# Print quality guide

Many print quality problems can be solved by replacing a supply or maintenance item approaching the end of its intended life. Check the printer control panel for a message about a printer supply.

Isolating print quality problems

Print the print quality test pages to help isolate print quality problems.

1 Turn the printer off.

2 Load letter- or A4-size paper in the tray or feeder.

3 Hold down `2 ABC` and `6 MNO` while turning the printer on.

4 Release the buttons when the screen with the progress bar appears.

The printer performs a power-on sequence, and then the Configuration menu appears.

5 Touch **Print Quality Pages** > **Print Quality Pages**.

The print quality test pages print.

6 Touch **Back** > **Exit Config Menu**.

Printer is printing blank pages
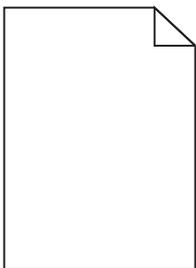
Try one or more of the following:

MAKE SURE THERE IS NO PACKING MATERIAL LEFT ON THE TONER CARTRIDGE

Remove the toner cartridge and make sure the packing material is properly removed. Reinstall the toner cartridge.

MAKE SURE THE TONER CARTRIDGE IS NOT LOW ON TONER

When `88.xx [color] cartridge low` appears, make sure the toner is distributed evenly within the toner cartridge:

1 Remove the toner cartridge.

2 Firmly shake the cartridge side-to-side and front-to-back several times to redistribute the toner.

3 Reinsert the toner cartridge.

> **Note:** If print quality does not improve, replace the toner cartridge.

If the problem continues, the printer may need to be serviced. For more information, contact Customer Support.

Characters have jagged or uneven edges
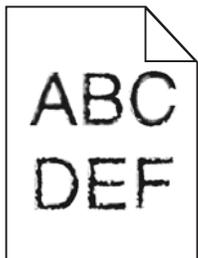
If you are using downloaded fonts, verify that the fonts are supported by the printer, the host computer, and the software program.

Colors not aligned properly

Color has shifted outside of the appropriate area or has been superimposed over another color area. Try one or more of the following:

PERFORM COLOR ADJUST

From the printer control panel Quality menu, perform Color Adjust.

REINSTALL THE TONER CARTRIDGE

Remove and reinstall the toner cartridge.

ADJUST THE COLOR ALIGNMENT

1 Turn the printer off.

2 Load letter- or A4-size paper in the tray.

3 Hold down [2 ABC] and [6 MNO] while turning the printer on.

4 Release the buttons when the screen with the progress bar appears.

The printer performs a power-on sequence, and then the Configuration menu appears.

5 Touch **Color Alignment** > **Color Alignment**.

The color alignment pages print.

6 Touch **Color Alignment**.

7 On the printed alignment pages, find the straightest of the 20 lines beside the letter A.

8 From the printer control panel, touch the left or right arrow to select that number.

9 Repeat steps 9 and 10 to align sets B through L.

10 Touch **Back** > **Exit Config Menu**.

Note: If necessary, adjust the color alignment again.

Clipped images

Try one or more of the following:

CHECK THE GUIDES

Move the width and length guides in the tray to the correct positions for the paper size loaded.
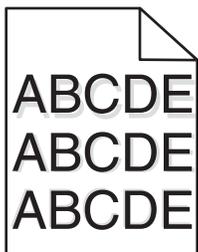
CHECK THE PAPER SIZE SETTING

Make sure the paper size setting matches the paper loaded in the tray:

1 From the printer control panel Paper menu, check the Paper Size setting.

2 Before sending the job to print, specify the correct size setting:
- For Windows users, specify the size from Print Properties.
- For Macintosh users, specify the size from the Page Setup dialog.

Fine horizontal lines appear on color pages

You may notice fine, horizontal lines in photographs or pages with a high concentration of color. This can occur when the printer is in Quiet Mode. To fix this, set Quiet Mode to **Off (Image/Photo)**.

Shadow images appear on prints

CHECK THE PAPER TYPE AND WEIGHT SETTINGS

Make sure the paper type and weight settings match the paper loaded in the tray:

1 From the printer control panel Paper menu, check the Paper Type and Paper Weight settings.

2 Before sending the job to print, specify the correct type setting:
- For Windows users, specify the type from Print Properties.
- For Macintosh users, specify the type from the Print dialog.

MAKE SURE THE IMAGING UNIT IS NOT DEFECTIVE

Replace the imaging unit.

