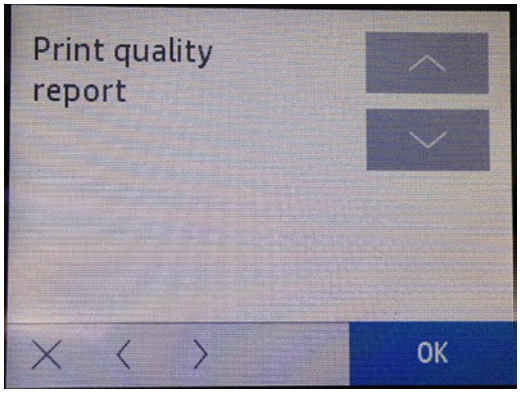
-- 5 Pt Font--
Number Power Cycles: 888
Pen Ambient Temp: 260
Main PCA Revision: 0x70e6
counts at off = 3

-- 5 Pt Font--

-- 5 Pt Font--
Total Engine Page Count: 1
Firmware Version: SPRKLFLP1A001.1942C.00
Other ASIC Revision(s): Not Available
SPOT Sensor Value =128

Print Quality report

Standard print quality report available from the customer UI.

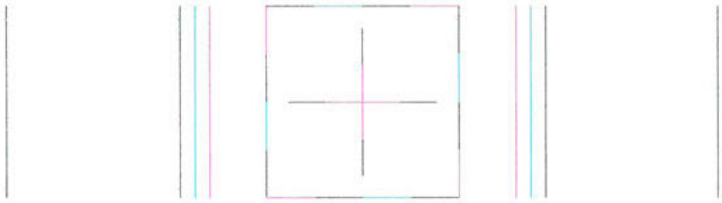


The printed report is as shown below:

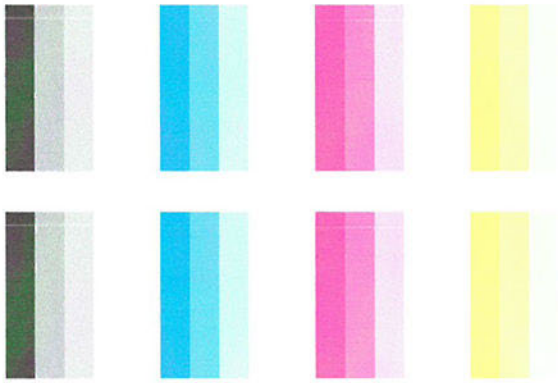
HP DesignJet T650 24-in Series
Print Quality Diagnostic Page

Printer Information
Product Model Number: 5HB08A
Product Serial Number: CN9630M00Q
Service ID: 11027
Firmware Version: SPRKLFLP1A001.1942C.00
Pages printed: Tray 1=2, Tray 2=0, Total=2
Ink cartridge level*: K=20, Y=60, M=50, C=50
*Estimates only. Actual ink levels may vary.

Test Pattern 1
If the lines are not straight and connected, align the printheads.

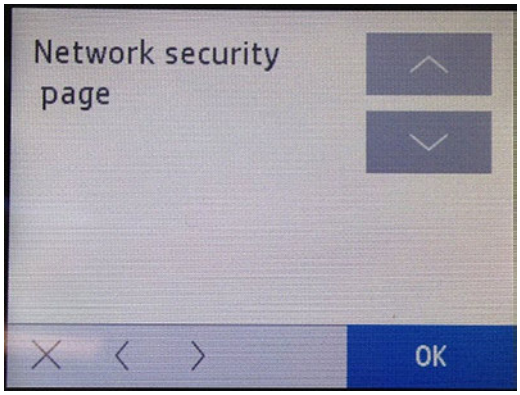


Test Pattern 2
If you see thin white lines across any of the colored blocks, clean the printheads.

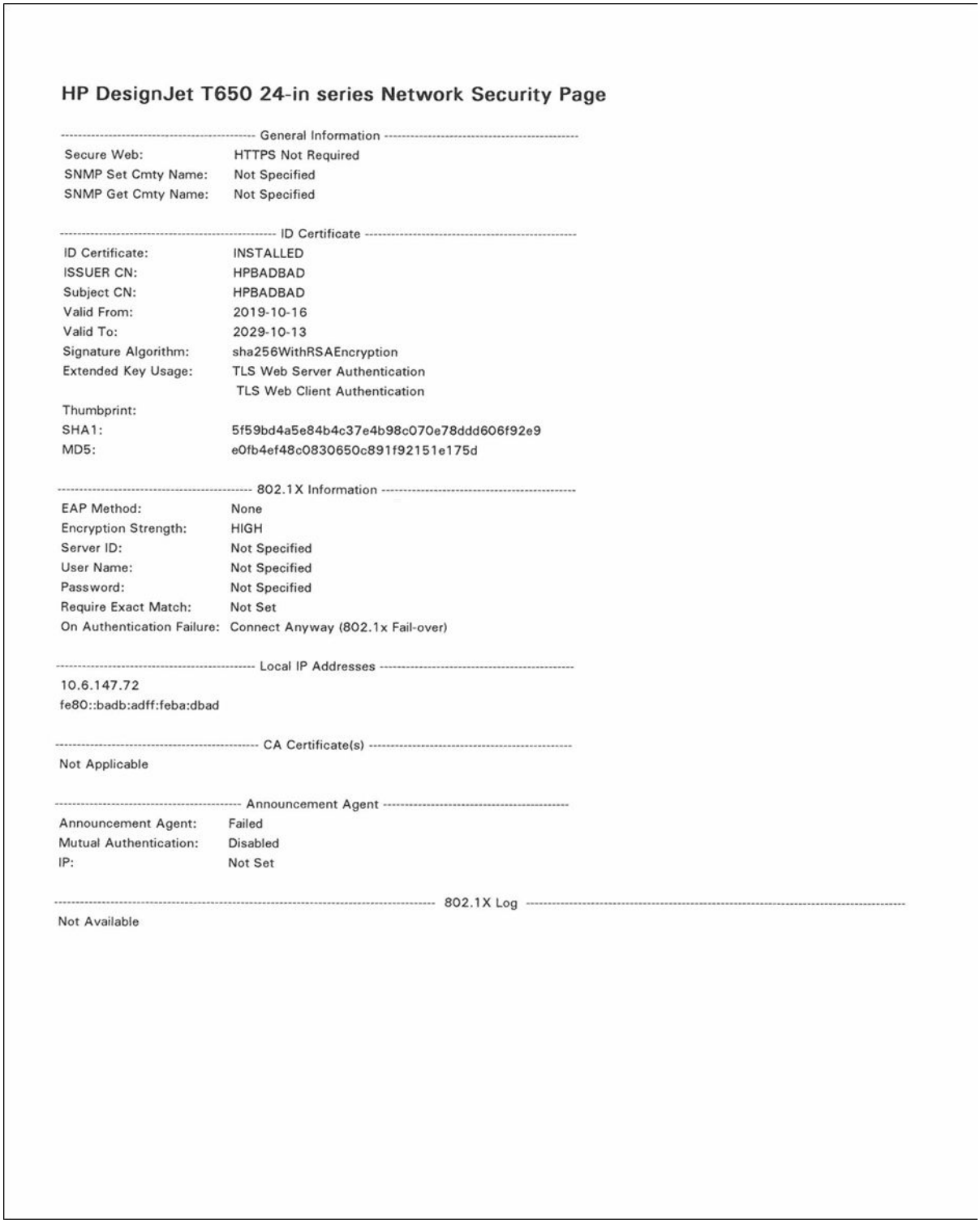


Network Security Page

Network report which contains printer connection info and the security information.



The printed report is as shown below:



HP DesignJet T650 24-in series Network Security Page

General Information

Secure Web:	HTTPS Not Required
SNMP Set Cmty Name:	Not Specified
SNMP Get Cmty Name:	Not Specified

ID Certificate

ID Certificate:	INSTALLED
ISSUER CN:	HPBADBAD
Subject CN:	HPBADBAD
Valid From:	2019-10-16
Valid To:	2029-10-13
Signature Algorithm:	sha256WithRSAEncryption
Extended Key Usage:	TLS Web Server Authentication TLS Web Client Authentication
Thumbprint:	
SHA1:	5f59bd4a5e84b4c37e4b98c070e78ddd606f92e9
MD5:	e0fb4ef48c0830650c891f92151e175d

802.1X Information

EAP Method:	None
Encryption Strength:	HIGH
Server ID:	Not Specified
User Name:	Not Specified
Password:	Not Specified
Require Exact Match:	Not Set
On Authentication Failure:	Connect Anyway (802.1x Fail-over)

Local IP Addresses

10.6.147.72
fe80::badb:adff:feba:dbad

CA Certificate(s)

Not Applicable

Announcement Agent

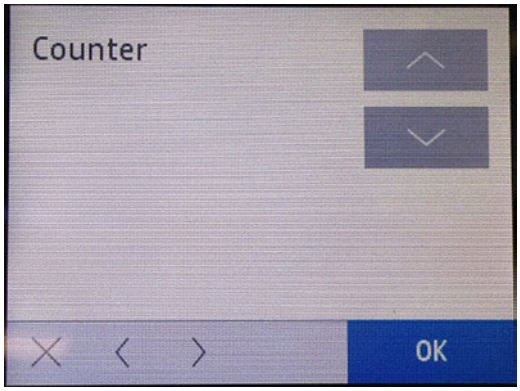
Announcement Agent:	Failed
Mutual Authentication:	Disabled
IP:	Not Set

802.1X Log

Not Available

Counter

Select this item to print an unlimited number of pages which count from zero to infinite. You can stop the plot whenever you want.



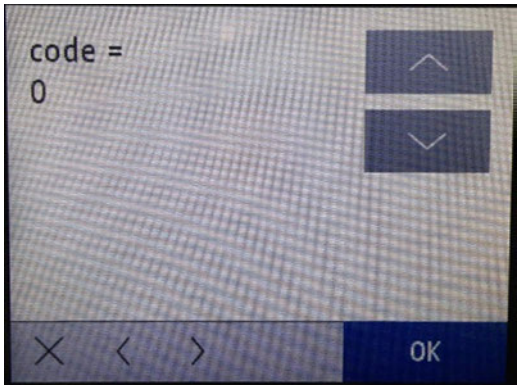
The printed report is as shown below:

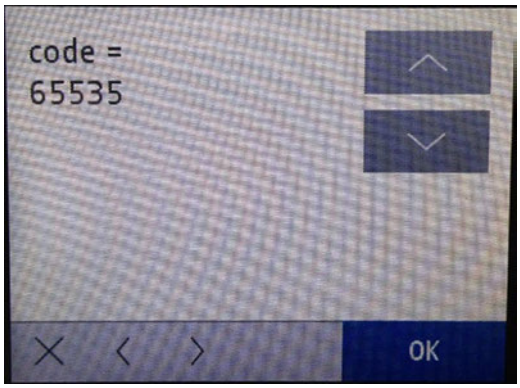
HP DesignJet T650 24-in **Counters Report**

Service ID #	11027
Serial #	CN9630M00Q
0	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	0
32	0
33	0
34	0
35	0
36	0
37	0
38	0
39	0
40	0
41	0
42	0
43	0
44	0
45	0
46	0

Print-Mech Button Tap

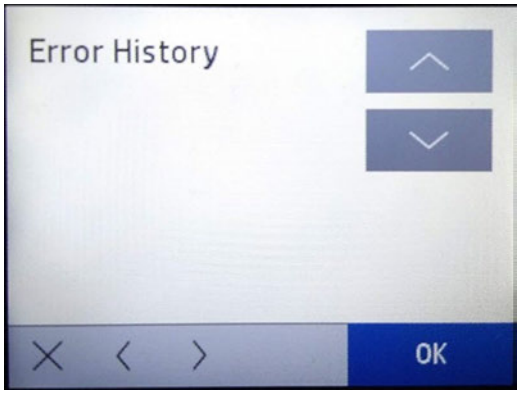
Advanced testing for manufacturing purposes. Only certain code numbers work.



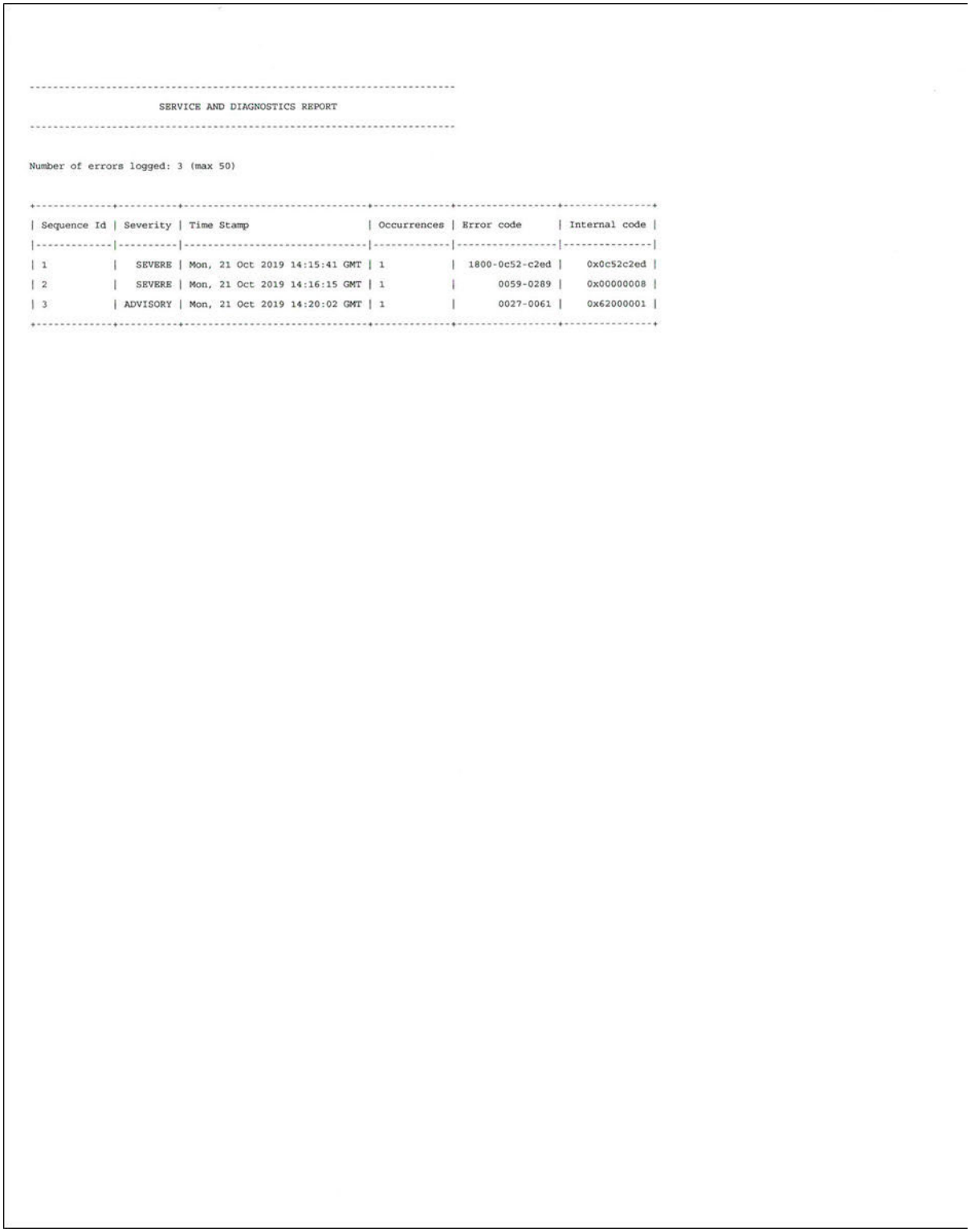


Error history

Prints the error log, a list with the latest 50 SE detected.



The printed report is as shown below:



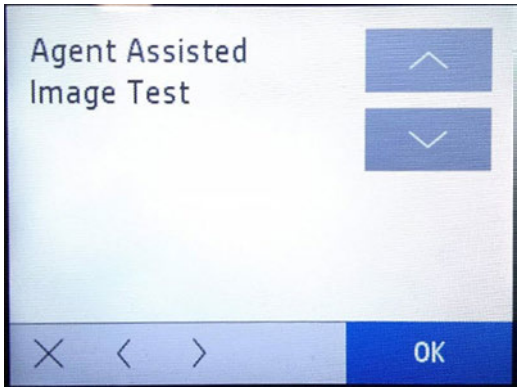
SERVICE AND DIAGNOSTICS REPORT

Number of errors logged: 3 (max 50)

Sequence Id	Severity	Time Stamp	Occurrences	Error code	Internal code
1	SEVERE	Mon, 21 Oct 2019 14:15:41 GMT	1	1800-0c52-c2ed	0x0c52c2ed
2	SEVERE	Mon, 21 Oct 2019 14:16:15 GMT	1	0059-0289	0x00000008
3	ADVISORY	Mon, 21 Oct 2019 14:20:02 GMT	1	0027-0061	0x62000001

Agent Assisted image test

Prints IQ troubleshooting page. It is recommended to use Plain paper (>85gsm).

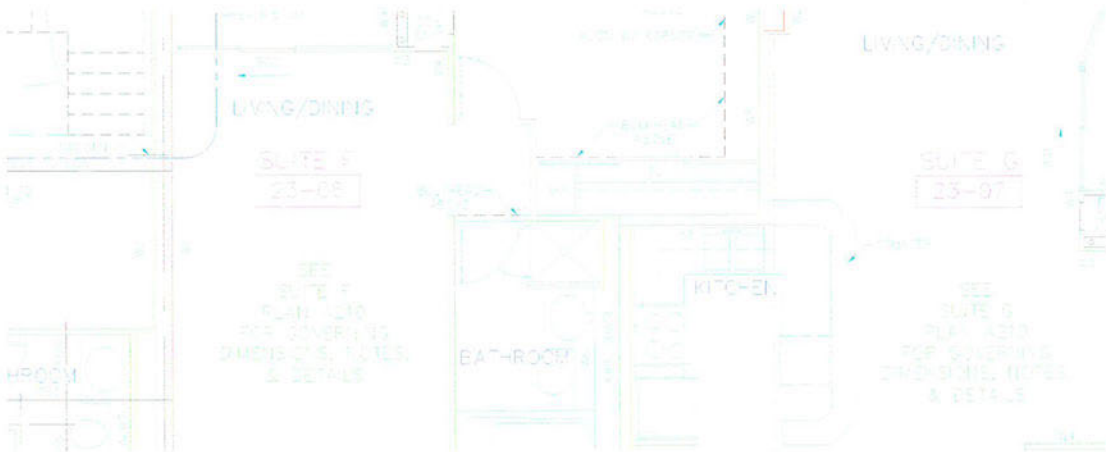


The printed report is as shown below:

AGENT-ASSISTED IMAGE TEST

Product and Revision Information

1. Serial Number: CN9630M00Q
2. Firmware Version: SPRKLFLP1A001.1942C.00



4 Parts and diagrams

This chapter provides a complete reference for the key components of the printer, with detailed visual representations of their locations and arrangement within each subsystem.

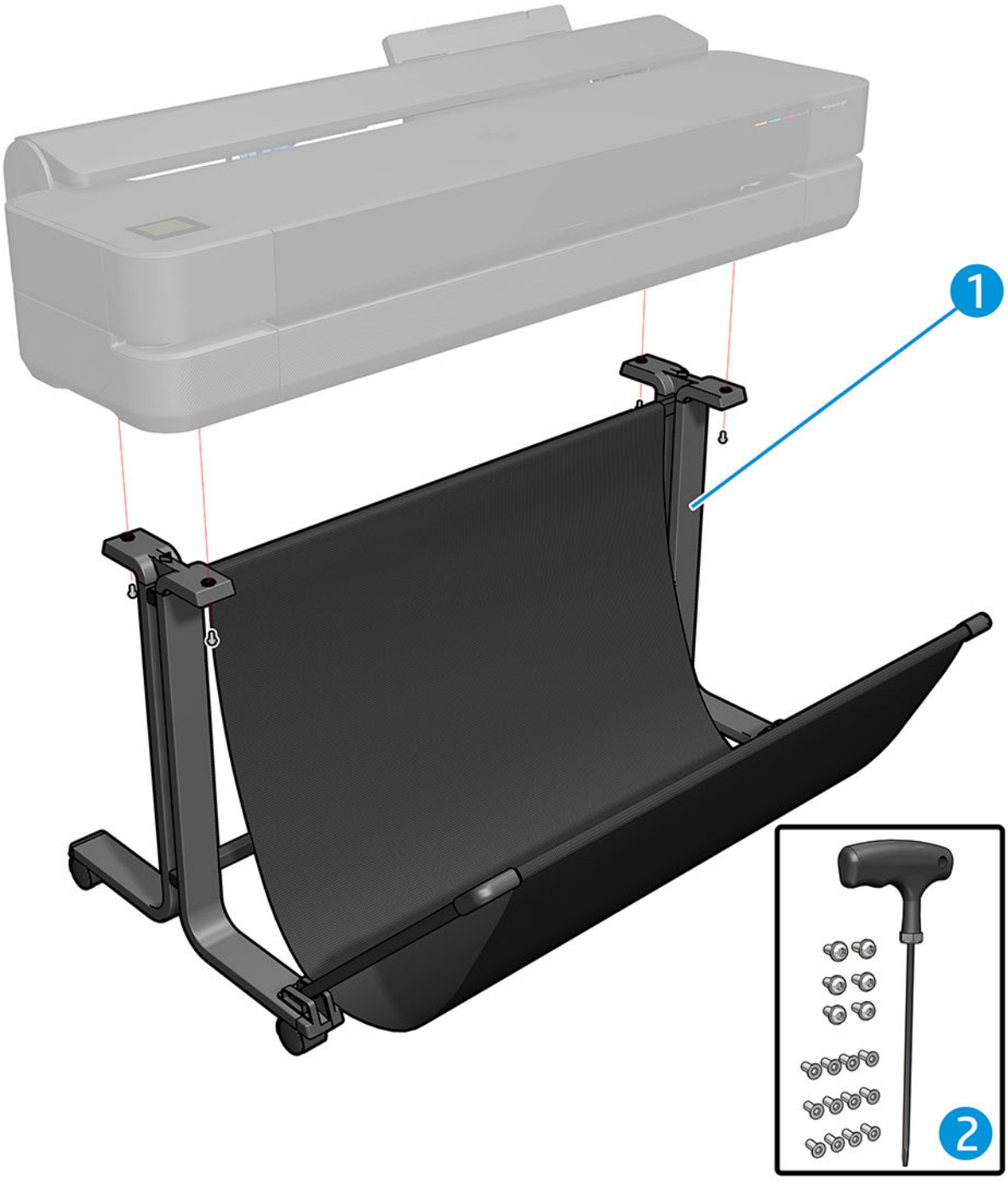
Introduction

The list of parts in this chapter include the notation CSR A or CSR B for parts that can be replaced by the customer.

- All other parts must be replaced by an engineer. See Customer Self Repair parts on page 295.
- For information on the preventive maintenance kits, see Preventive maintenance kits on page 446.

Printer support A

The printer support includes the stand assembly and all the hardware kit required to mount or repair it.

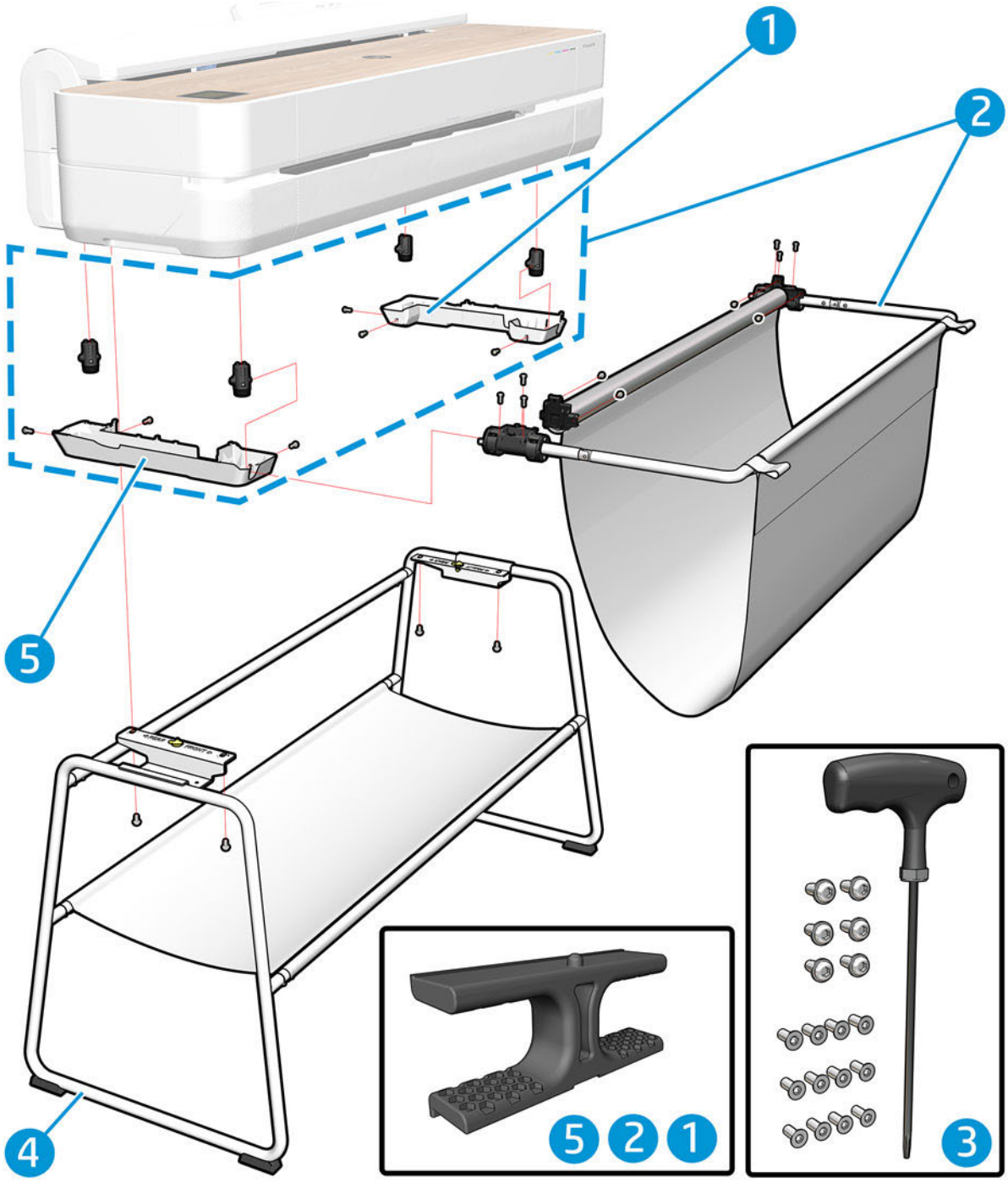


	HP part number	Part description	Removal and Installation reference	Applicable products
1	5HB08-67001	Stand Assembly	CSR A. See the flyer Stand	HP DesignJet T650 24-in Printer

	HP part number	Part description	Removal and Installation reference	Applicable products
			Assembly Instructions (T200) on page 494.	HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
	5HB10-67002	Stand Assembly	CSR A. See the flyer Stand Assembly Instructions (T200) on page 494.	HP Designjet T650 36-in Printer
				HP Designjet T630 36-in Printer
2	5HB08-67002	Stand Hardware Kit		HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer

Printer support B

The printer support includes the stand assembly and all the hardware kit required to mount or repair it.



	HP part number	Part description	Removal and Installation reference	Applicable products
1	5HB12-67014	Basket Right Cover		HP DesignJet Studio 24-in Printer

	HP part number	Part description	Removal and Installation reference	Applicable products
				HP DesignJet Studio 36-in Printer
2	5HB12-67012	Basket		HP DesignJet Studio 24-in Printer
	5HB14-67009			HP DesignJet Studio 36-in Printer
3	5HB12-67002	Stand Hardware Kit		HP DesignJet T650 24-in Printer
				HP DesignJet Studio 36-in Printer
4	5HB12-67001	Stand SV	CSR A. See the flyer HP DesignJet Studio Stand Assembly Instructions on page 502.	HP DesignJet Studio 24-in Printer
	5HB14-67001			HP DesignJet Studio 36-in Printer
5	5HB12-67013	Basket Left Cover		HP DesignJet Studio 24-in Printer
				HP DesignJet Studio 36-in Printer

Covers

These are the external protective covers of the printer.

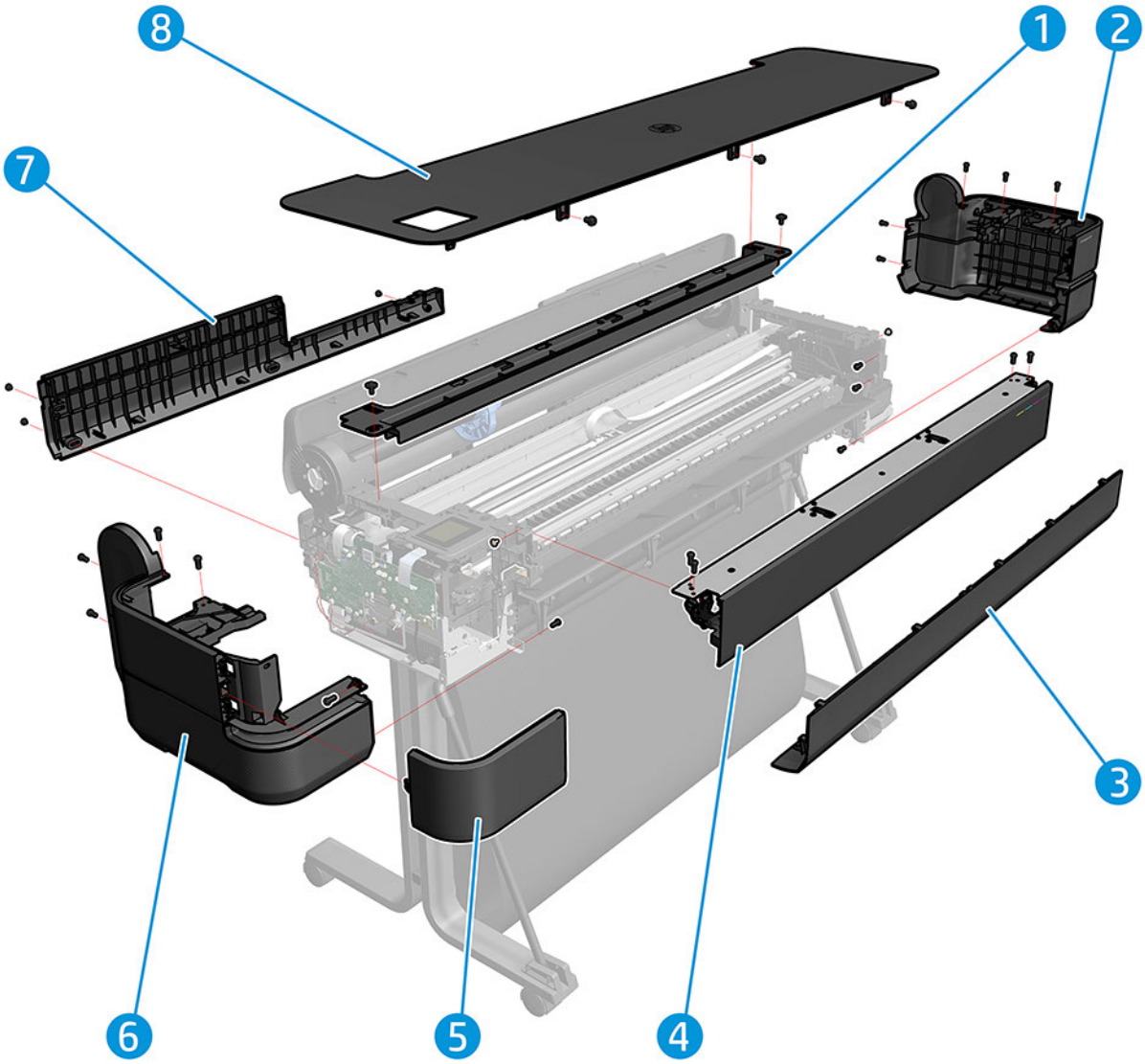


Table 4-1

Item	Part Number	Description	Removal and Installation reference	Applicable products
1	5HB12-67007	Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA

Table 4-1 (continued)

Item	Part Number	Description	Removal and Installation reference	Applicable products
				HP DesignJet T630 24-in Printer
				HP DesignJet Studio 24-in Printer
	5HB14-67005	Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
				HP DesignJet Studio 36-in Printer
2	5HB06-67006	Right Cover (5HB06-67006 & 5HB12-67006) on page 303		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67006	Right Cover (5HB06-67006 & 5HB12-67006) on page 303		HP DesignJet Studio 24-in Printer
				HP DesignJet Studio 36-in Printer
3	5HB06-67010 Front Cover	Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
	5HB10-67008	Front Cover (5HB06-67010 & 5HB10-67008,		HP DesignJet T650 36-in Printer

Table 4-1 (continued)

Item	Part Number	Description	Removal and Installation reference	Applicable products
		5HB12-67011 & 5HB14-67008) on page 299		HP DesignJet T630 36-in Printer
	5HB12-67011	Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299		HP DesignJet Studio 24-in Printer
	5HB14-67008	Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299		HP DesignJet Studio 36-in Printer
4	5HB06-67005	Front Door (5HB06-67005 & 5HB10-67005, 5HB12-67005 & 5HB14-67004) on page 305		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
	5HB10-67005	Front Door (5HB06-67005 & 5HB10-67005, 5HB12-67005 & 5HB14-67004) on page 305		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67005	Front Door (5HB06-67005 & 5HB10-67005, 5HB12-67005 & 5HB14-67004) on page 305		HP DesignJet Studio 24-in Printer
	5HB14-67004	Front Door (5HB06-67005 & 5HB10-67005, 5HB12-67005 & 5HB14-67004) on page 305		HP DesignJet Studio 36-in Printer
5	5HB06-67008	Cutter Door (5HB06-67008 & 5HB12-67009) on page 300		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer

Table 4-1 (continued)

Item	Part Number	Description	Removal and Installation reference	Applicable products
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67009	Cutter Door (5HB06-67008 & 5HB12-67009) on page 300		HP DesignJet Studio 24-in Printer
				HP DesignJet Studio 36-in Printer
6	5HB06-67017	Left Cover (5HB06-67017 & 5HB12-67008) on page 301		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67008	Left Cover (5HB06-67017 & 5HB12-67008) on page 301		HP DesignJet Studio 24-in Printer
				HP DesignJet Studio 36-in Printer
7	CQ890-67010	Back Cover (CQ890-67010 & CQ893-67002) on page 308		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA

Table 4-1 (continued)

Item	Part Number	Description	Removal and Installation reference	Applicable products
				HP DesignJet T630 24-in Printer
				HP DesignJet Studio 24-in Printer
	CQ893-67002	Back Cover (CQ890-67010 & CQ893-67002) on page 308		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
				HP DesignJet Studio 36-in Printer
8	5HB06-67004	Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
	5HB10-67003	Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67003	Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297		HP DesignJet Studio 24-in Printer
	5HB14-67002	Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297		HP DesignJet Studio 36-in Printer
	5HB12-67019	Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297		HP DesignJet Studio 24-in Printer HP DesignJet Studio Steel 24-in Printer

Table 4-1 (continued)

Item	Part Number	Description	Removal and Installation reference	Applicable products
	5HB14-67011	Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297		HP DesignJet Studio 36-in Printer HP DesignJet Studio Steel 36-in Printer

Roll covers

These are the external protective covers of the substrate roll and its supports, rewinders, and dampers.

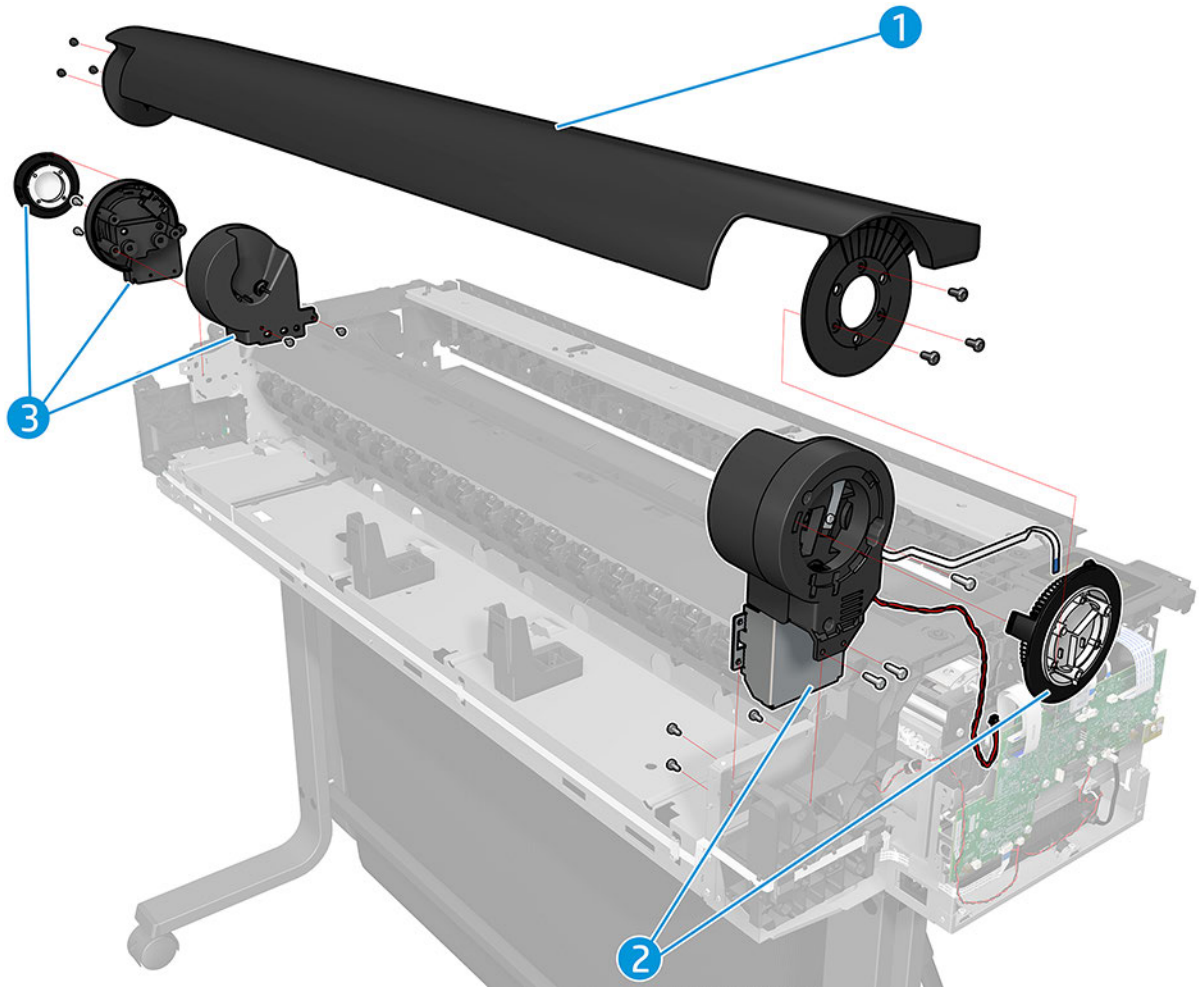


Table 4-2

Item	Part Number	Description	Removal and Installation reference	Applicable Products
1	5HB08-67003	Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311	CSR A. See the flyer Roll Cover (T200) on page 499.	HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer

Table 4-2 (continued)

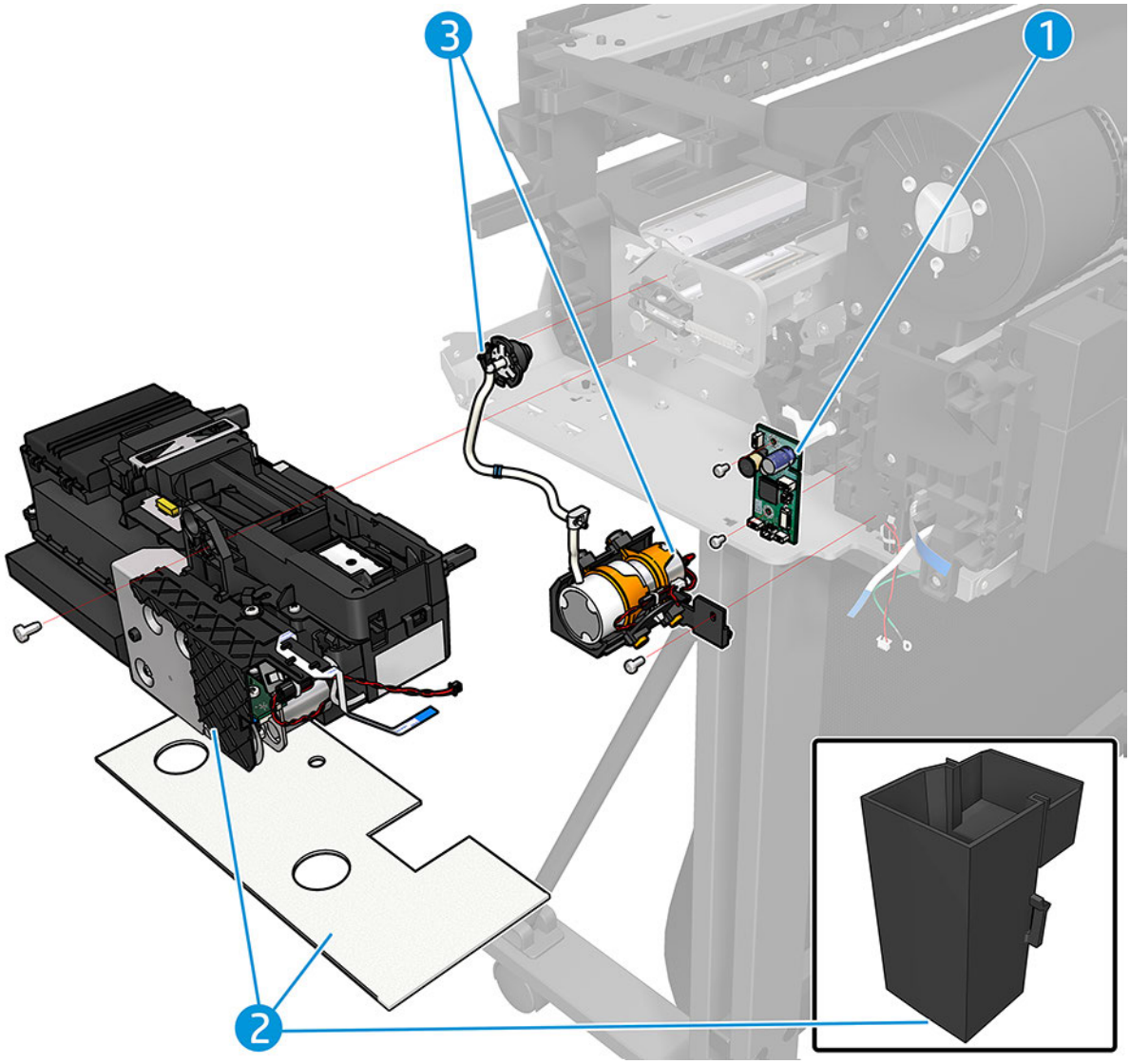
Item	Part Number	Description	Removal and Installation reference	Applicable Products
	5HB10-67004	Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311	CSR A. See the flyer Roll Cover (T200) on page 499.	HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67004	Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311	CSR A. See the flyer Roll Cover (T200) on page 499.	HP DesignJet Studio 24-in Printer
	5HB14-67003	Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311	CSR A. See the flyer Roll Cover (T200) on page 499.	HP DesignJet Studio 36-in Printer
2	5HB08-67004	Left Roll Support with Rewinder and Cover (5HB08-67004 & 5HB12-67016) on page 313		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67016	Left Roll Support with Rewinder and Cover (5HB08-67004 & 5HB12-67016) on page 313		HP DesignJet Studio 24-in Printer
				HP DesignJet Studio 36-in Printer
3	5HB08-67005	Right Roll Support with Cover (5HB08-67005 & 5HB12-67017) on page 319		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA

Table 4-2 (continued)

Item	Part Number	Description	Removal and Installation reference	Applicable Products
				HP DesignJet T630 24-in Printer
				HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67017	Right Roll Support with Cover (5HB08-67005 & 5HB12-67017) on page 319		HP DesignJet Studio 24-in Printer
				HP DesignJet Studio 36-in Printer

Right-hand assemblies

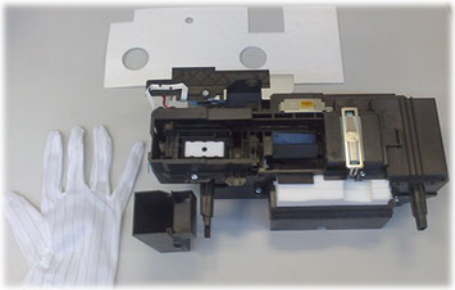
This includes the primp pump, the bundle board, and the various elements of the service station assembly.



	HP part number	Part description	Removal and Installation reference	Applicable products
1	5HB06-67021	Bundle PCA (5HB06-67021) on page 340		All
2	CQ890-67045	Service Station Assembly (CQ890-67045) on page 342		All
3	CQ890-67030	Prime Pump (CQ890-67030) on page 349		All

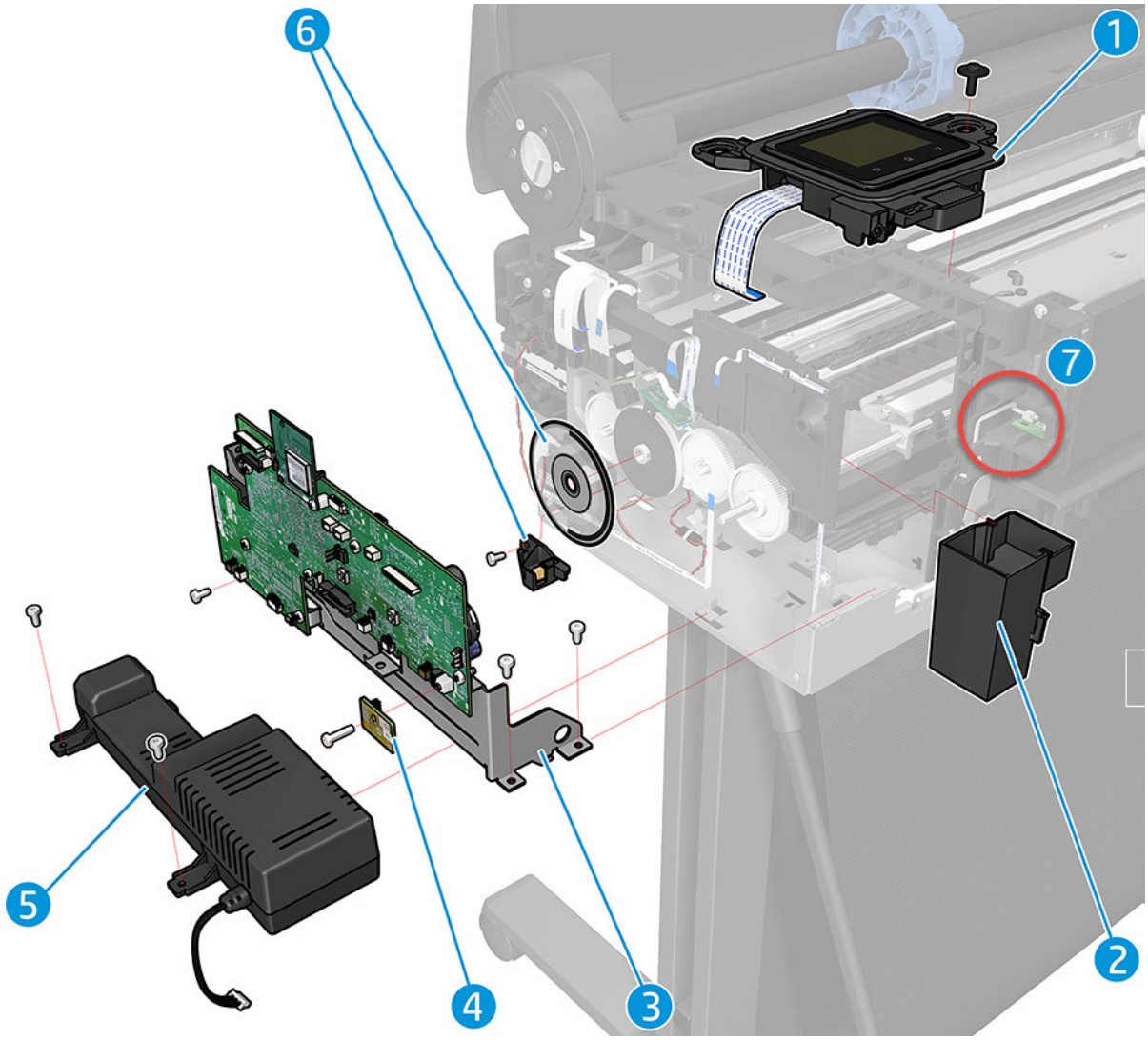
Service Station kit

These are the elements of the service station assembly.



Left-hand assemblies

This includes the printer's control panel, main PCA, power supply, encoder disk, ink cartridge cover PCA, and the left spittoon.



Item	Part Number	Description	Removal and Installation reference	Applicable products
1	5HB06-67002	Front Panel (5HB06-67002) on page 326		All
2	CQ890-67044	Left Spittoon (CQ890-67044) on page 334		All
3	5HB06-67018	Main PCA (5HB06-67018 & 5HB08-67008) on page 329		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer

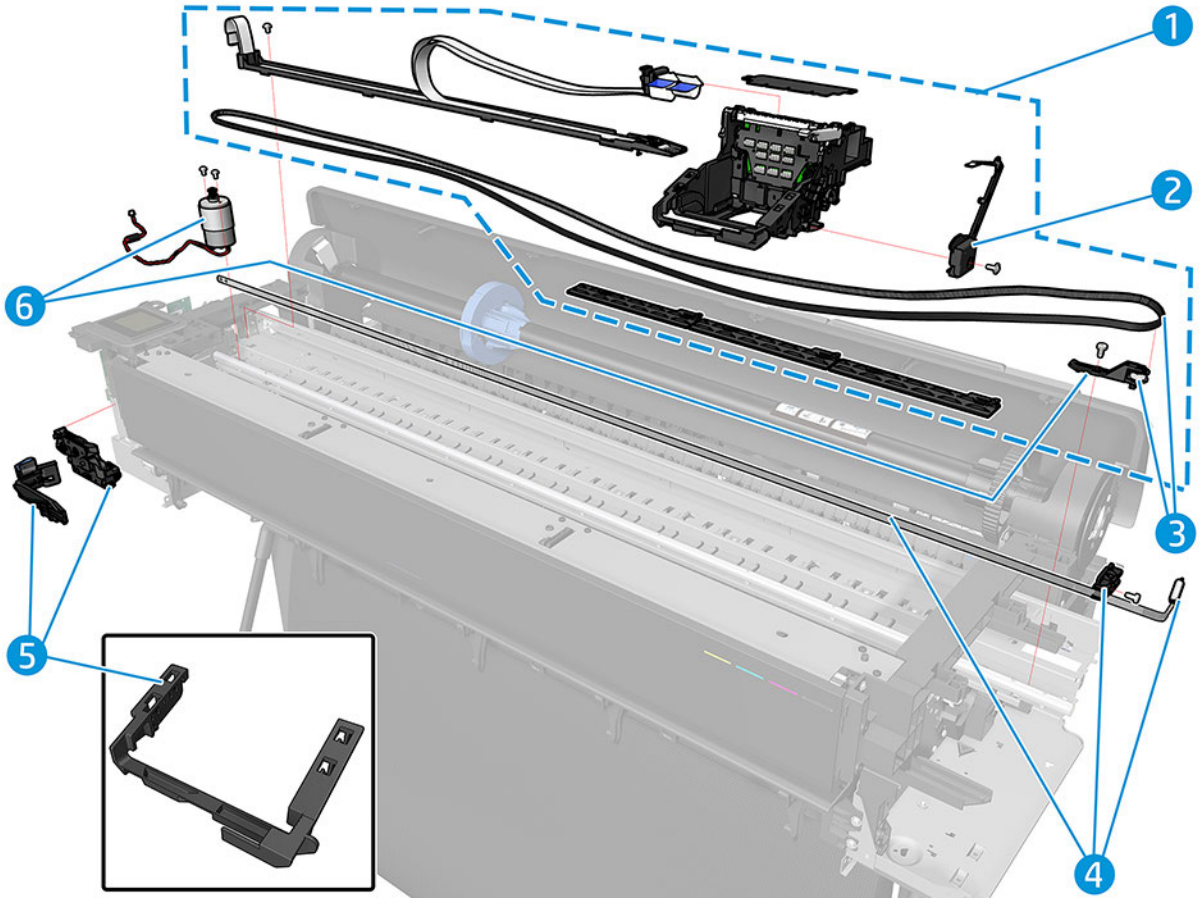
Item	Part Number	Description	Removal and Installation reference	Applicable products
	5HB08-67008	Main PCA (5HB06-67018 & 5HB08-67008) on page 329		HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
				HP DesignJet Studio 24-in Printer
				HP DesignJet Studio 36-in Printer
4	5HB06-67022	NVM Backup PCA (5HB06-67022) on page 328	CSR A. See the flyer NVM Backup PCA on page 505.	All
5	CQ890-67089	5V Power Supply SV (CQ890-67089) on page 332		All
6	CQ890-67033	Encoder Disk (CQ890-67033) on page 337		All
7	5HB06-67019	Sensor PCA and flat cable, see Cables and Sensors (5HB06-67019) on page 396.		All

Encoder Disk kit

This also includes an instructional flier and gloves.

Carriage assembly

This includes the carriage assembly, belt and pulley, aerosol shield, line sensor, encoder strip, cutter, and carriage motor.



	HP part number	Part description	Removal and Installation reference	Applicable products
1	5HB06-67001	Carriage Assembly with Belt and Trailing Cable (5HB06-67001 & 5HB10-67001) on page 380		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet Studio 24-in Printer
	5HB10-67001	Carriage Assembly with Belt and Trailing Cable (5HB06-67001 & 5HB10-67001) on page 380		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
				HP DesignJet Studio 36-in Printer

	HP part number	Part description	Removal and Installation reference	Applicable products
2	CQ890-67001	Carriage Line Sensor (ZIM sensor) (CQ890-67001) on page 387		All
3	CQ890-67112	Belt and Pulley (CQ890-67112 & F9A30-67068) on page 374		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet Studio 24-in Printer
	F9A30-67068	Belt and Pulley (CQ890-67112 & F9A30-67068) on page 374		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
				HP DesignJet Studio 36-in Printer
4	CQ890-67096	Encoder Strip (CQ890-67096 & CQ893-67029) on page 376		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet Studio 24-in Printer
	CQ893-67029	Encoder Strip (CQ890-67096 & CQ893-67029) on page 376		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
				HP DesignJet Studio 36-in Printer
5	CQ890-67108	Cutter with Clutch (CQ890-67108) on page 412	CSR A. See the flyer Cutter replacement instructions on page 500.	All
6	5HB06-67003	Carriage Motor (5HB06-67003) on page 391		All

Carriage Line Sensor kit

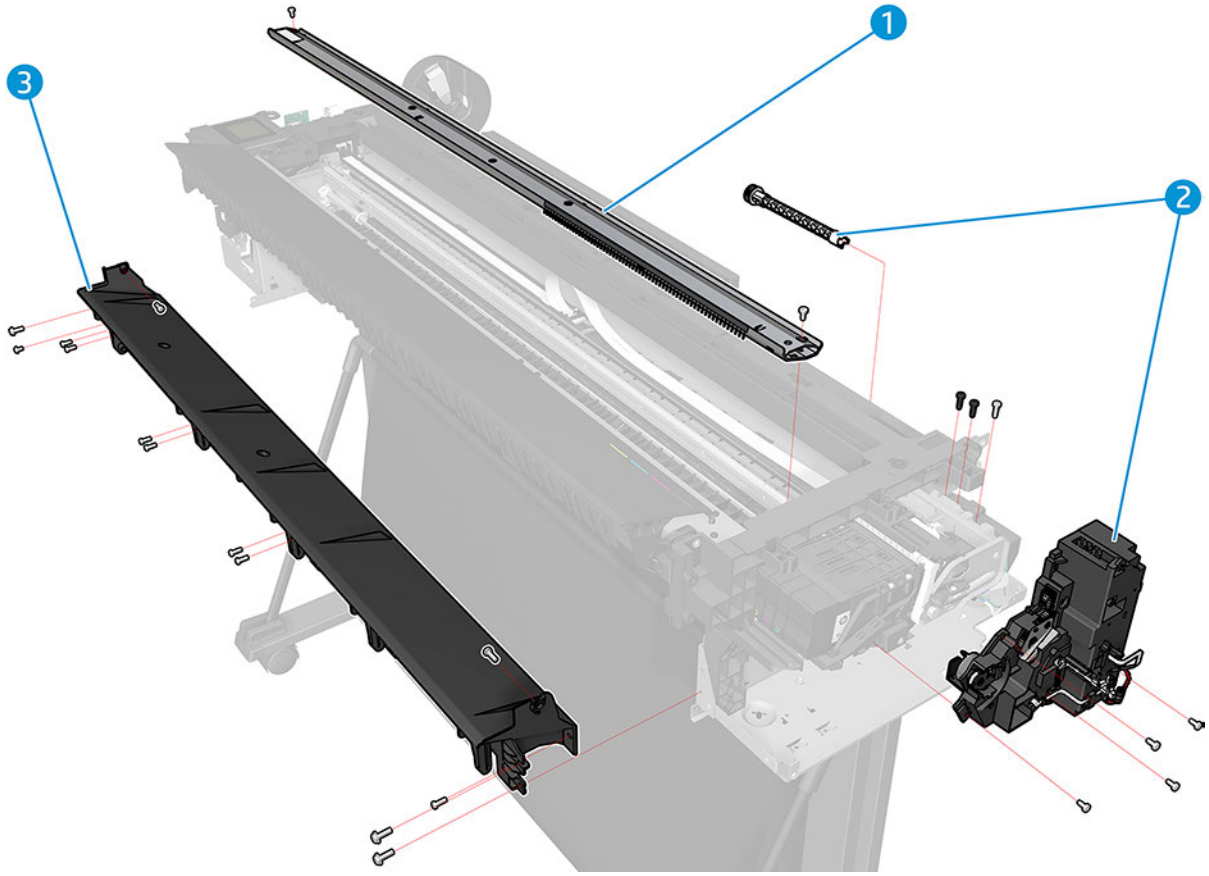
This kit also includes a T-6 screwdriver.

Encoder Strip kit

This kit also includes gloves for safe handling.

Paper path (front)

This includes the starwheel assembly, right gear train module, output tray, ouutput platen, and output tray sensor.

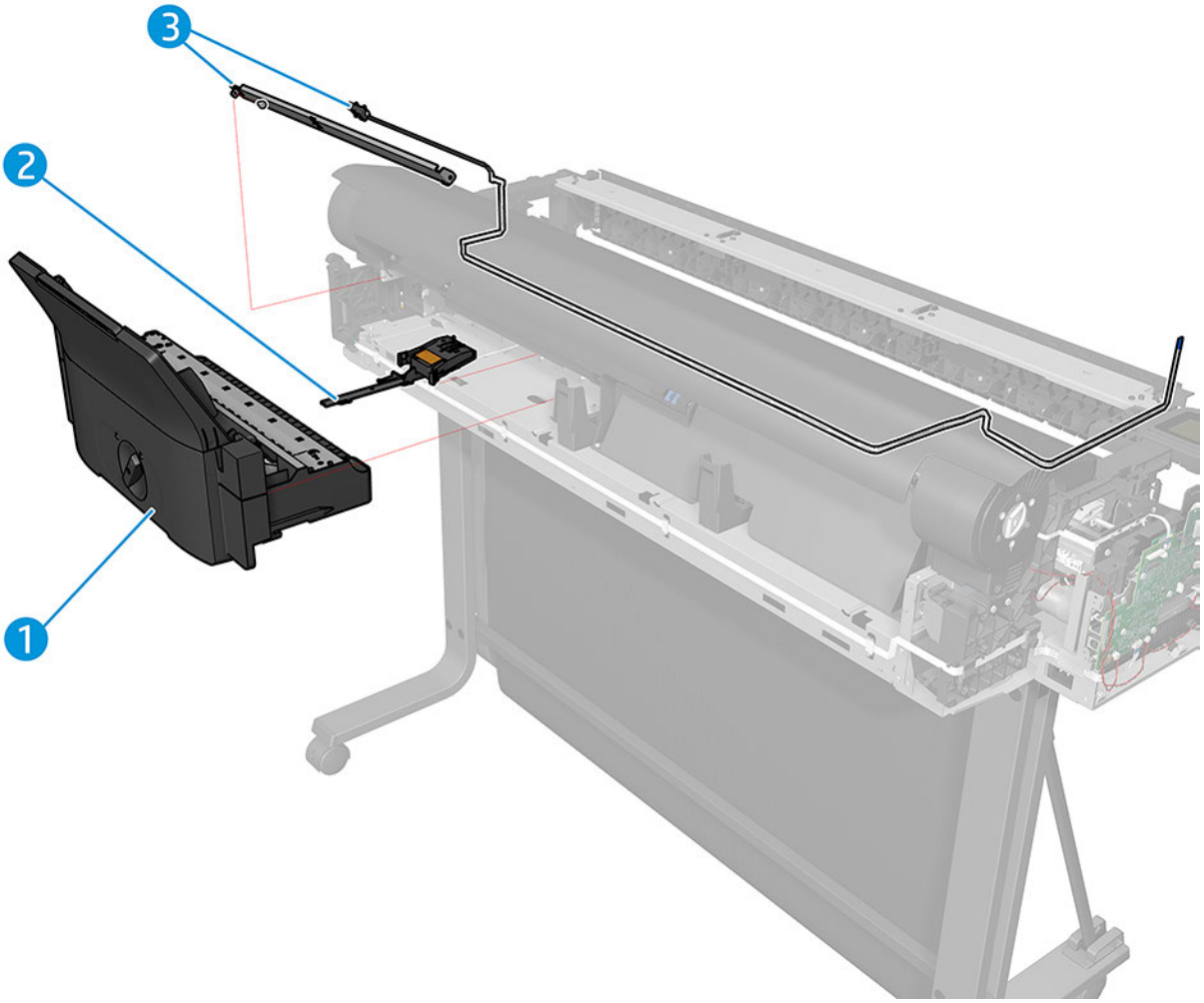


	HP part number	Part description	Removal and Installation reference	Applicable products
1	5HB06-67014	Starwheel Assembly (5HB06-67014 & 5HB10-67010) on page 368		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet Studio 24-in Printer
	5HB10-67010	Starwheel Assembly (5HB06-67014 & 5HB10-67010) on page 368		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
				HP DesignJet Studio 36-in Printer
2	5HB06-67012	Bridge Platen (5HB06-67012) on page 371		All

	HP part number	Part description	Removal and Installation reference	Applicable products
3	5HB06-67009	Output Platen (5HB06-67009 & 5HB10-67007, 5HB12-67010 & 5HB14-67007) on page 322		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
	5HB10-67007	Output Platen (5HB06-67009 & 5HB10-67007, 5HB12-67010 & 5HB14-67007) on page 322		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67010	Output Platen (5HB06-67009 & 5HB10-67007, 5HB12-67010 & 5HB14-67007) on page 322		HP DesignJet Studio 24-in Printer
	5HB14-67007	Output Platen (5HB06-67009 & 5HB10-67007, 5HB12-67010 & 5HB14-67007) on page 322		HP DesignJet Studio 36-in Printer

Paper path (rear) A

This includes the pinchwheels assembly, paper motor, multi-sheet tray module and extension, and the out-of-paper sensor.

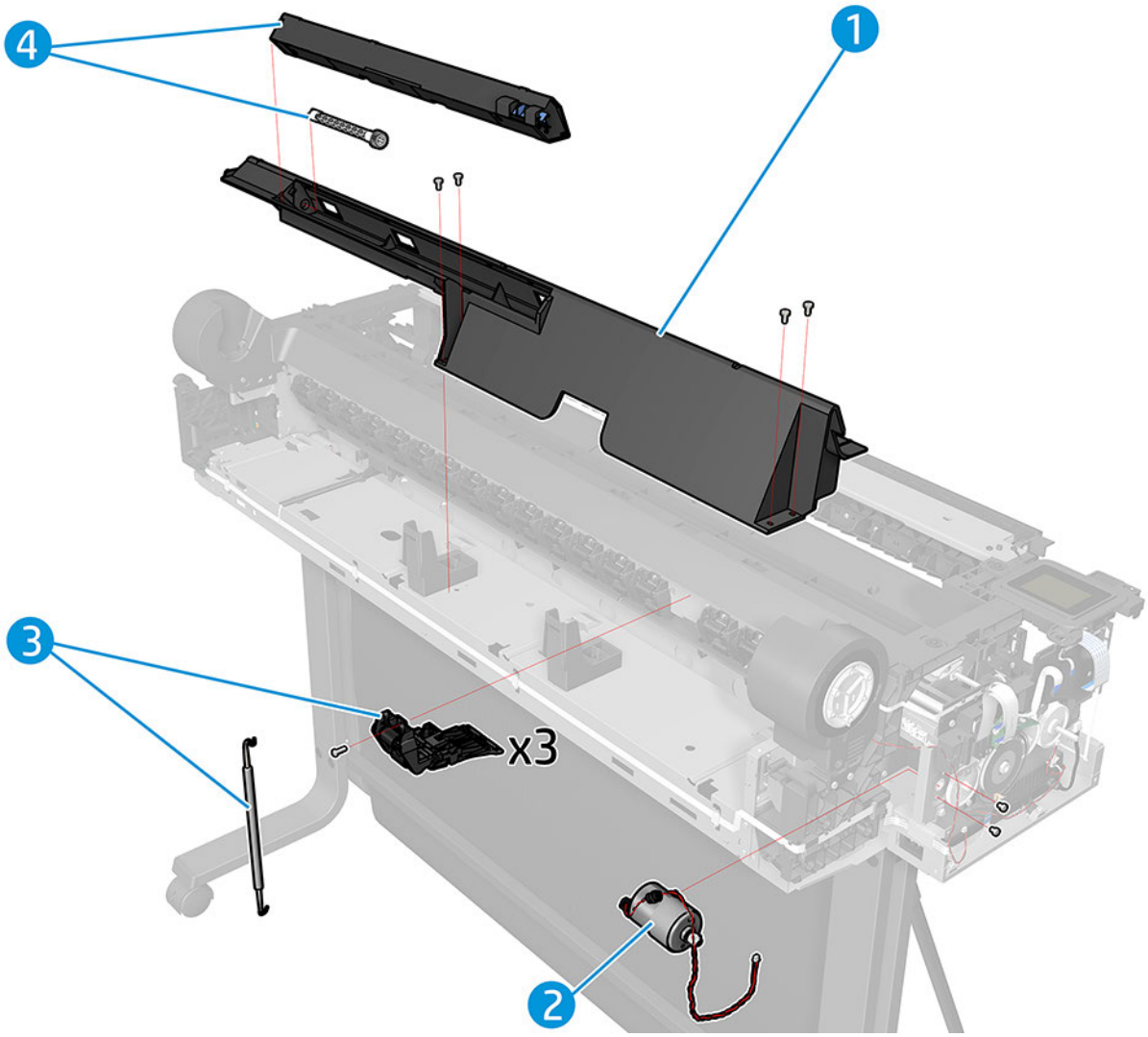


	HP part number	Part description	Removal and Installation reference	Applicable products
1	5HB08-67007	Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425	CSR A. See the flyer Multi-Sheet Tray SV (T200, T600, Studio) on page 487.	HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP Designjet T650 36-in Printer
				HP DesignJet T630 36-in Printer
	5HB12-67015	Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425	CSR A. See the flyer Multi-Sheet Tray SV (T200, T600,	HP DesignJet Studio 24-in Printer
				HP DesignJet Studio 36-in Printer

	HP part number	Part description	Removal and Installation reference	Applicable products
			Studio) on page 487.	
2	CQ890-67102	Out Of Paper Sensor without cable (CQ890-67102) on page 419	CSR A. See the flyer Out-Of-Paper Sensor without cable on page 489.	All
3	5HB06-67024	Multi-Sheet Tray Sensor Assembly (5HB06-67024 & 5HB08-67010) on page 358		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet Studio 24-in Printer
	5HB08-67010	Multi-Sheet Tray Sensor Assembly (5HB06-67024 & 5HB08-67010) on page 358		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
				HP DesignJet Studio 36-in Printer

Paper path (rear) B

This includes the input roll guide, multi-sheet tray sensor assembly, and ARSS.

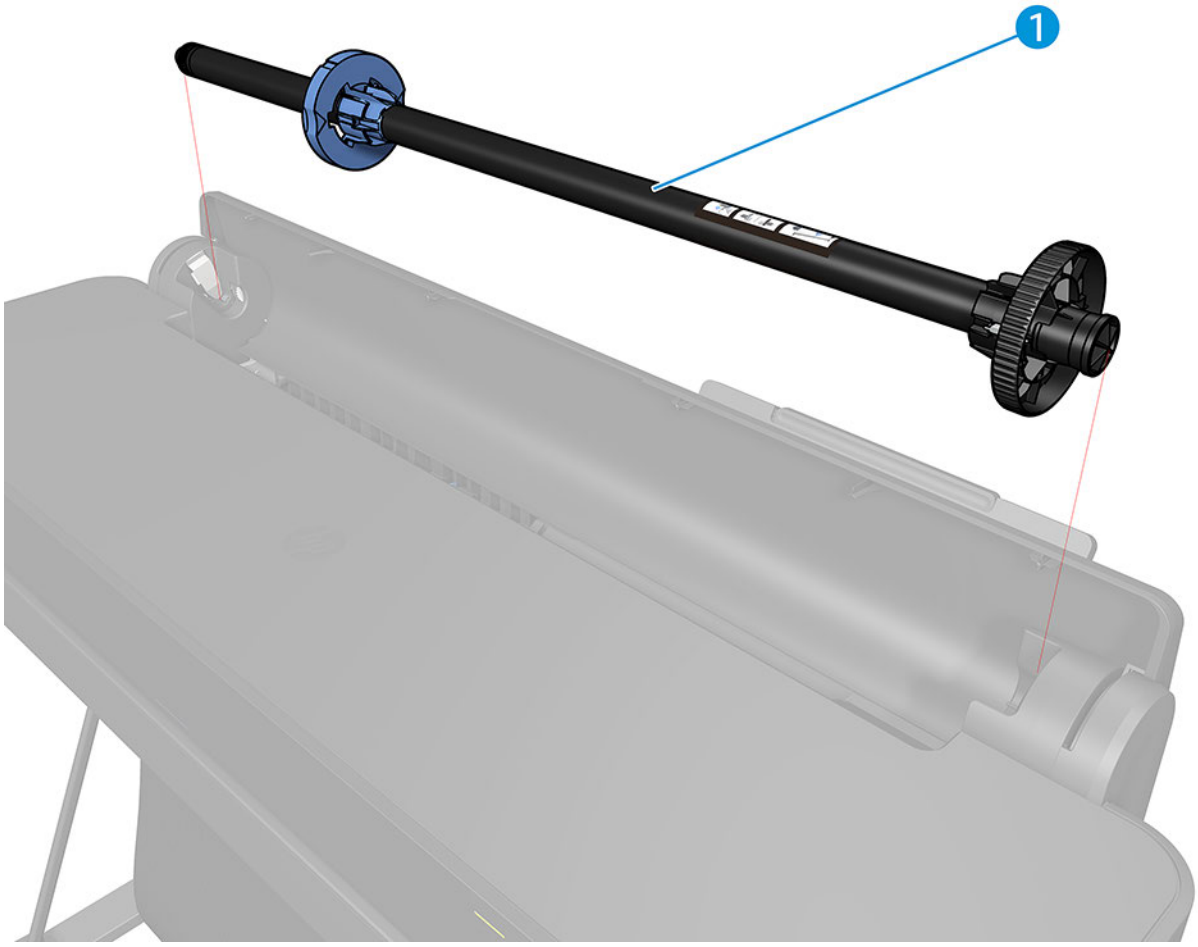


Item	HP part number	Part description	Removal and Installation reference	Applicable products
1	5HB06-67016	Input Roll Guide (5HB06-67016 & 5HB10-67011) on page 354		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet T630 24-in Printer
				HP DesignJet Studio 24-in Printer

Item	HP part number	Part description	Removal and Installation reference	Applicable products
	5HB10-67011	Input Roll Guide (5HB06-67016 & 5HB10-67011) on page 354		HP DesignJet T650 36-in Printer
				HP DesignJet T630 36-in Printer
				HP DesignJet Studio 36-in Printer
2	CQ890-67036	Paper Motor (CQ890-67036) on page 366		All
3	CQ890-67060	Pinchwheels Assembly (CQ890-67060) on page 360		All
4	5HB08-67006	ARSS (5HB08-67006) on page 352	CSR A. See the flyer ARSS on page 483.	All

Roll supports

This includes the spindle module.



