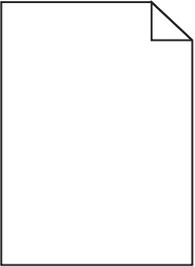# Print quality guide

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

This section provides solutions to print quality problems.

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
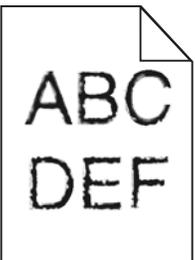
If you are using downloaded fonts, verify that the fonts are supported by the printer, the host computer, and the software program.

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.
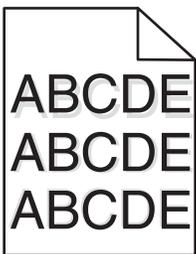
CHECK THE PAPER SIZE SETTING

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 PHOTOCONDUCTOR UNIT IS NOT DEFECTIVE

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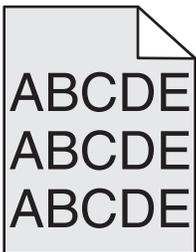
2 Firmly shake the cartridge side-to-side and front-to-back several times to redistribute the toner.

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

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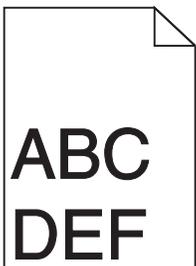
These are possible solutions. Try one or more of the following:

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
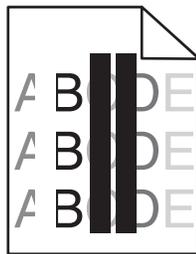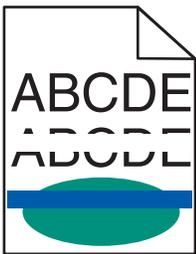
Try one or more of the following:

MAKE SURE THERE IS NO DEFECTIVE TONER CARTRIDGE

Replace the defective toner cartridge.

MAKE SURE THE PHOTOCONDUCTOR UNIT IS NOT DEFECTIVE

Replace the defective photoconductor unit.

MAKE SURE THE TRANSFER MODULE IS NOT DEFECTIVE

Replace the defective transfer module.

CLEAN THE PRINTHEAD LENSES

1 Open the front door, and then the internal cover.

2 Locate the printhead wipers.

3 Gently pull the printhead wiper out until it stops, and then slowly slide it back into place.

4 Clean the remaining three 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
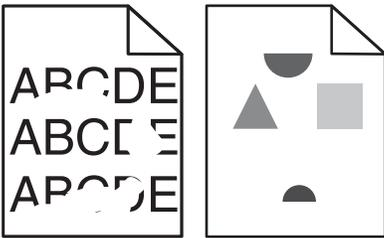
These are possible solutions. Try one or more of the following:

THE PAPER MAY HAVE ABSORBED MOISTURE DUE TO HIGH HUMIDITY

   - Load paper from a fresh package.
   - Store paper in its original wrapper until you use it.

CHECK THE PAPER TYPE SETTING

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

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

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.

CHECK THE PAPER

Avoid textured paper with rough finishes.

THE TONER MAY BE LOW

When `88 Cartridge Low` appears or when the print becomes faded, replace the toner cartridge.

THE FUSER MAY BE WORN OR DEFECTIVE

Replace the fuser.

Repeating defects appear on a page

Try one or more of the following:

MAKE SURE THE PHOTOCONDUCTOR UNIT IS NOT DEFECTIVE

The photoconductor unit may be defective if marks occur repeatedly in only one color and multiple times on a page.

- Replace the photoconductor unit if the defects occur every 94.2 mm (3.71 in.) or 37.68 mm (1.48 in.).

MAKE SURE THE FUSER IS NOT DEFECTIVE

The fuser may be defective if the marks occur down repeatedly in all colors.

- Replace the fuser if the defects occur every 141 mm (5.55 in.).

Skewed print

Try one or more of the following:

CHECK THE PAPER GUIDES

Adjust 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.

MAKE SURE THE PRINTER IS CLEAN OR IS NOT CONTAMINATED WITH PAPER DUST

Clean the exterior of the printer

1 Make sure that the printer is turned off and unplugged from the wall outlet.

   Warning—Potential Damage: To avoid the risk of electric shock when cleaning the exterior of the printer, unplug the power cord from the wall outlet and disconnect all cables to the printer before proceeding.