MAKE SURE THE TONER CARTRIDGE IS NOT LOW ON TONER

When `88.xx [color] cartridge low` appears, make sure the toner is distributed evenly within the toner cartridge.

1 Remove the toner cartridge.

> **Warning—Potential Damage:** Be careful not to touch the photoconductor drum. Doing so may affect the print quality of future print jobs.
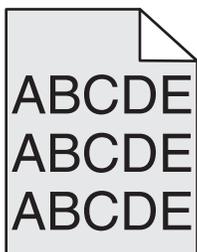
2 Firmly shake the cartridge side-to-side and front-to-back several times to redistribute the toner.

3 Reinsert the toner cartridge.

Note: If print quality does not improve, replace the toner cartridge.

If the problem continues, the printer may need to be serviced. For more information, contact Customer Support.

Gray background

ABCDE
ABCDE
ABCDE

CHECK THE TONER DARKNESS SETTING

Select a lighter Toner Darkness setting:
- From the printer control panel Quality menu, change the setting.
- For Windows users, change the setting from Print Properties.
- For Macintosh users, change the setting from the Print dialog.

THE TONER CARTRIDGE MAY BE WORN OR DEFECTIVE

Replace the toner cartridge.

Incorrect margins
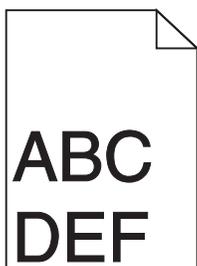
ABC
DEF

These are possible solutions. Try one or more of the following:

CHECK THE PAPER GUIDES

Move the guides in the tray to the correct positions for the paper size loaded.

CHECK THE PAPER SIZE SETTING

Make sure the paper size setting matches the paper loaded in the tray:

1 From the printer control panel Paper menu, check the Paper Size setting.

2 Before sending the job to print, specify the correct size setting:
   - For Windows users, specify the size from Print Properties.
   - For Macintosh users, specify the size from the Page Setup dialog.

Light colored line, white line, or incorrectly colored line appears on prints
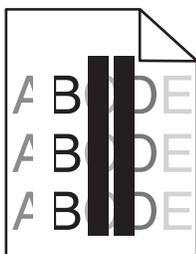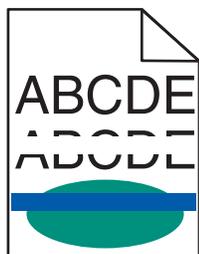
Try one or more of the following:

MAKE SURE THERE IS NO DEFECTIVE TONER CARTRIDGE

Replace the defective toner cartridge.

MAKE SURE THE IMAGING UNIT IS NOT DEFECTIVE

Replace the defective imaging unit.

MAKE SURE THE TRANSFER MODULE IS NOT DEFECTIVE

Replace the transfer module.

CLEAN THE PRINTHEAD LENSES

Remove and reinstall the imaging unit. The LED wipe at the end of the imaging unit will rub across the row of LEDs, thus cleaning the printhead lenses.

Paper curl

Try one or more of the following:
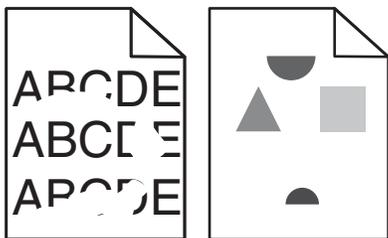
CHECK THE PAPER TYPE AND WEIGHT SETTINGS

Make sure the paper type and weight settings match the paper loaded in the tray or feeder:

1 From the printer control panel Paper menu, check the Paper Type and Paper Weight settings.

2 Before sending the print job, specify the correct paper type setting:
   - For Windows users, specify the paper type from Print Properties.
   - For Macintosh users, specify the paper type from the Print dialog.

LOAD PAPER FROM A FRESH PACKAGE

Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you use it.

Print irregularities

Try one or more of the following:

LOAD PAPER FROM A FRESH PACKAGE

The paper may have absorbed moisture due to high humidity. Store paper in its original wrapper until you use it.

CHECK THE PAPER TYPE AND WEIGHT SETTINGS

Make sure the paper type and weight settings match the paper loaded in the tray or feeder:

1 From the printer control panel Paper menu, check the Paper Type and Paper Weight settings.

2 Before sending the print job, specify the correct paper type setting:
   - For Windows users, specify the paper type from Print Properties.
   - For Macintosh users, specify the paper type from the Print dialog.

AVOID TEXTURED PAPER WITH ROUGH FINISHES

MAKE SURE THERE IS NO DEFECTIVE TONER CARTRIDGE

Replace the worn or defective toner cartridge.

