Xerox DocuColor 2060 NPS/IPS

Troubleshooting Guide

Table of contents

Safety

Laser safety

WARNING

Adjustments, use of controls, or performance of procedures other than those specified herein may result in hazardous light exposure.

The Xerox DocuColor printers are certified to comply with the performance standards of the U.S. Department of Health, Education, and Welfare for Class 1 laser products. Class 1 laser products do not emit hazardous radiation. The DocuColor printers do not emit hazardous radiation because the laser beam is completely enclosed during all modes of customer operation.

The laser danger labels on the system are for Xerox service representatives and are on or near panels or shields that must be removed with a tool.

DO NOT REMOVE LABELED PANELS OR PANELS NEAR LABELS. ONLY XEROX SERVICE REPRESENTATIVES HAVE ACCESS TO THESE PANELS.

DANGER
**LASER RADIATION WHEN OPEN
AVOID DIRECT EXPOSURE TO BEAM**

Ozone information: U. S. only

This product produces ozone during normal operation. The amount of ozone produced depends on copy volume. Ozone is heavier than air. The environmental parameters specified in the Xerox installation instructions ensure that concentration levels are within safe limits. If you need additional information concerning ozone, call 1-800-828-6571 to request the Xerox publication 600P83222, *OZONE*.

Operation safety: U. S.

Your Xerox equipment and supplies have been designed and tested to meet strict safety requirements. They have been approved by safety agencies, and they comply with environmental standards. Please observe the following precautions to ensure your continued safety.

WARNING

Improper connection of the equipment grounding conductor may result in risk of electrical shock.

- Always connect equipment to a properly grounded electrical outlet. If in doubt, have the outlet checked by a qualified electrician.

- Never use a ground adapter plug to connect equipment to an electrical outlet that lacks a ground connection terminal.

- Always place equipment on a solid support surface with adequate strength for its weight.

- Always use materials and supplies specifically designed for your Xerox equipment. Use of unsuitable materials may result in poor performance and may create a hazardous situation.

- Never move either the printer or the printer controller without first contacting Xerox for approval.

- Never attempt any maintenance that is not specifically described in this documentation.

- Never remove any covers or guards that are fastened with screws. There are no operator-serviceable areas within these covers.

- Never override electrical or mechanical interlocks.

- Never use supplies or cleaning materials for other than their intended purposes. Keep all materials out of the reach of children.

- Never operate the equipment if you notice unusual noises or odors. Disconnect the power cord from the electrical outlet and call service to correct the problem.

If you need any additional safety information concerning the equipment or materials Xerox supplies, call Xerox Product Safety at the following toll-free number in the United States:

1-800-828-6571

For customers outside the United States, contact your local Xerox representative or operating company.

Operation safety: Europe

This Xerox product and supplies are manufactured, tested and certified to strict safety regulations, electromagnetic regulations and established environmental standards.

Any unauthorised alteration, which may include the addition of new functions or connection of external devices, may impact the product certification.

Please contact your Xerox representative for more information.

Warning markings

All warning instructions marked on or supplied with the product should be followed.

This WARNING alerts users to areas of the product where there is the possibility of personal damage.

This WARNING alerts users to areas of the product where there are heated surfaces, which should not be touched.

Electrical supply

This product shall be operated from the type of electrical supply indicated on the product's data plate label. If you are not sure that your electrical supply meets the requirements, please consult your local power company for advice.

WARNING

This product must be connected to a protective earth circuit. This product is supplied with a plug that has a protective earth pin. This plug will fit only into an earthed electrical outlet. This is a safety feature. Always connect equipment to a properly grounded electrical outlet. If in doubt, have the outlet checked by a qualified electrician.

To disconnect all electrical power to the product, the disconnect device is the power cord. Remove the plug from the electrical outlet.

Ventilation

Slots and opening in the enclosure of the product are provided for ventilation. Do not block or cover the ventilation vents, as this could result in the product overheating.

This product should not be placed in a built-in installation unless proper ventilation is provided, please contact your Xerox representative for advice.

Never push objects of any kind into the ventilation vents of the product.

Operator accessible areas

This product has been designed to restrict operator access to safe areas only. Operator access to hazardous areas is restricted with covers or guards, which would require a tool to remove. Never remove these covers or guards.

Maintenance

Any operator product maintenance procedures will be described in the user documentation supplied with the product. Do not carry out any maintenance on the product, which is not described in the customer documentation.

Before cleaning your product

Before cleaning this product, unplug the product from the electrical outlet. Always use materials specifically designated for this product, the use of other materials may result in poor performance and may create a hazardous situation. Do not use aerosol cleaners, they may be flammable under certain circumstances.

CE mark: Europe only

January 1, 1995: Council Directive 73/23/EEC, amended by Council Directive 93/68/EEC, approximation of the laws of the member states related to low voltage equipment.

$\mathsf{C} \mathsf{E}$

January 1, 1996: Council Directive 89/336/EEC, approximation of the laws of the member states related to electromagnetic compatibility.

March 9, 1999: Council Directive 99/5/EC, on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

A full declaration of conformity, defining the relevant directives and referenced standards, can be obtained from your Xerox representative.

In order to allow this equipment to operate in proximity to Industrial, Scientific and Medical (ISM) equipment, the external radiation for the ISM equipment may have to be limited or special mitigation measures taken.

This is a Class A product. In a domestic environment this product may cause radio frequency interference, in which case the user may be required to take adequate measures.

Shielded interface cables must be used with this product to maintain compliance with Council Directive 89/36/EEC.

Radio and telecommunications equipment directive (Europe only)

Certification to 1999/5/EC Radio Equipment and Telecommunications Terminal Equipment Directive:

This Xerox product has been self-certified by Xerox for pan-European single terminal connection to the analog public switched telephone network (PSTN) in accordance with Directive 1999/5/EC.

The product has been designed to work with the national PSTNs and compatible PBXs of the following countries:

Austria	Germany	Luxembourg	Sweden
Belgium	Greece	Netherlands	Switzerland
Denmark	Iceland	Norway	United Kingdom
Finland	Ireland	Portugal	
France	Italy	Spain	

In the event of problems, contact your local Xerox representative in the first instance.

This product has been tested to, and is compliant with, TBR21, a specification for terminal equipment for use on analog switched telephone networks in the European Economic area.

The product may be configured to be compatible with other country networks. Please contact your Xerox representative if your product needs to be reconnected to a network in another country. This product has no user-adjustable settings.

NOTE: Although this product can use either loop disconnect (pulse) or DTMF (tone) signaling, it should be set to use DTMF signaling. DTMF signaling provides reliable and faster call setup.

Modification or connection to external control software, or to external control apparatus not authorized by Xerox, invalidates its certification.

For further information

For more information on Environment, Health and Safety in relation to this Xerox product and supplies, please contact the following customer help lines:

Europe:+44 1707 353434

USA:1 800 8286571

Canada:1 800 8286571

Introduction

This guide describes how to solve some specific problems that may occur when you are using the Xerox DocuColor 2060 NPS/IPS.

About this guide

This guide is designed for Xerox DocuColor 2060 NPS/IPS operators whose job consists of the routine operation of the system.

Users should have an understanding of printer controller operations.