Item	Part Number	Description	Removal and Installation reference	Applicable products
1	5HB06-67027	Spindle module SV		HP DesignJet T250 24-in Printer
				HP DesignJet T230 24-in Printer
				HP DesignJet T210 24-in Printer
				HP DesignJet T650 24-in Printer
				HP DesignJet T650 24-in Printer GSA
				HP DesignJet Studio 24-in Printer
				HP DesignJet T650 36-in Printer
	5HB10-67012	Spindle module SV		HP DesignJet T630 36-in Printer
				HP DesignJet Studio 36-in Printer
				HP DesignJet T250 24-in Printer

Miscellaneous parts

These include the cables service kit, the labels kit, and a region-specific power cord.

Table 4-3

Item	Part Number	Description	Removal and Installation reference	Applicable products
1	CQ891-60023	Power Cord: APJ SV KIT		All
2	CQ891-60021	Power Cord: EU SV KIT		All
3	CQ891-60022	Power Cord: AMS SV KIT		All

Cables and sensors A (5HB06-67019)

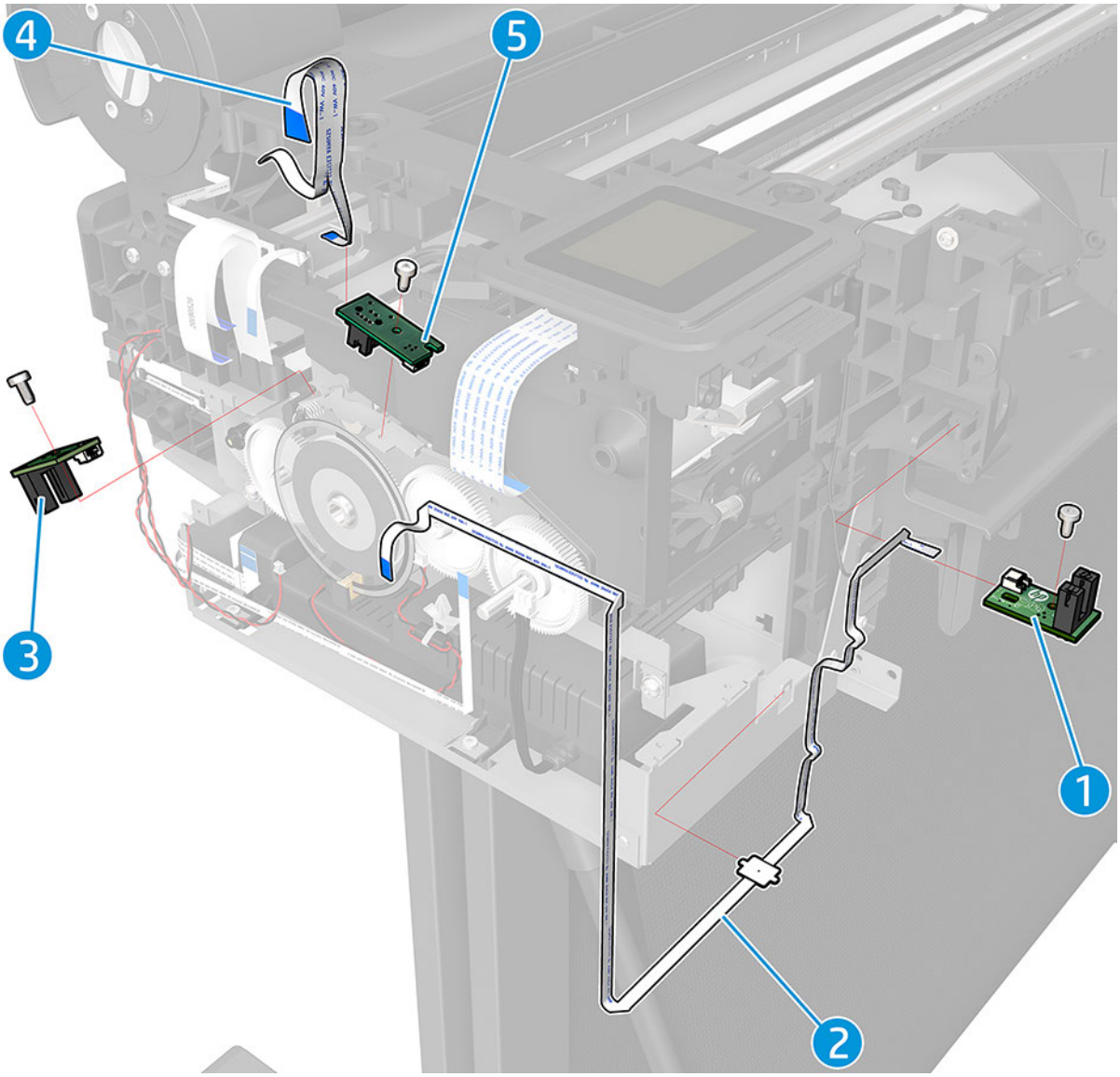


Table 4-4

Item	Part Number	Description	Removal and Installation reference
1	5HB06-67019	Door sensor PCA - ESD (F9A30-60262) on page 408	
2	5HB06-67019	FFC Front Window to MPCA (5HB06-50001) on page 409	
3	5HB06-67019	Encoder PCA (CQ890-60204) and Index (CM751-60021) on page 396	
4	5HB06-67019	FFC-Paper-Feed-Sensors (CQ890-80014) on page 399	

Table 4-4 (continued)

Item	Part Number	Description	Removal and Installation reference
5	5HB06-67019	Encoder PCA (CQ890-60204) and Index (CM751-60021) on page 396	

Cables and sensors B (5HB06-67019)

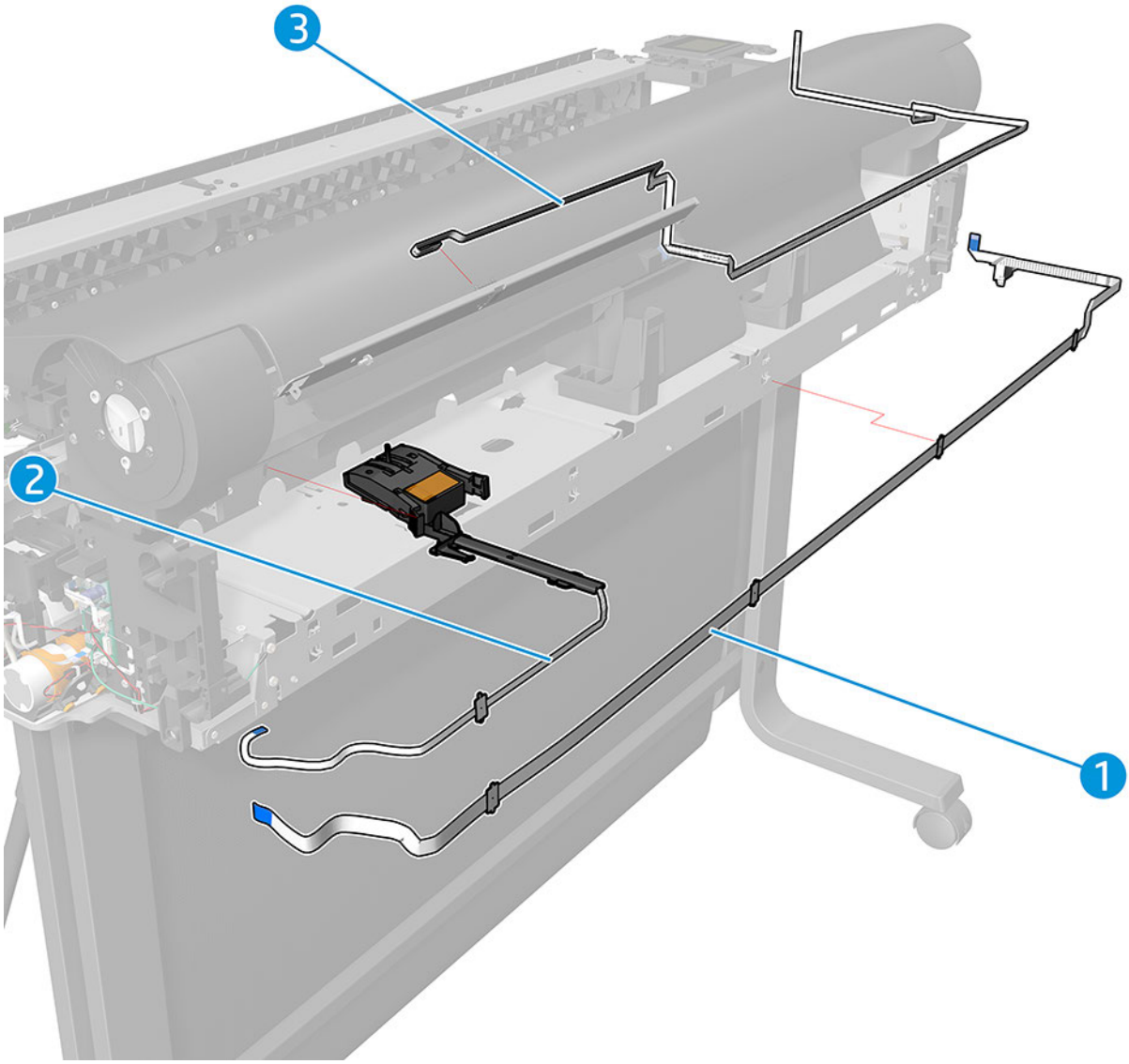


Table 4-5

Item	Part Number	Description	Removal and Installation reference
1	5HB06-67019	Assy PBB to MPCA FFC 36in (5HB10-60066) / Assy PBB to MPCA FFC 24in (5HB06-60099) on page 403	
		Assy PBB to MPCA FFC 36in (5HB10-60066) / Assy PBB to MPCA FFC 24in (5HB06-60099) on page 403	
2	5HB06-67019	Out-Of-Paper Sensor TL Assembly (5HB06-60066) on page 400	

Table 4-5 (continued)

Item	Part Number	Description	Removal and Installation reference
3	5HB06-67019	FFC Airprint to MPCA 24in (5HB06-60026) / FFC Airprint to MPCA 36in (5HB10-60008) on page 411	
		FFC Airprint to MPCA 24in (5HB06-60026) / FFC Airprint to MPCA 36in (5HB10-60008) on page 411	

5 Removal and installation

This chapter provides detailed instructions related to the maintanance of the printer, facilitating the replacement of exhausted, malfunctioning, or outdated components.

Procedure reference table

The Removal and Installation procedures are listed here in alphabetical and removal order.

Parts in alphabetical order	Parts in removal order
5V Power Supply SV (CQ890-67089) on page 332	Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
ARSS (5HB08-67006) on page 352	Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299
Back Cover (CQ890-67010 & CQ893-67002) on page 308	Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
Basket (5HB12-67012 & 5HB14-67009) on page 429	Left Cover (5HB06-67017 & 5HB12-67008) on page 301
Basket Left Cover (5HB12-67013) on page 434	Right Cover (5HB06-67006 & 5HB12-67006) on page 303
Basket Right Cover (5HB12-67014) on page 426	Front Door (5HB06-67005 & 5HB10-67005, 5HB12-67005 & 5HB14-67004) on page 305
Belt and Pulley (CQ890-67112 & F9A30-67068) on page 374	Top Rear Cover (5HB12-67007 & 5HB14-67005) on page 307
Bridge Platen (5HB06-67012) on page 371	Back Cover (CQ890-67010 & CQ893-67002) on page 308
Bundle PCA (5HB06-67021) on page 340	Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311
Cables and Sensors (5HB06-67019) on page 396	Left Roll Support with Rewinder and Cover (5HB08-67004 & 5HB12-67016) on page 313
Carriage Assembly with Belt and Trailing Cable (5HB06-67001 & 5HB10-67001) on page 380	Right Roll Support with Cover (5HB08-67005 & 5HB12-67017) on page 319
Carriage Line Sensor (ZIM sensor) (CQ890-67001) on page 387	Output Platen (5HB06-67009 & 5HB10-67007, 5HB12-67010 & 5HB14-67007) on page 322
Carriage Motor (5HB06-67003) on page 391	Front Panel (5HB06-67002) on page 326
Cutter Door (5HB06-67008 & 5HB12-67009) on page 300	NVM Backup PCA (5HB06-67022) on page 328
Cutter with Clutch (CQ890-67108) on page 412	Main PCA (5HB06-67018 & 5HB08-67008) on page 329
Encoder Disk (CQ890-67033) on page 337	5V Power Supply SV (CQ890-67089) on page 332
Encoder Strip (CQ890-67096 & CQ893-67029) on page 376	Left Spittoon (CQ890-67044) on page 334
Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299	Encoder Disk (CQ890-67033) on page 337
Front Door (5HB06-67005 & 5HB10-67005, 5HB12-67005 & 5HB14-67004) on page 305	Bundle PCA (5HB06-67021) on page 340
Front Panel (5HB06-67002) on page 326	Service Station Assembly (CQ890-67045) on page 342
Input Roll Guide (5HB06-67016 & 5HB10-67011) on page 354	Prime Pump (CQ890-67030) on page 349

Parts in alphabetical order	Parts in removal order
Left Cover (5HB06-67017 & 5HB12-67008) on page 301	ARSS (5HB08-67006) on page 352
Left Roll Support with Rewinder and Cover (5HB08-67004 & 5HB12-67016) on page 313	Input Roll Guide (5HB06-67016 & 5HB10-67011) on page 354
Left Spittoon (CQ890-67044) on page 334	Multi-Sheet Tray Sensor Assembly (5HB06-67024 & 5HB08-67010) on page 358
Main PCA (5HB06-67018 & 5HB08-67008) on page 329	Pinchwheels Assembly (CQ890-67060) on page 360
Multi-Sheet Tray Sensor Assembly (5HB06-67024 & 5HB08-67010) on page 358	Paper Motor (CQ890-67036) on page 366
Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425	Starwheel Assembly (5HB06-67014 & 5HB10-67010) on page 368
NVM Backup PCA (5HB06-67022) on page 328	Bridge Platen (5HB06-67012) on page 371
Out Of Paper Sensor without cable (CQ890-67102) on page 419	Belt and Pulley (CQ890-67112 & F9A30-67068) on page 374
Output Platen (5HB06-67009 & 5HB10-67007, 5HB12-67010 & 5HB14-67007) on page 322	Encoder Strip (CQ890-67096 & CQ893-67029) on page 376
Paper Motor (CQ890-67036) on page 366	Carriage Assembly with Belt and Trailing Cable (5HB06-67001 & 5HB10-67001) on page 380
Pinchwheels Assembly (CQ890-67060) on page 360	Carriage Line Sensor (ZIM sensor) (CQ890-67001) on page 387
Prime Pump (CQ890-67030) on page 349	Carriage Motor (5HB06-67003) on page 391
Right Cover (5HB06-67006 & 5HB12-67006) on page 303	Cables and Sensors (5HB06-67019) on page 396
Right Roll Support with Cover (5HB08-67005 & 5HB12-67017) on page 319	Cutter with Clutch (CQ890-67108) on page 412
Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311	Out Of Paper Sensor without cable (CQ890-67102) on page 419
Service Station Assembly (CQ890-67045) on page 342	Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425
Starwheel Assembly (5HB06-67014 & 5HB10-67010) on page 368	Basket Right Cover (5HB12-67014) on page 426
Top Rear Cover (5HB12-67007 & 5HB14-67005) on page 307	Basket (5HB12-67012 & 5HB14-67009) on page 429
Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297	Basket Left Cover (5HB12-67013) on page 434

Introduction

This chapter is a step-by-step guide to the removal and installation of the key components of the printer. Use the illustrations for each procedure to identify the parts referred to in the text.

NOTE: Before using this chapter to remove and install a new component, always make sure that you have performed the relevant service test. If the test passes you will not need to replace the component.

NOTE: We recommend that, every time a part is removed, the Line Sensor and the Encoder Strip are cleaned. See Clean the Carriage Line Sensor on page 439 and Clean the Encoder Strip on page 440.

NOTE: There are no parts in this printer that require calibration after installation.

IMPORTANT: It is highly recommended to review the Safety Precautions appendix before performing any removals or installations. This section includes General Safety Guidelines, plus specific best practices regarding

Electrical/Fire Hazards, Mechanical Hazards, and Electrostatic Discharge (ESD) Precautions. See Safety precautions on page 481.

Required tools

All the special tools and equipment required to disassemble, service, and repair the printer are provided in the Toolkit P/N Q6683-67001. Some tools can be ordered separately from the toolkit.

The Toolkit contains the following tools:

Table 5-1 Toolkit tools

Description/Comments	HP part number
General-purpose industrial cleaner	Q6675-60091
Cleaning Cloth	9300-2531
Protective Plastic Gloves	Q6675-60035
Tweezers	Q6675-60037
Flat screwdriver	
Torx screwdriver 6, 10	
Pliers	

You may also need the following standard hand tools:

Table 5-2 Standard hand tools

Description/Comments	Size
Long Torx Screwdriver	1/4 inch drive
Torx bit (75 mm)	15
	20

Customer Self Repair parts

Some printer parts are designated Customer Self Repair (CSR) parts, which means that a faulty part can be replaced by the customer. Non-CSR parts need to be replaced by an engineer.

There are two categories of CSR parts:

- CSR A: Customer self-repair is mandatory, as mentioned in the printer's warranty statement. If HP is asked to replace such parts, the customer will be charged for travel and labor costs. Parts should be replaceable by end users (customers) from a mechanical perspective within 5 minutes, with simple or no tools required. Examples include spindles and cartridges.
- CSR B: Parts are easy to replace, but some knowledge of the printer and technical skills may be required. The customer can decide whether to replace the part or to call for an engineer.

The CSR parts are listed below.

Table 5-3 CSR parts

5HB08-67006	ARSS	CSR A	No
5HB06-67008	Cutter Door (T200 and T600)	CSR A	Yes
5HB12-67009	Cutter Door (Studio)	CSR A	Yes
CQ890-67108	Cutter with clutch	CSR A	Yes
5HB08-67007	Multi-Sheet Tray SV (T200 and T600)	CSR A	Yes
5HB12-67015	Multi-Sheet Tray SV (Studio)	CSR A	Yes
CQ890-67102	Out-Of-Paper Sensor without cable	CSR B	Yes
CQ891-60022	Power Cord: AMS SV KIT	CSR A	No
CQ891-60023	Power Cord: APJ SV KIT	CSR A	No
CQ891-60021	Power Cord: EU SV KIT	CSR A	No
5HB08-67003	Roll Cover (T200 and T600 24in)	CSR A	Yes
5HB10-67004	Roll Cover (T600 36in)	CSR A	Yes
5HB06-67027	Spindle module SV (24in)	CSR A	No
5HB10-67012	Spindle module SV (36in)	CSR A	No
5HB08-67001	Stand Assembly (T200 and T600 24in)	CSR A	No
5HB10-67002	Stand Assembly (T200 and T600 36in)	CSR A	No
5HB12-67001	Stand Assembly (Studio 24in)	CSR A	No
5HB14-67001	Stand Assembly (Studio 36in)	CSR A	No
5HB08-67002	Stand Hardware Kit (T200 and T600 24in)	CSR A	No
5HB12-67002	Stand Hardware Kit (Studio)	CSR A	No
5HB12-67019	Top Trim Metalic (Studio Steel 24in)	CSR A	No
5HB14-67011	Top Trim Metalic (Studio Steel 36in)	CSR A	No
5HB12-67003	Top Trim Wood (Studio 24in)	CSR A	No
5HB14-67002	Top Trim Wood (Studio36in)	CSR A	No

Copies of most of the fliers can be found in the appendices to this manual: see Flyers on page 483.

Recommended checks after replacing parts

After replacing a part, we recommend checking the status of the printer.

The basic check of the printer status is as follows:

1. Turn on the printer and check that there is no system error.
2. Print the print-quality diagnostic report on an A4 or US Letter sheet of paper and check that there are no problems.
3. Load a roll of paper and perform some form feeds and cuts.

For some parts, further actions are required:

- After replacing the Main PCA, check for firmware updates and set up Web Services.
- After replacing the Service Station, perform the appropriate preventive maintenance reset.

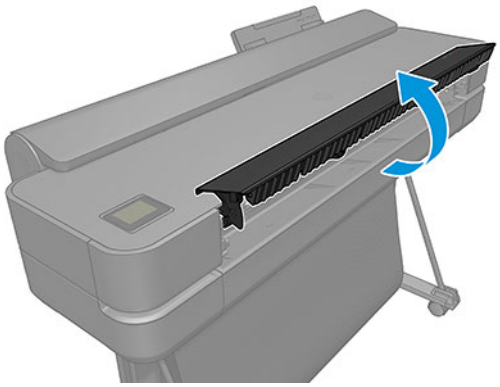
Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011)

This section explains the removal and installation processes for this component.

Removal

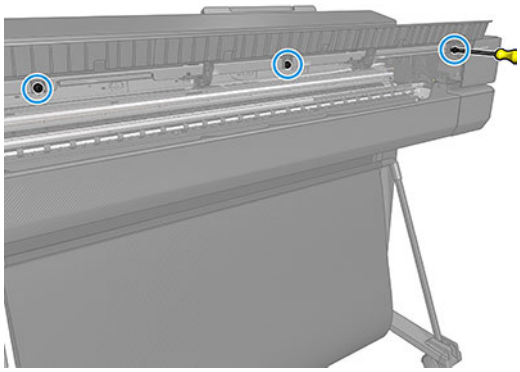
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the Power cable.
2. Open the Front Door.

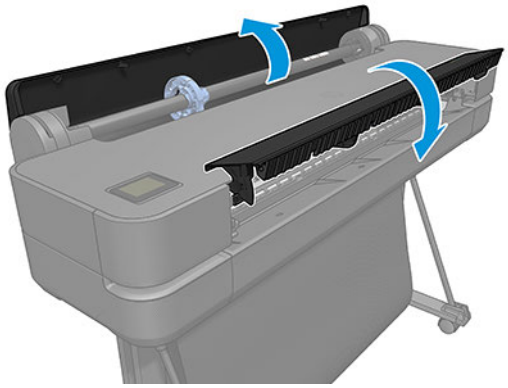


3. Remove 3 screws.

NOTE: Only for HP DesignJet T200 & T600 Series.



4. Close the Front Door and Open the Roll Cover.



5. Unclip the Top Trim.

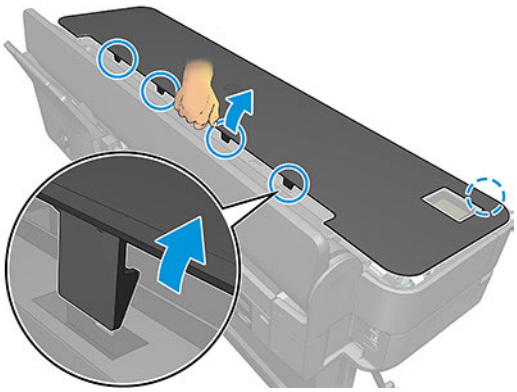
   a. For HP DesignJet T200&T600 Series:

      36 inch: Unclip 1 clip at the Front and 4 at the Back

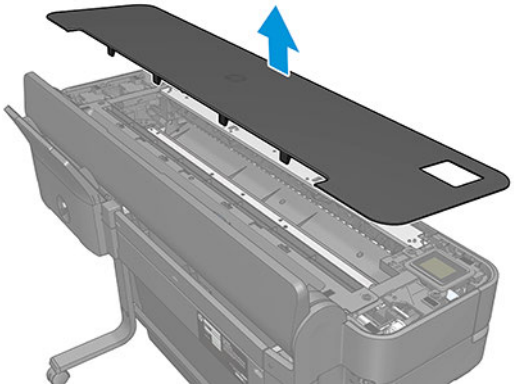
      24 inch: Unclip 1 clip at the Front and 3 at the Back

   b. For HP DesignJet Studios Series:

      36 inch & 24 inch: There aren't clips, only velcros



6. Remove the Top Trim.



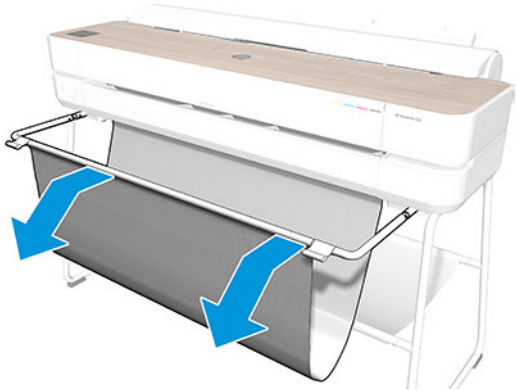
Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008)

This section explains the removal and installation processes for this component.

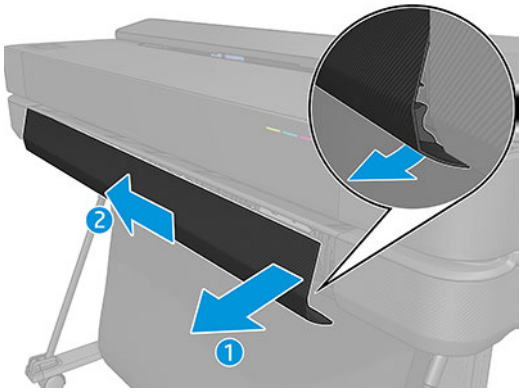
Removal

The following steps provide the complete procedure for this topic.

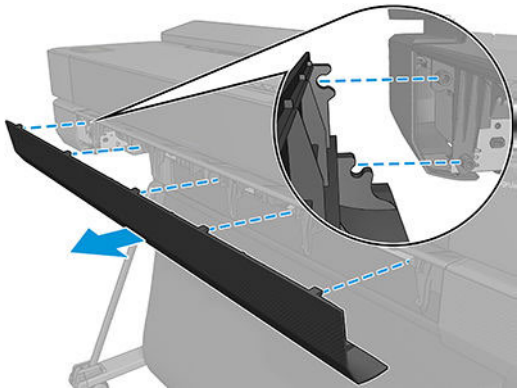
1. Turn off the printer and disconnect the Power cable.
2. For HP DesignJet Studio SKUs, pull the Basket until it reaches the down position.



3. Pull the Front Cover from the right edge, unclipping the snap, then continue unclipping the remaining snaps in a perpendicular direction from right to left.



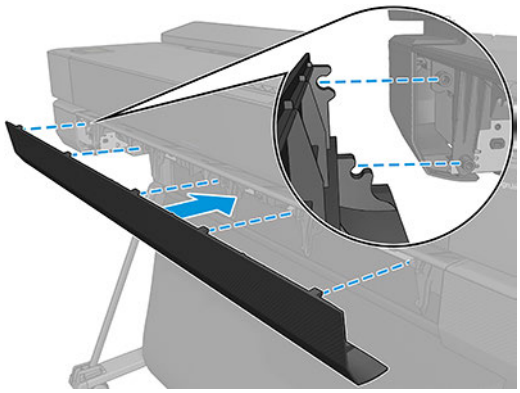
4. Remove the Front Cover.



Installation

The following steps provide the complete procedure for this topic.

▲ Insert the front cover.



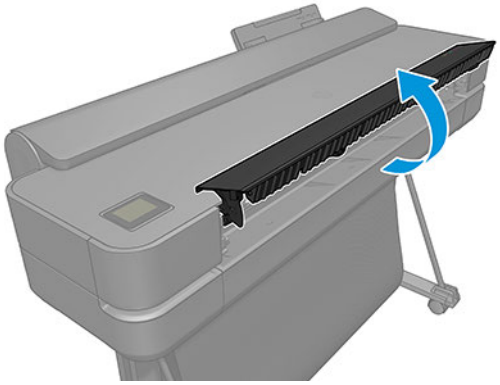
Cutter Door (5HB06-67008 & 5HB12-67009)

This section explains the removal and installation processes for this component.

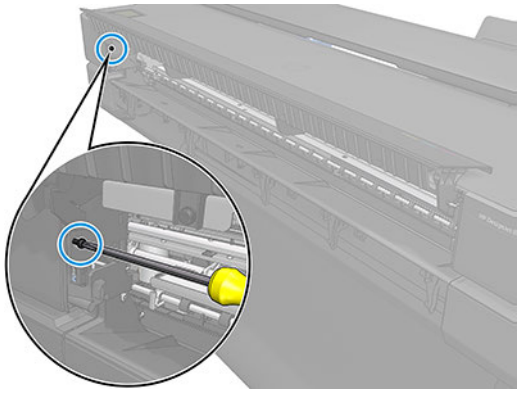
Removal

The following steps provide the complete procedure for this topic.

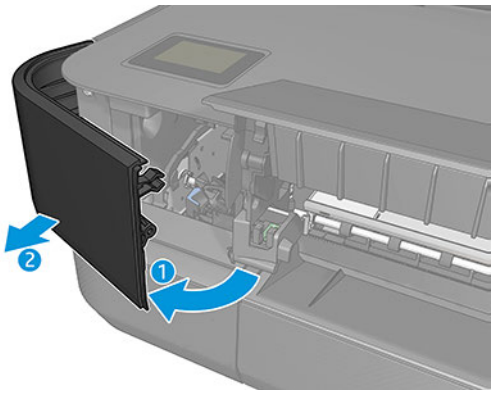
1. Turn off the printer and disconnect the Power cable.
2. Open the Front Door.



3. Remove 1 screw.



4. Remove the Cutter Door.



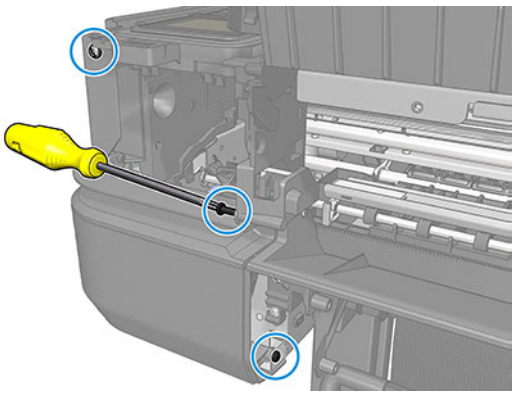
Left Cover (5HB06-67017 & 5HB12-67008)

This section explains the removal and installation processes for this component.

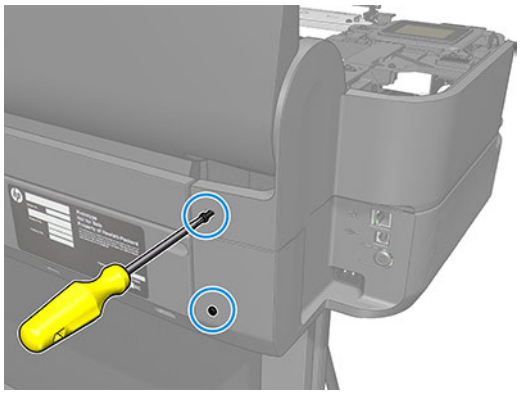
Removal

The following steps provide the complete procedure for this topic.

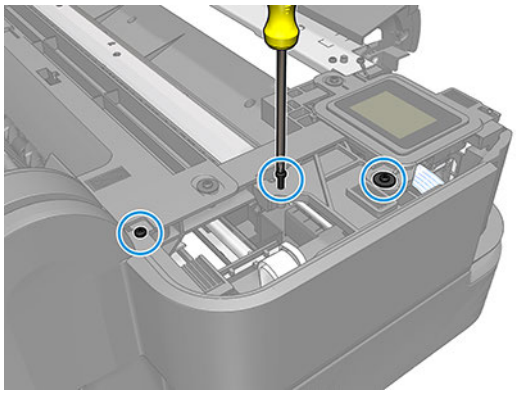
1. Turn off the printer and disconnect the Power cable and LAN Cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299
4. Remove the Cutter Door. See Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove 3 screws.



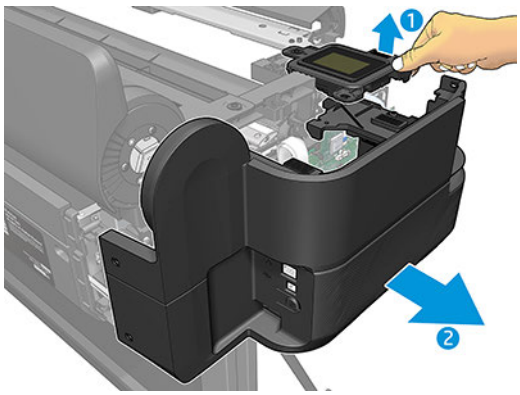
6. Remove 2 screws.



7. Remove 3 screws.



8. Remove the Left Cover.



Installation

The following steps provide the complete procedure for this topic.

NOTE: When installing the Left Cover, take care not to disconnect or damage the FFC cables.

Right Cover (5HB06-67006 & 5HB12-67006)

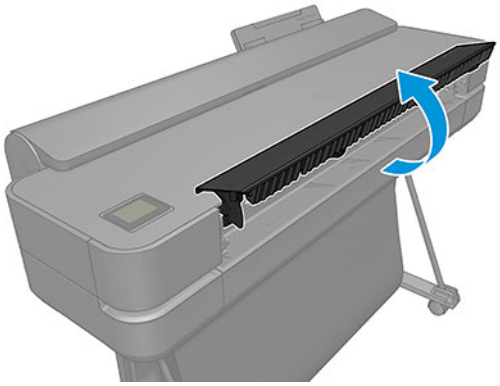
This section explains the removal and installation processes for this component.

Removal

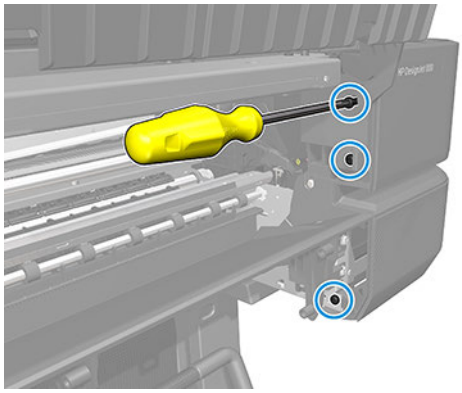
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299

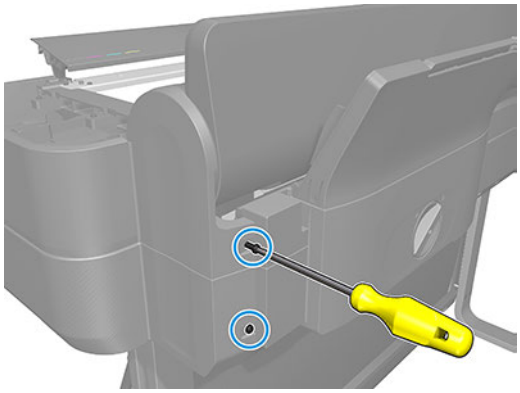
4. Open the Front Door.



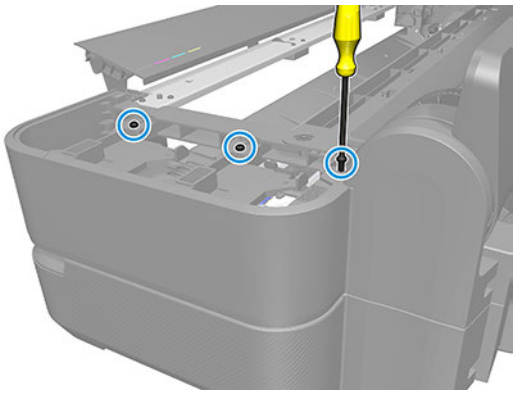
5. Remove 3 screws.



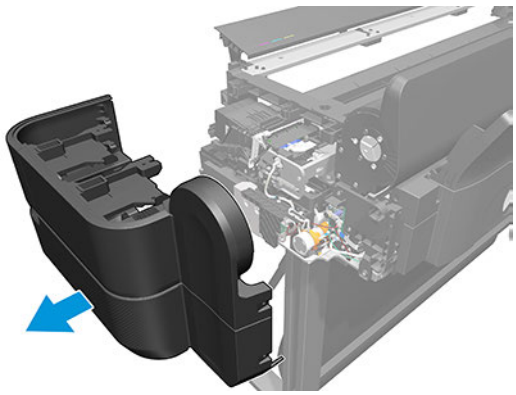
6. Remove 2 screws.



7. Remove 3 screws.



8. Remove the Right Cover.



Front Door (5HB06-67005 & 5HB10-67005, 5HB12-67005 & 5HB14-67004)

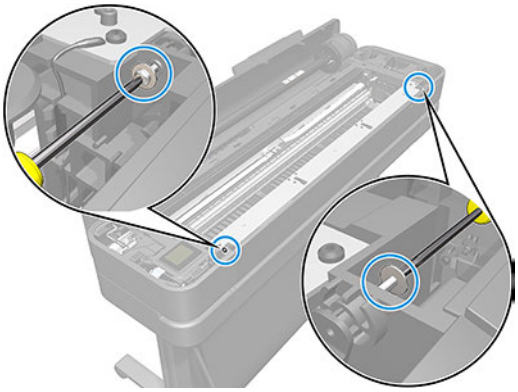
This section explains the removal and installation processes for this component.

Removal

The following steps provide the complete procedure for this topic.

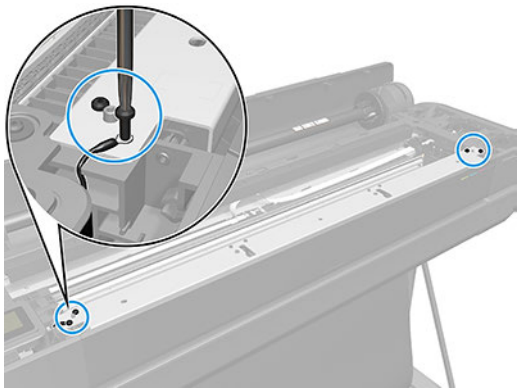
1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.

3. Remove 2 screws.

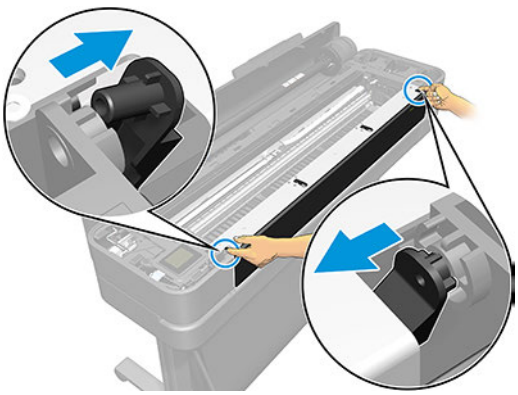


4. Remove 4 screws.

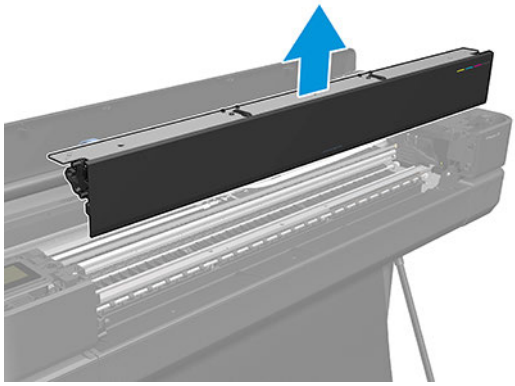
NOTE: One screw has a grounding cable attached.



5. Unclip the Front Door from both sides.



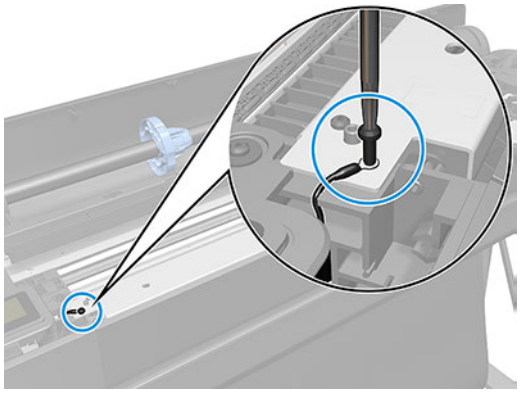
6. Remove the Front Door.



Installation

The following steps provide the complete procedure for this topic.

NOTE: Remember to screw the grounding cable.



Top Rear Cover (5HB12-67007 & 5HB14-67005)

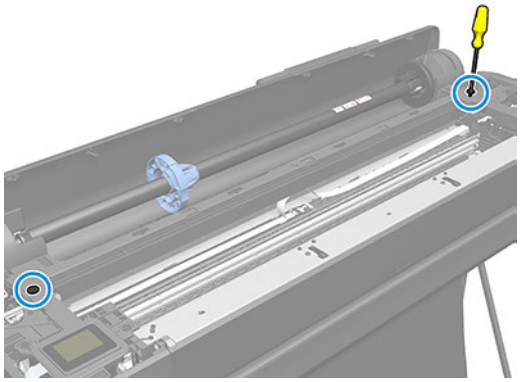
This section explains the removal and installation processes for this component.

Removal

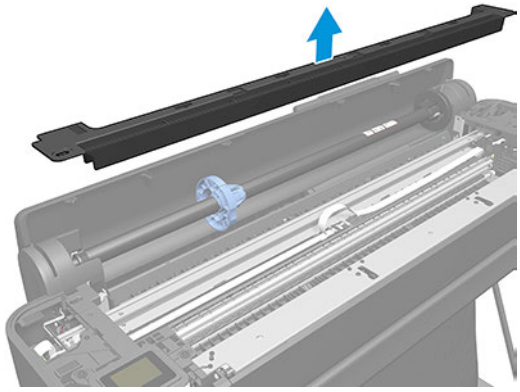
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.

3. Remove 2 screws.



4. Remove the Top Rear Cover.



Installation

The following steps provide the complete procedure for this topic.

▲ Please follow the steps of the Removal procedure in the reverse order.

Back Cover (CQ890-67010 & CQ893-67002)

This section explains the removal and installation processes for this component.

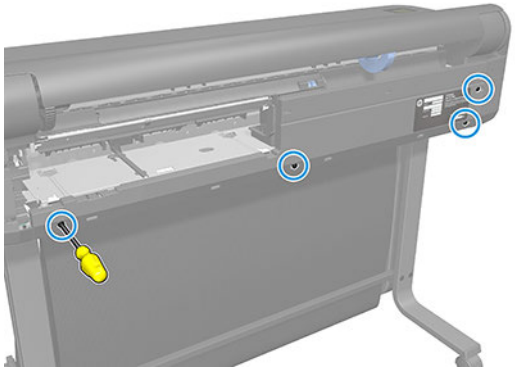
Removal

The following steps provide the complete procedure for this topic.

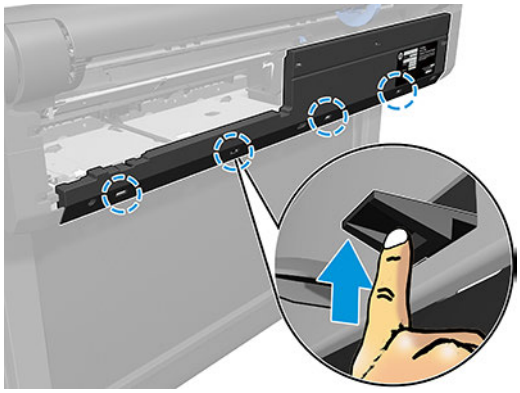
1. Turn off the printer and disconnect the Power cable.
2. Remove the Multi-Sheet Tray SV. Note that this is only necessary for for HP DesignJet T600 & Studio Series. See Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425.

Remove the Rear Cover (note that this is only necessary for the HP DesignJet T200 Series).

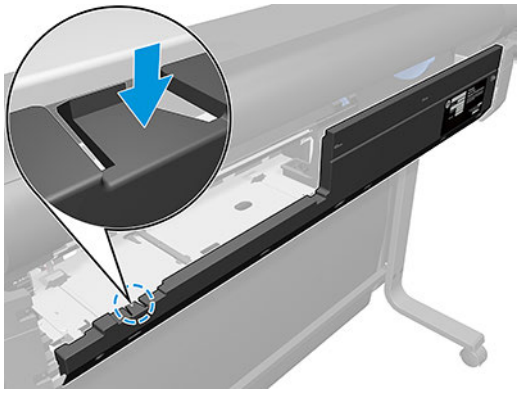
3. Remove 4 screws.



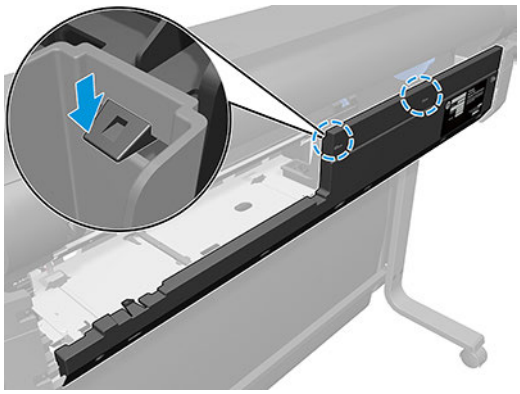
4. Unclip the four bottom clips.



5. Unclip the left top clip.



6. Unclip the two top clips.

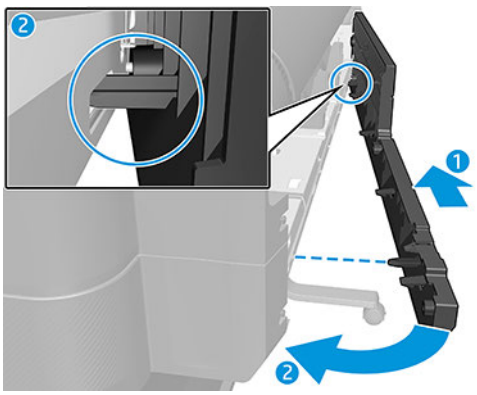


7. Rotate the Back Cover slightly and slide it to the left to remove it.

Installation

The following steps provide the complete procedure for this topic.

NOTE: Put the pins in the holes.



NOTE: When installing the Back Cover, take care not to disconnect or damage the FFC cables.

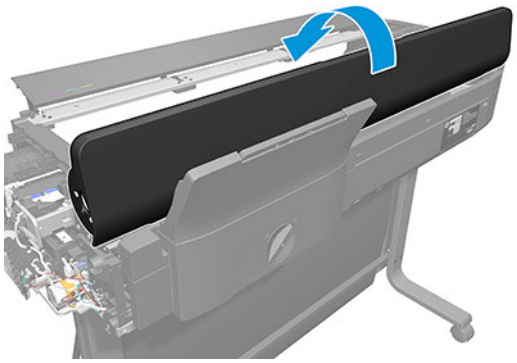
Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003)

This section explains the removal and installation processes for this component.

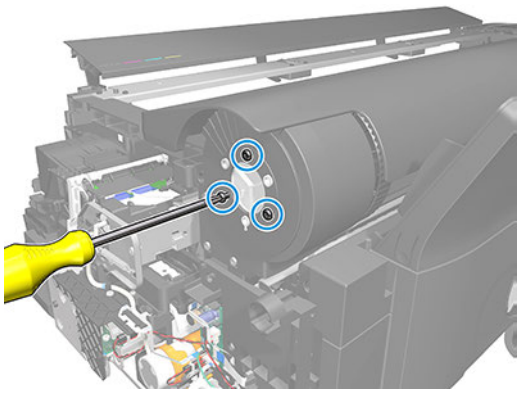
Removal

The following steps provide the complete procedure for this topic.

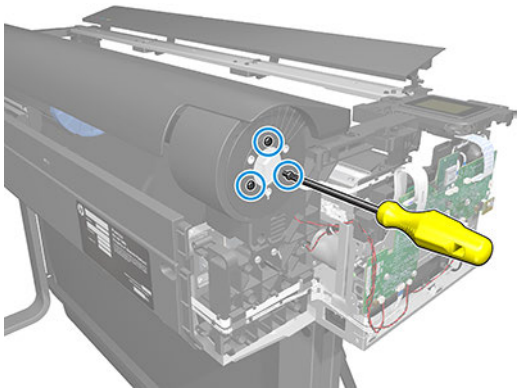
1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover. See Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the Right Cover. See Removal on page 303.
7. Close the Roll Cover.



8. Remove 3 screws.

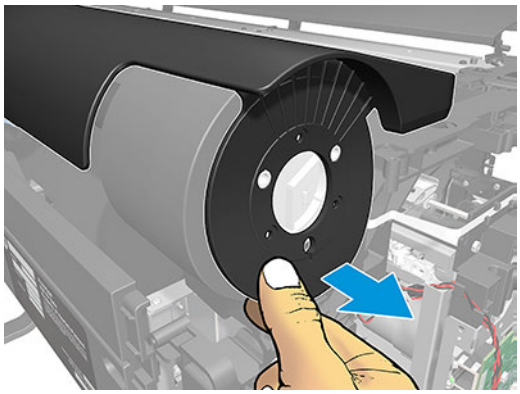


9. Remove 3 screws.

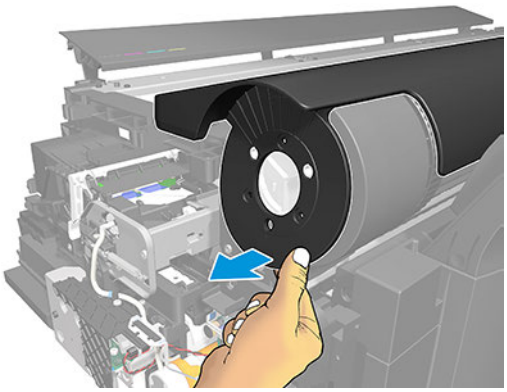


10. Unclip and detach the left side of the Roll Cover, bending it carefully.

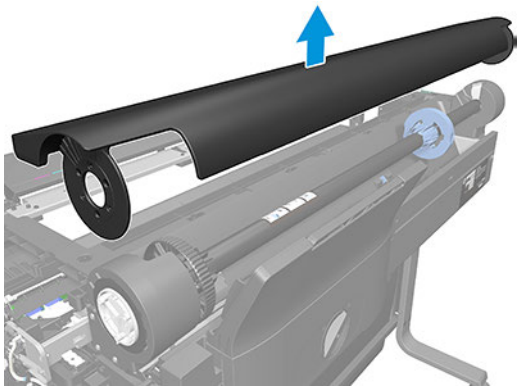
⚠ CAUTION: Take care not to damage the Rewinder cables.



11. Unclip and detach the right side of the Roll Cover, bending it carefully.



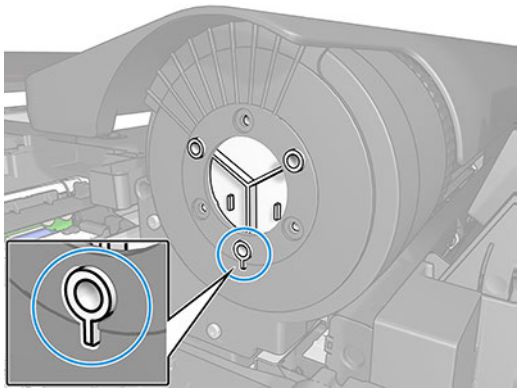
12. Remove the Roll Cover.



Installation

The following steps provide the complete procedure for this topic.

NOTE: When installing the Roll Cover, ensure that the key is correctly installed when attaching the Roll Cover to the Gear Damper.



Left Roll Support with Rewinder and Cover (5HB08-67004 & 5HB12-67016)

This section explains the removal and installation processes for this component.

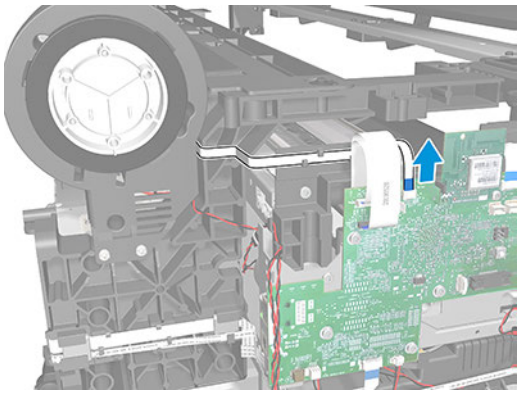
Removal

The following steps provide the complete procedure for this topic.

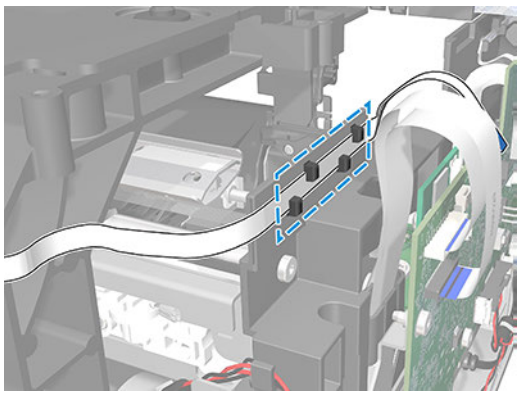
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300

5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301
6. Remove the Right Cover, see Right Cover (5HB06-67006 & 5HB12-67006) on page 303
7. Remove the Roll Cover, see Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311
8. Remove the Spindle Module SV (5HB06-67027 & 5HB10-67012).
9. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425.
   Note: Only for HP DesignJet T600 & Studio Series.

   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
10. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.
11. Remove the ARSS, see ARSS (5HB08-67006) on page 352.
12. Remove the Input Roll Guide, see Input Roll Guide (5HB06-67016 & 5HB10-67011) on page 354.
13. Disconnect the flat cable.

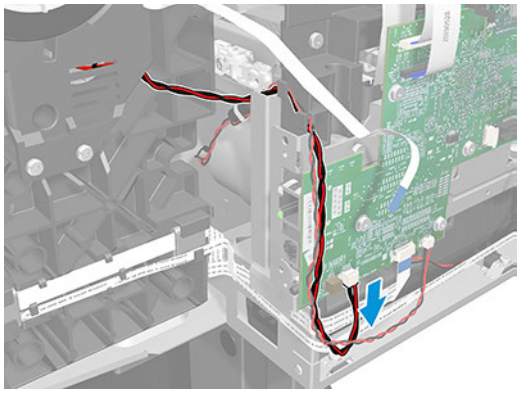


14. Detach the flat cable.

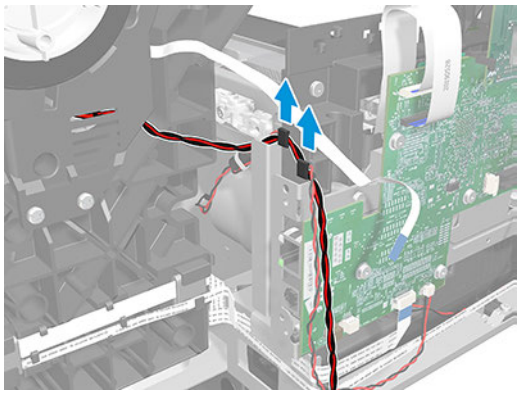


15. Disconnect the round cable.

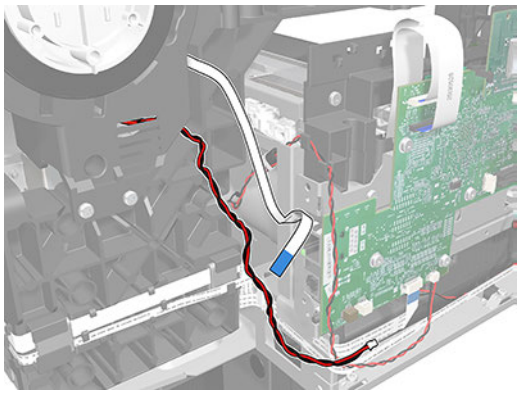
⚠ **CAUTION:** Take care, because the small connector is easy to break.



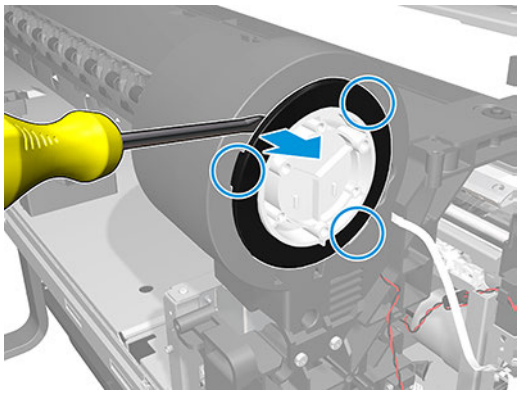
16. Unroute the round cable.



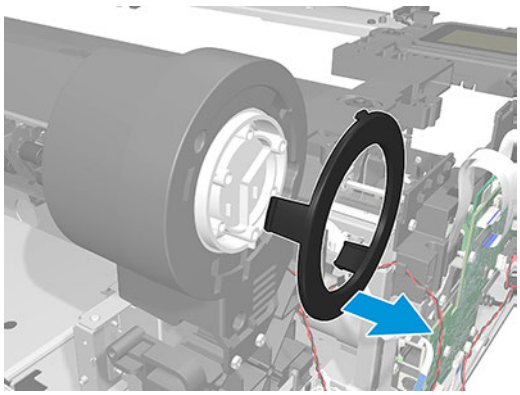
17. Make sure both cables are free.



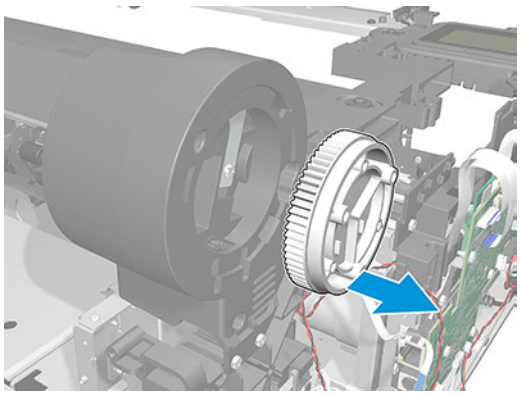
18. Unclip the Retainer Damper.



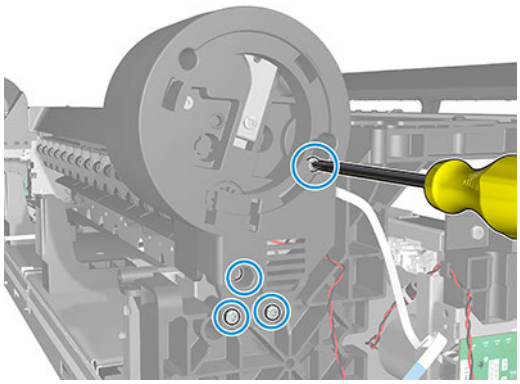
19. Remove the Retainer Damper.



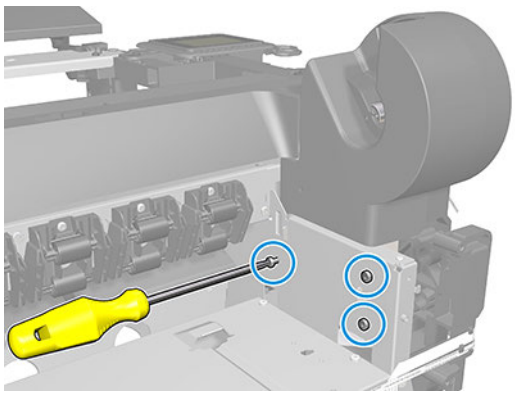
20. Remove the Gear Damper.



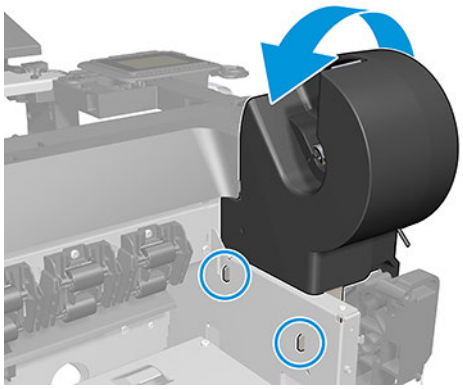
21. Remove 4 screws.



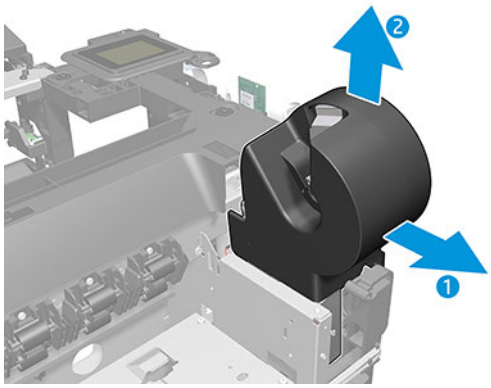
22. Remove three T-10 screws.



23. Rotate the Left Roll Support Cover to the left a little to detach it from the bracket.



24. Remove the Left Roll Support, taking care not to damage the cables.

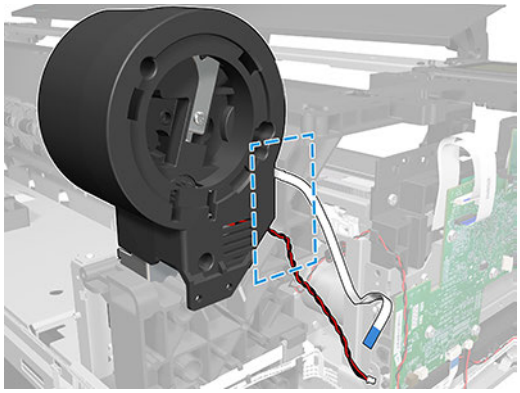


Installation

The following steps provide the complete procedure for this topic.

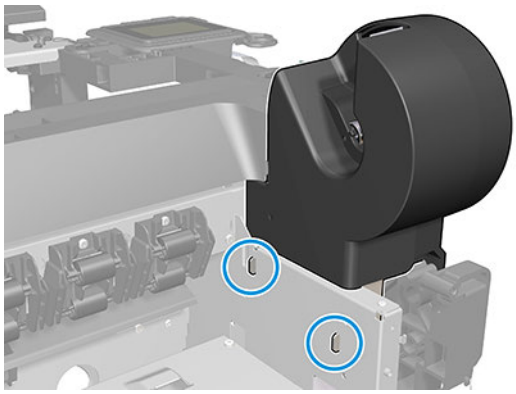
NOTE: Be careful to ensure that the cable routing is the same as before removal.

1. Follow the instructions to remove the left roll support in the reverse order.
2. When mounting the Left Roll Support, make sure to pass both cables through the arch.



NOTE: Check that the routing of the cables does not obstruct any moving parts or prevent any covers from being installed correctly.

3. Make sure the Left Roll Support is attached inside the two holes.



NOTE: When connecting the cables to the Main PCA, make sure that the blue side of the flat cables is facing you; and, with the red/black cables, **the red color should always be on the left**.

Right Roll Support with Cover (5HB08-67005 & 5HB12-67017)

This section explains the removal and installation processes for this component.

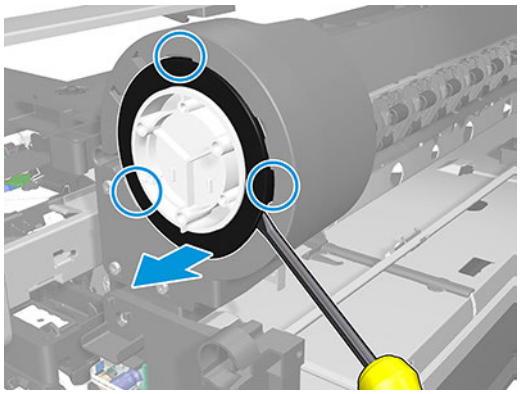
Removal

The following steps provide the complete procedure for this topic.

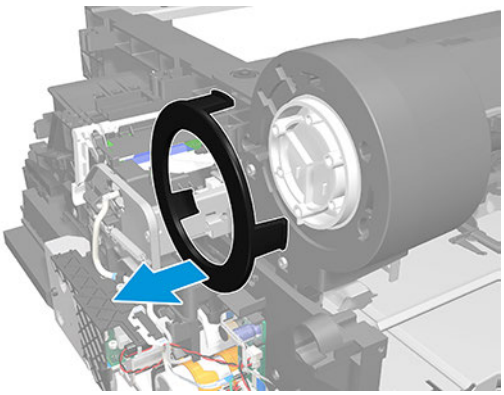
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the Right Cover, see Removal on page 303.
7. Remove the Roll Cover, see Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311.
8. Remove the Spindle Module SV (5HB06-67027 & 5HB10-67012).
9. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425. Note: Only for HP DesignJet T600 & Studio Series.

   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
10. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.
11. Remove the ARSS, see ARSS (5HB08-67006) on page 352.
12. Remove the Input Roll Guide, see Input Roll Guide (5HB06-67016 & 5HB10-67011) on page 354.

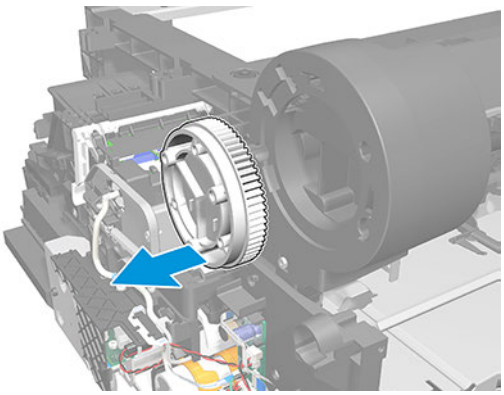
13. Unclip the Retainer Damper.



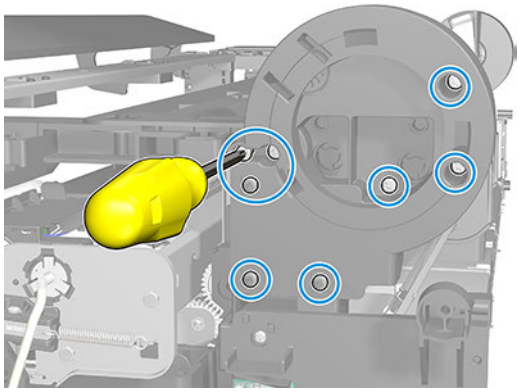
14. Remove the Retainer Damper.



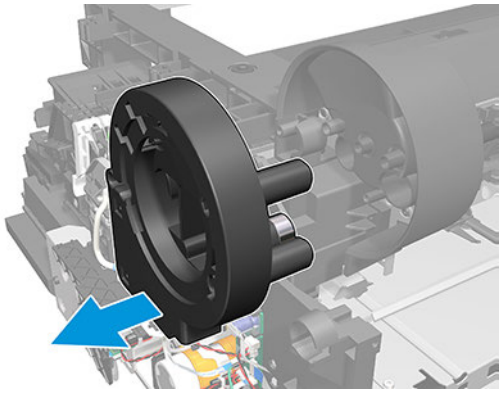
15. Remove the Gear Damper.



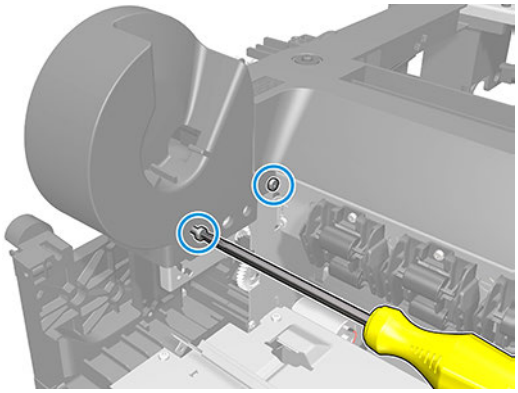
16. Remove 8 screws.



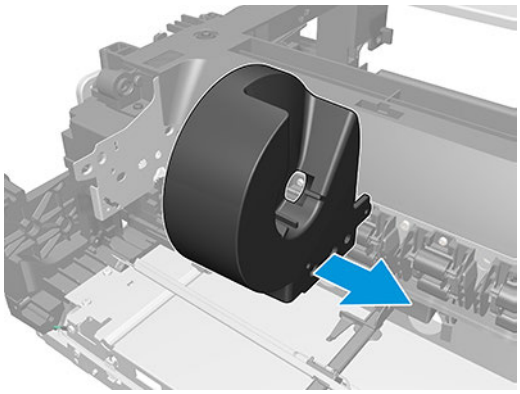
17. Remove the Right Roll Support Cover.



18. Remove 2 screws.



19. Remove the Right Roll Support.



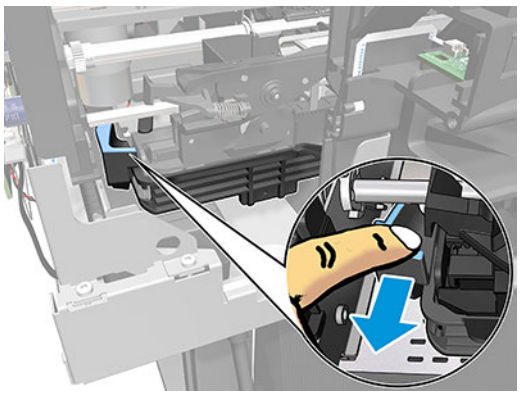
Output Platen (5HB06-67009 & 5HB10-67007, 5HB12-67010 & 5HB14-67007)

This section explains the removal and installation processes for this component.

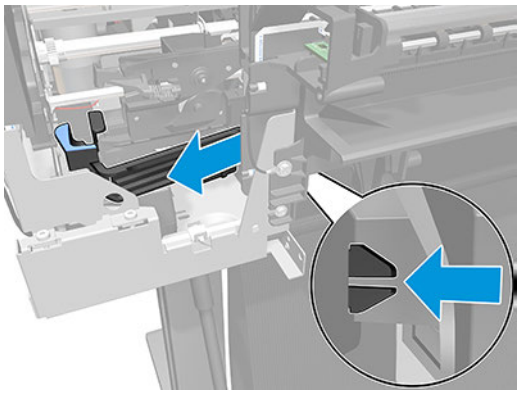
Removal

The following steps provide the complete procedure for this topic.

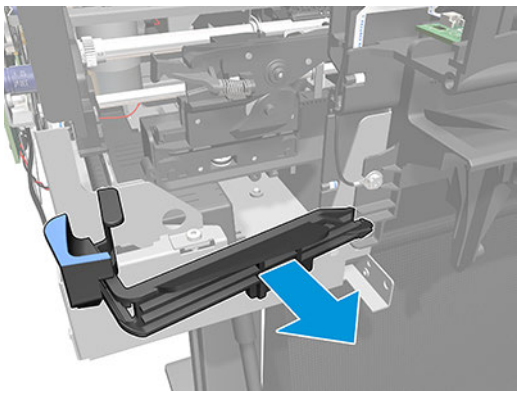
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the Right Cover, see Removal on page 303.
7. Pull out the left side of the Cutter Extraction Lid.



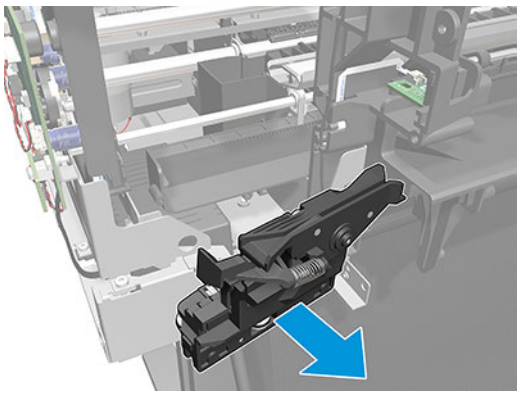
8. Slide the Cutter Extraction Lid to the left to detach it from the hole.



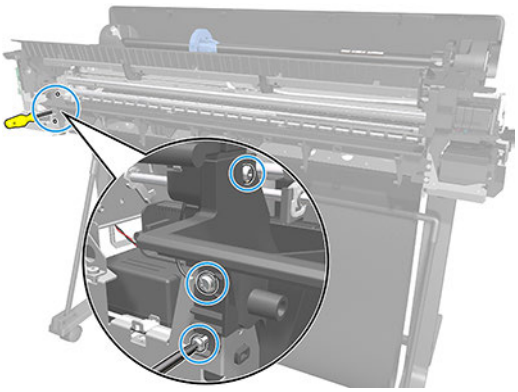
9. Remove the Cutter Extraction Lid.



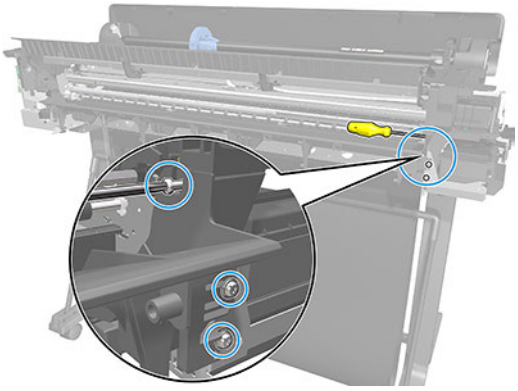
10. Remove the Cutter.



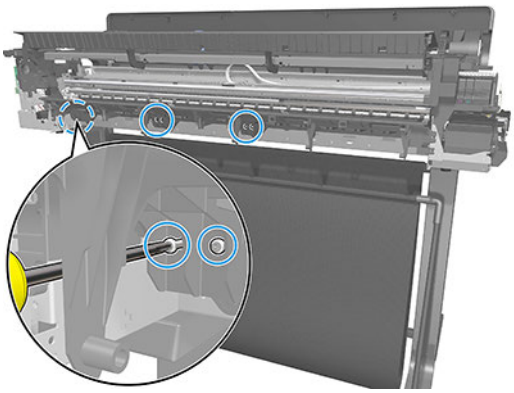
11. Remove 3 screws on the left side of the Output platen.



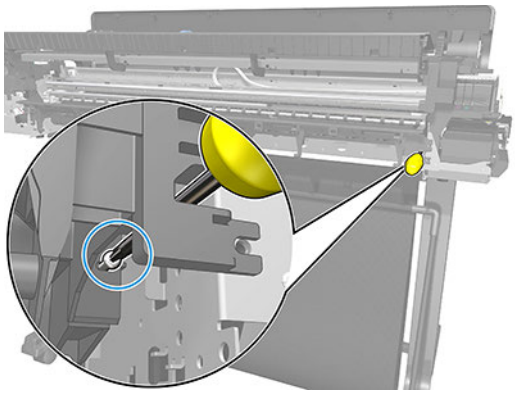
12. Remove 3 screws on the right side.



