
1 Introduction

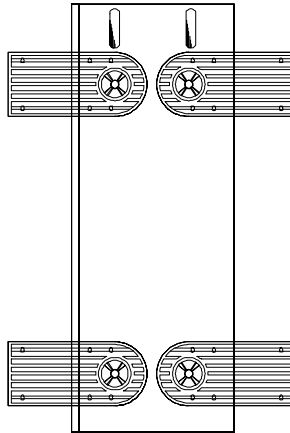
This installation guide describes the features of the IDUR housing and tells you how to install the basic system components such as disk drives, system board, or expansion boards. Descriptive illustrations accompany the installation procedures.



If you receive a complete system, the basic components are already installed.

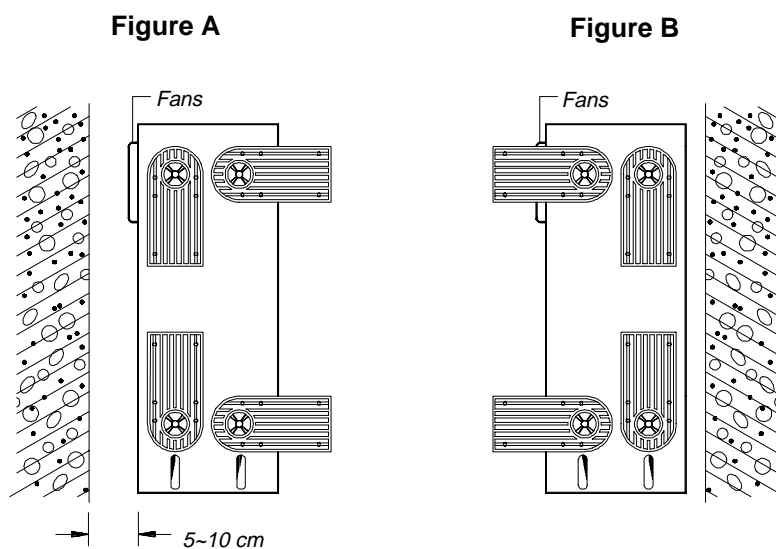
2 Positioning the System Housing

2.1 Standalone System



For a standalone system, rotate the legs outward to stabilize the housing.

2.2 Against a Wall



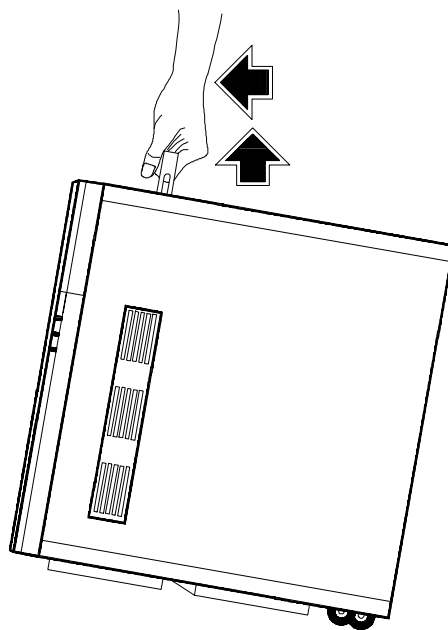
Fans Facing a Wall

When standing the housing with the fans facing a wall, leave a space of 5~10 cm from the wall to allow air circulation, then position the legs as in Figure A.

Fans Facing Out

When standing the housing with the fans facing out, you can put the system close to the wall and position the legs as in Figure B.

3 Transporting the System



The housing has a handle on top and two wheels behind the feet to facilitate moving to short distances.

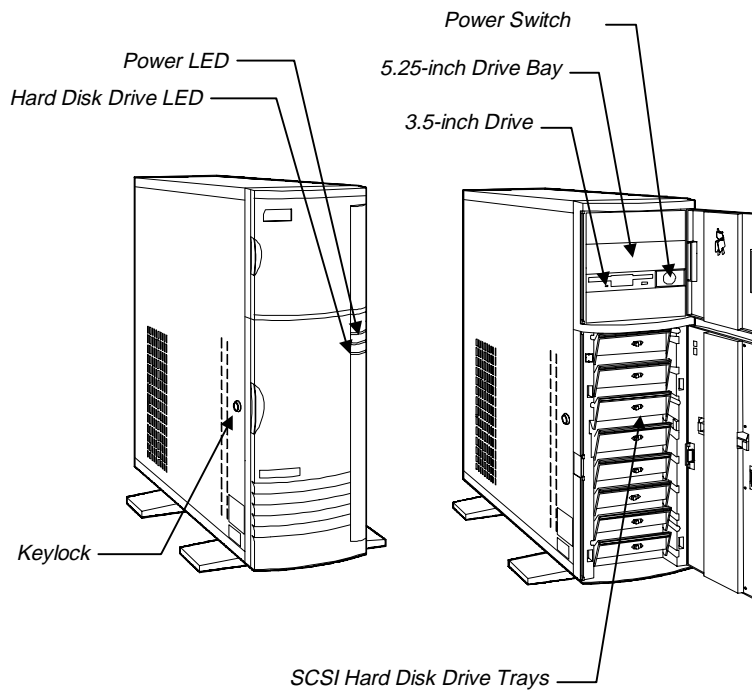


Rotate the feet inward before moving the housing.

