PHASER™ 3400
PERSONAL LASER PRINTER
REFERENCE GUIDE

XEROX
NETWORK PRINTERS

Xerox Phaser™ 3400
Personal Laser Printer
Reference Guide

Contents

Loading the optional trays

Loading instructions are also located on the labels inside the tray.

Caution

> Do not remove a tray while printing; this may cause paper jams.

For information on loading the standard tray, refer to the *Phaser 3400 Personal Laser Printer User Guide* on the printer CD-ROM.

Loading the optional A5/A6 tray

1. Remove the tray.
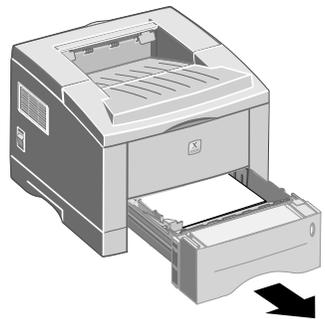
1710-52

2. Push the metal (bottom) plate down until it locks into place.
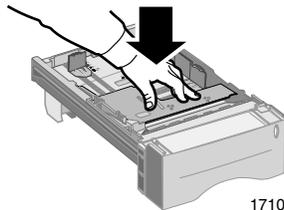
1710-04

3. If necessary, adjust the tray length. For legal or folio size paper, press the tab down and pull the rear wall all the way out.
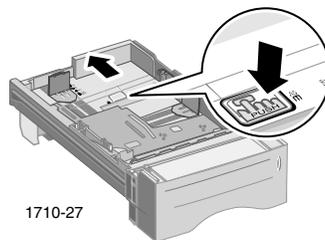
1710-27

Loading the optional trays

Note

> For a list of supported media types, sizes, and weights for this tray, see the *Phaser 3400 Personal Laser Printer User Guide.*

4. Load the paper.

   ■ Make sure that you place the paper under the corner tab in the left-front corner of the tray.

   ■ Load letterhead **face down** with the **top** of the page toward the **front** of the tray.

   ■ Don't load paper above the fill line. Don't load over 250 sheets.
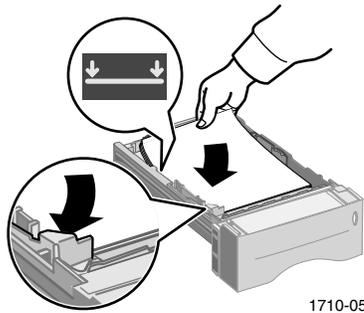
1710-05

5. If necessary, adjust the side and rear guides to lightly touch the paper.
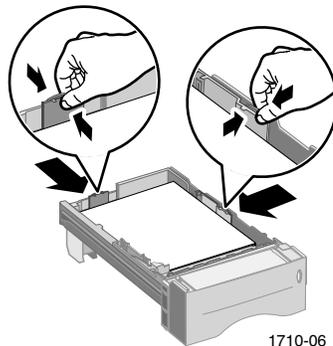
1710-06

