



Sun Blade™ 150 CD-ROM, DVD-ROM, and Hard Drive Installation Guide

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Sun Blade 150 CD-ROM, DVD-ROM, and Hard Drive Installation

This guide provides instructions for installing a CD-ROM, DVD-ROM, or hard drive in your Sun Blade 150™ system.

Required Tools

The following tools are required to service the Sun Blade 150 system:

- No. 2 Phillips screwdriver (magnetized tip suggested)
- Antistatic wrist strap
- Antistatic mat

Place ESD-sensitive components, such as the hard drives, on an antistatic mat. The following items can be used as an antistatic mat:

- Bag used to wrap a Sun™ replacement part
- Shipping container used to package a Sun replacement part
- Inner side (metal part) of the system cover
- Sun antistatic mat, part no. 250-1088 (available through your Sun sales representative)
- Disposable antistatic mat; shipped with replacement parts or optional system features

Preparing to Replace Components

Follow these procedures to ensure that you safely save data and power off the system.

Powering Off the System



Caution – Exit from the operating system before turning off system power. Failure to do so may result in data loss.

1. Back up system files and data.

- If Solaris is running in a windowing environment:

Momentarily press and release the front panel power switch (FIGURE 1) to automatically shut down all programs, the operating system, and to power off the system.

From the system shutdown menu displayed on the monitor, select “Shutdown.”

- If Solaris is not running in a windowing environment:

Press and hold the front panel power switch (FIGURE 1) for four seconds to power off the system.



Caution – This action forces an immediate power off of the system and unsaved data is lost.

Power switch

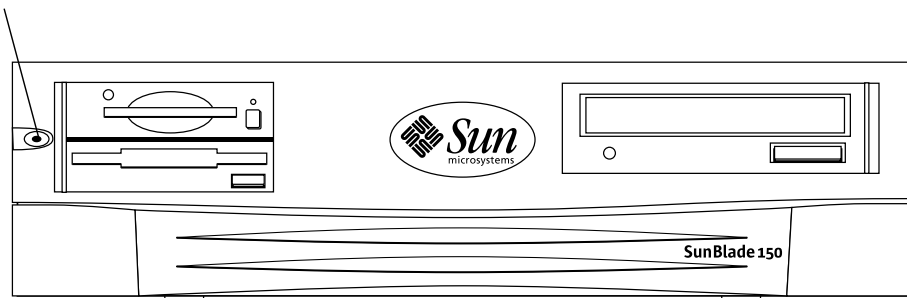


FIGURE 1 Front Panel Power Switch

2. **Verify the following:**

- The front panel power-indicator LED is off.
- The system fans are not spinning.

3. **Turn off the power to the monitor and any peripheral equipment.**

4. **Disconnect cables to any peripheral equipment.**



Caution – Pressing the power switch does not remove all power from the system; a trickle current remains in the power supply. To remove all power from the system, disconnect the power cord.

Removing the System Cover

1. **Using a No. 2 Phillips screwdriver, remove the two screws securing the system cover to the chassis (FIGURE 2).**
2. **Slide the system cover toward the rear of the system until the cover tabs release.**
3. **Lift the system cover straight up and set the cover aside in a safe place.**