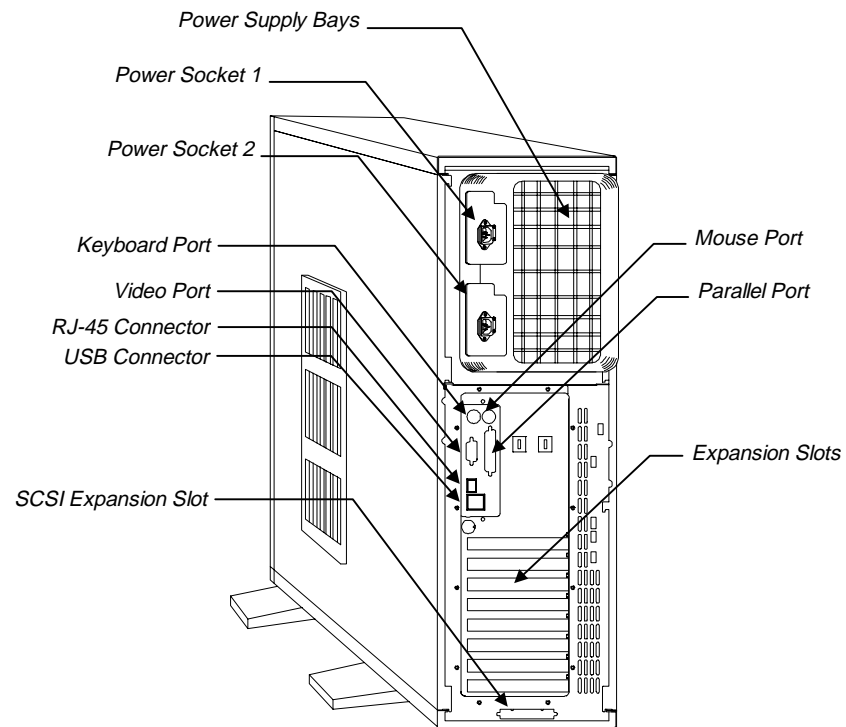
When transporting the housing, pull out the handle, at the same time lifting the unit front a few inches from the floor. Slide the housing forward with the wheels supporting the rear.

4 Features

4.1 Front Panel

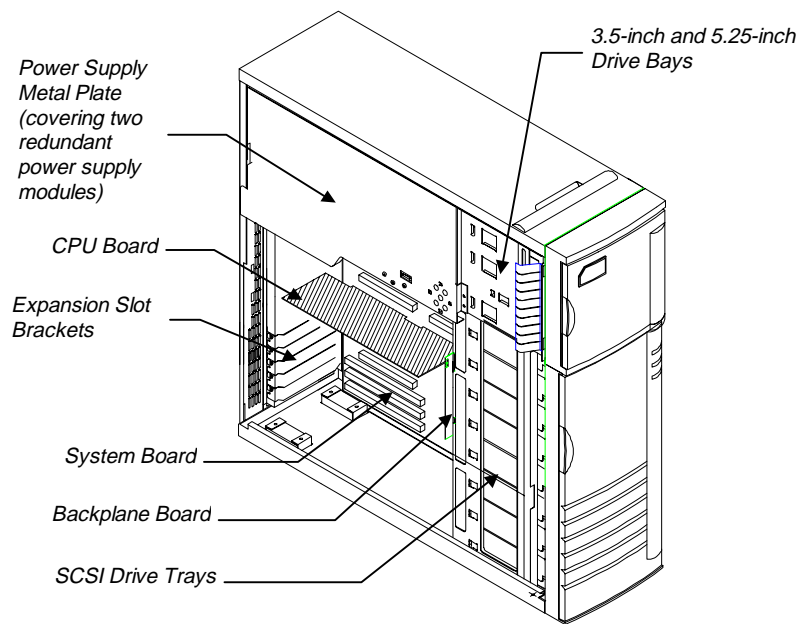


4.2 Rear Panel



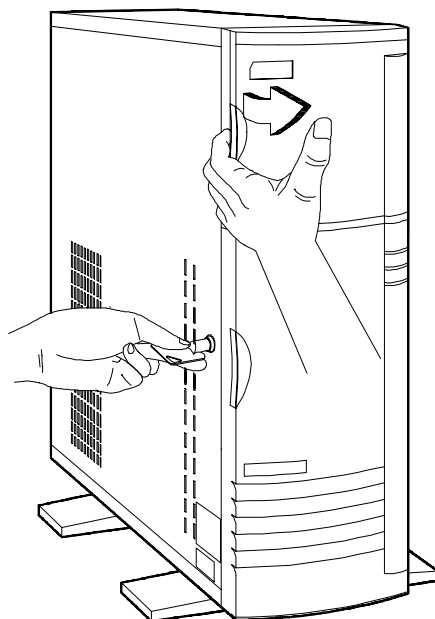
4.3 Internal Structure

The following figure shows the housing internal structure and some of the basic system components.



