User Guide:
Hard Disk Option
for OKI B6100 Printer

OKI®

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Contents

Safety Precautions

CAUTION: Handling ESD-Sensitive Parts

Many electronic parts use parts that are known to be sensitive to electrostatic discharge (ESD). To prevent damage to ESD-sensitive parts, follow the instructions below in addition to all the usual precautions, such as turning off power before removing logic boards:

- Keep the ESD-sensitive part in its original shipping container (a special "ESD bag") until you are ready to install the part into the machine.
- Make the least-possible movements with your body to prevent an increase of static electricity from clothing fibers, carpets, and furniture.
- Use an ESD wrist strap on your wrist if available. Connect the wrist band to the system ground point. This discharges any static electricity in your body to the machine.
- Hold the ESD-sensitive part by its edge connector cover; do not touch its pins. If you are removing a pluggable module, use the correct tool.
- Do not place the ESD-sensitive part on any metal surface; if you need to put down the ESD-sensitive part for any reason, first put it into its special bag.
- Metal surfaces are electrical grounds. They increase the risk of damage because they make a discharge path from your body through the ESD-sensitive part. (Large metal objects can be discharged paths without being grounded.)
- Prevent ESD-sensitive parts from being accidentally touched by other personnel.
- Take extra care working with ESD-sensitive parts when cold weather heating is used because low humidity increases static electricity.

WARNING: To prevent the danger of electric shock, before installing any options be sure to turn the power switch of the printer to the off [O] position and disconnect the power cord from the wall outlet.

Chapter 1

Installation

Features of the Hard Disk Option

The Hard Disk Option for your printer provides the following:

- Quick and easy installation requiring no tools
- 10 GB capacity
- Storage of PostScript files and/or storage of PCL power-on files (see page 10)
- Control panel menus enable fast and easy file manipulation (see page 8).

Installing the Hard Disk

NOTE: Carefully review the safety precautions on page iii before starting this installation procedure.

Remove the Side Panel from the Printer

1. Turn the printer power switch (**1**) OFF (O position), then unplug the power cord from the AC outlet (**2**).
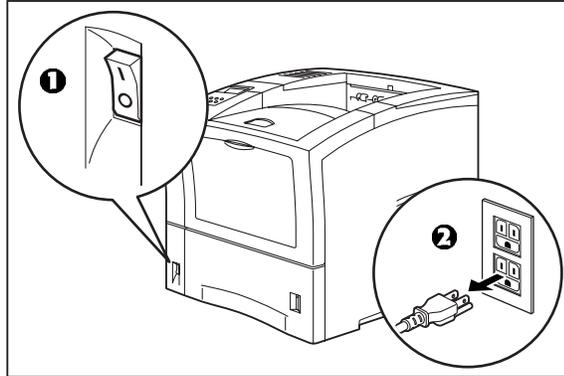
2. Loosen the thumbscrews at the top and bottom of the side cover by turning them in a counter-clockwise direction.

3. Slide the cover towards the rear of the printer, then down to remove it.

Install the Hard Disk in the Bracket

CAUTION: Handling ESD-Sensitive Parts

The Hard Disk is sensitive to electrostatic discharge (ESD).

❧ Keep the Hard Disk drive in its original shipping container until you are ready to install it.
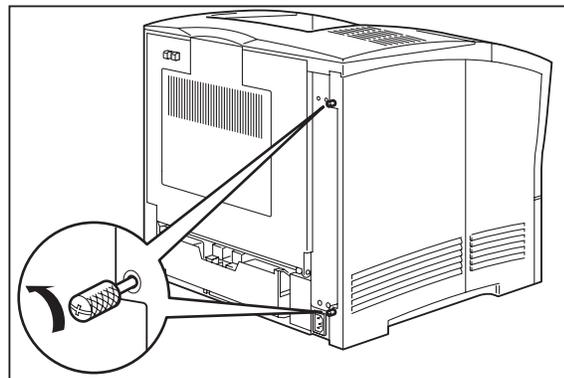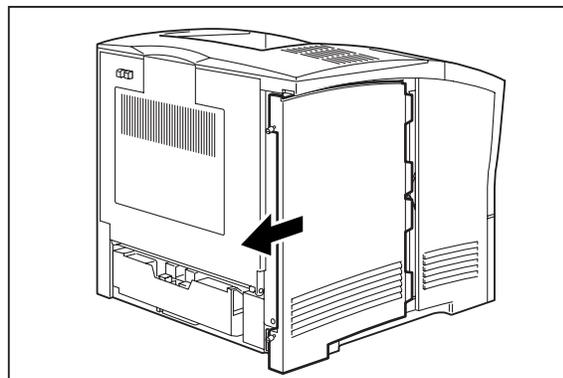
❧ Minimize your movements to prevent build up of static electricity.