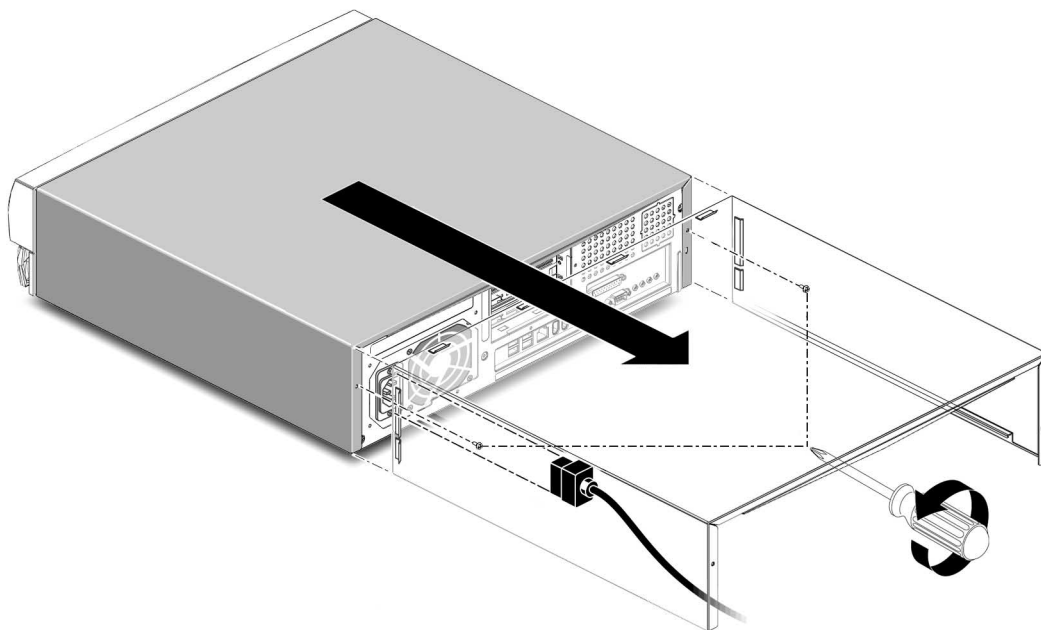


FIGURE 2 Removing the System Cover

Attaching the Antistatic Wrist Strap

1. Unwrap the first two folds of the wrist strap. Wrap the adhesive side firmly against your wrist.
2. Peel the liner from the copper foil at the opposite end of the wrist strap.
3. Attach the copper end of the wrist strap to the chassis (FIGURE 3).
4. Disconnect the AC power cord from the system.

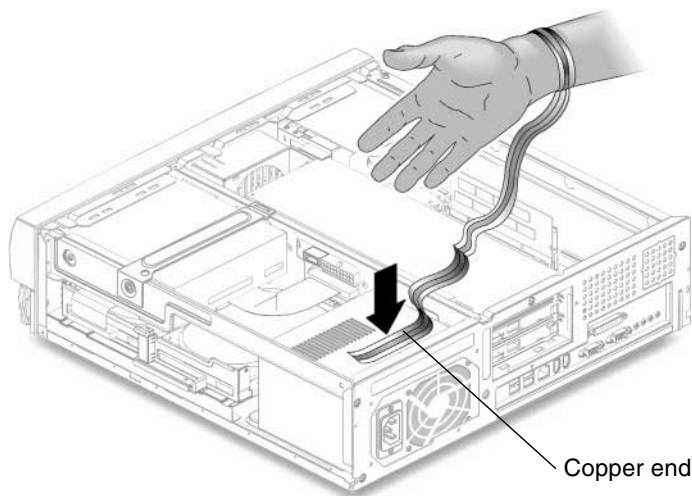


FIGURE 3 Attaching the Wrist Strap to the Chassis

Removing a Primary Hard Drive

1. Power off the system, remove the system cover, and attach an antistatic wrist strap as described in "Preparing to Replace Components" on page 2.



Caution – Use proper ESD grounding techniques when handling components. Wear an antistatic wrist strap and use an antistatic mat. Store ESD-sensitive components in antistatic bags before placing them on any surface.

2. Lift the spring-loaded latch upward to release the hard drive tray from the chassis (FIGURE 4).
3. Pull the hard drive tray ejection lever away from the chassis.
4. Disconnect the hard drive IDE cable and the power cable connectors from both hard drives (if two drives are installed).
Move the cables out of the way.
5. Slide the hard drive tray out of the chassis.
6. Turn the hard drive tray over and place it on an antistatic mat.
7. Using a No. 2 Phillips screwdriver, remove the four screws securing the hard drive to the hard drive tray.