Before using this guide, become familiar with its contents and conventions.

Contents

This section lists the contents of this guide:

- Chapter 1, "Calling for service," describes the information to have on hand when calling for support service.

- Chapter 2, "Troubleshooting Xerox Client Software installation," provides solutions to common problems with software installation.

- Chapter 3, "Troubleshooting a Novell implementation," describes some ways to troubleshoot a Novell implementation by viewing log messages.

- Chapter 4, "Clearing paper misfeeds and jams," illustrates how to clear paper misfeeds and jams from various parts of the paper path.

- Chapter 5, "Optimizing print quality," discusses methods of checking and improving print quality.

- Chapter 6, "Resolving printer problems," describes printer-related problems other than paper jams, and suggests corrective actions.

- Chapter 7, "Resolving system problems," describes various system problems and suggests corrective actions.

An index is provided at the end of the guide.

Conventions

This guide uses the following conventions:

- **All caps and angle brackets:** Within procedures, the names of keys are shown in all caps within angle brackets (for example, press <ENTER>).

- **Angle brackets:** Variable information, or the position of a specified argument in the command syntax, appears in angle brackets (for example, List Fonts <Pattern>).

- **Bold:** Within procedures, text and numbers that you enter are shown in bold (for example, enter **privilege operator**).

- **The word "enter" within procedures:** The two-step process of keying in data and pressing <ENTER> (for example, enter **y**).

- **Italics:** Document and library names are shown in italics (for example, the *Xerox DocuPrint NPS/IPS Guide to Managing Print Jobs*).

- **Quotation marks:** Keywords you can enter as arguments appear in quotes (for example, "USLetter").

- **Vertical bars:** Alternatives to specified arguments are separated by vertical bars (for example, Set Time <Time | Remote Host Name | IP Address>).

NOTE: Notes are hints that help you perform a task or understand the text.

CAUTION

Cautions alert you to an action that could damage hardware or software.

WARNING

Warnings alert you to conditions that may affect the safety of people.

Related publications

The Xerox DocuColor NPS/IPS documentation set includes the documents listed below.

NOTE: For a list of IBM reference manuals for IPDS printing, refer to the Solutions Guide for IPDS Printing.

- *Guide to Configuring and Managing the System*
- *Guide to Managing Print Jobs*
- *Guide to Performing Routine Maintenance*
- *Guide to Submitting Jobs from the Client*
- *Guide to Using Page Description Language*s
- *Installation Planning Guide*
- *System Overview Guide*
- *Troubleshooting Guide*
- *Solutions Guide for IPDS Printing*
- *Decomposition Service and Tools Guide*
- *Glossary*
- *Master Index*
- *Customer Information Quick Reference Card*
- *Printer Controller Commands Quick Reference Card*
- *Operator Quick Reference Card*
- *Submitting your Jobs from Macintosh Quick Reference Card*
- *Submitting your Jobs from UNIX & DOS Quick Reference Card*
- *Submitting your Jobs from Windows NT 4.0 (QuickPrint) Quick Reference Card*
- *Submitting your Jobs Using Windows NT 4.0 Drivers Quick Reference Card*

The documentation set also includes an electronic version, the DocuPrint NPS/IPS Interactive Customer Documentation CD.

1. Calling for service

Before calling your customer service support center, make sure you have read this chapter and have tried the corrective actions described here. If the problem persists, gather the necessary information and call the customer support center.

Information to have on hand when calling for service

To report hardware or software problems in the United States, call the following number:

1-800-822-2979

For customers outside the United States, call your local service representative.

Before calling, make note of the following:

- Status code numbers and messages that appear on the controller screen and the printer console

- Indicator lights that are lit

- Name of your printer: DocuColor 2060 NPS/IPS

- Serial number for your printing system (located inside the double doors on the front of the printer, centered at the bottom of the internal frame)

- Problems you are having with the system.

Additional information you may wish to note prior to calling includes:

- An explanation of how output differs from what was expected.

- An assessment of whether the symptoms follow a pattern or occur randomly.

- A list of special conditions that may be related to the problems:

    – New applications

    – Changes made to the software

  – Recent service performed

  – Previous conditions under which the application has printed properly.

Give this information to a customer service representative, who will discuss the information and give you an estimated time of arrival or assist you over the phone to resolve the problem.

Enabling and disabling the modem for remote service

Your system may be set up to use Sixth Sense Technology—a remote communication capability. Sixth Sense Technology is a suite of tools that allow service personnel to connect with a system and evaluate its performance. The service representative can troubleshoot problems remotely, transfer, apply, and remove patches remotely, and, if an on-site call is required, arrive with the solution to fix the problem.

An external modem allows your system to be accessed by remote service technicians.

You may be instructed to enable the modem so that the technician can dial into your system. Follow this procedure:

1. Stop all printing and queueing during the remote service session.

2. Follow the instructions of your service representative to enable the modem.

3. When the remote service session is complete, disable the modem.

4. Resume printing and queueing.

If you are using the command line interface, refer to the *Guide to Configuring and Managing the System*, "Using utility commands" chapter, for more information on the commands used for remote service. If you are using the graphical user interface, refer to the online Help.

If security is a concern, you can turn off the modem, or you can physically disconnect the cable from the system when it is not being used.

CAUTION

Depending on the commands used by the technician, the printer may start up during the remote service session. You should not attempt to operate the system or perform any tasks at the printer while remote service is in process.

2. Troubleshooting Xerox Client Software installation

Xerox Client Software is downloaded from the printer controller to a network client workstation to enable a print command. Refer to the *Guide to Submitting Jobs from the Client* for more information.

If you are unable to install the Xerox Client Software, or if you install it and all requests submitted fail, try the following:

- Make sure the Xerox Client print command does not conflict with the local print command on the client system. To verify this, at the prompt (or on a new shell window prompt, for Sun clients), enter print. You should see the usage message for the Xerox Client print command.

  If not, make sure that the environment variable path includes the subdirectory /usr/xerox/nps/client/bin and /usr/bin before the subdirectory containing the local print command. Also, resolve any print command aliases that might be set in the.cshrc file.

  If you see the message "Server or Directory Unreachable" after executing a print command, perform the following steps:

  1. If the printer controller software is newly installed, verify that queuing has started at the printer controller.

  2. At the client, verify the host file exists and contains the printer controller name and TCP/IP address.

  3. Verify the network connections between the printer controller and the client. Enter **ping <Printer Controller name>;** if that fails, **enter ping <Printer Controller TCP/IP address>**. Verify that the TCP/IP address of the printer controller is the same as the one in the host file on the client.

  4. Check for hardware problems.

- Verify that the cconf file (/usr/xerox/nps/client/cconf) contains the default printer controller name that most recently performed the client installation. Try submitting requests to another printer controller by using the server override switch in the print command.

- If you are unable to install the software, make sure the client hard disk meets the minimum requirements. Otherwise, you may run out of disk space during the installation, and you may get misleading error messages.

The following table provides a reference to error messages that may display during installation of Xerox Client Software.