5 Opening the Housing Panels

5.1 Upper Front Panel

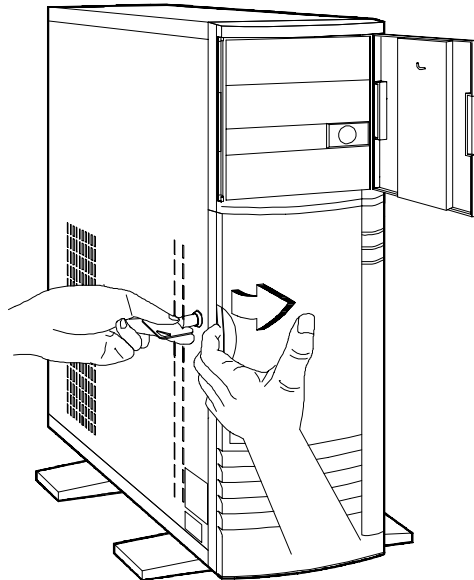


Hold the left edge of the upper front panel to open it and gain access to the diskette drive bays.



The housing keys are inside the front panel.

5.2 Lower Front Panel

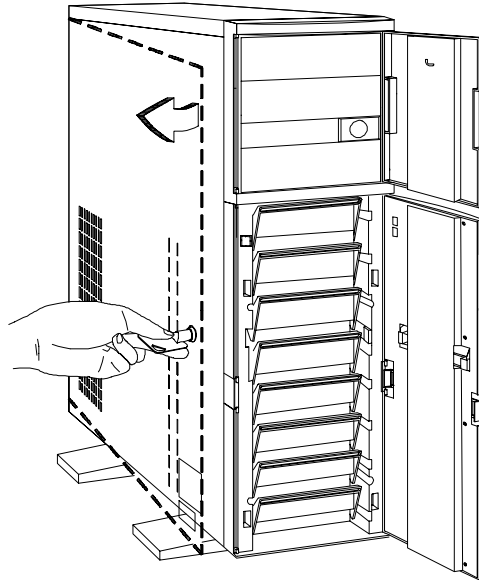


Unlock the housing with the key. Pull the lower panel to access the drive trays.



You cannot remove the key after you have unlocked the housing. You can remove it only when you lock the housing again.

5.3 Left Panel



Pull on the key to swing the left panel open. If necessary, you may use a screwdriver to pry open the panel.

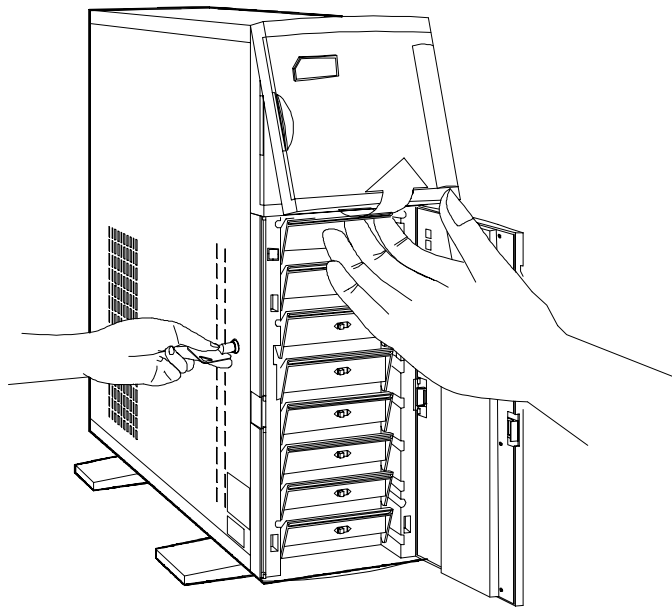
6 Installing Disk Drives



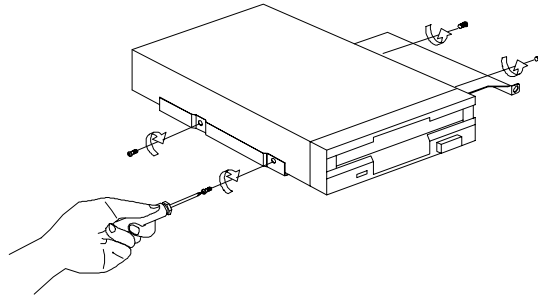
Turn off the power switch and unplug the power cord before installing or removing diskette drives.

6.1 3.5-inch Drive

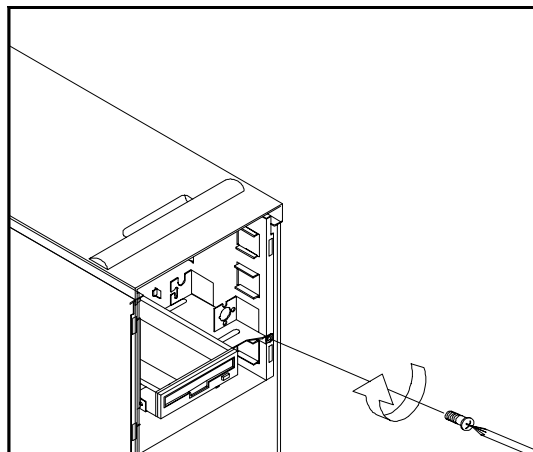
1. Open the lower front panel.
2. Remove the upper panel including its frame by pressing the latch underside and pulling the panel out.



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3. Remove the screw attaching the 3.5-inch drive frame to the housing.
 4. Secure a 3.5-inch drive on the frame with four screws.



