

Redundant Power Supply Upgrade Installation Guide

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Notes, Notices, and Cautions



NOTE: A NOTE indicates important information that helps you make better use of your computer.



NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

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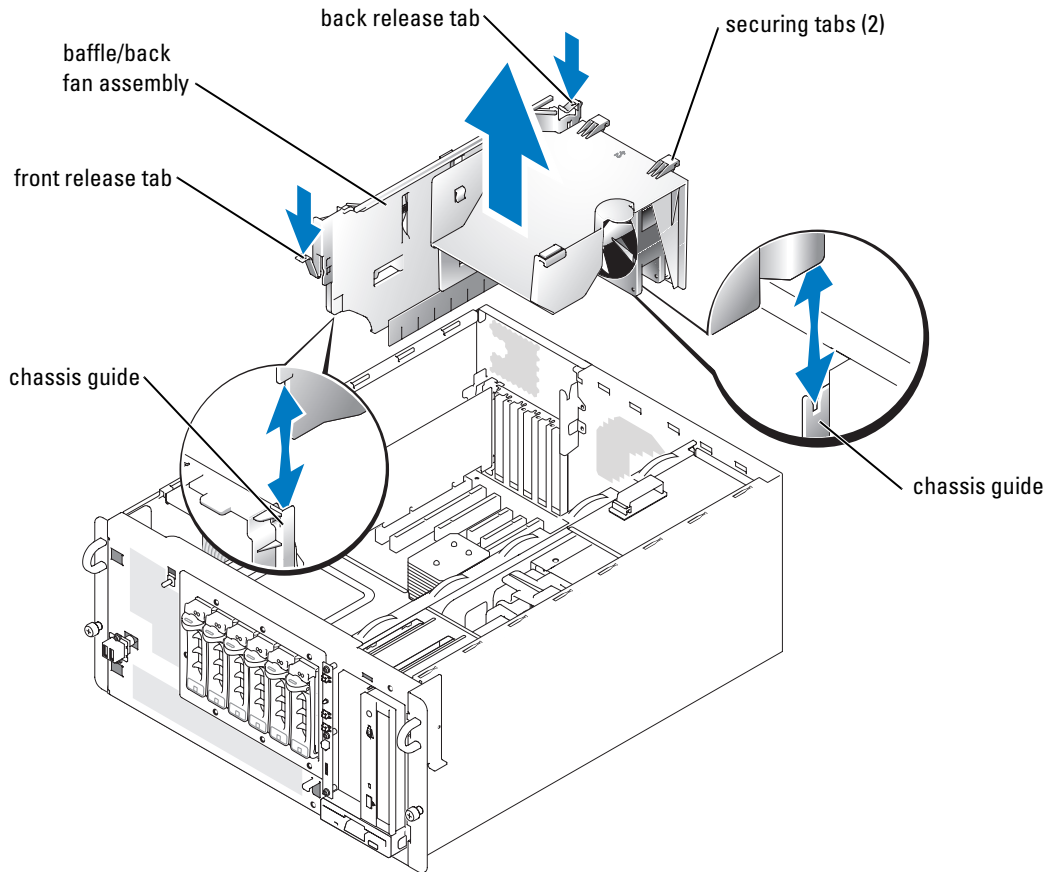
To upgrade your system from a single power supply, nonredundant configuration to a redundant configuration with two power supplies, you must first remove the nonredundant power supply and install a power distribution board (PDB) and two hot-plug power supplies.

Removing the Nonredundant Power Supply



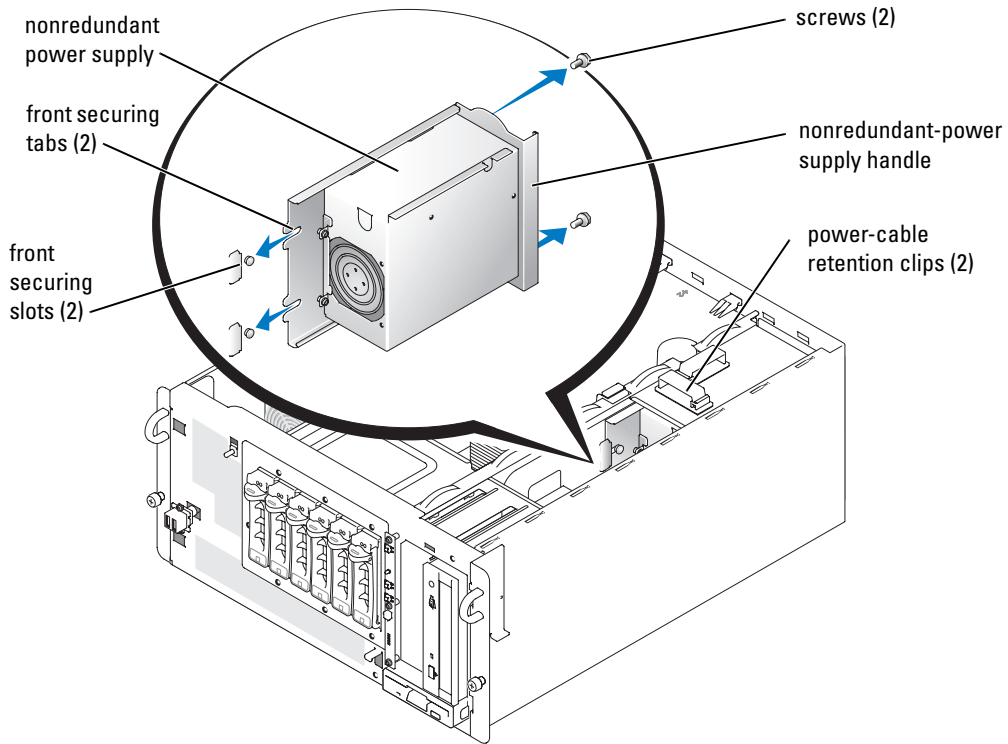
CAUTION: Only trained service technicians are authorized to remove the system cover and access any of the components inside the system. Before performing any procedure, see your *Product Information Guide* for complete information about safety precautions, working inside the computer and protecting against electrostatic discharge.