❧ Use an ESD wrist strap on your wrist if available. Connect the wrist band to the system ground point. This discharges any static electricity in your body to the machine.

❧ Hold the Hard Disk by its edge connector cover; *do not touch the pins.*

❧ Do not place the Hard Disk on any metal surface; if you need to put it down for any reason, first put it into its special bag.

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1. Place the bracket on a flat area protected against static electricity.

2. With the label side up, place the Hard Disk on the bracket, aligning the three holes in the bracket with the mounting holes on the Hard Disk.

3. Use the three screws (**1**) provided to secure the bracket to the Hard Disk. Be sure to tighten the screws securely.

Mount the Hard Disk on the Controller Board

1. Locate the area of the controller board (**1**) in the lower right corner, identified as "Hard Disk Option."
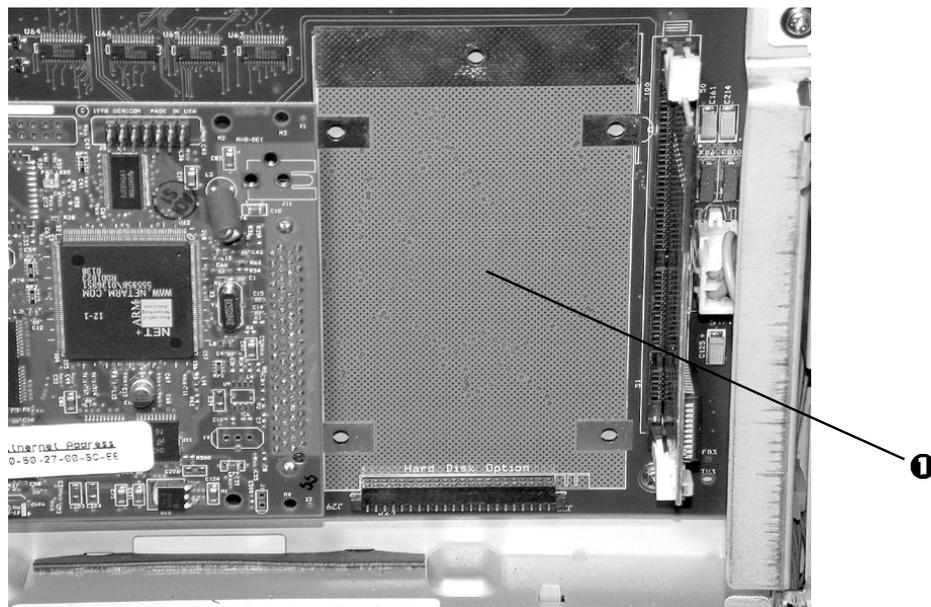
2. Align the wide bank of pins (**1**) on the Hard Disk—*CAREFUL! The pins (2) in a separate group on the Hard Disk are* **not** *used to make the connection*—with the connector on the control board, then gently slide the Hard Disk down to seat the pins firmly in the connector.
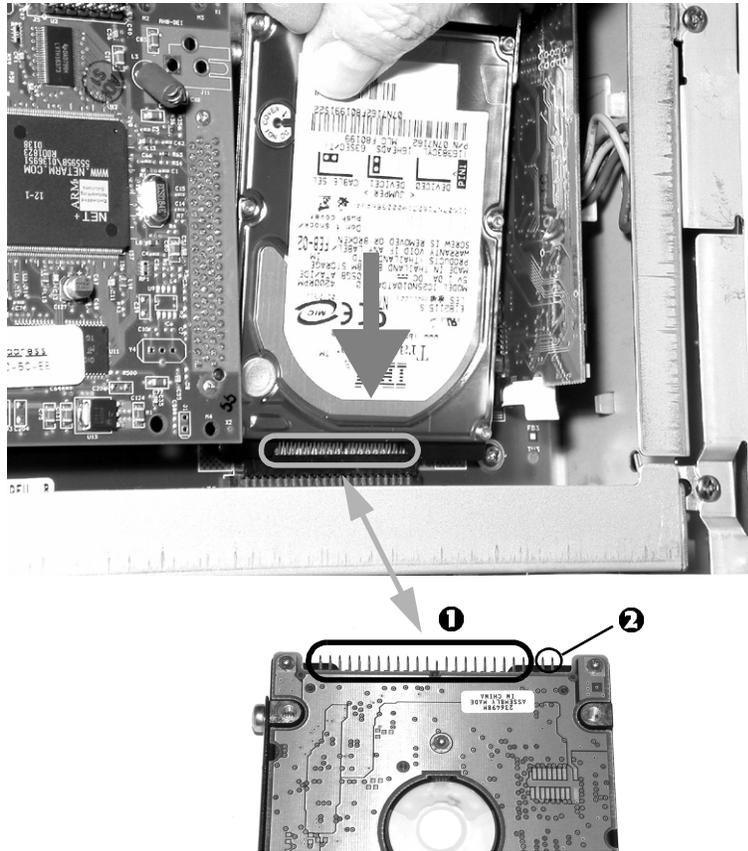
3. Align the hole in the Hard Disk bracket with the hole in the controller board, and insert the included plastic rivet (**1**) through the aligned holes (**2**).
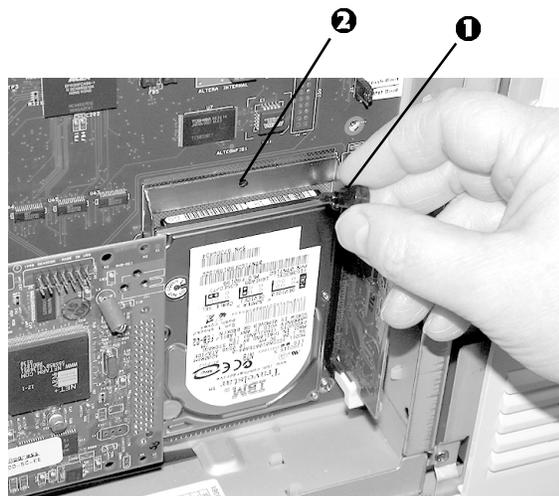
Reinstall the Side Panel on the Printer