Make sure the transfer module is not defective

Replace the defective transfer module. For more information, see the instruction sheet that came with the replacement part.

Make sure the fuser is not defective

Replace the defective fuser. For more information, see the instruction sheet that came with the replacement part.

Repeating defects appear on a page
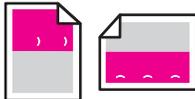
Cause	Solution
If marks occur repeatedly in only one color and multiple times on a page:	
The transfer module is defective.	Replace the transfer module if the defects occur every: • 38 mm (1.50 in.)
An imaging unit is defective.	Replace the imaging unit if the defects occur every: • 41.0 mm (1.61 in.) • 75.0 mm (2.95 in.)
If marks occur down the page repeatedly in all colors:	
The fuser is defective.	Replace the fuser if the defects occur every: • 141 mm (5.55 in.)

Skewed print

These are possible solutions. Try one or more of the following:
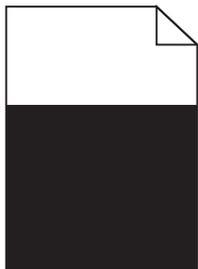
Check the paper guides

Move the length and width guides in the tray to the correct positions for the paper size loaded.
• Make sure the guides are not too far from the paper stack.
• Make sure the guides are not pressing too lightly against the paper stack.

Check the paper

Make sure you are using paper that meets the printer specifications.

Solid color pages

Try one or more of the following:

Make sure the imaging unit is installed correctly and is not defective

Remove and then reinstall the imaging unit. If the problem continues, the imaging unit may need to be replaced.

Make sure the toner cartridges are installed correctly, are not defective and not low on toner

- Remove and reinstall the toner cartridges.
- Make sure toner is distributed evenly within the toner cartridge:

    1 Remove the toner cartridge.

    Warning—Potential Damage: Be careful not to touch the photoconductor drum. Doing so may affect the print quality of future print jobs.
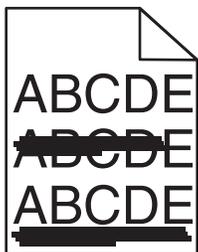
    2 Firmly shake the cartridge side-to-side and front-to-back several times to redistribute the toner.

    3 Reinsert the toner cartridge.

Note: If print quality does not improve, replace the toner cartridge.

- If the problem continues, the printer may need to be serviced. For more information, contact customer support.

Streaked horizontal lines appear on prints

Try one or more of the following:

Select another tray or feeder

- From the printer control panel Paper Menu, select Default Source.
- For Windows users, select the paper source from Print Properties.
- For Macintosh users, select the paper source from the Print dialog and pop-up menus.

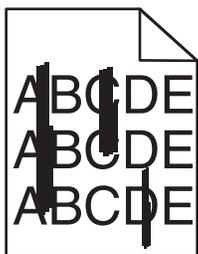## Make sure there is no worn, defective, or empty toner cartridge

Replace the worn, defective, or empty toner cartridge.

Clear the paper path around the toner cartridge

CAUTION—HOT SURFACE: The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching.

Clear any paper you see or clean any visible toner from the paper path. If the problem persists, then contact Customer Support.

Streaked vertical lines appear on prints

Try one or more of the following:

Select another tray or feeder

- From the printer control panel Paper menu, select Default Source
- For Windows users, select the paper source from Print Properties.
- For Macintosh users, select the paper source from the Print dialog and pop-up menus.

Make sure there is no worn, defective, or empty toner cartridge

Replace the worn, defective, or empty toner cartridge.
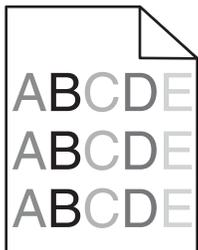
Clear the paper path around the toner cartridge

Check the paper path around the toner cartridge.

CAUTION—HOT SURFACE: The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching.

Clear any paper you see.

Make sure there is no toner in the paper path
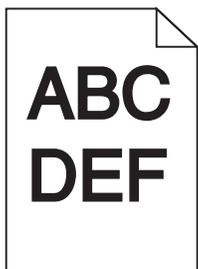
Uneven print density

Try one or more of the following:

MAKE SURE THERE IS NO DEFECTIVE OR WORN TONER CARTRIDGE

Replace the worn or defective toner cartridge.

MAKE SURE THE IMAGING UNIT IS NOT DEFECTIVE

Replace the defective imaging unit.