Table 2-1. Xerox Client Software installation error messages

Error message	Description
Installation not complete. Problems may have occurred during the transfer of files. Please verify that all files have been transferred and contact your system administrator for assistance.	Appears if any of the client files are missing at the end of installation.
Usage: <Printer__Controller__Name> or Usage: instsun4 <Printer__Controller__Name> or Usage: instsun3 <Printer__Controller__Name> or Usage: instult <Printer__Controller__Name>	Appears when the Printer Controller Name is not used as the argument to the installation commands. The <Printer__Controller__Name> is the name of the Printer Controller that the installation commands use to install the Client Software.
The attempt to communicate to the <Print__Controller__Name> has failed. Make sure the name <Print__Controller__Name> is correct. Make sure your /etc/hosts file contains correct information. Make sure the machine is operational and is in the network mode.	UNIX clients only. Indicates that the installation script's attempt to communicate with the printer controller has failed.
Problems may have occurred in ftp to the Print Server. Verify disk space. If the problem still exists, contact your system administrator for assistance.	UNIX clients only. Indicates problems occurred while using ftp to the printer controller to retrieve client files.
Problems may have occurred in setting permissions for the executables. You have to be at the super user level to install. Please contact your system administrator for assistance.	UNIX clients only. Indicates that the installation script's attempt to set permissions for the executables in /usr/xerox/client/nps/bin has failed.
Problems may have occurred in making the commands available. Please contact your system administrator.	UNIX clients only. Indicates that the attempt to copy the executables in /usr/xerox/client/nps/bin to /usr/bin has failed.
Unable to set permission for dir <path>. You have to be at the super user level to install. Contact your system administrator for assistance.	UNIX clients only. Indicates that the attempt to set permission for the client directory structure has failed. Make sure that you are executing the installation script at the super user level.

3. Troubleshooting a Novell implementation

The tables is this chapter describe some ways to troubleshoot Novell implementation from the log messages that appear in var/log/DocuPrint.

The following table describes how to troubleshoot PSERVER problems.

Table 3-1. PSERVER problems

Problem	Probable Cause	Resolution
Log message says there is a problem locating a NetWare server.	NPS/IPS is not getting SAP packets for the server. • There is a basic connectivity or routing problem. • The framing type has been set incorrectly during installation. • The file server name has been set incorrectly during installation.	If there is an external connectivity problem: • Check Novell file server console screen for messages. • Check that the server is running and connected to the network. If it is an incorrect framing type or server name, your Xerox service representative must change the configuration on the printer controller.
Log message says there is an error in connecting to the file server.	NPS/IPS is getting SAP packets with information about the server, but cannot communicate with it. • There is a basic connectivity or routing problem. • NPS/IPS has an incorrect network number.	If there is an external connectivity problem: • Check Novell file server console screen for messages. • Check that the server is running and connected to the network. If it is an incorrect network number, your Xerox service representative must change the configuration on the printer controller.

Table 3-1. PSERVER problems **(Continued)**

Problem	Probable Cause	Resolution
Log message says there is a failure to log in.	Password problem. • Server does not accept unencrypted logins • NPS/IPS does not have the correct password.	If the server is not properly configured, enter **SET ALLOW UNENCRYPTED PASSWORDS=ON** at the server console. If NPS/IPS has the wrong password, your Xerox service representative must change the password.
Log message indicates failure to login and password settings are correct.	A PSERVER with the printer's PSERVER name is running on the file server or on another machine (this could even be another NPS/IPS configured to use the same PSERVER name). The file server should only have a PSERVER defined with the same name as the printer's PSERVER, there should not be an instance of PSERVER running under that PSERVER definition.	Stop the PSERVER instance.
Log message says "Error finding queue."	Queue not created.	At the file server, create the queue, set up the printer for the PSERVER and be sure it will service the appropriate queue.
Log message says "Netware PServer <name> not found."	The PSERVER has not been defined on the file server.	Define a PSERVER with the correct name on the file server and restart the system.
Log message says that there was an error attaching to the queue.	NPS/IPS does not have access to the queue.	Ensure that there is a printer defined for the PSERVER on the file server and that the printer is defined to service the desired queue.

The following table describes troubleshooting RPRINTER problems.

Table 3-2. **RPRINTER problems**

Problem	Probable Cause	Resolution
Log message says: • "Cannot locate any Netware print server from the net." • "Requested server <name> not responding."	NPS/IPS is not getting SAP packets advertising the print server. • There is a basic connectivity or routing problem. • The incorrect framing type has been set. • The print server is not running. For RPRINTER, there must be a PSERVER running on the file server with the name specified to NPS/IPS at installation time.	If there is an external connectivity problem: PSERVER should work when it is repaired. If it is an incorrect framing type, your Xerox service representative must change the configuration on the printer controller. If print server is not running, start one.

4. Clearing paper misfeeds and jams

Paper jams and misfeeds can be greatly reduced or eliminated by:

- Using the correct type of paper under the right conditions. Refer to *Helpful Facts About Paper* for information on paper selection and care.

- Using the tray weight indicator to specify the correct paper weight. Refer to the *Guide to Performing Routine Maintenance*, "Paper Trays" chapter for more information.

- For tray 3, setting the paper size (Non Standard or Standard), and the paper type (Coated or Uncoated). Refer to the *Guide to Performing Routine Maintenance*, "Paper Trays" chapter for more information.

When jam occurs, the printer stops printing and a message displays on the touch screen. Follow all instructions displayed completely and in sequence to rectify the problem.

If power is interrupted during the printing process, it is imperative that you clear all other jam areas before opening and clearing areas behind the right and left front doors of the printer.
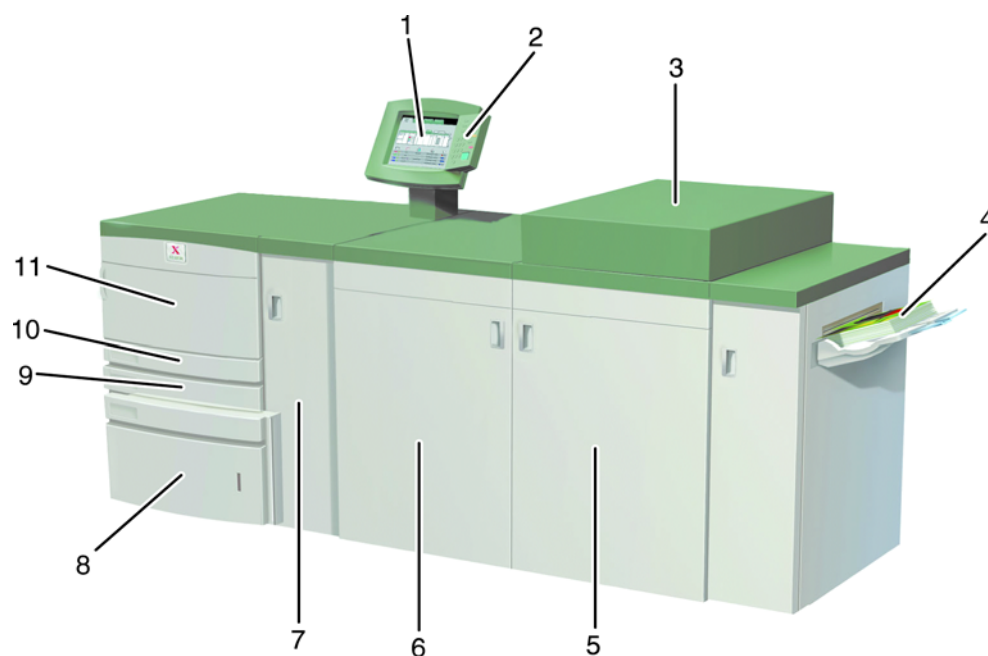
Figure 4-1. DocuColor 2060 NPS/IPS

1. Touch screen
2. Printer control panel
3. Dry ink compartment
4. Offset catch tray
5. Right front door
6. Left front door
7. Transport module
8. Tray 3
9. Tray 2
10. Tray 1
11. Upper door

Figure 4-2. Left side door

1. Printer rear
2. Printer front

To clear a jam in the left side door:

1. Open the left side door of the printer.

   If you have an optional tray 4, open the tray 4 right door, then open the left side door of the printer.