8. Lift the hard drive tray from the hard drive.

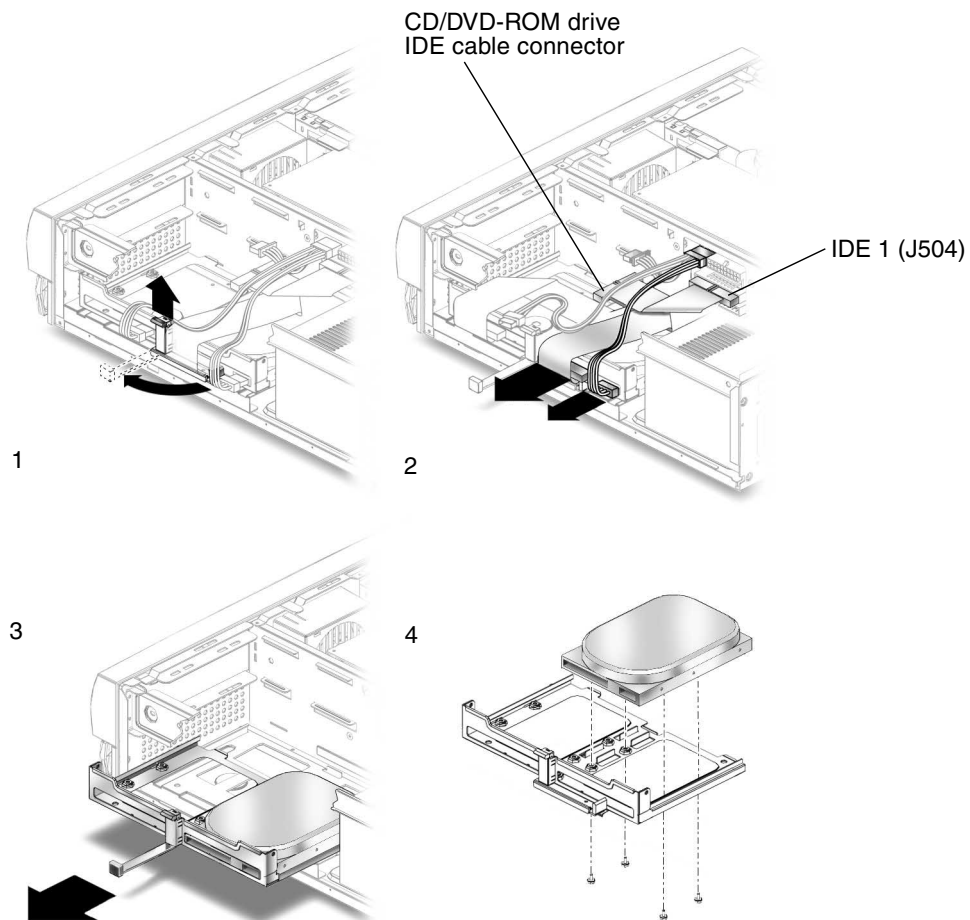


FIGURE 4 Removing and Replacing a Primary Hard Drive

Replacing a Primary Hard Drive

Note – Read the hard drive product guide for information about jumpers, switch settings, or other installation tasks.

Note – Before you replace any hard drive, verify that the hard drive mode-select jumper is set to “CS,” “Enable Cable Select,” or “Cable Select.”

1. Position the hard drive into the hard drive tray (FIGURE 4).
2. Turn the tray upside down on an antistatic mat.
3. Using a No. 2 Phillips screwdriver, replace the four screws securing the hard drive to the hard drive tray.
4. Position the hard drive tray into the chassis.
5. While ensuring that the cables are not damaged, slide the hard drive tray into the chassis until the spring-loaded latch clicks into place.
6. Connect the hard drive IDE cable connector labeled “Primary HDD” to the primary hard drive.

Note – Ensure that the cables are properly oriented by aligning the connector keys.

7. Connect the power cable to the hard drive.



Caution – Ensure that the cables will not be damaged when you replace the system cover.

8. Detach the wrist strap, replace the system cover, and power on the system as described in “Finishing Component Replacement” on page 13.

Installing a Secondary Hard Drive

The optional secondary hard drive mounts next to the primary hard drive on the hard drive tray (FIGURE 5). The secondary IDE cable assembly is used with the secondary hard drive. Use the following procedure to install the optional secondary hard drive.

1. **Power off the system, remove the system cover, and attach an antistatic wrist strap as described in "Preparing to Replace Components" on page 2.**



Caution – Use proper ESD grounding techniques when handling components. Wear an antistatic wrist strap and use an antistatic mat. Store ESD-sensitive components in antistatic bags before placing them on any surface.

2. **Lift the spring-loaded latch upward to release the hard drive tray from the chassis (FIGURE 5).**
3. **Pull the hard drive tray ejection lever away from the chassis.**
4. **Disconnect the existing hard drive IDE and power cables from the primary hard drive.**
5. **Slide the hard drive tray out of the chassis.**
6. **Place the new secondary hard drive onto the hard drive tray.**
7. **Turn the tray upside down on an antistatic mat.**

Note – Before installing the hard drive into the system, verify that the drive's back-panel mode-select jumper is set to "CS," "Enable Cable Select," or "Cable Select."