Print is too dark

Try one or more of the following:

CHECK THE DARKNESS, BRIGHTNESS, AND CONTRAST SETTINGS

The Toner Darkness setting may be too dark, the Brightness setting may be too dark, or the Contrast setting may be too high.

- Change these settings from the printer control panel Quality menu.
- For Windows users, change these settings from Print Properties.
- For Macintosh users:

  1 Choose **File** > **Print**.

  2 From the Orientation pictures drop-down menu, choose **Printer Features**.

  3 Choose a lower value for the Toner Darkness, Brightness, and Contrast settings.

LOAD PAPER FROM A FRESH PACKAGE

The paper may have absorbed moisture due to high humidity. Store paper in its original wrapper until you use it.

AVOID TEXTURED PAPER WITH ROUGH FINISHES

### CHECK THE PAPER TYPE SETTING

Make sure the Paper Type setting matches the paper loaded in the tray or feeder:

- From the printer control panel Paper menu, check the Paper Type setting.
- For Windows users, check this setting from Print Properties.
- For Macintosh users, check this setting from the Print dialog.

MAKE SURE THERE IS NO DEFECTIVE TONER CARTRIDGE

Replace the defective toner cartridge.

Print is too light
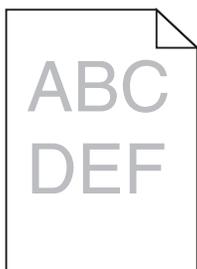
Try one or more of the following:

CHECK THE DARKNESS, BRIGHTNESS, AND CONTRAST SETTINGS

The Toner Darkness setting may be too light, the Brightness setting may be too light, or the Contrast setting may be too low.

- Change these settings from the printer control panel Quality menu.
- For Windows users, change these settings from Print Properties
- For Macintosh users:

  1 Choose **File** > **Print**.

  2 From the Orientation pictures drop-down menu, choose **Printer Features**.

  3 Choose a higher value for the Toner Darkness, Brightness, and Contrast settings.

LOAD PAPER FROM A FRESH PACKAGE

The paper may have absorbed moisture from high humidity. Store paper in its original wrapper until you use it.

Avoid textured paper with rough finishes

Check the Paper Type setting

Make sure the Paper Type setting matches the paper loaded in the tray or feeder:

- From the printer control panel Paper menu, check the Paper Type setting.
- For Windows users, check this setting from Print Properties.
- For Macintosh users, check this setting from the Print dialog.

Make sure the toner cartridge is not low on toner

When `88.xx [color] cartridge low` appears, make sure the toner is distributed evenly within the print cartridge.

1 Remove the toner cartridge.

2 Firmly shake the cartridge side-to-side and front-to-back several times to redistribute the toner.

3 Reinsert the toner cartridge.

  Note: If print quality does not improve, replace the print cartridge.

If the problem continues, the printer may need to be serviced. For more information, contact customer support.

Make sure there is no defective toner cartridge

Replace the defective toner cartridge.

Transparency print quality is poor

Try one or more of the following:

Check the transparencies

Use only transparencies that meet the printer specifications.

Check the paper type setting

Make sure the paper type setting is set to Transparency:

1 From the printer control panel Paper menu, check the Paper Type setting.

2 Before sending the job to print, specify the correct type setting:

- For Windows users, specify the type from Print Properties.
- For Macintosh users, specify the type from the Print dialog.

Toner specks

Cause	Solution
Toner cartridges may be worn or defective.	Replace the defective or worn cartridges.
Toner is in the paper path.	Call for service.

Cause	Solution
The imaging unit may be defective.	Replace the defective imaging unit.

Toner fog or background shading appears on the page

Cause	Solution
Toner cartridge may be defective or installed incorrectly.	Reinstall or replace the toner cartridge.
Transfer module may be worn or defective.	Replace the transfer module.
Imaging unit may be worn or defective.	Replace the imaging unit.
Fuser may be worn or defective.	Replace the fuser.
Toner may be in the paper path.	Call for service.
Printer may not have recalibrated recently.	Perform color adjust from the Quality menu.
Application may specify an off-white background.	Check the application.

Toner rubs off

Cause	Solution
Specialty media is being used.	Make sure the correct Paper Type is selected.
The Paper Weight setting in the Paper Menu is wrong for the type of paper being used.	Change the Paper Weight from Normal to Heavy. If necessary, change Paper Texture from Normal to Rough.
Fuser is worn or defective.	Replace the fuser.
Fuser is in envelope mode.	Open the side door. Make sure that the green lever on the left side of the fuser is not in envelope mode.