Repetitive image defect ruler

When troubleshooting the source of some print image defects, one solution is to identify if it is a repetitive defect (does the print quality defect appear multiple times on the printed page?). If this is the case, use a ruler to measure occurrences of repetitive image defects to help solve image-quality problems. For more information, see Use a ruler to measure between repetitive defects on page 297.

Place the ruler next to the first occurrence of the defect on the page. Find the distance between identical defects and use the table below to identify the component that is causing the defect.

IMPORTANT: Do not use solvents or oils to clean rollers. Instead, rub the roller with lint-free paper. If dirt is difficult to remove, rub the roller with lint-free paper that has been dampened with water.

NOTE: Defects on the tray pickup rollers or the Tray 1 pickup roller do not cause a repetitive defect. Defects on these rollers cause a defect to appear only on the leading edge of the image.

TIP: To make a printer specific repetitive defect ruler, use a metric ruler to transfer the measurements in Table 2-63 Repetitive defects on page 296 to a transparency or the edge of a piece of paper—clearly label each ruler mark with the associated defective assembly.

Table 2-63 Repetitive defects

Assembly	Distance between defects
Primary charging roller[1]	27 mm (1.06 in)
Developer roller[1][1]	26 mm (1.02 in)
Registration roller	42 mm (1.65 in)
Secondary transfer roller	50 mm (1.97 in)
Fuser film[2]	75 mm (2.95 in)
Pressure roller[2]	79 mm (3.11 in)
Photosensitive drum[1]	75 mm (2.95 in)

1 The primary charging roller, photosensitive drum and developer roller cannot be cleaned. If any of these rollers are indicated, replace the toner cartridge.

2 The primary fuser sleeve unit or pressure roller cannot be cleaned because they are internal assemblies in the fuser. If one of these assemblies is causing the defect, replace the fuser.

Use a ruler to measure between repetitive defects

The figures in this section show color repetitive defect pages. However, the process for measuring repetitive defects is valid for mono pages.

1. Identify a repetitive defect on the page.

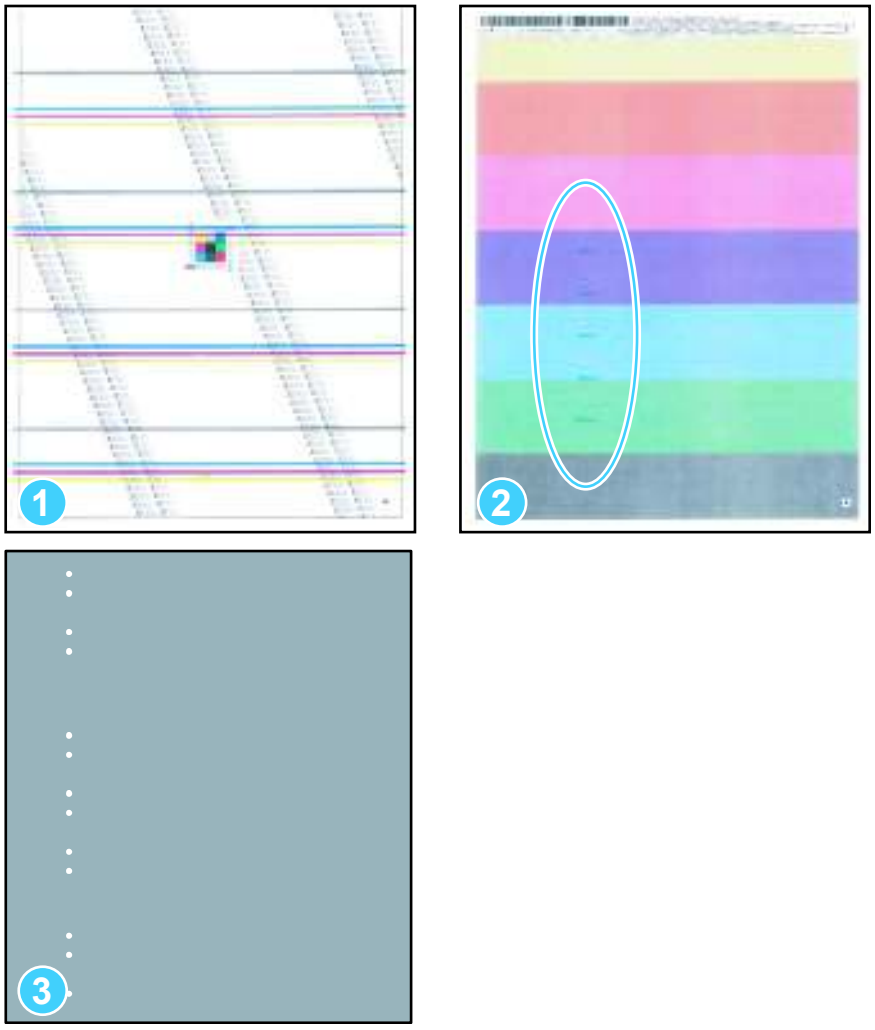
TIP: Print a cleaning page to see if that resolves the defect.

The example pages below show the following types of repetitive defects.

NOTE: These are examples only, other types of repetitive defects might appear on a page.