8. **Using a No. 2 Phillips screwdriver, install the four screws that secure the drive to the hard drive tray.**
9. **While ensuring that the cables are not damaged, slide the hard drive tray into the chassis until the spring-loaded latch clicks into place.**

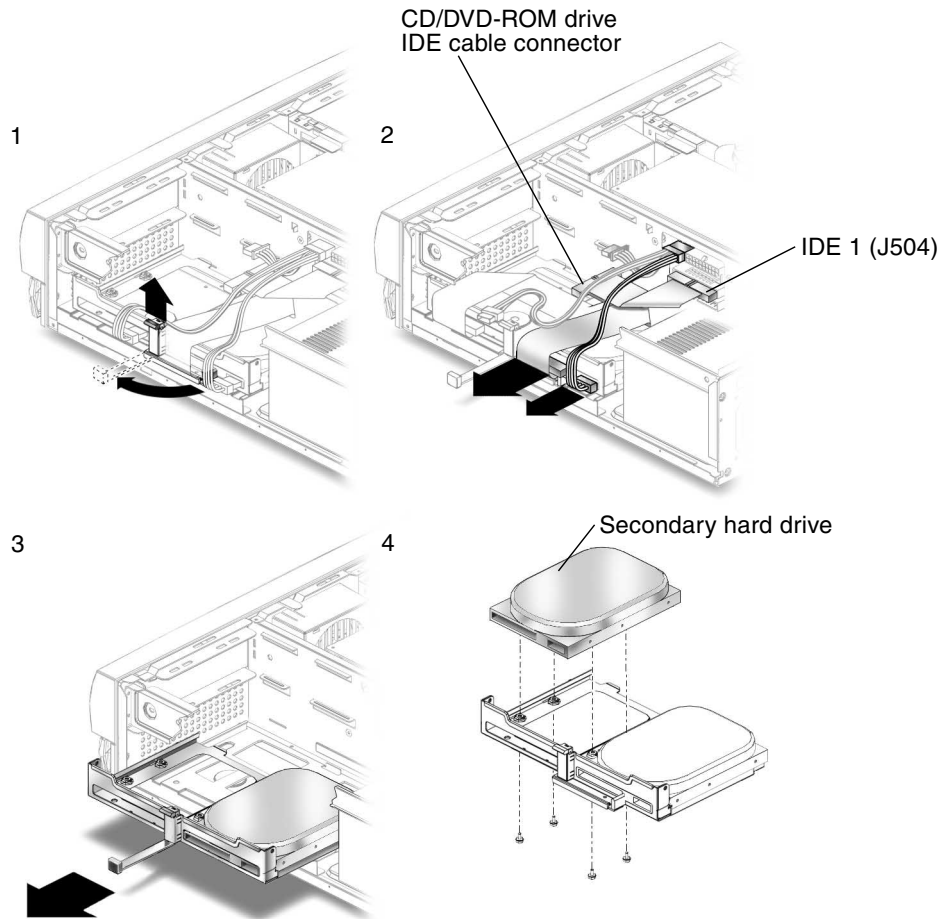


FIGURE 5 Installing a Secondary Hard Drive

10. Verify that the *secondary* IDE cable connector is connected to riser board connector IDE2 (J503). See FIGURE 7.

Note – Ensure that the cables are properly oriented by aligning the connector keys.

11. Verify that the CD-ROM or DVD-ROM cable is connected to the primary (IDE1, J504) cable connector labeled CD/DVD (FIGURE 5 and FIGURE 6).
12. Connect the hard drive IDE cable connector labeled “Primary HDD” to the primary hard drive.

