



Replacing Components

This chapter describes how to remove and install components for the Cisco Nexus 5600 Platform switch.

This section includes the following sections:

- [Replacing or Installing Expansion Modules, page 4-1](#)
- [Replacing or Installing Power Supplies, page 4-2](#)
- [Replacing a Fan Module, page 4-5](#)
- [Removing the Cisco Nexus 5600 Platform Chassis, page 4-7](#)
- [Repacking Cisco Nexus 5600 Platform Switch Components or Cisco Nexus Platform Switch Components for Return Shipment, page 4-7](#)

Replacing or Installing Expansion Modules



Caution

To prevent ESD damage, wear grounding wrist straps during these procedures and handle expansion modules by the carrier edges only.

Install the switch in the rack before installing expansion modules. For information about installing the chassis, see the [“Installing a Cisco Nexus 5600 Series Switch”](#) section on page 2-5.

This section includes the following topics:

- [Removing an Expansion Module from a Cisco Nexus 5600 Platform Chassis, page 4-1](#)
- [Installing an Expansion Module in a Cisco Nexus 5600 Platform Chassis, page 4-2](#)

Removing an Expansion Module from a Cisco Nexus 5600 Platform Chassis



Caution

The expansion module must be powered off prior to removal.

To remove an expansion module from the Cisco Nexus 5600 Platform switch chassis, follow these steps:

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- Step 1** Power off the expansion module by using the **poweroff module** command in global configuration mode.
- Step 2** Disconnect any network interface cables attached to the module.

- Step 3 Open the packing materials for the module and prepare an antistatic surface for uninstalled modules.
- Step 4 Loosen the captive screw on the ejector lever so that the lever can move.
- Step 5 Rotate the ejector lever fully from the front of the module until it stops at about 80 degrees from the front.
- Step 6 With one hand on the ejector handle and front of the module, pull the module part way out of its slot in the chassis.
- Step 7 Place your other hand under the module to support its weight and fully remove the module.
- Step 8 Place the module on an antistatic surface or pack it in its packing materials.

You are ready to install a replacement module in the chassis as described in the [“Installing an Expansion Module in a Cisco Nexus 5600 Platform Chassis”](#) section on page 4-2.

Installing an Expansion Module in a Cisco Nexus 5600 Platform Chassis

To install an expansion module in a Cisco Nexus 5600 Platform switch chassis, follow these steps:

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- Step 1 Remove the module from its packing materials and place it on an antistatic surface.
 - Step 2 Rotate the ejector lever away from the front of the module until it stops at about 80 degrees from the front.
 - Step 3 Holding the module with one hand on the front of the module and the other hand on its carrier edges or bottom, align the module to the open slot.
 - Step 4 Push the module fully into the slot until the ejector engages and the lever moves.
 - Step 5 Rotate the ejector lever to the front of the module so that the module is fully inserted in the slot and the captive screw on the ejector assembly is in position to screw into the chassis.
 - Step 6 Tighten the captive screw on the expansion module to the chassis.
 - Step 7 Verify the installation by making sure that the module status LED turns on and is green.
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Replacing or Installing Power Supplies

The Cisco Nexus 5600 series supports redundant power supplies. You must fill any unused power supply slots with a blank covers to maintain the designed airflow.

If you need to replace an existing power supply, follow the procedures that explain how to remove and install power supplies. If you are installing a new power supply where one did not exist before, follow the installation procedure.



Note

The airflow direction must be the same for all power supply and fan modules in the chassis. You can order all modules with front to back airflow or back to front airflow. To change the airflow direction of the chassis, you must power down the switch before swapping out all fan and power supply modules.

This section includes the following topics:

- [Removing a Power Supply, page 4-3](#)

- [Installing a Power Supply, page 4-3](#)
- [Wiring a DC Power Connector, page 4-4](#)

**Note**

You can replace a faulty power supply while the system is operating if the other power supply is functioning.

Removing a Power Supply

**Caution**

If you are using a Cisco Nexus 5600 Platform, removing the power supply causes the switch to shut down. If you are using two power supplies and you remove one of them, the switch can continue to operate.