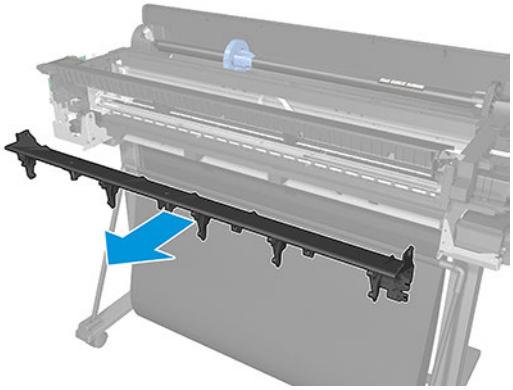
13. Remove 6 screws.



14. Remove 1 screw.



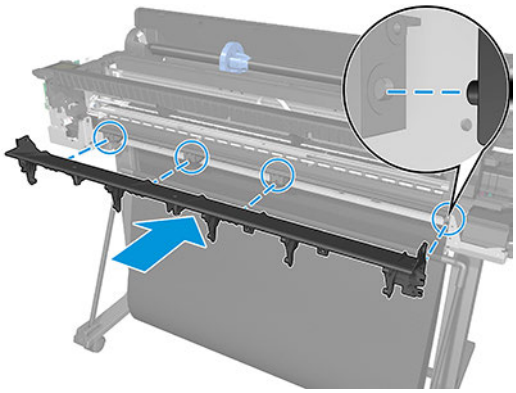
15. Remove the Output Platen.



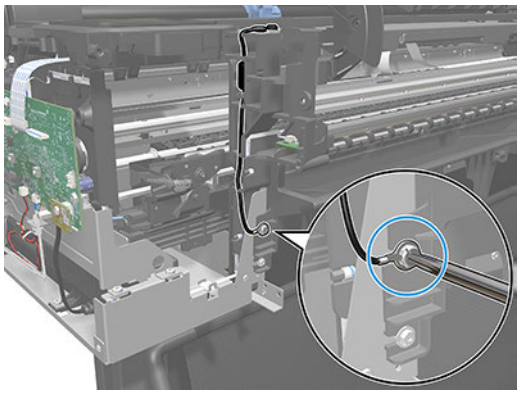
Installation

The following steps provide the complete procedure for this topic.

1. There are 4 pins and locators when mounting the Output Platen.



2. Remember to screw down the grounding cable.



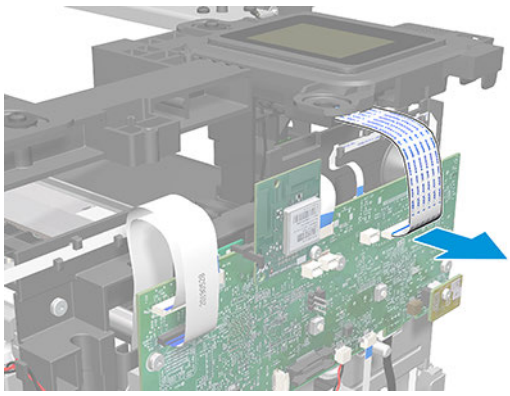
Front Panel (5HB06-67002)

This section explains the removal and installation processes for this component.

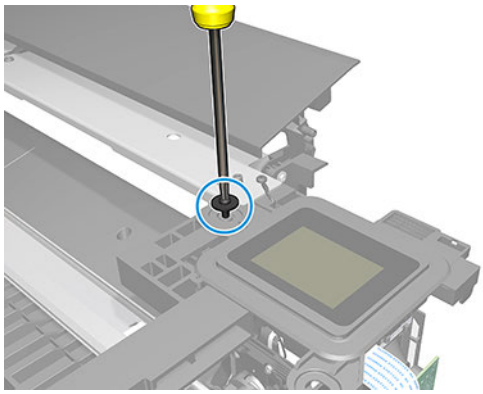
Removal

The following steps provide the complete procedure for this topic.

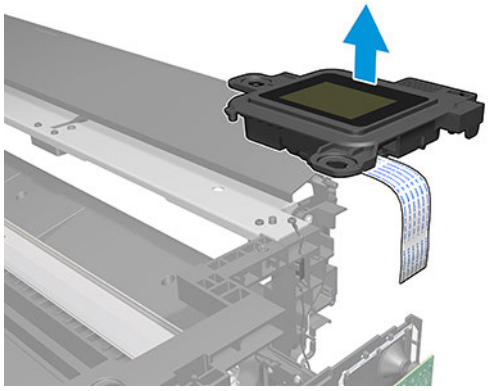
1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Unplug the FFC Cable.



7. Remove 1 screw.



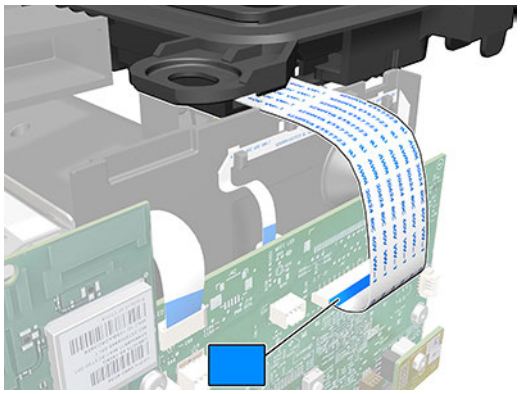
8. Remove the Front Panel.



Installation

The following steps provide the complete procedure for this topic.

1. Follow the instructions for removing the front panel in reverse order.
2. If the Front Panel cable is not correctly connected, the printer can sometimes start up with colors that are different from the normal colors (orange, blue).



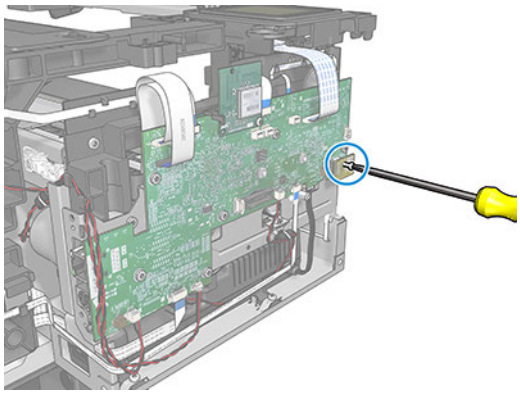
NVM Backup PCA (5HB06-67022)

This section explains the removal and installation processes for this component.

Removal

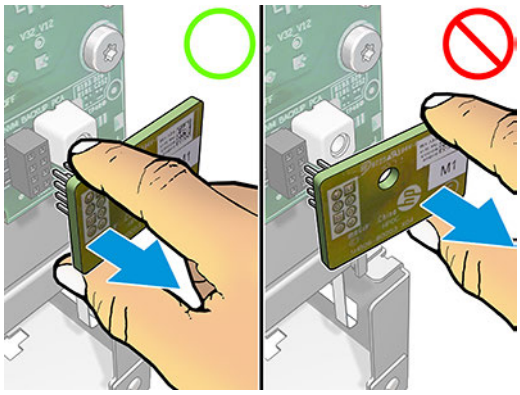
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove 1 screw.



7. Pull out the NVM Backup PCA, without tilting it.

NOTE: Be careful not to damage it.



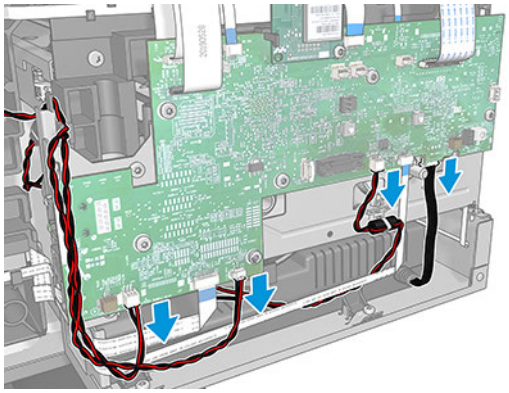
Main PCA (5HB06-67018 & 5HB08-67008)

This section explains the removal and installation processes for this component.

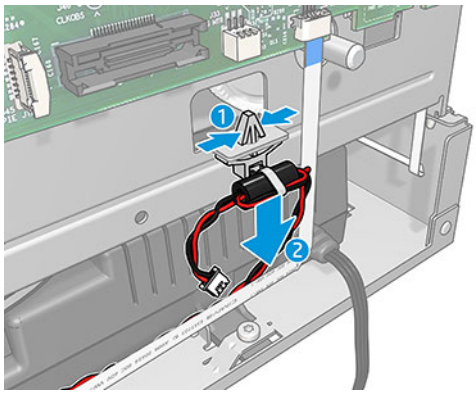
Removal

The following steps provide the complete procedure for this topic.

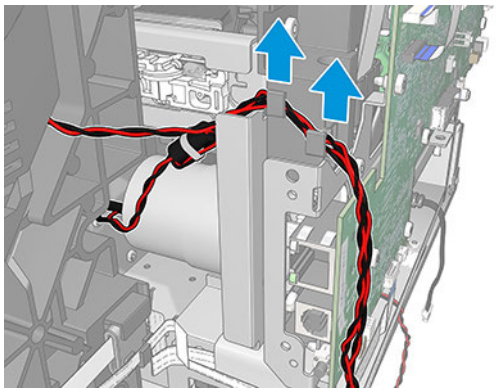
1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the NVM Backup PCA, see NVM Backup PCA (5HB06-67022) on page 328.
7. Disconnect the round cables.



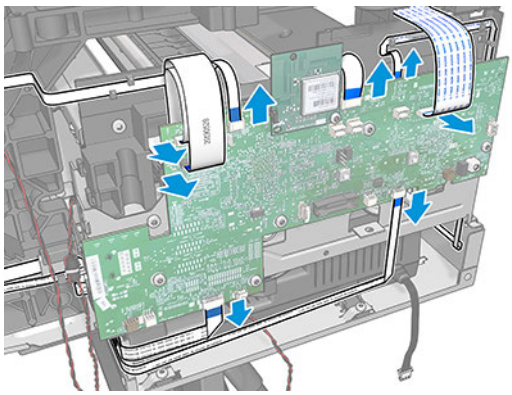
8. Unclip the clamp.



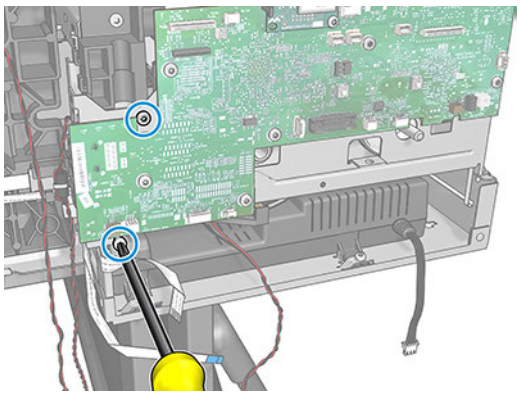
9. Unroute the round cables.



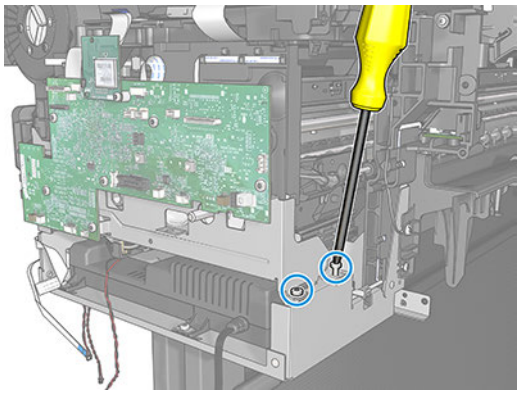
10. Disconnect the FFC cables.



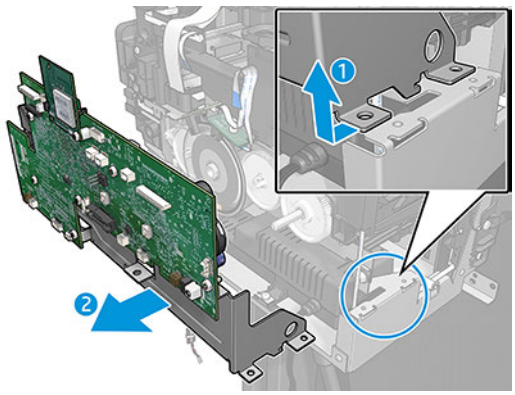
11. Remove 2 screws.



12. Remove 2 screws.



13. Disengage the Main PCA from the Hook and remove it.

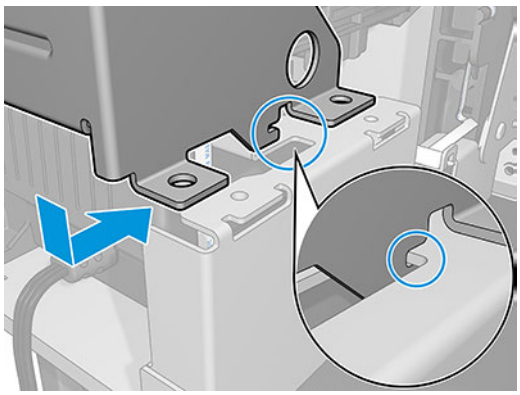


Installation

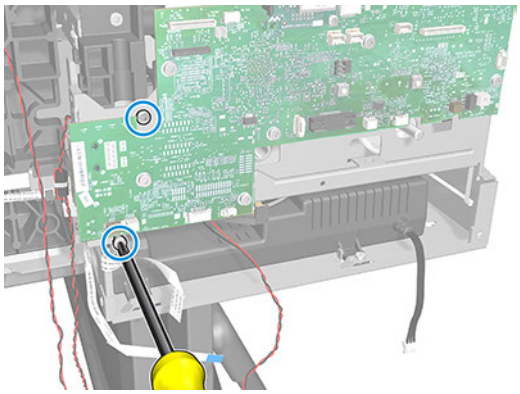
The following steps provide the complete procedure for this topic.

⚠ CAUTION: Do not forget to reuse the NVM Backup PCA. Move the NVM Backup PCA from the original Main PCA to new Main PCA.

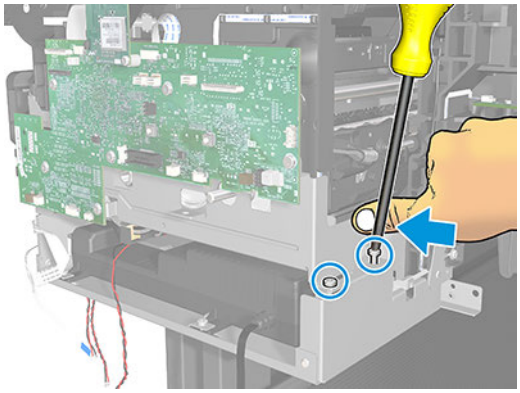
1. When mounting the Main PCA, remember to insert it in the hook.



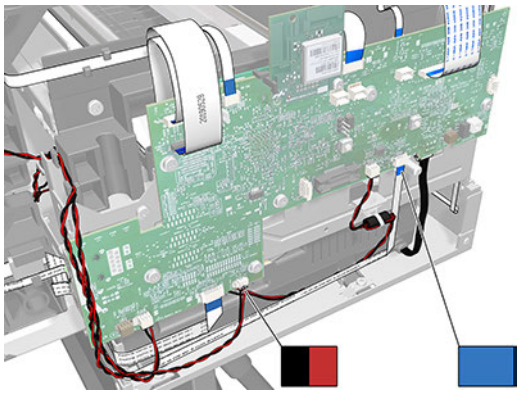
2. First place these two screws, because it will be easier to screw in the next two screws.



3. Push in the bracket of the Main PCA to align the two holes and screw the two screws without damaging them.



4. When connecting the cables to the Main PCA, make sure that the blue side of the flat cables is facing you; and, with the red/black cables, **the red color should always be on the left**.



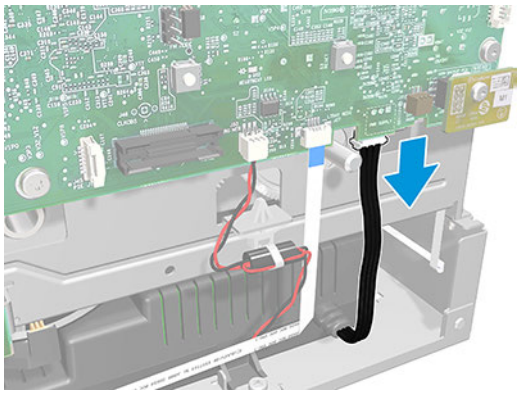
5V Power Supply SV (CQ890-67089)

This section explains the removal and installation processes for this component.

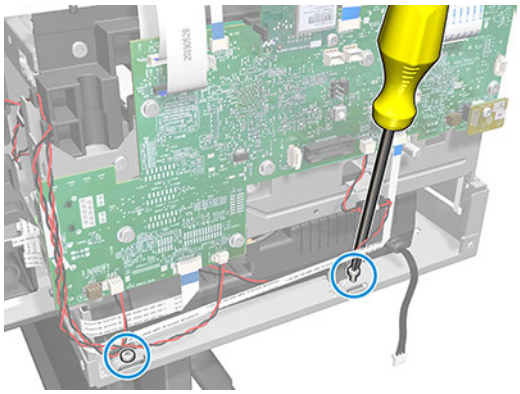
Removal

The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Disconnect the Power Supply Cable.

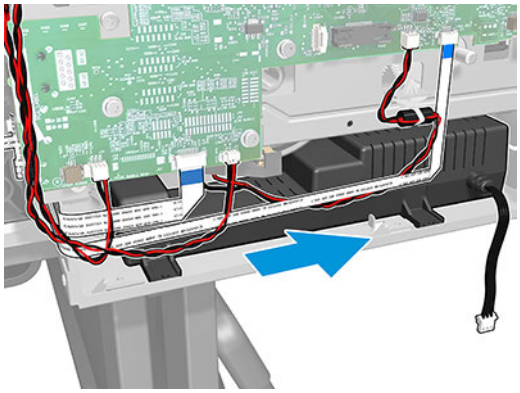


7. Remove 2 screws.

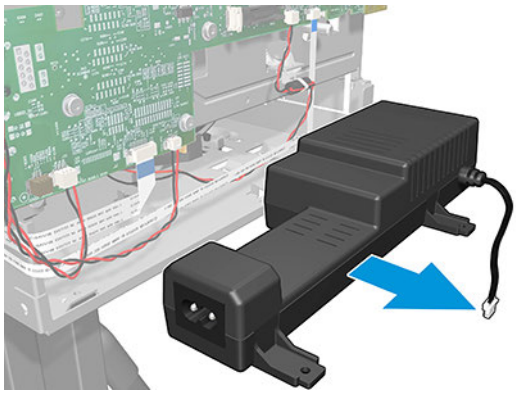


8. Slide the Power Supply to the side.

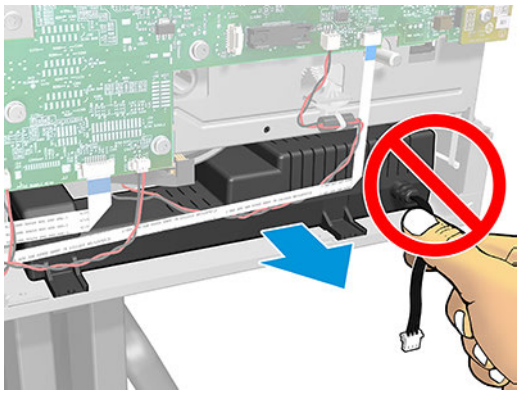
NOTE: Take care to not disconnect cables.



9. Remove the Power Supply.



NOTE: Never take out the Power Supply by pulling the cable, because you will damage it.



Installation

The following steps provide the complete procedure for this topic.

- Follow the instructions for removing the 5V Power Supply SV in reverse order.

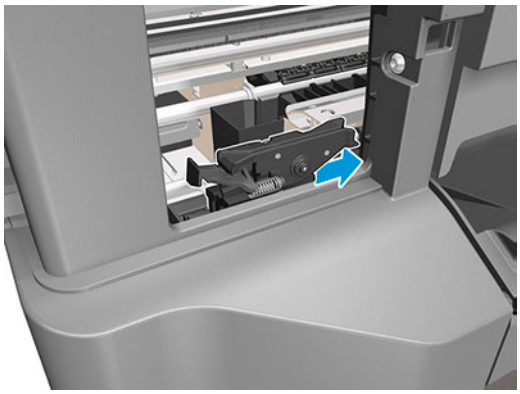
Left Spittoon (CQ890-67044)

This section explains the removal and installation processes for this component.

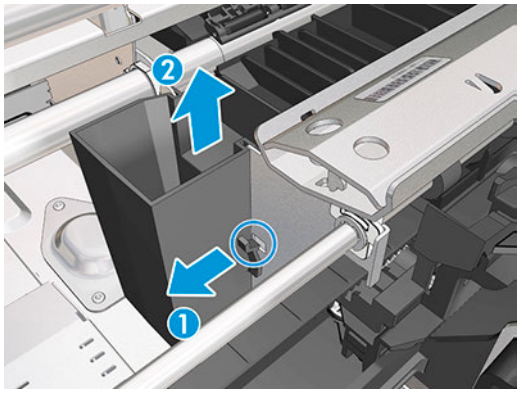
Removal

The following steps provide the complete procedure for this topic.

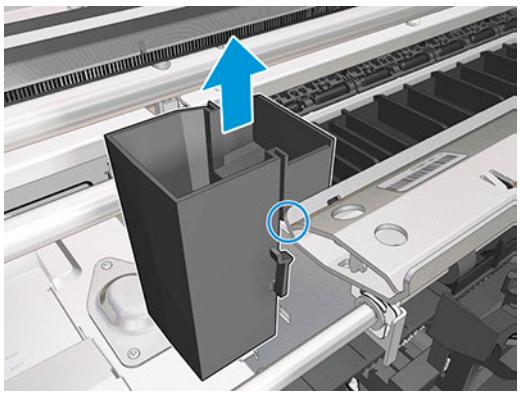
1. Turn off the printer and disconnect the power cable.
2. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
3. Slide the Cutter to the right.



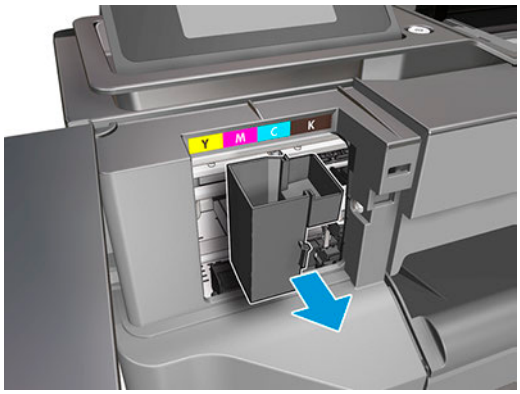
4. Unclip the flange of the Left Spittoon (1). Maintain it in the unclipped position and slide it up (2).



5. Slide up the Left Spittoon until it is detached from the bracket.



6. Remove the Left Spittoon in the vertical position. You are recommended to wear gloves.

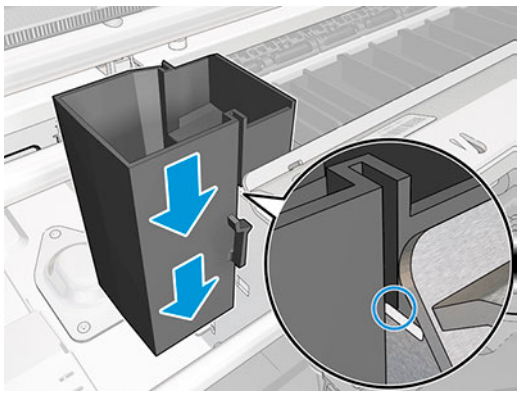


7. Never incline the Left Spittoon, because the ink can fall out.

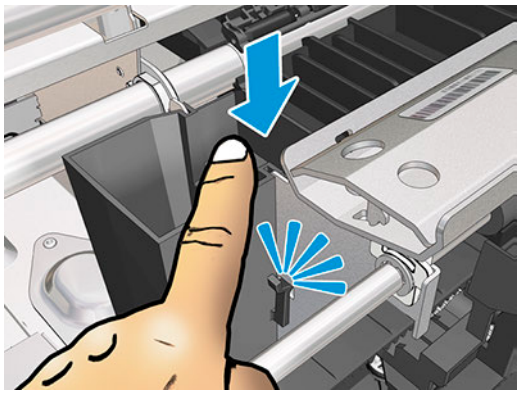
Installation

The following steps provide the complete procedure for this topic.

1. When sliding the Left Spittoon down, make sure to slide it by the path of the bracket.



2. Press down the Left Spittoon until you hear a click; make sure the flange is clipped.



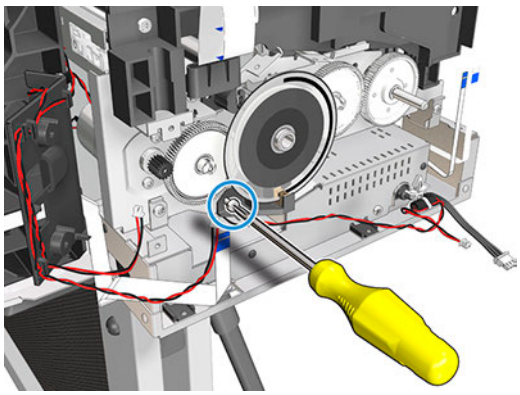
Encoder Disk (CQ890-67033)

This section explains the removal and installation processes for this component.

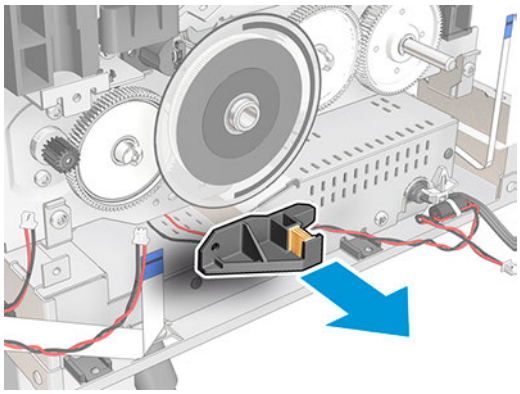
Removal

The following steps provide the complete procedure for this topic.

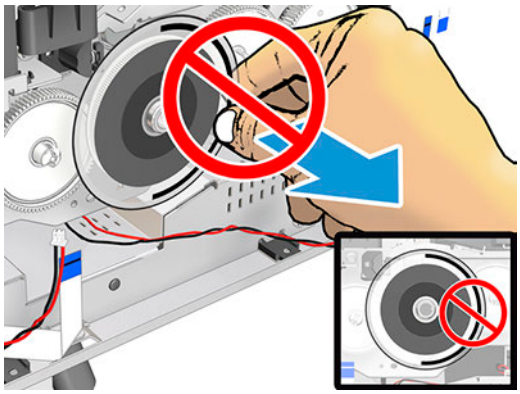
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the NVM Backup PCA, seee NVM Backup PCA (5HB06-67022) on page 328.
7. Remove the Main PCA, see Main PCA (5HB06-67018 & 5HB08-67008) on page 329.
8. Remove one T-10 screw.



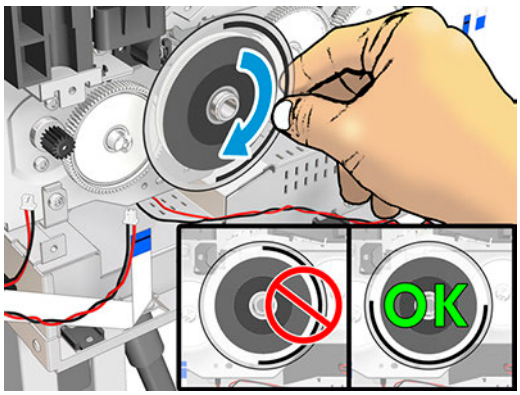
9. Remove the Holder Brush Feed Shaft.



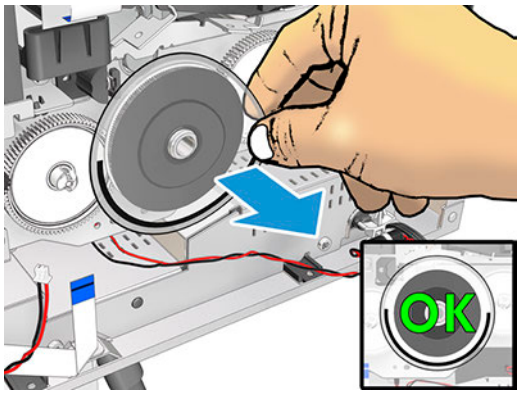
IMPORTANT: Do not remove the Encoder Disk without checking the position of the black reference mark.



10. Rotate the Encoder Disk to a position where the black reference mark is entirely below the midpoint of the disk (so that it looks like a smile).



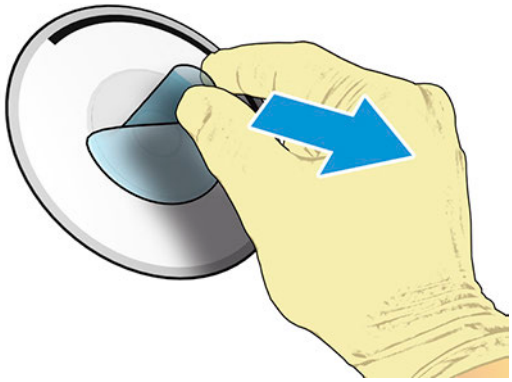
11. Remove the Encoder Disk by pulling it off (without moving the Roller).



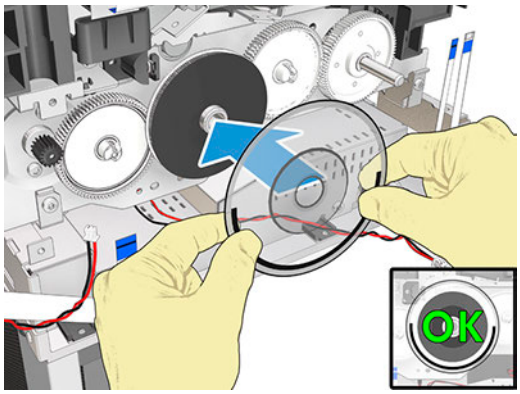
Installation

The following steps provide the complete procedure for this topic.

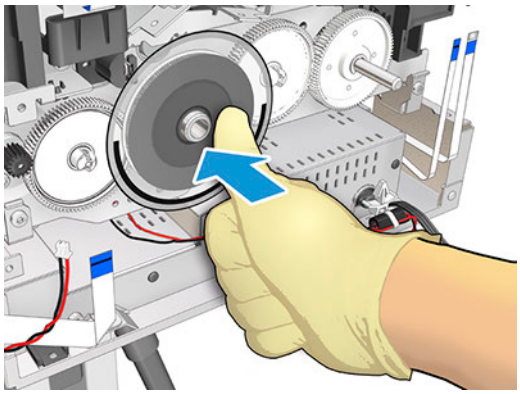
1. Remove the film from the new Encoder Disk. **IMPORTANT:** Wear gloves.



2. Clean the new Encoder Disk with a lint-free cloth dampened with a general-purpose industrial cleaner to remove any remaining glue. Let it dry before proceeding.
3. Attach the new Encoder Disk with the black reference mark in exactly the same position as it was when you removed it (without moving the Roller).



4. Make sure the Encoder Disk is firmly attached.



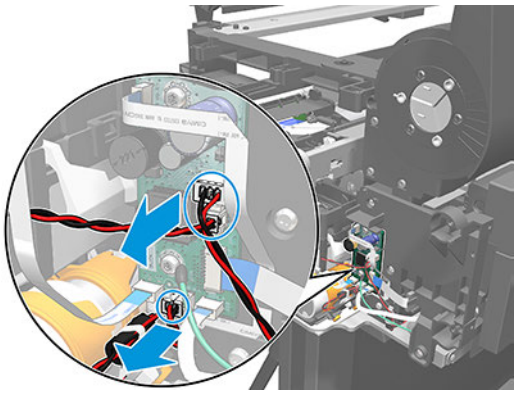
Bundle PCA (5HB06-67021)

This section explains the removal and installation processes for this component.

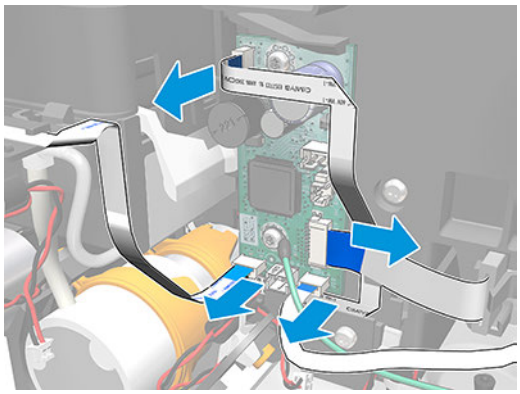
Removal

The following steps provide the complete procedure for this topic.

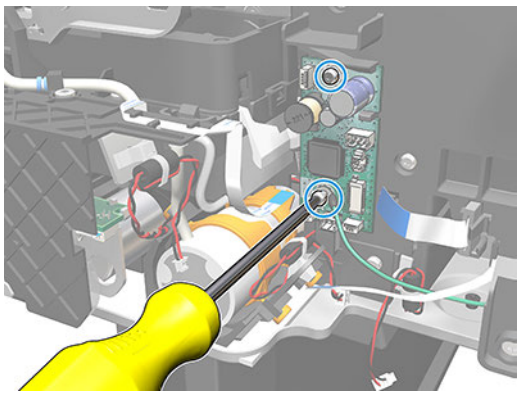
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Right Cover, see Removal on page 303.
5. Disconnect 3 motor cables.



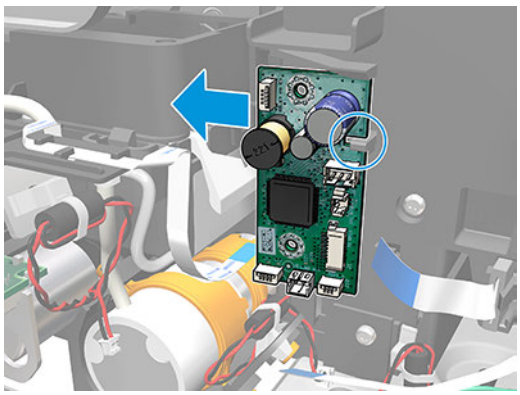
6. Disconnect 4 FFC (flat flexible cables) from the Bundle Board.



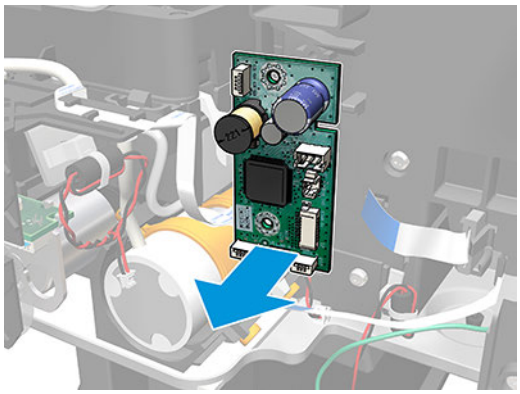
7. Remove 2 screws.



8. Detach the Bundle Board from the hook.



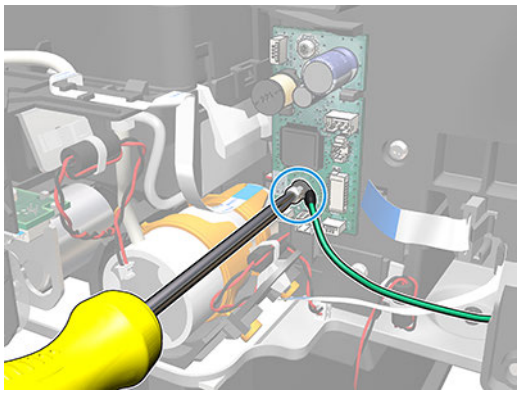
9. Remove the Bundle Board.



Installation

The following steps provide the complete procedure for this topic.

NOTE: Remember to screw down the grounding cable.



Service Station Assembly (CQ890-67045)

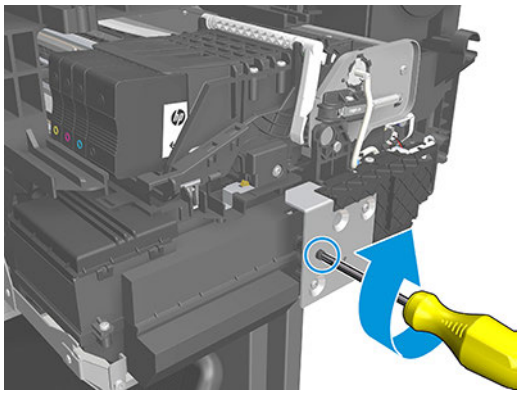
This section explains the removal and installation processes for this component.

Removal

The following steps provide the complete procedure for this topic.

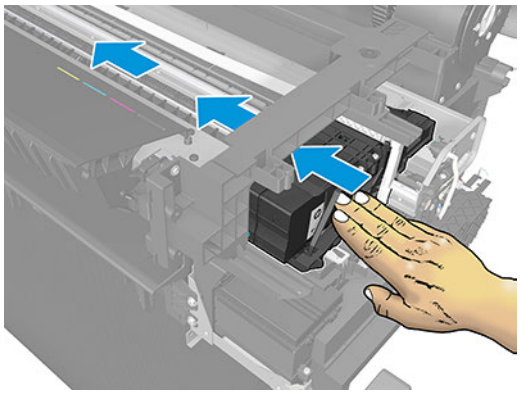
1. Turn off the printer and disconnet the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Right Cover, see Removal on page 303.

5. Uncap the Carriage.

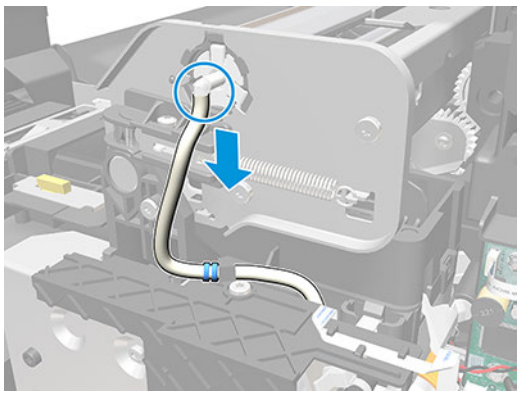


⚠ **CAUTION:** Avoid touching the Encoder Disk by mistake.

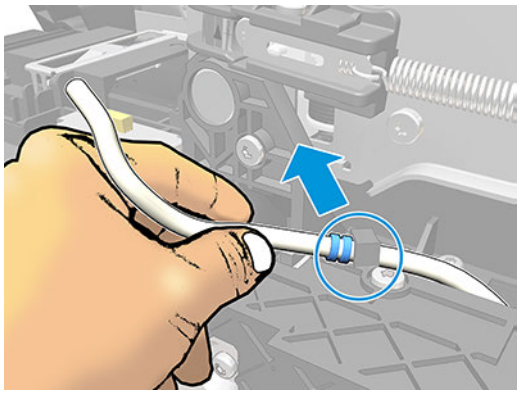
6. Move the Carriage to the left.



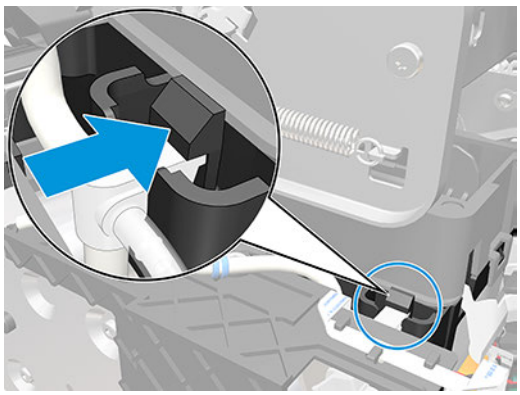
7. Disconnect the tube.



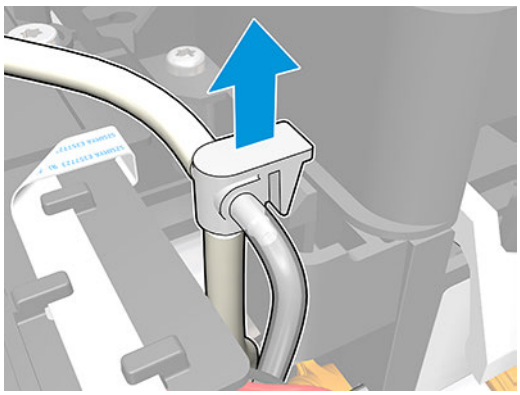
8. Unclip the tube.



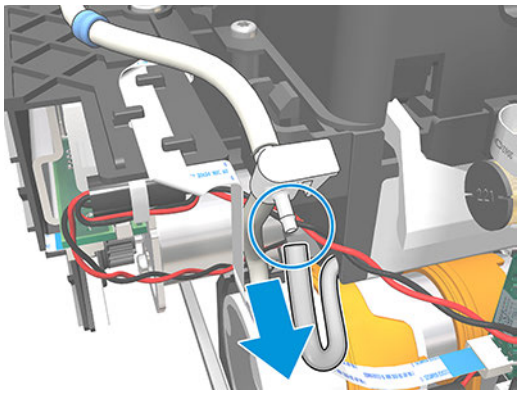
9. Unclip the Tee Pump Prime.



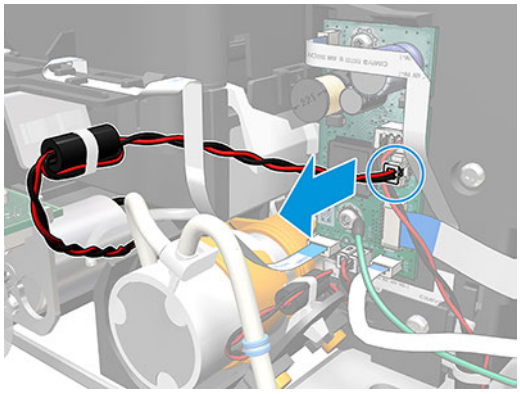
10. Remove the Tee Pump Prime.



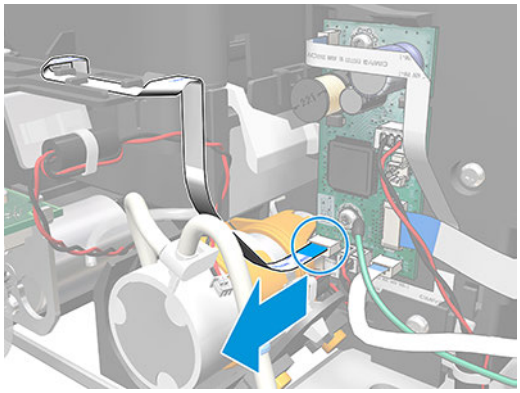
11. Disconnect the tube.



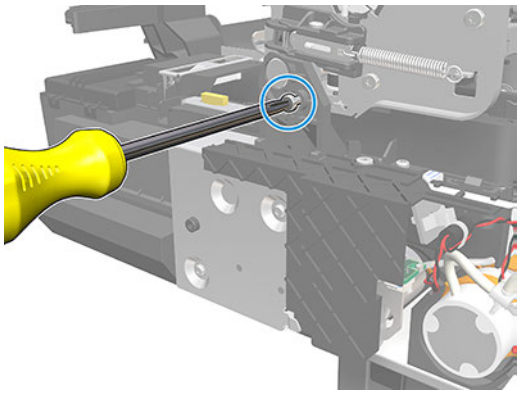
12. Disconnect the cable.



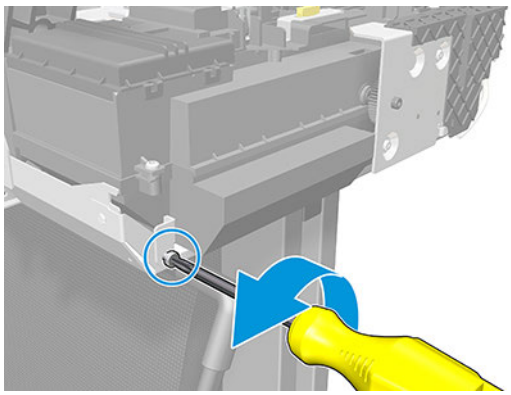
13. Disconnect the flat cable.



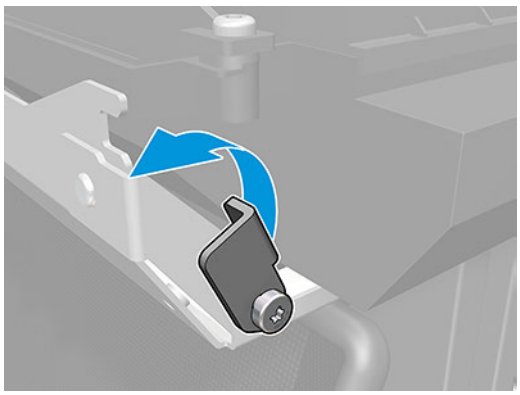
14. Remove 1 screw.



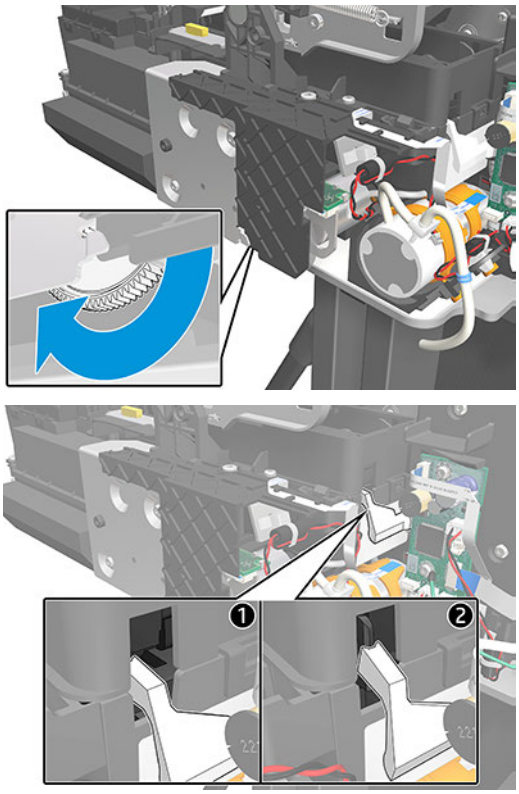
15. Loosen only 1 screw.



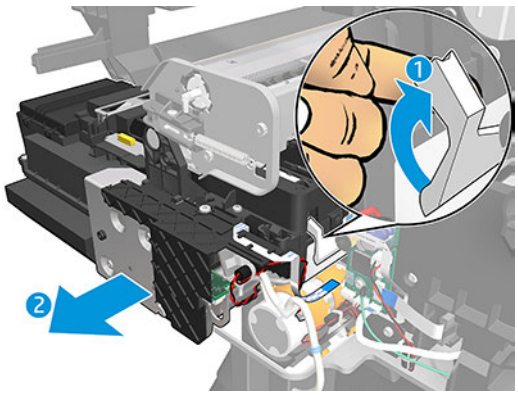
16. Rotate the Xlimiter.



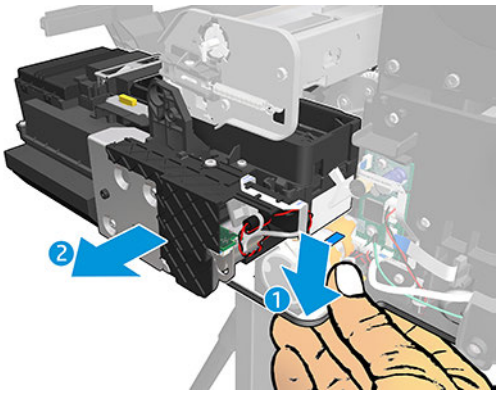
17. Move the cap to push the Trigger.



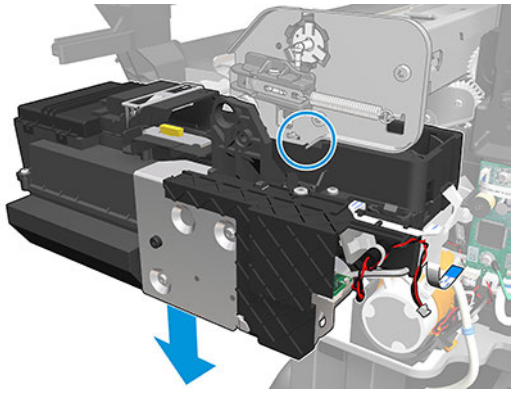
18. Hold the Trigger and then unlock the Service Station.



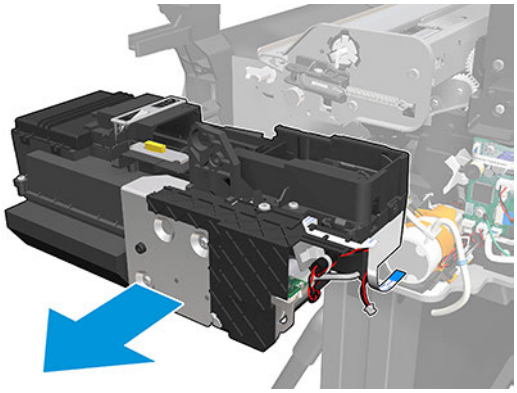
19. Push down the metal sheet and slide out the Service Station.



20. If, while you are sliding out the Service Station, there is an interaction with the metallic bracket, then you should push down the Service Station.



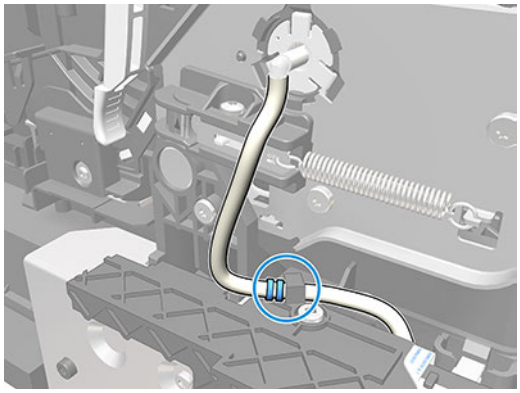
21. Remove the Service Station.



Installation

The following steps provide the complete procedure for this topic.

NOTE: Install the blue washers of the tube on the left side of the hook.



NOTE: After the successful installation of this part, perform the Preventive Maintenance Kit Reset procedure.

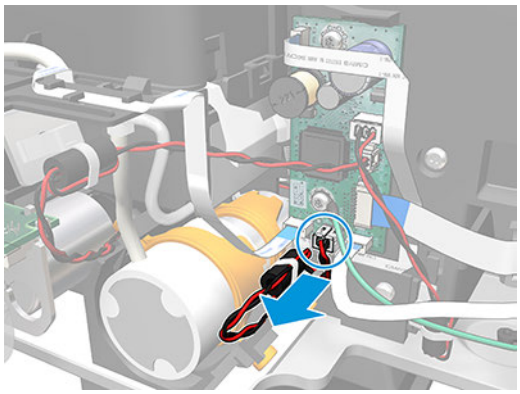
Prime Pump (CQ890-67030)

This section explains the removal and installation processes for this component.

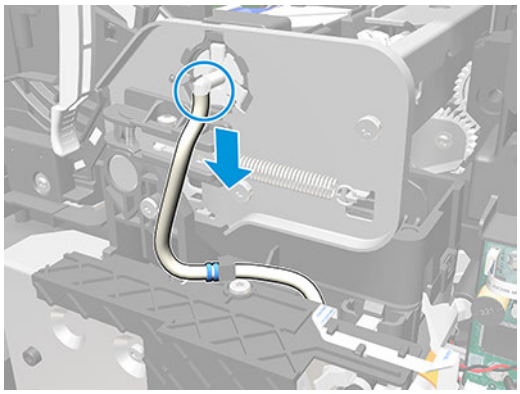
Removal

The following steps provide the complete procedure for this topic.

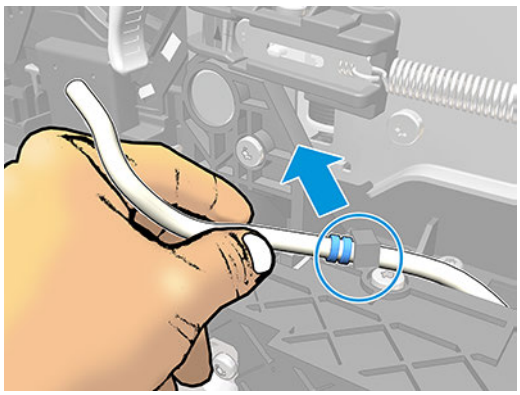
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Right Cover, see Removal on page 303
5. Disconnect the cable from the Bundle PCA.



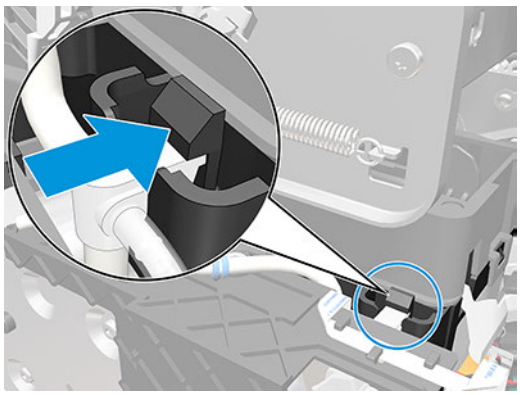
6. Disconnect the tube.



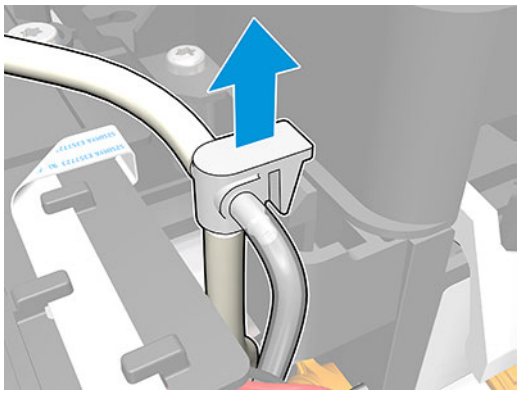
7. Unclip the tube.



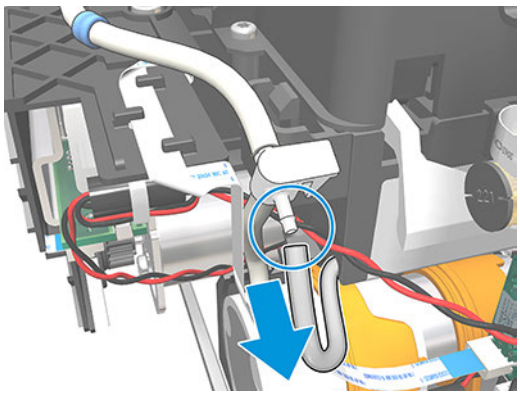
8. Unclip the Tee Pump Prime.



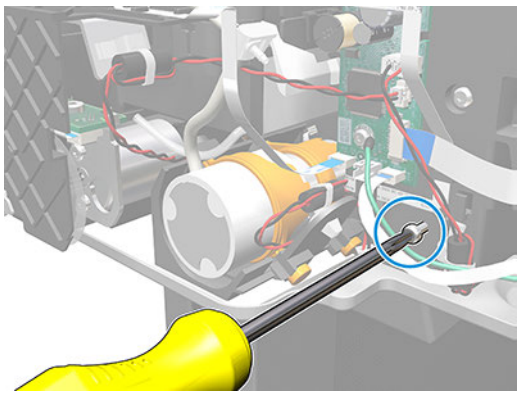
9. Remove the Tee Pump Prime.



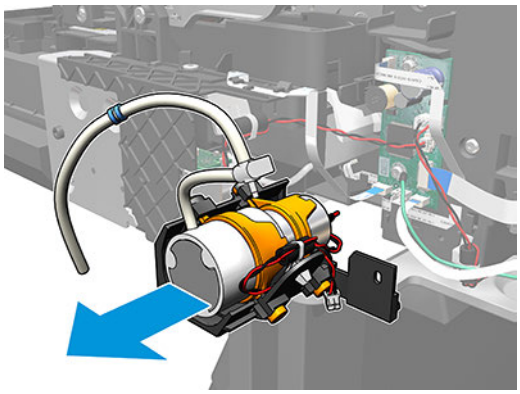
10. Disconnect the tube.



11. Remove 1 screw.



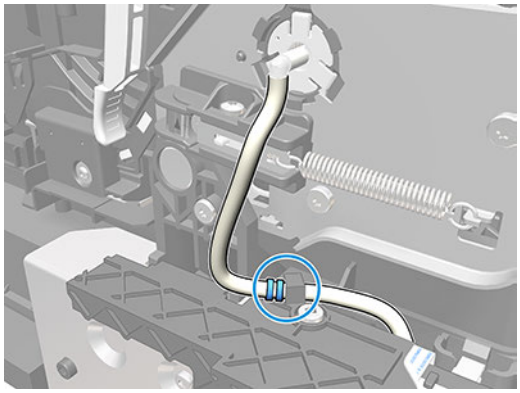
12. Remove the Prime Pump, taking care of the cables.



Installation

The following steps provide the complete procedure for this topic.

NOTE: Install the blue washers of the tube on the left side of the hook.



ARSS (5HB08-67006)

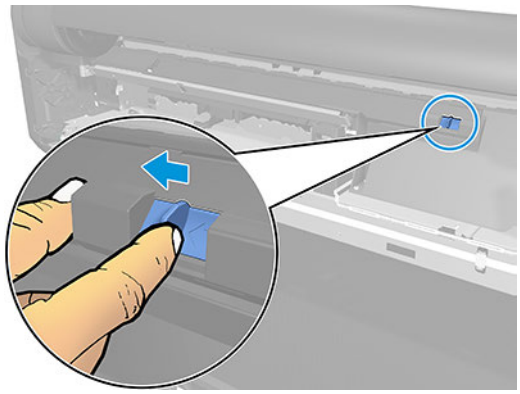
This section explains the removal and installation processes for this component.

Removal

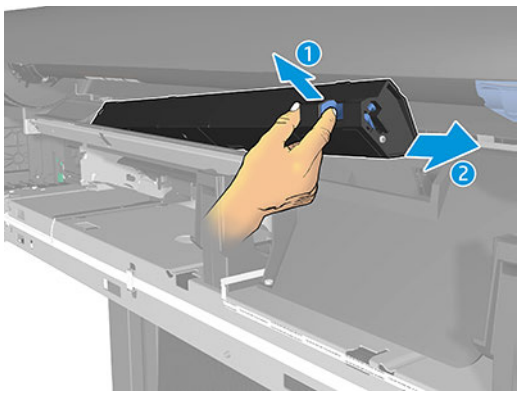
1. Turn off the printer and disconnect the Power cable.
2. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425.
   Note: Only for HP DesignJet T600 & Studio Series.

   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
3. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.

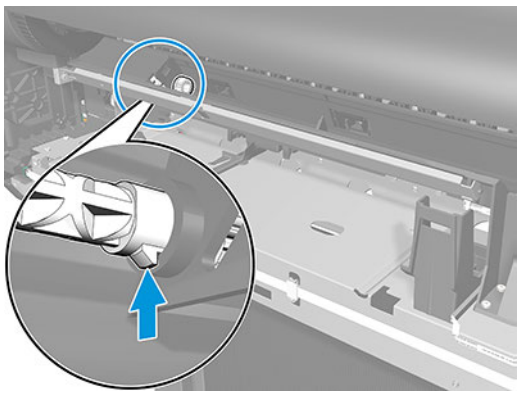
4. Unlock the Blue Latch and keep unlocked.



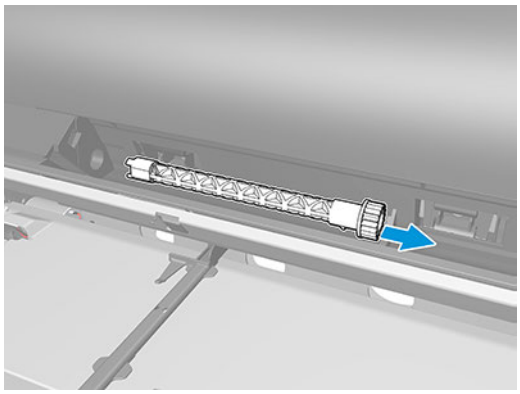
5. Keep the Blue Latch unlocked and remove the Guide Roll Media Accessory.



6. Unclip the Gear ARSS Link.



7. Remove the Gear ARSS Link.



Installation

The following steps provide the complete procedure for this topic.

▲ Follow the instructions for removing the ARSS in reverse order.

Input Roll Guide (5HB06-67016 & 5HB10-67011)

This section explains the removal and installation processes for this component.

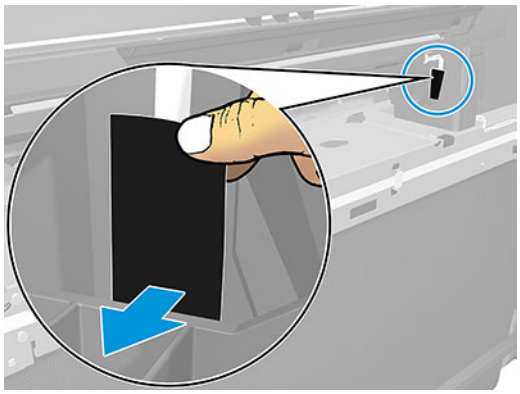
Removal

The following steps provide the complete procedure for this topic.

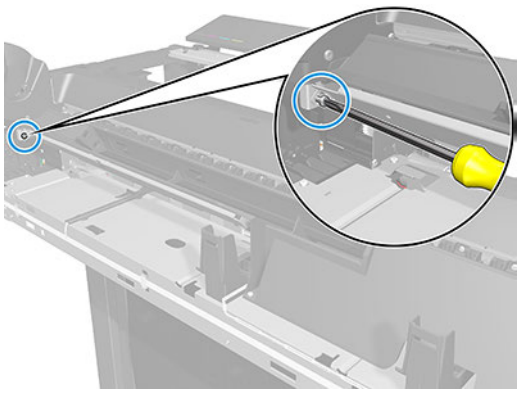
1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the Right Cover, see Right Cover (5HB06-67006 & 5HB12-67006) on page 303.
7. Remove the Roll Cover, see Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311.
8. Remove the Spindle module SV (5HB06-67027 & 5HB10-67012).
9. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425. Note: Only for HP DesignJet T600 & Studio Series.

   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
10. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.
11. Remove the ARSS, see ARSS (5HB08-67006) on page 352.

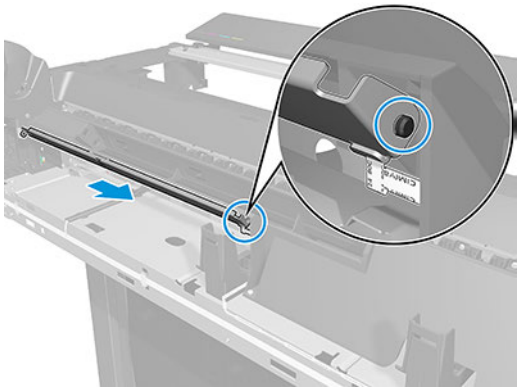
12. Remove the Tape.



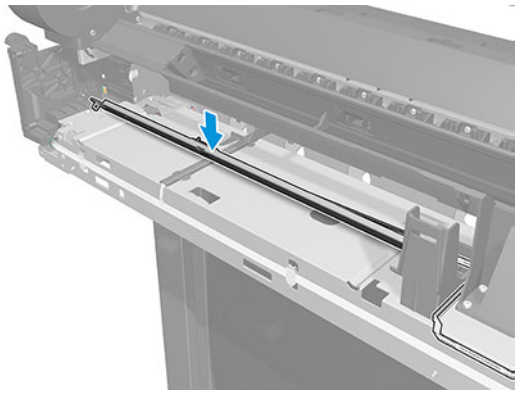
13. Remove 1 screw.



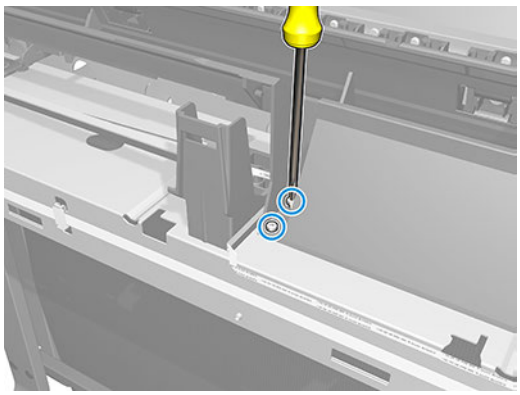
14. Slide the Multi-Sheet Tray Sensor Assembly sideways.



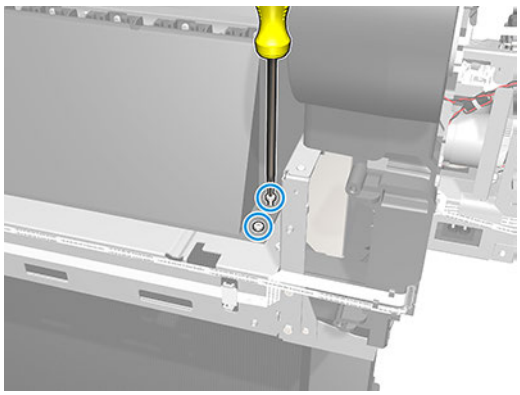
15. Carefully leave the Multi-Sheet Tray Sensor Assembly on the structure of the printer.



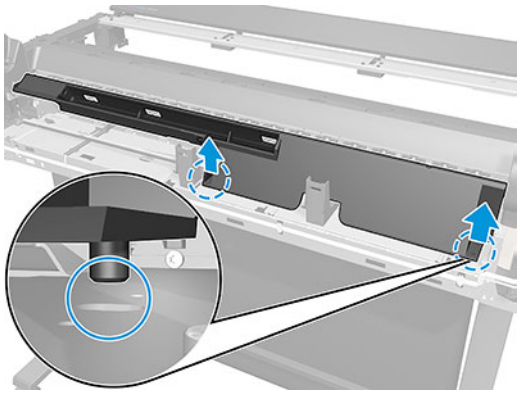
16. Remove 2 screws.



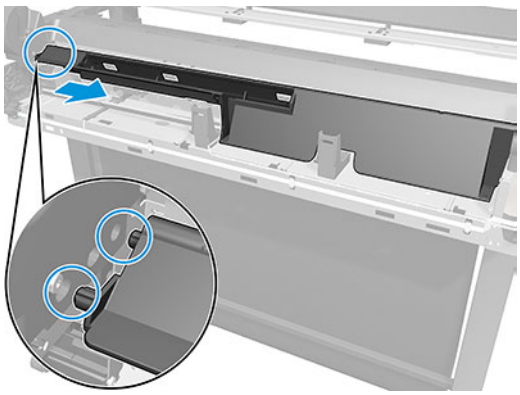
17. Remove 2 screws.



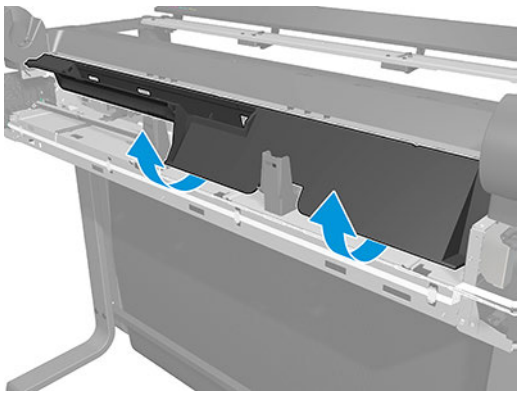
18. Lift the Input Roll Paper Guide to detach the pin from both sides.



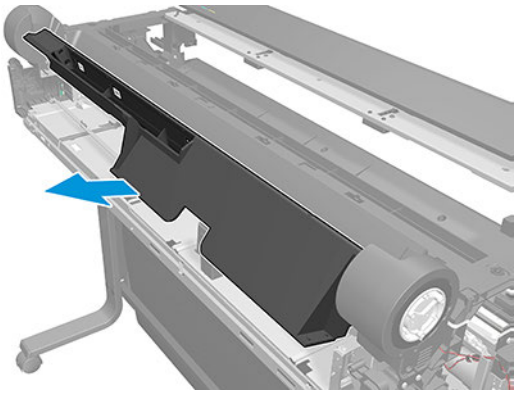
19. Slide the Input Roll Paper Guide sideways to release both pins from the holes.



20. Rotate the Input Roll Paper Guide out and upward.



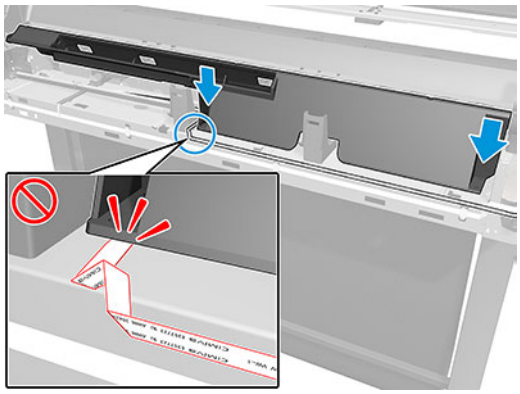
21. Remove the Input Roll Paper Guide.



Installation

The following steps provide the complete procedure for this topic.

NOTE: When installing the Input Roll Guide, take care not to disconnect or damage the FFC cables.



Multi-Sheet Tray Sensor Assembly (5HB06-67024 & 5HB08-67010)

This section explains the removal and installation processes for this component.

Removal

The following steps provide the complete procedure for this topic.

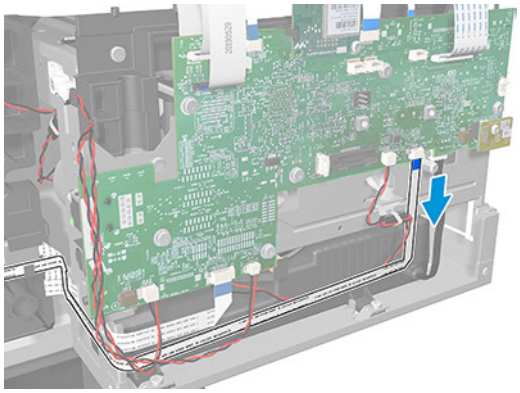
1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.

6. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425.
Note: Only for HP DesignJet T600 & Studio Series.

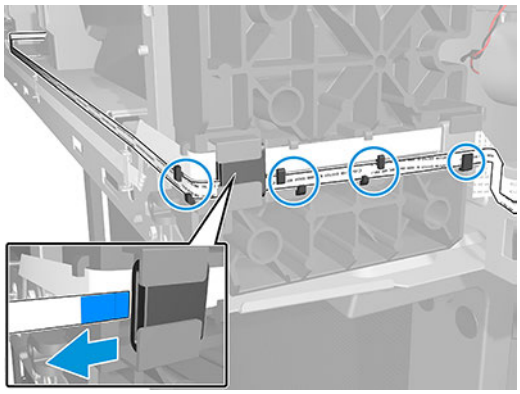
   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.

7. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.

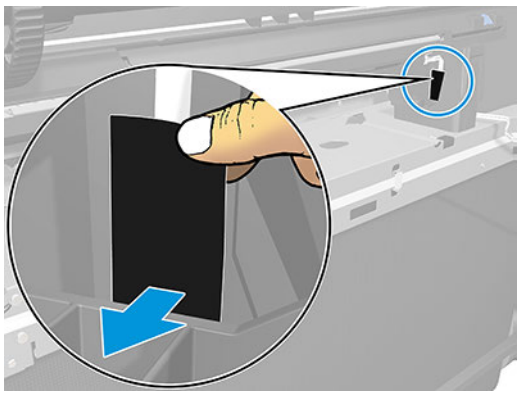
8. Disconnect the FFC Cable.



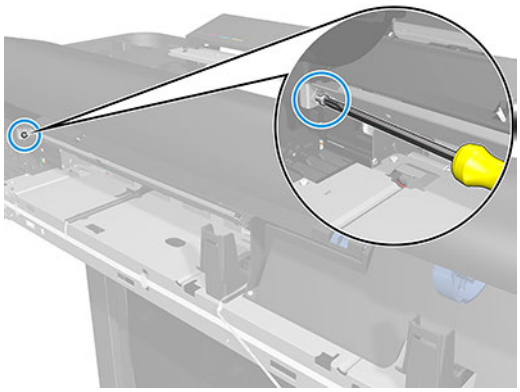
9. Unroute the FFC Cable and pass it through the ferrite.



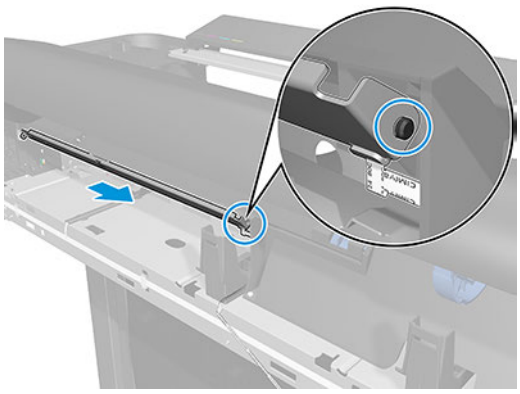
10. Remove the Tape.



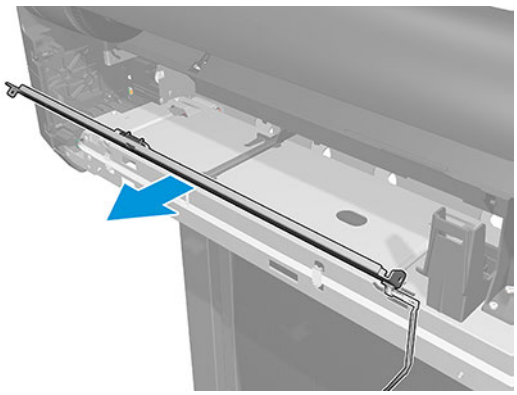
11. Remove 1 screw.