5. Insert the drive into the drive bay and secure it with a screw.

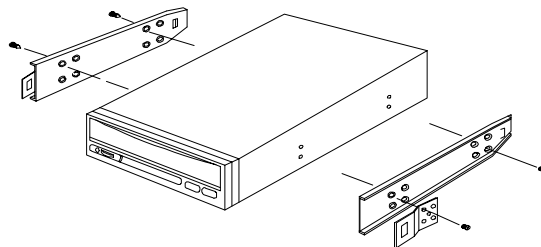


6. Connect the diskette drive cables.

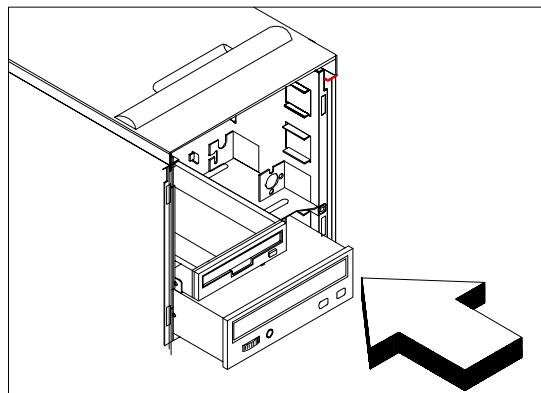
6.2 5.25-inch Drive

You may install a CD-ROM, digital audio tape (DAT), hard disk, diskette drive or any other 5.25-inch device into the drive bay.

1. Open the lower front panel.
2. Remove the upper panel including its frame by pressing the latch underside and pulling the panel out.
3. Secure the drive guides on the sides of a 5.25-inch drive.



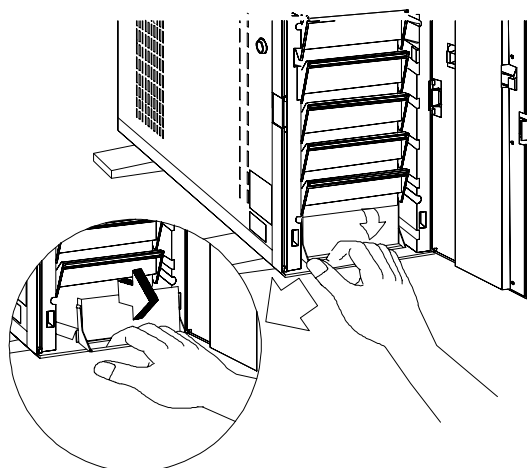
4. Insert the drive into the drive bay.



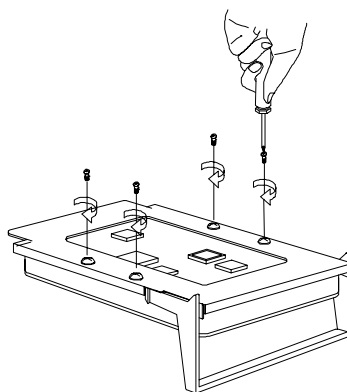
5. Connect the signal and power cables to the drive.

6.3 Hard Disk

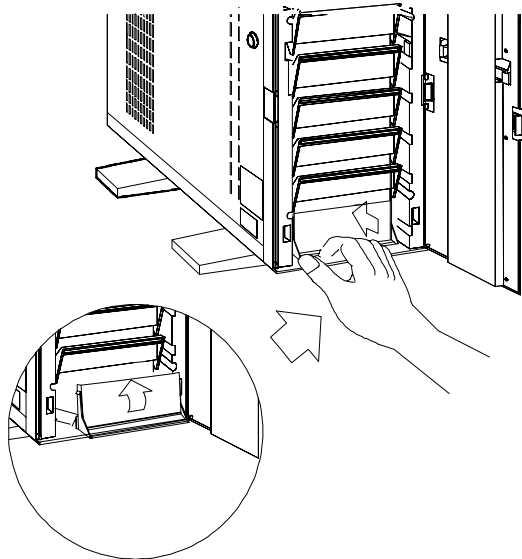
1. Pull out a drive tray.



2. Place a hard disk on the tray and secure it with four screws.



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3. Insert the tray back into the housing. Make sure to push back the drive tray handle in place before pushing the tray in completely. The tray does not fit in if the handle is not in place.



4. Connect the hard disk cables.



If you installed a SCSI backplane board into the housing, see the backplane board manual for hard disk installation instructions.

7 Upgrading to Two Redundant Power Supply Modules

Follow the instructions in this section when you want to upgrade to two 420W redundant power supply modules.



To reduce the risk of electric shock, make sure to disconnect all power supply cables from the wall socket before opening the system housing.

7.1 Removing the Existing Power Supply

1. Unplug the AC power cable from the wall socket, then remove the plastic fan cover on the rear panel.
2. Open and remove the lower front and left doors. See section 5.
3. Remove the three screws that secure the right door.



DO NOT open the RIGHT door at this moment! Doing so will damage the power sharing board and cables attached to its inner side.