To remove an AC or DC power supply, follow these steps:

- Step 1** Ensure that the system (earth) ground connection has been made. For ground connection instructions, see the [“Grounding the Switch” section on page 2-8](#).
- Step 2** Remove the AC power cord or DC wiring connector.
- Step 3** Grasp the power supply handle with your left hand.
- Step 4** Push against the release latch with your left thumb, and slide the power supply part way out of the chassis.
- Step 5** Place your other hand under the power supply to support its weight, and then completely remove the module from the slot.
- Step 6** If the power supply bay is to remain empty, install a blank power supply filler panel. If you are replacing the power supply, see [Installing a Power Supply, page 4-3](#)

Installing a Power Supply

To install a power supply in a Cisco Nexus 5600 Platform chassis, follow these steps:

- Step 1** Ensure that the system (earth) ground connection has been made. For ground connection instructions, see the [“Grounding the Switch” section on page 2-8](#).
- Step 2** If the power supply bay has a filler panel, press the latches on the sides of the filler panel, and then slide it out of the power supply bay.
- Step 3** Hold the power supply by the handle and position it so that the release latch is on the right, and then slide it into the power supply bay, ensuring that the power supply is fully seated in the bay.
- Step 4** Plug the AC power cable or DC wiring connector into the inlet receptacle at the rear of the chassis. For a DC installation, you should secure the plug to the power supply by tightening both captive screws on the plug.



Note Depending on the outlet receptacle on your power distribution unit, you may need the optional jumper power cord to connect the Cisco Nexus 5600 switch to your outlet receptacle. See the [“Jumper Power Cord” section on page C-8](#).

Step 5 Connect the other end of the power cable to an AC power source. DC sources should connect negative (black wire) and then positive (red wire) connections.



Caution In a system with dual power supplies, connect each power supply to a separate power source. In case of a power source failure, the second source will most likely still be available.

Step 6 Verify the power supply operation by checking that the power supply LED is green.

Wiring a DC Power Connector



Warning **A readily accessible two-poled disconnect device must be incorporated in the fixed wiring.** Statement 1022



Warning **This product requires short-circuit (overcurrent) protection, to be provided as part of the building installation. Install only in accordance with national and local wiring regulations.** Statement 1045



Warning **When installing or replacing the unit, the ground connection must always be made first and disconnected last.** Statement 1046



Warning **Installation of the equipment must comply with local and national electrical codes.** Statement 1074



Warning **Hazardous voltage or energy may be present on DC power terminals. Always replace cover when terminals are not in service. Be sure uninsulated conductors are not accessible when cover is in place.** Statement 1075

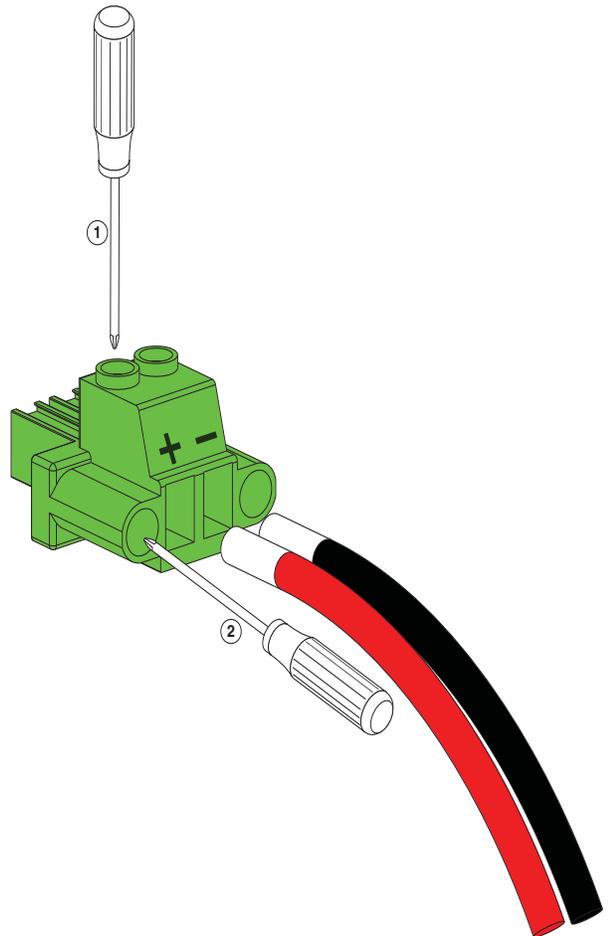
Before installing a DC power supply to the switch, you will need to attach DC connection wires that you provide (10 GA recommended) to the DC power connector included in the DC power supply’s accessory kit. To wire the connector:

Step 1 Using a 1/8” flat head screwdriver or No. 1 Phillips head screwdriver, loosen the set screws on the connector to freely accept the power wires. The connector will accept 8-24 AWG wires, use what your local electrical code calls for.