2. Carefully remove all jammed paper, ensuring that all pieces are removed if the paper rips.

3. Close the left side door.

   If you have an optional tray 4, close the tray 4 right door.

Clearing jams in tray 1, 2, or 3

CAUTION

The feed heads and the feed rolls are delicate and can be damaged if this procedure is not followed precisely.

Figure 4-3. Paper path of trays 1, 2, and 3

1. From tray 4
2. Transport module
3. To the printer
4. From horizontal (duplex) transport
5. Tray 1
6. Tray 2
7. Tray 3

To clear a jam in tray 1, 2, or 3:

1. Clear jams in the left side door. Refer to the section "Clearing jams in the left side door" in this chapter.
2. Open tray 1.
3. Carefully remove all jammed paper.
4. Close tray 1.
5. Open tray 2.
6. Carefully remove all jammed paper.

7. Close tray 2.

8. Clear jams in the transport module. Refer to the section "Clearing jams in the transport module" in this chapter.

9. Open tray 3.

10. Carefully remove all jammed paper.

11. Close tray 3.

12. Follow the instructions on the touch screen to resume your print job.

Clearing jams in the upper door

Figure 4-4. Upper door

To clear a jam in the upper door:

1. Open the upper door above tray 1.

2. Lower the feed transport by pulling down on green handle 2.

3. Carefully remove all jammed paper.

4. Raise the feed transport back into its original position.

   NOTE: The front door does not close if the feed transport handle is not seated properly.

5. Close the upper door.

6. Follow the instructions on the touch screen to resume your print job.

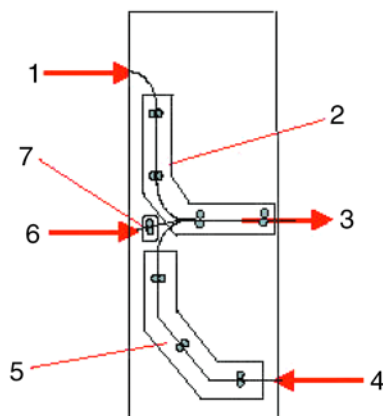## Clearing jams in the transport module

Figure 4-5. Transport module paper path

1. Paper from trays 1, 2, and 4
2. Upper transport
3. To the printer
4. Single sided prints from the horizontal transport
5. Lower transport
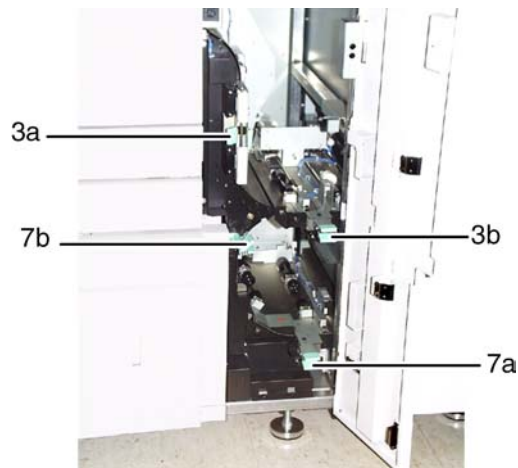6. Paper from tray 3
7. Takeaway transport

Figure 4-6. Transport module

To clear a jam in the transport module:

1. Open the transport module door.

2. When printing one-sided or two-sided, grasp the green handle 3a, squeeze and move it to the right.

3. Carefully remove all jammed paper.

4. Reposition the green handle 3a.

5. Lift green handle 3b.

6. Carefully remove all jammed paper and return handle 3b to its original position.

7. When a tray 3 misfeed occurs, release handle 7b and remove all jammed paper. Return handle 7b to its original position.

8. Close the transport module door.

9. Follow the instructions on the touch screen to restart your print job.
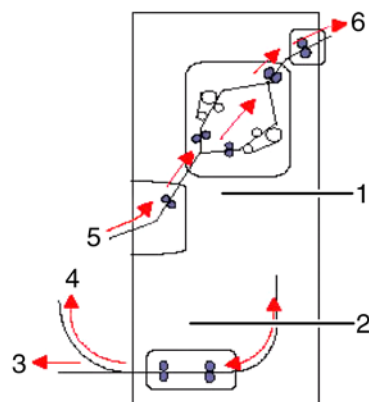
Clearing jams in the exit module

Figure 4-7. Exit module paper path

1. Decurler
2. Duplex inverter transport
3. To printer
4. To inverter transport
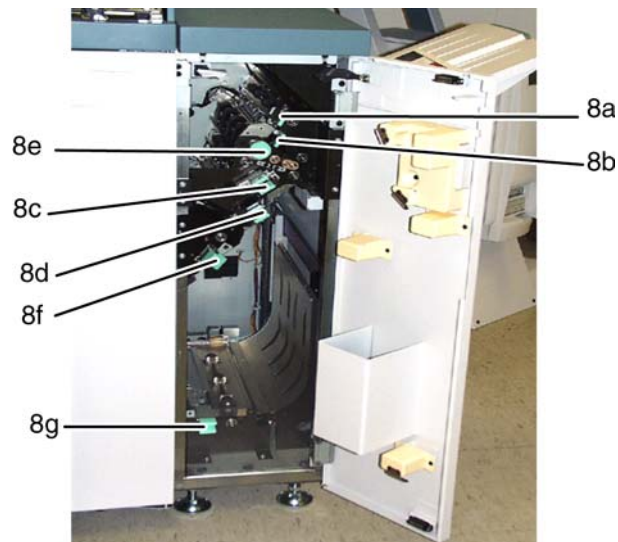5. From printer
6. To the output device

Figure 4-8. Exit module

To clear a jam in the exit module:

1. Open the exit module door.

2. When printing one-sided or two-sided, squeeze and open green handle 8a.

3. Squeeze and open green handle 8b.

4. Squeeze and open green handle 8c.

5. Squeeze and open green handle 8d.

6. Squeeze and open green handle 8f.

7. Carefully remove all jammed paper.

8. Turn green knob 8e to free any immovable paper.

9. Reposition the green handle 8a and ensure the handle is seated properly.

10. Reposition the green handle 8b and ensure the handle is seated properly.

11. Reposition the green handle 8c and ensure the handle is seated properly.

12. Reposition the green handle 8d and ensure the handle is seated properly.

13. Reposition the green handle 8f and ensure the handle is seated properly.

14. When printing two-sided or face down output, lift handle 8g.

15. Carefully remove all jammed paper.

16. Reposition the green handle 8g and ensure the handle is seated properly.

17. Close the exit module door.

18. Follow the instructions on the touch screen to restart your print job.

Clearing jams in the right and left door paper path

This section lists the steps to clear jams in the following areas:

- Registration, vacuum transport, and fuser

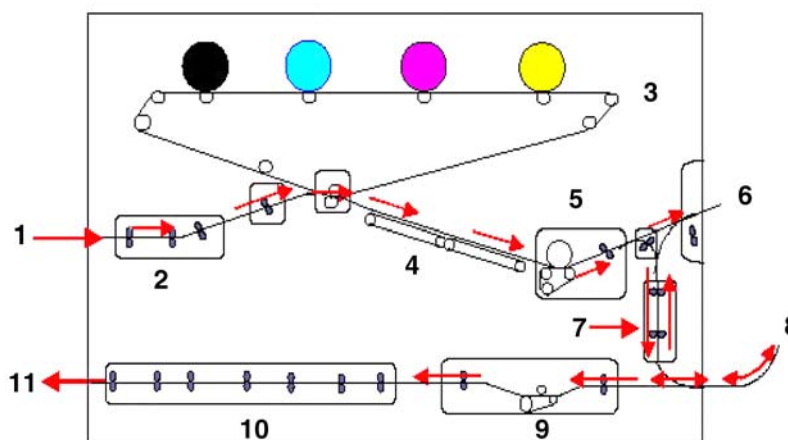- Horizontal transport (two-sided printing only)

Figure 4-9. Right and left door paper path

1. From transport module

2. Alignment transport

3. Inverter gate

4. Vacuum transport

5. Fuser transport

6. To exit module

7. Inverter transport

8. From duplex Inverter transport

9. Horizontal transport 1

10. Horizontal transport 2

11. To transport module

Figure 4-10. Right and left doors open

Clearing jams in the registration, vacuum transport, and fuser

NOTE: You must clear all other jam areas before opening and clearing the right and left front door areas.

WARNING

The fuser area is extremely hot and injury will occur if the area is not handled correctly.
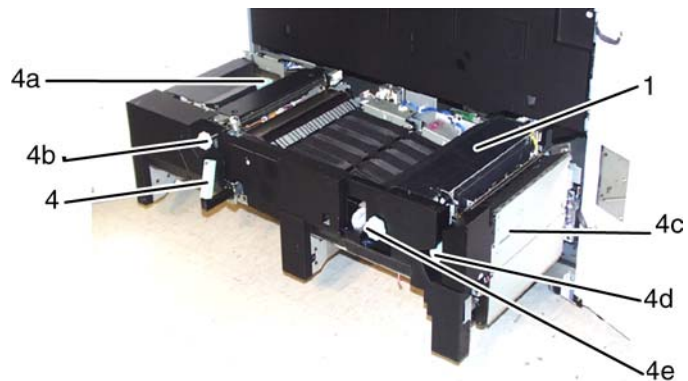

Figure 4-11. Alignment, vacuum and fuser transport

To clear a jam in the registration, vacuum transport, and fuser:

1. Open the right and left front doors.

2. Grasp handle 4 and move it in the direction of the arrow.

3. Slowly pull the paper transport straight out until it stops.

4. Lift handle 4a and carefully remove all jammed paper, ensuring that all pieces are removed if the paper is torn.

5. Turn the green handle 4b to free any immovable paper.

6. Reposition green handle 4a.

7. The fuser area is on the right side of the paper transport (1 in the figure above). Lift handle 4c on the right hand side and lay the inverter transport back.

8. Lift handle 4d and clear all jammed paper. Rotate knob 4e counterclockwise to clear any immovable paper.

   NOTE: Occasionally a sheet of paper may wrap around the heat roll. (The heat roll can be seen when handle 4d is up.) DO NOT attempt to remove this sheet of paper because doing so could damage the stripper fingers. Call your service representative to remove this piece of paper.

9. Reposition green handle 4d and close the inverter transport 4c. Ensure the magnets are in place front and back.

10. Slowly push in the paper transport until it stops. Ensure that the green handle is seated properly.

11. Close the right and left front doors.

12. Follow the instructions on the touch screen to restart your print job.

NOTE: You must clear all other jam areas before opening and clearing the right and left front door areas.

WARNING

The fuser area is extremely hot, and injury will occur if this area is not handled correctly.
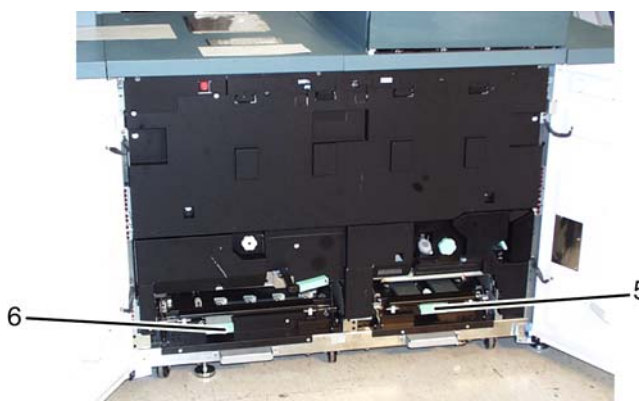

Figure 4-12. Horizontal transport

To clear a jam in the horizontal transport, perform the following steps in addition to steps 2 through 8 of the procedures for clearing jams in the registration, vacuum transport, and fuser. Refer to "Clearing jams in the registration, vacuum transport, and fuser" in this chapter.

1. Lift both of the horizontal transport handles 5 and 6.

CAUTION

The paper can rip if you do not push it before removing it from under the lip of the transport.

2. Apply pressure to the handles to securely latch them.

3. Push the paper back until you see the edge of the paper, then remove the paper.

4. Reposition handles 5 and 6.

5. Close the right and left front doors.

6. Follow the instructions on the touch screen to restart your print job.

Clearing paper jams in tray 4

A message on the touch screen notifies you of a paper jam in tray 4 and provides instructions for clearing it.

To clear a paper jam from tray 4:

1. Locate the tray 4 icon on the tray 4 control panel. Open the doors indicated.

2. Press the Tray Unlock button.

3. Wait until the Ready to Open indicator is illuminated.

4. Open the tray 4 left door. Remove any misfed paper from the tray 4 paper tray.

5. Open the tray 4 right door. Remove any paper from the tray 4 horizontal transport by lifting the green handle and turning the green knob in the direction of the arrow.

6. Open the left side door of the printer.

Figure 4-13. Left side door

1. Printer rear

2. Printer front

7. Carefully remove all jammed paper, ensuring that all pieces are removed if the paper rips.

8. Close the tray 4 doors.

    The elevator tray automatically rises and stops at the correct feeding height.

9. Follow the instructions displayed on the touch screen and tray 4 icon to resume printing.

NOTE: If the printer does not resume printing after a paper tray fault or after paper is loaded, lower then raise the tray. The system should resume printing.

Clearing paper jams in the high-capacity stacker (HCS)

A message on the touch screen notifies you of a paper jam in the high-capacity stacker (HCS), and provides instructions for clearing it.