12. Slide the Multi-Sheet Tray Sensor Assembly.



13. Remove the Multi-Sheet Tray Sensor Assembly.



Installation

The following steps provide the complete procedure for this topic.

▲ Follow the instructions for removing the Multi-Sheet Tray Sensor Assembly in reverse order.

Pinchwheels Assembly (CQ890-67060)

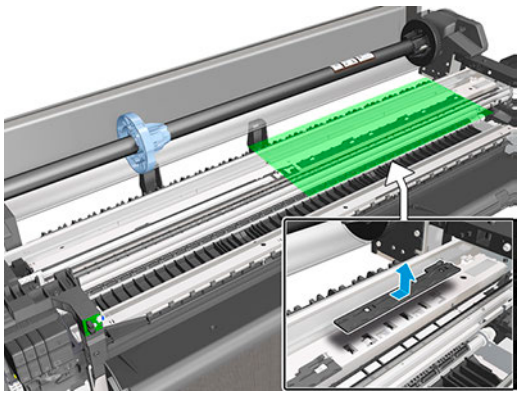
This section explains the removal and installation processes for this component.

Removal

The following steps provide the complete procedure for this topic.

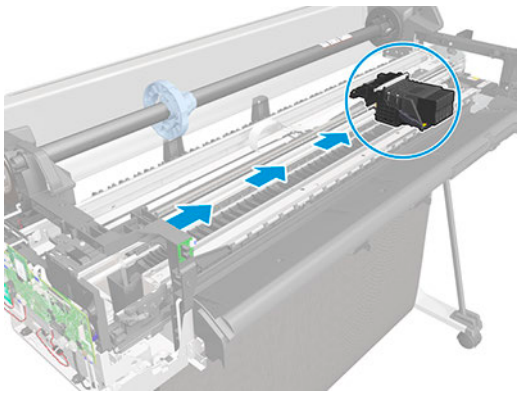
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the Right Cover, see Removal on page 303.
7. Remove the Roll Cover, see Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311
8. Remove the Spindle Module SV (5HB06-67027 & 5HB10-67012).
9. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425. Note: Only for HP DesignJet T600 & Studio Series.

   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
10. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.
11. Remove the ARSS, see ARSS (5HB08-67006) on page 352.
12. Remove the Input Roll Guide, see Input Roll Guide (5HB06-67016 & 5HB10-67011) on page 354.
13. Remove the Top Rear Cover, see Top Rear Cover (5HB12-67007 & 5HB14-67005) on page 307.
14. If the damaged Pinchwheels are in the zone indicated in green below, remove the Aerosol Shields and go to step 22..

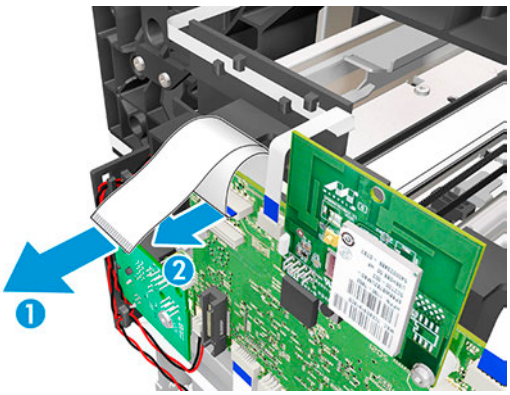


15. If the damaged Pinchwheels are in the zone indicated in green below, continue with the next steps.

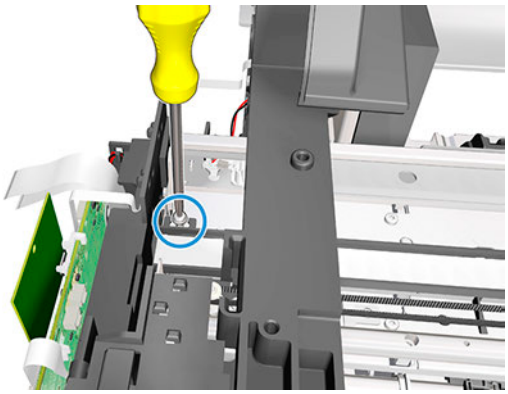
16. Uncap the Carriage, move it to the right, and leave it in the position indicated below.



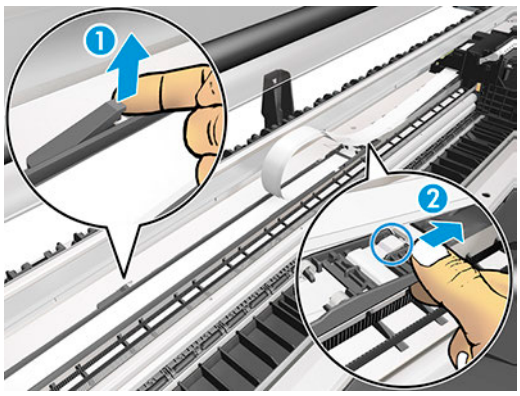
17. Disconnect the two flat trailing cables from the Main PCA.



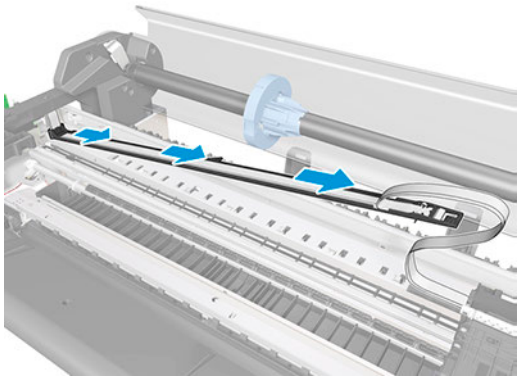
18. Remove one T-10 screw.



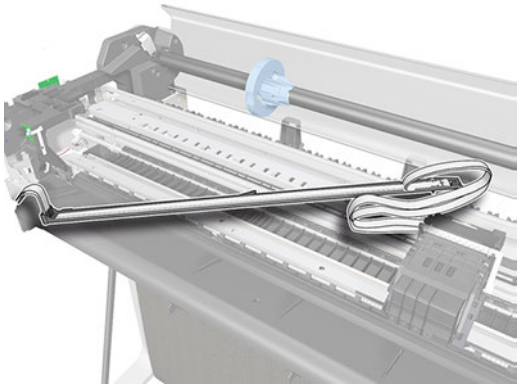
19. Detach the flex retainer assembly from the backbone.



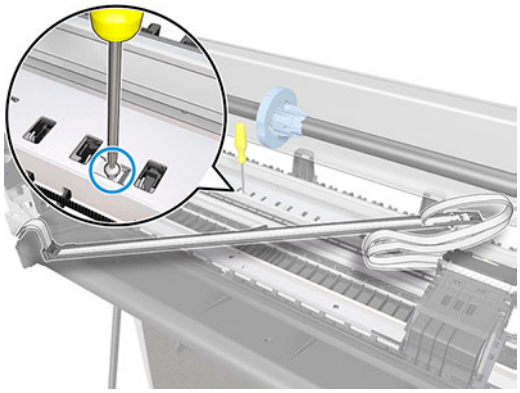
20. Slide the flex retainer with the trailing cable to the right. Be careful not to damage the trailing cable.



21. Leave the flex retainer with the trailing cable in the position shown below.

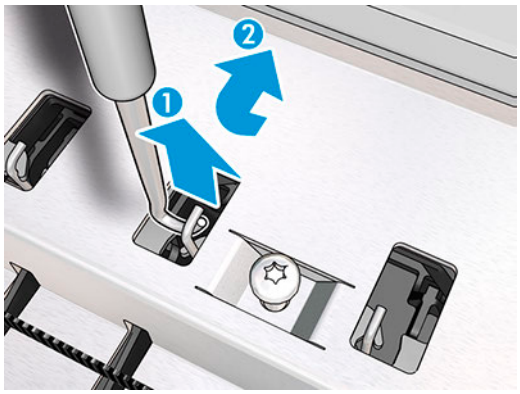


22. Loosen the screws that secure the Pinchwheels.

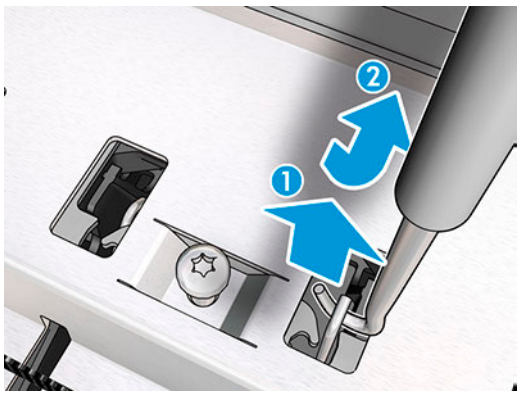


23. Locate the tool needed to detach the springs.

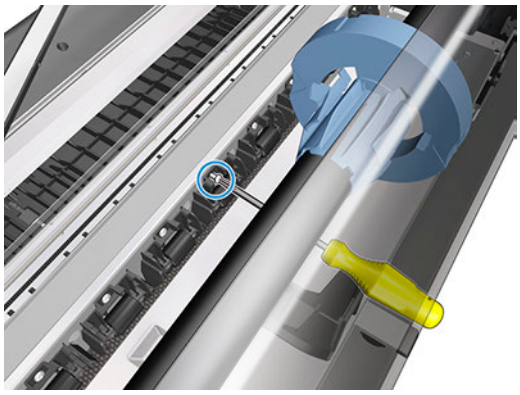
24. Detach the left end of the Pinchwheels.



25. Detach the right end of the Pinchwheels.



Remove one T-10 screw.

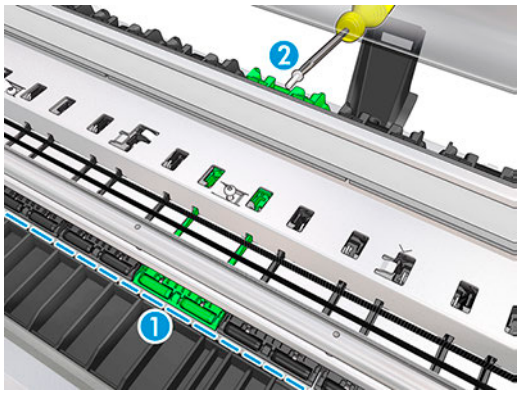


26. Remove the Pinchwheels.

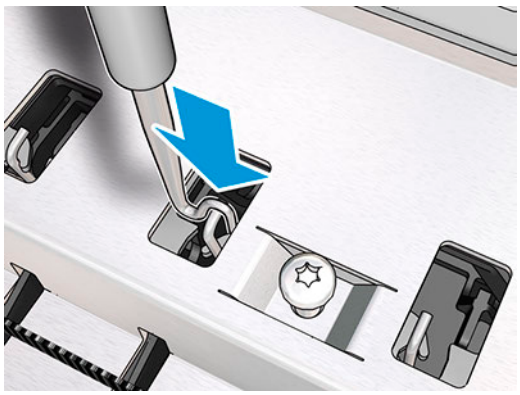
Installation

The following steps provide the complete procedure for this topic.

1. Make sure that the new Pinchwheels are properly aligned (1). Then tighten the screw (2).



2. Attach the spring to the hook by pushing with the tool provided.



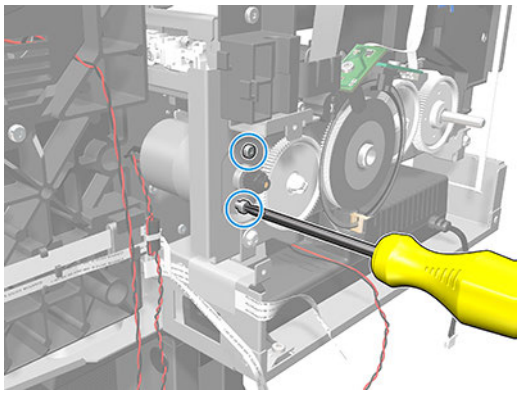
Paper Motor (CQ890-67036)

This section explains the removal and installation processes for this component.

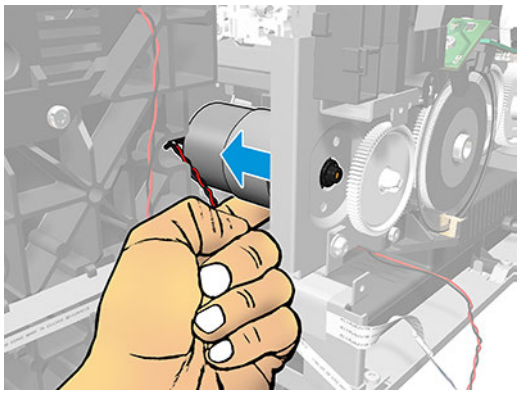
Removal

The following steps provide the complete procedure for this topic.

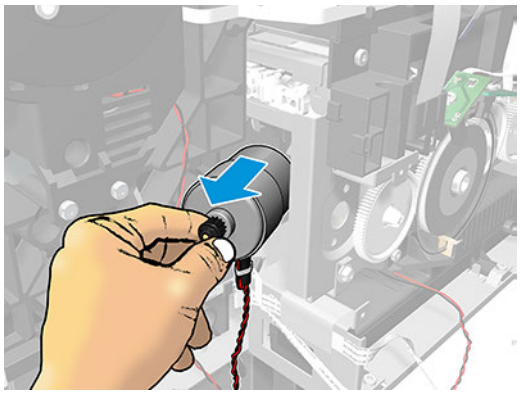
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the NVM Backup PCA, see NVM Backup PCA (5HB06-67022) on page 328.
7. Remove the Main PCA, see Main PCA (5HB06-67018 & 5HB08-67008) on page 329.
8. Remove two screws.



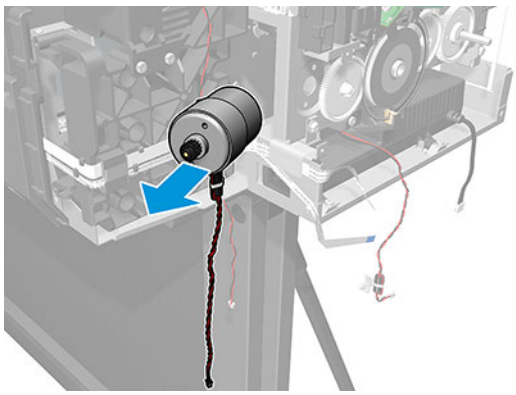
9. Slide the Paper Motor inwards, and hold it with a finger to stop it falling down.



10. Slide it out from this hole.

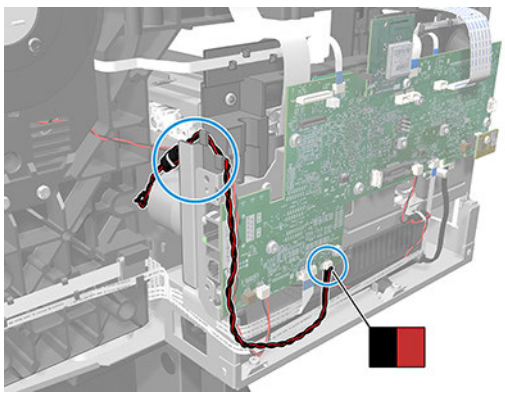


11. Remove the Paper Motor.



Installation

Make sure to reinstall the cable correctly. The red color should always be on the left.



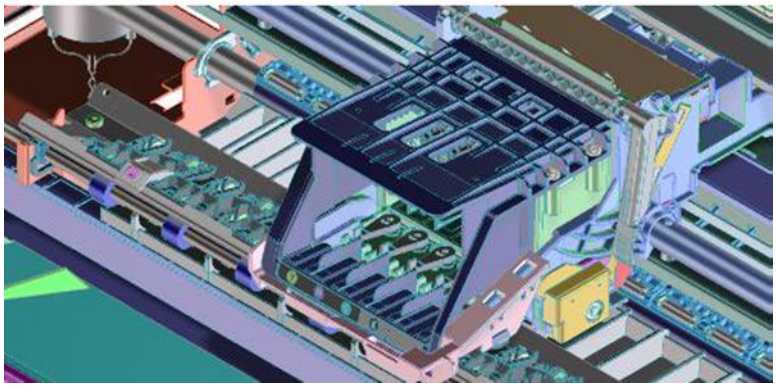
▲ Follow the instructions for removing the paper motor in reverse order.

Starwheel Assembly (5HB06-67014 & 5HB10-67010)

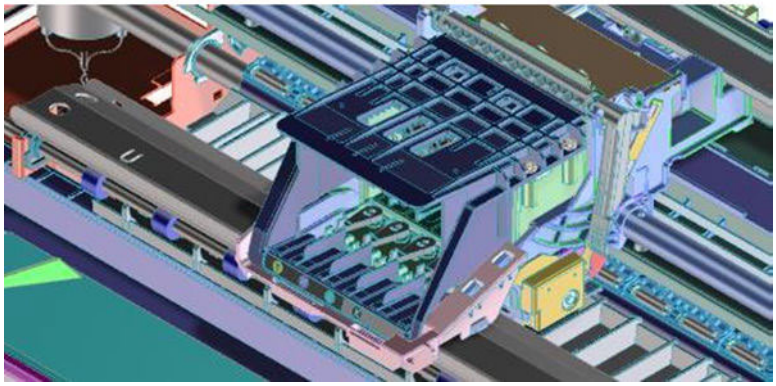
This section explains the removal and installation processes for this component.

There are two configurations of the Starwheel Assembly: Starwheel Assembly without metal lid (24” Model) and Starwheel Assembly with metal lid (36” Model). The installation/removal method are the same for both configurations.

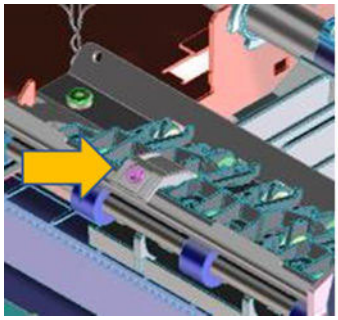
24” Model

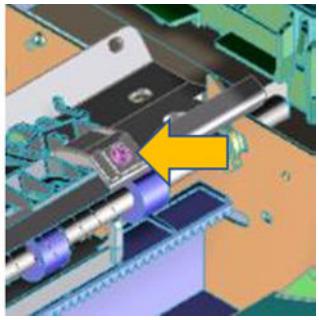


36” Model



NOTE: There are two T8 size screws that are used to fasten a pair of plastic deflectors to the Starwheel Assembly located near the ends of both sides of the Assembly:





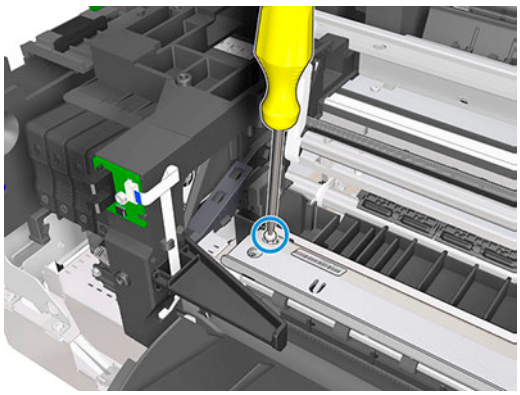
It is important to keep it at the factory state and avoid over/under tightening, which can affect the localized controlled deflection role of the Starwheel Assembly.

Removal

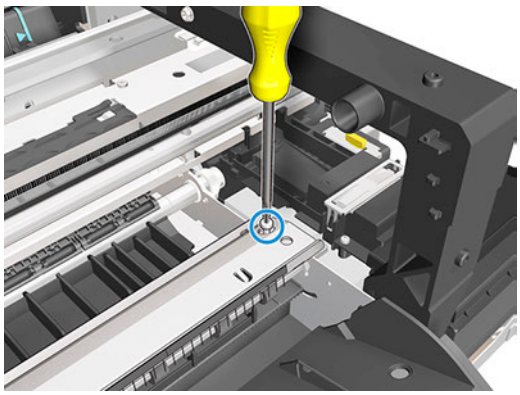
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297

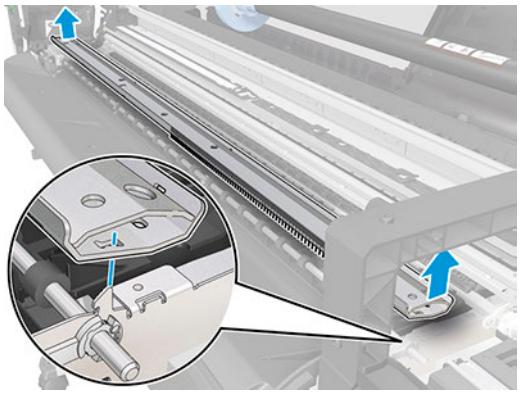
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the Right Cover, see Removal on page 303.
7. Remove one T-10 screw on the left side of the Starwheel Assembly.



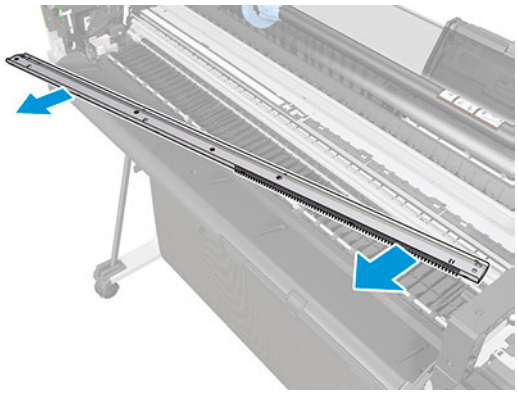
8. Remove one T-10 screw on the right side of the Starwheel Assembly.



9. Detach the Starwheel Assembly from the two hooks by sliding it up.

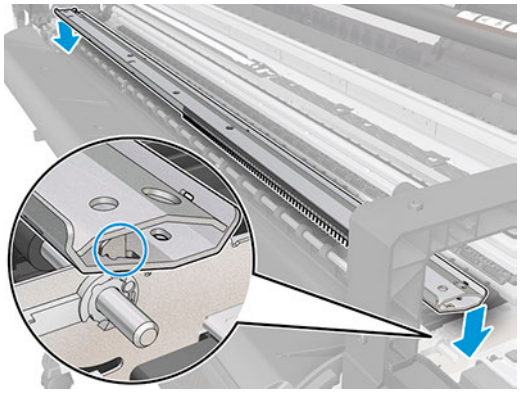


10. Remove the Starwheel Assembly.



Installation

When installing the Starwheel Assembly, make sure it is located correctly on the hooks.



▲ Follow the instructions for removing the starwheel assembly in reverese order.

Bridge Platen (5HB06-67012)

This section explains the removal and installation processes for this component.

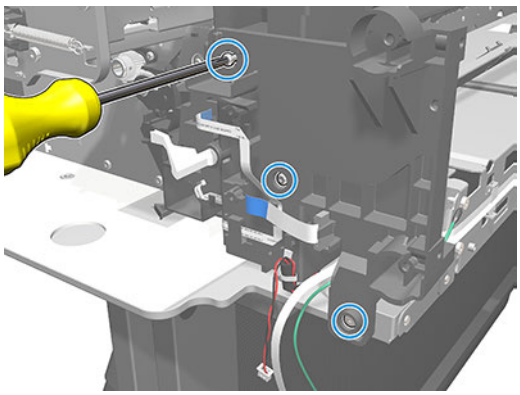
Removal

The following steps provide the complete procedure for this topic.

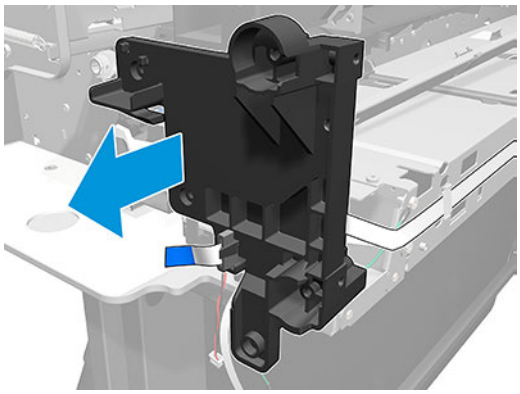
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301
6. Remove the Right Cover, see Right Cover (5HB06-67006 & 5HB12-67006) on page 303

7. Remove the Roll Cover, see Roll Cover (5HB08-67003 & 5HB10-67004, 5HB12-67004 & 5HB14-67003) on page 311
8. Remove the Spindle Module SV (5HB06-67027 & 5HB10-67012).
9. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425.
   Note: Only for HP DesignJet T600 & Studio Series.

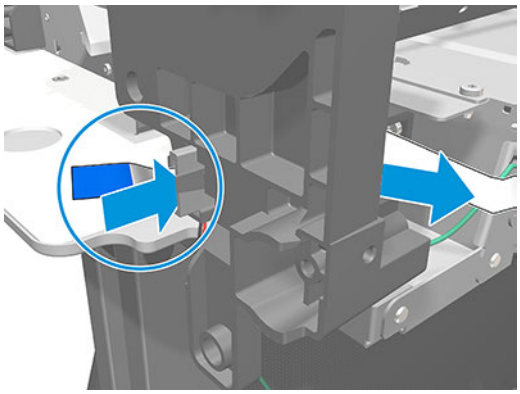
   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
10. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.
11. Remove the ARSS, see ARSS (5HB08-67006) on page 352.
12. Remove the Input Roll Guide, see Input Roll Guide (5HB06-67016 & 5HB10-67011) on page 354.
13. Remove the Right Roll Support with Cover, see Right Roll Support with Cover (5HB08-67005 & 5HB12-67017) on page 319.
14. Remove the Top Rear Cover, see Top Rear Cover (5HB12-67007 & 5HB14-67005) on page 307.
15. Remove the Service Station Assembly, see Service Station Assembly (CQ890-67045) on page 342.
16. Remove the Prime Pump, see Prime Pump (CQ890-67030) on page 349.
17. Remove the Bundle PCA, see Bundle PCA (5HB06-67021) on page 340.
18. Remove 3 screws.



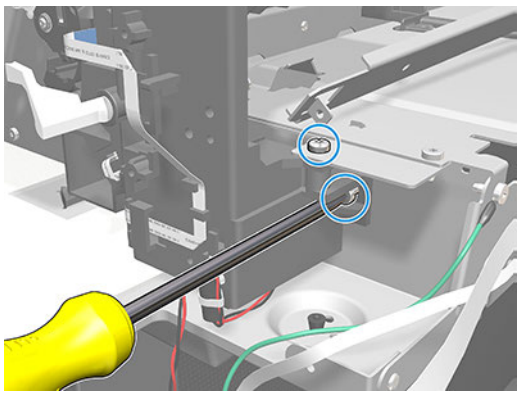
19. Remove the Guide Base Right.



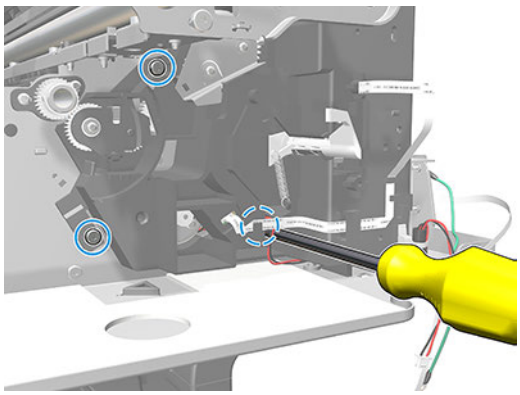
20. Unroute the FFC cable.



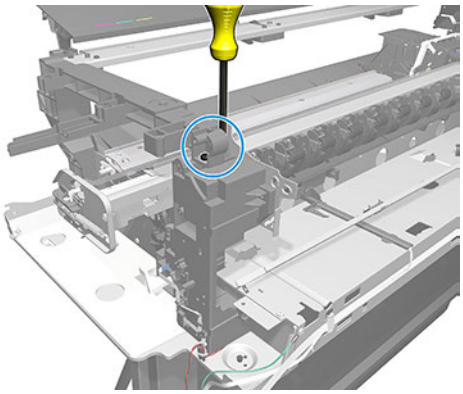
21. Remove 2 screws.



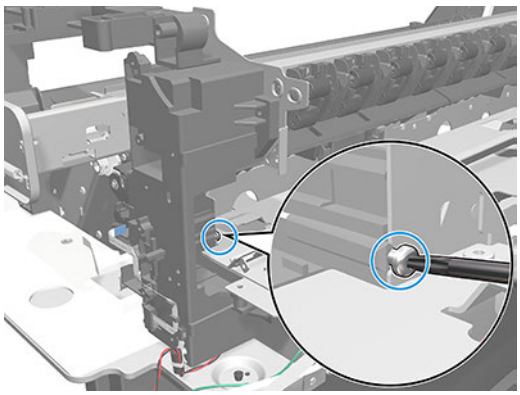
22. Remove 3 screws.



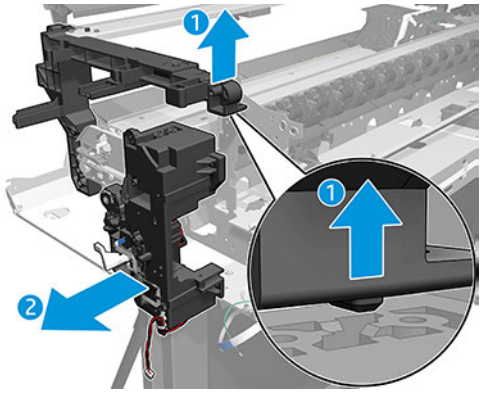
23. Remove 2 screws on the top.



24. Remove 1 screw on the back.



25. Remove the bridge platen while holding the arch for better access.



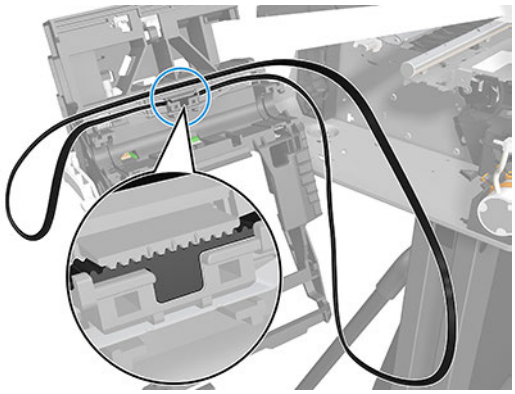
Belt and Pulley (CQ890-67112 & F9A30-67068)

This section explains the removal and installation processes for this component.

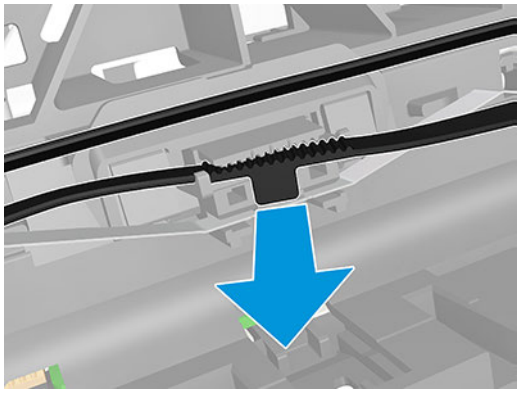
Removal

The following steps provide the complete procedure for this topic.

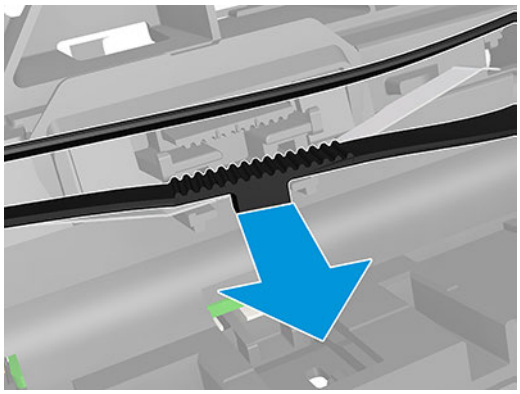
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Right Cover, see Removal on page 303.
5. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
6. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
7. Remove the Front Door, see Front Door (5HB06-67005 & 5HB10-67005, 5HB12-67005 & 5HB14-67004) on page 305.
8. Remove the Top Rear Cover, see Top Rear Cover (5HB12-67007 & 5HB14-67005) on page 307.
9. Remove the Service Station Assembly, see Service Station Assembly (CQ890-67045) on page 342.
10. Do not touch the Service Station's Encoder Disk when handling the Service Station.
11. Remove the Encoder Strip, see Encoder Strip (CQ890-67096 & CQ893-67029) on page 376.
12. Remove the Ink Cartridges and the Printhead Assembly.
13. Remove the Carriage Assembly with Belt and Trailing Cable, see Carriage assembly on page 278.
14. Rotate the Carriage to see the bottom side.



15. Slide the Carriage Belt.



16. Remove the Carriage Belt.



NOTE: After the successful installation of this part, perform the Preventive Maintenance Kit Reset procedure.

Installation

The following steps provide the complete procedure for this topic.

▲ Please follow the steps of the Removal procedure in the reverse order.

Encoder Strip (CQ890-67096 & CQ893-67029)

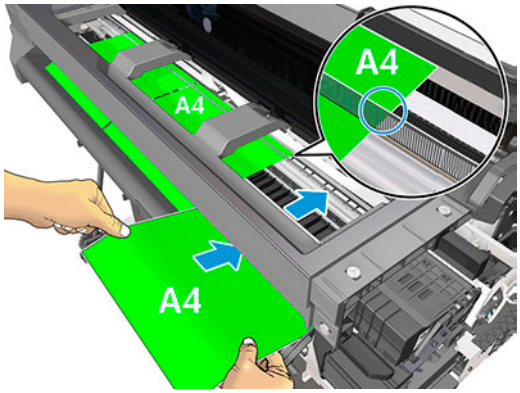
This section explains the removal and installation processes for this component.

Removal

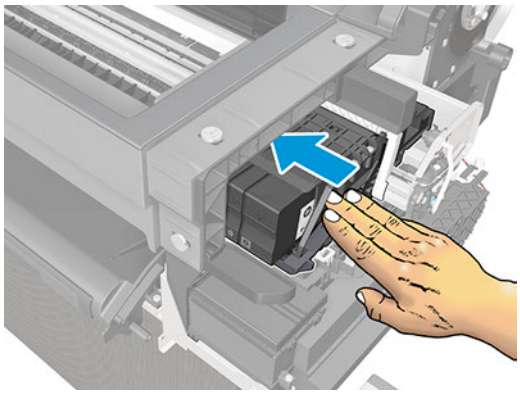
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Right Cover, see Removal on page 303.
5. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
6. Insert some paper (of any type) to prevent grease or dirt from falling into the printer.

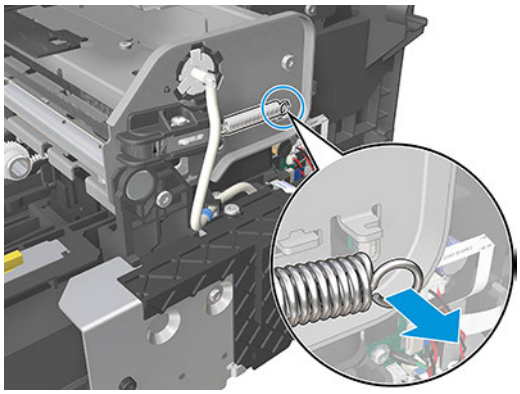
NOTE: When working in this area, in which dirt and grease can contaminate other parts of the printer, we recommend wearing gloves.



7. Uncap the Carriage and move it to the left.



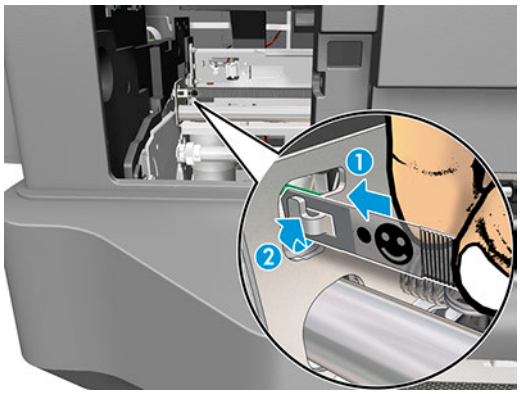
8. Detach the spring.



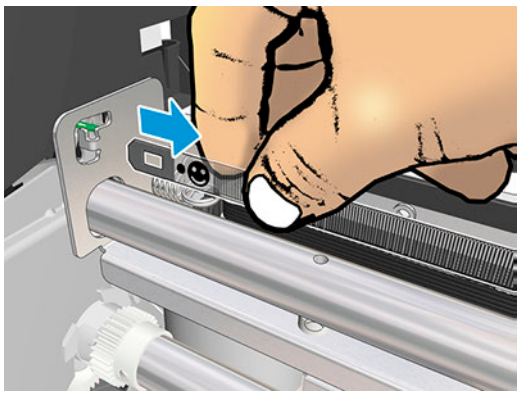
⚠ CAUTION: The Encoder Strip must not come into contact with the slider rod grease! Handle with care, and be careful with your hands and the Encoder Strip.

⚠ CAUTION: The primer pipe at the end plate can become damaged.

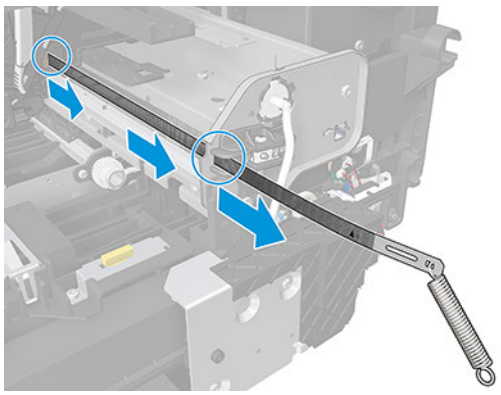
9. Rotate the Encoder Strip a little to detach it from the hook.



10. Detach the Encoder Strip from the hook.



11. Slide the Encoder Strip carefully from the right side, and remove it.

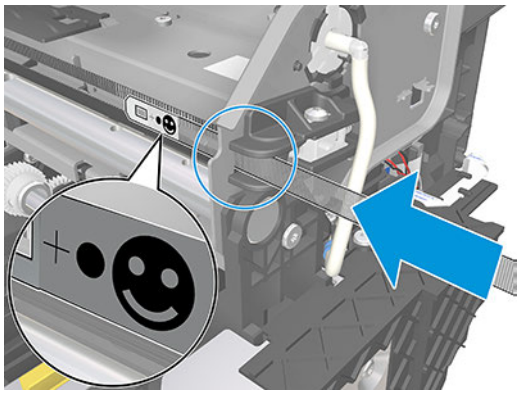


Installation

The following steps provide the complete procedure for this topic.

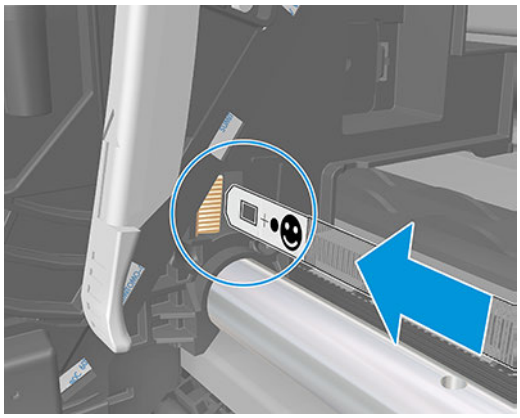
1. Move the Carriage to cap position.

2. Pass the Encoder Strip through the hole of the bracket. **Very important:** The face is shown here:

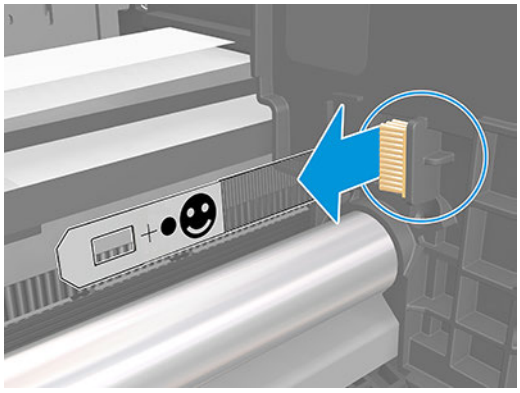


NOTE: The Encoder Strip must be inserted from the right side of the Carriage into the left side.

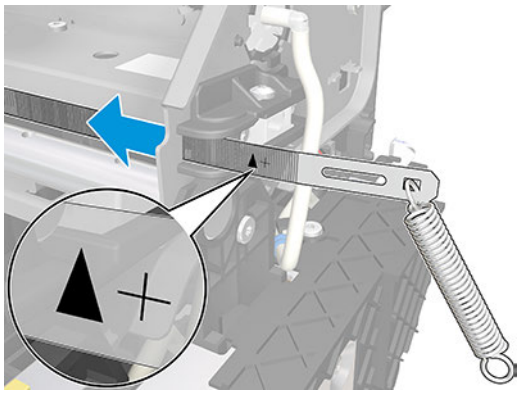
3. Pass the Encoder Strip through the hole of the Carriage, taking care not to bend it.



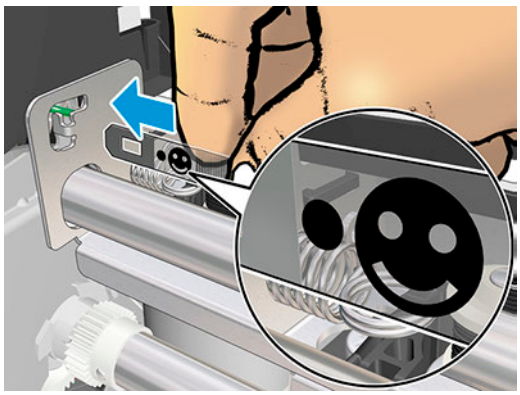
4. The Encoder Strip should go out through the other side of the Carriage as shown.



5. The right end of the Encoder Strip must have the triangle in the position as shown below.



6. When you attach the left end of the Encoder Strip to the hook, make sure the position of the face is as shown in the following image:



7. Attach the Encoder Strip at the left before attaching the spring at the right.

Carriage Assembly with Belt and Trailing Cable (5HB06-67001 & 5HB10-67001)

This section explains the removal and installation processes for this component.

Removal

The following steps provide the complete procedure for this topic.

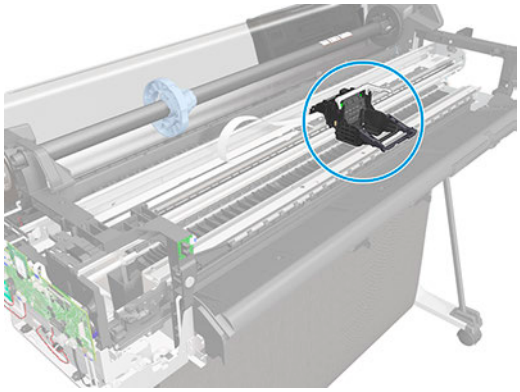
⚠ CAUTION: Do not remove the trailing cable from carriage. The trailing cable is well-aligned in factory and is not a field replaceable part. Replace the whole carriage instead of a single trailing cable.

1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.

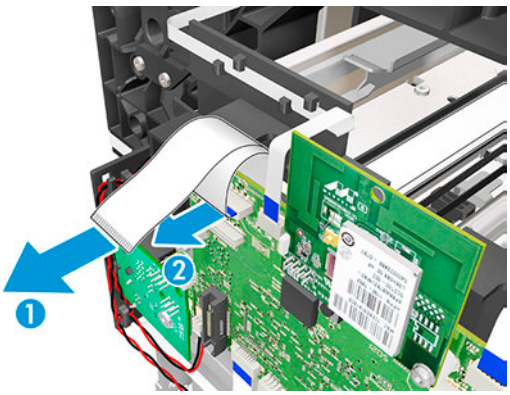
4. Remove the Right Cover, see Right Cover (5HB06-67006 & 5HB12-67006) on page 303
5. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
6. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301
7. Remove the Front Door, see Front Door (5HB06-67005 & 5HB10-67005, 5HB12-67005 & 5HB14-67004) on page 305.
8. Remove the Top Rear Cover, see Top Rear Cover (5HB12-67007 & 5HB14-67005) on page 307.
9. Remove the Service Station Assembly, see Service Station Assembly (CQ890-67045) on page 342.

TIP: Do not touch the Service Station's Encoder Disk when handling the Service Station.

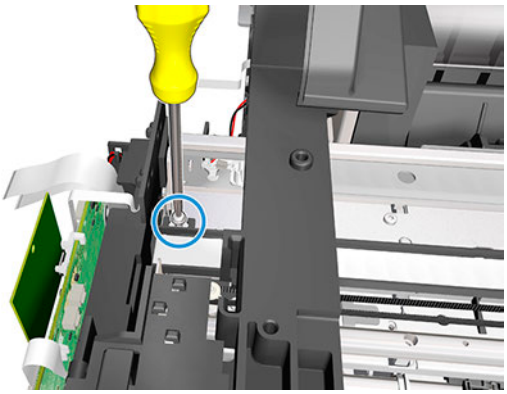
10. Remove the Encoder Strip, see Encoder Strip (CQ890-67096 & CQ893-67029) on page 376.
11. Remove the Ink Cartridges and the Printhead Assembly.
12. Make sure the Carriage is in this position.



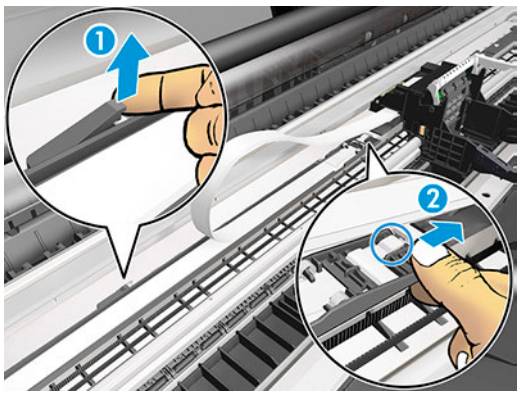
13. Disconnect the two flat cables from the PCA.



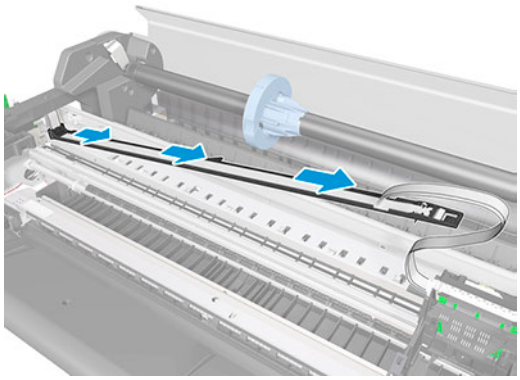
14. Remove one T-15 screw from the left side.



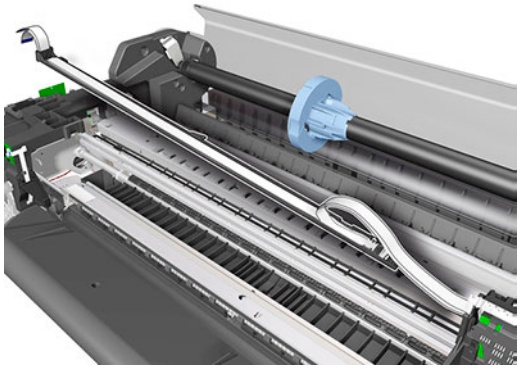
15. Unclip the trailing cable retainer clip shown here (1) and slide it to the right (2).



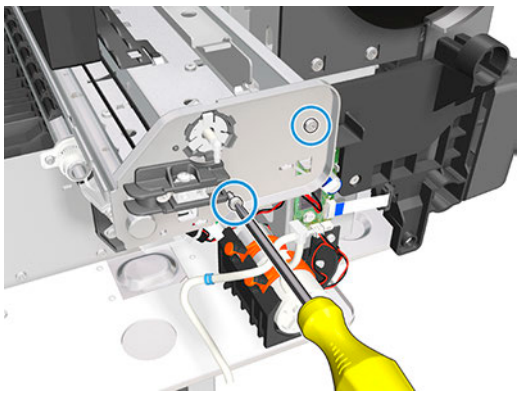
16. Slide the right backbone end plate to the right.



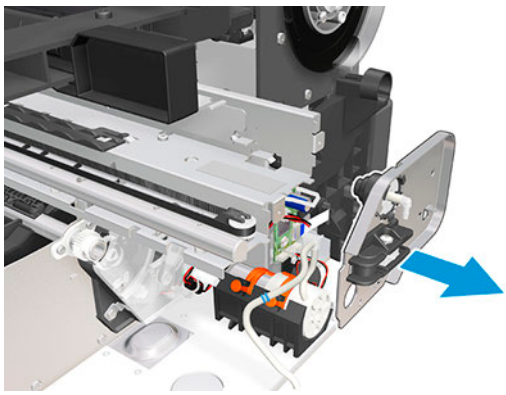
17. Leave the right backbone on the platen.



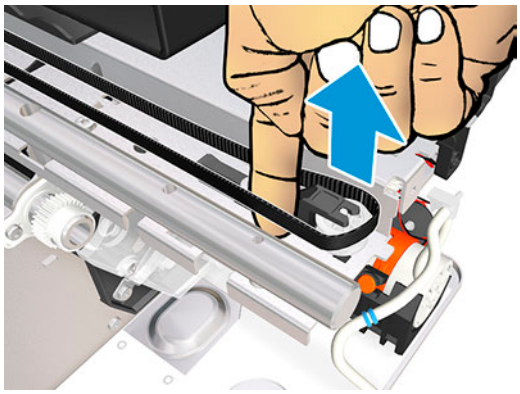
18. Remove two T-10 screws from the Right End Plate.



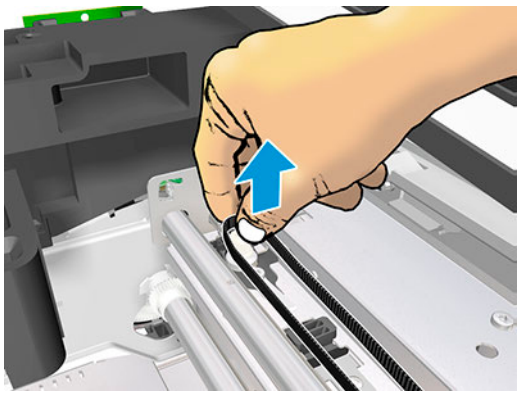
19. Remove the Right End Plate.



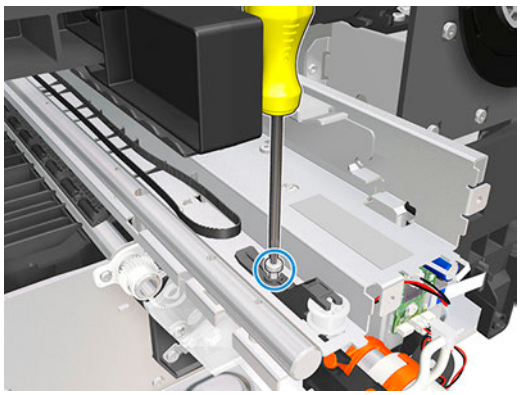
20. Unhook the Carriage Belt with a finger and lift it away.



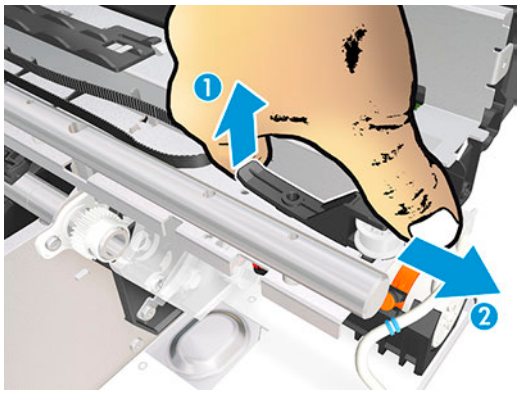
21. Remove the Carriage Belt from the end pulley.



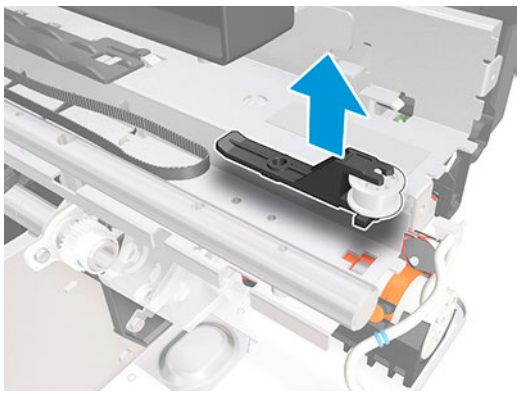
22. Remove one T-15 screw.



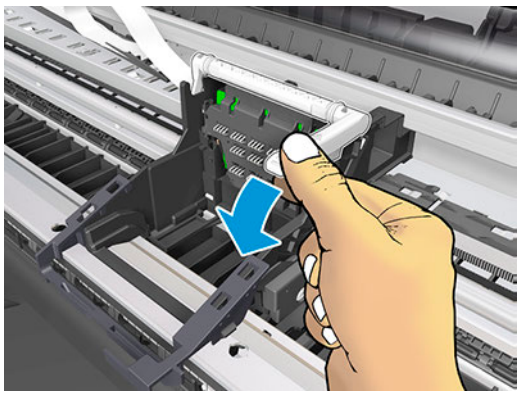
23. Unclip the pulley latch shown here (1) and slide it to the right (2).



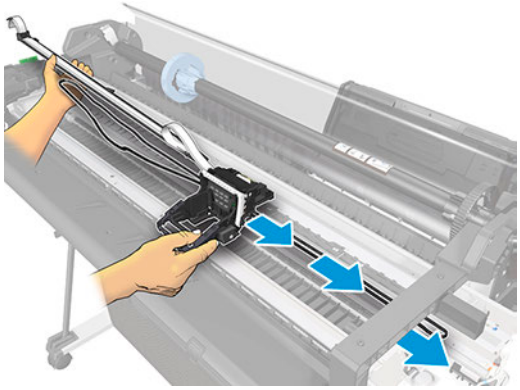
24. Remove the pulley latch.



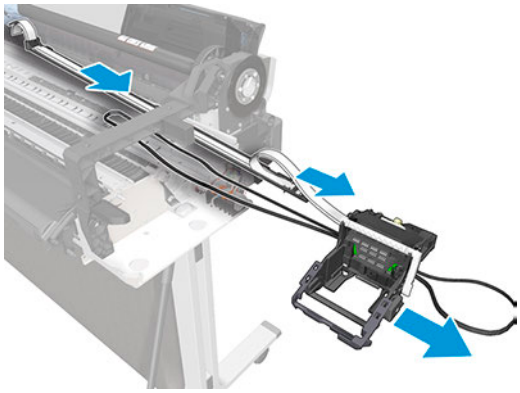
25. Pull the latch down.



26. Slide the Carriage, the Belt, and the Trailing Cable to the right.



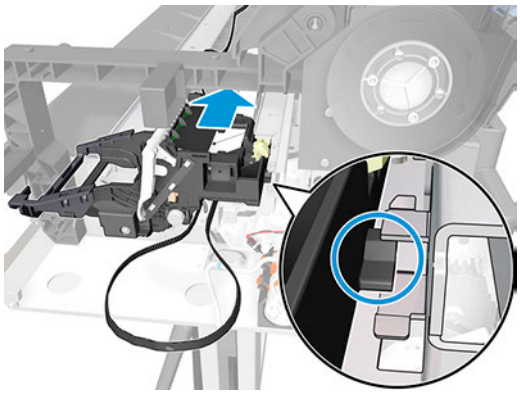
27. Remove the Carriage Assembly.



Installation

The following steps provide the complete procedure for this topic.

1. To reinstall the Belt, use a screwdriver to lever the Belt back on.
2. When installing the Carriage Assembly, make sure you slide the part indicated here onto the slider rod.



3. When the installation is complete, clean the Encoder Strip (see Clean the Encoder Strip on page 440) and the Line Sensor (see Clean the Carriage Line Sensor on page 439).

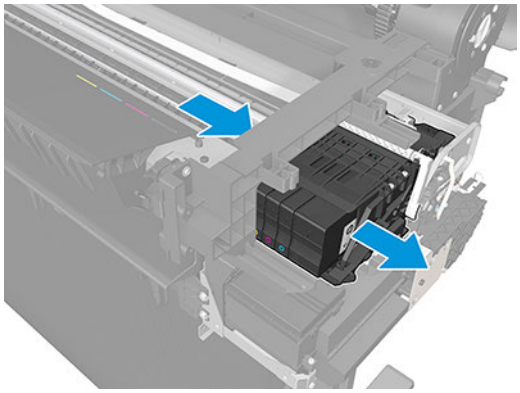
Carriage Line Sensor (ZIM sensor) (CQ890-67001)

This section explains the removal and installation processes for this component.

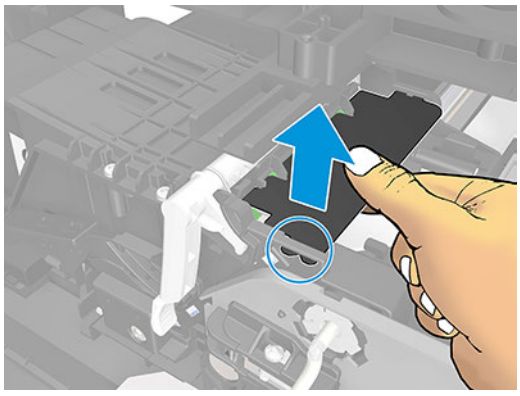
Removal

The following steps provide the complete procedure for this topic.

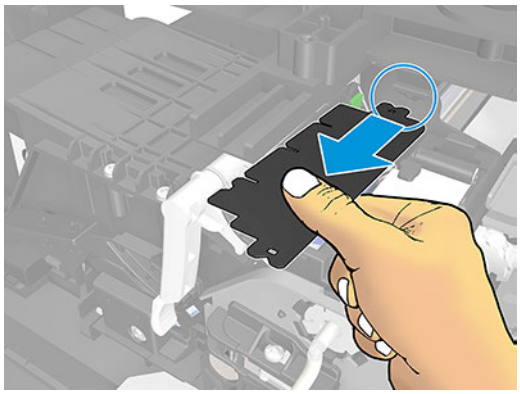
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Right Cover, see Right Cover (5HB06-67006 & 5HB12-67006) on page 303
5. Make sure the Carriage is located in the right position.



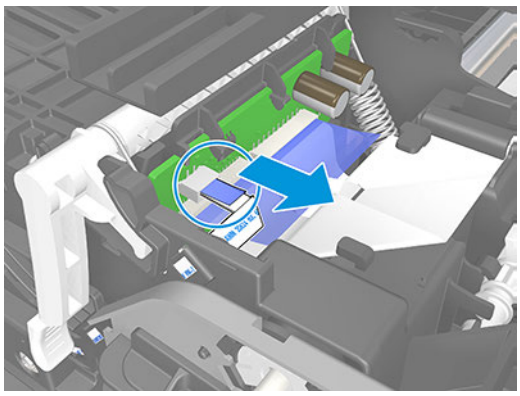
6. Detach the right side of the Cover PCA Carriage.



7. Remove the Cover PCA Carriage.

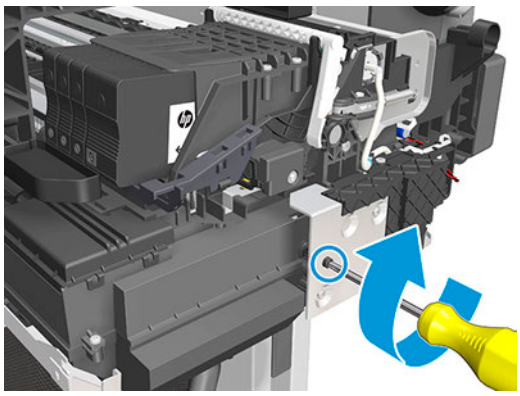


8. Disconnect the flat cable.

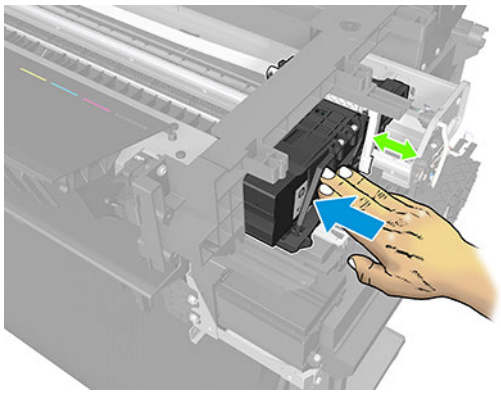


9. Uncap the carriage.

IMPORTANT: If the Carriage is in the capped position, move the Service Station gear clockwise to uncap it.

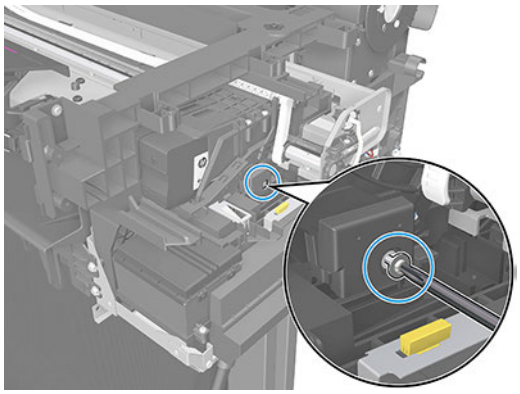


10. Move the Carriage slightly to allow access to the Carriage Line Sensor, maintain a separation of 4 cm.

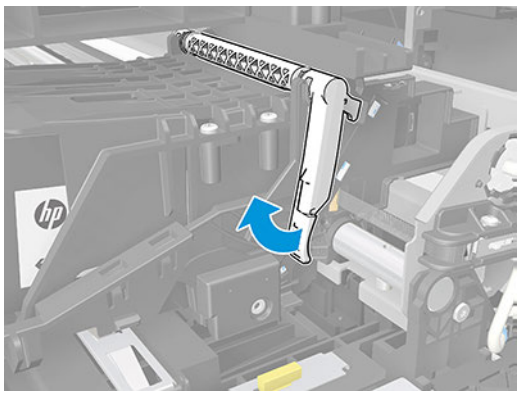


11. Remove one screw.

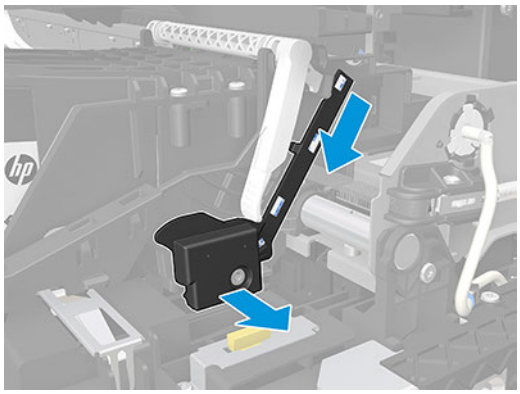
⚠ CAUTION: Make sure that the screw does not fall down into the Service Station.



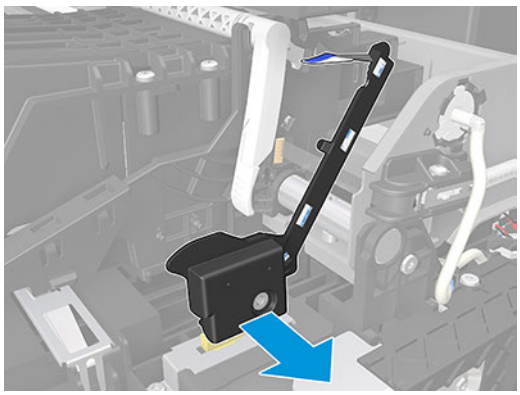
12. Open the Carriage latch upwards to allow access to the Carriage Line Sensor.



13. Detach the Line Sensor from the Carriage.



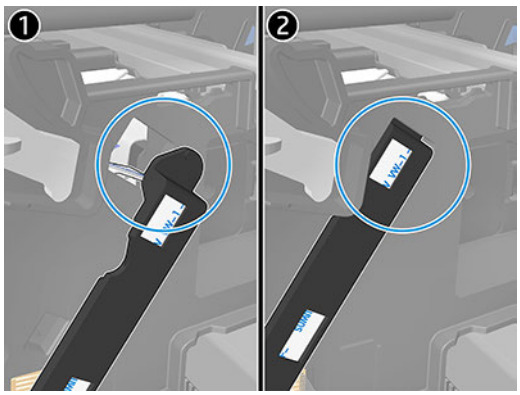
14. Remove the Carriage Line Sensor.



Installation

The following steps provide the complete procedure for this topic.

1. Make sure to introduce the end of the Carriage Line Sensor into the hole in the Carriage.



2. Follow the instructions for removing the Carriage Line Sensor in reverse order.
3. Before putting the covers back on, clean the Carriage Line Sensor.

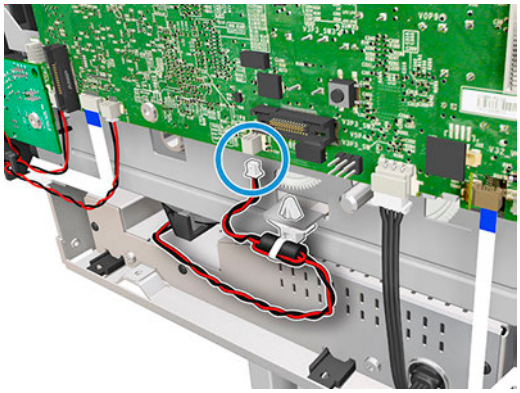
Carriage Motor (5HB06-67003)

This section explains the removal and installation processes for this component.

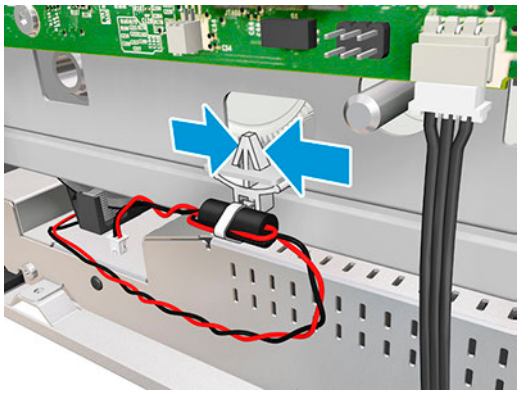
Removal

The following steps provide the complete procedure for this topic.

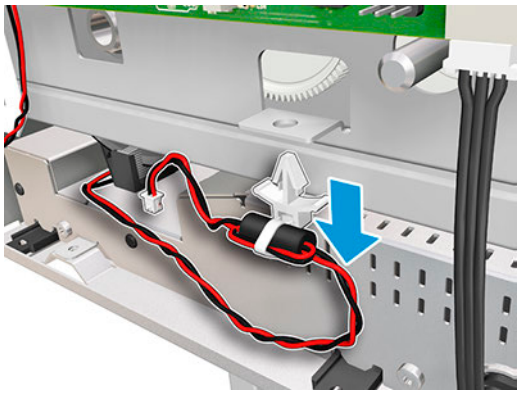
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301
6. Remove the Front Panel, see Front Panel (5HB06-67002) on page 326.
7. Disconnect the Carriage Motor Cable.



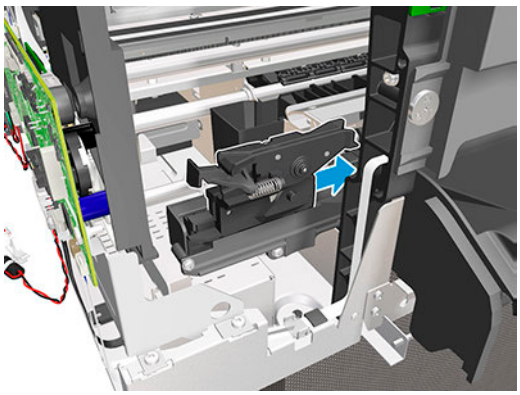
8. Unclip it from the holder in the chassis.



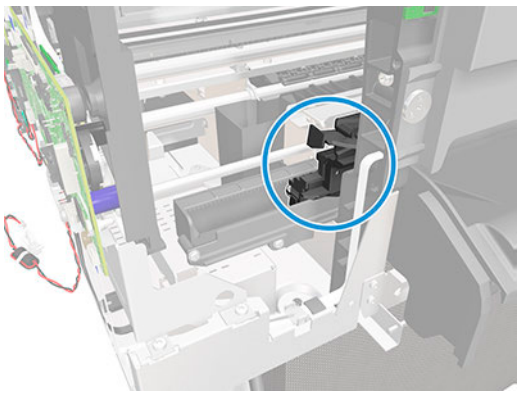
9. Remove the Carriage Motor Cable.



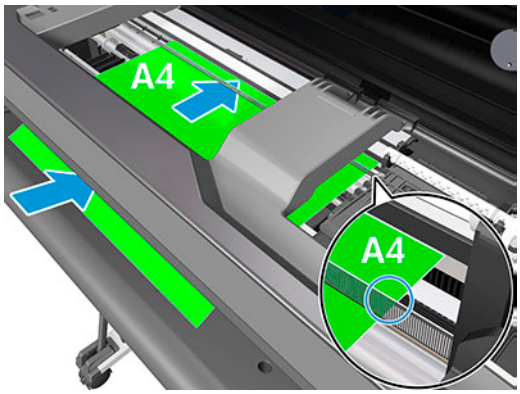
10. Slide the Cutter to the right.



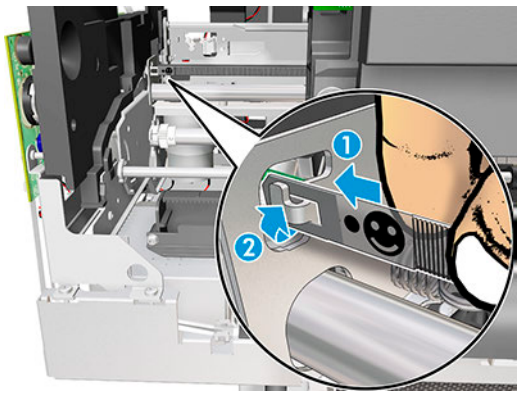
11. Leave the Cutter in that position.



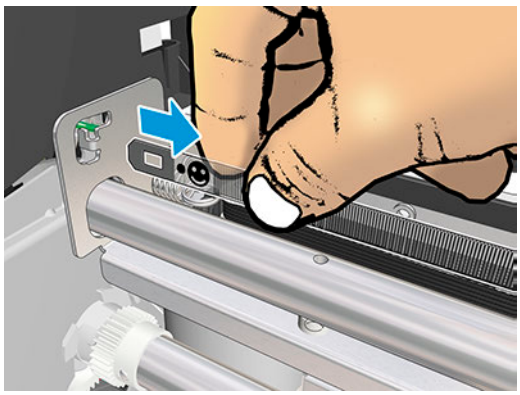
12. Insert some paper (of any type) to prevent grease or dirt from falling into the printer.



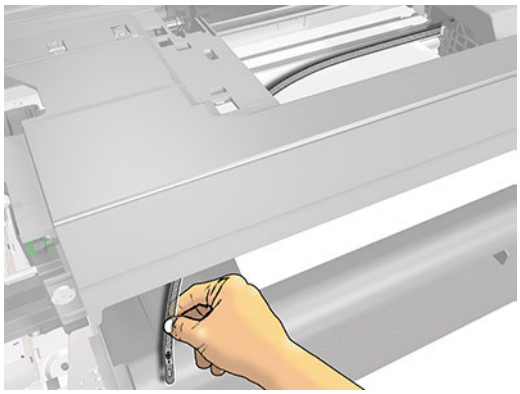
13. Rotate the Encoder Strip a little bit to detach it from the hook.



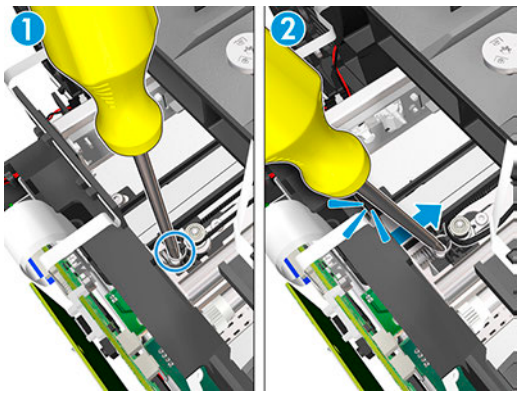
14. Detach the Encoder Strip from the hook.



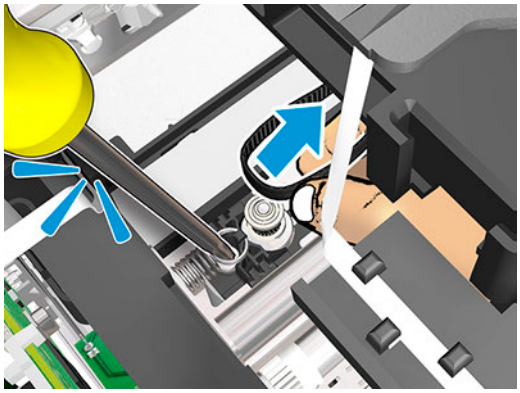
15. Leave the Encoder Strip on the Output Platen.



16. Keep the screwdriver inserted while levering and at the same time releasing the left end of the Belt from the Carriage Pulley Motor.