Step 2 Strip 1/2” of insulation off the DC wires you will use.

- Step 3** Insert the black (DC negative) wire into the right aperture on the connector and tighten down the connection set screw. Finger tight or about 3 ft./lbs should be sufficient.
- Step 4** Insert the red (DC positive) wire into the left aperture on the connector and tighten down the connection set screw. Do not tighten over 0.7 Nm.

Figure 4-1 Wiring the DC Power Connector



Replacing a Fan Module

The fan module is designed to be removed and replaced while the system is operating without presenting an electrical hazard or damage to the system, if the replacement is performed promptly.



Note

The airflow direction must be the same for all power supply and fan modules in the chassis. You can order all modules with port side exhaust and you can also order port side intake.

To change the airflow direction of the chassis, you must power down the switch before swapping out all fan and power supply modules.

On Cisco Nexus 5600 Series Switches, forward airflow ejector on the fan side intake is blue in color, and the reverse airflow ejector on the port side intake is maroon in color. However, for Cisco Nexus 5696 switches, the reverse airflow ejector on the port side intake has a black stripe.

This section includes the following topics:

- [Removing a Fan Module, page 4-6](#)
- [Installing a Fan Module, page 4-6](#)

Removing a Fan Module



Warning

When removing the fan tray, keep your hands and fingers away from the spinning fan blades. Let the fan blades completely stop before you remove the fan tray. Statement 258

To remove a fan module, follow these steps:

- Step 1** Loosen the captive screws on the fan module by turning them counterclockwise, using a flat-blade or number 2 Phillips screwdriver if required. On the Cisco Nexus 5624Q, 5672UP, and 5672UP-16G switches, there are no screws; instead, press together the latches on the fan module to release it.
- Step 2** Grasp the fan module and pull it outward.
- Step 3** Pull the fan module clear of the chassis.

Installing a Fan Module

To install a fan module, follow these steps:

- Step 1** Hold the fan module in such a way that the Product ID label is straight, horizontally.
- Step 2** Place the fan module into the chassis fan bay so it rests on the chassis, and then push the fan module into the chassis as far as it can go until the captive screw makes contact with the chassis, and tighten the captive screws. On the Cisco Nexus 5624Q, 5672UP, and 5672UP-16G switches, there are no screws; instead, latches engage inside when you insert the module fully.
- Step 3** If the switch is powered on, listen for the fans. You should immediately hear them operating. If you do not hear them, ensure that the fan module is inserted completely in the chassis and the faceplate of the module is flush with the outside surface of the chassis. The fans may change speed a few times as they synchronize with each other and adjust to the proper operating speed.
- Step 4** Verify that the fan module LED is green. If the LED is not green, one or more fans are faulty. If this situation occurs, contact your customer service representative for replacement parts.



Note

If you purchased this product through a Cisco reseller, contact the reseller directly for technical support. If you purchased this product directly from Cisco, contact Cisco Technical Support at this URL: <http://www.cisco.com/c/en/us/support/web/tsd-cisco-worldwide-contacts.html>.

Removing the Cisco Nexus 5600 Platform Chassis

**Caution**

The slider rail and front rack-mount brackets do not have a stop mechanism when sliding in and out. If the front of the chassis is unfastened from the rack and the chassis slides forward on the slider rails, it might slip off the end of the rails and fall out of the rack.

To remove the Cisco Nexus 5600 Platform chassis from a rack, follow these steps:

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- Step 1** Ensure that the weight of the switch is fully supported and that the switch is being held by another person.
 - Step 2** Disconnect the power cord and the console cables.
 - Step 3** Disconnect all cables that are connected to transceivers.
 - Step 4** Remove the screws fastening the front rack-mount brackets to the mounting rails.
 - Step 5** Gently slide the switch towards you, off of the slider rails and out of the rack.
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Repacking Cisco Nexus 5600 Platform Switch Components or Cisco Nexus Platform Switch Components for Return Shipment

If you need to return the switch, remove the switch from the rack by following the steps in the [“Removing the Cisco Nexus 5600 Platform Chassis”](#) section on page 4-7, and repack it for shipment. If possible, use the original packing materials and container to repack the switch. Contact your Cisco customer service representative to arrange for return shipment to Cisco.