4. Unplug the connectors
 - from the power supply to the power sharing board
 - from the power sharing board to the system board
 - from the power sharing board to the disk drives
 - from the fans to the system board

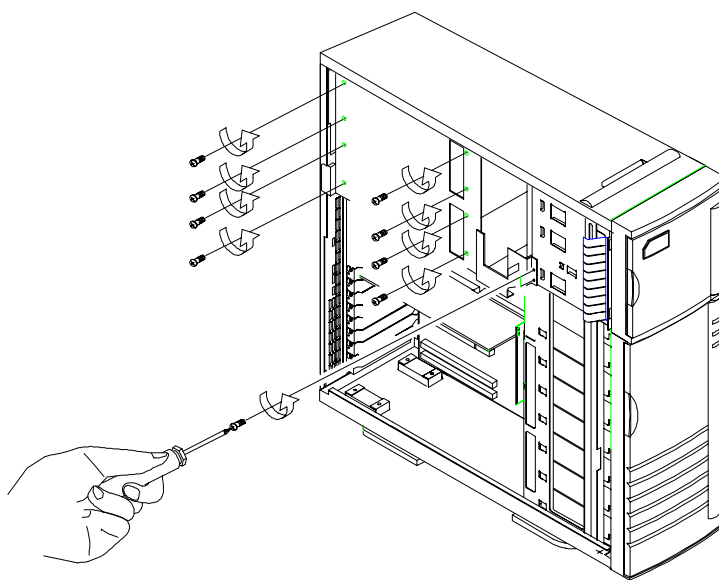
Remember where you unplugged each connector. You will have to reconnect them later.

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5. When finished disconnecting all the cables attached to the inner side of the right door, open and remove the right door.



Be careful when opening and removing the right door to avoid damaging the power sharing board attached to its inner side.

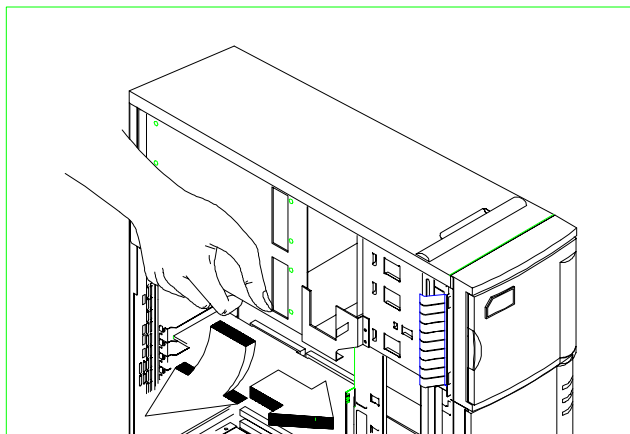
6. Remove the screws that secure the power supply holding plate.



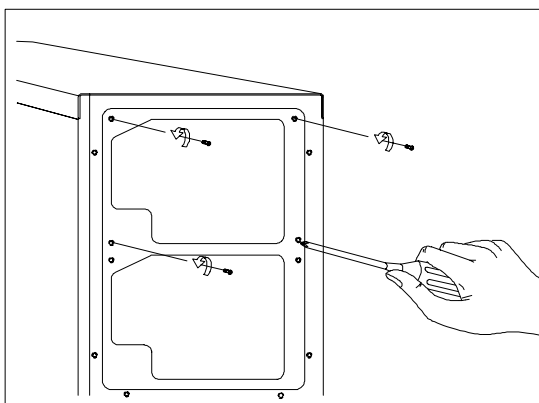
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7. Slide the holding plate to the right for about an inch.
 8. Pull out the lower part of the holding plate and unhook the upper part from the housing roof.



You may need to pull the plate downward to remove it easier.



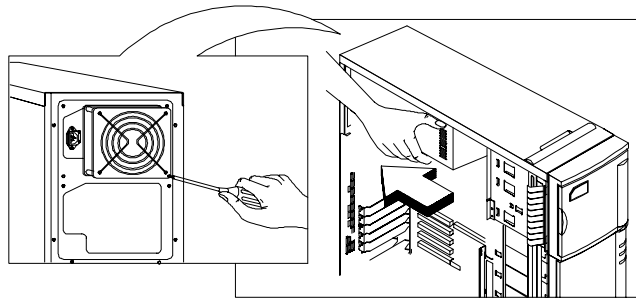
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9. Remove the screws that secure the metal cover of the upper power supply bay to the rear panel.



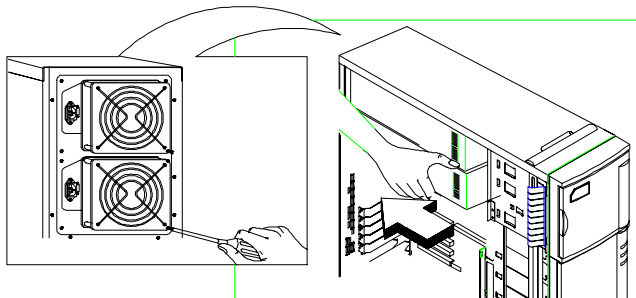
10. Remove the screws that secure the power supply module. In the process, make sure to support the module with your hand.

7.2 Installing the Power Supply Modules

1. After you have removed all the screws that secure the existing power supply module to the lower bay, carefully move the module to the upper power supply bay.
2. When in place, secure the first power supply with screws.



3. Get the second redundant power supply ready.
4. Firmly hold the power supply and align it to the lower bay.
5. When in place, secure the second power supply with screws.

