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.

Use the following table to find solutions to print quality problems:

Isolating print quality problems

To help isolate print quality problems, print the print quality test pages:

- **1** Make sure paper is loaded in Tray 1.
- **2** Turn the printer off.
- **3** From the printer control panel, press and hold **1** and the right arrow button while turning the printer on.
- 4 Release both buttons when the clock appears, and wait for Config Menu to appear.
- 5 Press the down arrow button until √Prt Quality Pgs appears, and then press ✓.
 The print quality test pages print.
- 6 Press the down arrow button until √Exit Config Menu appears, and then press ✓.

 Resetting the Printer appears briefly, followed by a clock, and then Ready appears.

Print irregularities

Example	Cause	Solution
	Paper has absorbed moisture due to high humidity.	Load paper from a fresh package into the paper tray.
ARCDE	You are using paper that does not meet the printer specifications.	Make sure that the Paper Type and Paper Weight settings match the type of paper that you are using.
ABC[]		Avoid textured paper with rough finishes.
APODE	A toner cartridge, the transfer module, or the fuser is worn or defective.	Replace the print cartridge, the transfer module, or the fuser.

Repeating defects

Cause	Solution	
If marks occur repeatedly in only one color and multiple times on a page:		
A toner cartridge is defective.	Replace the toner cartridge if the defects occur every:	
	• 33.0 mm (1.30 in.)	
	• 35.3 mm (1.39 in.)	
A photoconductor is defective.	Replace the photoconductor if the defects occur every:	
	• 28.3 mm (1.11 in.)	
	• 72.4 mm (2.85 in.)	
If marks occur down the page repeatedly in all colors:		
The fuser is defective.	Replace the fuser if the defects occur every:	
	• 47.4 mm (1.87 in.)	
	• 94.8 mm (3.73 in.)	
	• 113.0 mm (4.45 in.)	

Light colored line, white line, or incorrectly colored line

Example	Cause	Solution
	Toner cartridge is defective.	Replace the color cartridge causing the line.
APCDE	Photoconductor is defective.	Replace the photoconductor.
ABCDE	Transfer module is defective.	Replace the transfer module.
A BODE A BODE A BODE	Printhead lenses are dirty.	Clean the printhead lenses.

Color misregistration

Example	Cause	Solution
ABCDE	Color has shifted outside of the appropriate area or has been superimposed over another color area.	Recalibrate the printer. Perform Color Adjust from the Quality menu
ABODE		2 Remove and reinstall the photoconductor.
ABODE		3 Adjust the color alignment. For more information, see "Adjusting the color alignment" on page 3.
		Note: If you have not resolved the issue, then recalibrate again. If necessary, adjust the color alignment again.

Adjusting the color alignment

- **1** Make sure that the printer is turned off.
- **2** From the printer control panel, press and hold **4** and the right arrow button while turning the printer on.
- 3 Release both buttons when the clock appears.
 The printer performs its power-on sequence, and then Config Menu appears.
- **4** Press the down arrow button until $\sqrt{\text{Color}}$ Alignment appears, and then press $\boxed{\prime}$.
- **5** Press **4** again to print the alignment page.
- 6 Press the down arrow button until √Set A appears, and then press ✓.
- 7 From the printed sheet, find the straightest of the 20 lines beside the letter A.
- 8 Press the left arrow button or the right arrow button until that number is displayed, and then press .

 Submitting selection appears.
- **9** Repeat steps 6 through 8 to align sets A through L.
- **10** Press ✓.
- 11 Press 5.
- 12 Press the down arrow button until **Exit Config Menu** appears, and then press **.** Resetting the Printer appears briefly, followed by a clock, and then Ready appears.

Streaked horizontal lines

Example	Cause	Solution
	A toner cartridge is defective, empty, or worn.	Replace the toner cartridge.
ABCDE	Fuser is defective or worn.	Replace the fuser.
ABCDE ABCDE	Photoconductor may be defective.	Replace the defective photoconductor.

Streaked vertical lines

Example	Cause	Solution
	Toner is smeared before fusing to the paper.	If paper is stiff, try feeding from another tray.
ABCDE	Toner cartridge is defective.	Replace the toner cartridge causing the streaks.
ABCDE	Transfer module is worn or defective.	Replace the transfer module.

Uneven print density

Example	Cause	Solution
	Toner cartridge is worn or defective.	Replace the toner cartridge.
ABCDE ABCDE ABCDE	Photoconductor is worn or defective.	Replace the photoconductor.