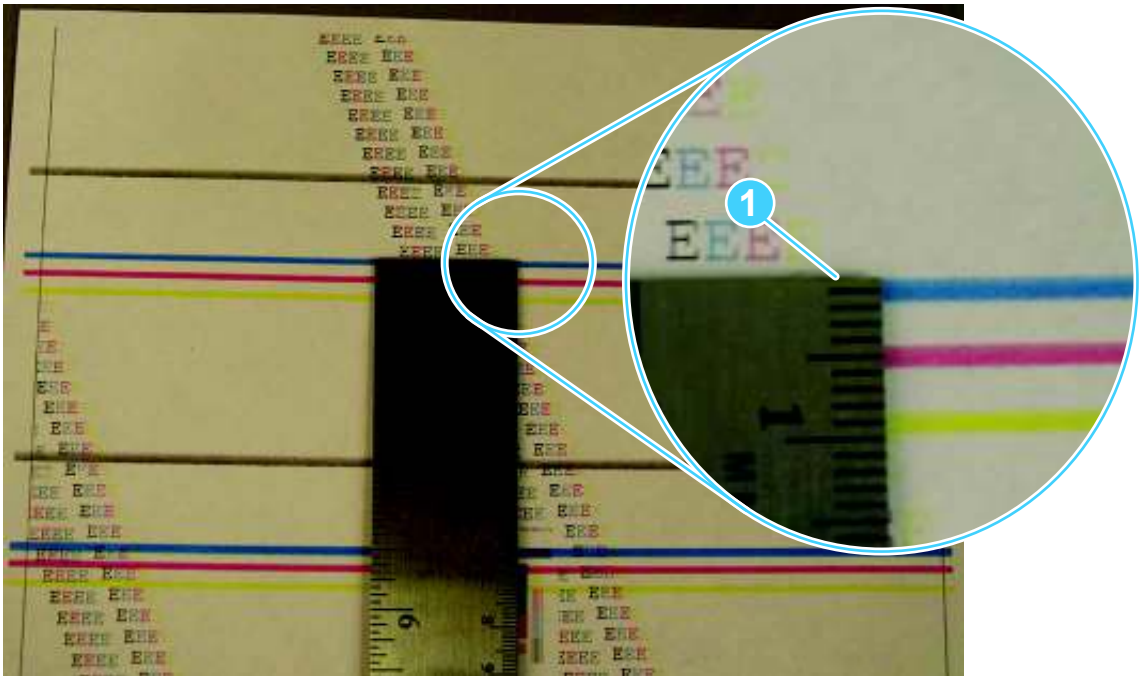
- Lines (callout 1)
- Smudges (callout 2)
- Dots or spots (callout 3)

Figure 2-87 Examples of repetitive defects



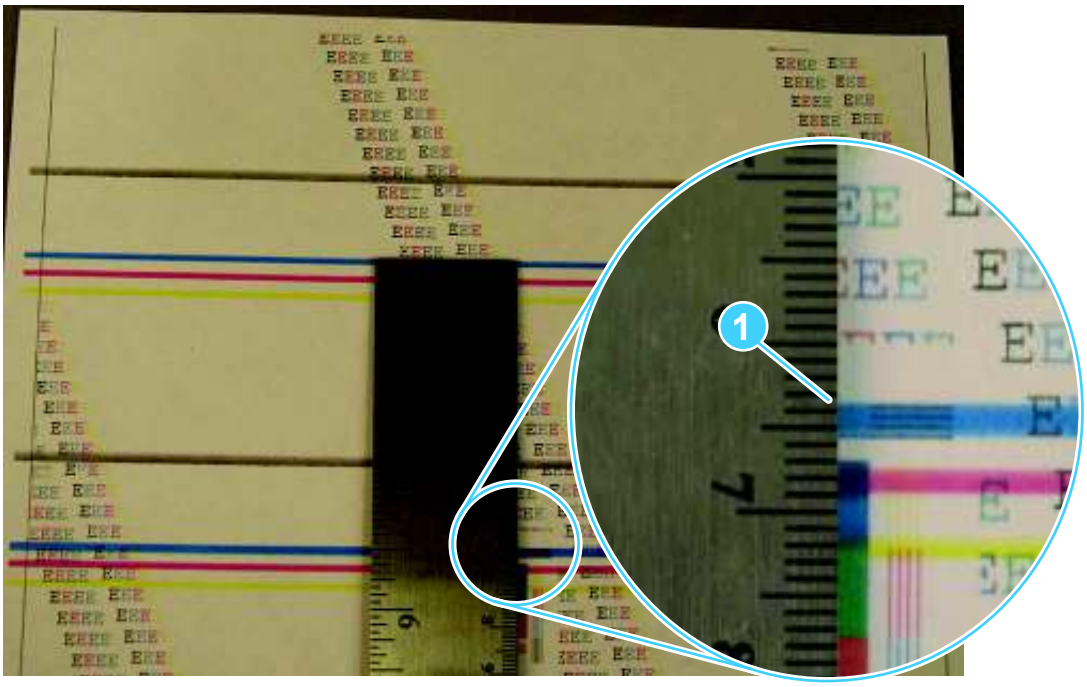
2. Position a metric ruler on the page with the “zero” ruler mark at one occurrence of the defect (callout 1).

Figure 2-88 Place the ruler on the page



3. Locate the next occurrence of the defect (callout 1).

Figure 2-89 Locate the next repetitive defect



4. Measure the distance (in millimeters) between the two occurrences (callout 1), and then use Table 2-63 Repetitive defects on page 296 to determine the defective assembly.

TIP: Always measure from and to the same point on the defects. For example, if the ruler is “zeroed” at the top edge of a defect, measure to the top edge of the next occurrence of that defect.

Figure 2-90 Determine the defective assembly