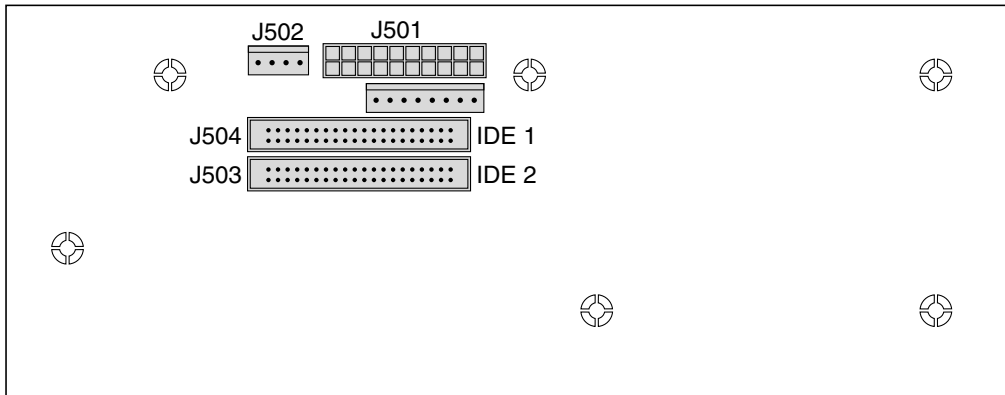


FIGURE 6 Riser Board, Side Two

13. Connect the power cable to the secondary hard drive (FIGURE 7).
14. Connect the power cable to the primary hard drive.
15. Connect the secondary hard drive to the cable connector labeled “Secondary HDD”.

The following diagram shows the cabling for the secondary hard drive.

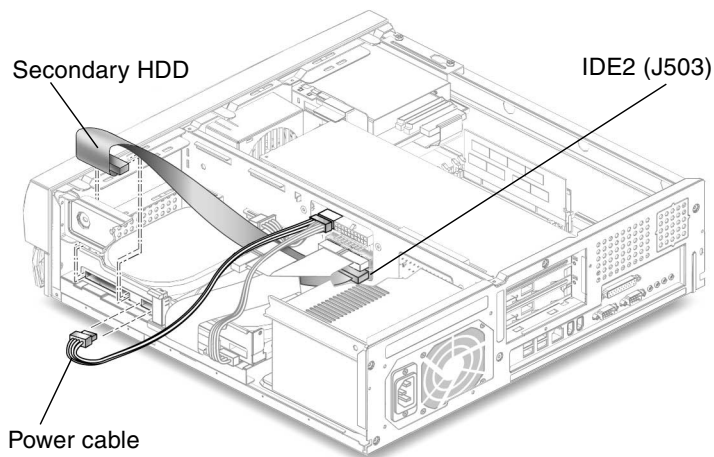


FIGURE 7 Secondary Hard Drive Cabling Configuration



Caution – Ensure that the cables will not be damaged when you replace the system cover.

16. Detach the wrist strap, replace the system cover, and power on the system as described in “Finishing Component Replacement” on page 13.

Removing a CD-ROM or DVD-ROM Drive

1. Remove any CD or DVD media from the drive.
2. Power off the system, remove the system cover, and attach an antistatic wrist strap as described in “Preparing to Replace Components” on page 2.



Caution – Use proper ESD grounding techniques when handling components. Wear an antistatic wrist strap and use an antistatic mat. Store ESD-sensitive components in antistatic bags before placing them on any surface.

3. Remove the following from the back of the CD-ROM or DVD-ROM drive (FIGURE 8):
 - CD-ROM or DVD-ROM drive IDE cable connector
 - Power cable connector
4. Using a No. 2 Phillips screwdriver, remove the two screws securing the CD-ROM or DVD-ROM drive to the chassis.
5. Place your fingers on the back of the CD-ROM or DVD-ROM drive. Push the CD-ROM or DVD-ROM drive toward the chassis front and remove it.
6. Place the CD-ROM or DVD-ROM drive on an antistatic mat.