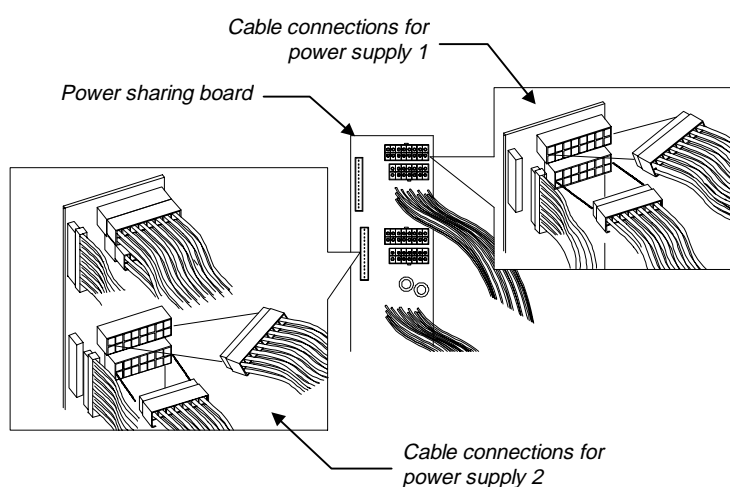


6. Reinstall the right door but do not close it completely.

7. Connect all the power supply cables to the connectors on the power sharing board. Make sure to connect the connectors of power supply 1 to the three upper connectors on the power sharing board. Connect the connectors of power supply 2 to the three lower connectors on the power sharing board.

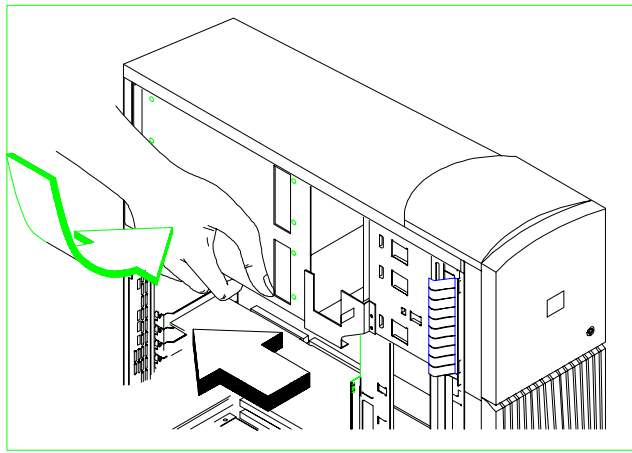


The power connectors are foolproof and connect only in one direction. If a connector does not fit in completely, reverse its orientation then try to reconnect.



8. Arrange all the cables from the power sharing board and fans to facilitate connection to the system board and disk drives. Do not let power cables block the housing exhaust and fans.
9. Close the right door completely and secure it with the screws that you removed earlier.
10. Reconnect the fan connectors.
11. Reconnect the system board power connectors.

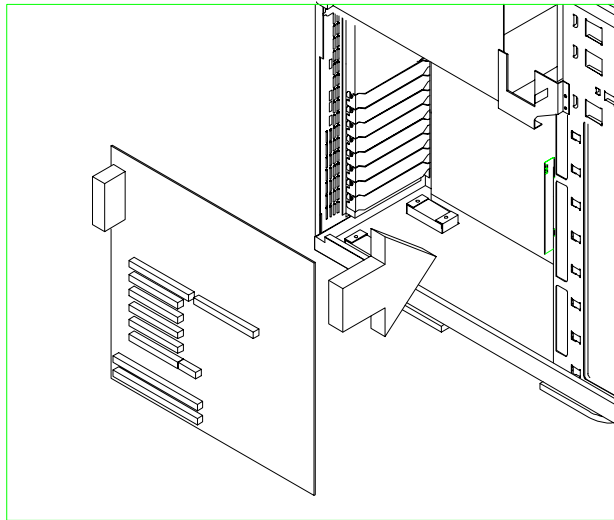
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12. Reconnect the disk drives power connectors.
 13. Reinstall the holding plate by inserting the upper part to the rail on the inner side of the housing roof, then fitting in the lower part.
 14. Slide the holding plate to the left until it fits completely and the screw holes match.



15. Secure the holding plate with the screws that you removed earlier.
16. Reinstall the left door and close it.
17. Close the lower front door and lock the system housing.
18. Reinstall the plastic fan cover on the rear panel.
19. Reconnect the AC power cables.

8 Installing a System Board

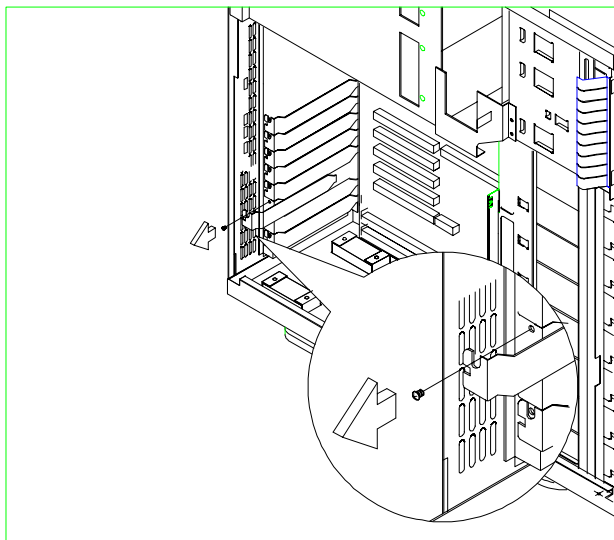
The housing accommodates various system board sizes. You can rearrange the pegs on the system board plate to fit the board that you wish to install.