Print is too dark

Cause	Solution
Printer may not have recalibrated recently.	Perform Color Adjust from the Quality menu.
	Select a different Toner Darkness setting, RGB Brightness setting, or RGB Contrast setting from Print Properties before sending the job to print.
Toner cartridge is worn or defective.	Replace the toner cartridge.

Print is too light

Cause	Solution
Printer may not have recalibrated recently.	Perform Color Adjust from the Quality menu.
Toner Darkness setting is too light, RGB Brightness setting is too bright, or RGB Contrast setting is too high.	 Select a different Toner Darkness setting, RGB Brightness setting, or RGB Contrast setting from Print Properties before sending the job to print. Adjust the color quality settings in the Quality menu.
You are using paper that does not meet the printer specifications.	 Load paper from a new package. Avoid textured paper with rough finishes. Make sure the paper you load in the trays is not damp. Make sure the Paper Type and Paper Weight settings match the type of paper that you are using.
Color Saver is On.	Turn Color Saver off in the Quality menu.
Toner is low.	Replace the toner cartridge.
Toner cartridge is worn or defective.	

Transparency print quality is poor

Cause	Solution
You are using transparencies that do not meet the printer specifications.	Use only transparencies recommended by the printer manufacturer.
Paper Type setting for the tray you are using is set to something other than Transparency.	Make sure the Paper Type setting is set to Transparency.

Gray background

Cause	Solution
Toner darkness setting is too dark.	Select a different toner darkness setting in the printer software before sending the job to print.
Toner cartridge is worn or defective.	Replace the toner cartridge.

Ghost images

Cause	Solution
The photoconductor is not functioning properly.	 Make sure the Paper Type setting is correct for the media that you are using. Replace the photoconductor.
The paper weight or Paper Weight setting in the Paper Menu is wrong for the type of paper being used.	Make sure the Paper Type and Paper Weight settings match the type of paper that you are using.
Toner is low.	Replace the toner cartridge.

Toner specks

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

Toner fog or background shading appears on the page

Cause	Solution
Toner cartridge is defective or installed incorrectly.	Reinstall or replace the cartridge.
Transfer module is worn or defective.	Replace the transfer module.
Photoconductor is worn or defective.	Replace the photoconductor.
Fuser is worn or defective.	Replace the fuser.
Toner is in the paper path.	Call for service.
Printer may not have recalibrated recently.	Perform color adjust from the Quality menu.
Application may specify 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.

Clipped images

Cause	Solution
Guides in the selected tray are set for a different paper size than what is loaded in the tray.	Move the guides in the tray to the proper positions for the size loaded.
There could be an incorrect page size selected in the driver or program.	 Specify the correct page size in the driver or program. Set the Paper Size to match the media in the tray.

Skewed print

Cause	Solution
Guides in the selected tray are not in the correct position for the paper size loaded in the tray.	Move the guides in the tray to the proper positions for the size loaded.
	Make sure that the width guide is not too far from the paper stack.
	 Make sure that the width guide is not pressing too tightly against the paper stack.
	Make sure that the length guide is not too far from the paper stack.
	 Make sure that the length guide is not pressing too tightly against the paper stack.
You are using paper that does not meet the printer specifications.	Make sure that you are using paper that meets the printer specifications.

Incorrect margins

Cause	Solution
Guides in the selected tray are set for a different paper size than what is loaded in the tray.	Move the guides in the tray to the proper positions for the size loaded.
Auto size sensing is set to Off, but you loaded a different size paper in a tray. For example, you inserted A4-size paper into the selected tray but did not set the Paper Size to A4.	 Set the Paper Size to match the paper size in the tray. Specify the correct page size in Print Properties or the program.

Blank pages

Cause	Solution
Packaging materials have not been removed from the toner cartridge.	Remove the packaging materials from the toner cartridge, and reinstall it.
Toner is low.	 Remove the toner cartridge from the printer. Shake the cartridge back and forth several times, and then reinstall it. Install a new toner cartridge.
Toner cartridge is defective or empty.	Replace the toner cartridge.
Printer requires servicing.	Call for service.

Solid color pages

Cause	Solution
Photoconductor is installed incorrectly.	Remove and then reinstall the photoconductor.
Photoconductor is defective.	Replace the photoconductor.
Printer requires servicing.	Call for service.

Paper curls badly

Cause	Solution
	Change the Paper Type and Paper Weight settings to match the paper or specialty media loaded in the printer.
Paper has been stored in a high-humidity environment.	Load paper from a fresh package. Store paper in its original wrapper until you use it.