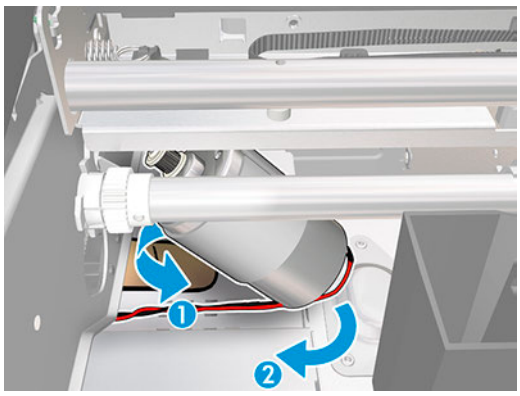


17. Remove the Carriage Belt from the pulley.

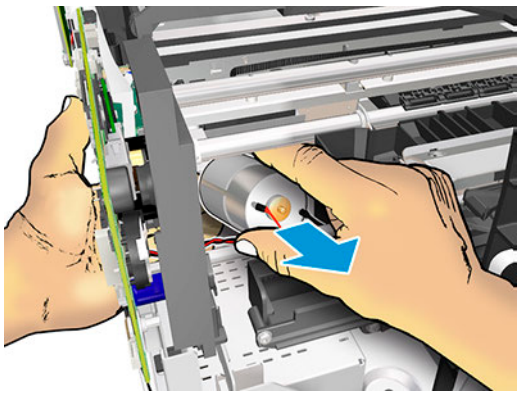


18. Remove two T-15 screws.

19. Rotate the Carriage Motor to have better access to it.



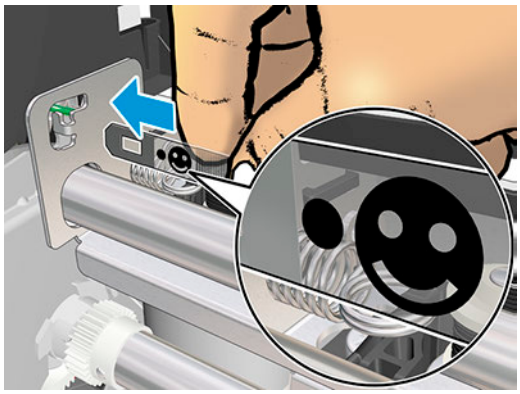
20. Remove the Carriage Motor.



Installation

The following steps provide the complete procedure for this topic.

▲ When you attach the left end of the Encoder Strip to the hook, make sure the position of the face is as shown below.



Cables and Sensors (5HB06-67019)

This section explains the removal and installation processes for these components.

Table 5-4

Parts in alphabetical order	Parts in removal order
Assy PBB to MPCA FFC 36in (5HB10-60066) / Assy PBB to MPCA FFC 24in (5HB06-60099) on page 403	Encoder PCA (CQ890-60204) and Index (CM751-60021) on page 396
Door sensor PCA - ESD (F9A30-60262) on page 408	FFC-Paper-Feed-Sensors (CQ890-80014) on page 399
Encoder PCA (CQ890-60204) and Index (CM751-60021) on page 396	Out-Of-Paper Sensor TL Assembly (5HB06-60066) on page 400
FFC Airprint to MPCA 24in (5HB06-60026) / FFC Airprint to MPCA 36in (5HB10-60008) on page 411	Assy PBB to MPCA FFC 36in (5HB10-60066) / Assy PBB to MPCA FFC 24in (5HB06-60099) on page 403
FFC Front Window to MPCA (5HB06-50001) on page 409	Door sensor PCA - ESD (F9A30-60262) on page 408
FFC-Paper-Feed-Sensors (CQ890-80014) on page 399	FFC Front Window to MPCA (5HB06-50001) on page 409
Out-Of-Paper Sensor TL Assembly (5HB06-60066) on page 400	FFC Airprint to MPCA 24in (5HB06-60026) / FFC Airprint to MPCA 36in (5HB10-60008) on page 411

Encoder PCA (CQ890-60204) and Index (CM751-60021)

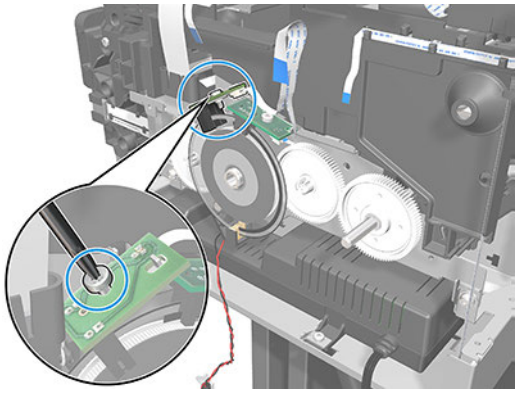
This section explains the removal and installation processes for this component.

Removal

The following steps provide the complete procedure for this topic.

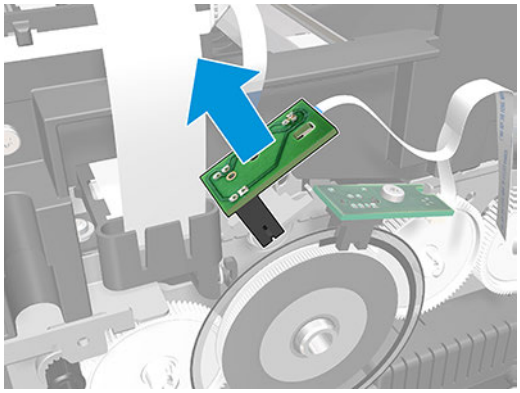
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.

4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301
6. Remove the Main PCA, see Main PCA (5HB06-67018 & 5HB08-67008) on page 329.
7. Remove one screw.

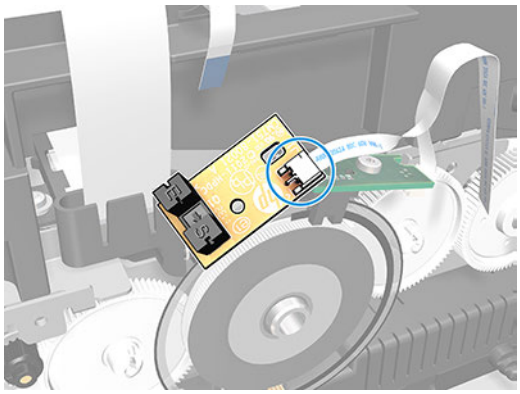


⚠ **CAUTION:** Be careful not to damage the Encoder Disk.

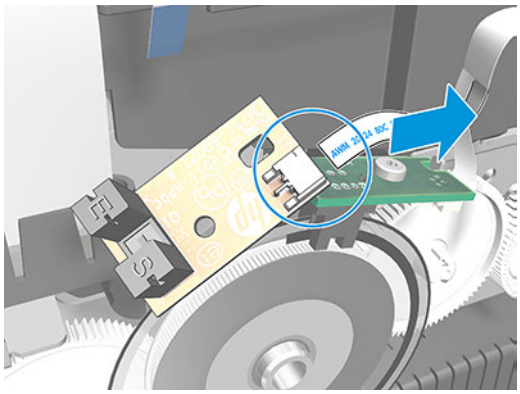
8. Release the Encoder PCA from the pin or locator.



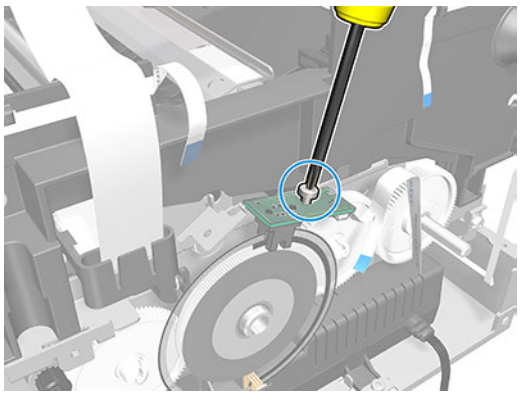
9. Rotate the Encoder PCA to see the connector.



10. Disconnect the flat cable.

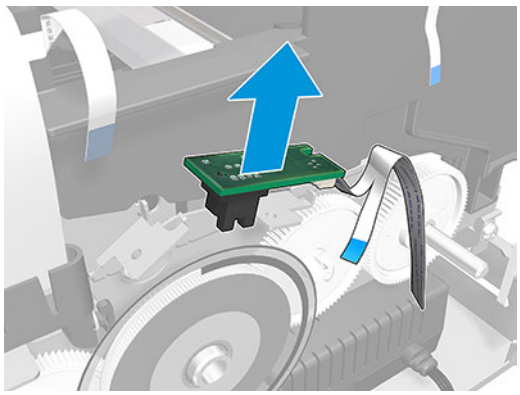


11. Remove one screw from the Index PCA.

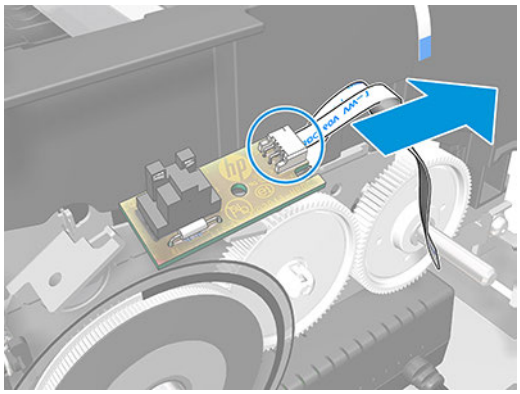


⚠ **CAUTION:** Be careful not to damage the Encoder Disk.

12. Release the Index PCA from the pin or locator.



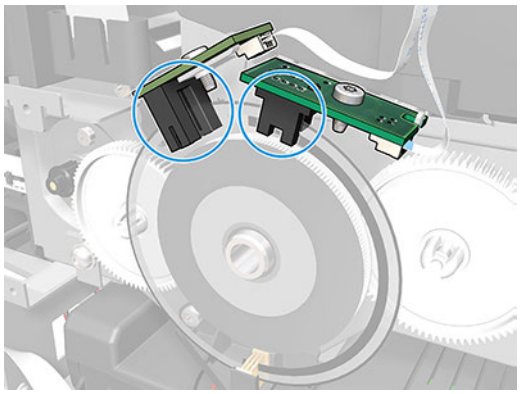
13. Disconnect the flat cable.



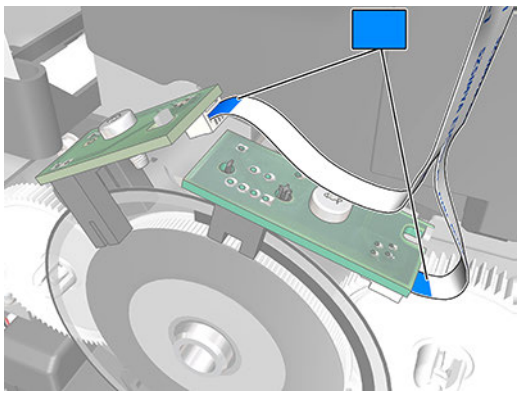
Installation

The following steps provide the complete procedure for this topic.

1. Be careful not to damage the Encoder Strip when you mount the two PCAs.



2. When connecting the cables to the PCAs, make sure that the blue side of the flat cables is facing up.



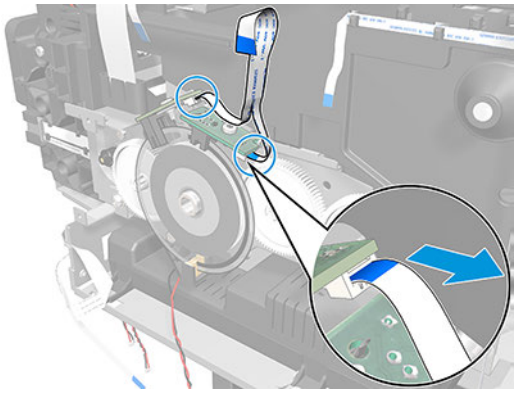
FFC-Paper-Feed-Sensors (CQ890-80014)

This section explains the removal and installation processes for this component.

Removal

The following steps provide the complete procedure for this topic.

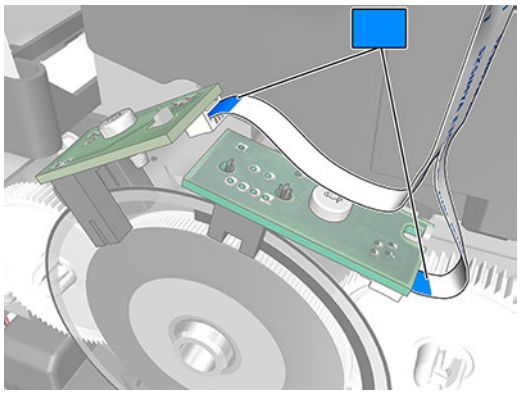
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301
6. Remove the Main PCA, see Main PCA (5HB06-67018 & 5HB08-67008) on page 329.
7. Disconnect the flat cable from the Encoder PCA and from the Index sensor.



Installation

The following steps provide the complete procedure for this topic.

- When connecting the cables to the PCAs, make sure that the blue side of the flat cables is facing up.



Out-Of-Paper Sensor TL Assembly (5HB06-60066)

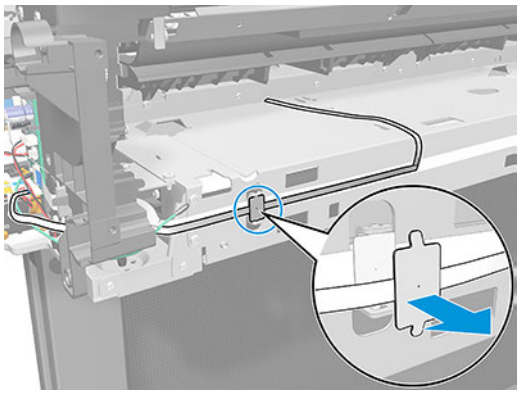
This section explains the removal and installation processes for this component.

Removal

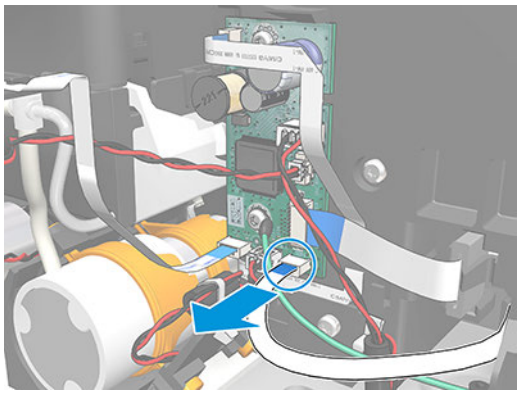
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Right Cover, see Removal on page 303.
5. Remove the Multi-sheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425. Note: only for HP DesignJet T600 & Studio Series.

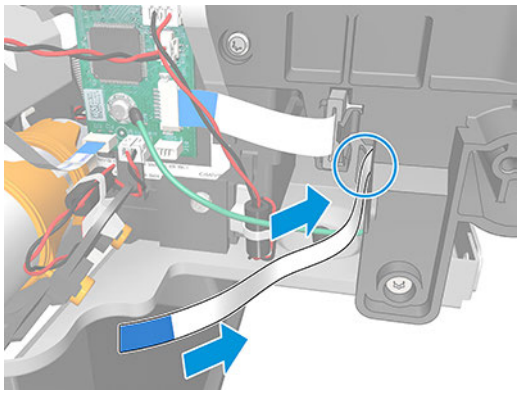
   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
6. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.
7. Remove the Out-Of-Paper Sensor without cable, see Out Of Paper Sensor without cable (CQ890-67102) on page 419.
8. Unclip the locator FFC.



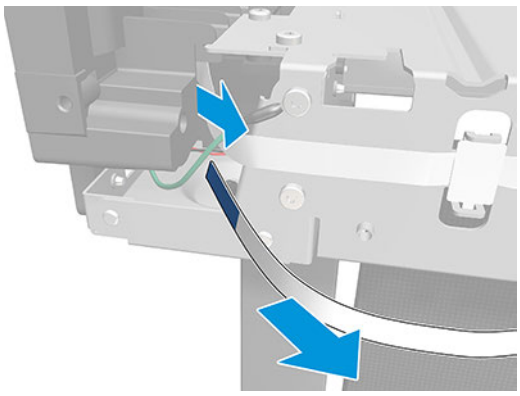
9. Disconnect the Out-Of-Paper Sensor Cable from the Bundle Board.



10. Unroute the Out-Of-Paper Sensor Cable through the hook.



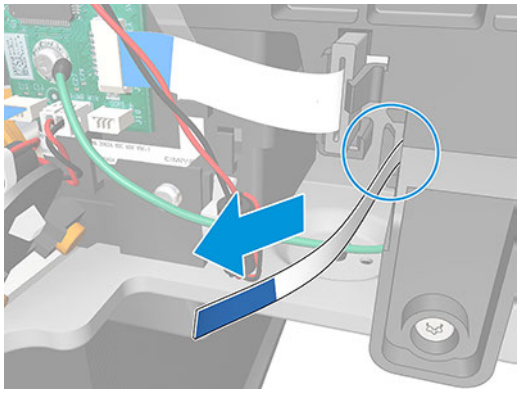
11. Remove the Out-Of-Paper Sensor Cable.



Installation

Follow these steps when installing the Out-Of-Paper Sensor Cable.

1. When you pass the Out-Of-Paper Sensor Cable through the hook, make sure that the blue end of the cable is facing you.



2. Follow the instructions for removing the Out Of Paper Sensor cable in reverse order.

Assy PBB to MPCA FFC 36in (5HB10-60066) / Assy PBB to MPCA FFC 24in (5HB06-60099)

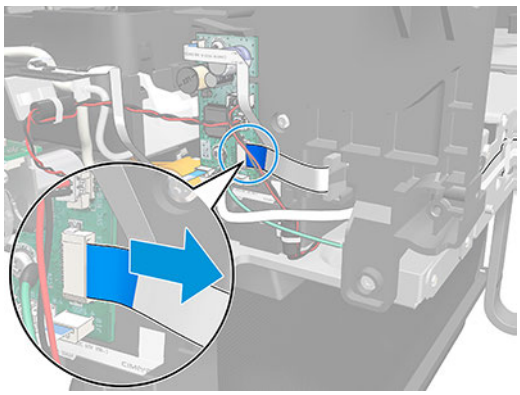
This section explains the removal and installation processes for this component.

Removal

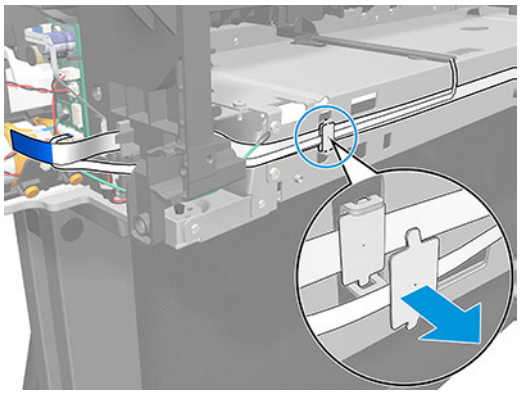
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301
6. Remove the Right Cover, see Removal on page 303.
7. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425. Note: Only for HP DesignJet T600 & Studio Series.

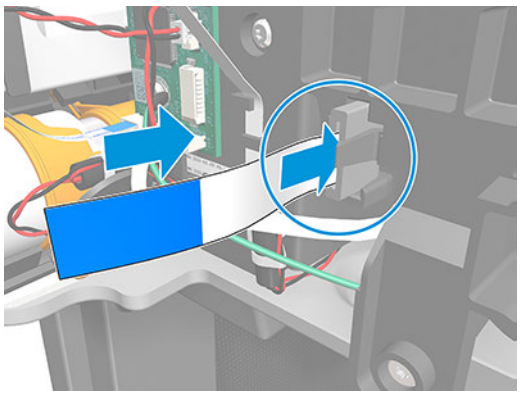
   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
8. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.
9. Disconnect the FFC cable from the Bundle Board.



10. Unclip the two locators FFC, by first pushing up and pushing out.

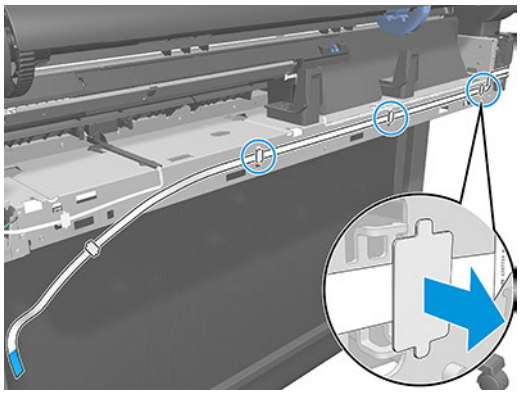


11. Unroute the Bundle Board Cable FFC.

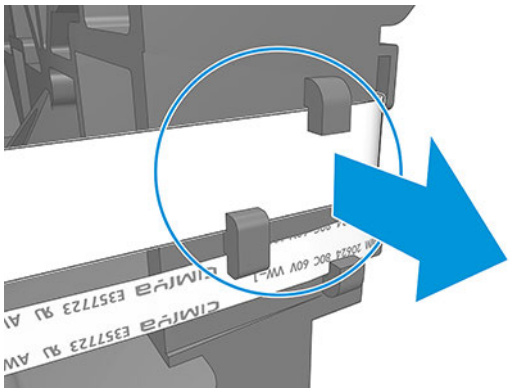


12. Unclip the locators FFC.

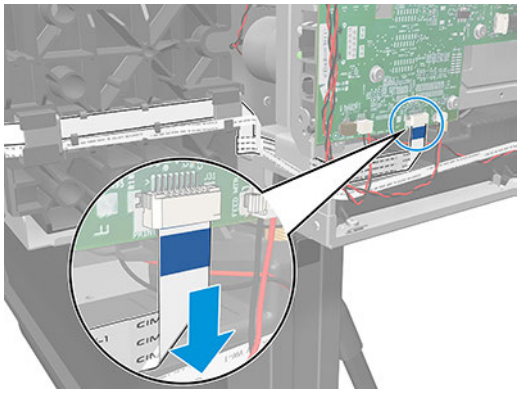
    - 3 clips in the 24 inch printer
    - 4 clips in the 36 inch printer



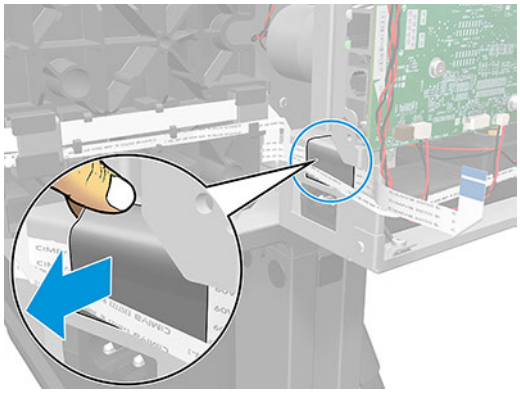
13. Carefully remove the FFC from the hook of the left arch.



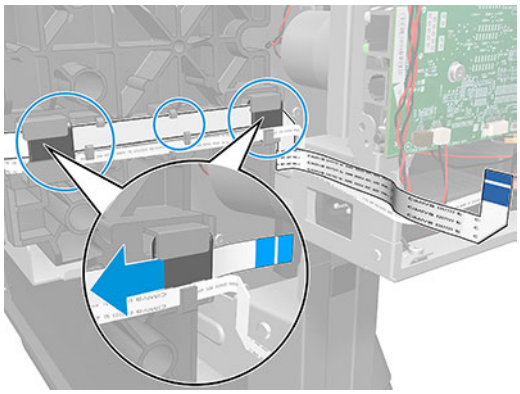
14. Disconnect the Bundle Board cable FFC from the Main PCA.



15. Remove the tape.



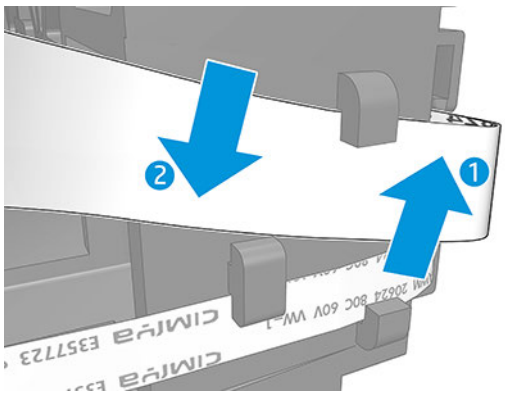
16. Carefully remove the FFC from the 2 hooks of the left arch, and remove the FFC cable.



Installation

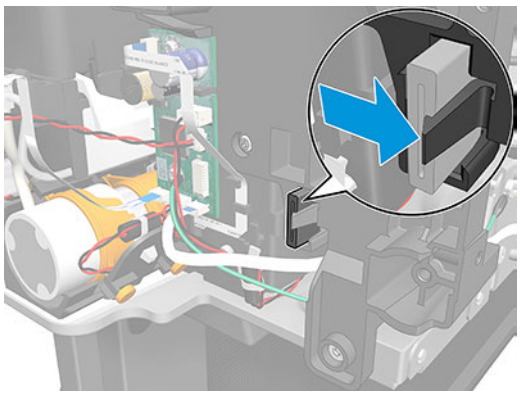
The following steps provide the complete procedure for this topic.

1. When re-installing the Bundle FFC into the hooks of the left arch, orient the FFC inclined as in the following image. Make sure to assemble the Bundle Ferrite in the same position close to the Bundle Board.

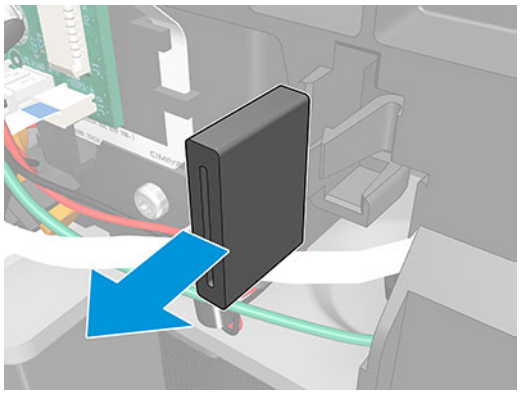


NOTE: When re-installing the Bundle FFC, hook each clamp first on the upper clip and then push on the bottom area.

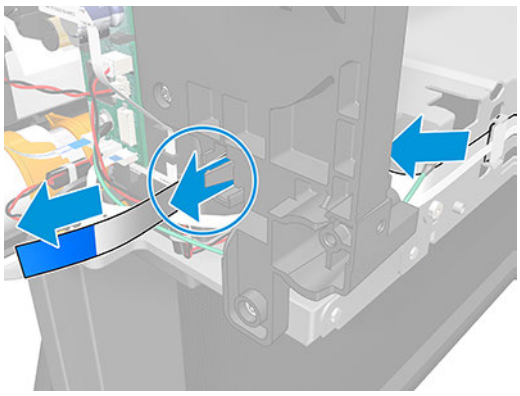
2. Unclip to remove the ferrite of the right arch.



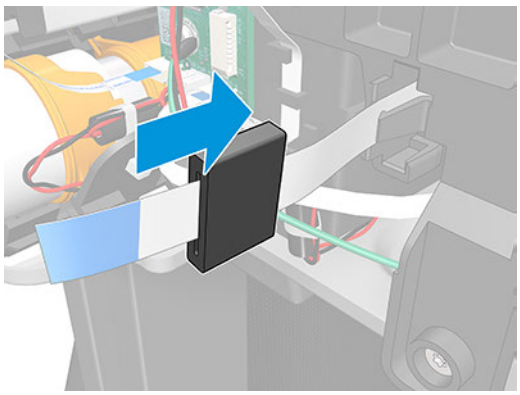
3. Remove the ferrite.



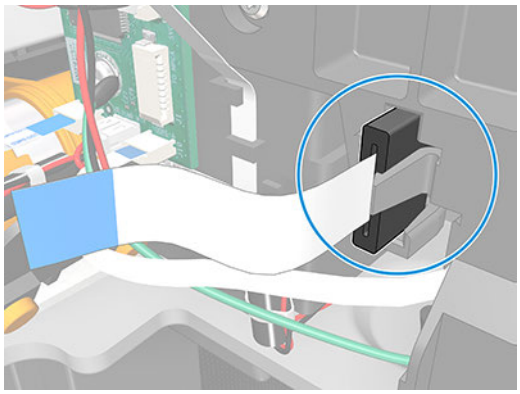
4. Route the Bundle FFC. Re-install the Bundle FFC in exactly the same place where the ferrite was.



5. Pass the ferrite through the FFC.



6. Attach the ferrite to the right arch.



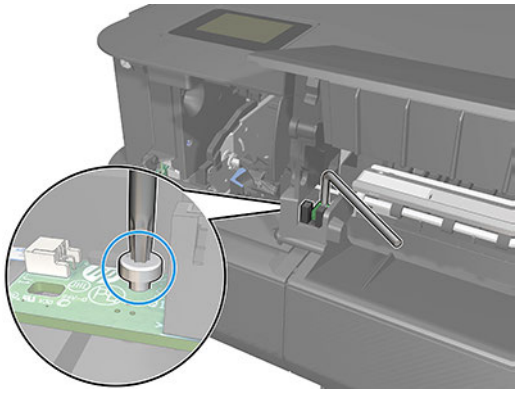
Door sensor PCA - ESD (F9A30-60262)

This section explains the removal and installation processes for this component.

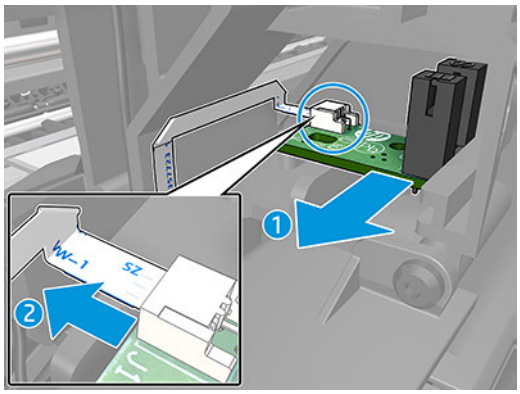
Removal

The following steps provide the complete procedure for this topic.

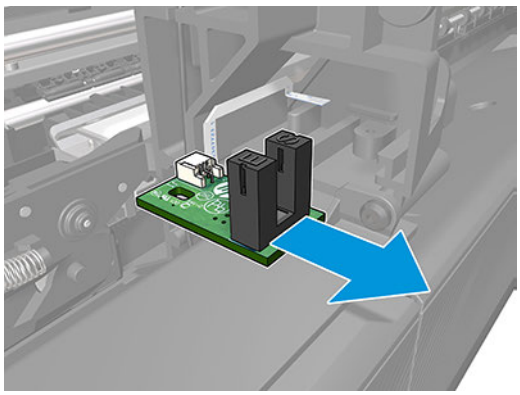
1. Turn off the printer and disconnect the power cable.
2. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
3. Remove 1 screw.



4. Carefully slide the sensor and disconnect the cable.



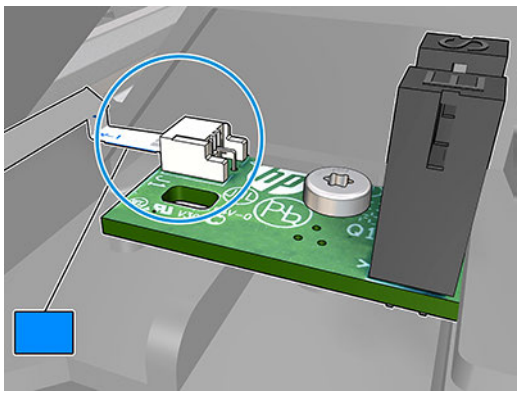
5. Remove the sensor.



Installation

The following steps provide the complete procedure for this topic.

▲ When connecting the cables to the PCAs, make sure that the blue side of the flat cables is facing down.



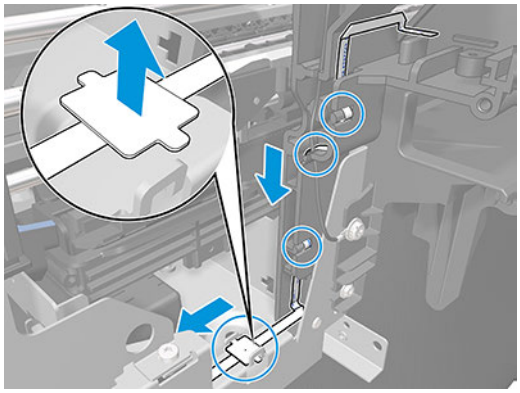
FFC Front Window to MPCA (5HB06-50001)

This section explains the removal and installation processes for this component.

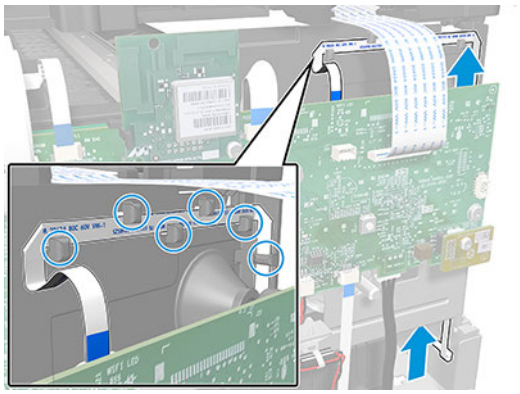
Removal

The following steps provide the complete procedure for this topic.

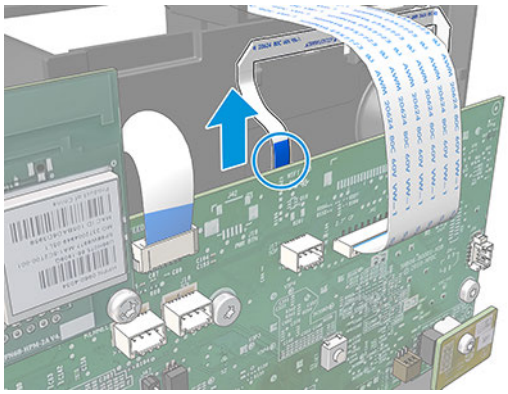
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301
6. Remove the Door Sensor PCA - ESD, see Door sensor PCA - ESD (F9A30-60262) on page 408.
7. Unroute the cable and unclip the locator FFC.



8. Unroute the FFC Front Window to MPCA cable through the hooks.



9. Disconnect the flat cable and remove the cable.



FFC Airprint to MPCA 24in (5HB06-60026) / FFC Airprint to MPCA 36in (5HB10-60008)

This section explains the removal and installation processes for this component.

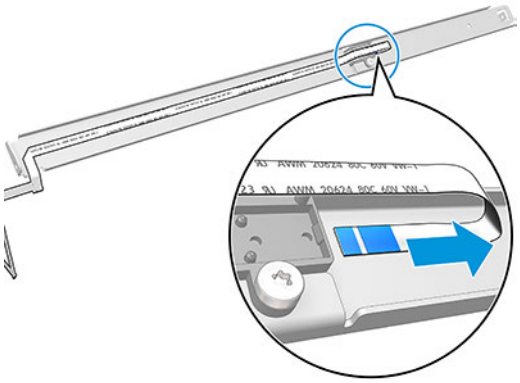
Removal

The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover, see Left Cover (5HB06-67017 & 5HB12-67008) on page 301
6. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425. Note: Only for HP DesignJet T600 & Studio Series.

   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
7. Remove the Back Cover, see Back Cover (CQ890-67010 & CQ893-67002) on page 308.
8. Remove the Multi-Sheet Tray Sensor Assembly, Multi-Sheet Tray Sensor Assembly (5HB06-67024 & 5HB08-67010) on page 358.

9. Disconnect the flat cable and remove the cable.



Cutter with Clutch (CQ890-67108)

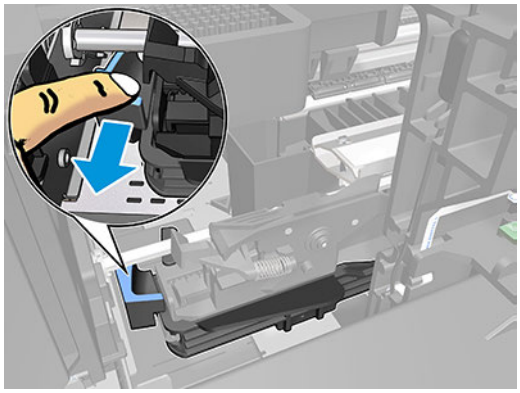
Cutter

This section explains the removal and installation processes for this component.

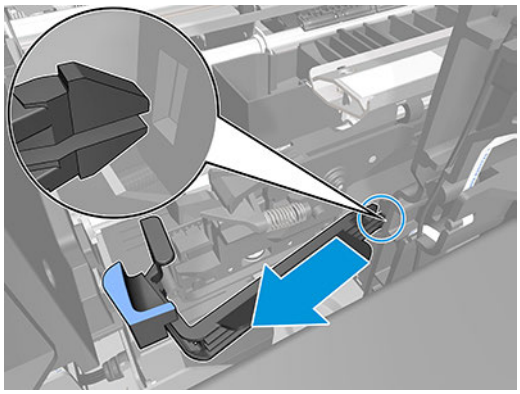
Removal

The following steps provide the complete procedure for this topic.

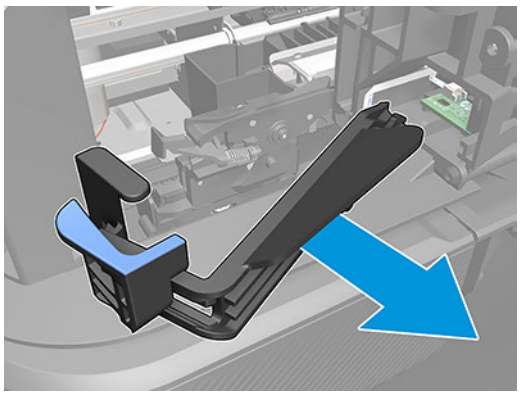
1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Front Cover, see Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door, see Cutter Door (5HB06-67008 & 5HB12-67009) on page 300
5. Pull out the left side of the Cutter Extraction Lid.



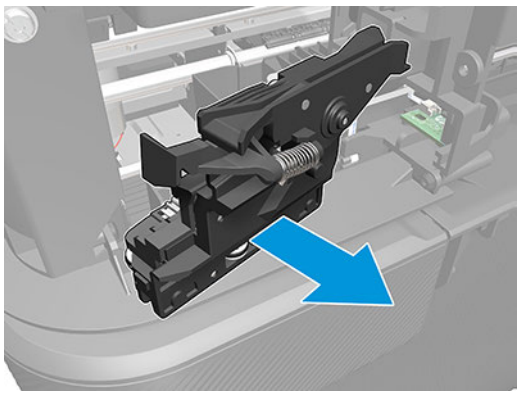
6. Slide the Cutter Extraction Lid to the left to detach it from the hole.



7. Remove the Cutter Extraction Lid.



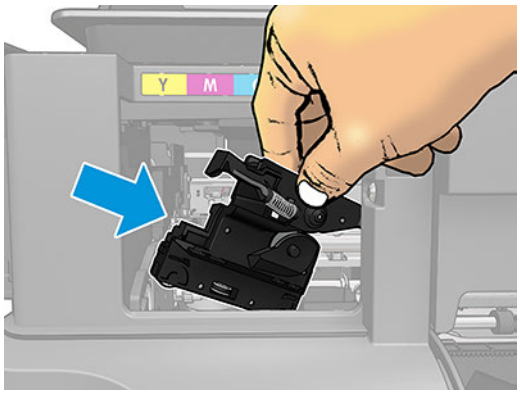
8. Remove the Cutter.



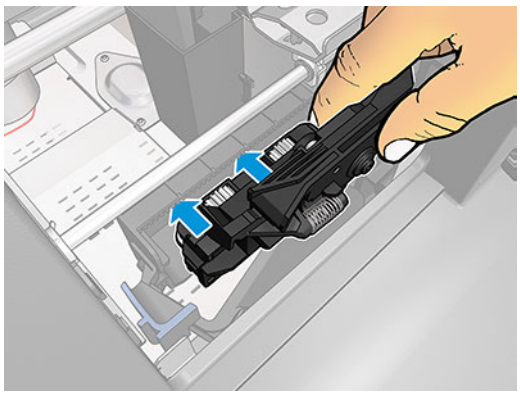
Installation

The following steps provide the complete procedure for this topic.

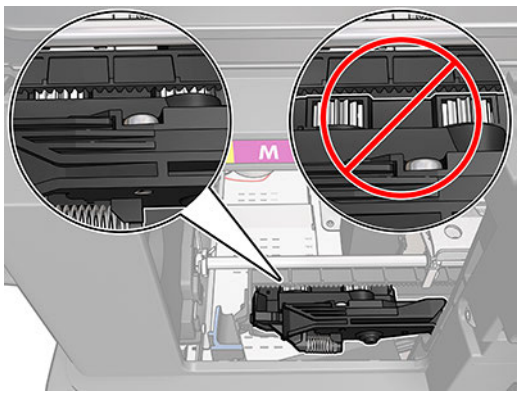
1. Mount the Cutter.



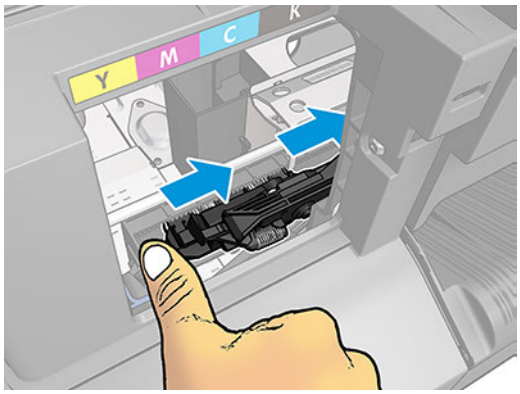
2. Make sure that the cutter gears keep below the cutter guide rack.



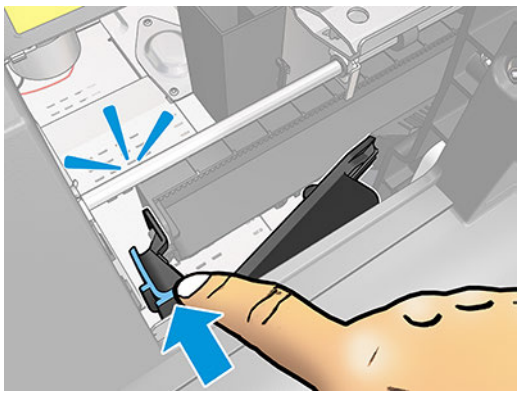
3. The cutter gears should engage perfectly with the cutter guide.



4. Move the Cutter to the right.



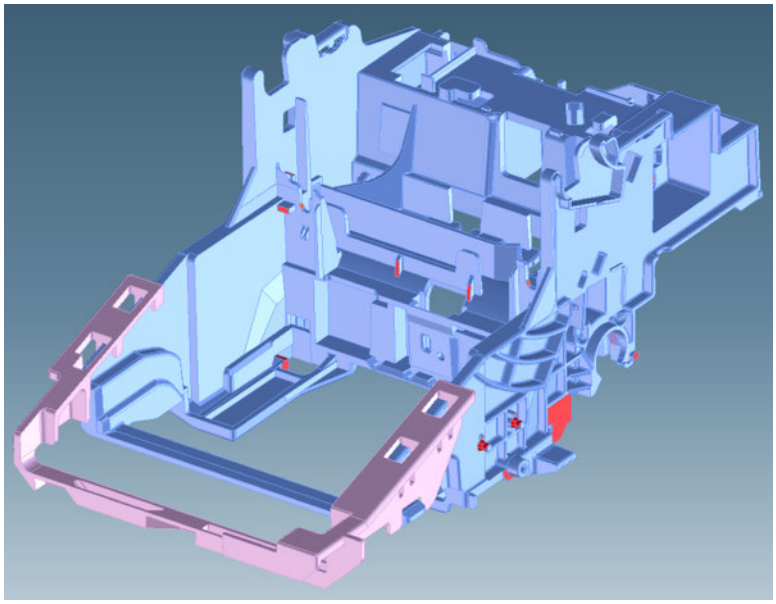
5. Introduce the Cutter Extraction Lid into the hole.



Cutter Bridge

This section explains the removal and installation processes for this component.

The Cutter Bridge is attached to the front of the Carriage. The arrangement of the cutter bridge to the carriage can be seen in the following image:

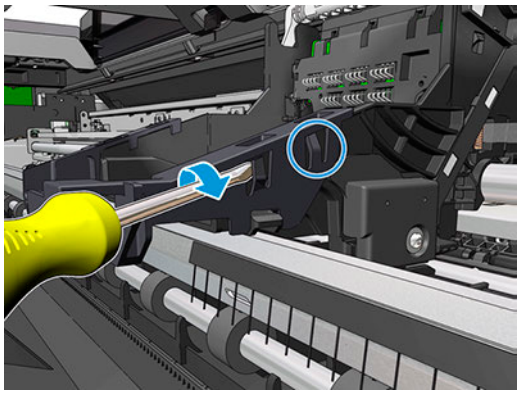


Removal

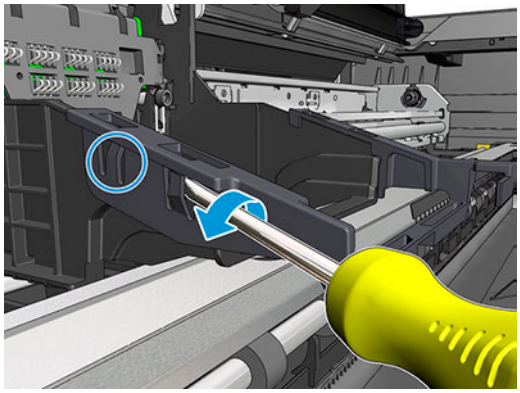
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the power cable.
2. Remove the Top Trim, see Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297
3. Remove the Ink Cartridges and the Printhead Assembly.
4. Open the Front Door.
5. Ensure that the Carriage is in the center of the Platen, where you can easily access it.

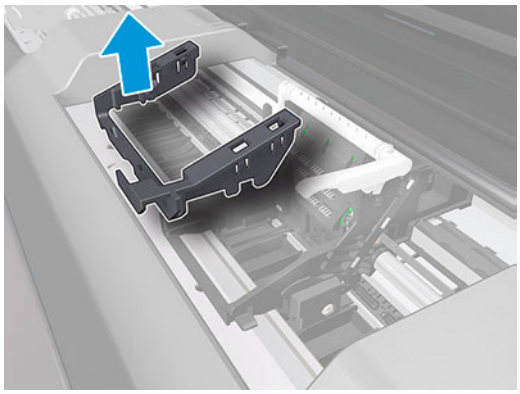
6. Use the tool provided with the Cutter Assembly Kit to lever up the two prongs attaching the Cutter Bridge to the right-hand side of the Carriage.



7. Use the tool again to lever up the two prongs attaching the Cutter Bridge to the left-hand side of the Carriage.



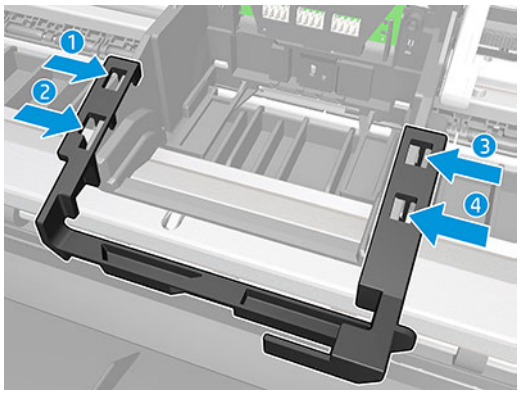
8. Remove the Cutter Bridge.



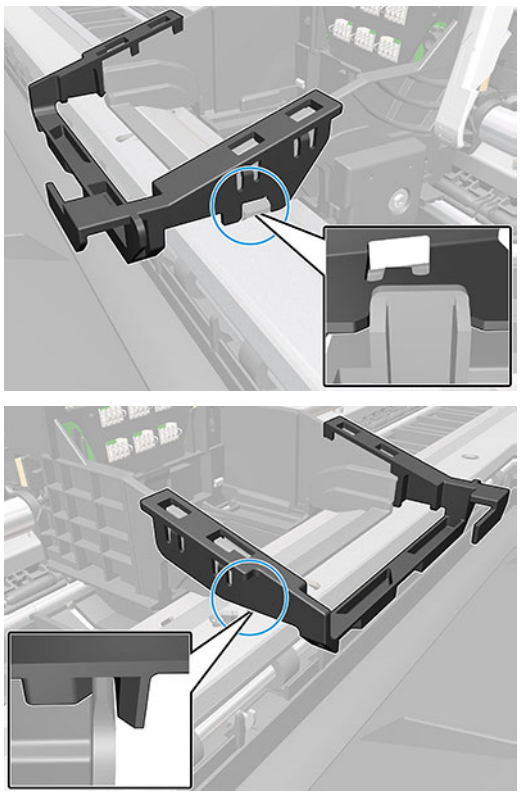
Installation

The following steps provide the complete procedure for this topic.

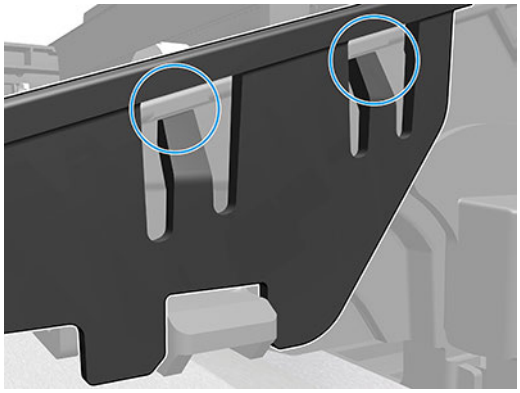
1. Position the new Cutter Bridge above the Carriage and press down.



2. The Cutter Bridge is designed to fit over features of the Carriage.



3. Use the tool provided with the Cutter Assembly Kit to press each of the four prongs attaching the Cutter Bridge to the Carriage, and make sure that all of them are correctly engaged; otherwise the Cutter may not work correctly.



Out Of Paper Sensor without cable (CQ890-67102)

This section explains the removal and installation processes for this component.

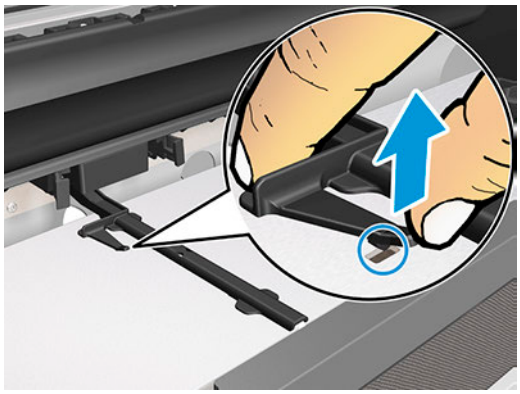
Removal

The following steps provide the complete procedure for this topic.

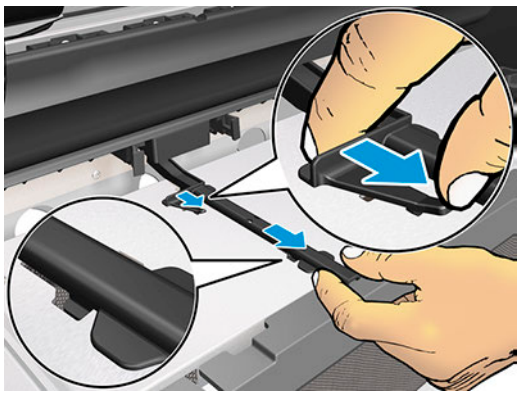
1. Turn off the printer and disconnect the power cable.
2. Remove the Multisheet Tray SV, see Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015) on page 425.
   Note: Only for HP DesignJet T600 & Studio Series.

   Remove the Rear Cover. Note: Only for HP DesignJet T200 Series.
3. Locate the Out-Of-Paper Sensor.

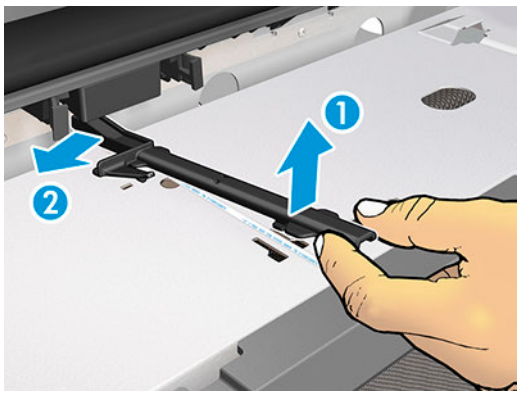
4. Unclip the Out-Of-Paper Sensor FFC Cover.



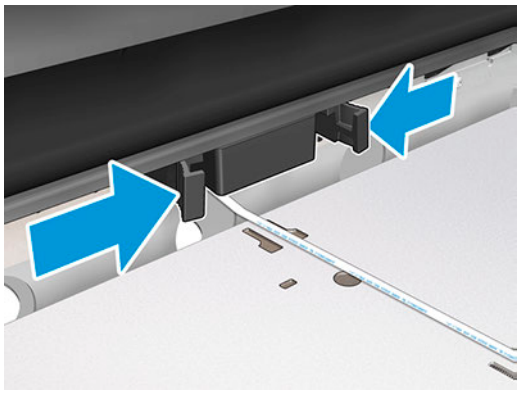
5. Slide the Out-Of-Paper Sensor FFC Cover.



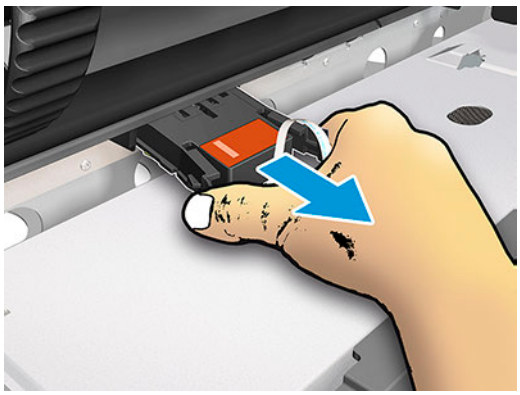
6. Lift up (1) the Out-Of-Paper Sensor FFC Cover and slide it to the left (2).



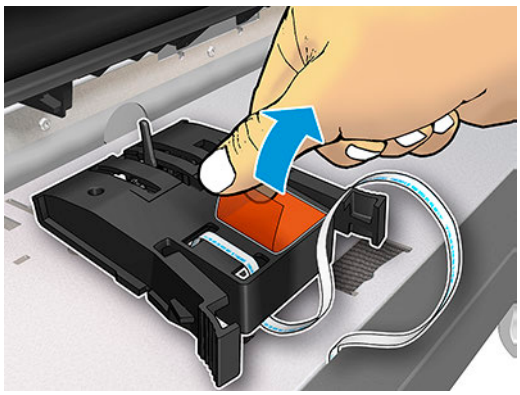
7. Press the retaining clips of the Out-Of-Paper Sensor Assembly.



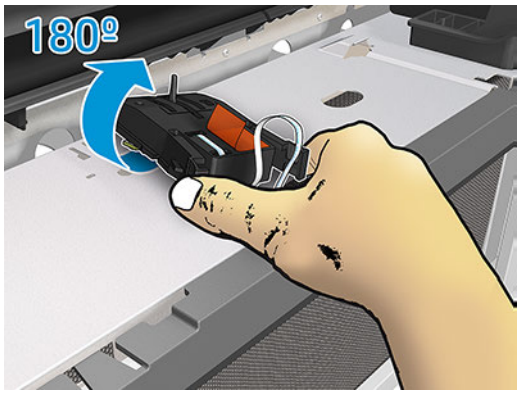
8. Slide out the Out-Of-Paper Sensor Assembly.



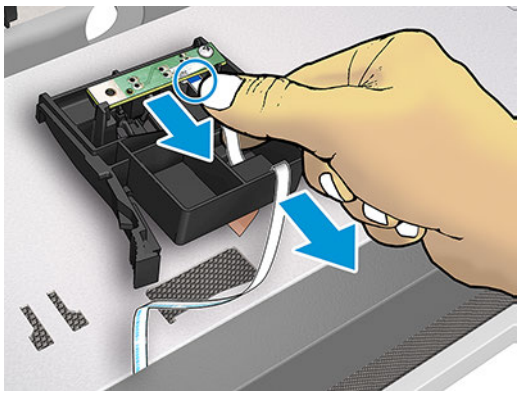
9. Partically unstick the tape.



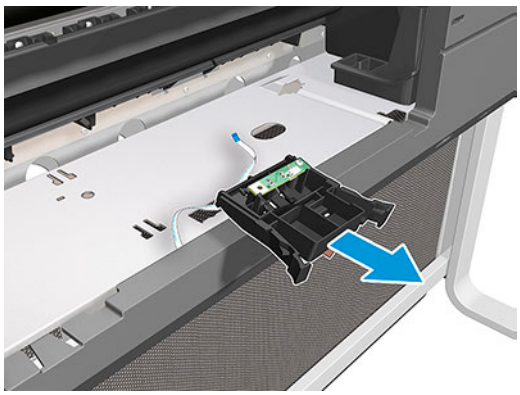
10. Turn over the Out-Of-Paper Sensor Assembly to get better access to the connector.



11. Disconnect the Out-Of-Paper Sensor cable.



12. Remove the Out-Of-Paper Sensor Assembly.

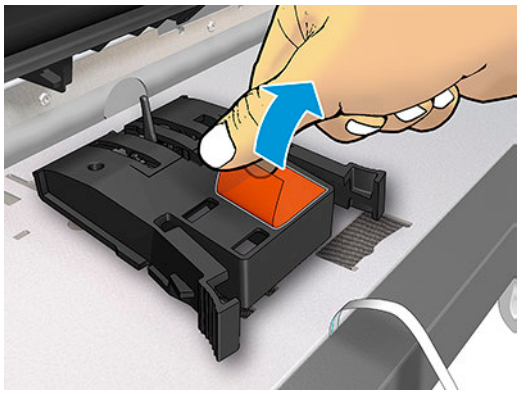


Installation

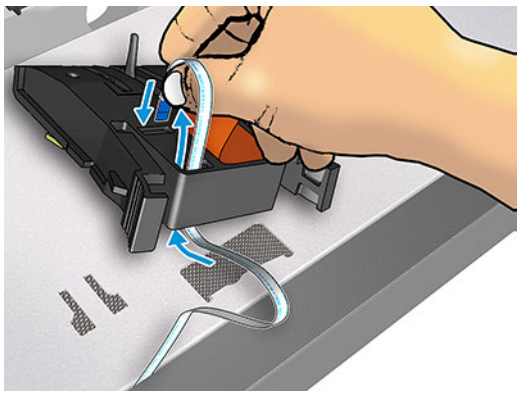
The following steps provide the complete procedure for this topic.

1. Please follow the steps of the Removal procedure in the reverse order.

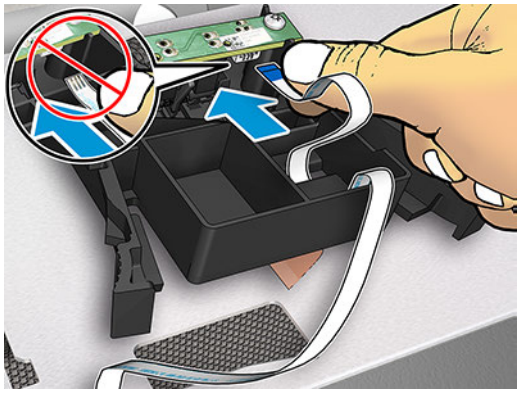
2. Partially unstick the tape, to install the cable.



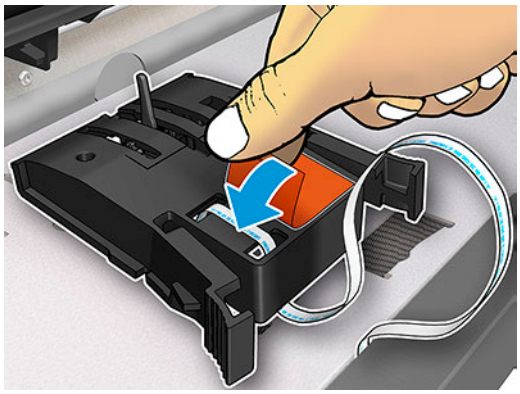
3. Route the cable.



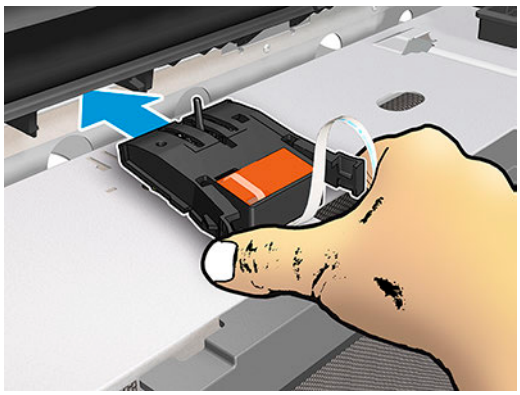
4. Connect the FFC cable.



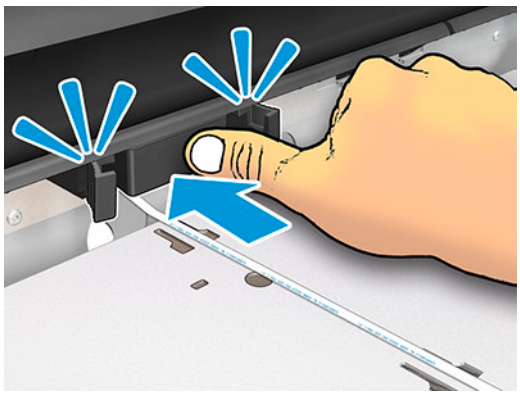
5. Stick down the tape.



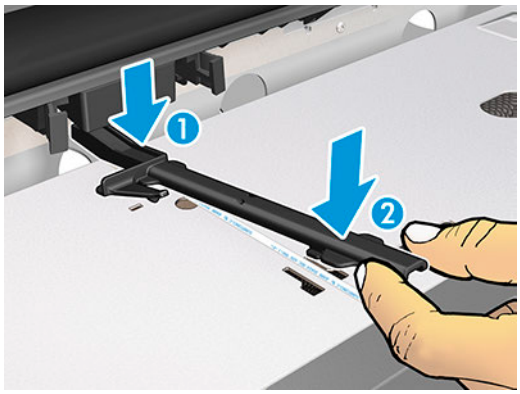
6. Replace the Out-Of-Paper Sensor Assembly.



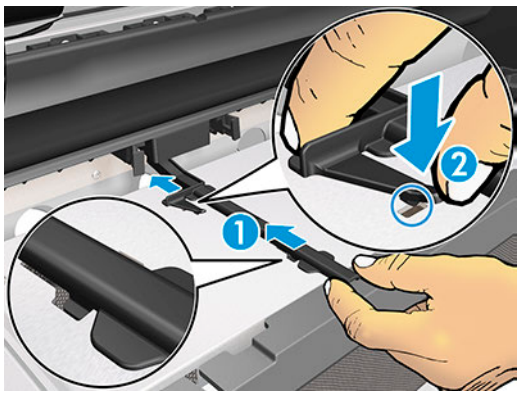
7. Press to install.



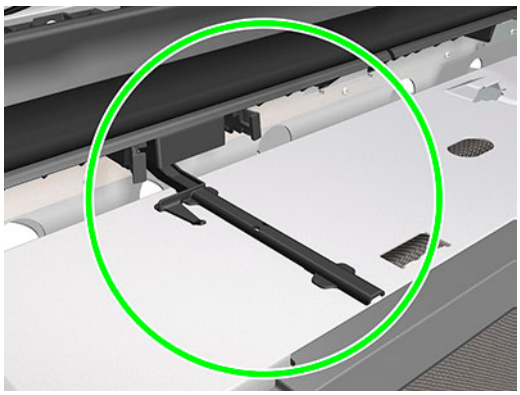
8. Install the Out-Of-Paper Sensor FFC Cover.



9. Slide in and clip the Out-Of-Paper Sensor FFC Cover.



10. The Out-Of-Paper Sensor is correctly installed.



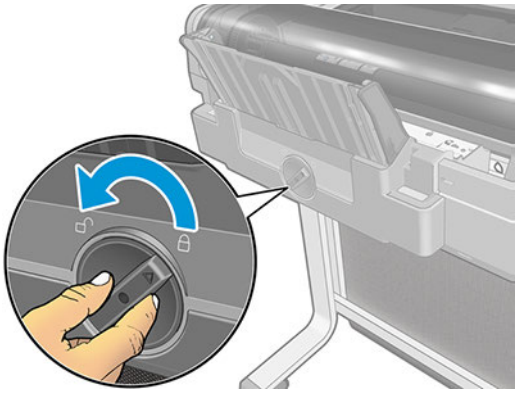
Multi-Sheet Tray SV (5HB08-67007 & 5HB12-67015)

This section explains the removal and installation processes for this component.

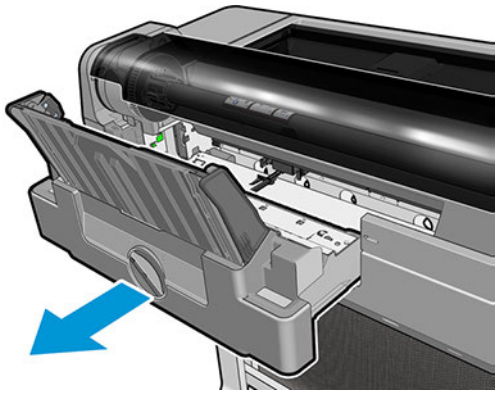
Removal

The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the Power cable.
2. Unlock the Multi-Sheet Tray Assembly.



3. Pull out the Multi-Sheet Tray Assembly.



Installation

The following steps provide the complete procedure for this topic.

▲ Please follow the steps of the Removal procedure in the reverse order.

Basket Right Cover (5HB12-67014)

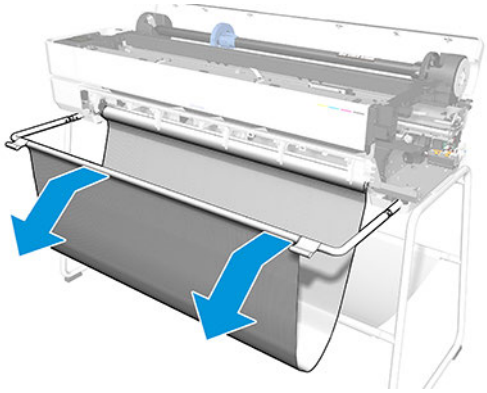
This section explains the removal and installation processes for this component.

Removal

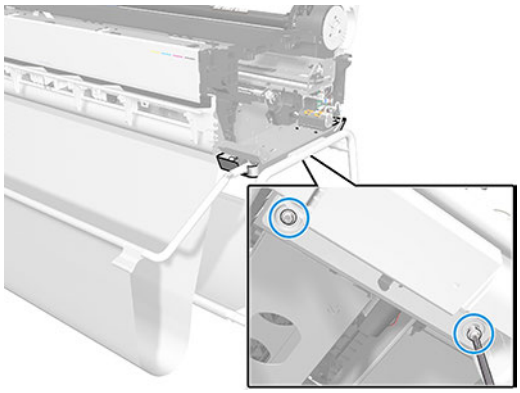
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Right Cover (5HB06-67006 & 5HB12-67006) on page 303.

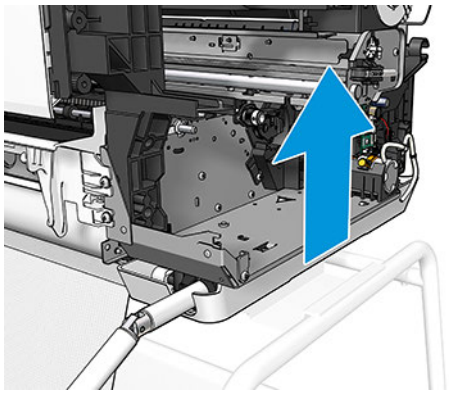
5. Remove the Service Station Assembly (CQ890-67045) on page 342.
6. Pull the Basket until it reaches the down position.



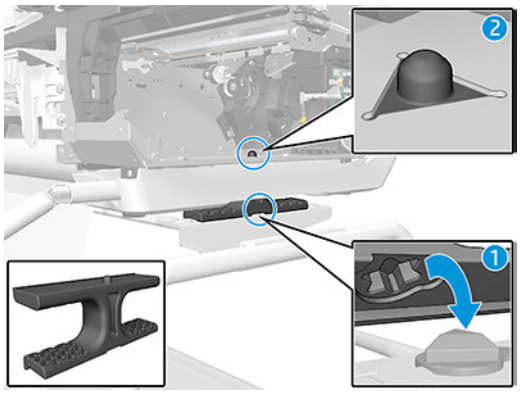
7. Remove 2 screws. Please keep the screws to assemble the stand later.



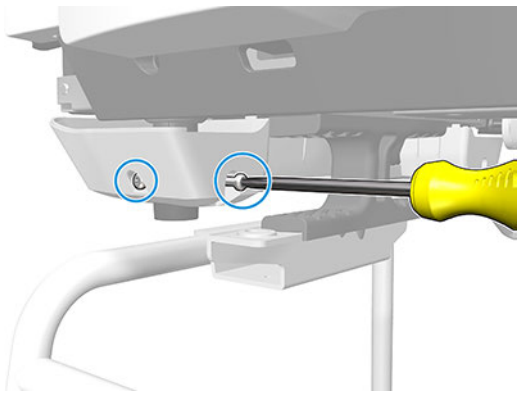
8. Align the Basket lifter part with the stand. First you have to lift the printer.



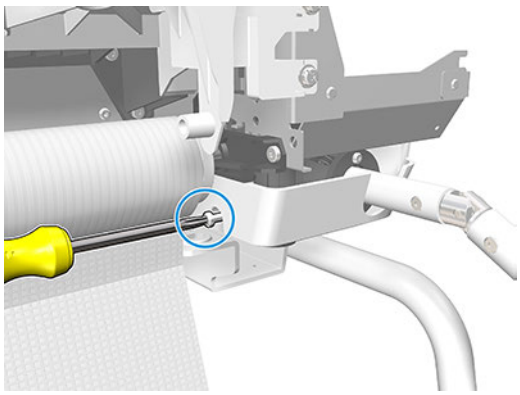
9. Locate the Basket lifter and align the part with the stand.



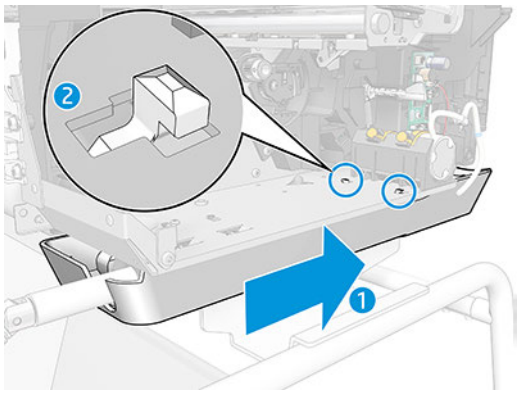
10. Remove 2 screws at the back.



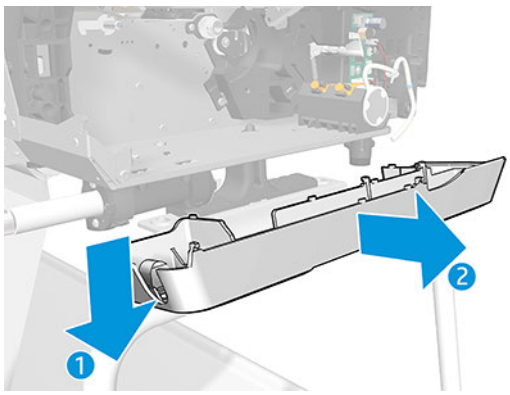
11. Remove 1 screw from the front.



12. Pull the cover toward the back.



13. Pull down the cover and remove.



Installation

The following steps provide the complete procedure for this topic.

▲ Please follow the steps of the Removal procedure in the reverse order.

Basket (5HB12-67012 & 5HB14-67009)

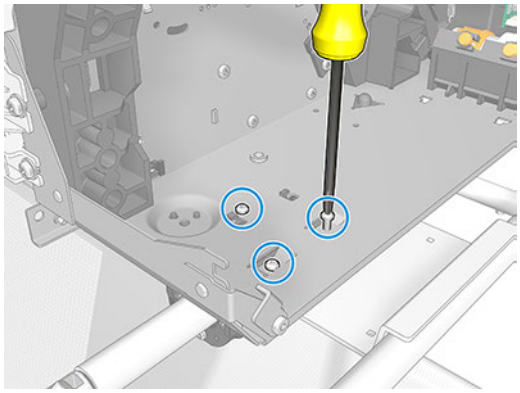
This section explains the removal and installation processes for this component.

Removal

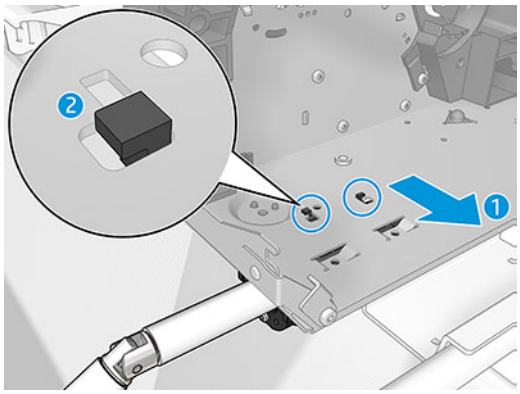
The following steps provide the complete procedure for this topic.

1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Right Cover (5HB06-67006 & 5HB12-67006) on page 303.
5. Remove the Service Station Assembly (CQ890-67045) on page 342.

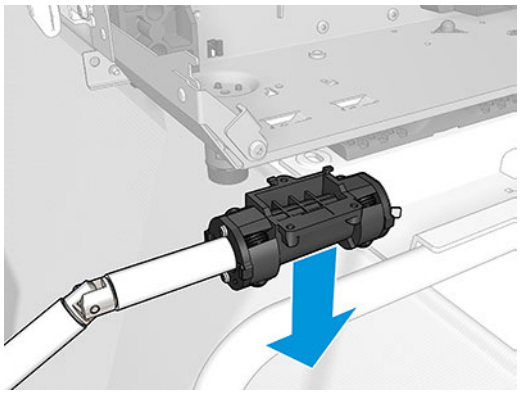
6. Remove the Basket Right Cover (5HB12-67014) on page 426.
7. Remove 3 screws.