6. Slide the tray back into the printer.
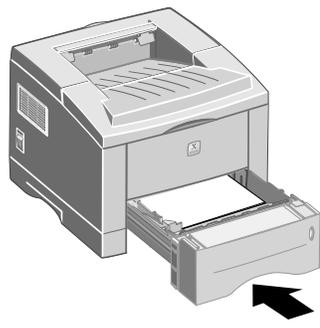
1710-53

Loading optional Tray 2

1. Remove the tray.
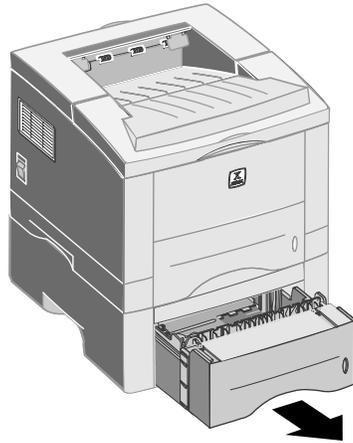
1710-59

2. Push the metal (bottom) plate down until it locks into place.
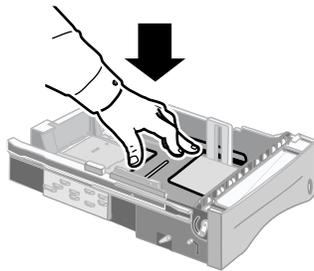
1710-60

3. If necessary, adjust the tray length to match the length of the paper. Pull up on the tab on the back of the tray, then pull the back of the tray to the desired length.
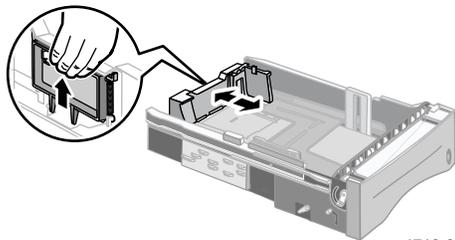
1710-61

4. Load the paper.

   - Make sure that you place the paper up against the left-front corner of the tray.
   - Make sure that you place the paper under the tab at the back of the tray.
   - Load letterhead **face down** with the **top** of the page toward the **front** of the tray.
   - Don't load paper above the fill line. Don't load over 550 sheets.

1710-63
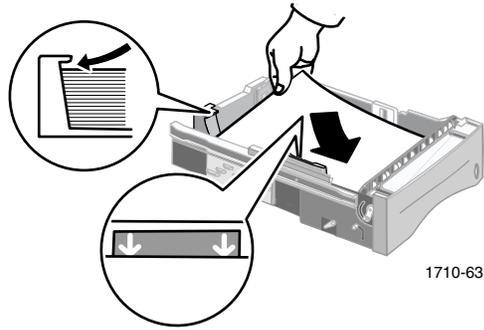
5. If necessary, adjust the side guides to lightly touch the paper.

1710-64

6. Slide the tray back into the printer.

1710-65
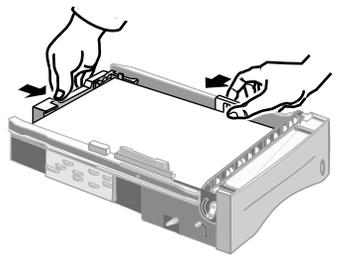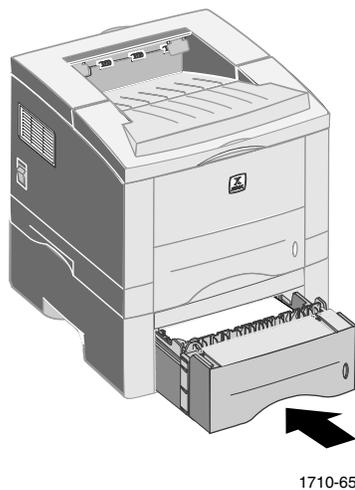
Printing two-sided jobs

Note

> **Do not** print two-sided jobs on transparencies, labels, envelopes, or heavy paper.

To print a two-sided job using the PCL 6 driver (Windows):

1. Select manual two-sided printing in the driver:

   a. From the **File** menu, select **Print**.

   b. Select the PCL 6 driver and click the **Properties** button.

   c. Click the **Page Layout** tab, then select **Manual 2-sided Printing**.

   d. Choose a binding preference.

   e. If desired, check the **Instruction page** checkbox to print instructions for printing the second side of the job.

   f. Click the **OK** button to save the driver settings for this job.

2. If the rear face-up output tray is open, close it.

3. Print the job.

   The printer prints the even-numbered pages only.

4. To print the back sides (odd-numbered pages), insert the prints **face down** in the multi-purpose tray. The direction you load the paper depends on the orientation and the binding preference.

Portrait Bind - Long Edge	Portrait Bind - Short Edge	Landscape Bind - Short Edge	Landscape Bind - Long Edge
Top of the page entering the printer first	**Bottom** of the page entering the printer first	**Left edge** of the page entering the printer first	**Right edge** of the page entering the printer first
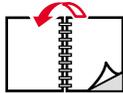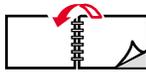
5. When the message to print the second side appears in the PCL driver dialog box, click the **OK** button.