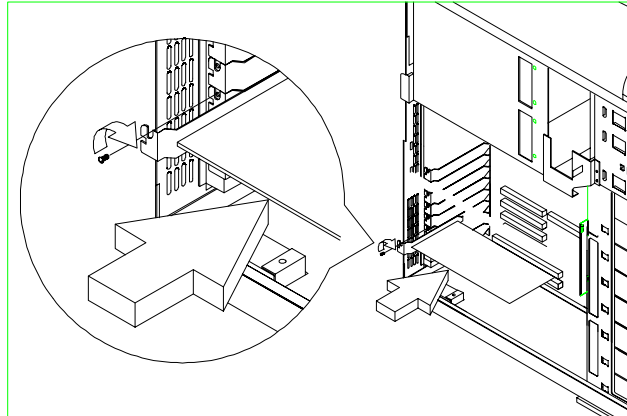
1. If you have not done so, open the housing following the steps in section 4.
2. When ready, align the system board holes to the pegs with the external ports facing the rear of the housing.
3. Secure the board with eight screws.

9 Installing an Expansion Board

1. Remove an expansion slot bracket cover. Save the screw to secure the expansion board.



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2. Align an expansion board with the open slot and insert the golden fingers into the expansion bus connector.
 3. Secure the board with a screw.



10 Installing a CPU Board

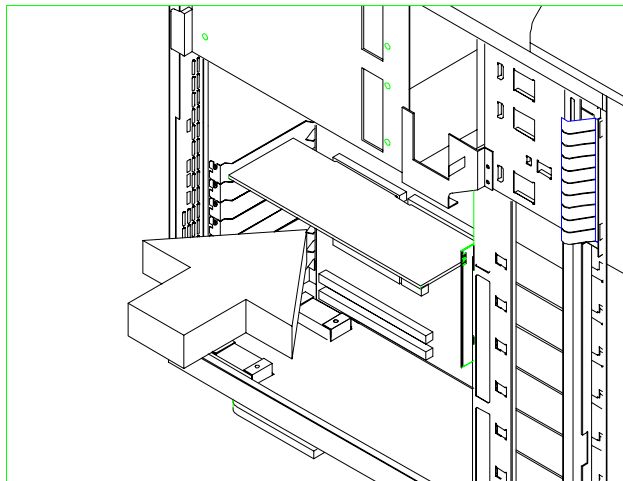
If your system board does not include a CPU socket, follow these steps to install a CPU board.

1. Locate the CPU board connector in the system board.
2. Insert the board into the connector.

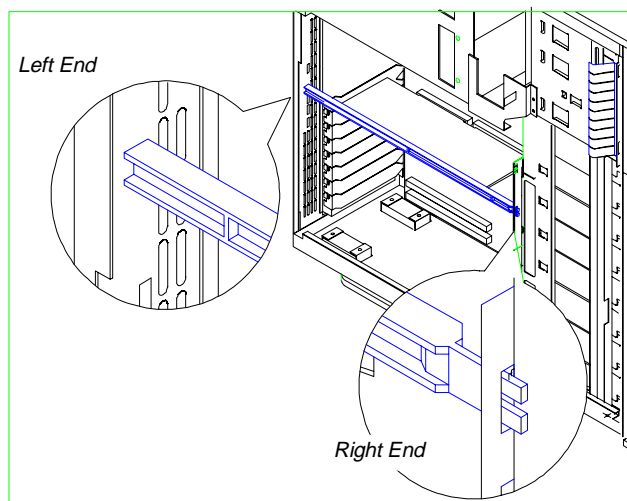


Make sure that the board is properly seated in the connector.

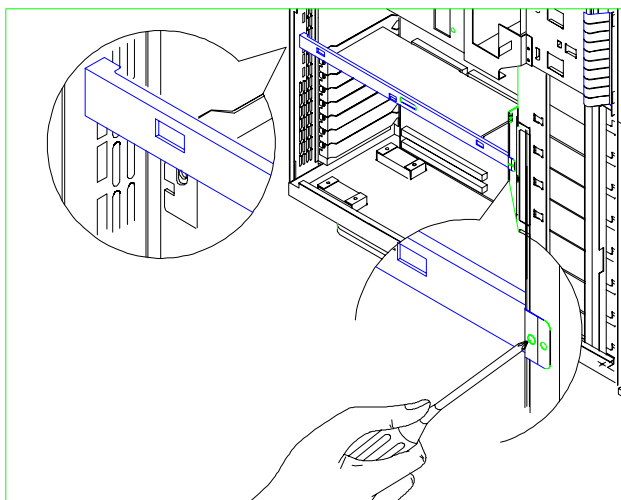
3. Secure the board with a screw.