2 Remove paper from the standard exit bin.

3 Dampen a clean, lint-free cloth with water.

   Warning—Potential Damage: Do not use household cleaners or detergents, as they may damage the finish of the printer.

4 Wipe only the exterior of the printer, making sure to include the standard exit bin.

   Warning—Potential Damage: Using a damp cloth to clean the interior may cause damage to your printer.

5 Make sure the paper support and standard exit bin are dry before beginning a new print job.

MAKE SURE THE PAPER FEED ROLLERS ARE CLEAN AND ARE NOT CONTAMINATED WITH DUST

1 Turn the printer off using the power switch, and then unplug the power cord from the wall outlet.

2 Remove the paper feed rollers.

   Note: For instructions on how to remove and reinstall the paper feed rollers, see the setup sheet that came with the rollers inside the compartment box of Tray 1.
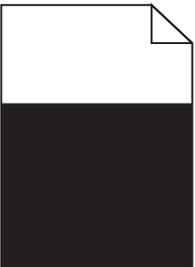
3 Dampen a clean, lint-free cloth with water.

4 Clean the paper feed rollers.

   Warning—Potential Damage: Do not touch the rubber. Doing so will damage the rollers.

5 Reinstall the paper feed rollers.

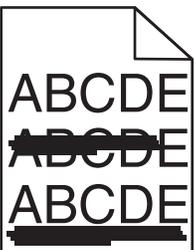   **Note:** Make sure to replace the worn or defective paper feed rollers.

Solid color pages

MAKE SURE THE PHOTOCONDUCTOR IS NOT DEFECTIVE AND IS INSTALLED CORRECTLY

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

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.

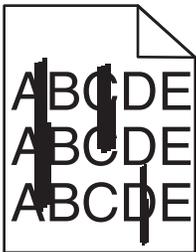#### Make sure there is no worn, defective, or empty toner cartridge

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.

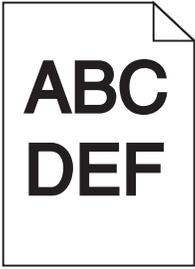#### Clear the paper path around the toner cartridge

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

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" 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.

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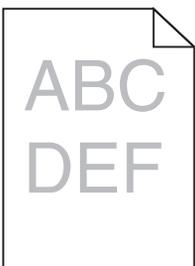
Try one or more of the following:

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.

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

Try one or more of the following:

MAKE SURE THERE IS NO DEFECTIVE TONER CARTRIDGE

Replace the defective or worn cartridges.

MAKE SURE THE PHOTOCONDUCTOR UNIT IS NOT DEFECTIVE

Replace the defective photoconductor unit.

CALL CUSTOMER SUPPORT

Toner fog or background shading appears on the page

Try one or more of the following:

MAKE SURE THE TONER CARTRIDGE IS INSTALLED CORRECTLY OR IS NOT DEFECTIVE

Reinstall or replace the defective toner cartridge.

MAKE SURE THE TRANSFER MODULE IS NOT WORN OR DEFECTIVE

Replace the worn or defective transfer module.

MAKE SURE THE PHOTOCONDUCTOR UNIT IS NOT WORN OR DEFECTIVE

Replace the word or defective photoconductor unit.

MAKE SURE THE FUSER IS NOT WORN OR DEFECTIVE

Replace the worn or defective fuser.

MAKE SURE THE PRINTER HAS RECALIBRATED RECENTLY
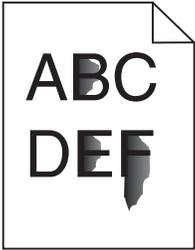
Perform color adjust from the Quality menu.

MAKE SURE THE APPLICATION HAS NOT SPECIFIED AN OFF-WHITE BACKGROUND

Check the application settings.

MAKE SURE NO TONER IS IN THE PAPER PATH

Contact customer support.

Toner rubs off

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. Change the Paper Weight setting from Normal to Heavy.

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.

CHECK THE PAPER TEXTURE SETTING

From the printer control panel Paper menu, make sure the Paper Texture setting matches the paper loaded in the tray or feeder. If necessary, change the Paper Texture setting from Normal to Rough.

MAKE SURE THE FUSER IS NOT WORN OR DEFECTIVE

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