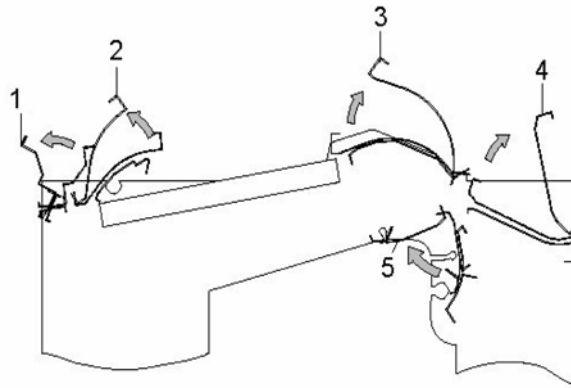To clear a paper jam from the HCS:

Figure 4-14. Clearing a jam from the HCS

1. Lift the HCS top cover.
2. Lift green handle 1 and remove all paper in this area.
3. Close green handle 1.
4. Lift green handle 2 and remove all paper in this area.
5. Close green handle 2.
6. Lift green handle 3 and remove all paper in this area.
7. Close green handle 3.
8. Lift green handle 4 and remove all paper in this area.
9. Close green handle 4.
10. Close the HCS top cover.
11. Open the HCS front door.
12. Pull green handle 5 and rotate the baffle to the left to remove all paper in this area and remove all paper in this area.
13. Close the HCS front door.
14. Open the printer and remove any paper found in it.
15. Follow the instructions displayed on the touch screen to resume printing.

NOTE: If the printer does not resume printing after a paper tray fault or after paper is loaded, lower then raise the tray. The system should resume printing.

Clearing paper jams in the high-capacity stacker stapler (HCSS)

A message on the touch screen notifies you of a paper jam in the high-capacity stacker stapler (HCSS), and provides instructions for clearing it.

To clear a paper jam from the HCSS:

 1. Open the HCSS front door.

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 2. Pull down handle 1, remove all jammed paper.

 3. Reposition handle 1.

 4. Pull handle 2 to the right, remove all jammed paper.

 5. Reposition handle 2.

 6. Lift handle 3, remove all jammed paper.

 7. Reposition handle 3.

 8. Open the HCSS front door.

 9. Follow all instructions to restart your print job.

5. Optimizing print quality

This chapter discusses methods of checking and improving print quality.

NOTE: One way to test print quality is to print a sample document. For information on printing sample documents, refer to:

- *•* The *Guide to Configuring and Managing the System,* if using the command line interface

- *•* *The online help, if using the graphical user interface.*

Performing color calibration

Calibration is essential to insuring good color quality. The purpose of calibration is to measure how the printer prints the requested colors and to then make any corrections that are required.

Calibration should be done any time you notice a degradation in the color, or any time there is the possibility that the printer colors may have changed from what they were in an earlier calibration. Some of the reasons to calibrate are:

- • Color may change after adding dry ink or having service performed on the system.

- • Color will display differently on identical printer models produced by the same manufacturer.

- • The temperature of machinery as it warms up will affect color intensity.

- • Image quality and color reproduction on uncalibrated equipment will lead to unpredictable, unreliable results.

For the calibration procedure, refer to the *Guide to Configuring and Managing the System*.

Product features that affect PostScript print quality

You can improve the appearance of your documents by being aware of potential problems created through the use of proprietary PostScript extensions and device-dependent operators.

Proprietary PostScript extensions

PostScript masters that use proprietary printer features may cause appearance inconsistencies between different PostScript printers. Some PostScript printers contain proprietary PostScript extensions. For example, some versions of the Apple Macintosh PostScript driver download encrypted proprietary image "smoothing" operators to Apple LaserWriters. The downloaded PostScript code uses the product operator to determine if it is being used on a LaserWriter. If not, the proprietary code is bypassed by doing a flushfile. This allows the PostScript master to print on non–LaserWriter products. As a result, PostScript masters generated on a Macintosh with Apple proprietary features may produce output that varies between LaserWriter and non–LaserWriter PostScript printers.

Device-dependent operators

Some PostScript operators result in device-dependent PostScript files. "Device dependence" means that devices having different output characteristics may produce different-looking output even though they use the same software. This section documents the most serious examples of device dependence. The *PostScript Language Reference Manual,* second edition, lists all of the graphics state operators that are considered device-dependent.

Gray shading—setscreen and setcolorscreen

The PostScript operators setscreen and setcolorscreen control the PostScript halftone software that simulates various intensity levels of gray and color inks. Since each PostScript product may have a different default halftone definition, the halftone patterns and gray scale range may differ also. Because setscreen is inherently device dependent (especially when used for pattern fills), PostScript masters look different on almost every different model of PostScript printer.

The operators are also used to perform pattern fills, since PostScript Level 1 does not have a pattern fill operator. (PostScript Level 2 has pattern fill operators.) As stated in the *PostScript Language Reference Manual*, first edition, "Remember that everything pertaining to halftones is, by definition, device-dependent. In general, when an application provides its own halftone specifications, it sacrifices portability. Associated with every device is a default halftone definition that is appropriate for most applications."

In addition to the device-dependent nature of halftoning, a spot function is used by **setscreen** and **setcolorscreen** to determine the order of pixel darkening in the halftone cell. When two pixels have the same spot function value, their ordering values are determined arbitrarily. Duplicate spot function values are very common. In fact, almost all the various default spot functions generate duplicate values. Therefore, different PostScript implementations yield different halftone patterns, resulting in visual differences in the output.

Gray shading—settransfer and transfer function

The PostScript operators settransfer and setcolortransfer are used to change the procedure for mapping perceived color values in the output of the print device into specified color values in the PostScript master. PostScript devices use an internal transfer array or procedure that takes into account the printing characteristics of their marking engines in order to produce levels of color.

Transfer functions are called by the setcmykcolor, setbsbcolor, setrgbcolor, and setgray operator before processing of the desired color level that is specified in the master. The transfer function takes a value from the stack and leaves another value on the stack for each color component (red, green, blue, and gray).

The PostScript language provides a scheme for overwriting the internal transfer function of a printing device by providing the **settransfer** and **setcolortransfer** operators. However, some Xerox PostScript devices do not allow you to overwrite their internal transfer function.

Typically, a master tries to replace the internal transfer function with a null transfer function such as:

{} **settransfer**, or

{} {} {} {} **setcolortransfer**

If either of the above procedures is successful, the transfer functions return the same color levels that are passed to them without modifying or mapping the level. On printers which do not allow the overwriting of the transfer function, the **settransfer** operator does not affect the mapping of gray values between the output of the print device and specified levels of color.

NOTE: **Settransfer** *actually sets the transfer functions for all four color components (red, green, blue, and gray) to the same value. The* **setcolortransfer** *operator sets the transfer functions individually.*

Smooth curves—setflat

PostScript masters that use the PostScript operator **setflat** produce inconsistent output across different PostScript printers. **setflat** controls curve rendering smoothness. PostScript curve operators use cubic Bezier control points to define the curve shape. These curves can be rendered from straight line segments. Normally the line segments are so short that the curve appears smooth. The **setflat** operator indirectly controls the length of the straight line segments. As stated in the *PostScript Language Reference Manual*, second edition, "If the flatness parameter is large enough to cause visible straight line segments to appear, the result is unpredictable. **Setflat** sets a graphics state parameter whose effect is device-dependent. It should not be used in a page description that is intended to be device-independent."