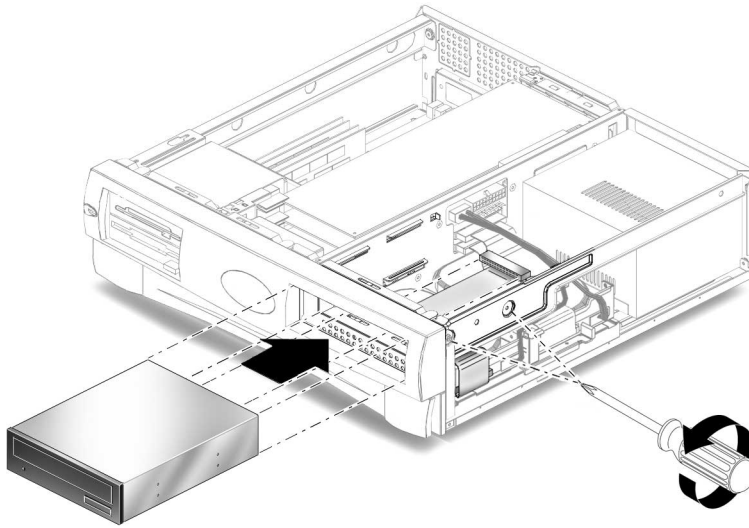


FIGURE 8 Removing and Replacing a CD-ROM or DVD-ROM Drive

Replacing a CD-ROM or DVD-ROM Drive

Note – Before you replace the CD-ROM or DVD-ROM drive, verify that the CD-ROM drive jumper (located on the CD-ROM drive back panel) is set to either “CS,” “Cable Select” or “Enable Cable Select.”

1. Position the CD-ROM or DVD-ROM drive in the chassis (FIGURE 8).
2. Push the CD-ROM or DVD-ROM drive toward the chassis rear.
3. Connect the following to the rear of the CD-ROM or DVD-ROM drive:
 - CD-ROM or DVD-ROM drive cable connector
 - Power cable connector
4. Ensure that the cable assembly connectors are properly oriented by aligning the connector keys.
5. Using a No. 2 Phillips screwdriver, replace the two screws securing the CD-ROM or DVD-ROM drive to the chassis.

6. Detach the wrist strap, replace the system cover, and power on the system as described in “Finishing Component Replacement” on page 13.

Finishing Component Replacement

1. Remove the wrist strap from the system chassis and from your wrist.
2. Position the system cover onto the system chassis.



Caution – Ensure that the hard drive cables will not be damaged when you replace the system cover.

3. Slide the system cover toward the front of the system until the cover tabs lock (FIGURE 9).
4. Using a No. 2 Phillips screwdriver, replace the two screws securing the system cover to the chassis.

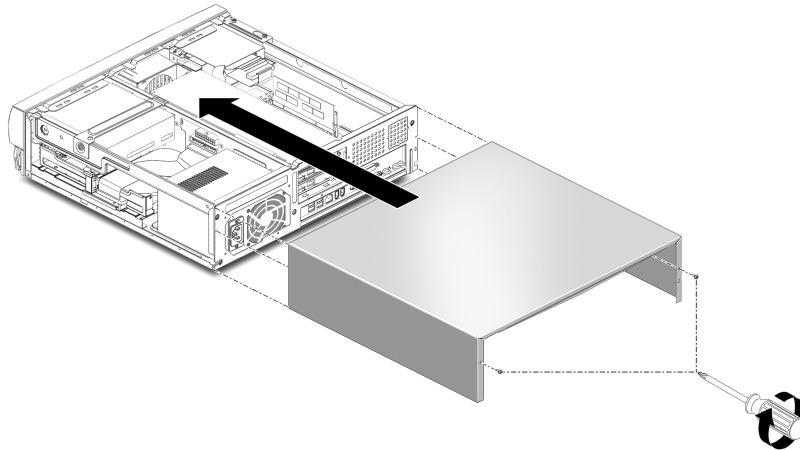


FIGURE 9 Replacing the System Cover

Powering On the System

1. Connect the system power cord to the system and to an AC power outlet.
2. Reconnect and turn on power to any peripherals (so that the system can recognize the peripherals when it is powered on).
3. Press the front panel power switch (FIGURE 10).

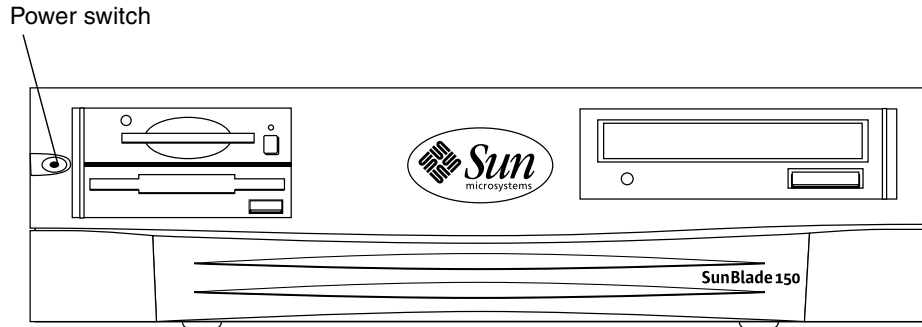


FIGURE 10 System Power Switch

4. Verify the following:
 - The front panel power indicator LED is on.
 - The system fans are spinning.

If the system does not power on, see the “Troubleshooting” section in the *Sun Blade 150 Getting Started Guide*, 816-1161, or the *Sun Blade 150 Service Manual*, 816-4379.