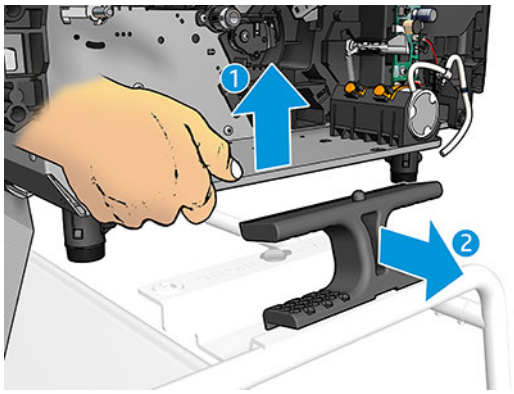
8. Unclip the telescopic support.



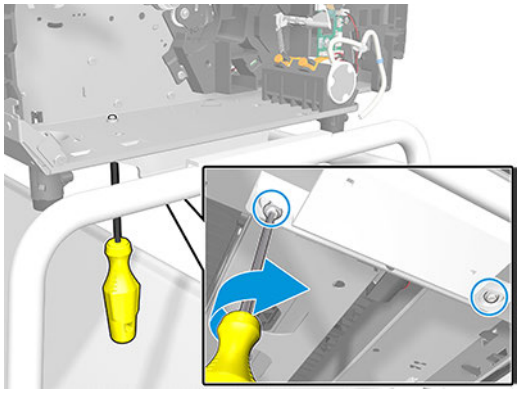
9. Remove the telescopic support.



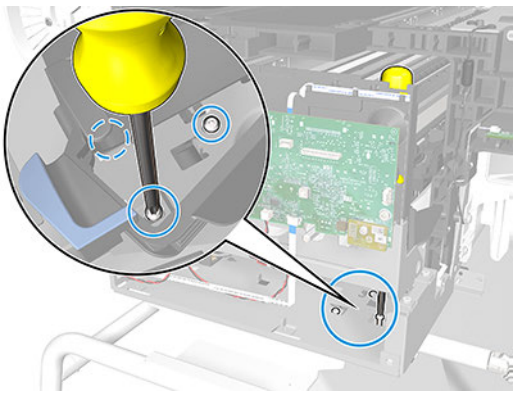
10. Once you remove the cover on this side, lift the printer and remove the Basket lifter.



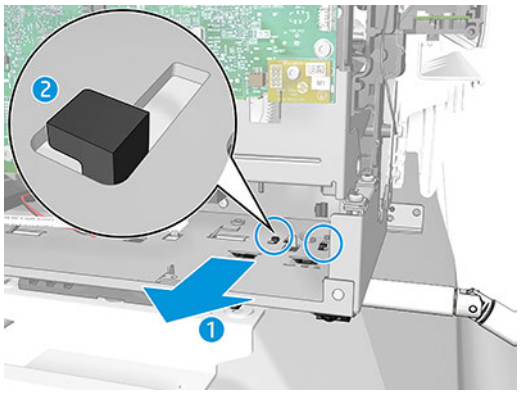
11. Put back 2 screws to fix the printer to the stand. This is very important, because if the printer is not fixed it could be dislodged by any movement.



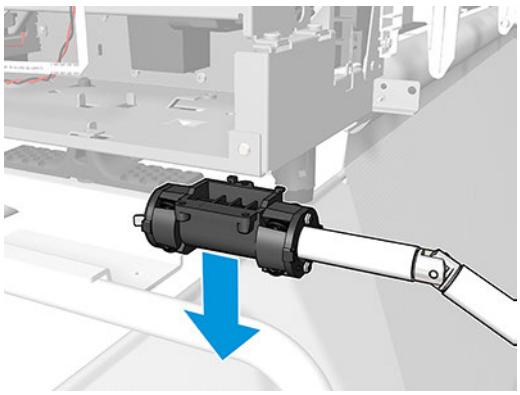
12. Remove the Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
13. Remove the Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
14. Remove the 5V Power Supply SV (CQ890-67089) on page 332.
15. Remove the Basket Left Cover (5HB12-67013) on page 434.
16. Remove the Front Panel (5HB06-67002) on page 326.
17. Remove 3 screws. Move the cutter to have better access to the screws.



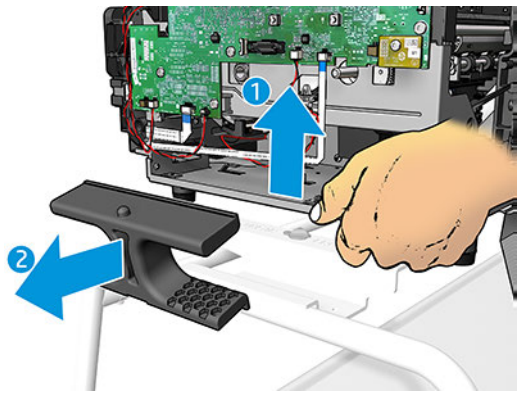
18. Unclip the telecopic support.



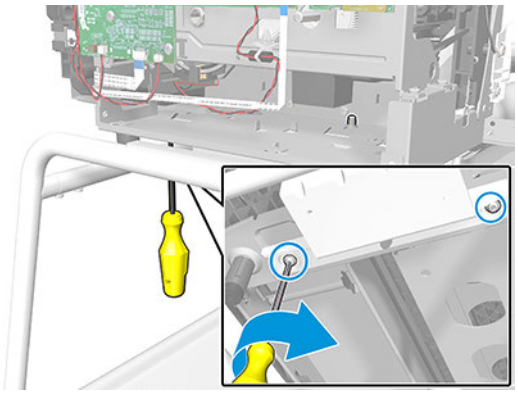
19. Remove the telecopic support.



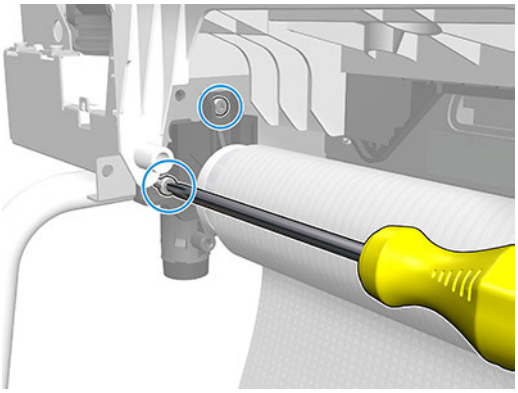
20. Once you remove the cover on this side, lift the printer and remove the Basket lifter.



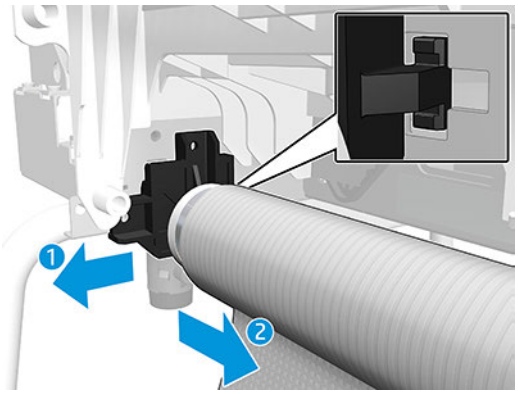
21. Put back 2 screws to fix the printer to the stand. This is very important, because if the printer is not fixed it could be dislodged by any movement.



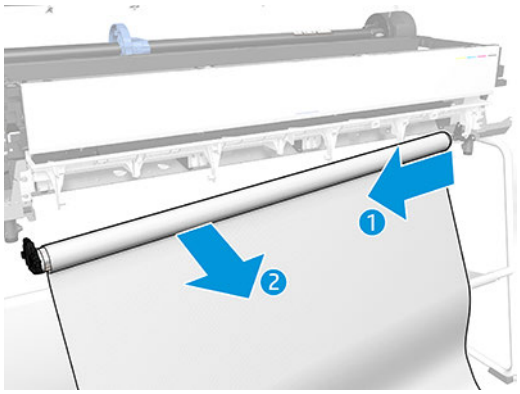
22. Remove 2 screws on the left side.



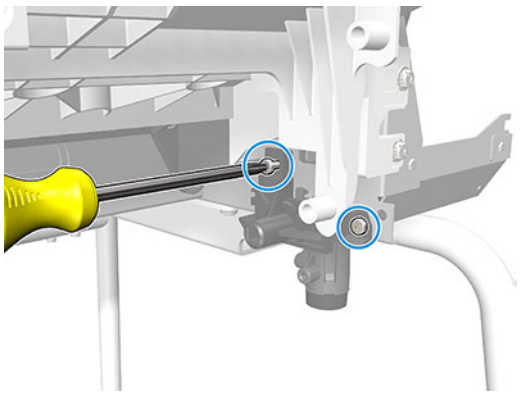
23. Move the support to unclip and remove the support and the Self Folding Fabric Mechanism Roll from the left side.



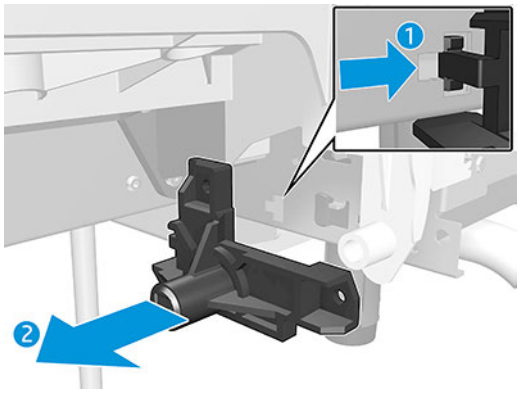
24. Remove the Self Folding Fabric Mechanism Roll from the right side.



25. Remove 2 screws.



26. Remove the support.



Installation

The following steps provide the complete procedure for this topic.

▲ Please follow the steps of the Removal procedure in the reverse order.

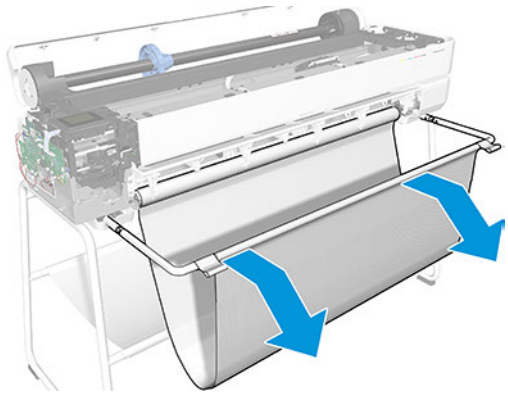
Basket Left Cover (5HB12-67013)

This section explains the removal and installation processes for this component.

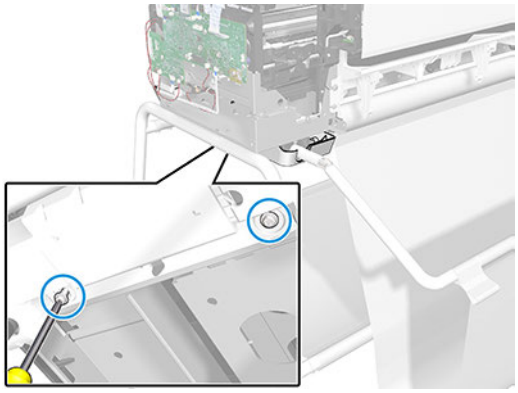
Removal

The following steps provide the complete procedure for this topic.

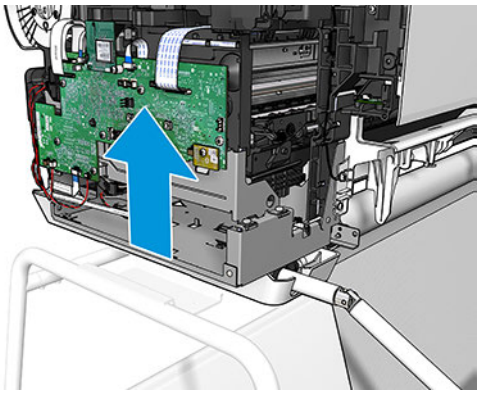
1. Turn off the printer and disconnect the Power cable.
2. Remove the Top Trim (5HB06-67004 & 5HB10-67003 & 5HB12-67003, 5HB14-67002 & 5HB12-67019 & 5HB14-67011) on page 297.
3. Remove the Front Cover (5HB06-67010 & 5HB10-67008, 5HB12-67011 & 5HB14-67008) on page 299.
4. Remove the Cutter Door (5HB06-67008 & 5HB12-67009) on page 300.
5. Remove the Left Cover (5HB06-67017 & 5HB12-67008) on page 301.
6. Remove the 5V Power Supply SV (CQ890-67089) on page 332.
7. Pull the Basket until it reaches the down position.



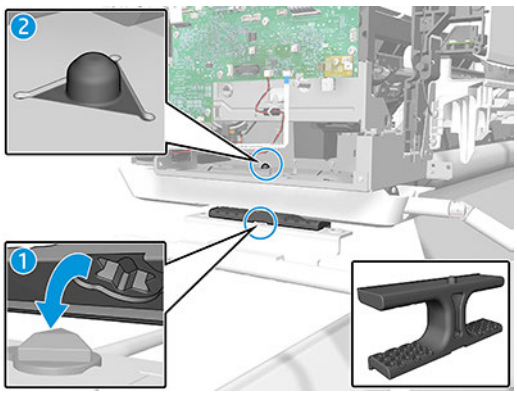
8. Remove 2 screws. Please keep the screws to assemble the stand later.



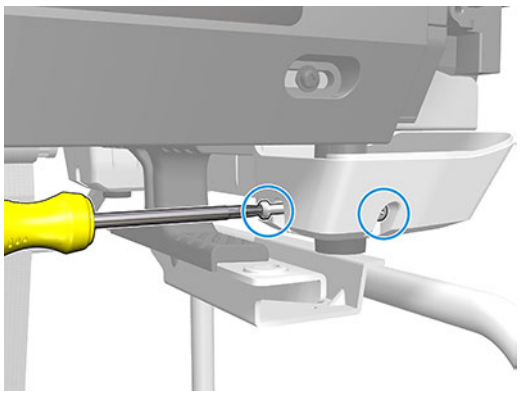
9. Align the Basket lifter part with the stand. First you have to lift the printer.



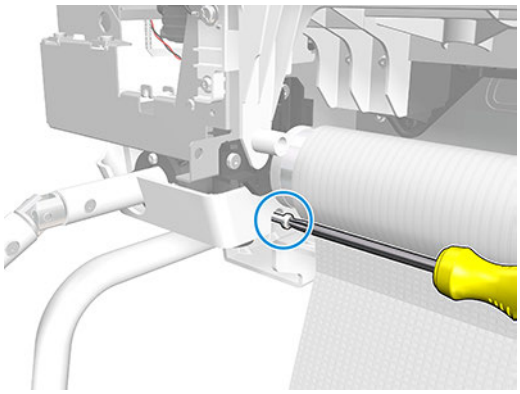
10. Locate the Basket lifter and align the part with the stand.



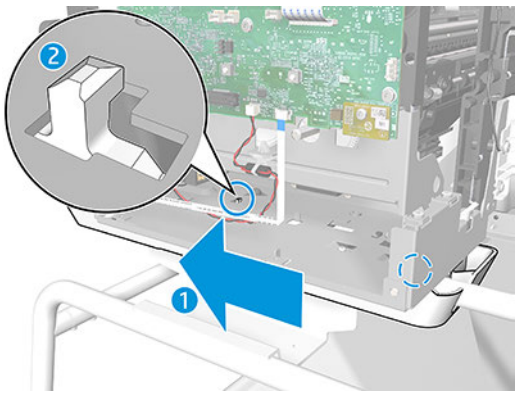
11. Remove 2 screws at the back.



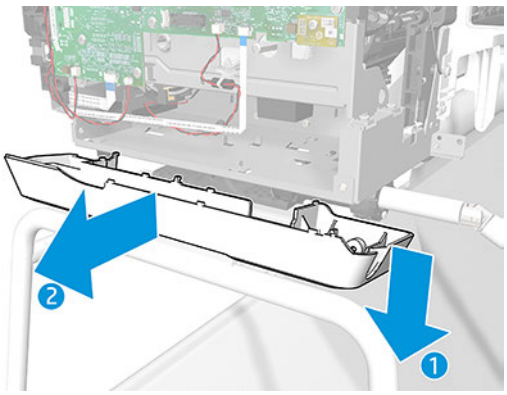
12. Remove 1 screw from the front.



13. Pull the cover toward the back.



14. Pull down the cover and remove.



Installation

The following steps provide the complete procedure for this topic.

▲ Please follow the steps of the Removal procedure in the reverse order.

6 Preventive maintenance

This chapter provides guidance for ensuring that your printer retains optimal performance conditions once usage has begun.

Preventive maintenance processes

This section includes instructions for cleaning the carriage line sensor, encoder strip,, and the printer exterior, plus prodedures regarding carriage assembly lubrication, moisture accumulation, and considerations on the level of printer usage.

Clean the printer

To maintain the printer in good operating condition, keep it free of accumulated dust, ink, and other contamination. Cleaning intervals are determined by the printer environment and by the types of printer supplies used.

General cleaning

To prevent electric shock, make sure that the printer is switched off and unplugged before any cleaning is performed. Do **not** let any water get inside the printer.

Proper general cleaning should include the following:

1. Blow away dust accumulation with compressed air if available.
2. Clean the outer surface of the printer with a damp sponge or cloth. Use a mild soap and water solution if necessary. Do not use abrasive cleaners.
3. Wipe the printer dry with a soft lint-free cloth.

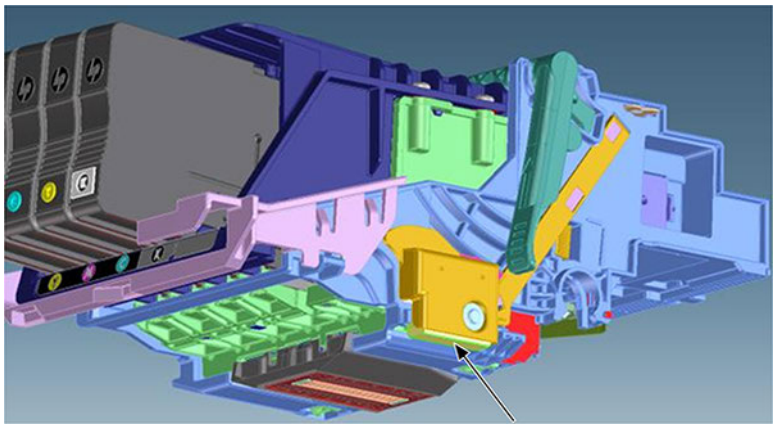
Clean the Carriage Line Sensor

The cleaning actually involves cleaning the clear plastic lens cover, not the sensor itself.

The Carriage Line Sensor should not normally require cleaning during the life of the printer. However, it may require cleaning after a bad printhead crash while printing with high ink density. In practice, it is recommended to clean the sensor if there are intermittent failures of paper edge detection, printhead alignment, or paper advance calibration.

1. Use tap water. Do not use chemicals that could damage the clear plastic of the lens cover.
2. Use a lint-free cloth.

3. Wipe the lens with the damp cloth, then remove excess water or moisture with a dry area of the same cloth.



Clean the Encoder Strip

The Encoder Strip should not normally require cleaning during the life of the printer.

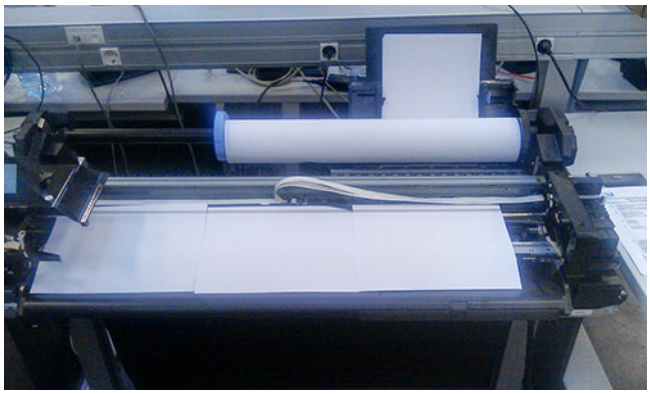
However, it may require cleaning in the following cases:

- When droplets of ink get into the encoder. This may happen under certain environmental conditions, with very heavy use of the printer, high ink concentrations, and system errors affecting the scan axis.
- When there is grease on the Encoder Strip. This may happen if the Encoder Strip is allowed to touch the Carriage rail during repair operations or while clearing a paper jam.

Cleaning procedure

1. Switch off the printer and remove the power cable.
2. Move the Carriage Assembly to the capping position and uncap the printhead.

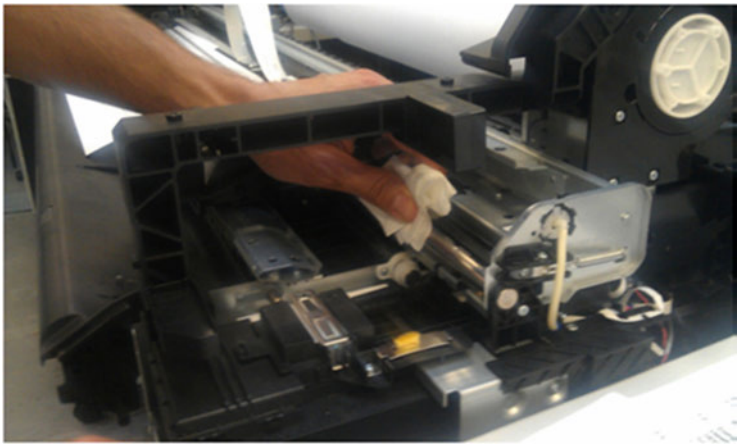
3. Place some paper over the slider rod in order to protect the lubricant and avoid cross-contamination with grease and general-purpose industrial cleaner.



4. Dampen a cloth with a general-purpose industrial cleaner.

5. Clean the encoder strip carefully, not moving the papers underneath and not stretching the strip.

6. Move the Carriage towards the center of the printer and clean the remaining portion of the strip.



7. Return the Carriage to the capping position and cap it manually.
8. Remove the papers carefully in order not to remove grease from the slider rod.

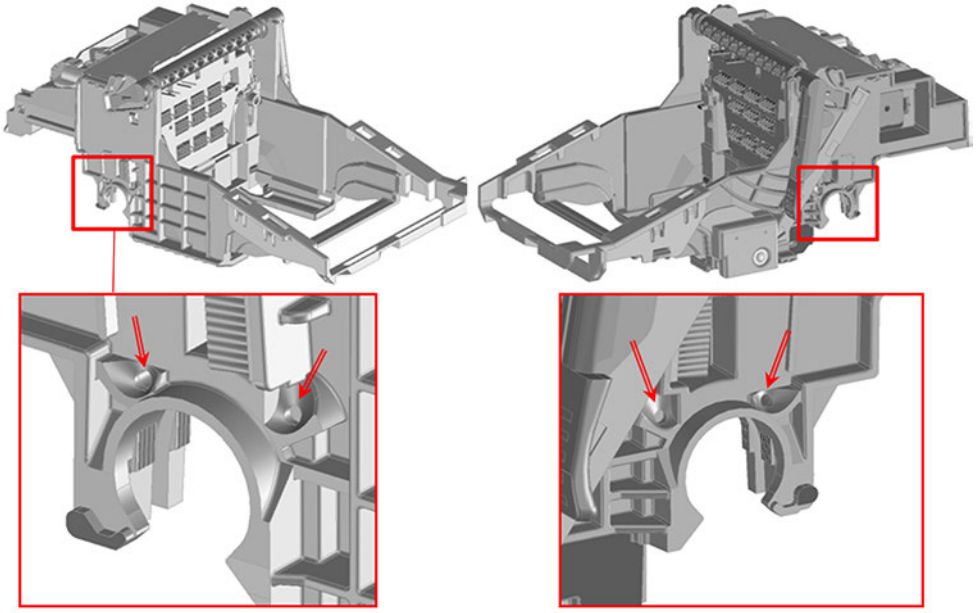
Carriage Lubrication

The Carriage should not normally require lubrication during the life of the printer. However, lubrication is recommended if there are intermittent Carriage jams.

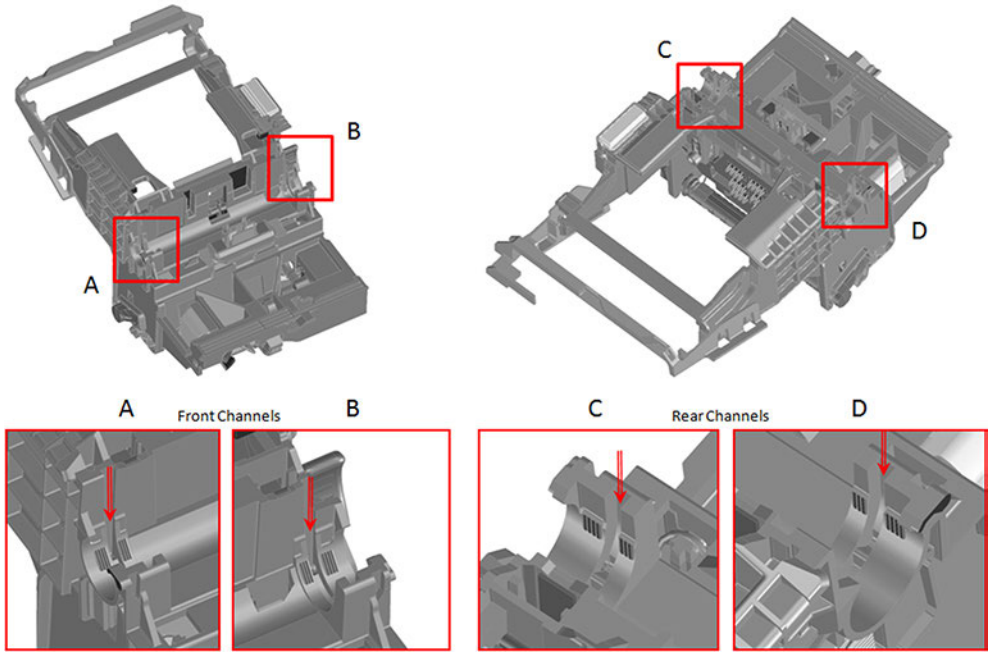
Lubricate the Carriage Assembly

The following steps provide the complete procedure for this topic.

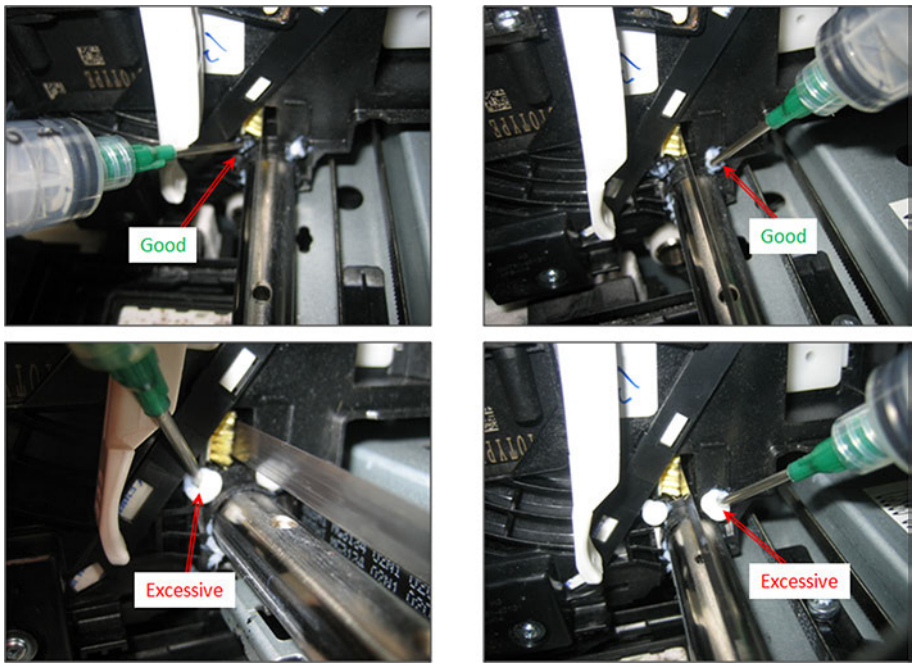
1. Lubricate the four areas indicated here.



2. Lubricate the areas indicated here, A-D.

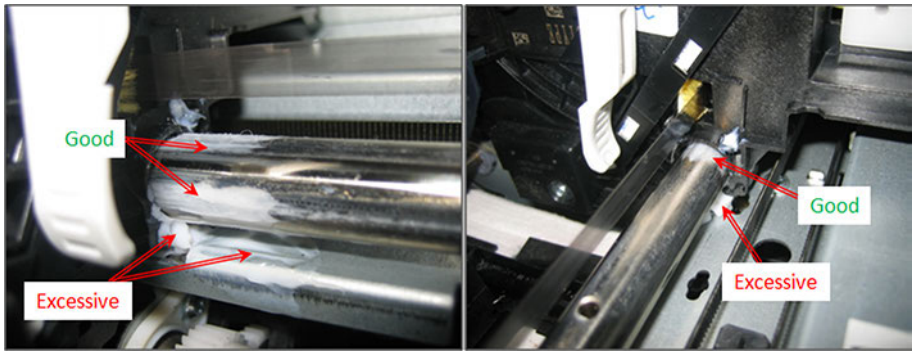


3. Use a syringe to inject grease into the ports. Push the needle against the ports firmly to direct grease into the channels.



NOTE: The Encoder Strip must stay free of grease. Wipe off with a dry lint-free cloth if necessary.

4. Move the Carriage 10–20 mm to check the grease on the rod.

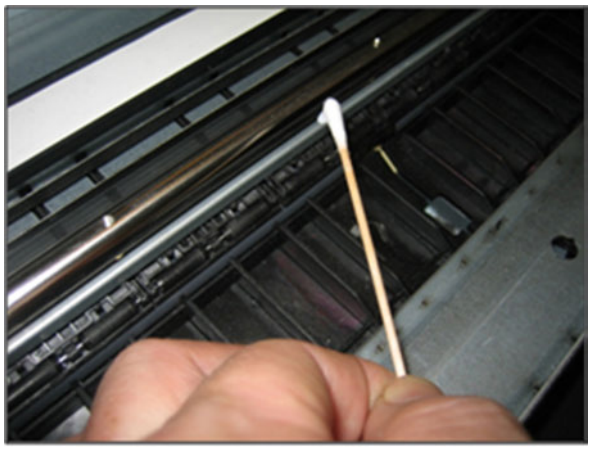


Lubricate the Carriage Rod

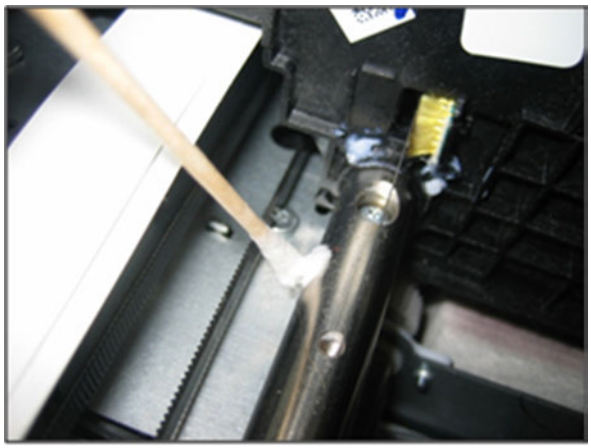
The following steps provide the complete procedure for this topic.

1. Apply a large drop of grease to a cotton swab.

2. Apply grease to the front of the rod and smear for a distance of about 50 mm.



3. Apply grease to the rear of the rod and smear for a distance of about 50 mm.



Moisture on the printer

Customers should use the printer in an environment between 20% and 80% relative humidity.

To recover from moisture condensation, turn the printer off, and wait until the printer is completely dry before using it again.

Level of printer usage

Normal printer use means 800,000 m Carriage traveled distance (which corresponds approximately to more than 15,000 A1 prints on average).

Under normal conditions, it will be approximately more than 5 years before the printer needs a maintenance. If the printer is used more than the normal usage conditions, then it will need maintenance service more frequently.

Table 6-1 Component usage triggers

Service Part	LIFE_VALUE	Maintenance Advice
Scan Axis Distance Covered	800,000 meters	PMKIT1
Right Spittoon Volume	600 cc	PMKIT2
Left Spittoon Volume	51 cc	PMKIT2

When these components of the printer exceed this amount, the Front Panel displays the following message:

"Maintenance #1 required"

"Maintenance #2 required"

Once one of the maintenance advised messages is displayed, the relevant preventive maintenance kit must be used to replace the most worn parts of the printer. See Removal and installation on page 293 when replacing the necessary parts.

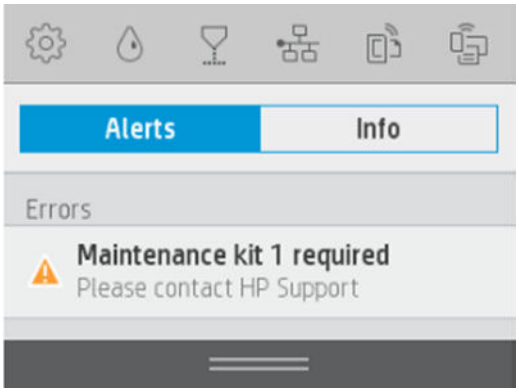
Preventive maintenance kits

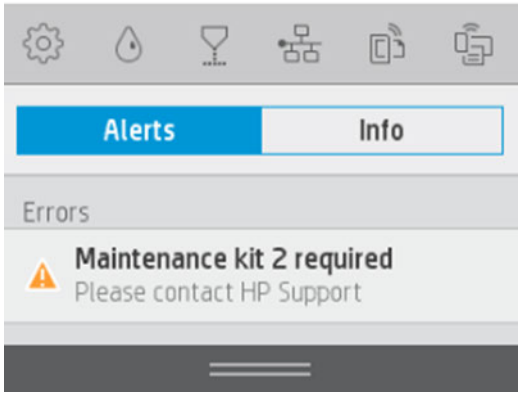
Preventive maintenance kits are designed to replace high-usage parts before they fail, avoiding printer downtime.

Warning message displayed on the front panel

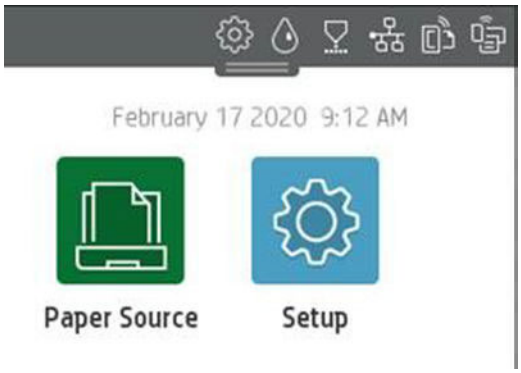
The following is the process that the customer will see when a component has passed a maintenance usage threshold and needs replacement.

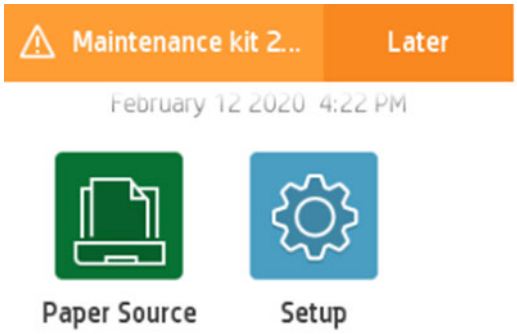
1. As the printer is turned on, if a component has passed its maximum-usage threshold a warning will be displayed. If the customer presses **OK**, the message disappears and will not reappear until the printer is turned on again.





2. A warning icon will remain over the wrench until the part has been replaced. If the wrench icon is touched, before going into the setup menu, the above warning message is shown again.





3. When the warning threshold is surpassed by a significant amount, reaching a critical threshold, the message becomes more assertive and the warnings appear more frequently.

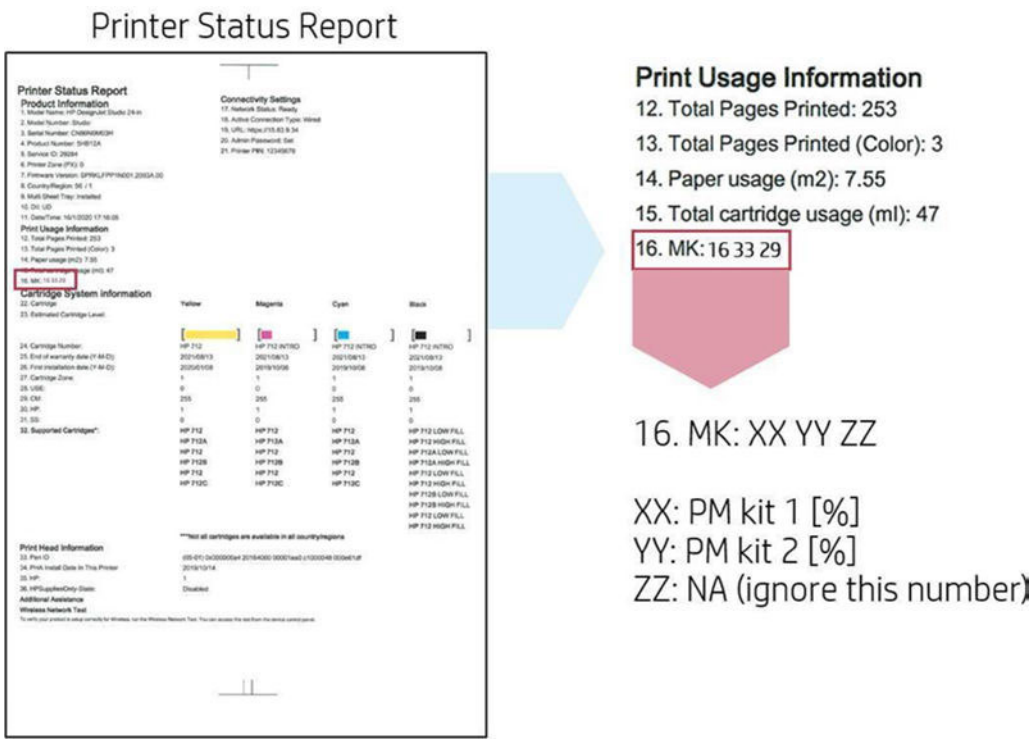
Table 6-2 Warning thresholds

PMK1 (Carriage)	800,000 meters
PMK2 (service station)	90% full of ink: 1 warning
	95% full of ink:1 warning per print
	100% full of ink: stops printing

Printing and interpreting the Preventive Maintenance Kit status report

The Preventive Maintenance Kit status report shows the status of the high-usage parts and how far they are from requiring replacement.

▲ To print the report, go to **Setup > Reports > Printer Status Report**.



Preventive Maintenance Kit #1 (Carriage)

The printer will alert the customer of the need to use PMK1 when the carriage has traveled 800,000 meters distance.

Table 6-3 PMK1 contents

PMK #1 for 24-in Carriage (5HB06-67013)		PMK #1 for 36-in (5HB10-67009)	
Part number	Description	Part number	Description
5HB06-67001	Carriage Assembly with Belt and Trailing Cable	5HB10-67001	Carriage Assembly with Belt and Trailing Cable
5HB06-67003	Carriage Motor	5HB06-67003	Carriage Motor
CQ890-67108	Cutter with clutch	CQ890-67108	Cutter with clutch

Preventive Maintenance Kit #2 (Service Station)

The printer will alert the customer of the need to use PMK2 when one or both of the spittoons exceed their life value threshold.

Table 6-4 PMK2 content

Part number	Description
5HB06-67026	Service Station Assembly SV

General Cleaning Instructions

For general cleaning, a lint-free cloth dampened with distilled water is recommended. Allow to dry, or use a cloth to dry the cleaned part completely.

Do not spray fluids directly onto the HP product. Spray the fluid on the cloth used for cleaning.

To remove stubborn dirt or stains, moisten a soft cloth with water and a neutral detergent, or a general-purpose industrial cleaner (e.g. Simple Green industrial cleaner). Remove any remaining soap foam with a dry cloth.

For glass surfaces, is recommended to use a soft, lint-free cloth lightly moistened with a non-abrasive glass cleaner or with general purpose glass cleaner (e.g. Simple green glass cleaner). Remove any remaining soap foam with a lint-free cloth dampened distilled water and dry it with a dry cloth to prevent spotting.

⚠ CAUTION: Do not use abrasives, acetone, benzene, sodium hydroxide, or carbon tetrachloride on the glass; they can damage it. Do not place or spray liquid directly onto the glass, as the liquid might seep under the glass and damage the device.

It is recommended to use a canister of compressed air to remove dust from electronic/electrical parts.

⚠ CAUTION: Do not use water-based cleaners for parts with electrical contacts, as it may damage electrical circuits.

NOTE: Do not use wax, alcohol, benzene, thinner, ammonia-based cleaners, or other chemical detergents, to prevent any damage to the product or the environment.

NOTE: In some locations the use of cleaning products is regulated. Ensure that your cleaner is following federal, state, and local regulations.

All products and company names are registered trademarks of their original owners. The use of any trademark is for identification and reference purposes only and does not imply any association between HP and the trademark owner or product brand.

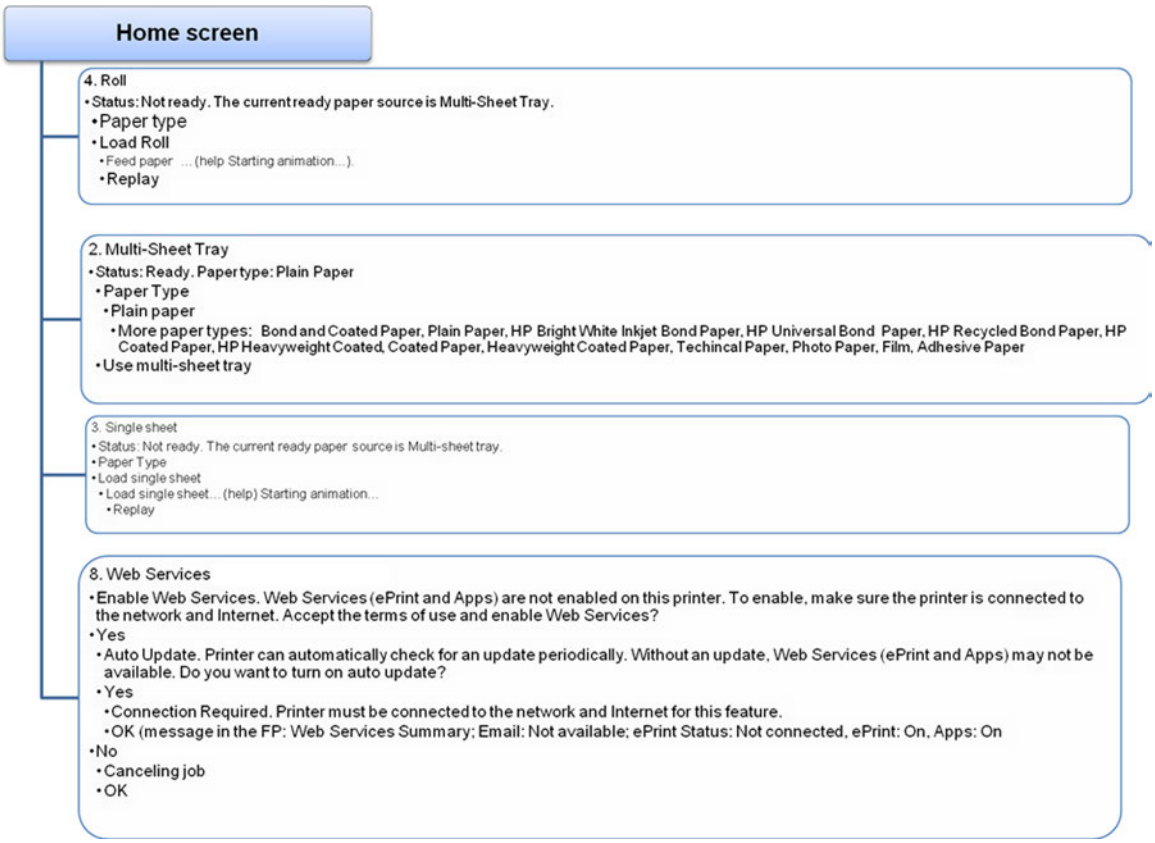
A Important links

The following are links to useful sources of information.

- Manuals:
  - http://www.hp.com/go/DesignJetT200/manuals
  - http://www.hp.com/go/DesignJetT600/manuals
  - http://www.hp.com/go/DesignJetStudio/manuals
- Printer Firmware:
  - http://123.hp.com
  - http://www.hp.com/go/DesignJetT200/firmware
  - http://www.hp.com/go/DesignJetT600/firmware
  - http://www.hp.com/go/DesignJetStudio/firmware
- Printer Software:
  - http://www.hp.com/go/DesignJetT200/software
  - http://www.hp.com/go/DesignJetT600/software
  - http://www.hp.com/go/DesignJetStudio/software
- Support:
  - http://www.hp.com/go/DesignJetT200/support
  - http://www.hp.com/go/DesignJetT600/support
  - http://www.hp.com/go/DesignJetStudio/support

B Front panel home screen

See the section "Front Panel" in the User Guide.



8. Web Services (from above, printer not connected to Internet)

The following options are accessed from the indicated icon on the front panel.

▲ Connection Required. Printer must be connected to the network and Internet for this feature.

▲ OK

▲ Web Services Summary / Email: Not available / ePrint Status: Not connected / ePrint: On / Apps: On

▲ Settings / Web Services Settings

- Display Email Address
- Print Info Page
- Printer Update
- Set Web Proxy

- ePrint (on/off)
- Apps (on/off)
- Remove Web Services

▲ OK (goes to home screen)

5. Bluetooth

The following options are accessed from the indicated icon on the front panel.

▲ Settings

a. Not Connected

i. Wireless (on/off)

ii. Wireless Setup Wizard

- This wizard will help you set up a wireless connection for the printer.
- Continue (button)
  - Single sheet / Status: Not ready / The current ready paper source is Multi-Sheet Tray.
  - Paper Type (button)
  - Load single sheet (button showing help animations)
  - Replay (button)
- Wi-Fi Protected Setup
- View Network Summary
  - View Wired > IP not applicable / MAC: 101F74700458 / Hostname: HP70036D
  - Print Details (button to Printing report (animation of HP logo) Paper source: Multi-Sheet Tray / Paper type: Plain paper
  - OK
  - View Wired (a drop-down menu takes you to the View Wired screen)

    View Wireless (a drop-down menu takes you to the Wireless Summary screen)
- Print Wireless Network Test
- Print Network Configuration
- Advanced Setup
  - Select I/O timeout : 30 s; 1 min; 2 min; 4.5 min; 5 min; 10 min; 15 min; 20 min; 30 min
  - Link Speed: Automatic; 10-Full; 10-Half; 100-Full; 100-Half
  - IP Settings (changing the IP address will remove the printer from the network)

OK (button activated): Automatic (DHCP) (button activated); Manual (Static) (button not activated)

- Hostname > Hostname: HP70036D

  Change (button without option to select); OK (button with option to click that takes you back to the Advanced Setup screen)

- Restore Network Defaults
- Print Details (button not activated)
- OK (goes to home screen)

b. Connected IP:xxx.xxx.x.xx. MAC:101G74700458 Hostname: HPxxxxxx

i. Wireless (on/off)

ii. Wireless Setup Wizard

- Wireless connection has already been set up. Are you sure you want to set it up again?
  - Yes (button that allows you to select but nothing happens)
  - No (button that allows you to select and then the options below appear)
- Wi-Fi Protected Setup
- View Network Summary
  - View Wired (a drop-down menu takes you to the View Wired screen)
  - View Wireless (a drop-down menu takes you to the Wireless Summary screen)
- Print Wireless Network Test
- Print Network Configuration
- Advanced Setup
  - Select I/O timeout : 30 s; 1 min; 2 min; 4.5 min; 5 min; 10 min; 15 min; 20 min; 30 min
  - Link Speed: Automatic; 10-Full; 10-Half; 100-Full; 100-Half
  - IP Settings (changing the IP address will remove the printer from the network)

    OK (button activated): Automatic (DHCP) (button activated); Manual (Static) (button not activated)

  - Hostname > Hostname: HP70036D

    Change (button without option to select); OK (button with option to click that takes you back to the Advanced Setup screen)

- Restore Network Defaults
- Print Details (button not activated)
- OK (goes to home screen)

6. Estimated ink levels

The following options are accessed from the indicated icon on the front panel.

- More (button that takes you to a drawing of the ink levels of all cartridges)
- Print Report
  - Printing Report (message of printing in progress with animation of HP logo)
  - Paper source: Multi-Sheet Tray / Paper type: Plain Paper

7. Setup (Wireless off)

The following options are accessed from the indicated icon on the front panel (when Wireless connection is off).

1. Last page
   - Last page is not available to reprint (there is a drop-down menu with numbers)
   - Reprint (button that takes you back to the Setup menu)
2. Form feed
3. Form feed and cut
4. Connectivity
   a. Not Connected
   b. Wireless (on/off)
   c. Wireless Setup Wizard

      This wizard will help you set up a wireless connection for the printer.

      i. Press Print Guide for easy wireless setup instruction

      ii. Print Guide
         - Printing Report
           - Paper source: Multi-Sheet Tray
           - Paper type: Plain Paper
           - Wi-Fi Protected Setup
           - Setting up the network through Wi-Fi Protected Setup (WPS) has timed out
           - For diagnostic information, press Print Report. For help, press ?
           - Print Report
           - OK
           - Continue
         - Searching for wireless routers...

d. Wi-Fi Protected Setup

i. Two ways to set up using Wi-Fi Protected Setup (WPS):

- Use the WPS button, if available, on your router.
- Enter the PIN generated by the printer in the router's configuration software.

For help, press ?

ii. Continue

- Wi-Fi Protected Setup
  - Push Button
  - Wi-Fi Protected Setup

    On the router, press and hold the WPS button for 3 seconds to connect to the network.
- Show Me
  - Starting animation...

    Replay

    Done

iii. PIN

e. View Network Summary

- View Wired
  - Wired Summary

    IP: Not applicable

    MAC: 02BAD0AD5AB5

    Hostname: HPxxxxxx
  - Print Details
  - OK
- View Wireless

f. Print Wireless Network Test

g. Print Network Configuration

h. Advanced Setup

i. Restore Network Defaults

5. Image quality maintenance

- Printhead information
- Align printhead

- Clean printhead
- Replace printhead
- Print diagnostic image
- Paper advance calibration
  - Calibrate ready paper
  - Reset ready paper calibration

6. Printer preferences
   - Screen Brightness (there is a picture of brightness regulation)
     - OK
   - Language
     - English, Français, Deutch, Português, Español, Italiano, Japanese, Korean, Chinese, Taiwanese, etc.
   - Country/Region
     - USA, Canada, Australia, India, UK, Singapore, New Zealand, South Africa, Hong Kong, Israel, Thailand, Saudi Arabia, UAE, Malaysia, Philippines, Ireland, Indonesia, Egypt, Kuwait, Jordan, Pakistan, Qatar, Lebanon, Vietnam, Argentina, Austria, Belarus, Belgium, Brazil, Bulgaria, Chile, China, Columbia, Costa Rica, Croatia, Czech Republic, Denmark, Ecuador, Estonia, Finland.
   - Keyboard: QWERTY (selected) /AZERTY/QWERTZ
   - Auto Off: Off (selected) / 2 Hours/ 4 Hours/ 8 Hours/ 12 Hours
   - Sleep: After 5 Minutes / After 15 Minutes / After 30 Minutes (selected) / After 60 Minutes / After 120 Minutes / After 240 Minutes
   - Print retrieval : Select drying time / Enable cutter
7. Anonymous usage information
8. Internal prints
   - Demo prints
   - User information prints
9. Service menu
   - Restore factory settings
   - Reset all paper calibration

7. Setup (Wireless on)

The following options are accessed from the indicated icon on the front panel (when Wireless connection is on).

1. Last page
   - Last page is not available to reprint (there is a drop-down menu with numbers)

- Reprint (button that takes you back to the Setup menu)

2. Form feed
3. Form feed and cut
4. Connectivity
    a. Connected
    b. Wireless (on/off)
    c. Wireless Setup Wizard

        This wizard will help you set up a wireless connection for the printer.

        i. Press Print Guide for easy wireless setup instruction
        ii. Print Guide
            - Printing Report
                – Paper source: Multi-Sheet Tray
                – Paper type: Plain Paper
                – Wi-Fi Protected Setup
                – Setting up the network through Wi-Fi Protected Setup (WPS) has timed out
                – For diagnostic information, press Print Report. For help, press ?
                – Print Report
                – OK
                – Continue
            - Searching for wireless routers...
    d. Wi-Fi Protected Setup
        i. Two ways to set up using Wi-Fi Protected Setup (WPS):
            - Use the WPS button, if available, on your router.
            - Enter the PIN generated by the printer in the router's configuration software.

              For help, press ?
        ii. Continue
            - Wi-Fi Protected Setup
                – Push Button
                – Wi-Fi Protected Setup

                  On the router, press and hold the WPS button for 3 seconds to connect to the network.
            - Show Me

- Starting animation...

  Replay

  Done

iii. PIN

e. View Network Summary

- View Wired
  - Wired Summary

    IP: Not applicable

    MAC: 02BAD0AD5AB5

    Hostname: HPxxxxxx
  - Print Details
  - OK
- View Wireless

f. Print Wireless Network Test

g. Print Network Configuration

h. Advanced Setup

- Select I/O timeout: 30 s / 1 min / 2 min / 5 min / 10 min / 15 min / 20 min / 30 min
- Link Speed: Automatic / 10-Full / 10-Half / 100-Full / 100-Half
- IP Settings (changing the IP address will remove the printer from the network)
  - Automatic (DHCP)
  - Manual (static)
- Hostname > Hostname: HP70036D
  - Change

    Changing the hostname affects the existing connection between your computer and this printer. You would need to reestablish connection.

    OK
  - OK

i. Restore Network Defaults

5. Image quality maintenance

- Printhead information
- Align printhead
- Clean printhead

- Replace printhead
- Print diagnostic image
- Paper advance calibration
  - Calibrate ready paper
  - Reset ready paper calibration

6. Printer preferences
   - Screen Brightness (there is a picture of brightness regulation)
     - OK
   - Language
     - English, Français, Deutch, Português, Español, Italiano, Japanese, Korean, Chinese, Taiwanese, etc.
   - Country/Region
     - USA, Canada, Australia, India, UK, Singapore, New Zealand, South Africa, Hong Kong, Israel, Thailand, Saudi Arabia, UAE, Malaysia, Philippines, Ireland, Indonesia, Egypt, Kuwait, Jordan, Pakistan, Qatar, Lebanon, Vietnam, Argentina, Austria, Belarus, Belgium, Brazil, Bulgaria, Chile, China, Columbia, Costa Rica, Croatia, Czech Republic, Denmark, Ecuador, Estonia, Finland.
   - Keyboard: QWERTY (selected) /AZERTY/QWERTZ
   - Auto Off: Off (selected) / 2 Hours/ 4 Hours/ 8 Hours/ 12 Hours
   - Sleep: After 5 Minutes / After 15 Minutes / After 30 Minutes (selected) / After 60 Minutes / After 120 Minutes / After 240 Minutes
   - Print retrieval : Select drying time / Enable cutter
7. Anonymous usage information
8. Internal prints
   - Demo prints
   - User information prints
9. Service menu
   - Restore factory settings
   - Reset all paper calibration

C Support menu and Service menu tree

See Support and Service menu trees.

Menu options

See the following table for the complete list of options available.

Table C-1 Information Menu

1.1	Model number
1.2	Serial number
1.3	Region/Language
1.4	Counters
1.5	Firmware version
1.6	Error log
1.7	Printer region
1.8	Pen supply region
1.9	Ink supply serial number (SN)
1.10	Ink supply level of ink (LOI)
1.11	Relocks remaining
1.12	Relock attempts remaining
1.13	Gather/scramble scheme
1.14	Checksum for relock data input
1.15	Wireless region

Reset Menu

2.1	Country/Language reset
2.2	Webserver Password
2.3	OOBE reset
2.4	PMK1 reset*
2.5	PMK2 reset*
2.6	Mark tubes as empty*
2.7	Line feed mfg calibration
2.8	RTC battery expired*
2.9	Power-On Button behavior*

Systems Configuration Menu

3.1	Set boot mode to user mode
3.2	Set wireless Region*
3.3	Convert unit to OEM-SKU*
3.4	Config SKU

D How to check whether your computer is connected to your network

There are several different ways of confirming connectivity between your computer and your network.

1. If you are not using a unique network name (SSID), then it is possible that the computer could be connected to the wrong network. The following steps can help you to determine whether your computer is connected to the correct network.

   Windows

   a. Click **Start**, click **Control Panel**, point to **Network Connections**, and then click **View Network Status** and **Tasks** – or – Click **Start**, select **Settings**, click **Control Panel**, double-click **Network Connections**, click the **View** menu, and then select **Details**.

      Leave the network dialog box open while you continue to the next step.

   b. Disconnect the power cord from the wireless router. The connection status of the computer should change to **Not Connected**.

   c. Reconnect the power cord to the wireless router. The connection status should change to Connected.

   Mac OS X

   ▲ Click the **AirPort** icon in the menu bar at the top of the screen. From the menu that appears, you can determine if the AirPort is turned on and which wireless network the computer is connected to.

   NOTE: For more detailed information about the AirPort connection, click **System Preferences** in the Dock, and then click **Network**. If the wireless connection is working correctly, a green dot appears next to AirPort in the list of connections. For more information, click the **Help** button in the window.

   If you are unable to get the computer connected to your network, contact the person who set up your network or the router manufacturer as there may be a hardware issue with the router or computer.

   If you are able to access the Internet and are using a computer running Windows, you can also access the HP Network Assistant at http://www.hp.com/sbso/wireless/tools-setup.html?jumpid=reg_R1002_USEN for help in setting up a network (this website is available in English only).

2. Print the printer's Wireless Configuration page. After the page has been printed, check the Network Status and URL. The Network Status is Ready if the printer is actively connected to a network, or Offline if it is not (in the latter case, run the Wireless Network Test). The URL is the network address assigned to the printer by the router; you need it to connect to the printer's Embedded Web Server.

3. If you have established that the computer and the printer both have active connections to a network, you can check whether they are on the same network by trying to access the printer's Embedded Web Server.

4. The printer may be too far away from the WiFi access point or there may be intervening objects that are preventing connection. You can try moving the printer closer to the WiFi acess point.

5. Check that the WEP key password entered is the correct one. The pass phrase capitalization, punctuation, etc., must all match exactly.

6. If you cannot access the Embedded Web Server and are sure that both the computer and printer have active connections to the same network, the firewall security software could be blocking communication. Temporarily turn off any firewall security software running on the computer, and try to access the Embedded Web Server again. If you can access it, try using the printer for printing.

   If you are able to access the Embedded Web Server and use the printer with the firewall turned off, you need to reconfigure your firewall settings to allow the computer and printer to communicate with each other over the network.

   If you are able to access the Embedded Web Server, but are still unable to use the printer even with the firewall turned off, try enabling the firewall software to recognize the printer.

7. Make sure the printer is online and ready.

   If you have the HP software installed, you can check the printer's status from your computer to see if the printer is paused or offline, preventing you from using it. To check the printer's status, complete the following steps:

   Windows

   a. From **Start** > **Settings**, and then click **Printers** or **Printers and Faxes**. - or - From **Start** > **Control Panel**, and then double-click **Printers**.

   b. If the printers on the computer are not being displayed in Details view, click the **View** menu, and then click **Details**.

   c. Do one of the following, depending on the printer status:

      - If the printer is Offline, right-click the printer, and click Use Printer Online.
      - If the printer is Paused, right-click the printer, and click Resume Printing.

   d. Try using the printer over the network.

   Mac OS X

   a. Click System Preferences in the Dock, and then click Print & Fax.

   b. Select the printer, and the click Print Queue.

   c. If Jobs Stopped appears in the window that appears, click Start Jobs.

8. If you install the HP software a second time, the installer may create a second version of the printer driver in the Printers or Printers and Faxes folder (Windows only). If you have difficulties printing or connecting to the printer, make sure the correct version of the printer driver is set as the default.

   a. From **Start** > **Settings**, and then click **Printers** or **Printers and Faxes**. - or - From **Start** > **Control Panel**, and then double-click **Printers**.

   b. Right-click the printer icon and then click **Properties**, **Document Defaults**, or **Printing Preferences.**

   c. On the **Ports** tab, look for a port in the list with a checkmark. The version of the printer driver that is connected wirelessly has **Standard TCP/IP Port** as the Port description, next to the checkmark.

   d. Right-click the printer icon for the version of the printer driver that is connected wirelessly, and select Set as Default Printer.

9. Try restarting the HP Network Device Support service (Windows only).

   a. Delete any print jobs currently in the print queue.

b. On the desktop, right-click My Computer or Computer, then click Manage.

c. Double-click Services and Applications, then click Services.

d. Scroll down the list of services, right-click HP Network Devices Support, then click Restart.

e. After the service restarts, try using the printer over the network again.

If you still cannot use the printer over the network, or if you have periodic problems in doing so, the firewall may be interfering, or there may be a problem with the network configuration or router. Contact the person who set up the network or the router manufacturer for help.

If you are able to use the printer over the network, the network setup was successful.

E Wireless troubleshooting report error cases

The following error alerts fall into two categeries: "Warning" and "Failure".

Error case table

In the first column of the following table, W indicates Warning and F indicates Failure.

W/F	#	Description	Internal conditions and parameters	Internal details	Troubleshooting
W	0	Ethernet cable plugged in	Ethernet cable plugged in && ncaPolicy != nHot && powerOnEnabled == true && no SSID found	The Ethernet cable is plugged in. The printing device cannot connect to a wireless network while it is connected via Ethernet. To connect wirelessly, unplug the cable from the printing device and run these tests again.	ATTENTION: Your printer is unable to connect to your wireless router. SOLUTION 1: To connect wirelessly, disconnect the Ethernet network cable from your printer.
W	1	Ethernet cable plugged in and SSID found	Ethernet cable plugged in && ncaPolicy != nHot && powerOnEnabled == true && SSID found	A wireless network was found that matches what you have configured (%s). However, the Ethernet cable is plugged in, which will prevent you from connecting to it. To connect wirelessly, unplug the cable from the printer and run these tests again. The %s parameter will be the SSID name that is displayed on the advanced wireless networking webpage.	ATTENTION: Your printer is unable to connect to your wireless router. SOLUTION 1: To connect wirelessly, disconnect the Ethernet network cable from your printer.
W	2	Wireless adaptor disabled	powerOnEnabled == false	The wireless network interface in the printing device (%s) is not enabled. You cannot connect to a wireless network until this is turned on. If you want to connect to a wireless network, consult the documentation that came with the printer on how to enable the wireless interface. The first %s parameter will be the name of the interface, i.e. “Wifi0”.>>	ATTENTION: The wireless radio on your printer is currently turned off. SOLUTION 1: To connect wirelessly, disconnect the Ethernet network cable from your printer. Refer to the assembly instructions that came with your printer.
F	4	Radio hardware not functioning properly	powerOnEnabled == ncaTrue && radioHardwareStatus != ncaRSInitialized	The wireless network interface (%s) is not functioning properly. The printer cannot connect to a wireless network. This may be a problem with the printer hardware. As a first step, disconnect the power from the printer, wait a few seconds, then plug the power back in and re-run these tests. If this error message persists, the printer will need to be serviced. The %s parameter will be the name of the interface, i.e. “Wifi0”.	ATTENTION: The wireless radio is not functioning. Contact HP support. The Wireless PCA needs to be repaired.
F	100	Possible MAC filtering	Trying to associate && mode == infrastructure && SSID matches && completion code != AkmFailedPmkInvalid all parameters consistent	The printer is configured to connect to a wireless network (%s). An access point (AP) with this SSID has been found and its settings are consistent with those configured in the printer, but you are **not** connected. Some possible causes and fixes are:	ATTENTION: Your printer is unable to connect to your wireless router. MAC address filtering may be enabled on your wireless router, which can prevent your printer from connecting to your wireless network during setup.

W/F	#	Description	Internal conditions and parameters	Internal details	Troubleshooting
				The printer may be temporarily experiencing a problem. Turning the printer off and then back on may correct this problem. The AP may be temporarily experiencing a problem. Turning the AP off and then back on may correct this problem. Note that turning off the AP will cause other connected devices (computers, printers, etc.) to lose their network connection until the AP is turned back on. The AP firmware may be out of date. Check the manufacturer's website to see if an update is available. MAC address filtering may be enabled on the AP. This can prevent the printer from connecting if its MAC address is not in the AP's approved list of devices. The person who initially set up your network may have done this for added security. If this is the case you can either disable MAC filtering in the AP, or add the printing device's MAC address (%02x:%02x:%02x:%02x:%02x:%02x) to the approved list in the AP. Refer to the documentation that came with the AP for more information about MAC address filtering. The first %s parameter will be the SSID name that is displayed on the advanced wireless networking webpage. The second set of %s parameters will be the MAC address of the printer.	SOLUTION 1: If MAC address filtering is enabled and you would like to keep it enabled, you must add the MAC address of your printer (available in this Test Report) to the list of permitted devices for your wireless router before continuing.
F	101	Consistency check when only one AP found with matching name while trying to associate	mode == infrastructure && SSID matches exactly one AP && not all parameters consistent	The settings you entered in the printer do not match those of the wireless network you are trying to connect to (%s). Connection was not made. Ensure that all of the wireless settings in the printer match those in the access point (AP) for this network. Assuming that the settings in the AP are the correct ones, change the wireless network settings in the printer. Consult the documentation that came with the printing device on how to do this. If you do need to change the settings in the AP then consult the documentation that came with the AP on how to do this. Note that this will require you to update settings in all devices (computers, printers, etc.) that connect wirelessly through this AP. The first %s parameter will be the SSID name that is displayed on the advanced wireless webpage.	ATTENTION: Your printer settings do not match your wireless router settings. SOLUTION 1: Run the Wireless Setup Wizard to configure your printer.
W	103	AutoIP configured	Adaptor assigned an AutoIP		
W	200	Check that configuration has	currentState != ncaASOff && mode	Your printer is configured to connect to a wireless network with a manufacturer's	ATTENTION: Your wireless network is currently using

W/F	#	Description	Internal conditions and parameters	Internal details	Troubleshooting
		manufacturer default SSID for access point	== infrastructure && SSID matches entry in manufacturer default list	default SSID name (%s). You should change the name to something unique to you in order to avoid connecting to the wrong network. You will most likely experience network problems if you do not correct this problem. Even if the network appears to be functioning correctly now, it may not in the future. Refer to the documentation that came with your access point to change the SSID name. If you do change the SSID name of the wireless network, note that this will require you to update settings in all devices (computers, printers, etc.) that connect to this network. The %s parameter will be the SSID name that is displayed on the advanced wireless networking webpage.	the manufacturer's default network name (SSID). It is recommended that you change your network name (SSID) to be unique, to avoid connecting to other wireless networks that may also be using the same default network name. If you change your network name, you will need to configure the SSID on all wireless devices to match your new network SSID.
F	201	SSID not found, infrastructure mode	Trying to associate && mode == infrastructure && configured SSID is not found in directed scan list	The SSID (%s) that you have entered in the printer does not match any of the available wireless network access points (AP). Connection was not made. The undirected scan list above shows all of the access points that were found nearby that are broadcasting their SSID. Your access point may not be in this list if broadcasting has been disabled. Note that if broadcasting is off it won't affect your ability to connect, just the visibility of the AP in the undirected scan list. When the SSID is correct and the AP is functioning properly, it will show up in the directed scan list above. Some possible causes and fixes for the connection problem are: You may have entered an incorrect SSID in the printing device. Refer to the documentation that came with the printer for information on how to change the SSID. The AP may be powered off. Make sure your AP is powered on and that the SSID is correct. Refer to the documentation that came with your AP to verify its SSID. The printer may be too far from your AP or there may be intervening objects that are preventing connection. You can try moving the printer and the AP closer together. The %s parameter will be the SSID name that is displayed on the advanced wireless networking webpage.	ATTENTION: Your printer is unable to connect to your wireless router. SOLUTION 1: Check that your wireless router is powered on. SOLUTION 2: Check that your printer network name (SSID) matches your wireless router network name (SSID) exactly. If they do not match exactly, run the Wireless Setup Wizard to configure your printer.
F	202	SSID not found, ad hoc mode	Trying to associate && mode == ad hoc && configured SSID is not found in directed scan list	The printer has created an ad-hoc wireless network with SSID %s. However, no other wireless devices have been found that are using this SSID. Connection was not made. This is not a problem if the other devices you want to connect to are not powered on yet. If they are powered on then some possible causes and fixes are: You may have entered an incorrect SSID in the printer. In order to form an ad-hoc	ATTENTION: Your printer is unable to connect to your wireless router. SOLUTION 1: Check that your access point is powered on. SOLUTION 2: Check that your printer network name (SSID) matches your access point network name (SSID) exactly.

W/F	#	Description	Internal conditions and parameters	Internal details	Troubleshooting
				wireless network, all the devices must be using the same SSID. Refer to the documentation that came with the printer for information on how to change the SSID. The printer may be too far from any other devices in the wireless network or there may be intervening objects that are preventing connection. You can try moving the printer closer to the other devices. Note that you cannot connect to an access point (AP) using the ad-hoc method. Ad-hoc mode allows devices to communicate directly without the use of an AP. Infrastructure mode allows you to connect to a wireless network using an AP. Refer to the documentation that came with the printer if you want to connect to a wireless network with an AP. The %s parameter will be the SSID name that is displayed on the advanced wireless networking webpage.	If they do not match exactly, run the Wireless Setup Wizard to configure your printer.
F	203	SSID found if doing case-insensitive search, ad hoc and infrastructure	Associated or trying to associate && any mode && non-exact SSID match found in undirected scan. Non-exact match means case-insensitive compare is true and case-sensitive compare is false.	A wireless network was found (%s) whose name closely matches the name you have entered (%s) in the printer's wireless settings. You are not connected to this network. If this is the network you are trying to connect to, you will need to change the SSID name you have entered in the printer. Refer to the documentation that came with the printer for information on how to do this. Note that network SSID names must be entered exactly as they appear in the list above: capitalization, punctuation, etc., must all match. The first %s parameter will be the SSID name found during the un-directed scan, the second %s parameter will be the SSID name that is displayed on the advanced wireless networking webpage.	ATTENTION: Your printer is unable to connect to your wireless router. A network name (SSID) was found that closely matches your wireless network name except for upper/lower case. SOLUTION 1: Run the Wireless Setup Wizard to re-enter the SSID correctly.
W	400	Signal strength when associated	Associated && adaptor signal strength < -85 dB	The signal strength of the wireless network you are connected to (%s) is %d dBm. This is below -85 dBm which may result in poor performance or an intermittent connection. If you are using an access point (AP), bring the printing device and AP closer together to increase the signal strength. If you are connecting to an ad-hoc wireless network, bring the printer closer to other devices in the wireless network. In either case there may also be intervening objects that are causing the signal strength to weaken. Large metal objects such as refrigerators, water heaters, or office furniture can block wireless signals. Try to ensure that such objects are not directly between the printer and the AP or other devices in the wireless network.	ATTENTION: The wireless signal strength between your printer and wireless router is weak. SOLUTION 1: Move your printer closer to your wireless router and avoid obstructions such as walls and large metal objects. SOLUTION 2: After moving your printer, run the wireless network test to verify the signal strength.