   The printer prints the back sides of the pages (odd-numbered pages).

To print a two-sided job using another driver, first print the even-numbered pages, then insert the printed pages face down in the multi-purpose tray and print the odd-numbered pages.

Linux Printing

You can use your Phaser 3400 printer with a PC running Red Hat Linux 6.0 or higher.

You must install the Linux printer utility provided on the CD-ROM, then use the X-Window System's "printtool" to install and set up the printer driver. Do not use the root user or manual installation to install the driver. The Phaser 3400 printer driver is dependent upon the native driver shipped with your Linux RedHat OS.

Installing the printer driver

1. Log in to Linux as Super User (root) account.

2. Insert the Phaser 3400 printer's CD-ROM into your computer's CD-ROM drive.

3. Open a terminal window. For Gnome interface users, from **Utilities**, select **GNOME terminal**.

4. Mount your CD-ROM and run a script file:
   mount -t iso9660 /dev/cdrom /mnt/ cdrom cd /mnt/cdrom/en/linux ./install.sh

5. Setup your print driver using printtool.

   a. Run the printtool program. From **program**, select **printtool**, and select **Run**. If you get an error message regarding ncpfs, click **Ignore** to continue installing a local printer.

   b. From the RedHat Linux Print System Manager, select **Add**, place a check mark in the **Local printer** box under **Printer type**, then click **OK**.

   c. When the Auto-detection device dialog box indicates that **/dev/1p0** is **Detected**, click **OK**.

   d. In the **Edit Local Print Entry** dialog box, use the defaults and click **Select**.

   e. For printer type, select **Xerox DocuPrint Series PCL5e Compatible** and click **OK**.

   f. In the **Edit Local Printer Entry** dialog box, click **OK**.

6. At the end of installation, close RedHat's printtool by clicking the **X** in the upper right-hand corner of the windows.

   Your Xerox Printer will be the default printer (lp) for printing.

Printing in the X-Window System

A majority of the X-Window System's applications offer the standard GUI interface of **File : Print** for the menu bar at the top of the active window. This will then spool the document to the default printer — usually **dev/lp** — and the printer will then carry out the job. More advanced printer controls are available via the terminal window in the X-Window System or directly from the Linux shell.

Printing from the Linux Shell or Terminal Window within the X-Window System

The Linux environment has the ability to directly interface with the devices attached to the computer. There are three basic commands to initiate, view, and delete print jobs:

- LPR
- LPQ
- LPRM

LPR sends the document to the designated printer; this is the format:

> **$ lpr [*options*] [*filename ...*]**

> Example: **$ lpr thesis.txt** prints the file named thesis.txt

> Options:

> -*#x* = number of copies

> Example: **$ lpr -#2 thesis.txt** prints 2 copies

> -P*printername* = specific printer name (if you have multiple printers installed)

> Example: **$ lpr -P3400 thesis.txt** prints on the printer named 3400

LPQ displays all the documents that are in the printer queue waiting to be printed; this is the format:

> **$ lpq**

> Example: **$ lpq** at the shell would return:

> | Rank | Owner | Job | Files | Total Size |
> |------|-------|-----|-------|------------|
> | Active | mwf | 31 | thesis.txt | 682048 bytes |

LPRM deletes pending print jobs; this is the format:

> **$ lprm -**

> Example: **$ lprm 31** would delete print job #31 (thesis.txt) from the queue.

Remote Control Panel

The Remote Control Panel is a Windows utility that enables you to:

■ Set printer-specific settings in the printer.

■ Set up the printer to work with DOS applications that run inside the Windows MS-DOS Command Prompt window.

The Remote Control Panel can be used when the printer is connected via the parallel interface for all Windows operating systems. The Remote Control Panel can also be used through the USB port for Windows 98, Windows Me, and Windows 2000.

Install the Remote Control Panel utility from the Xerox Phaser 3400 printer CD-ROM.