1. Insert the top part of the left side cover into the printer. Ensure the locking tab aligns with the hole in the printer's side.
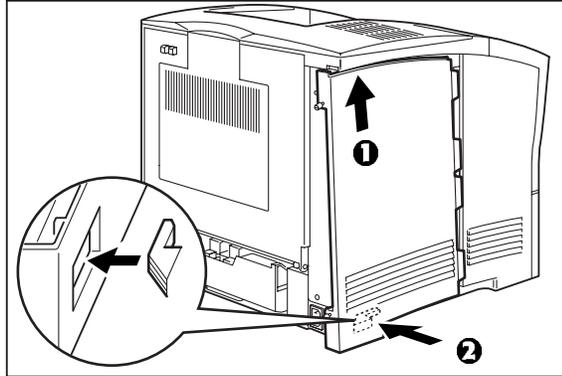
2. Slide the side cover towards the front of the printer to install it.
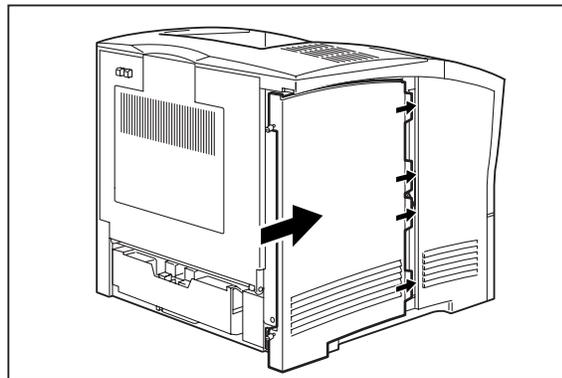
3. Tighten both thumbscrews in a clockwise direction.
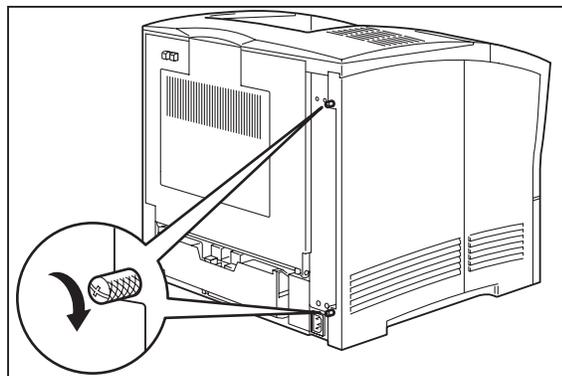
4. First, connect the power cord to the wall outlet, and then turn the printer on.
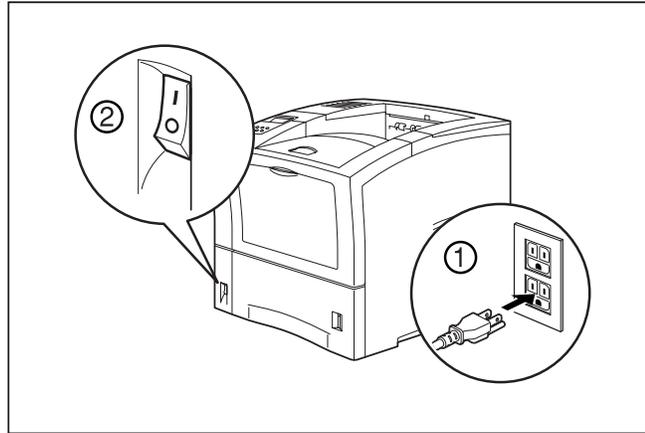
5. Check the operator panel. After the warm up and initialization cycles, it should read READY. If it is blank, the Hard Disk pins are improperly installed in the connector:

    a. Turn the printer off, then remove the power cord from the outlet.

    b. Remove the side panel from the printer.

    c. Check to be sure that the Hard Disk pins—***wide bank only: the separate pins should not engage the connector***—are properly seated in the connector.

    d. Reinstall the side panel, plug the printer in and turn it on. Wait for the warm up and initialization cycles to complete, then check the display for READY.

The installation of your Hard Disk is complete.

Chapter 2

Using the Hard Disk

Control Panel Menu Structure

When the Hard Disk is installed, the printer control panel menu structure is enhanced as shown in the following table. The shaded areas denote additional features and settings relevant to the Hard Disk.

Menu			
	Paper Menu		
	Interface Menu		
	PS Menu		
	PCL Menu		
	System Menu		
		Display Language	
		Alarm Control	
		Power Saver	
		Wait Timeout	
		Job Timeout	
		Jam Recovery	
		Hex Print	
		Toner Out	
		Power-On Files	
			Playback	FILE01.POR
				FILE02.POR
				FILE03.POR
				. . .
				. . .
			Delete	FILE01.POR
				FILE02.POR
				FILE03.POR
				. . .
				. . .
	Quality Menu		
	Functions		
	Disk Menu		
		Print	
		Delete	
		Format Disk	
		Disk Summary	

NOTE: The Disk Menu will only appear when the Hard Disk is installed.

The Power-On Files menu will only appear if the Hard Disk (or the Flash SIMM option) is installed and power-on files exist.

Using the Disk Menu

Manipulation of files stored on the Hard Disk can be accomplished using the Disk Menu (Print, Delete, Format Disk, Disk Summary).

Print

This selection reads the selected file from the Hard Disk and prints it as if it were being received from one of the input ports.

Delete

This selection deletes the selected disk file or directory from the Hard Disk. To delete an entire directory, you must first delete all the files within that directory.

Format Disk

This selection *reformats the Hard Disk*.

CAUTION! All files on the Hard Disk are deleted if this function is selected.

Disk Summary

This selection prints a page containing information about the Hard Disk including a list of all the current files and directories.

Using the PCL and PostScript Power-On Files Feature

Power-on Files Defined

Your printer can store files on the Hard Disk which can be read and interpreted at power-on.