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4. Align the plastic support bar with the board edge.
 5. Insert the right end of the plastic bar to the hole on the side of the backplane board and the left end to the hole on the rear panel.

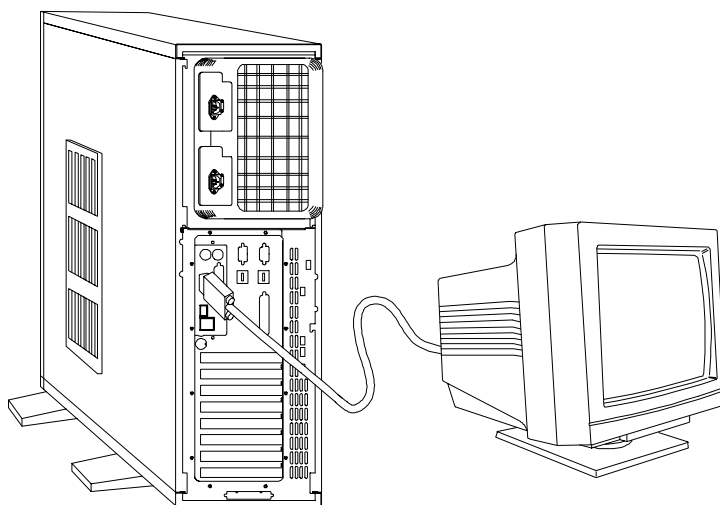


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6. Insert the left end of the metal support bar tabs to the holes on the rear panel and align the right end to the screw holes on the side of the backplane board.
 7. Secure the metal bar with two screws.

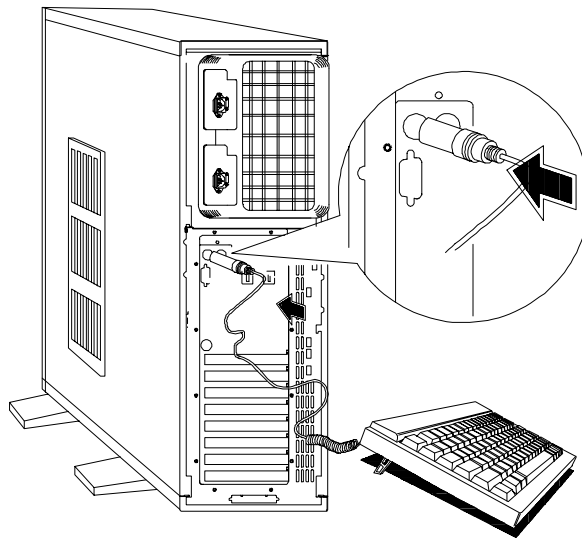


11 Connecting External Devices

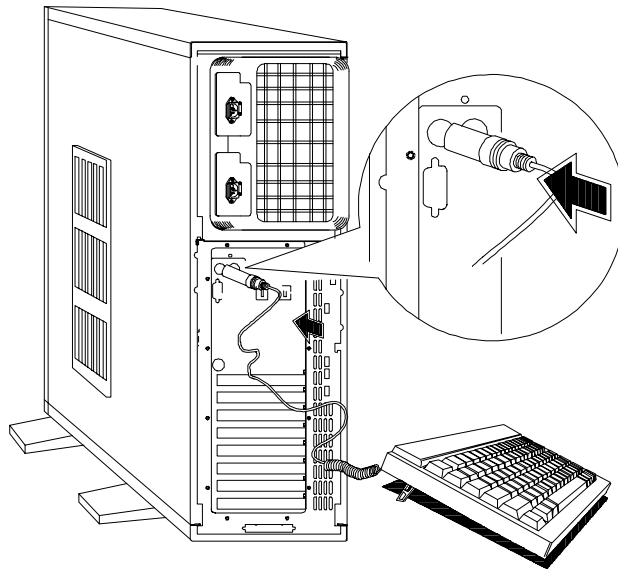
11.1 Connecting a Monitor



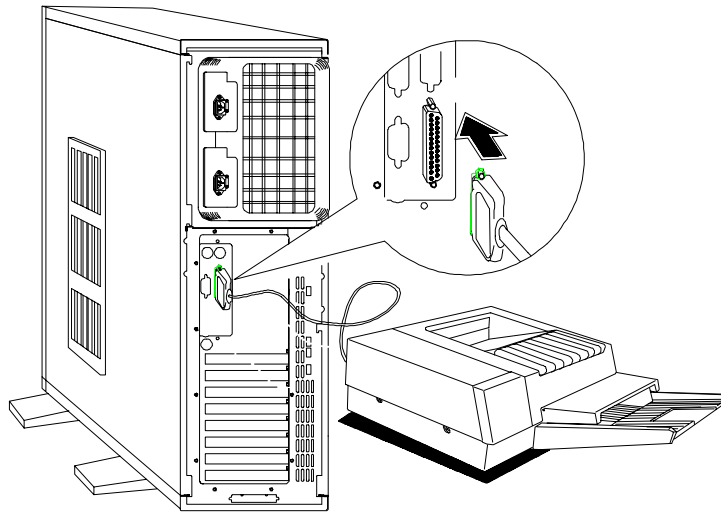
11.2 Connecting a Keyboard



11.3 Connecting a Mouse



11.4 Connecting a Printer



12 Complete System Connections