Note – The *Sun Blade 150 Getting Started Guide* is translated into 10 languages. All 10 language versions are available on the CD-ROM that shipped with the Sun Blade 150 system.

Hard Drive Mirroring

This section describes the requirements and constraints of a hard drive mirroring solution that uses Solstice DiskSuite™ software.

Hard Drive Mirroring Configuration

The IDE subsystem of the Sun Blade 150 system has two independent channels designated “primary” and “secondary.” The system riser board has a connector for each IDE Channel, labelled IDE1 (J504) and IDE 2 (J503).

Note – When mirroring hard drives in a Sun Blade 150 system, both hard drives should be jumpered as “CS,” “Cable Select” or “Enable Cable Select” to allow for automatic configuration.

Two IDE cables are required for this configuration. Each cable is connected to the riser board at one end and to a hard drive connector at the other end. FIGURE 11 shows this hardware configuration (with an optional CD-ROM or DVD-ROM drive).

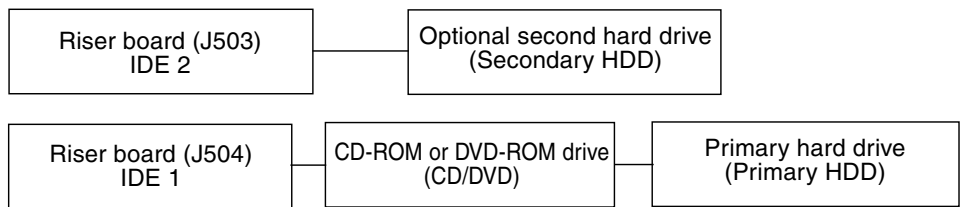


FIGURE 11 Hard Drive Mirroring Configuration

Required Software and Patches

The supported software is Solstice DiskSuite 4.2.1 or a subsequent compatible release. For detailed instructions on configuring hard drives refer to see the *Solstice DiskSuite User's Guide*, part number 806-3205 at this web site:
<http://docs.sun.com>

CD or DVD Handling and Use

Inserting a CD or DVD Into the Drive

1. After the system is powered on, push the eject button on the CD-ROM or DVD-ROM drive to open the drive tray.

2. Place the CD (label side up) into the tray.

Ensure that the CD is properly set into the recessed area of the tray.

3. Push the tray to close it.

Ejecting a CD or DVD

You may need to unmount the CD before manually ejecting it.

There are three ways to eject a CD:

- Press the eject button on the front of the CD-ROM drive.
- Use software commands to eject the CD. Refer to the peripherals handbook that corresponds with your operating system.
- If the motorized eject mechanism does not operate, insert a thin, stiff wire (such as a paper clip) into the hole next to the eject button.

Cleaning a CD or DVD

If your CD-ROM drive cannot read a CD or DVD, the cause may be a dirty CD or DVD. Follow these guidelines to clean a CD or DVD:

- Use a soft, clean, lint-free, dry cloth.
- Clean the *unlabeled* side of the CD or DVD.
- Wipe the CD *radially* from the center to the outside.
- Use professional cleaning kits.



Caution – Do not use solvents such as benzine, paint thinner, antistatic aerosol spray, or abrasive cleaners to clean CDs.

Handling and Storing CDs and DVDs

Follow these guidelines when handling and storing CDs:

- Handle CDs only by their edges; avoid touching CD or DVD surfaces.
- Write only on the premarked label side of a CD or DVD. Use a soft felt-tip marker.
- Do not use CDs in high-dust environments.
- Keep CDs out of direct sunlight, extreme sources of heat or cold, and away from dust and moisture.
- Make sure CDs are at room temperature before using them.
- Store CDs in storage boxes so that they remain clean and free of dust.