Such power-on files can contain either PCL or PostScript language content. Examples of power-on files include soft fonts, and macro/overlay definitions.

NOTE: Power-on files are processed only at power-on initialization and not at the start of every print job.

Contact the technical support organization at your point of purchase for full details about the power-on files feature.

Using the Hard Disk as a PostScript Device

In order to allow PostScript® programs to access the Hard Disk, a full implementation of a PostScript storage device is provided. This section discusses an overview of the PostScript operators and parameter sets that are included.

For detailed information on using the operators/parameter sets, please refer to the following publications (available on the Adobe® web site, www.adobe.com):

- PostScript Language Reference Manual
- Adobe PostScript 3 Version 3010 Product Supplement

Device Name and Priority

The device name assigned to the Hard Disk option is %disk0%.

- If both the Hard Disk and the Flash SIMM options are installed, both can be referenced uniquely by name.
- If no device name is specified in the PostScript operation, the *SearchOrder* parameter in the device parameter set establishes the priority for file operations.
- When both devices are installed, the *SearchOrder* value for the Hard Disk is set to 1, while the *SearchOrder* value for the Flash SIMM is set to 2. This gives priority to the Hard Disk.

PostScript Operators

All of the standard file-object related operators (file, read, write, etc.) are supported. In addition, following is a list of device-related PostScript Compatibility operators that are supported for use with the Hard Disk (*%disk0%*):

- devdismount
- devforall
- devformat
- devmount
- devstatus
- diskonline
- diskstatus
- initializedisk
- dosysstart
- setdosysstart

Device Parameter Sets

When installed, a device parameter set will be supported for the Hard Disk. The parameter sets can be referenced using the device names *%disk0%*. Each parameter set will include the following parameters:

- LogicalSize

- Writeable

- BlockSize

- Searchable

- SearchOrder

- Type

- Mounted

- HasNames

- PhysicalSize

- InitializeAction

- Free

- Removable

Warmstart.ps and Sys/Start Files

When the Hard Disk is installed, there are two features which provide support for automatic execution of a PostScript program during power-on initialization: warmstart.ps and Sys/Start.

warmstart.ps File

Each time the printer is powered on, the Hard Disk is checked for a file named *warmstart.ps*. If this file is found, it is read and parsed by the PostScript interpreter.   It is up to the PostScript programmer to create the content of this file and get the file onto the Hard Disk using the PostScript device and file operators.

Sys/Start File

With the Hard Disk installed, an additional parameter is supported in the System Parameter set. This parameter is an integer parameter called *StartupMode* and is set to 1 by default.

NOTE: This parameter can be read or written using the *dosysstart* and *setdosysstart* operators.

Each time the printer is powered on, if the StartupMode parameter is set to 1, the Hard Disk is searched for a file called *Sys/Start*, a file named *Start* in a path called *Sys*. If this file is found, it is read and parsed by the PostScript interpreter. Again, it is up to the PostScript programmer to create the content of this file and get the file onto the Hard Disk the PostScript device and file operators.

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Chapter 3

Service & Support

First …

Consult the store where you purchased your Hard Disk.

Additional OKI Resources: Available 24/7

- Visit our multilingual web site **www.okidata.com**.
- Visit **http://my.okidata.com**.
- Call 1-800-654-3282

Have the following information ready:

- Your phone number, fax number and shipping address.
- A description of the problem.
- The printer model.
- The type of host computer you are using.
- The type and version of operating system you are using.
- The application and version you are using.
- The interface you are using (e.g., network, parallel, serial).
- If using the network interface, the network protocol (TCP/IP, EtherTalk, IPX/SPX, NetBIOS/NetBEUI).
- The printer emulation you are using (e.g., PCL or PostScript).
- A printout of your printer's Configuration Summary. (Refer to your printer's User manual).
- If you have a printer hardware problem you cannot resolve, provide the error message displayed on the Control Panel. For a list of error messages, refer to your printer's User manual.

NOTE: To confirm that a problem is isolated to the Hard Disk option, you may want to remove the Hard Disk from the printer and diagnose the printer using the User's Manual that came with your printer. If the condition persists, it can be assumed that the problem resides within the printer and not necessarily the Hard Disk.