W/F	#	Description	Internal conditions and parameters	Internal details	Troubleshooting
W	500	Check for multiple access points (or wireless repeaters) with the target SSID	Associated or trying to associate && infrastructure mode && number of directed scans > 1	There were %d access points (APs) (or wireless repeaters) with your configured SSID (%s) found in the area. The printer will connect to the one with the strongest signal. If you've set up a network with multiple APs, this is a normal condition. Note that the APs must be connected to the same LAN, usually via a wired connection. A special case is a wireless repeater, which is an AP but uses a wireless connection to connect to a "master" AP. If you have not set up a network with multiple APs, it means that someone else has a network with the same SSID nearby, in which case you could connect to the other network instead of your own. You will probably experience network problems if you do not correct this problem. Even if the network appears to be functioning correctly now, it may not in the future. You can solve this problem by creating a wireless network with a unique SSID. Refer to the documentation that came with your access point for information on how to change its SSID. When you change the SSID name of the wireless network, note that this will require you to update settings in all devices (computers, printers, etc.) that connect to this network. The %d parameter is an integer value of the number of networks found with the name, the %s parameter will be the SSID name found in the network scan.	ATTENTION: More than one wireless router has been found that matches your wireless network name (SSID). If this is not intended, your printer may connect to the wrong wireless network. To avoid this, change your wireless network name (SSID) to be unique. If you change your network name, you will need to configure the SSID on all wireless devices to match your new network SSID.
F	600	Incorrect WEP key	Connected && associated && encryption mode == WEP && wepDecryptStatus == ncaD11WDSFailed	The printer is connected to a wireless network (%s) that requires a WEP key. The key you have provided does not match what is expected. Although it looks as if a valid connection is made, the printer will not receive any data. You will need to enter a matching WEP key in the printer. Refer to the documentation that came with the printer for information on how to change the WEP key. The person who initially set up your network should be able to provide you with the correct WEP key to use. Alternately, if you are connecting to an access point (AP), you may be able to find the matching WEP key from the AP. Consult the documentation that came with the AP on how to do this. The %s parameter will be the SSID name found in the network scan.	ATTENTION: The WEP security key configured on your printer does not match your wireless router setting. The WEP key index setting on your printer has been changed from the default setting of "1". This may cause problems when connecting to your wireless network if your wireless router is not using the same WEP key index value. SOLUTION 1: Run the Wireless Setup Wizard to re-enter your wireless network WEP security key.
I	601	Unknown WEP decrypt status	Connected && associated && encryption mode == WEP &&	The printer is connected to a wireless network (%s) that requires a WEP key. However, no data have been sent to the printer. Because of this, it is unknown	

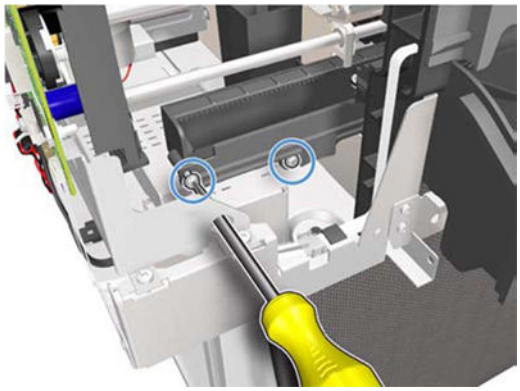
W/F	#	Description	Internal conditions and parameters	Internal details	Troubleshooting
			wepDecryptStatus == ncaD11WDSUnknown	whether the WEP key entered in the printer matches that of the wireless network. Usually this is a temporary condition. Once some data are sent, the printer will be able to determine whether the WEP keys match. Try running this report again in a few seconds. The %s parameter will be the SSID name found in the network scan.	
W	602	WEP key index is different from 1	Connected && associated && encryption mode == WEP && wepDecryptStatus == ncaD11WDSUnknown || ncaD11WDSFailed && wepKeyIndex != 1	The printer is connected to a wireless network (%s) that requires a WEP key. Data are not being received. You are using a WEP key index of %d. A WEP key index of 1 is typical. If the index does not match what the wireless network is expecting, it will prevent the printer from being able to receive data. The person who initially set up your network should be able to provide you with the correct WEP key index to use. Alternately, if you are connecting to an access point (AP), you may be able to find the matching WEP key index from the AP. Consult the documentation that came with the AP on how to do this. If you do need to change the WEP key index of the printer, refer to the documentation that came with the printer for information on how to do this. The %d parameter will be the index, the %s parameter will be the SSID name found in the network scan.	ATTENTION: The WEP key index setting on your printer has been changed from the default setting of “1”. This may cause problems when connecting to your wireless network if your wireless router is not using the same WEP key index value. SOLUTION 1: Run the Wireless Setup Wizard to re-enter your wireless network WEP security key.
F	604	Non-default WEP Authentication	associationState != ncaD11ASAssociated && communicationMode == infrastructure && wirelessEncryptionMode == WEP && wirelessAuthMode != OpenThenShared	The printer is configured to connect to a WEP wireless network (%s), and the printer’s configured authentication method (\"%s\") has been changed from its default setting (\"Automatic (Open then Shared)\"). This could potentially cause the printer to be unable to connect to the wireless network. The printer’s default setting should always work and avoids any potential future problems. Unless you know that the printer’s current setting is correct for your wireless network, it is recommended that this setting be changed back to the default. Refer to the documentation that came with the printer for information on how to configure the WEP authentication method. The first %s parameter will be the SSID name found in the network scan , the second %s parameter will be the actual value of the setting.	ATTENTION: The WEP key authentication setting on your printer has been configured to a non-default setting. This may cause problems when connecting to your wireless network if your wireless router is not using the same WEP authentication method. SOLUTION 1: Refer to your printer documentation for information on configuring WEP.
F	605	Non-default WPA Encryption	Associated or trying to associate && communicationMode	The printer is configured to connect to a WPA-PSK wireless network, (%s) and the printer’s configured encryption method	ATTENTION: The WPA encryption method on your printer has been configured

W/F	#	Description	Internal conditions and parameters	Internal details	Troubleshooting
			== infrastructure && wirelessAuthMode == ncaD11AMWPA_PSK && wirelessEncrypMode != ncaD11EMAESorTKIP	(\"%s\") has been changed from its default setting (\"Automatic (AES or TKIP)\"). This could potentially cause the printer to be unable to connect to the wireless network. The printer's default setting should always work and avoids any potential future problems. Unless you know that the printer's current setting is correct for your wireless network, it is recommended that this setting be changed back to the default. Refer to the documentation that came with the printer for information on how to configure the WPA-PSK encryption method. The first %s parameter will be the SSID name found in the network scan , the second %s parameter will be the actual value of the setting.	to a non-default setting. This may cause problems when connecting to your wireless network if your wireless router is not using the same WPA encryption method. SOLUTION 1: Refer to your printer documentation for information on configuring WPA.
F	606	Non-default WPA Authentication	associationState != ncaD11ASAssociated && communicationMode == infrastructure && wirelessAuthMode == ncaD11AMWPA_PSK && rsnAuthType != ncaD11ATAutoWPA	The printer is configured to connect to a WPA-PSK wireless network, (%s) and the printer's configured WPA version (\"%s\") has been changed from its default setting (\"Automatic (WPA2 or WPA1)\"). This could potentially cause the printer to be unable to connect to the wireless network. The printer's default setting should always work and avoids any potential future problems. Unless you know that the printer's current setting is correct for your wireless network, it is recommended that this setting be changed back to the default. Refer to the documentation that came with the printer for information on how to configure the WPA-PSK WPA version. The first %s parameter will be the SSID name found in the network scan , the second %s parameter will be the actual value of the setting.	ATTENTION: The WPA authentication method on your printer has been configured to a non-default setting. This may cause problems when connecting to your wireless network, if your wireless router is not using the same WPA authentication method. SOLUTION 1: Refer to your printer documentation for information on configuring WPA.
F	609	Non-standard WPA mode	Radio connected to an 802.11n-only AP which supports WPA with TKIP.		ATTENTION: Your printer is unable to connect to your wireless router. This may be caused by the following settings on your wireless router: 1) 802.11n devices only and 2) WPA-TKIP only encryption. WPA-TKIP is no longer allowed for newer certified wireless 802.11n devices because WPA-AES provides stronger security. SOLUTION 1: Change your wireless router encryption setting to “WPA-AES” or “WPA-AES or TKIP” (also called “mixmode”), then run the printer's Wireless Setup Wizard again.

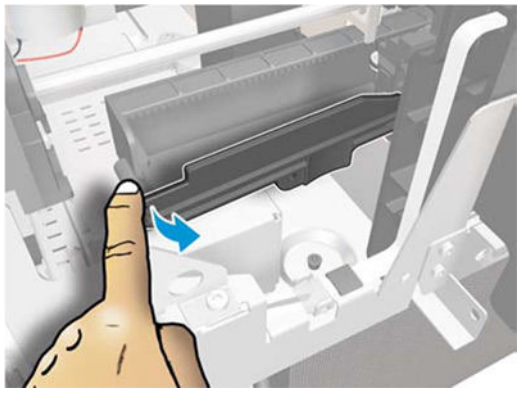
F Updating the cutter design

Follow this procedure in order to update the old cutter design to the new one.

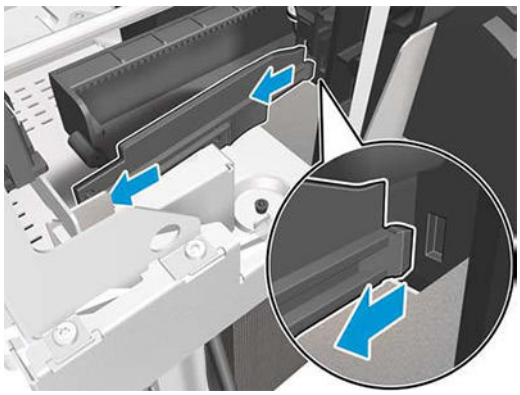
1. Remove two T-10 screws.



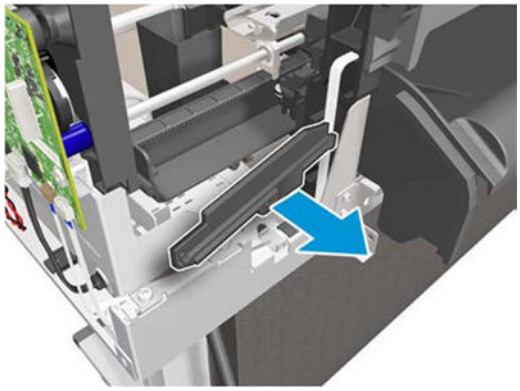
2. Pull out the left side of the Cutter Extraction Lid.



3. Slide the Cutter Extraction Lid to the left to detach it from the hole.

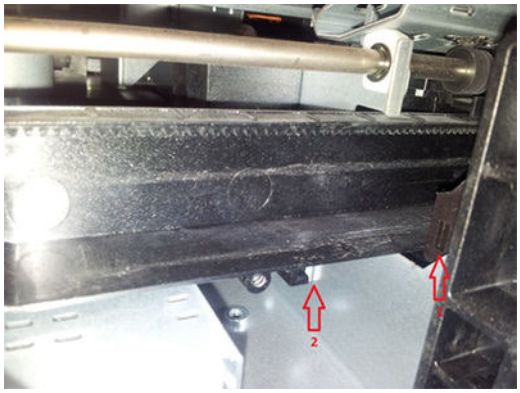


4. Remove the Cutter Extraction Lid.

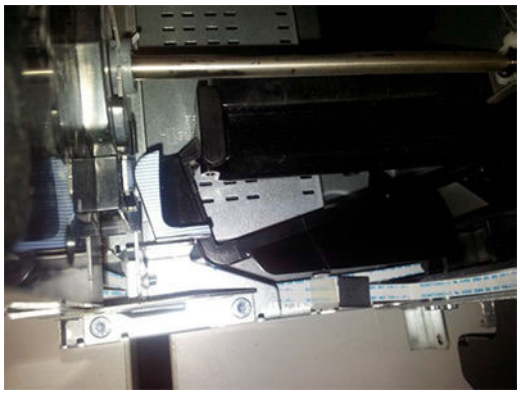


5. New Cutter Extraction Lid. (Identify the marked areas, it will match on the printer.)

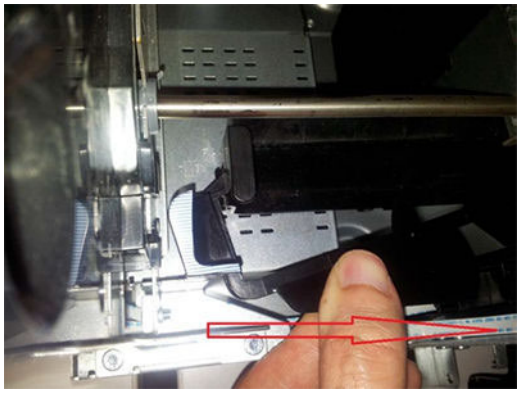
6. Identify the marked areas in the printer.



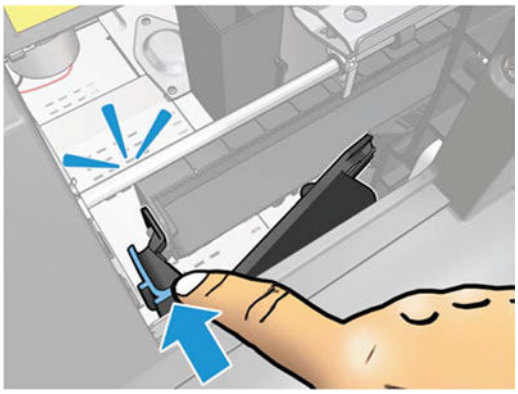
7. Introduce the new Cutter Extraction Lid on the printer.



8. Move the Cutter Extraction Lid to the right in order to insert the area marked with “1” with the same number on the printer.



9. Push the blue lever until it “clicks”. Areas marked with number “2”, should match.



G Safety precautions

This appendix details general safety guidelines and best practices regarding electrical, fire, and mechanical hazards.

General safety guidelines

Before servicing the printer, read the following safety precautions to make sure that you can work on the printer safely.

- Before servicing the printer, turn it off, and disconnect electrical power.
- Before removing and replacing parts, see Removal and installation on page 293.

Service personnel are expected to have appropriate technical training and experience necessary to be aware of hazards to which they may be exposed in performing a task, and to take appropriate measures to minimize the risks to themselves and other people.

Electrical / Fire hazards

Please observe the following best practices at all times.

- Do not set heavy objects on the power cord; and do not bend the cables or force them into contorted positions.
- Do not use a damaged power cord.
- Do not handle the power cord with wet hands. Doing so may cause an electric shock hazard.
- Do not allow metal or liquids (except those used in the HP Cleaning Kit) to touch the internal parts of the equipment. Doing so may cause fire, electrical shock, or other serious hazards.

Mechanical hazards

Please observe the following best practices at all times.

- Wear safety gloves when installing the assembly, taking caution not to injure yourself on the edges and corners.
- Avoid wearing necklaces, bracelets, and other hanging objects.
- If your hair is long, try to secure it so that it will not fall into the equipment.

Electrostatic Discharge (ESD) Precautions

High-voltage electrostatic discharge can cause preventable damage to the printer's circuits.

- Do not wear clothing that is subject to static build-up.
- Do not handle integrated circuits (ICs) in carpeted areas.

- Do not remove an IC or a Printed-Circuit Assembly (PCA) from its conductive foam pad or conductive packaging until you are ready to install it.
- Ground (earth) your body while disassembling and working on the printer.
- After removing a cover from the printer, attach an earthing (ground) lead between the PCA common and earth (ground). Touch all tools to earth (ground) to remove static charges before using them on the printer.
- After removing any PCA from the printer, place it on a conductive foam pad or into its conductive packaging to prevent ESD damage to any ICs on the PCA.

H Flyers

Flyers are short procedural guides to assist in the performance of certain removal and installation actions.

CSR

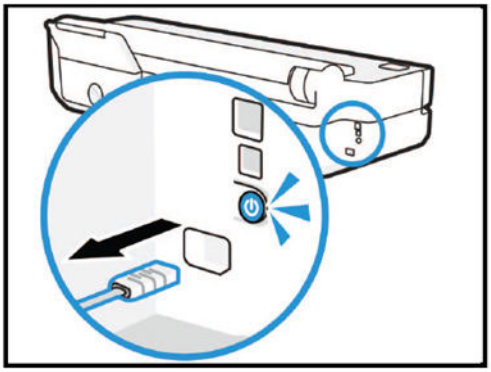
The following flyers provide Customer Self-Repair information.

ARSS

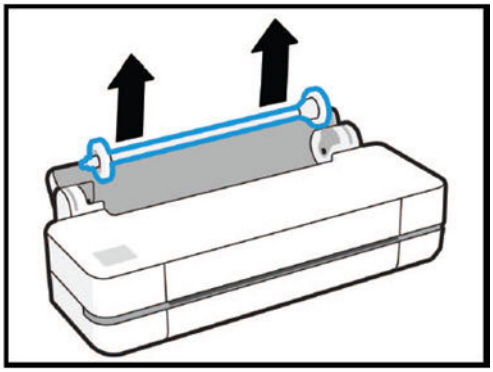
The original ARSS flyer is reproduced here for your reference.

HP DesignJet T200/T600/Studio Printer Series
ARSS replacement

1

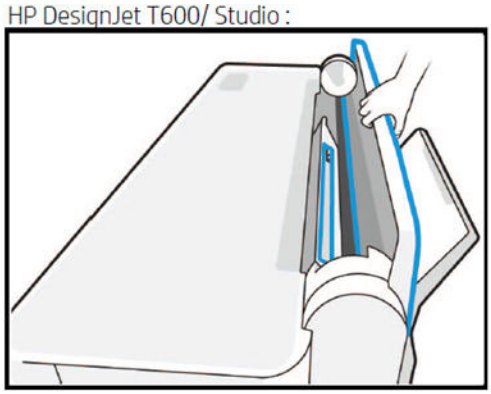


2

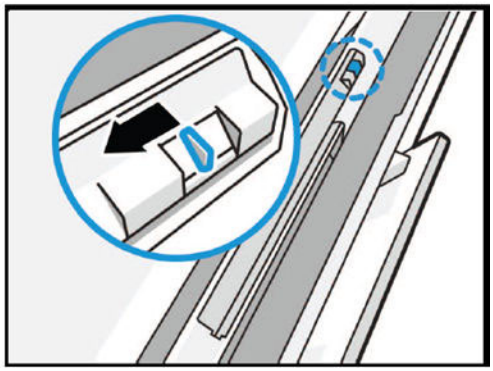


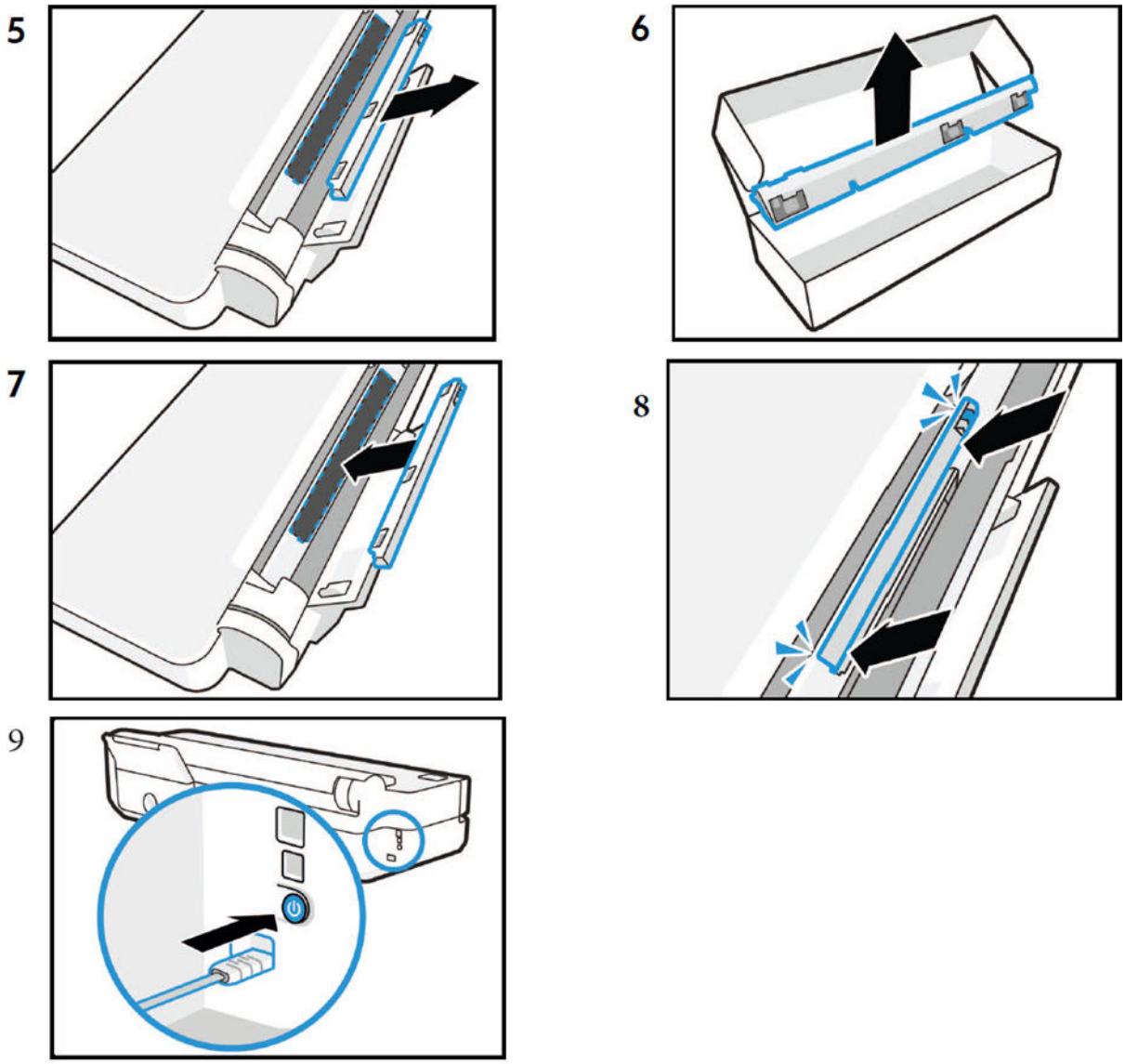
HP DesignJet T600/ Studio :

3



4

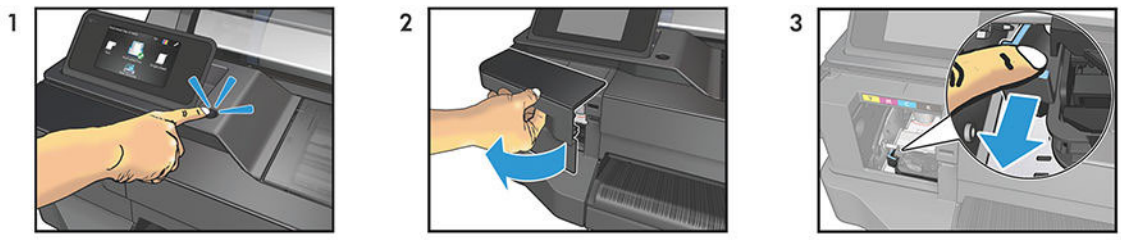




EN AirPrint: In order to use the Automatic Sheet Feeder/Automatic Roll Switch System: remove and reinstall the printer on your macOs device. The same operation is required if the Automatic Sheet Feeder/Automatic Roll Switch System has been unattached from the printer for a time.. Check the User guide for more information.

Cutter with clutch

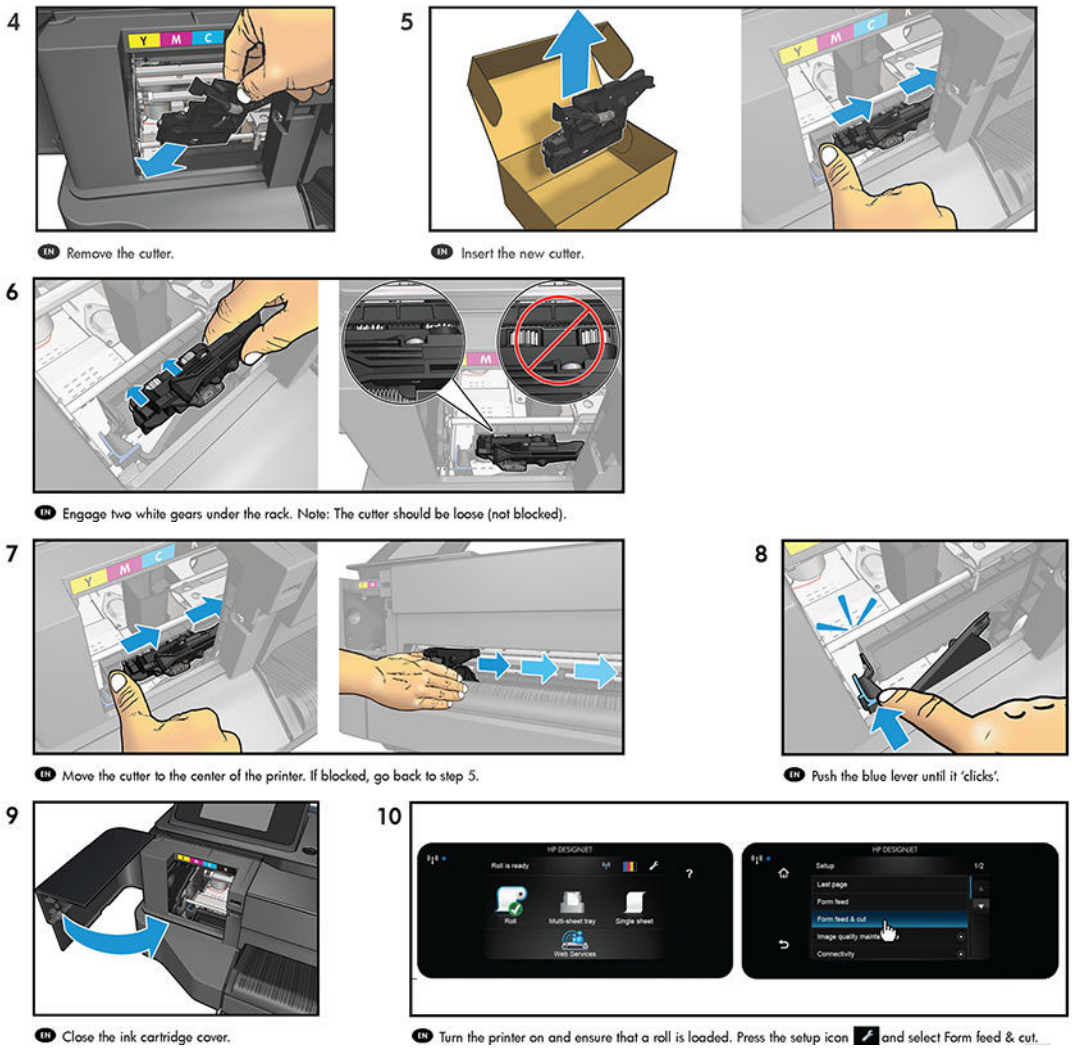
The original Cutter CSR flyer is reproduced here for your reference.



EN Switch off the printer.

EN Open the ink cartridge cover.

EN Pull the blue lever to release the cutter.



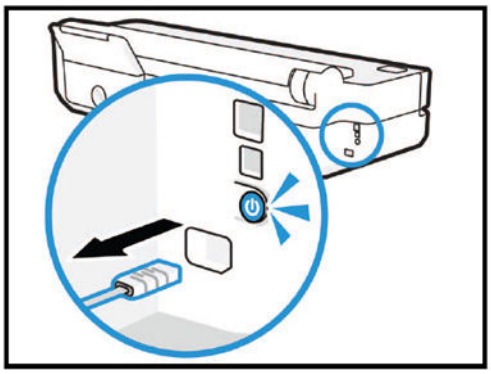
Cutter Door (T200, T600, Studio)

The original Cutter Door flyer is reproduced here for your reference.

HP DesignJet T200/T600/Studio Printer Series

Cutter door replacement

1



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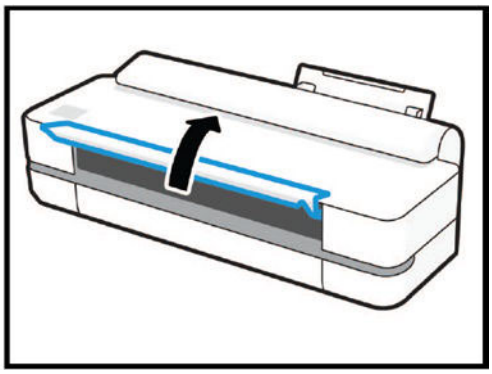

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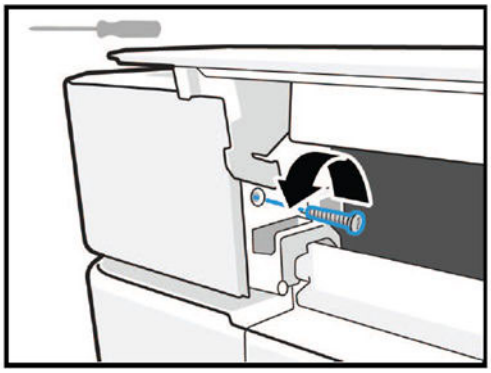

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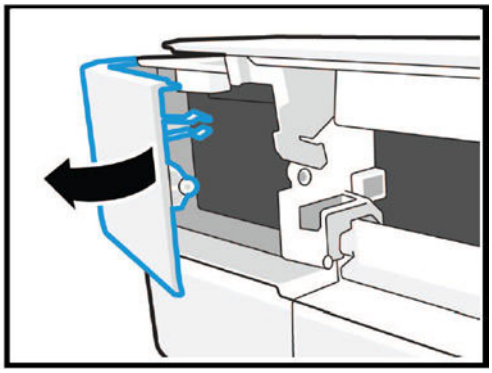

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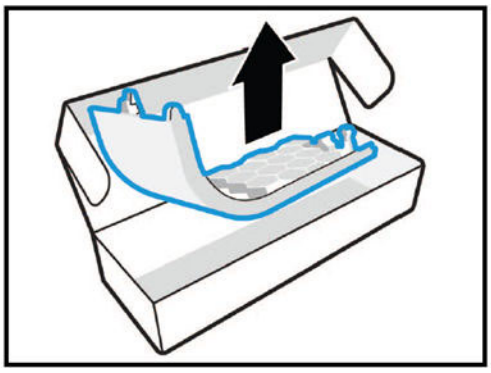

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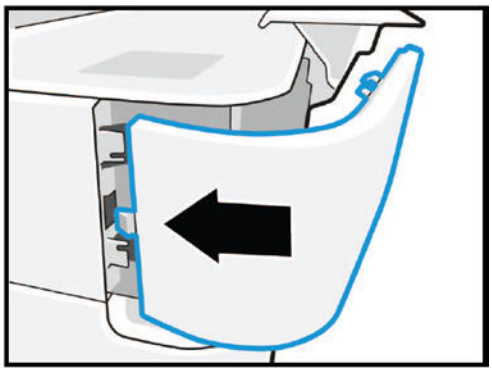

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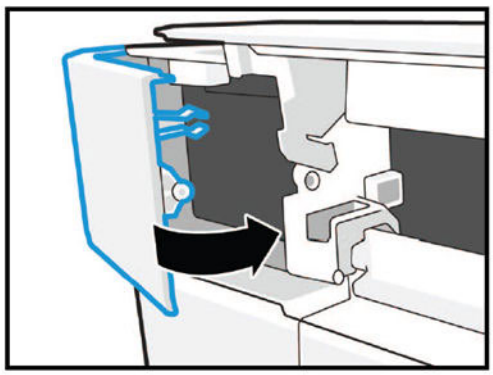

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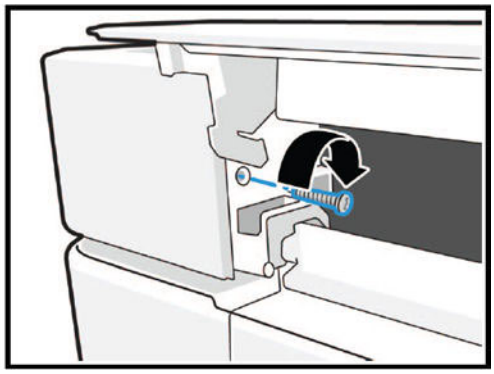

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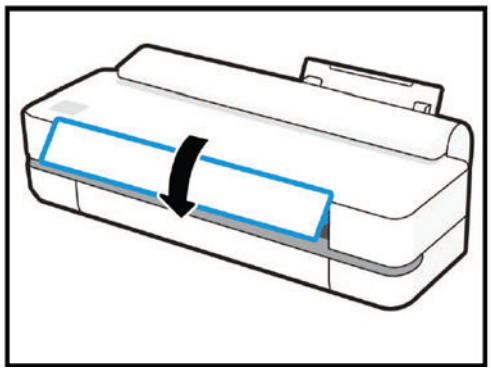

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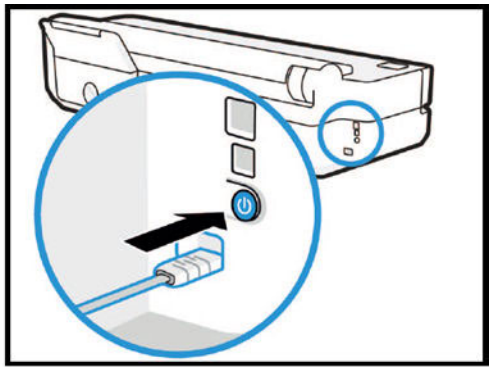

Multi-Sheet Tray SV (T200, T600, Studio)

The original Multi-Sheet Tray Extension CSR flyer is reproduced here for your reference.

1

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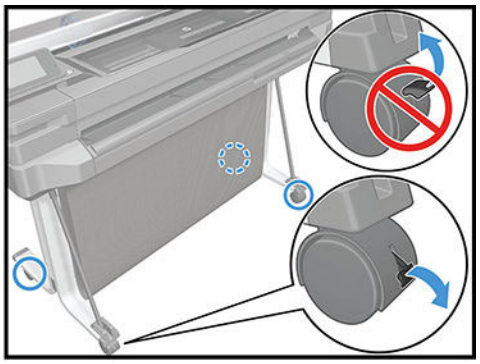

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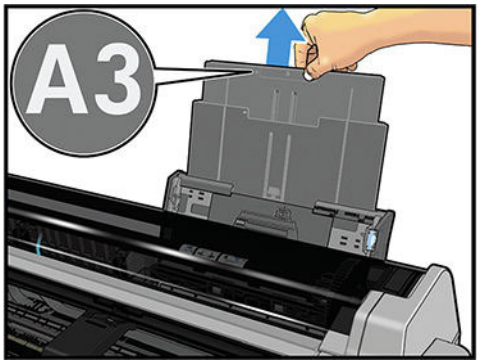

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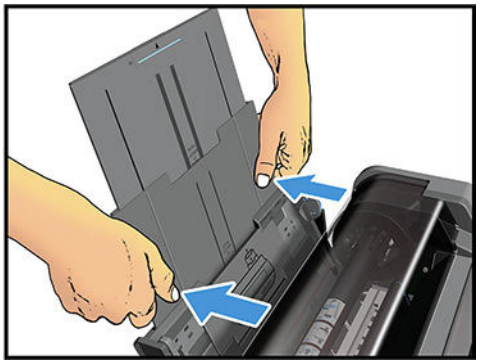

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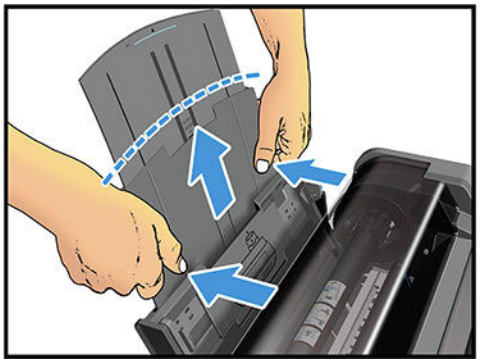

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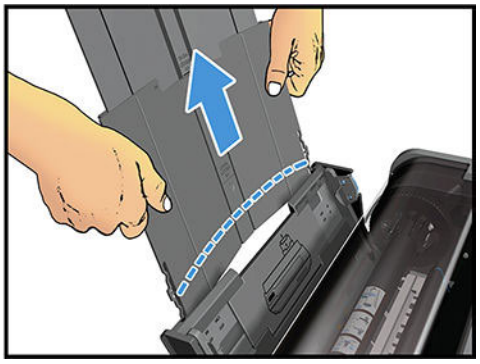
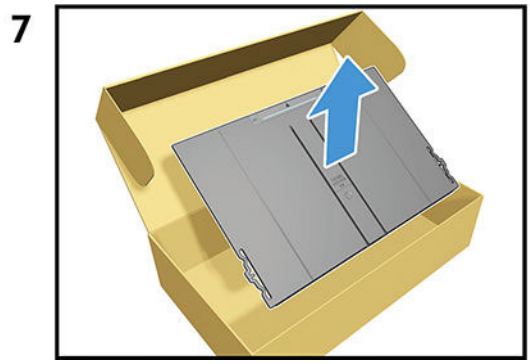
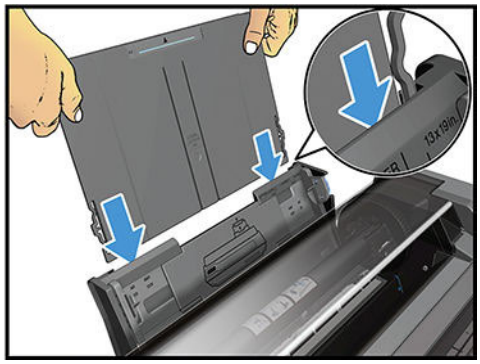


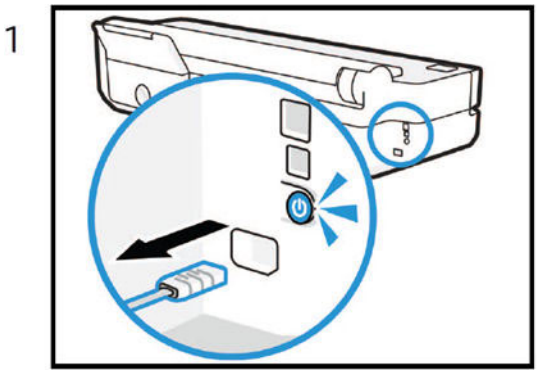


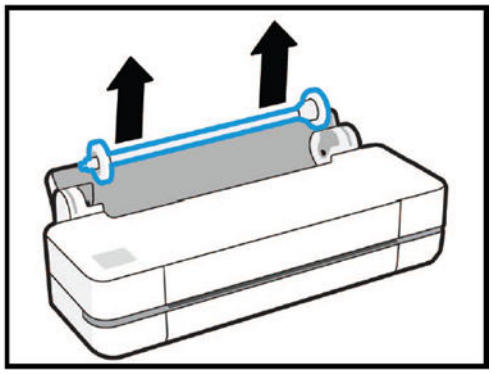


Roll Cover (T200, T600 24in, T600 36in)

The original Roll Cover CSR flyer is reproduced here for your reference.

HP DesignJet T600 Printer Series
Roll cover replacement





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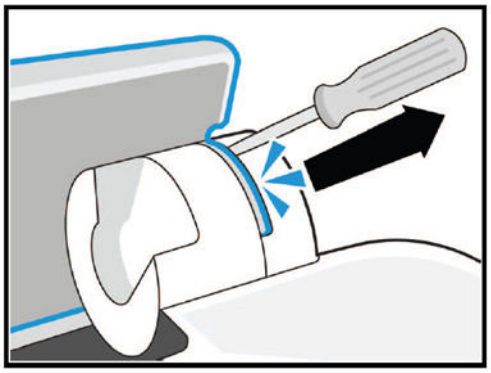

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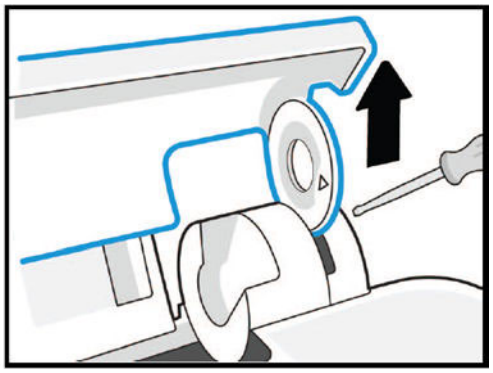

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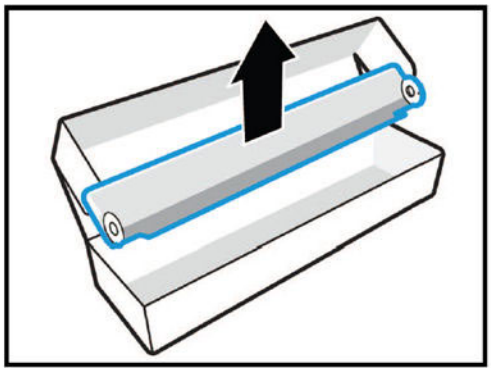

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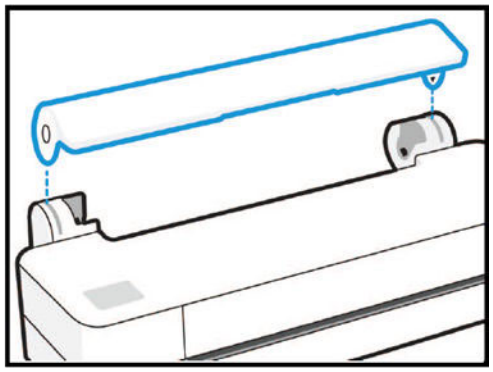

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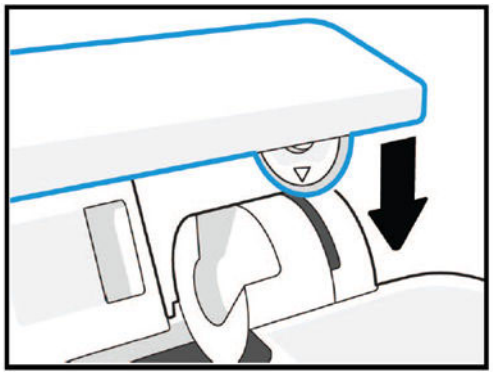

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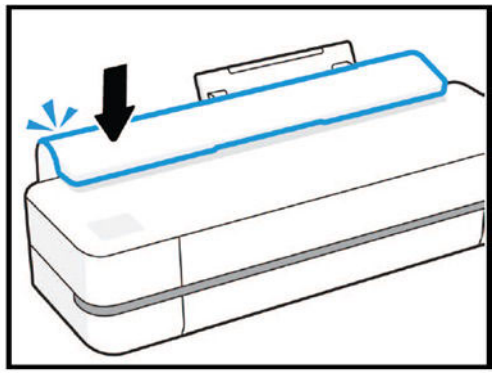

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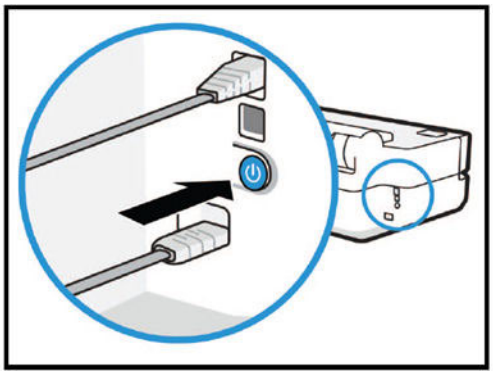
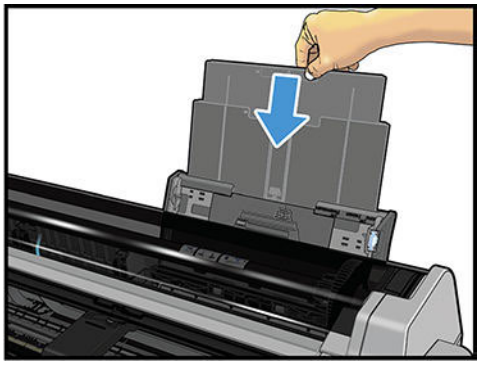


Out-Of-Paper Sensor without cable

For more information, please reread.

1

2



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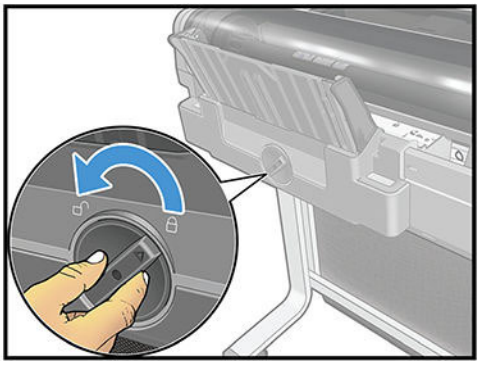

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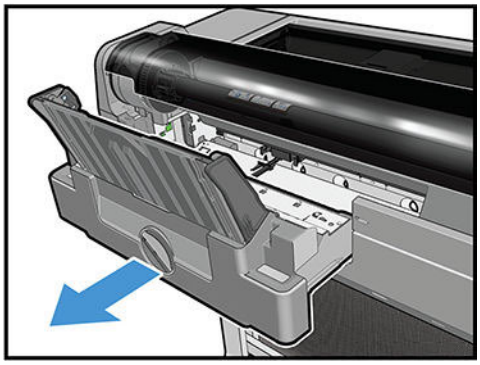

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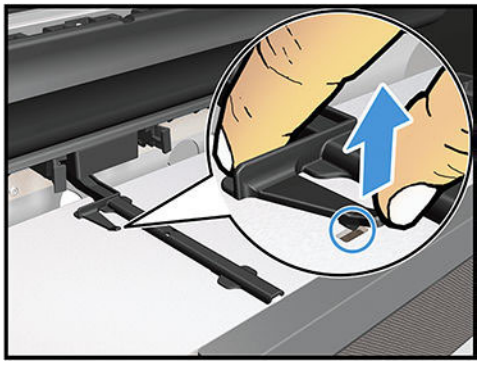

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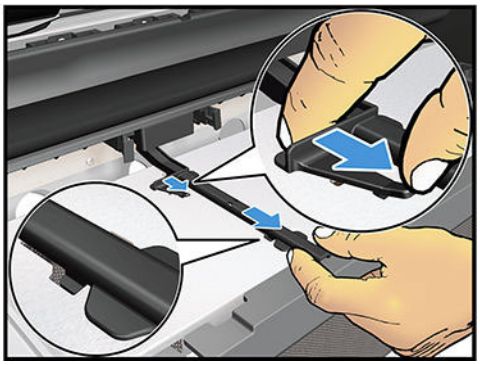

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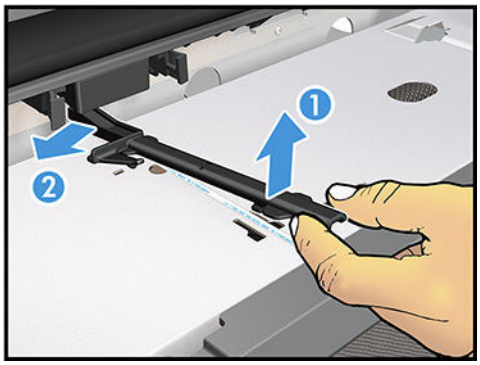

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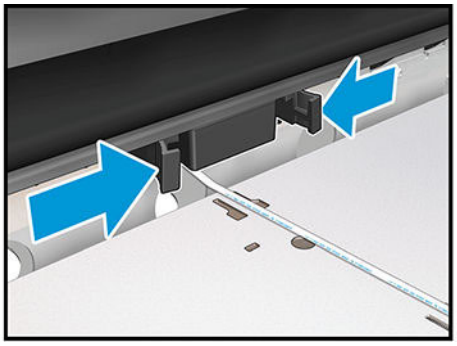

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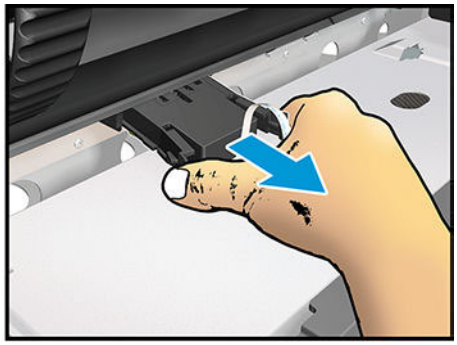

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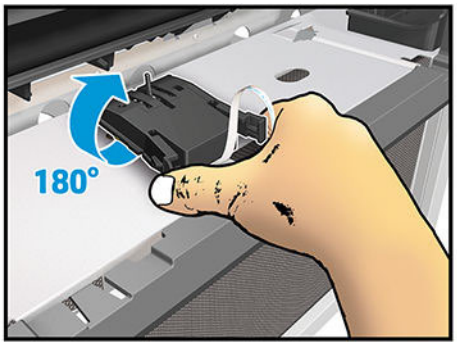

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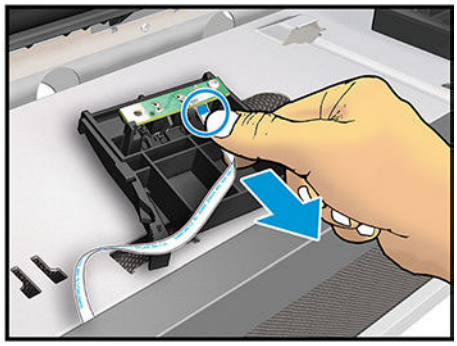

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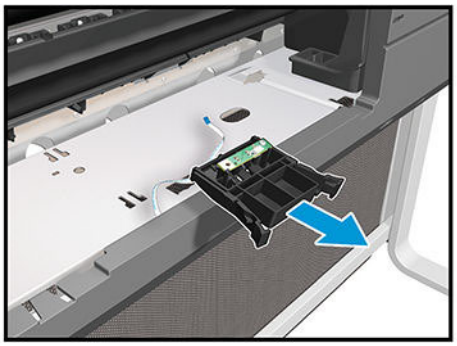

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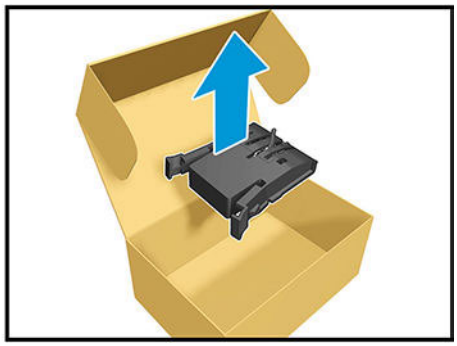

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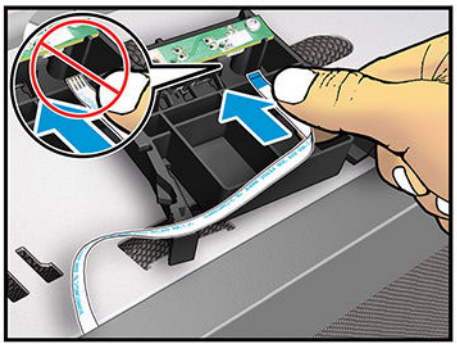

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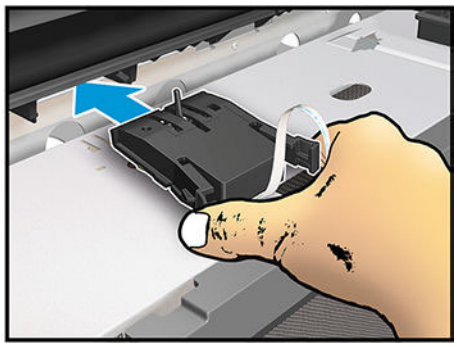

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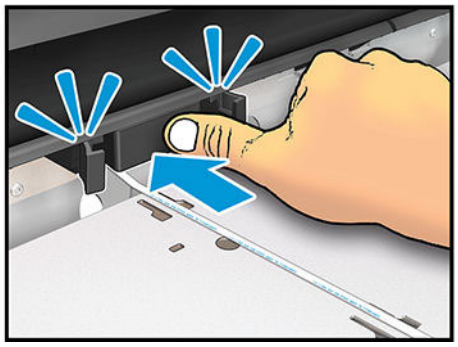

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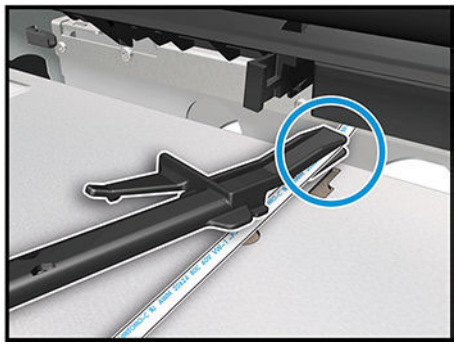

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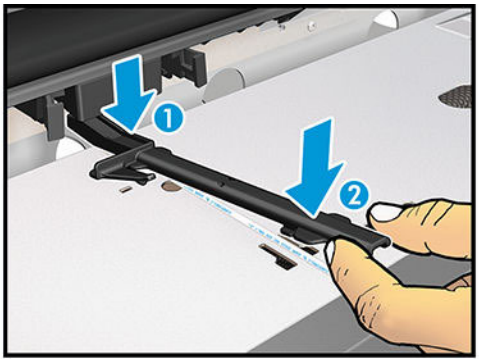

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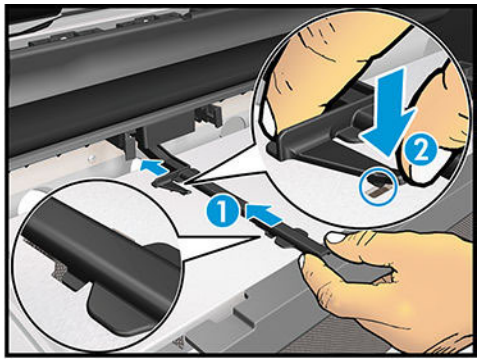

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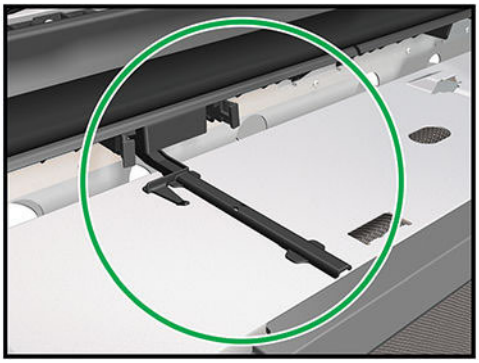

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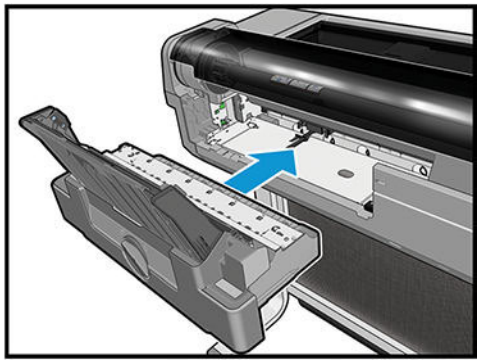

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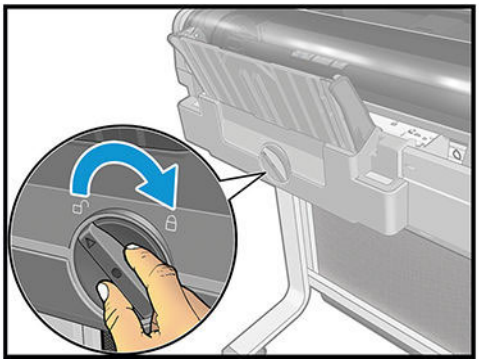
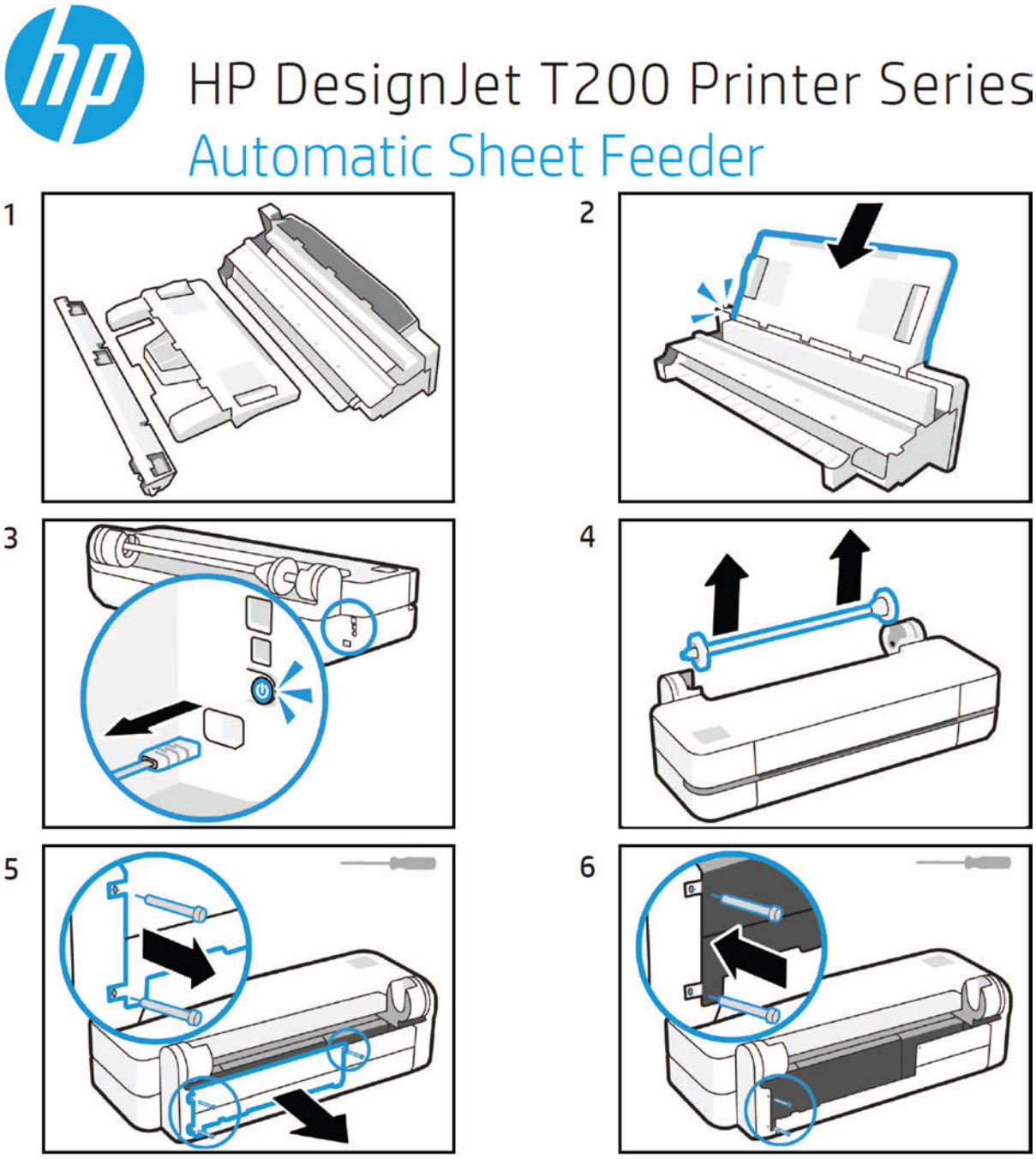


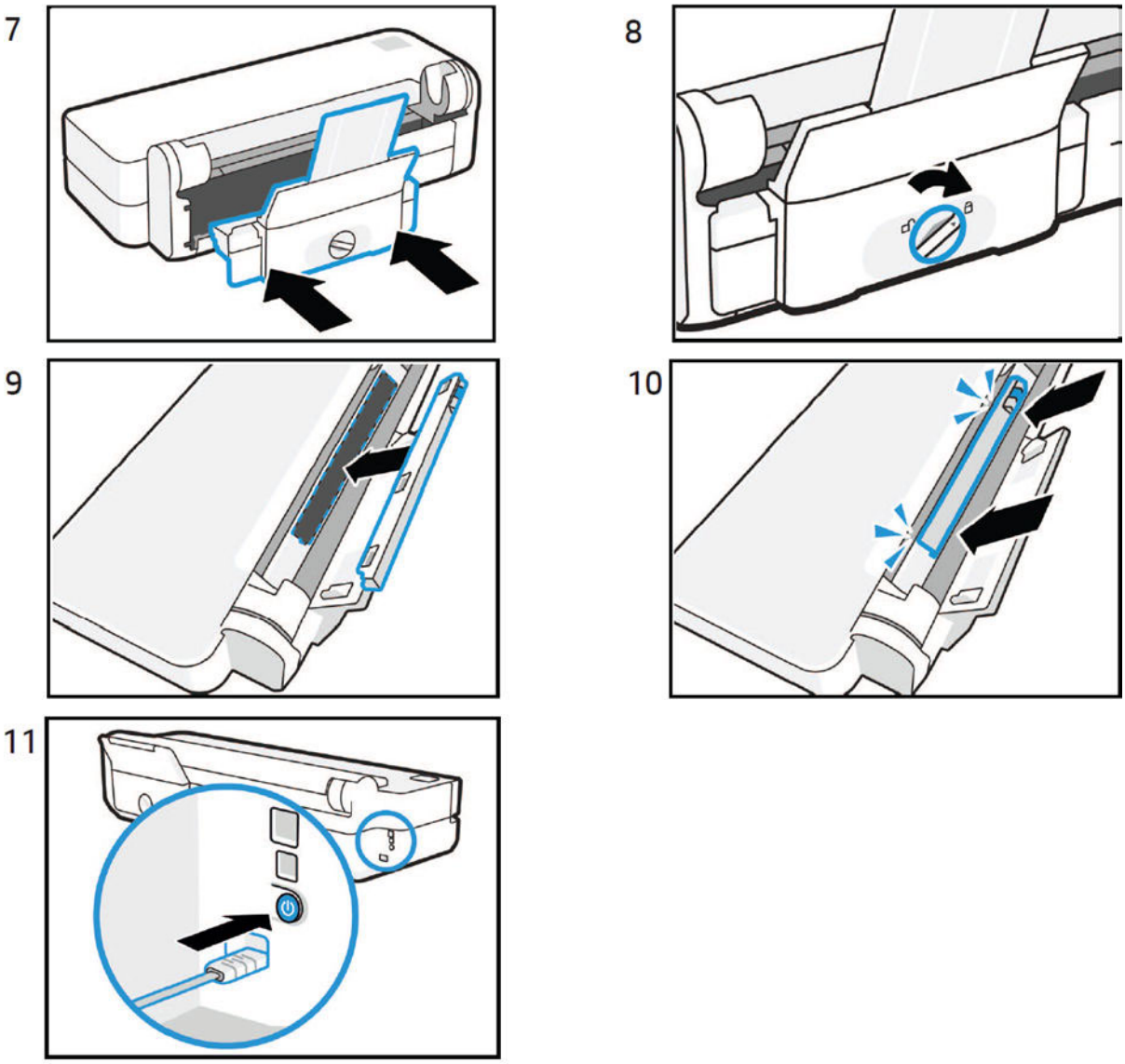
Accessory

The following flyers provide Accessory information.

Automatic Sheet Feeder (T200)

The original Automatic Sheet Feeder flyer is reproduced here for your reference.





EN **AirPrint:** In order to use the Automatic Sheet Feeder/Automatic Roll Switch System: remove and reinstall the printer on your macOs device. The same operation is required if the Automatic Sheet Feeder/Automatic Roll Switch System has been unattached from the printer for a time. Check the User guide for more information.

Stand Assembly Instructions (T200)

The original Stand Assembly Instructions flyer is reproduced here for your reference.

HP DesignJet T200 Printer Series

- EN Stand assembly instructions
- FR Instructions d'assemblage du support
- DE Anleitung zur Ständermontage
- IT Istruzioni per l'installazione del piedistallo
- ES Instrucciones de montaje del soporte
- PT Instruções de montagem do suporte
- NL Instructies voor assemblage van de standaard
- RU Инструкции по сборке основания
- PL Instrukcje montażu podstawy
- JA スタンドの組み立て手順
- ZHCN 支架组装说明
- ZHTW 機架組裝說明
- KO 스탠드 조립 지침

5HB08-90012

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Barcelona - Spain

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Printed in XXX

EN These assembly instructions explain how to assemble the stand of your printer. Because spare screws are supplied, some screws may remain unused after assembly.

FR Ces instructions d'assemblage expliquent comment assembler le socle de l'imprimante. Des vis de rechange étant fournies, il se peut que certaines vis ne soient pas utilisées après l'assemblage.

DE Diese Montageanleitung erklärt, wie der Standfuß des Druckers montiert wird. Da im Lieferumfang Reserveschrauben enthalten sind, kann es vorkommen, dass bei der Montage ein paar Schrauben übrigbleiben.

IT Le presenti istruzioni di assemblaggio illustrano come assemblare il supporto della stampante. Dato che vengono fornite delle viti di riserva, alcune di queste viti potrebbero rimanere inutilizzate al termine dell'assemblaggio.

ES Estas instrucciones de montaje explican cómo montar el soporte de la impresora. También se incluyen tornillos de repuesto, por lo que algunos pueden quedar sin utilizar una vez terminado el montaje.

PT Essas instruções de montagem explicam como montar o suporte da impressora. Como são fornecidos parafusos sobressalentes, alguns parafusos podem sobrar após a montagem.

NL In deze montage-instructies wordt uitgelegd hoe u het onderstel van uw printer kunt monteren. Aangezien er reserveschroeven zijn meegeleverd, zullen er na de montage schroeven overblijven.

RU Эти инструкции по сборке объясняют, как собрать стойку принтера. Поскольку в комплект поставки входят запасные винты, несколько винтов могут остаться неиспользованными после сборки.

PL Niniejsze instrukcje dotyczące montażu opisują sposób montażu podstawy drukarki. Dołączono dodatkowe śruby. Dlatego po zakończeniu montażu kilka śrub może pozostać niewykorzystanych.

JA これらの組み立て手順では、プリンタのスタンドの組み立て方法を説明します。予備のネジが同梱されているため、ネジの一部は組み立て後も未使用で余ることがあります。

ZHCN 这些组装说明描述了如何组装打印机支架。由于有备用螺钉，因此组装完成后可能还有螺钉未使用。

ZHTW 這些組件說明描述將解釋如何組裝您印表機的機架。由於隨附備用螺絲，所以完成組裝後仍會有多餘的未用螺絲。

KO 이러한 조립 지침은 프린터의 스탠드를 조립하는 방법을 설명합니다. 예비 나사가 제공되므로 일부 나사는 조립 후에도 사용하지 않은 채로 남을 수 있습니다.

EN 2m at the side is needed for unpacking. The size of the crate is: FR 2 mètres sont nécessaires sur le côté pour le déballage. La taille de l'emballage est : DE Zum Auspacken wird auf jeder Seite ein freier Platz von 2 m benötigt. Größe der Kiste: IT Per il disimballaggio, è necessario lasciare 2 metri di spazio libero sul lato. La dimensione dell'imballaggio è: ES Para desembalar la impresora se necesitan 2 m laterales. El tamaño de la caja es el siguiente: PT 2 m no lado são necessários para desembalagem. O tamanho do engradado é: NL 2m aan de zijkant is nodig voor unpacking.The grootte van het krat is: RU При распаковке с каждой стороны требуется по 2 человека.Размер упаковки: PL Należy pozostawić po 2 m wolnej przestrzeni z każdej strony na rozpakowanie. Wymiary opakowania: JA 開梱する際は、横に2mのスペースが必要です。クレートのサイズ: ZHCN 侧面应留出 2 米的空间以拆开包装。包装箱尺寸: ZHTW 打開包裝時，側邊需要 2 公尺的空間。包裝箱的大小: KO 상자를 풀려면 옆면에 2m가 필요합니다. 상자 크기:

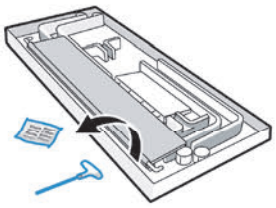
L1186 x W570 x H86 mm

EN 2 people are required to perform certain tasks. FR L'exécution de certaines tâches nécessite la présence de 2 personnes. DE Für bestimmte Tätigkeiten werden 2 Personen benötigt. IT Per determinate operazioni, sono necessarie 2 persone. ES Algunas tareas se deben realizar entre2 personas. PT São necessárias 2 pessoas para a realização de determinadas tarefas. NL Voor bepaalde taken zijn 2 personen nodig. RU Некоторые задачи следует выполнять вдвоем. PL Do wykonania niektórych czynności potrzebne są 2 osoby. JA 特定の作業は、2名で行う必要があります。ZHCN 某些任务需要 2 人完成。ZHTW 某些工作需要 2 個人才能執行。KO 일부 작업에는 3 명이 필요합니다.

EN Time required for assembly of the printer is approximately 25 minutes. FR Le temps requis pour l'assemblage de l'imprimante est d'environ 25 minutes. DE Der Zusammenbau des Druckers dauert etwa 25 Minuten. IT L'installazione della stampante richiede circa 25 minuti. ES El tiempo de montaje de la impresora es aproximadamente de 25 minutos. PT O tempo necessário para a montagem da impressora é de aproximadamente 25 minutos. NL De vereiste tijd voor assemblage van de printer is ongeveer 25 minuten. RU Сборка принтера занимает примерно 25 минут. PL Czas potrzebny do zmontowania drukarki: około 25 minut. JA プリンタの組み立て所要時間は約25分です。ZHCN 组装打印机大约需要 25 分钟的时间。ZHTW 組裝印表機大約要花 25 分鐘的時間。KO 프린터 조립에 소요되는 시간은 약 25분입니다.

EN Tools required: Screwdriver (included). FR Outils nécessaires : Tournevis (fourni). DE Erforderliches Werkzeug: Schraubendreher (enthalten). IT Strumenti necessari: cacciavite (incluso). ES Herramientas requeridas: Destornillador (incluido). PT Ferramentas necessárias: Chave de fenda (incluída). NL Benodigd gereedschap: Schroevendraaier (inbegrepen). RU Необходимые инструменты: Отвертка (в комплекте). PL Potrzebne narzędzia: śrubokręt (w zestawie). JA 必要な工具: ドライバ（付属しています）。ZHCN 必备工具：螺丝刀（附带提供）。ZHTW 必要工具：螺絲起子（隨附）。KO 필요한 도구: 드라이버(포함됨).

1



EN Open the box and take out the screwdriver and screws.

FR Ouvrez le carton et sortez le tournevis et les vis.

DE Öffnen Sie die Verpackung und nehmen Sie den Schraubendreher und die Schrauben heraus.

IT Aprire la confezione ed estrarre il cacciavite e le viti.

ES Abra la caja y extraiga el destornillador y los tornillos.

PT Abra a caixa e remova os parafusos e a chave de fenda.

NL Open de doos en haal de schroevendraaier en schroeven eruit.

RU Откройте коробку и извлеките отвертку и винты.

PL Otwórz pudełko i wyjmij śrubokręt i śruby.

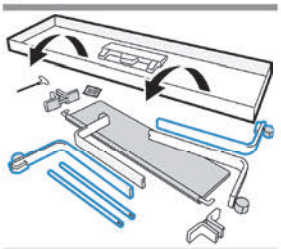
JA 箱を開けて、ドライバとネジを取り出します。

ZHCN 打开包装箱并取下螺丝刀和螺钉。

ZHTW 打開包裝盒，接著取出螺絲起子和螺絲。

KO 상자를 열어 드라이버와 나사를 꺼냅니다.

2



EN Locate the stand pieces. Identify the front legs and basket bars (outlined in blue).

FR Localisez les pièces du socle. Identifiez les pattes avant et les barres de panier (indiquées en bleu).

DE Suchen Sie die Teile des Standfußes. Ermitteln Sie die vorderen Standbeine und die Stangen der Ablage (blau hervorgehoben).

IT Individuare i pezzi del supporto. Identificare le gambe anteriori e le barre del raccoglitore (indicate in blu).

ES Localice las piezas del soporte. Identifique las patas frontales y las barras de la cesta (destacadas con contorno azul).

PT Localize as peças do suporte. Identifique as pernas dianteiras e as barras da cesta (contornadas em azul).

NL Zoek de stukken van het onderstel. Zoek de voorpoten en de mandstangen (blauw omlijnd).

RU Найдите компоненты стойки. Найдите передние ноги и стержни приемника (выделено синим).

PL Znajdź części podstawy. Zidentyfikuj przednie nogi i pręty koszyka (wyszczególnione na niebiesko).

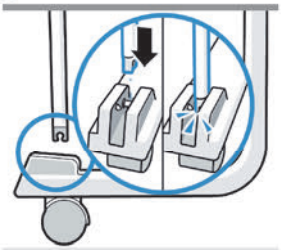
JA スタンドの部品を確認します。前側の脚とバスケット バーを確認します（青で示されたもの）。

ZHCN 找到支架部件。识别前支腿和纸篋支杆（用蓝线圈起）。

ZHTW 找到機架零件。識別前方腳架和承接槽撐桿（以藍線圈起）

KO 스탠드 부품을 찾습니다. 앞쪽 다리 및 바스켓 바(파란색)를 확인합니다.

3



EN Insert the basket bars into the legs.

FR Insérez les barres de panier dans les pattes.

DE Setzen Sie die Stangen der Ablage in die Standbeine ein.

IT Inserire le barre del raccoglitore nelle gambe.

ES Inserte las barras de la cesta en las patas.

PT Insira as barras da cesta nas pernas.

NL Plaats de mandstangen in de poten.

RU Вставьте стержни приемника в ноги.

PL Włóż pręty koszyka na nogi.

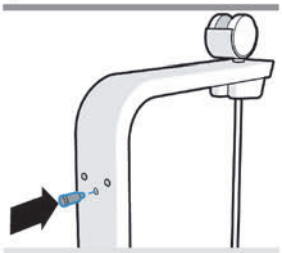
JA バスケット バーを脚に挿入します。

ZHCN 将纸篋支杆插入支腿。

ZHTW 將承接槽撐桿插入腳架。

KO 바스켓 바를 다리에 삽입합니다.

4



EN Attach the plastic dowels to the front legs.

FR Fixez les chevilles en plastique aux pattes avant.

DE Bringen Sie die Kunststoffdübel an den vorderen Standbeinen an.

IT Fissare i perni di plastica alle gambe anteriori della stampante.

ES Fije los pasadores de plástico a las patas frontales.

PT Fixe as cavilhas plásticas nas pernas dianteiras.

NL Bevestig de kunststof deuvels aan de voorpoten.

RU Прикрепите пластмассовые штифты к передним ногам.

PL Przymocuj plastikowe kołki do przednich nóg.

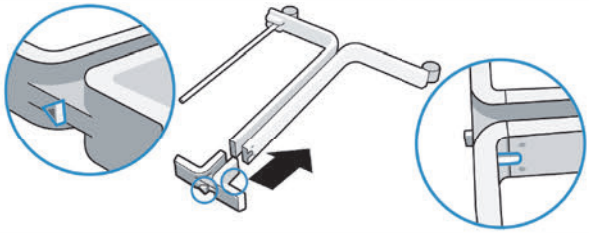
JA プラスチック ダウエルを前側の脚に取り付けます。

ZHCN 将塑料钉连接到前支腿上。

ZHTW 將塑膠定位銷裝入前方腳架。

KO 플라스틱 은못을 앞쪽 다리에 부착합니다.