To change settings using the Remote Control Panel:

1. Click **Start**, select **Programs**, select **Xerox Phaser 3400 Utility**, and then click **Remote Control Panel**.

2. Make changes to the Remote Control Panel settings on the **Printing**, **Config**, **Job**, **Test**, **PCL 5e**, and/or **PS 3** tabs.

   For information about the settings on these tabs, access the online help by clicking the **Help** button.

3. Send the changed settings to the printer by pressing the **Send** button.

Note

Settings selected in the print driver override settings selected in the Remote Control Panel.

Troubleshooting Printing Problems

For more information, access the troubleshooting knowledge base at
www.xerox.com/officeprinting/infoSMART/

For general things to check and information about the indicator lights on the control panel,
refer to the *Phaser 3400 Personal Laser Printer User Guide* on the printer CD-ROM.

The printer name does not appear in the Chooser (Macintosh only)

■ Make sure that the printer is powered on.

■ Make sure that the printer cable is connected properly.

■ If the printer is connected through Ethernet, check that the Appletalk control panel is
set to **Ethernet**.

■ If the printer is connected with a USB cable, it will not show up in the **Chooser**. To set
up the printer using USB, you must use the Desktop Printer Utility to create a desktop
printer. Refer to the *Phaser 3400 Personal Laser Printer User Guide* for more
information about Setting up the printer when using a USB cable.

The printer prints an error sheet

■ Make sure that the printer cable is connected properly.

■ Try printing a simple document that doesn't contain graphics. If that document prints
fine, the incomplete job either contains a corrupt graphic or is too complex.

■ The printer may have run out of memory for that job:

　■ Reduce the complexity of the print job.

　■ Do not send the entire job to the printer at once. Print it in sections instead, such
as pages 1-5, pages 6-10, etc.

　■ Reduce the print resolution, such as from 1200 dpi to 600 dpi.

　■ Add additional memory.

The printer prints an error sheet stating that the job contains binary data

■ Since the pure binary data option is not set by default in the PostScript driver, you
must set this option in the PostScript printer driver's properties. Click the **Advanced**
button and check the box next to **Pure Binary Data**.

Half of the page is blank

■ Check the page orientation setting in the application program.

■ Make sure that the paper size in the tray and the software paper-size settings match.

■ The printer may have run out of memory for that job:

  ■ Reduce the complexity of the print job.

  ■ Do not send the entire job to the printer at once. Print it in sections instead, such as pages 1-5, pages 6-10, etc.

  ■ Reduce the print resolution, such as from 1200 dpi to 600 dpi.

  ■ Add additional memory.

The printer ejects blank pages

■ Make sure that the file doesn't contain unwanted blank pages.

■ The laser print cartridge may be defective or out of toner. Replace the laser print cartridge with a new one.

■ If the laser print cartridge is new, the sealing tape may still be in the laser print cartridge. Remove the laser print cartridge, pull out the sealing tape, and then reinstall the cartridge.

The computer displays an error message

■ There may be a software problem. Save your work, reboot your computer, and re-submit the print job.

■ If the message occurs again, write down the error and look it up on infoSMART: **www.xerox.com/officeprinting/infoSMART/**

Paper is not fed into the printer

■ Make sure that the paper is loaded correctly by removing the paper tray and reloading the paper; refer to the *Phaser 3400 Personal Laser Printer User Guide* for more information.

■ If paper is above the fill line, remove the extra paper.

■ If printing on heavy paper or special media, only use the multi-purpose tray. Be sure to use paper supported by the printer; refer to the *Phaser 3400 Personal Laser Printer User Guide* for more information.

Printing is too slow

■ The job may be very complex. If possible, reduce the complexity of the page or adjust the print-quality setting.

■ The computer may need more memory if jobs frequently contain complex images.

The printer prints the wrong data or incorrect characters

- Make sure that your computer is connected to the printer with the right cable and is connected properly. Test whether the cable is defective by swapping the cable with one known to work.

- Make sure that you selected the correct printer driver.

- Test whether the software application is malfunctioning by printing a job from another application.