Invisible strokes—0 setlinewidth

PostScript masters that use the PostScript operator **setlinewidth** are not consistent across different PostScript printers. **setlinewidth** controls the width of a stroked line. When **setlinewidth** is executed with an input of zero, it produces a line that is one pixel wide. On devices whose dot size is small, single-pixel-width lines may be invisible.

Scan conversion—fill, eofill, and stroke

Scan conversion algorithms are implementation-dependent, so different PostScript printers paint ("turn on") different dots, resulting in output differences. For filled circles, PostScript printers differ in the dots they paint at the edge of the circle; thus, some printers produce slightly larger circles than others. For large circles this is not noticeable, but for small circles, it is.

Sections 2.2 and 6.5 of the *PostScript Language Reference Manual*, second edition, discuss scan conversion. Section 6.5 states that scan conversion details are not part of the PostScript standard.

6. Resolving printer problems

This chapter describes printer-related problems other than paper jams, and suggests corrective actions. (Refer to "Clearing paper misfeeds and jams" for information on paper jams.)

Printer engine problems

The following table describes problems associated with the printer engine.

Table 6-1. **Printer engine problems**

Problem	Action
The printer does not power on.	• Ensure the power cord is plugged into the receptacle correctly. • Ensure the power switch inside the front left door is set to the on position. • Check the ground fault indicator (GFI) circuit breaker switch. • If the power in your location is working properly, you have tried the suggested solutions, and the printer does not power on, call for assistance.
Printing does not resume after a paper tray fault or after paper is changed in the feeder.	The printer did not receive the signal that the feeder tray has paper and is ready to feed. Pull out, then push back the feeder tray.
Paper is misfed or wrinkles repeatedly.	• If a message appears on the touch screen, follow the instructions displayed. • Ensure that the proper paper is loaded and that it is loaded correctly and not filled above the MAX line. • Turn the paper stack around and/or over in the selected paper tray. • Remove a few sheets from the top and the bottom of the stack in the paper tray. • Fan all four edges of the paper in the selected paper tray. • Replace the paper in the selected paper tray with paper from a new package. • Remove any partially fed paper from the trays. • Ensure the paper you are using had been stored properly.

Table 6-1. **Printer engine problems (Continued)**

Problem	Action

The control panel touch screen does not respond to a touch command.	• Press Clear All on the control panel.
	
	• Touch a selectable button on the touch screen. A slight pressure is required to cause the printer to react.
	
	• If the problem persists:
	
	   1. Open, then close the front door of the printer.
	
	   2. Make a selection on the touch screen.
	
	   3. If the touch screen does not respond to any touch commands, switch off the power, wait 15 seconds, then switch the power back on.
	
	NOTE: Some functions on the printer control panel are not available for DocuColor 2060 NPS/IPS. For details on the available functions, refer to the Xerox DocuColor 2060 NPS/IPS System Overview Guide, "Printer components and options" chapter.

Multiple sheets feed from the paper trays.	• Do not fill the paper trays above the MAX fill line indicator. • Remove the paper from the tray and fan the sheets to separate the joined sheets. • Predrilled sheets may stick together at the holes. Remove the paper from the tray and fan the sheets to separate the joined sheets. • Paper and transparencies may stick together if environmental conditions are too dry and cause excessive static. Increase the humidity level in the room to minimize static. • Gently fan transparencies to separate the sheets before you load them.
Sheets will not feed from paper tray 4.	• Ensure that the height of the stack does not exceed the MAX fill line. • Check that the paper guide is not too tight. The paper guide should be adjusted to fit snug against the paper stack.
Paper jams when exiting the paper trays.	• Ensure that the edge guides of the paper tray fit snugly against the paper stack. • Do not fill the paper trays above the MAX fill line indicator. • Close the tray slowly to avoid shifting the paper stack.
Output jams when exiting the printer to the offset catch tray.	• When no other output device is present, the offset catch tray can hold up to 500 sheets of 24 pound (90 gsm) paper. Empty the catch tray when output approaches this limit to ensure continuous production. • Ensure the first sheet is not blocking the paper exit, particularly for 11 x 17 inch (A3) output.
Prints originating from paper tray 4 are skewed, jams may be occurring.	The paper guides on paper tray 4 may not be set correctly or may be too tight against the paper stack. Ensure that the paper guide lightly touches the paper stack.

Table 6-1. **Printer engine problems (Continued)**

Problem	Action
Paper curl is excessive.	Paper curl may be a result of: • Paper weight and type • Humidity conditions at the printer • The mass of dry ink (toner) coverage on the print - the greater the toner mass, the greater the paper curl. To minimize curl problems: • Ensure that the correct paper weight and paper type are selected. • Flip the paper over in the tray then reprint. If excessive curl is still present, use a heavier paper. • Empty the output device when output approaches this limit to ensure continuous production. • Place the printer and paper in a room with air conditioning and low humidity to minimize the moisture in the environment. • Attempt to print on thicker paper or on paper stock that is less sensitive to moisture.
Prints are not fusing properly.	Ensure that the paper weight setting for the tray is correct. For tray 3, ensure that the paper type (Coated or Uncoated) is correct as well.

High-capacity stacker and high-capacity stacker stapler problems

The following table describes problems associated with the high-capacity stacker (HCS) and high-capacity stacker stapler (HCSS).

Table 6-2. **HCS and HCSS problems**

Symptom	Probable cause	Action
Ready indicator does not illuminate or HCS/HCSS does not stack paper.	No power	• Check that the power cord is connected to the power source. • Check that the ground fault indicator (GFI) circuit breaker is not tripped (rear cover). • Check that the main switch is turned on.
Paper does not stack properly.	Mixed sizes of paper	Run separate jobs and empty stacker.
	High paper curl	• Adjust the printer decurler. • Flip paper in paper trays. • Rotate paper in paper trays.
	8 1/2 x 11 inch, 8 1/2 x 14 inch, A4 paper sizes	Check that printer is set to short edge feed (SEF) (applies to HCS).
	Mechanical obstruction	• Check for obstruction in the stacker paper path. • Ensure that all transports and baffles are properly seated. • Ensure that the cart is properly seated (applies to HCS).
Paper jams.	Lower paper path	Deselect offset or restart job.
	High paper curl	• Adjust the printer decurler. • Flip paper in paper trays. • Rotate paper in paper trays. • Switch to heavier paper.

Tray 4 problems

The following table describes problems associated with tray 4.

Table 6-3. **Tray 4 problems**

Symptom	Probable cause	Action

Tray 4 does not feed.	No power	• Ensure the power cord is plugged in to the proper wall receptacle (the ground fault indicator must be plugged in to reset).
		
		• Test the ground fault indicator (GFI):
		
		  1. Locate the GFI at the bottom center of the back cover of tray 4.
		
		  2. Check to see if the GFI switch was tripped. Press and release the RESET button. Power should be restored to Tray 4.
		
		Figure 6-1. Tray 4 GFI
		
		• If the actions above do not restore power to tray 4, or if loss of power to the tray seems to be excessive, contact your Xerox service representative.