5



EN Position one front and one back leg side by side on the floor.Attach the T-shaped stand supports to the legs. The triangle must point towards the front of the stand (basket bar side). **Important:** Ensure it slots into place as shown.

FR Placez une patte avant et une patte arrière côte à côte sur le sol. Fixez les supports de socle en forme de T à les pattes. Le triangle doit pointer vers l'avant du socle (côté barre de panier). **Important :** assurez-vous qu'il s'enclenche en place comme indiqué.

DE Platzieren Sie ein vorderes und ein hinteres Standbein nebeneinander auf den Boden. Bringen Sie die T-förmigen Standfußhalterungen an das Standbein an. Das Dreieck muss zur Vorderseite des Standfußes zeigen (auf der Seite der Stange der Ablage). **Wichtig:** Das Teil muss wie in der Abbildung gezeigt in die Öffnung einrasten.

IT Posizionare una gamba anteriore e una gamba posteriore della stampante una accanto all'altra sul pavimento. Fissare i sostegni a T del supporto a le gambe della stampante. Il triangolo deve essere rivolto verso la parte anteriore del supporto (sul lato della barra del raccoglitore). **Importante:** assicurarsi di inserirlo come mostrato.

ES Coloque una pata frontal y una trasera en el suelo, una frente a otra. Fije el soporte en forma de T a las patas. El triángulo debe apuntar hacia la parte delantera del soporte (lado de la barra de la cesta). **Importante:** asegúrese de que encaje en su lugar tal y como se muestra.

PT Posicione uma perna dianteira e uma traseira lado a lado no chão. Encaixe o suporte com formato em T às pernas. O triângulo deve apontar para a frente do suporte (lado da barra da cesta). **Importante:** Certifique-se de que tudo fica encaixado conforme mostrado.

NL Plaats één voorpoot en één achterpoot naast elkaar op de vloer. Bevestig de T-vormige steunen van het onderstel aan de poot. De driehoek moet naar de voorkant van het onderstel wijzen (kant van de mandstang). **Belangrijk:** zorg ervoor dat de steun op de juiste plek wordt vastgezet, zoals afgebeeld.

RU Поставьте одну переднюю и одну заднюю ногу рядом на полу. Прикрепите Т-образные опоры к ноге. Треугольник должен указывать на переднюю сторону стойки (сторона стержней приемника). **Важно!** Убедитесь, что компонент вставлен, как показано на рисунке.

PL Umieść jedną przednią i jedną tylną nogę obok siebie na podłodze. Przymocuj wsporniki podstawy w kształcie litery T do nogi. Trójkąt musi się znajdować przodem w kierunku podstawy (strona pręta koszyka). **Ważne:** Upewnij się, że jest umieszczony na miejscu, jak pokazano na rysunku.

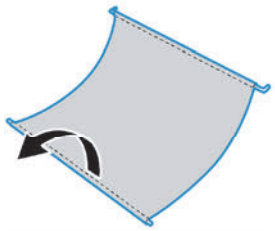
JA 前側と後側の脚を 1 本ずつ、並べて床に置きます。T字形のスタンドサポートを脚に取り付けます。三角形がスタンドの正面 (バスケット バーの側) の方向を指していることを確認してください。**重要：** 図に示すように、所定の場所に挿入されていることを確認してください。

ZHCN 将一侧的前和后支腿相邻放在地面上。将 T 形支架连接到支腿上。这个三角形必须指向支架的正面（纸篮侧）。
重要说明： 如图所示，确保将其插入到位。

ZHTW 將前方腳架和後方腳架並排放在地板上，接著將 T 型機架支架裝到腳架上。三角形必須指向機架前方（承接槽撐桿側）。
重要： 確定將撐桿插入定位（如圖所示）。

KO 바닥에 앞쪽 다리 1개와 뒤쪽 다리 1개를 나란히 배치합니다. T자형 스탠드 지지대를 다리에 부착합니다. 삼각형이 스탠드 앞쪽을 향하도록 해야 합니다(바스켓 바쪽).
중요: 그림과 같이 제자리에 끼워지도록 하십시오.

6



EN Open the stand basket fabric.

FR Ouvrez le tissu du panier de socle.

DE Öffnen Sie die Stoffablage des Standfußes.

IT Aprire il tessuto del raccoglitore del supporto.

ES Abra la tela de la cesta del soporte.

PT Abra a estrutura da cesta de suporte.

NL Open de stof van de mand van het onderstel.

RU Разверните полотно приемника на стойке.

PL Otwórz materiał kosza podstawy.

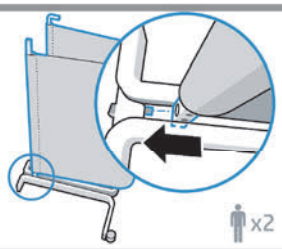
JA スタンドのバスケット ファブリックを開きます。

ZHCN 打开支架纸篮织物。

ZHTW 打開機架承接槽的布層。

KO 스탠드 바스켓 패브릭을 엽니다.

7



EN Insert the basket bar into the T-shaped support. **Important:** Ensure it slots into place as shown

FR Insérez la barre de panier dans le support en forme de T. **Important :** assurez-vous qu'elle s'enclenche en place comme indiqué.

DE Setzen Sie die Stange der Ablage in die T-förmige Halterung ein. **Wichtig:** Das Teil muss wie in der Abbildung gezeigt in die Öffnung einrasten.

IT Inserire la barra del raccoglitore nel supporto a T. **Importante:** assicurarsi di inserirla come mostrato.

ES Inserte la barra de la cesta en el soporte en forma de T. **Importante:** asegúrese de que encaje en su lugar tal y como se muestra.

PT Insira a barra da cesta no suporte em forma de T. **Importante:** Certifique-se de que tudo fica encaixado conforme mostrado.

NL Plaats de mandstang in de T-vormige steun. **Belangrijk:** zorg ervoor dat de steun op de juiste plek wordt vastgezet, zoals afgebeeld.

RU Вставьте стержень приемника в Т-образную опору. **Важно!** Убедитесь, что компонент вставлен, как показано на рисунке.

PL Włóż pręt koszyka do wspornika w kształcie litery T. **Ważne:** Upewnij się, że jest umieszczony na miejscu, jak pokazano na rysunku.

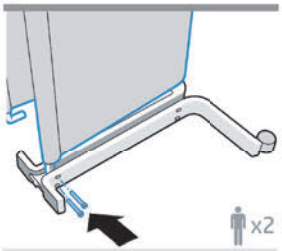
JA バスケット バーをT字形のサポートに挿入します。**重要：** 図に示すように、所定の場所に挿入されていることを確認してください。

ZHCN 将纸篮支杆插入 T 形支架。
重要说明： 如图所示，确保将其插入到位。

ZHTW 將承接槽撐桿插入 T 型支架。
重要： 確定將撐桿插入定位（如圖所示）。

KO 바스켓 바를 T자형 지지대에 삽입합니다.
중요: 그림과 같이 제자리에 끼워지도록 하십시오.

8



EN Fix the basket bar to the leg with 2 screws.

FR Fixez la barre de panier à la patte avec 2 vis.

DE Befestigen Sie die Stange der Ablage mit 2 Schrauben am Standbein.

IT Fissare la barra del raccoglitore alla gamba con 2 viti.

ES Fije la barra de la cesta a la pata con 2 tornillos.

PT Fixe a barra da cesta na perna com 2 parafusos.

NL Bevestig de mandstang met 2 schroeven aan de poot.

RU Прикрепите стержень приемника к ноге 2 винтами.

PL Przymocuj pręt koszyka do nogi za pomocą 2 śrub.

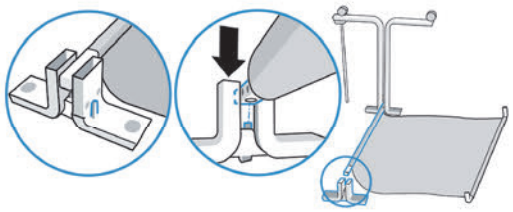
JA 2本のネジでバスケット バーを脚に固定します。

ZHCN 用 2 颗螺钉把纸篮支杆固定到支腿上。

ZHTW 使用 2 顆螺絲將承接槽撐桿固定至腳架。

KO 2개의 나사로 바스켓 바를 다리에 고정합니다.

9



EN Turn the stand upside down and insert the other side of the basket bar into the other T-shaped support. **Important:** Ensure it slots into place as shown.

FR Retournez le socle et insérez l'autre côté de la barre de panier dans l'autre support en forme de T. **Important :** assurez-vous qu'il s'enclenche en place comme indiqué.

DE Drehen Sie den Standfuß auf den Kopf und setzen Sie die andere Seite der Stange der Ablage in die andere T-förmige Halterung ein. **Wichtig:** Das Teil muss wie in der Abbildung gezeigt in die Öffnung einrasten.

IT Capovolgere il supporto e inserire l'altro lato della barra del raccoglitore nell'altro supporto a T. **Importante:** assicurarsi di inserirlo come mostrato.

ES Coloque el soporte boca abajo e inserte el otro lado de la barra de la cesta en el otro soporte en forma de T. **Importante:** asegúrese de que encaje en su lugar tal y como se muestra.

PT Vire o suporte para cima e insira o outro lado da barra da cesta no outro suporte em forma de T. **Importante:** Certifique-se de que tudo fica encaixado conforme mostrado.

NL Draai het onderstel ondersteboven en plaats de andere kant van de mandstang in de andere T-vormige steun. **Belangrijk:** zorg ervoor dat de mandstang op de juiste plek wordt vastgezet, zoals afgebeeld.

RU Переверните стойку и вставьте другую сторону стержня приемника в другую Т-образную опору. **Важно!** Убедитесь, что компонент вставлен, как показано на рисунке.

PL Obróć podstawę do góry nogami, włóż drugą stronę pręta koszyka do drugiego wspornika w kształcie litery T. **Ważne:** Upewnij się, że jest umieszczony na miejscu, jak pokazano na rysunku.

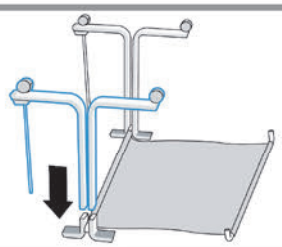
JA スタンドの上下をひっくり返して、バスケット バーのもう一方の側を他のT字型のサポートに挿入します。**重要：** に示すように、所定の場所に挿入されていることを確認してください。

ZHCN 将支架翻转过来，将纸篮支杆的另一侧插入其它 T 形支架。
重要说明： 如图所示，确保将其插入到位。

ZHTW 將機架倒過來放，接著將承接槽撐桿的另一側插入另一個 T 型支架。
重要： 確定將撐桿插入定位。

KO 스탠드를 거꾸로 세우고 바스켓 바의 다른 쪽 면을 다른 T자형 지지대에 삽입합니다.
중요: 그림과 같이 제자리에 끼워지도록 하십시오.

10



EN Insert the legs of the other side of the stand. **Important:** Ensure they slot into place as shown.

FR Insérez les pattes de l'autre côté du socle. **Important :** assurez-vous qu'elles s'enclenchent comme indiqué.

DE Setzen Sie die Standbeine der anderen Seite des Standfußes ein. **Wichtig:** Die Teile müssen wie in der Abbildung gezeigt in die Öffnung einrasten.

IT Inserire le gambe dell'altro lato del supporto. **Importante:** assicurarsi di inserirle come mostrato.

ES Inserte las patas del otro lado del soporte. **Importante:** asegúrese de que encajen en su sitio tal y como se muestra.

PT Insira as pernas do outro lado do suporte. **Importante:** Certifique-se de que tudo fica encaixado conforme mostrado.

NL Plaats de poten van de andere kant van het onderstel. **Belangrijk:** zorg ervoor dat de poten op de juiste plek worden vastgezet, zoals afgebeeld.

RU Вставьте ноги другой стороны стойки. **Важно!** Убедитесь, что компоненты вставлены, как показано на рисунке.

PL Włóż nogi z drugiej strony podstawy. **Ważne:** Upewnij się, że są umieszczone na miejscu, jak pokazano na rysunku.

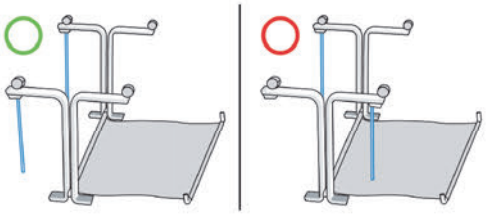
JA スタンドのもう一方の側の脚を挿入します。**重要：** に示すように、所定の場所に挿入されていることを確認してください。

ZHCN 插入支架另一侧的支腿。**重要说明：** 如图所示，确保将其插入到位。

ZHTW 插入機架另一側的腳架。**重要：** 確定將腳架插入定位。

KO 스탠드 다른 쪽의 다리를 삽입합니다. **중요:** 그림과 같이 제자리에 끼워지도록 하십시오.

11



EN Important: Check that the legs are correctly orientated with both basket bars on the same side. If not, go back to previous step.

FR Important : assurez-vous que les pattes sont correctement orientées avec les deux barres de panier sur le même côté. Dans le cas contraire, revenez à l'étape précédente.

DE Wichtig: Die Standbeine müssen richtig ausgerichtet sein, d. h. beide Stangen der Ablage müssen auf der gleichen Seite sein. Kehren Sie andernfalls zum vorherigen Schritt zurück.

IT Importante: verificare che le gambe siano orientate correttamente con entrambe le barre del raccoglitore sullo stesso lato. In caso contrario, tornare al passaggio precedente.

ES Importante: compruebe que las patas estén bien orientadas con las dos barras de la cesta en el mismo lado. Si no es así, vuelva al paso anterior.

PT Importante: Certifique-se de que as pernas estejam orientadas corretamente com ambas as barras da cesta no mesmo lado. Se não estiverem, volte para a etapa anterior.

NL Belangrijk: controleer of de poten in de juiste richting staan met beide mandstangen aan dezelfde kant. Zo niet, ga dan terug naar de vorige stap.

RU Важно! Убедитесь, что ноги правильно ориентированы, и оба стержня приемника находятся с одной стороны. В противном случае вернитесь к предыдущему шагу.

PL Ważne: Upewnij się, że nogi są prawidłowo umieszczone z oboma prętami koszyka po tej samej stronie. Jeśli nie, wróć do poprzedniego kroku.

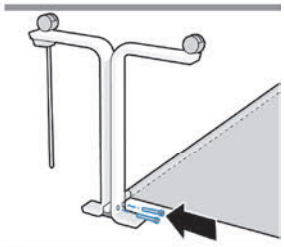
JA 重要：両方のバスケットバーが同じ側にあって、脚が正しい方向を向いていることを確認してください。正しく取り付けられていない場合は、前の手順に戻ります。

ZHCN 重要说明：确认支腿的方向都正确，即两个纸篮支杆都位于同一侧。如果不正确，请返回上一步。

ZHTW 重要：檢查腳架的安裝方向是否正確，兩個承接槽撐桿應都在同一側。如果沒有，請返回上一個步驟。

KO 중요: 다리의 방향이 같은 쪽 바스켓 두 개 모두와 올바르게 방향이 잡혀 있는지 확인하십시오. 그렇지 않은 경우, 이전 단계로 돌아가십시오.

12



EN Fix the basket bar to the legs with 2 screws.

FR Fixez la barre de panier aux pattes avec 2 vis.

DE Befestigen Sie die Stange der Ablage mit 2 Schrauben an den Standbeinen.

IT Fissare il raccoglitore alle gambe con 2 viti.

ES Fije la barra de la cesta a las patas con 2 tornillos.

PT Fixe a barra da cesta nas pernas com 2 parafusos.

NL Gebruik de 2 schroeven om de mandstang aan de poten te bevestigen.

RU Прикрепите стержень приемника к ногам 2 винтами.

PL Przymocuj pręt koszyka do nóg za pomocą 2 śrub.

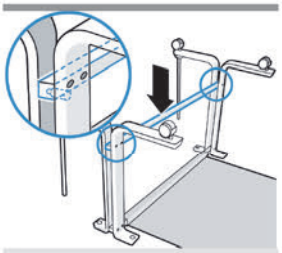
JA 2本のネジでバスケットバーを脚に固定します。

ZHCN 用 2 颗螺钉把纸篮支杆固定到支腿上。

ZHTW 使用 2 顆螺絲將承接槽撐桿固定至腳架。

KO 2개의 나사로 다리에 바스켓 바를 고정합니다

13



EN Slide the bar into the legs until it rests on the dowels.

FR Faites glisser la barre dans les pattes jusqu'à ce qu'elle repose sur les chevilles.

DE Schieben Sie die Stange in die Standbeine, bis sie an den Dübeln anliegt.

IT Far scorrere la barra nelle gambe finché non appoggia sui perni.

ES Deslice la barra en las patas hasta que se asiente sobre los pasadores.

PT Deslize a barra nas pernas até que ela se posicione nas cavilhas.

NL Schuif de balk in de poten totdat deze op de deuvels rust.

RU Вставьте стержень в ноги так, чтобы он лег на штифты.

PL Wsuń pręt w nogi, aż osiądzie na kołkach.

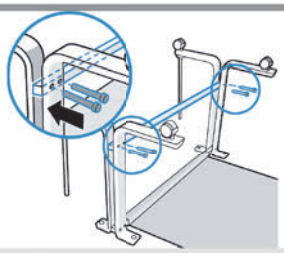
JA ピンの上で固定されるまでバーを脚の中にスライドさせます。

ZHCN 将支杆滑入支腿中，直至支杆停在定位销上。

ZHTW 將撐桿滑入腳架，直到置於固定榫上。

KO 다월에 닿을 때까지 바를 다리로 밀어 넣습니다.

14



EN Fix the bar to the legs with 4 screws. **Caution:** Ensure the screws connect the bar to the legs as shown. **Important:** Check all 4 screws are fully tightened.

FR Fixez la barre aux pattes avec 4 vis. **Attention :** assurez-vous que les vis connectent la barre aux pattes comme indiqué. **Important :** vérifiez que les 4 vis sont bien serrées.

DE Befestigen Sie die Stange mit 4 Schrauben an den Standbeinen. **Achtung:** Die Stange muss mit den Schrauben fest an die Standbeine montiert werden (siehe Abbildung). **Wichtig:** Überprüfen Sie, ob alle 4 Schrauben fest angezogen sind.

IT Fissare la barra alle gambe con 4 viti. **Attenzione:** assicurarsi che le viti colleghino la barra alle gambe come mostrato. **Importante:** verificare che tutte e 4 le viti siano completamente serrate.

ES Fije la barra a las patas con 4 tornillos. **Precaución:** Asegúrese de que los tornillos conectan la barra a las patas tal y como se muestra. **Importante:** compruebe que los 4 tornillos estén totalmente apretados.

PT Fixe a barra nas pernas com 4 parafusos. **Cuidado:** Certifique-se de que os parafusos conectam a barra às pernas, como mostrado. **Importante:** Verifique se todos os 4 parafusos estão totalmente apertados.

NL Gebruik de 4 schroeven om de balk aan de poten te bevestigen. **Waarschuwing:** zorg ervoor dat de balk aan de poten is bevestigd met de schroeven zoals wordt afgebeeld. **Belangrijk:** controleer of alle 4 schroeven goed zijn vastgedraaid.

RU Прикрепите стержень к ногам с помощью 4 винтов. **Внимание!** Убедитесь, что стержень крепится к ногам винтами, как показано на рисунке. **Важно!** Убедитесь, что все 4 винта затянуты до конца.

PL Przymocuj pręt do nóg za pomocą 4 śrub. **Przestroga:** Upewnij się, że śruby łączą pręt z nogami jak pokazano na rysunku. **Ważne:** Upewnij się, że wszystkie 4 śruby są całkowicie dokręcone.

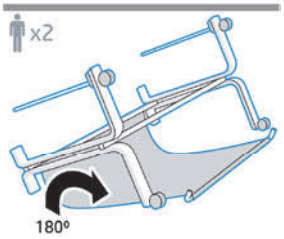
JA 4本のネジでバーを脚に固定します。**注意:** 図に示すように、ネジでバーを脚にしっかり固定します。**重要：** 4本すべてのネジがしっかりと締め付けられていることを確認してください。

ZHCN 用 4 颗螺钉把支杆固定到支腿上。**警告：** 确保螺钉正确地将支杆连接到支腿上，如图所示。**重要说明：** 确认所有 4 颗螺钉都已完全拧紧。

ZHTW 使用 4 顆螺絲將撐桿固定至腳架。**注意：** 請確定螺絲確實接合撐桿與腳架（如圖所示）。**重要：** 檢查 4 顆螺絲是否皆已鎖緊。

KO 4개의 나사로 다리에 바를 고정합니다. **주의:** 그림과 같이 나사로 바를 다리에 연결하십시오. **중요:** 4개의 나사가 모두 완전히 조여졌는지 확인하십시오.

15



EN Rotate the stand into the upright position.

FR Faites pivoter le socle en position verticale.

DE Drehen Sie den Standfuß und bringen Sie ihn in die aufrechte Position.

IT Ruotare il supporto in posizione perpendicolare.

ES Gire el soporte hasta colocarlo en posición vertical.

PT Gire o suporte para a posição vertical.

NL Zet het onderstel rechtop.

RU Переверните стойку в вертикальное положение.

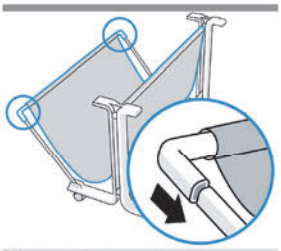
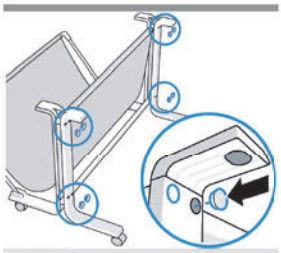
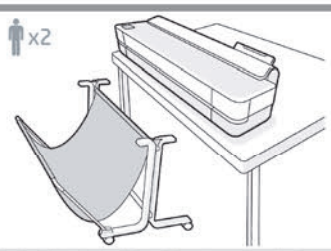
PL Obróć podstawę do pozycji pionowej.

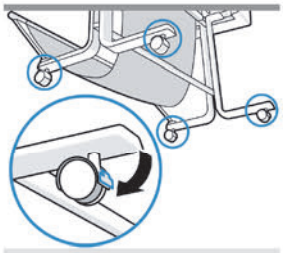
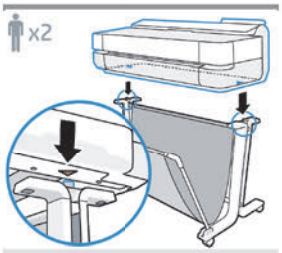
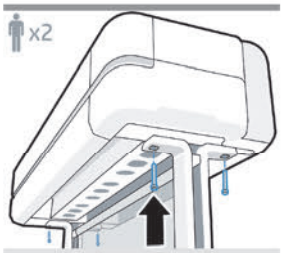
JA スタンドを回転させて立てます。

ZHCN 旋转支架，使其直立。

ZHTW 旋轉機架，將其倒放。

KO 스탠드를 똑바로 선 위치로 회전합니다.

16	17	18
		
EN Slot the basket bars into position on the legs.	Attach the 8 screw cap covers.	Place the printer and basket side by side with the front of the printer and stand in the same orientation. **Important:** If your printer has already been set up, do not turn it upside down.
FR Placez les barres de panier en position sur les pattes.	Fixez les 8 couvercles de capuchon à vis.	Placez l'imprimante et le panier côte à côte avec l'avant de l'imprimante et le socle sur la même orientation. **Important :** Si votre imprimante a déjà été mise en place, ne la retournez pas.
DE Schieben Sie die Stangen der Ablage in die richtige Position an den Standbeinen.	Bringen Sie die 8 Schraubkappenabdeckungen an.	Stellen Sie den Drucker und die Ablage nebeneinander; achten Sie dabei darauf, dass die Vorderseite des Druckers und des Standfußes die gleiche Ausrichtung aufweisen. **Wichtig:** Wenn Sie Ihren Drucker bereits aufgebaut haben, drehen Sie diesen nicht um.
IT Introdurre le barre del raccoglitore nelle gambe.	Fissare gli 8 tappi di copertura delle viti.	Posizionare la stampante e il raccoglitore una accanto all'altro con la parte anteriore della stampante e del supporto nella stessa direzione. **Importante:** se la stampante è già installata, non capovolgerla.
ES Inserte las barras de la cesta en su posición en las patas.	Fije las tapas de la tapa de 8 tornillos.	Coloque la impresora y la cesta una al lado de la otra, con la parte frontal de la impresora y del soporte mirando en la misma dirección. **Importante:** si la impresora ya está configurada, no la gire hacia abajo.
PT Encaixe as barras da cesta em posição nas pernas.	Fixe as 8 tampas de parafuso.	Posicione a impressora e a cesta lado a lado com a parte dianteira da impressora e o suporte virados para o mesmo lado. **Importante:** Se sua impressora já estiver configurada, não a vire de cabeça para baixo.
NL Bevestig de mandstangen op de juiste manier aan de poten.	Bevestig de 8 schroefkapjes.	Plaats de printer en de mand naast elkaar en zorg ervoor dat de voorkant van de printer en het onderstel in dezelfde richting wijzen. **Belangrijk:** Als de printer al is ingesteld, zet deze dan niet ondersteboven.
RU Вставьте стержни приемника на место в ногах.	Прикрепите восемь защитных колпачков для винтов.	Разместите принтер и приемник таким образом, чтобы передняя сторона принтера и стойка располагались в одном направлении. **Важно!** Если принтер уже собран, не переворачивайте его.
PL Umieść pręty koszyka w odpowiedniej pozycji w nogach.	Przymocuj 8 osłon nakrętek.	Umieść drukarkę i kosz obok siebie z przodem drukarki i podstawą w tym samym kierunku. **Ważne:** Jeśli drukarka została już skonfigurowana, nie należy odwracać jej do góry nogami.
JA バスケット バーを脚の所定の位置に挿入します。	8本のネジ キャップ カバーを取り付けます。	プリンタとスタンドの正面が同じ向きになるようにプリンタとバスケットを並べます。 **重要:** プリンタが既にセットアップされている場合は、逆さにしないでください。
ZHCN 将纸篮支杆插入支腿上的相应位置。	装上 8 个螺丝帽盖。	将打印机和纸篮相邻放置，且打印机正面与支架的方向相同。 **重要说明:** 如果打印机已组装好，请不要将其颠倒放置。
ZHTW 將承接槽撐桿插入腳架上的定位。	裝上 8 個螺帽蓋。	將印表機和承接槽並排放置，承接槽擺在印表機前方，且朝向同方向。 **重要:** 如果您的印表機已完成安裝，請勿將它上下倒置。
KO 바스켓 바를 다리의 위치에 끼웁니다.	나사 캡 덮개 8개를 부착합니다.	프린터와 바스켓을 프린터 앞면과 나란히 놓고 같은 방향으로 세워 놓습니다. **중요:** 프린터가 이미설치되어 있다면 뒤집어 놓지마십시오.

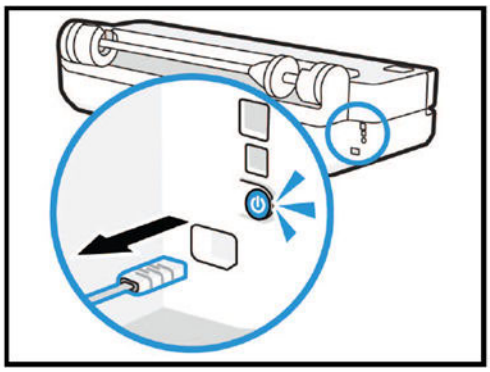
19	20	21
		
EN Check all 4 wheels are locked.	Place the printer on the stand.	From underneath, fix the printer to the stand with 4 screws.
FR Vérifiez si les 4 roues sont bloquées.	Placez l'imprimante sur le socle.	De dessous, fixez l'imprimante au socle à l'aide de 4 vis.
DE Überprüfen Sie, ob die Bremse in den vier Rollen eingerastet ist.	Setzen Sie den Drucker auf den Standfuß.	Befestigen Sie den Drucker von unten mit 4 Schrauben am Standfuß.
IT Controllare che le 4 rotelle siano bloccate.	Posizionare la stampante sul supporto.	Partendo dal basso, fissare la stampante al supporto con 4 viti.
ES Asegúrese de que las 4 ruedas estén bloqueadas.	Coloque la impresora en el soporte.	Desde debajo, fije la impresora al soporte con 4 tornillos.
PT Verifique se as 4 rodas estão travadas.	Coloque a impressora no suporte.	Por baixo, fixe a impressora no suporte com 4 parafusos.
NL Controleer of de 4 wielen geblokkeerd zijn.	Plaats de printer op het onderstel.	Bevestig de printer van onderaf op het onderstel met 4 schroeven.
RU Убедитесь, что 4 колеса заблокированы.	Установите принтер на стойку.	Снизу зафиксируйте принтер на стойке с помощью четырех винтов.
PL Sprawdź, czy 4 kółka są zablokowane.	Umieść drukarkę na podstawie.	Od spodu przymocuj drukarkę do podstawy, korzystając z 4 śrub.
JA 4個のキャスターがロックされていることを確認します。	プリンタをスタンドに載せます。	下から、4本のネジでプリンタをスタンドに固定します。
ZHCN 确保 4 个脚轮已锁紧。	将打印机放在支架上。	从下面，用 4 个螺丝将打印机固定到支架上。
ZHTW 檢查 4 個腳輪是否都已鎖定。	將印表機放到機架上。	使用 4 顆螺絲，從下方將印表機固定到機架上。
KO 4개의 휠이 잠겨있는지 확인합니다.	프린터를 스탠드에 놓습니다.	아래에서 나사 4개로 프린터를 스탠드에 고정합니다.

Roll Cover (T200)

The original Roll Cover accessory flyer is reproduced here for your reference.

HP DesignJet T200 Printer Series
Roll cover

1



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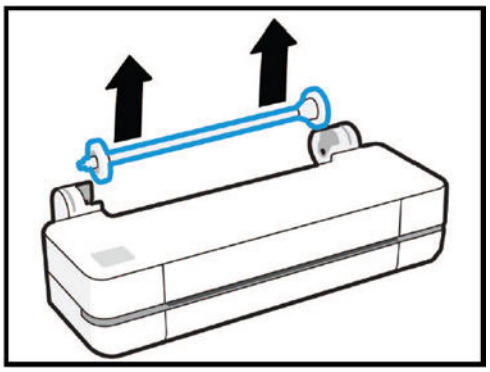

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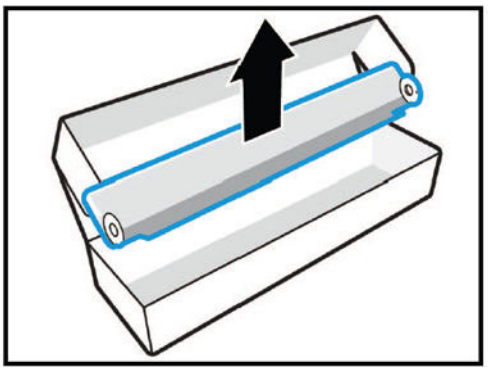

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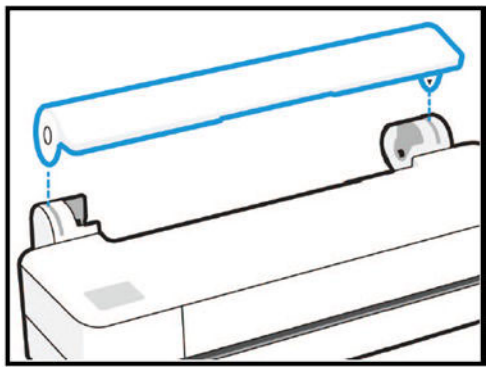

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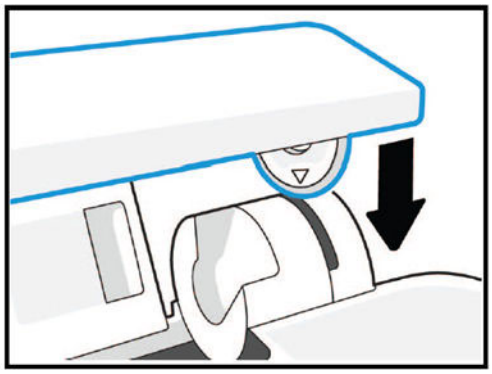

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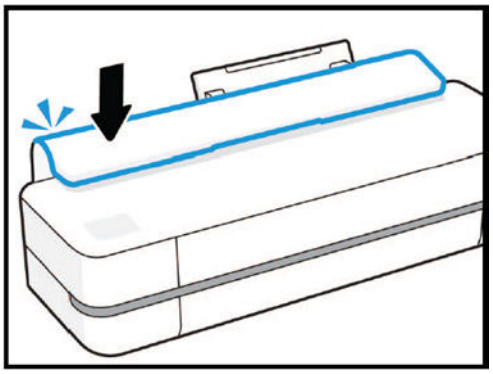

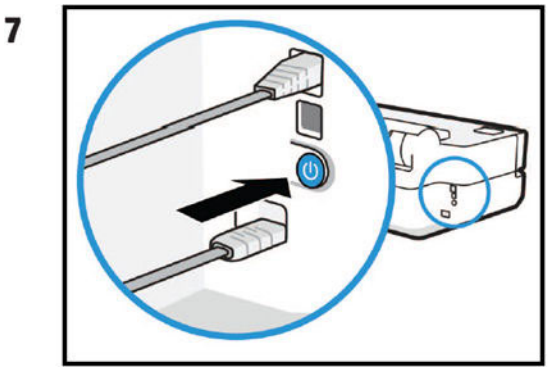

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5HB08-90013

Cutter replacement instructions

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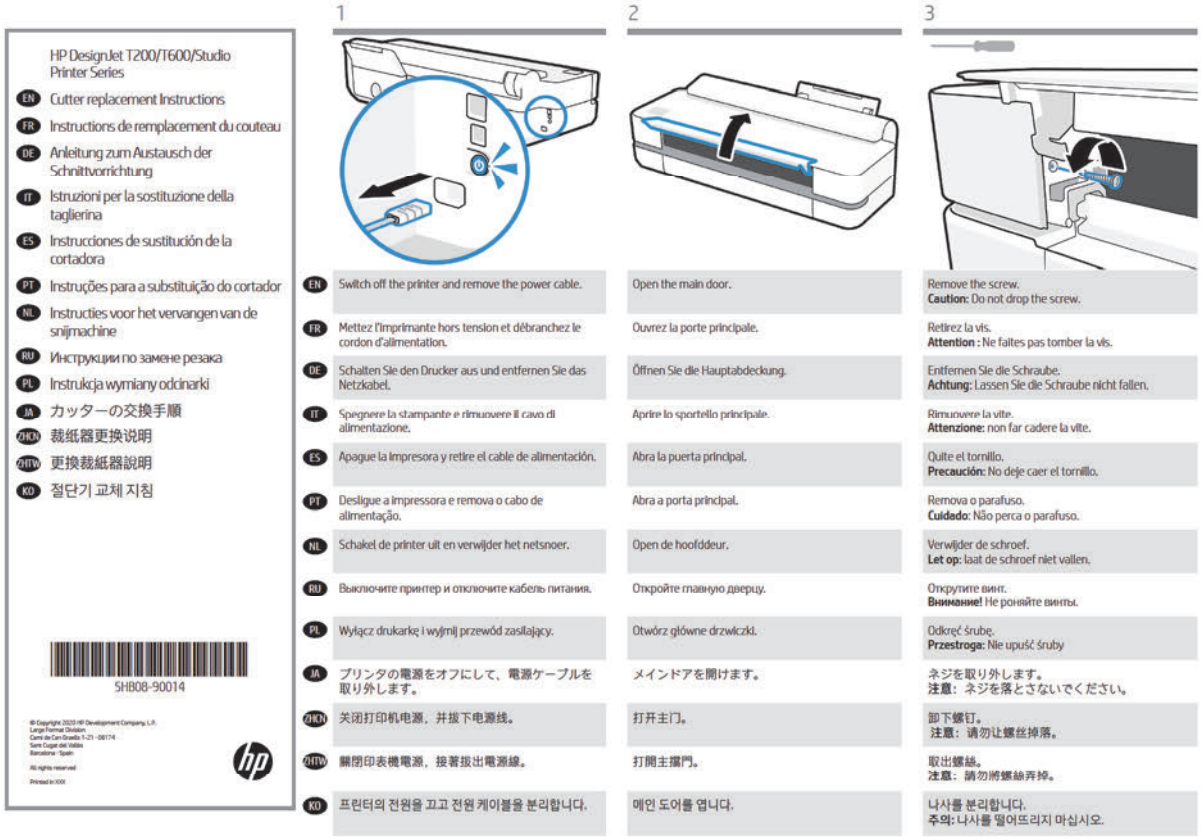

HP DesignJet T200/T600/Studio Printer Series

EN Cutter replacement Instructions
FR Instructions de remplacement du couteau
DE Anleitung zum Austausch der Schnittvorrichtung
IT Istruzioni per la sostituzione della taglierina
ES Instrucciones de sustitución de la cortadora
PT Instruções para a substituição do cortador
NL Instructies voor het vervangen van de snijmachine
RU Инструкции по замене резака
PL Instrukcja wymiany odcinarki
JA カッターの交換手順
ZHCN 裁纸器更换说明
ZHTW 更換裁紙器說明
KO 절단기 교체 지침

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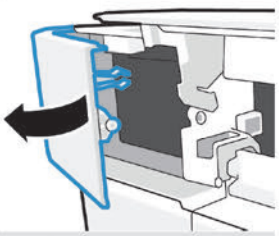
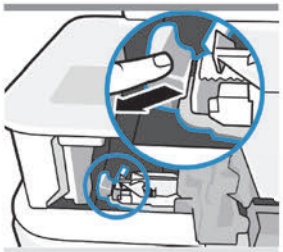
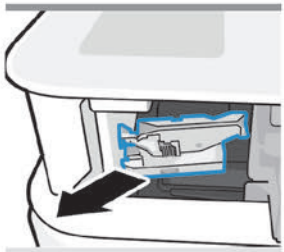
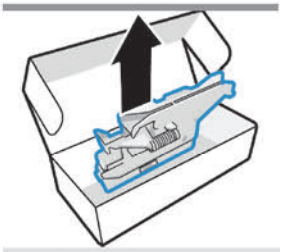
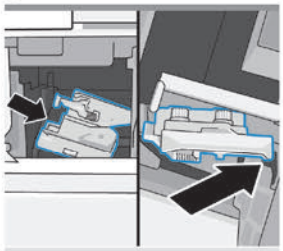
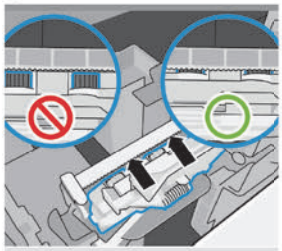
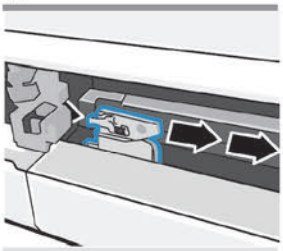
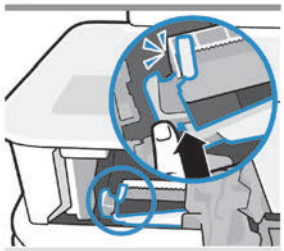
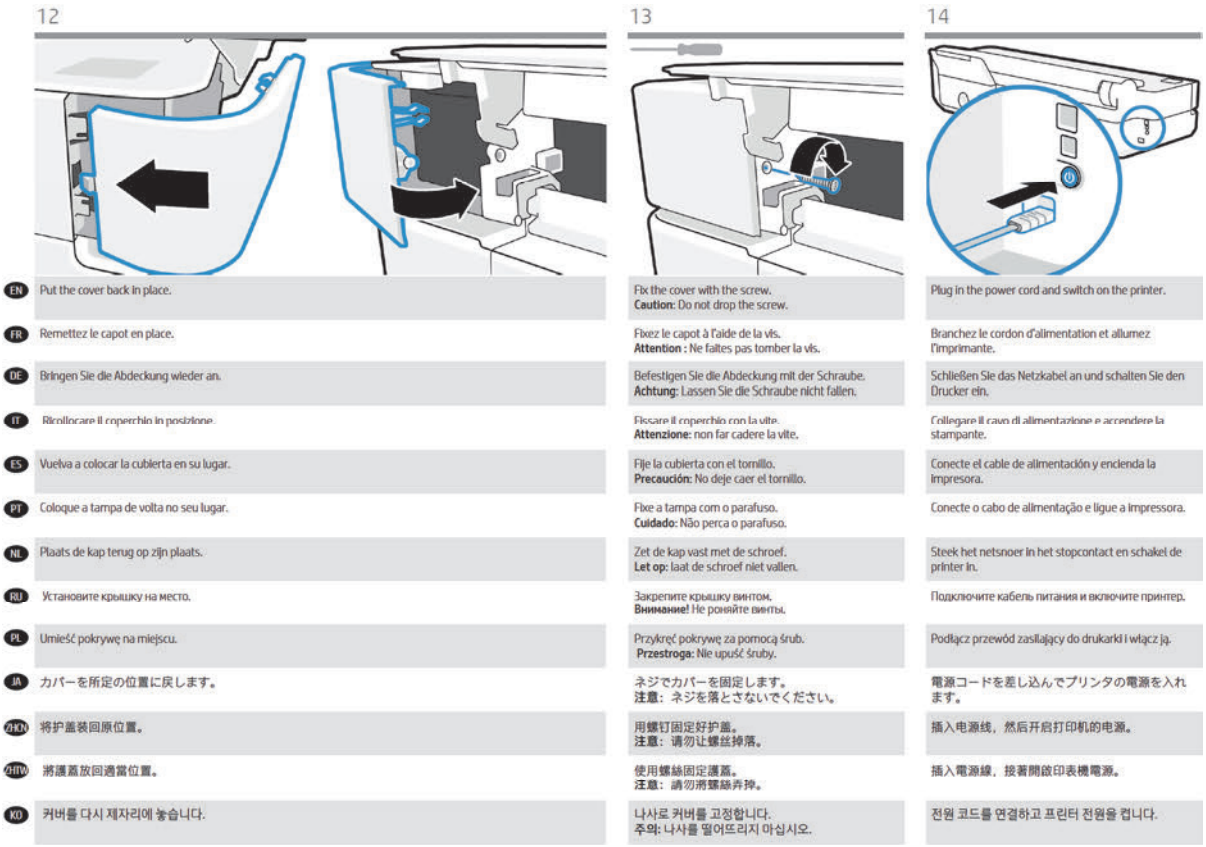
	1	2	3
EN	Switch off the printer and remove the power cable.	Open the main door.	Remove the screw. **Caution:** Do not drop the screw.
FR	Mettez l'imprimante hors tension et débranchez le cordon d'alimentation.	Ouvrez la porte principale.	Retirez la vis. **Attention :** Ne faites pas tomber la vis.
DE	Schalten Sie den Drucker aus und entfernen Sie das Netzkabel.	Öffnen Sie die Hauptabdeckung.	Entfernen Sie die Schraube. **Achtung:** Lassen Sie die Schraube nicht fallen.
IT	Spegnere la stampante e rimuovere il cavo di alimentazione.	Aprire lo sportello principale.	Rimuovere la vite. **Attenzione:** non far cadere la vite.
ES	Apague la impresora y retire el cable de alimentación.	Abra la puerta principal.	Quite el tornillo. **Precaución:** No deje caer el tornillo.
PT	Desligue a impressora e remova o cabo de alimentação.	Abra a porta principal.	Remova o parafuso. **Cuidado:** Não perca o parafuso.
NL	Schakel de printer uit en verwijder het netsnoer.	Open de hoofddeur.	Verwijder de schroef. **Let op:** laat de schroef niet vallen.
RU	Выключите принтер и отключите кабель питания.	Откройте главную дверцу.	Открутите винт. **Внимание!** Не роняйте винты.
PL	Wyłącz drukarkę i wyjmij przewód zasilający.	Otwórz główne drzwiczki.	Odkręć śrubę. **Przestroga:** Nie upuść śruby
JA	プリンタの電源をオフにして、電源ケーブルを取り外します。	メインドアを開けます。	ネジを取り外します。 **注意：** ネジを落とさないでください。
ZHCN	关闭打印机电源，并拔下电源线。	打开主门。	卸下螺钉。 **注意：** 请勿让螺丝掉落。
ZHTW	關閉印表機電源，接著拔出電源線。	打開主擋門。	取出螺絲。 **注意：** 請勿將螺絲弄掉。
KO	프린터의 전원을 끄고 전원 케이블을 분리합니다.	메인 도어를 엽니다.	나사를 분리합니다. **주의:** 나사를 떨어뜨리지 마십시오.

4	5	6	7
			
EN Remove the cover.	Pull the blue lever to release the cutter.	Remove the cutter.	Remove the new cutter from its box.
FR Retirez le capot.	Tirez sur le levier bleu pour dégager le couteau.	Retirez le couteau.	Retirez le nouveau couteau de son carton.
DE Nehmen Sie die Abdeckung ab.	Ziehen Sie am blauen Hebel, um die Schnittvorrichtung zu lösen.	Entfernen Sie die Schnittvorrichtung.	Nehmen Sie die neue Schnittvorrichtung aus der Verpackung.
IT Rimuovere il coperchio.	Tirare la leva blu per sbloccare la taglierina.	Rimuovere la taglierina.	Rimuovere la nuova taglierina dalla confezione.
ES Retire la cubierta.	Tire de la palanca azul para liberar la cortadora.	Retire la cortadora.	Saque la cortadora nueva de su caja.
PT Remova a tampa.	Puxe a alavanca azul para liberar o cortador.	Remova o cortador.	Remova o novo cortador de sua caixa.
NL Verwijder de kap.	Trek aan de blauwe hendel om de snijmachine los te maken.	Verwijder de snijmachine.	Haal de nieuwe snijmachine uit de doos.
RU Снимите крышку.	Потяните за синий рычаг, чтобы освободить резак.	Снимите резак.	Извлеките новый резак из упаковки.
PL Zdejmij osłonę.	Pociągnij niebieską dźwignię, aby zwolnić odcinarkę.	Wyjmij odcinarkę.	Wyjmij nową odcinarkę z pudełka.
JA カバーを取り外します。	青いレバーを引いて、カッターの固定を解除します。	カッターを取り外します。	箱から新しいカッターを取り出します。
ZHCN 卸下护盖。	提起蓝色手柄使裁纸器松开。	取下裁纸器。	从包装箱中取出新裁纸器。
ZHTW 取下護蓋。	拉下藍色控制桿以鬆開裁紙器。	取下裁紙器。	從包裝盒中取出新的裁紙器。
KO 커버를 분리합니다.	파란색 레버를 당겨 절단기를 풉니다.	절단기를 분리합니다.	상자에서 새 절단기를 분리합니다.

8	9	10	11
			
EN Insert the new cutter.	Engage two white gears under the rack. **Note:** The cutter should be loose (not blocked).	Move the cutter to the center of the printer. If blocked, go back to step 9.	Push the blue lever until it 'clicks'.
FR Insérez le nouveau couteau.	Enclenchez deux engrenages blancs sous le rack. **Remarque :** le couteau doit être desserré (et non bloqué).	Déplacez le couteau au centre de l'imprimante. En cas de blocage, retournez à l'étape 9.	Poussez le levier bleu jusqu'à ce qu'il « s'enclenche ».
DE Setzen Sie die neue Schnittvorrichtung ein.	Die zwei weißen Zahnräder unter dem Gestell müssen einrasten. Hinweis: Die Schnittvorrichtung muss locker sitzen (darf nicht blockiert sein).	Bewegen Sie die Schnittvorrichtung zur Mitte des Druckers. Wenn Sie blockiert ist, gehen Sie zu Schritt 9 zurück.	Betätigen Sie den blauen Hebel, bis er mit einem Klickgeräusch einrastet.
IT Inserire la nuova taglierina.	Agganciare due ingranaggi bianchi sotto la cremagliera. **Nota:** la taglierina deve essere allentata (non bloccata).	Spostare la taglierina al centro della stampante. Se è bloccata, tornare al passaggio 9.	Spingere la leva blu finché non scatta.
ES Inserte la cortadora nueva.	Enganche dos engranajes blancos debajo del bastidor. **Nota:** la cortadora debería estar suelta (no bloqueada).	Mueva la cortadora al centro de la impresora. Si está bloqueada, vuelva al paso 9.	Empuje la palanca azul hasta que haga «clic».
PT Insira o novo cortador.	Prenda duas engrenagens brancas abaixo da prateleira. **Observação:** O cortador deve estar solto (não bloqueado).	Mova o cortador para o centro da impressora. Se bloqueado, volte para a etapa 9.	Empurre a alavanca azul até ouvir um "clique".
NL Plaats de nieuwe snijmachine.	Plaats de twee witte tandwielen onder het rek. **Opmerking:** de snijmachine moet losjes zitten (niet geblokkeerd).	Verplaats de snijmachine naar het midden van de printer. Als deze is geblokkeerd, ga dan terug naar stap 9.	Druk op de blauwe hendel totdat deze 'vastklikt'.
RU Вставьте новый резак.	Защелкните две белые шестерни под рейкой. **Примечание.** Резак должен двигаться свободно (не быть заблокирован).	Переместите резак к центру принтера. Если он не двигается, вернитесь к шагу 9.	Нажмите на синий рычаг, чтобы он защелкнулся.
PL Włóż nową odcinarkę.	Zamontuj dwa białe koła zębate pod stojakiem. **Uwaga:** Odcinarki powinny być luźne (nie zablokowane).	Przesuń odcinarkę ku środkowi drukarki. Jeśli jest zablokowana, wróć do kroku 9.	Pociągnij niebieską dźwignię, aż zaskoczy.
JA 新しいカッターを挿入します。	ラックの下の2つの白いギアをかけます。 **注記:** カッターはゆるく取り付けます（ブロックされていないこと）。	カッターをプリンタの中央に移動します。ブロックされている場合は、手順9に戻ります。	カチッと音がするまで青いレバーを押し込みます。
ZHCN 插入新裁纸器。	让机架下面的两个白色齿轮啮合到位。 **注：** 裁纸器不可以太紧（必须不受阻）。	将裁纸器移到打印机的中心位置。如果受到阻碍，请返回步骤 9。	推动蓝色手柄，直至其卡入到位。
ZHTW 插入新的裁紙器。	嚙合機架下方的兩個白色齒輪。 **附註：** 裁紙器應該是鬆動的（而不是緊緊固定）。	將裁紙器移至印表機中間。如果受到阻擋，請返回步驟 9。	推藍色控制桿，直到聽到「喀擦」一聲。
KO 새 절단기를 삽입합니다.	흰색 기어 2개를 랙 아래에 체결합니다. **참고:** 절단기는 느슨해야 합니다(막히지 않음).	절단기를 프린터의 중앙으로 이동합니다. 막힌 경우, 9단계로 돌아갑니다.	파란색 레버를 '딸깍' 소리가 날 때까지 밉니다.



HP DesignJet Studio Stand Assembly Instructions

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HP DesignJet Studio

Printer Series

EN Stand assembly instructions

FR Instructions d'assemblage du support

DE Anleitung zur Ständermontage

IT Istruzioni per l'installazione del piedistallo

ES Instrucciones de montaje del soporte

PT Instruções de montagem do suporte

NL Instructies voor assemblage van de standaard

RU Инструкции по сборке основания

PL Instrukcje montażu podstawy

JA スタンドの組み立て手順

ZHCN 支架组装说明

ZHTW 機架組裝說明

KO 스탠드 조립 지침

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EN These assembly instructions explain how to assemble the stand of your printer . Because spare screws are supplied, some screws may remain unused after assembly.

FR Ces instructions d'assemblage expliquent comment assembler le socle de l'imprimante. Des vis de rechange étant fournies, il se peut que certaines vis ne soient pas utilisées après l'assemblage.

DE Diese Montageanleitung erklärt, wie der Standfuß des Druckers montiert wird. Da im Lieferumfang Reserveschrauben enthalten sind, kann es vorkommen, dass bei der Montage ein paar Schrauben übrigbleiben.

IT Le presenti istruzioni di assemblaggio illustrano come assemblare il supporto della stampante. Dato che vengono fornite delle viti di riserva, alcune di queste viti potrebbero rimanere inutilizzate al termine dell'assemblaggio.

ES Estas instrucciones de montaje explican cómo montar el soporte de la impresora. También se incluyen tornillos de repuesto, por lo que algunos pueden quedar sin utilizar una vez terminado el montaje.

PT Essas instruções de montagem explicam como montar o suporte da impressora. Como são fornecidos parafusos sobressalentes, alguns parafusos podem sobrar após a montagem.

NL In deze montage-instructies wordt uitgelegd hoe u het onderstel van uw printer kunt monteren. Aangezien er reserveschroeven zijn meegeleverd, zullen er na de montage schroeven overblijven.

RU Эти инструкции по сборке объясняют, как собрать стойку принтера. Поскольку в комплект поставки входят запасные винты, несколько винтов могут остаться неиспользованными после сборки.

PL Niniejsze instrukcje dotyczące montażu opisują sposób montażu podstawy drukarki. Dołączono dodatkowe śruby. Dlatego po zakończeniu montażu kilka śrub może pozostać niewykorzystanych.

JA これらの組み立て手順では、プリンタのスタンドの組み立て方法を説明します。予備のネジが同梱されているため、ネジの一部は組み立て後も未使用で余ることがあります。

ZHCN 这些组装说明描述了如何组装打印机支架。由于有备用螺钉，因此组装完成后可能还有螺钉未使用。

ZHTW 這些組件說明描述將解釋如何組裝您印表機的機架。由於隨附備用螺絲，所以完成組裝後仍會有多餘的未用螺絲。

KO 이러한 조립 지침은 프린터의 스탠드를 조립하는 방법을 설명합니다. 예비 나사가 제공되므로 일부 나사는 조립 후에도 사용하지 않은 채로 남을 수 있습니다.

EN 2m at the side is needed for unpacking. The size of the crate is: FR 2 mètres sont nécessaires sur le côté pour le déballage. La taille de l'emballage est : DE Zum Auspacken wird auf jeder Seite ein freier Platz von 2 m benötigt. Größe der Kiste: IT Per il disimballaggio, è necesssario lasciare 2 metri di spazio libero sul lato. La dimensione dell'imballaggio è: ES Para desembalar la impresora se necesitan 2 m laterales. El tamaño de la caja es el siguiente: PT 2 m no lado são necessários para desembalagem. O tamanho do engradado é: NL 2m aan de zijkant is nodig voor unpacking.The grootte van het krat is: RU При распаковке с каждой стороны требуется по 2 человека.Размер упаковки: PL Należy pozostawić po 2 m wolnej przestrzeni z każdej strony na rozpakowanie. Wymiary opakowania: JA 開梱する際は、横に2mのスペースが必要です。クレートのサイズ: ZHCN 侧面应留出 2 米的空间以拆开包装。包装箱尺寸: ZHTW 打開包裝時，側邊需要 2 公尺的空間。包裝箱的大小: KO 상자를 풀려면 옆면에 2m가 필요합니다. 상자 크기:

24": 1148 mm x 573 mm x 157 mm

36": 1488 mm x 579 mm x 148 mm

EN 2 people are required to perform certain tasks. FR L'exécution de certaines tâches nécessite la présence de 2 personnes. DE Für bestimmte Tätigkeiten werden 2 Personen benötigt. IT Per determinate operazioni, sono necessarie 2 persone. ES Algunas tareas se deben realizar entre2 personas. PT São necessárias 2 pessoas para a realização de determinadas tarefas. NL Voor bepaalde taken zijn 2 personen nodig. RU Некоторые задачи следует выполнять вдвоем. PL Do wykonania niektórych czynności potrzebne są 2 osoby. JA 特定の作業は、2名で行う必要があります。ZHCN 某些任务需要 2 人完成。ZHTW 某些工作需要 2 個人才能執行。KO 일부 작업에는 3 명이 필요합니다.

EN Time required for assembly of the printer is approximately 20 minutes . FR Le temps requis pour l'assemblage de l'imprimante est d'environ 20 minutes. DE Der Zusammenbau des Druckers dauert etwa 20 Minuten. IT L'installazione della stampante richiede circa 20 minuti. ES El tiempo de montaje de la impresora es aproximadamente de 20 minutos. PT O tempo necessário para a montagem da impressora é de aproximadamente 20 minutos. NL De vereiste tijd voor assemblage van de printer is ongeveer 20 minuten. RU Сборка принтера занимает примерно 20 минут. PL Czas potrzebny do zmontowania drukarki: około 20 minut. JA プリンタの組み立て所要時間は約20分です。ZHCN 组装打印机大约需要 20 分钟的时间。ZHTW 組裝印表機大約要花 20 分鐘的時間。KO 프린터 조립에 소요되는 시간은 약 20분입니다.

EN Tools required: Screwdriver (included). FR Outils nécessaires : Tournevis (fourni). DE Erforderliches Werkzeug: Schraubendreher (enthalten). IT Strumenti necessari: cacciavite (incluso). ES Herramientas requeridas: Destornillador (incluido). PT Ferramentas necessárias: Chave de fenda (incluída). NL Benodigd gereedschap: Schroevendraaier (inbegrepen). RU Необходимые инструменты: Отвертка (в комплекте). PL Potrzebne narzędzia: śrubokręt (w zestawie). JA 必要な工具: ドライバ（付属しています）。ZHCN 必备工具：螺丝刀（附带提供）。ZHTW 必要工具：螺絲起子（隨附）。KO 필요한 도구: 드라이버(포함됨).

EN Remove the old stand

FR Retirer l'ancien socle

DE Entfernen Sie den alten Standfuß

IT Rimuovere il vecchio supporto

ES Retire el soporte antiguo

PT Remova o suporte antigo

NL Verwijder het oude onderstel

RU Берите старую стойку

PL usuń starą podstawę

JA 古いスタンドの取り外し

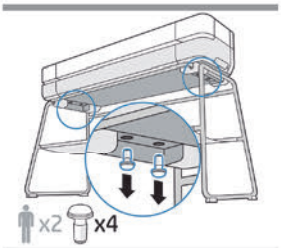
ZHCN 卸下旧支架

ZHTW 拆除舊的機架

KO 구형 스탠드 제거

3' x2

1

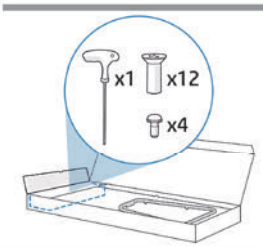


2

	1	2
EN	Remove the screws.	Remove the stand.
FR	Retirez les vis.	Retirez le socle.
DE	Entfernen Sie die Schrauben.	Entfernen Sie den Standfuß.
IT	Rimuovere le viti.	Rimuovere il supporto.
ES	Extraiga los tornillos	Retire el soporte.
PT	Remova os parafusos.	Remova o suporte.
NL	Verwijder de schroeven.	Verwijder het onderstel.
RU	Выверните винты.	Снимите стойку.
PL	Odkręć śruby.	Wyjmij podstawę.
JA	ネジを取り外します。	スタンドを取り外します。
ZHCN	拧下螺丝。	卸下支架。
ZHTW	取下螺絲。	拆除機架。
KO	나사를 제거합니다.	스탠드를 제거합니다.

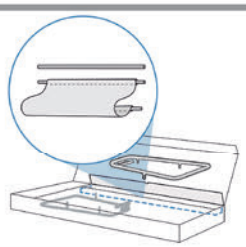
EN Assemble the new stand
FR Monter le nouveau socle
DE Montieren Sie den neuen Standfuß
IT Assemblare il nuovo supporto
ES Monte el soporte nuevo
PT Monte o novo suporte
NL Monteer het nieuwe onderstel
RU Соберите новую стойку
PL Zamontuj nową podstawę
JA 新しいスタンドの組み立て
ZHCN 安装新支架
ZHTW 組裝新的機架
KO 새 스탠드를 조립합니다

3



EN	Open the flap and locate the screws and screwdriver.
FR	Ouvrez le rabat et repérez les vis et le tournevis.
DE	Öffnen Sie die Klappe und suchen Sie die Schrauben und den Schraubendreher.
IT	Aprire l'aletta e individuare le viti e il cacciavite.
ES	Abra la solapa y localice los tornillos y el destornillador.
PT	Abra a aba e localize os parafusos e a chave de fenda.
NL	Open de klep en zoek de schroeven en schroevendraaier.
RU	Откройте крышку и найдите винты и отвертку.
PL	Otwórz klapę i odszukaj śruby oraz śrubokręt.
JA	フラップを開いて、ネジとドライバを確認します。
ZHCN	打开折盖，找到螺丝和螺丝刀。
ZHTW	打開封蓋，並找出螺絲與螺絲起子。
KO	덮개를 열고 나사와 드라이버를 찾습니다.

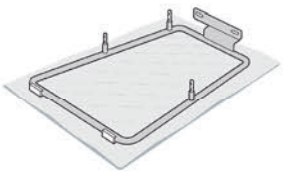
4



EN	Locate the side section, the bars, and the fabric.
FR	Repérez la section latérale, les barres et le tissu.
DE	Suchen Sie den Seitenbereich, die Stangen und den Stoff.
IT	Individuare la sezione laterale, le barre e il tessuto.
ES	Localice la sección lateral, las barras y la tela.
PT	Localize a seção lateral, as barras e a malha.
NL	Zoek het zijgedeelte, de stangen en de stof.
RU	Найдите боковую секцию, штанги и полотно.
PL	Znajdź sekcję boczną, paski i materiał
JA	サイドセクション、バー、ファブリックを確認します。
ZHCN	找到支架侧面部件、横杆和织物。
ZHTW	找出側面鐵架、鐵桿和布簾。
KO	측면 섹션, 바 및 패브릭을 찾습니다.

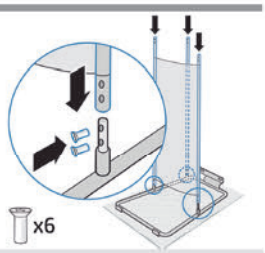
EN Stand Assembly
FR Assemblage du socle
DE Montage des Standfußes
IT Assemblaggio del supporto
ES Montaje del soporte
PT Montagem de suporte
NL Het onderstel monteren
RU Сборка основания
PL Montaż podstawy
JA スタンドの組み立て
ZHCN 底座组装
ZHTW 組裝機架
KO 스탠드 조립

5



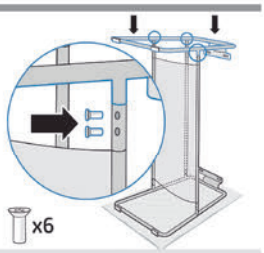
EN	Put some protection on the floor, then place the side section on it.
FR	Mettez une protection au sol, puis placez la section latérale dessus.
DE	Legen Sie einen Schutz auf den Boden und platzieren Sie den Seitenabschnitt darauf.
IT	Mettere una protezione sul pavimento, quindi posizionarvi la sezione laterale.
ES	Ponga algo de protección en el suelo y, a continuación, coloque la sección lateral sobre ella.
PT	Coloque proteção no chão e, em seguida, coloque a seção lateral sobre a mesma.
NL	Leg een beschermend materiaal op de vloer en leg het zijgedeelte erop.
RU	Установите на пол защитное покрытие. Затем поместите на него боковую секцию.
PL	Połóż ochronę na podłoże, a następnie umieść na niej sekcję boczną.
JA	床に何らかの養生をして、その上にサイドセクションを置きます。
ZHCN	在地板上放置一些保护物，然后将支架的侧面部件放置在上面。
ZHTW	在地板鋪上防護措施，接著將側面鐵架放在其上。
KO	바닥에 몇 가지 보호 장치를 마련하고 측면 섹션을 놓습니다.

6

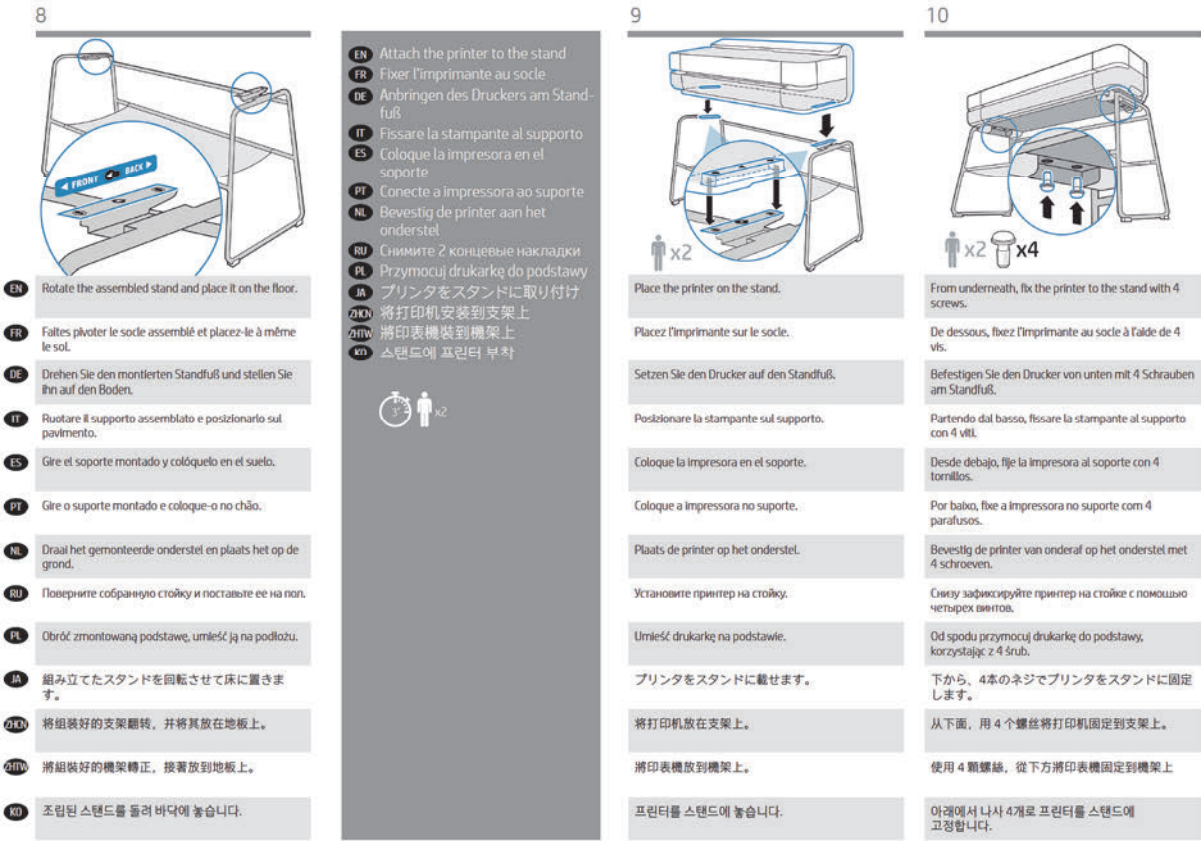


EN	Attach the bars to the side section, and fix them with 6 screws.
FR	Fixez les barres à la section latérale à l'aide de 6 vis. Bringen
DE	Sie die Stangen am Seitenabschnitt an und befestigen Sie diese mit 6 Schrauben.
IT	Sistemare le barre sulla sezione laterale e fissarle con 6 viti.
ES	Fije las barras a la sección lateral y fíjela los 6 tornillos.
PT	Prenda as barras na seção lateral e fixe-as com 6 parafusos.
NL	Bevestig de staven aan het zijgedeelte en zet deze met 6 schroeven vast.
RU	Прикрепите штанги к боковой секции и зафиксируйте их шестью винтами.
PL	Przymocuj paski do sekcji bocznej, a następnie przykręć do niej 6 śrub.
JA	バーをサイドセクションに取り付け、6本のネジで固定します。
ZHCN	将横杆连接到支架侧面部件，然后用 6 个螺丝将其固定。
ZHTW	將鐵桿裝到側面鐵架上，接著用 6 顆螺絲固定。
KO	측면 섹션에 바를 부착하고 나사 6개로 고정합니다.

7



EN	Attach the other side section and fix it with 6 screws.
FR	Fixez l'autre section latérale à l'aide de 6 vis.
DE	Bringen Sie den anderen Seitenabschnitt an und befestigen Sie ihn mit 6 Schrauben.
IT	Sistemare l'altra sezione laterale e fissarla con 6 viti.
ES	Ponga la otra sección lateral y fíjela con 6 tornillos.
PT	Prenda a seção do outro lado e fixe-a com 6 parafusos.
NL	Bevestig het andere zijgedeelte en zet het met 6 schroeven vast.
RU	Прикрепите боковую секцию с другой стороны и зафиксируйте ее шестью винтами.
PL	Zamocuj drugą sekcję boczną i przykręć do niej 6 śrub.
JA	もう一方のサイドセクションを取り付け、6本のネジで固定します。
ZHCN	连接支架的另一侧部件，并用 6 个螺丝将其固定。
ZHTW	裝上另一個側面鐵架，並使用 6 顆螺絲固定。
KO	다른 측면 섹션을 부착하고 나사 6개로 고정합니다.



Service Part

The following flyer provides service part information.

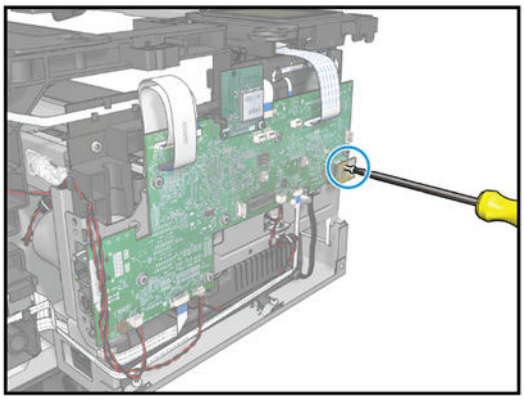
NVM Backup PCA

The original NVM Backup PCA flyer is reproduced here for your reference.

HP DesignJet T200/T600/Studio Printer Series

Caution: Do not forget to reuse NVM Backup PCA. Move the NVM Backup PCA from the original Main PCA to new Main PCA.

1



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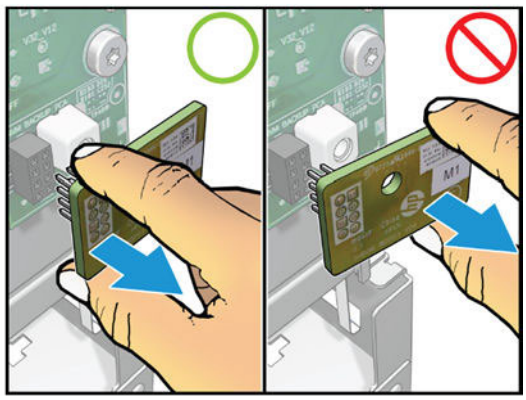

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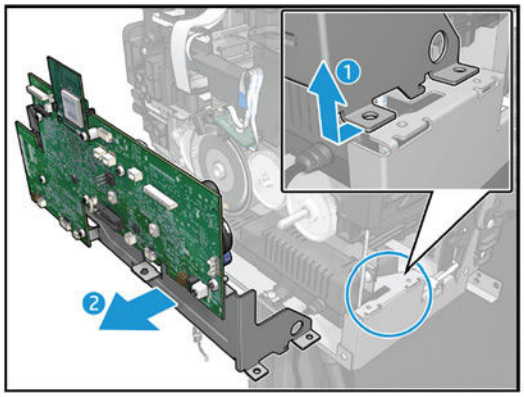

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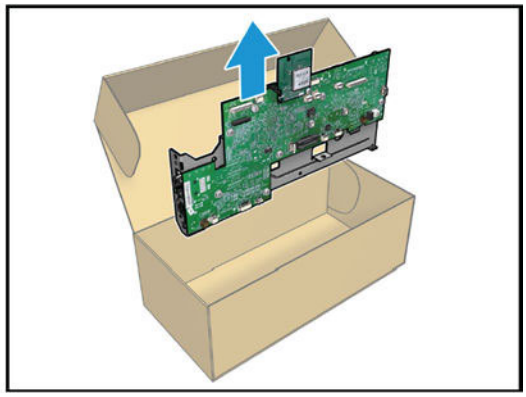

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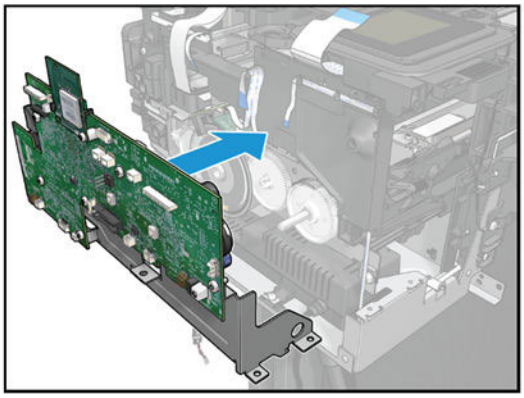
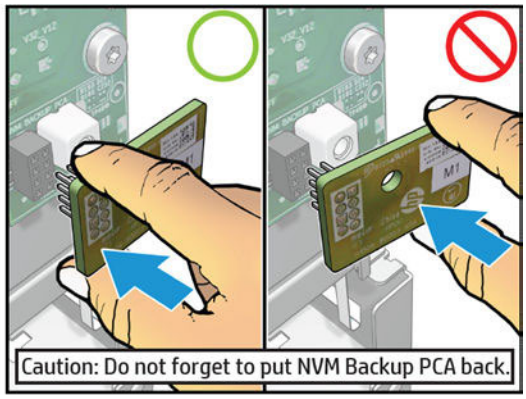
6