- Make sure that the parallel port setting is set to one of these supported modes: Compatible, Nibble, Byte, or ECP.

- If there is still a problem, reboot your computer and the printer, then re-submit the job.

Cannot select the optional Tray 2 in the driver

- Configure the printer driver to recognize the optional tray.

  - From the PCL 6 printer driver's properties, select the **Paper** tab and place a check in the **Paper tray 2 installed** check box.

  - From the PostScript printer driver's properties, select the **Device Options** tab, select **Change settings for Paper Tray 2**, and change the setting from **Not installed** to **Installed**.

Print Quality

Irregular faded patches of print

■ Be sure to use paper supported by the printer; refer to the *Phaser 3400 Personal Laser Printer User Guid*e for more information.

■ Toner may be unevenly distributed. Remove the laser print cartridge, shake it gently to evenly distribute the toner, then reinsert the cartridge into the printer.

Graphics faded

■ Toner may be low. Remove the laser print cartridge, shake it gently to evenly distribute the toner, then reinsert the cartridge in the printer.

■ If the problem persists, insert a new laser print cartridge.

Black stains

■ Be sure to use paper supported by the printer; refer to the *Phaser 3400 Personal Laser Printer User Guid*e for more information.

■ The printer may require a print-quality adjustment. Press and hold the control panel's **Print** button for 10 seconds (until all lights remain steadily lighted) then release the button. The printer performs the print-quality adjustment and prints a cleaning sheet.

Character voids

■ The paper may be too dry. Try printing with paper from a new package.

Background scatter

■ The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until needed so that the paper does not absorb moisture from the air.

■ The printing surface may be uneven. For example, if printing on envelopes, try changing the layout of the image to avoid printing over areas that have overlapping seams on the reverse side.

Missing characters or data

■ The paper may be too damp. Try printing with a different batch of paper. Do not open packages of paper until needed so that the paper does not absorb moisture from the air.

■ This may be due to differences in vector mode versus raster mode. Try changing the graphics mode in the printer driver before re-printing the job.

Back of the printout is dirty

■ The transfer roller may be dirty. Print a few blank pages to clean the transfer roller.

Maintenance and Cleaning

Replacing the laser print cartridge

For replacement instructions, refer to the illustrated instructions included with the new laser print cartridge. You can also access the Phaser 3400 Laser Print Cartridge Installation instruction sheet on the Phaser 3400 printer's CD-ROM.

Cleaning

Caution

> Do not use ammonia-based sprays or volatile solvents such as thinner to clean the printer; they can damage the printer surface.

Cleaning the outside

Keep the covers and trays closed. Wipe the outside surfaces of the printer with a soft, clean, lint-free cloth. If needed, dampen the cloth slightly with water, but be careful not to let any water drip inside the printer.

Cleaning the inside

When paper jams occur, unfused toner on the paper can fall off the paper and build up inside the printer.

1. Unplug the power cord and wait 10 to 15 minutes for the hot surfaces to cool.

2. Open the top cover and remove the laser print cartridge.

1710-08
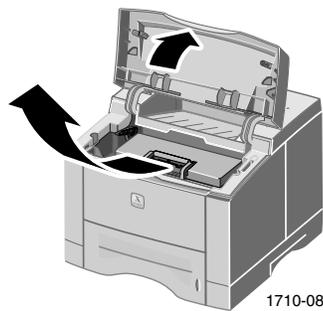
Caution

> Do not expose the laser print cartridge to heat or direct sunlight.

3. Use a soft cloth to wipe away any dust and spilled toner. If needed, dampen the cloth slightly with water but be careful not to let any water drip inside the printer.

4. Using the handle, insert the laser print cartridge into the printer until it clicks into place, then close the top cover.