- 1 Turn off the system, including any attached peripherals, and disconnect the system from the electrical outlet.
- 2 Remove the bezel.
- 3 Open the system:
 - a Loosen the three captive screws at the front edge of the left-side cover.
 - b Grasp the cover at both ends and slide it toward the front of the system.
 - c Lift the cover away from the system.
- 4 If your system is configured as a tower system, lay it on its right side.
- 5 Remove the baffle/back fan assembly. See Figure 1-1.
 - a Press the release tab at the front of the assembly and the release tab at the back of the assembly.
 - b Slightly lift up the baffle/back fan assembly and disconnect the back fan assembly cable from the system board.
 - c Lift the baffle/back fan assembly out of the chassis.

Figure 1-1. Removing the Baffle/Back Fan Assembly

- 6** Disconnect all power cables from the SATA hard drives or SCSI backplane, diskette drive, optical drive, and any other installed drive.
- 7** Disconnect the power cables from system-board power connectors P1 and P2.
- 8** Open the power-cable retention clips and remove the power cables from the clips. See Figure 1-2
- 9** From the back of the system, remove the two screws that secure the power supply to the system. See Figure 1-2.
- 10** Use the power supply handle to carefully slide the power supply out of the system.

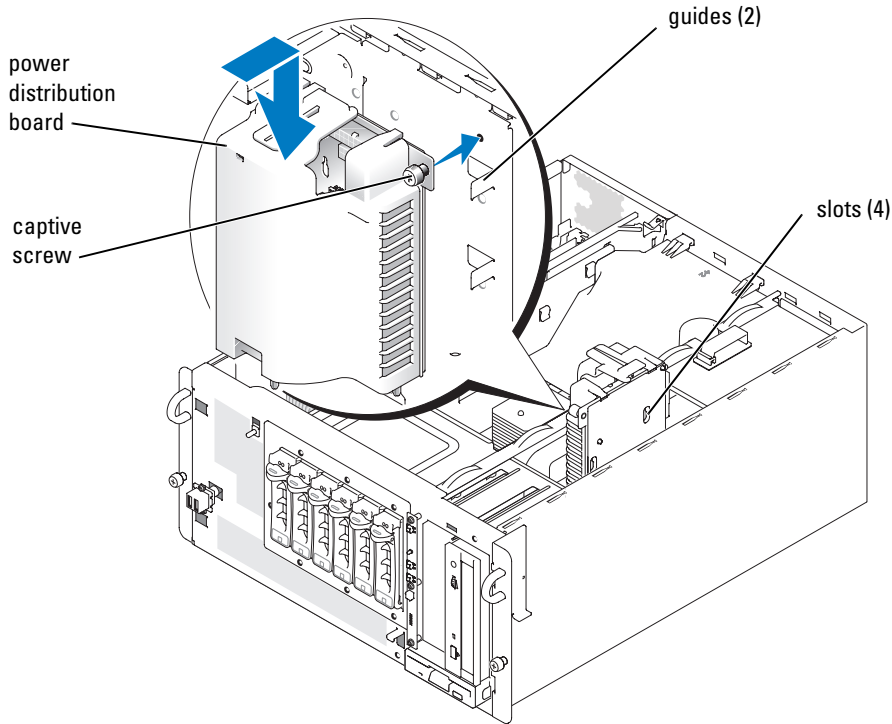
Figure 1-2. Removing the Nonredundant Power Supply