	Printer is not set to feed from tray 4.	At the printer controller, use the set tray procedure to set up tray 4.

Table 6-3. **Tray 4 problems**

Symptom	Probable cause	Action
Tray 4 misfeeds repeatedly.	Paper weight or condition is inappropriate for tray 4.	• Turn the paper stack around or over in the elevator tray. • Replace the paper in the tray with paper from a new package. • Keep paper in the original wrapper and store it flat in a dry environment when not in use. • Fan the paper at all four corners. Change it if it has uneven edges or if it was not drilled properly. Fan drilled paper to remove paper plugs. • Use papers that are 64 to 220 gsm if possible. Lightweight or heavyweight paper may not feed with as much reliability as 64 to 220 gsm paper. • Remove a few sheets from the top and the bottom of the ream in the elevator tray. • If the environment is highly humid (50 to 85%) and you are using coated paper, you may need to install the tray 4 heater kit.
	Paper is loaded incorrectly.	• Ensure that the paper is loaded evenly to the edge of the tray and not overloaded. • Check to ensure that the side guides are lightly against the paper and not too tight.
Misfeeds occur with lightweight paper.	Paper weight is inappropriate for tray 4.	Use a heavier weight paper.
Prints are skewed.	Rear and/or side guide adjustment levers are incorrectly positioned.	Ensure that the rear and side guide adjustment levers are in the correct position.

7. Resolving system problems

This chapter describes various system problems and suggests corrective actions.

NOTE: Some corrective actions can be performed using either the command line interface (CLI) or the graphical user interface (GUI). The actions listed below are for CLI users. If using the GUI, refer to the online help for equivalent information.

Table 7-1. **System problems**

Symptom	Probable cause	Action
Blank display: pressing a key fails to restore image. *NOTE: If you have a SunBlade 1000, the monitor takes one minute to display following restart. Do not restart the system while waiting for the monitor to display.*	Monitor is powered off; brightness and contrast controls are misadjusted; or there's a more serious problem.	1. Make sure that the monitor is powered on. 2. Make sure that the brightness and contrast controls (if available) are turned far enough to the left to brighten the screen. 3. If the monitor is powered on and controls are turned to the left, call the service representative.
The first job to print after a reboot or a diagnostics session takes 30 to 60 seconds longer than usual.	This is normal operation.	No action is needed. Subsequent jobs should print without a delay.
User says a job is not printing.	The jobs is ineligible due to unavailable resource.	• Enter **List Documents Ineligible**. • Load the appropriate resource.
	Queueing is stopped.	• Enter **Show Status**. • Enter the **Start Queueing** command.
	The virtual printer is stopped.	• Enter **List Virtual Printers**. • Enter **Start Virtual Printer** <printer_name>.
	The jobs are held.	• Enter **List Documents Held**. • Release the job if appropriate.
	The job never arrived.	• Enter **List Documents All**. • Ask the user to resend. If the job still does not arrive, consult with the network or workstation administrator.

Table 7-1. **System problems (Continued)**

Symptom	Probable cause	Action
No jobs appear to be printing.	Queueing or printing may be stopped.	• Enter **Show Status**. • Enter **Start Queueing or Printing**.
	Scheduling policy may be First Come First Served (FCFS) and the next job may be ineligible.	• Enter **Show Scheduling Policy** to determine current setting. • If scheduling policy is FCFS and the next job is ineligible, no jobs will print. Either load the media the job is waiting for, or **Set Scheduling Policy** to ResourceMatch so the next eligible job prints.
	Possible system problem	• Enter **Print Sample Document** to see if jobs can print from the controller to the printer. • If the sample document does not print, there may be a system problem.
	Printer controller is not communicating with the network. (Does not apply to channel-attached host.)	• **Ping** the printer controller; check the cabling/connections. • Reconnect the network cable. Use the network diagnostics to check the network devices.
	Printer controller is off or needs to be restarted.	• Check the printer controller operation. • Restart the printer controller.
User cannot send a job from a workstation.	The workstation is not communicating with the network.	• **Ping** the printer controller or another workstation. Look at the workstation network cable. • Reconnect the network cable.
	For TCP/IP: Printer controller host name and address are not in the workstation hosts file.	• View the workstation hosts file. • Add the printer controller name and address to the hosts file.

Table 7-1. **System problems (Continued)**

Symptom	Probable cause	Action
Job prints on the wrong paper, or is otherwise not as expected.	Paper in the tray and tray settings do not match.	• Check the trays and Enter **Show Status**. • Change paper in the tray or set the correct paper type using **Set Tray**.
	Job has a job ticket and specified virtual printer has SkipJTPreScan set to True. (Does not apply to IPDS.)	• Enter **List Virtual Printers**. • Send to another virtual printer with SkipJTPreScan set to False.
	Job has attributes from some other source (DSC, embedded from job ticket, etc.)	• Enter **Show Document Attributes**. • Resend if necessary. Enter **Change Document Attributes** to specify desired attributes. • Ensure that "Fit to Paper" or an equivalent selection is not selected in user print driver.
	User error in entering print options from the client workstation.	• Enter **Show Document Attributes**. • Resend if necessary using correct options, or enter **Change Document Attributes** to specify the desired attributes.
Job prints correctly on the right media, but an error message on the trailer page indicates a media error.	There are PostScript setpagedevice operators in the job that specify the media to use, and the job submission method or virtual printer specified other media.	• Enter **Show Document Attributes** to view the requested media and compare with output. Then check the PostScript code of the file. You can enter **Examine Document**, but it may be easier to do this from a user workstation. • If the job has printed as desired, do nothing. If you want the job to print using the media set by the setpagedevice operators, do not use a job submission method that creates a job ticket, or use a virtual printer with SkipJTPreScan set to True, and no media attributes.

Table 7-1. **System problems (Continued)**

Symptom	Probable cause	Action
The IPDS host receives a Not Ready message from the DocuPrint NPS/IPS.	If a virtual printer is specified for a job, and the virtual printer properties are changed, then the virtual printer stops and sends a not ready message to the host.	1. Enter **Show Status** to ensure there is no other problem. If you have a stoppage due to the status shown, correct the problem status. 2. Enter **List Virtual Printer** or **Show IPDS Virtual Printer** to see if the virtual printer is stopped. 3. Enter **Start Virtual Printer <vpname>**.
	Queueing has stopped. The job pool manager cannot accept any jobs when queuing has stopped.	1. Enter **Show Status** to determine if printing is stopped. 2. Enter **Start Queueing**.
	The IPDS job is not selected for printing because printing has stopped.	1. Enter **Show Status** to determine if printing is stopped. 2. Enter **Show IPDS Status** to determine if IPDS printing is stopped. 3. Enter **Start Printing** or **Start IPDS Printing**.
	Out of paper condition	1. Enter **Show Status**. 2. Reload the paper tray.

Restarting the system after an error condition

To restart the system after you have cleared an error condition:

1. Drain the printer at the host. (Follow procedures for your host system.)

2. In an MVS environment, cancel the FSS (Functional Subsystem), which automatically drains the printer.

3. Restart the printer controller.

4. Restart the printer at the host.

Index