1710-58

1710-02
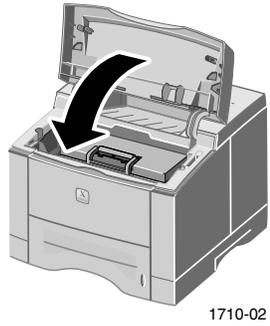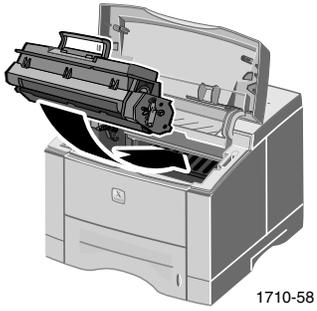
Material Safety Data Sheet

Article No: A28

Date: 4/28/00

Revision: N.A.

Distributor: Xerox Corporation, Rochester, NY 14644

Telephone #(s): Safety Information: (800) 828-6571
Health Emergency: (716) 422-2177
Transportation Emergency(Chemtrec): (800) 424-9300

Section I - Product Identification

Trade Names/Synonyms: Xerox Phaser 3400 printer CRU
Part No.: 106R00462, 106R00461
Chemical Name: None
WHMIS Status: This is not a WHMIS controlled product.

Ingredients (% by wt.)	CAS No.
Toner:	
Polyester resin (85-95%)	186397-54-6
Carbon Black (5-10%)	1333-86-4
Chromium(III)-azo complex (1-3%)	31714-55-3
Iron oxide (1-3%)	1309-38-2
Photoreceptor:	
Substrate (> 95%)	
Polymer Coating and Photosensitive materials (<5%)	Trade Secret

Section II - Emergency and First Aid

Primary Route of Entry: Inhalation
Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation: Remove from exposure.
Ingestion: Dilute stomach contents with several glasses of water.

Symptoms of Overexposure: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Medical Conditions Generally Aggravated by Exposure: None when used as described by product literature.

Additional Information: None.

Section III - Toxicology and Health Information

*This toner material has been evaluated by Xerox Corporation. The toxicity data noted below is based on test results of similar reprographic toner material*s

Oral LD$_{50}$:	>5 g/kg (rats) practically non-toxic.
Dermal LD$_{50}$:	>5 g/kg (rabbits) practically non-toxic.
Inhalation LC$_{50}$:	>5 mg/l (rats, 4 hr exposure) practically non-toxic. >20 mg/l (rats, calculated 1 hr exposure) non-poisonous,
Eye Irritation:	Not an irritant.
Skin Sensitization:	Not a sensitizer.
Skin Irritation:	Not an irritant.
Human Patch:	Non-irritating/non-sensitizing.
Mutagenicity:	No evidence of mutagenicity detected in Ames Assay.
Carcinogens:	None present
Aquatic LC$_{50}$:	>1000 mg/l (fathead minnows/rainbow trout) non-toxic.
TLV:	10mg/m^3 (total dust)
PEL:	15 mg/m^3 (total dust) 5 mg/m^3 (respirable dust)
STEL	N.E.
Ceiling:	N.E.
XEL[1]	2.5 mg/m^3 (total dust) 0.4 mg/m^3 (respirable dust)

Additional Information: The results obtained from a Xerox-sponsored Chronic Toner Inhalation Study demonstrated no lung change in rats for the lowest (1 mg/m^3) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25 percent of the animals at the middle (4 mg/m^3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m^3) exposure level. These findings are attributed to "lung overloading," a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner, and would not be functionally suitable for Xerox equipment.

[1] XEL - Xerox Exposure Limit

N.A. - Not Applicable
N.E. - None Established
N.D. - Not Determined

Section IV - Physical Data

Appearance/Odor:	black powder/ faint odor
Softening Range:	43.3 to 60.0 degrees C (110 to 140 degrees F)
Boiling Point:	N.A.
Melting Point:	N.A.
Solubility in Water:	insoluble
Specific Gravity (H_2O=1):	~3.5
Evaporation Rate:	N.A.
Vapor Pressure (mm Hg):	N.A.
Vapor Density (Air=1):	N.A.
pH:	N.A.
Volatile:	N.D.% (Wt.) N.D. % (Vol.)