Installing the Power Distribution Board

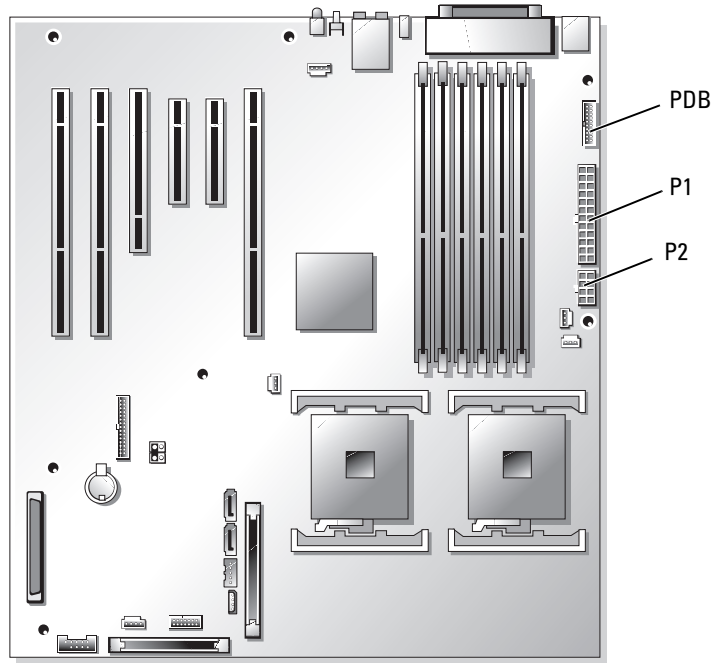
- 1 Position the PDB so that the four slots on the underside of the PDB are aligned with the corresponding retention pins on the chassis, and the right edge of the PDB is aligned with with the two guides on the chassis. See Figure 1-3.

Figure 1-3. Installing the Power Distribution Board



- 2 When the PDB is correctly aligned, place the PDB over the retention pins on the chassis and slide the PDB downwards slightly. See Figure 1-3.
- 3 Tighten the captive screw to secure the PDB. See Figure 1-3.
- 4 Connect the following cables to the system board. See Figure 1-4.
 - Connect the 24-pin connector to connector P1.
 - Connect the 8-pin connector to connector P2.
 - Connect the ribbon cable to connector PDB.

Figure 1-4. System Board Connections to the Power Distribution Board



5 Connect the power cables from the PDB to the SATA hard drives or SCSI backplane, diskette drive, optical drive, and any other installed drive.

➔ NOTICE: You must reinstall the baffle/back fan assembly to maintain proper airflow for system cooling.

6 Reinstall the baffle/back fan assembly. See Figure 1-1.

a Reconnect the back fan cable to the system board connector.

b Align both ends of the assembly with the chassis guides, and then slide the assembly into the system until the two securing tabs properly seat in the chassis slots and the two release tabs lock into position.

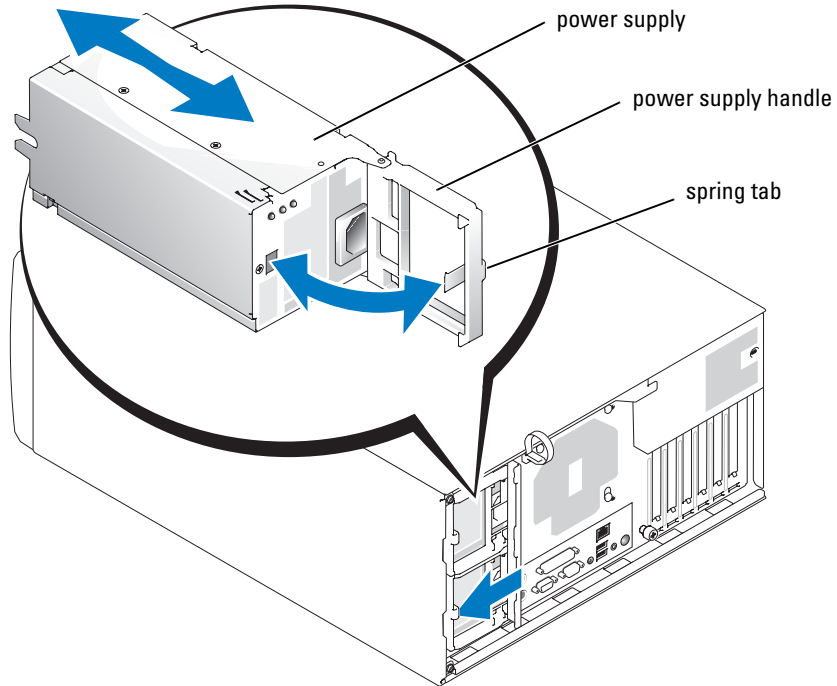
7 If the system is a tower, stand the system upright.

8 Close the system.

9 Reinstall the bezel.

Installing the Redundant Power Supplies

Figure 1-5. Installing a Redundant Power Supply



- 10** Slide the first power supply into the chassis. See Figure 1-5.
- 11** When the power supply is fully inserted, rotate the power supply handle inward to lock the power supply in place. See Figure 1-5.
The power supply does not function until the handle is fully closed.
- 12** Repeat step 10 and step 11 to install the second power supply.
- 13** Plug the power cables into the power supplies, ensuring that each cable passes through the power cable strain relief loop.
- 14** Connect each power cable to a power source, and turn on the system, including any attached peripherals.



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