Section V - Fire and Explosion Data

Flash Point (Method Used):	N.A.
Flammable Limits:	LEL: N.A., UEL: N.A.
NFPA 704:	Health – 0, Fire –1, Reactivity - 0
Extinguishing Media:	Water spray, foam, dry powder.
Special Fire Fighting Procedures:	Avoid inhalation of smoke. Wear protective clothing and self-contained breathing apparatus.
Fire and Explosion Hazards:	Toner is a combustible powder. Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Section VI -Reactivity Data

Stability:	Stable
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Products:	CO, CO_2 and other toxic products of combustion. Avoid breathing smoke.
Incompatibility (Materials to Avoid):	None known.

Section VII - Special Protection Information

Respiratory Protection:	None required when used as intended in Xerox equipment.
Eye Protection:	None required when used as intended in Xerox equipment.
Protective Gloves:	None required when used as intended in Xerox equipment.
Other:	For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: None

Conditions to Avoid: Avoid prolonged inhalation of excessive dust.

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Sweep up or vacuum spilled toner and carefully transfer into sealable waste container. Sweep slowly to minimize generation of dust during clean-up. If a vacuum is used, the motor must be rated as dust tight. A conductive hose bonded to the machine should be used to reduce static buildup (See Section V). Residue can be removed with soap and cold water. Garments may be washed or dry cleaned, after removal of loose toner.

Waste Disposal Method: This material is not a hazardous waste according to Federal Regulation 40 CFR 261 when disposed. State and Local waste disposal requirements may be more restrictive. Consult with the appropriate State and Local waste disposal authorities for additional information. Incinerate only in a closed container.

Section X - Transportation Information

DOT Proper Shipping Name: N.A. (Not Regulated)

ID Number: N.A.

Hazard Classification: N.A.

Packing Group: N.A.

Certifications

The Xerox Phaser 3400 printer and its supplies are designed and tested to meet strict safety requirements. Follow all warnings and instructions marked on or supplied with the product. Refer to the "User Safety Summary" section in the *Phaser 3400 Personal Laser Printer User Guide* for operational safety instructions.

Laser Safety

The Xerox Phaser 3400 printer complies with safety standards, and is certified as a Class 1 Laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. The printer does not emit hazardous laser radiation. The use of controls, adjustments, or procedures other than those specified in the documentation might result in hazardous exposure to laser light.

(European Union) Declaration of Conformance

The CE marking applied to this product symbolizes Xerox Ltd. Declaration of Conformity with the following applicable Directives of the European Union as of the dates indicated:

■ January 1, 1995: Council Directive 73/23/EC amended by Council Directive 93/68/EC, on the harmonization of the laws of the Member States related to equipment designated for use within certain voltage limits.

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

■ March 9, 1999: Council Directive 99/5/EC, on the harmonization of the laws of the Member States related to radio and telecommunications terminal equipment.

A full declaration, defining the relevant Directives and referenced standards, can be obtained from your Xerox Ltd. representative.

WARNING: Changes or modifications to this equipment not specifically approved by Xerox Europe may void the user's authority to operate this equipment. Shielded cables must be used with this equipment to maintain compliance with the EMC Directive (89/336/EEC).

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

Australia and New Zealand

Changes or modifications to this equipment not specifically approved by Fuji Xerox Australia Pty. Limited may void the user's authority to operate this equipment. Shielded cables must be used with this equipment to maintain compliance with the Radiocommunications Act 1992.

Radio Frequency Emissions

United States and Canada

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

■   Reorient or relocate the receiving antenna.

■   Increase the separation between the equipment and receiver.

■   Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

■   Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to this equipment not specially approved by Xerox Corporation may void the authority granted by the FCC to operate this equipment. Shielded cables must be used with this equipment to maintain compliance with FCC regulations. In order to allow this equipment to operate in proximity to Industrial, Scientific, and Medical (ISM) equipment, the external radiation from ISM equipment may have to be limited or special migration measures taken.

Ozone Safety

During normal operation, the Xerox Phaser 3400 printer produces ozone. The ozone produced does not present a hazard to the operator, however, it is advisable that the machine be operated in a well-ventilated area.

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