



## CHAPTER 8

# Replacement Procedures

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This chapter describes the replacement procedures for the Cisco Nexus 7000 Series switch components. A Cisco Nexus 7000 Series switch is designed for redundancy, which means that you can replace its modules, fan trays, and power supply units if there is at least one other of the same type operating during the replacement process.

This chapter includes the following sections:

- [Replacing a Power Supply Unit During Operations, page 8-1](#)
- [Replacing a Supervisor Module, page 8-4](#)
- [Replacing an I/O Module, page 8-9](#)
- [Replacing a Fabric Module During System Operations, page 8-12](#)
- [Replacing a Cisco Nexus 7010 System Fan Tray During System Operations, page 8-14](#)
- [Replacing a Cisco Nexus 7010 Fabric Fan Tray During System Operations, page 8-15](#)
- [Replacing a Cisco Nexus 7018 Fan Tray During System Operations, page 8-17](#)
- [Replacing a CompactFlash Card, page 8-17](#)
- [Replacing the Front Doors and Frame Assembly on the Cisco Nexus 7010 Chassis, page 8-18](#)
- [Replacing the Cable Management Frame on the Cisco Nexus 7018 Chassis, page 8-29](#)
- [Replacing the Front Door and Air Intake Assemblies on the Cisco Nexus 7018 Chassis, page 8-38](#)
- [Replacing the Air Filter on the Cisco Nexus 7010 Chassis, page 8-53](#)

## Replacing a Power Supply Unit During Operations

The Cisco Nexus 7000 Series switches use a load-balanced power supply that uses up to three or four power supply units that each convert up to 1.2 kW, 3 kW, 3.5 kW, 6 kW, or 7.5 kW of AC power to DC power for system operations. If you can set one power supply unit in standby mode and have the required power load balanced by the remaining online power supply units, you can replace the standby power supply unit with another power supply unit without interrupting system operations.



### Warning

**Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and rear covers are in place.** Statement 1029

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**Note**

If a replacement power supply unit is not available and you do not have a blank plate to cover the empty power supply bay, you should leave the original power supply in the bay until you have the replacement unit.

This section describes how to remove and install redundant power supply units and includes the following topics:

- [Removing a Power Supply Unit During Operations, page 8-2](#)
- [Installing a Power Supply Unit During Operations, page 8-3](#)

## Removing a Power Supply Unit During Operations

**Warning**

**Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.** Statement 1034

To replace a power supply unit while a Cisco Nexus 7000 Series switch is operating, follow these steps:

**Step 1** Make sure that the power supply units not being replaced have their power switches turned to ON.

**Step 2** Turn the power switch on the power supply that you are removing to standby (STBY).

The Input 1 and Input 2 LEDs turn off.

**Note**

If the power supply has only one AC power cord attached to it, only the LED for that input line turns off (the other one is already off).

**Step 3** Unplug the AC power cords from the AC power source. If the power supply unit has only one AC power cable, unplug just that cable. Otherwise, unplug both AC power cables.

**Step 4** Unscrew the four captive screws on the power supply unit until each screw is no longer in contact with the chassis.

**Step 5** Grasp the power supply handle with one hand and slide the power supply part of the way out of the chassis. Place your other hand underneath the power supply unit and slide the power supply unit completely out of the chassis.

**Step 6** Place the power supply unit on an antistatic mat or repack it in its original shipping materials.

**Step 7** Either replace the power supply unit or cover the empty power supply bay as follows:

- If you are ready to replace the power supply unit, see the [Installing a Power Supply Unit During Operations, page 8-3](#).
- If the power supply bay is to remain empty, install a blank power supply filler plate (Cisco part number 800-28658-01) over the opening, and secure it with the captive screws.

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## Installing a Power Supply Unit During Operations

After you remove a power supply, you can replace it with another power supply or replace it with a blank plate until another power supply is available.



### Warning

**Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.** Statement 1034

To install a power supply unit while a Cisco Nexus 7000 Series switch is operating, follow these steps:

- Step 1**    Unpack the replacement power supply unit and place it on an antistatic mat. If you are unpacking a 6-kW power supply unit, you must also unpack one or two power cords. If you are unpacking a 7.5-kW power supply unit, the power cord is already attached to the power supply unit.
- Step 2**    Ensure that the power switch on the power supply unit is in the standby (STBY) position and that the AC power cords are not plugged into the AC power supply.
- Step 3**    If the power cords are not already attached to the power supply unit, plug the power cables into the power jacks on the front of the power supply unit and tighten the cable retention devices for each cable. Depending on the amount of power consumed by the power supply unit, you need to attach one or two power cords.



### Note

The 6-kW power supply unit does not ship with power cables attached to it, so you must attach one or two of those cables. If necessary, you can remove the cables from the power supply unit that you removed. The 7.5-kW power supply ships with permanently attached power cables, so you do not need to attach power cables to that power supply unit.

- Step 4**    Grasp the power supply unit handle with one hand, and place your other hand underneath the power supply unit to support its weight. Align the back of the power supply unit with the power supply bay and slide the power supply into the power supply bay. Make sure the power supply unit is fully seated in the power supply bay and that its four captive screws are aligned with their holes in the chassis.



### Note

The 6-kW power supply unit weighs 22 pounds (10 kg), and the 7.5-kW power supply unit weighs 26.4 pounds (12 kg). Use two hands to safely hold and move a power supply unit.

- Step 5**    Screw in and tighten the four captive screws so the power supply unit is secured to the switch chassis.
- Step 6**    Plug the power cables that are already attached to the power supply unit into the AC power source.



### Tip

For power redundancy, plug each power cable into a separate AC power supply circuit.

- Step 7**    Turn the Power switch from STBY to ON.
- Step 8**    Verify the power supply operation by checking that the power supply LEDs are in the following states:
  - Input 1 LED is green.
  - If a second AC power cord was connected, the Input 2 LED is green.
  - Output LED is green.
  - Fault LED is not on or blinking.

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If one or more of these LEDs is red, turn the power switch to standby (STBY), check the AC power connections for the line in standby (STDBY), and then turn the power switch back to ON. The LEDs for the connected power supply units should be green.

For more information on the power supply unit LED states, see [Table C-5 on page C-5](#).

# Replacing a Supervisor Module

The Cisco Nexus 7000 Series switches can be configured with one or two supervisor modules. If the system has two supervisor modules, you can replace one of the supervisors while the other one manages system operations. If the system has only one supervisor, you must bring the system down to replace the supervisor module because the supervisor module is required for managing operations.

This section describes how to replace supervisor modules and includes the following topics:

- [Required Tools, page 8-4](#)
- [Replacing One of Two Supervisor Modules During System Operations, page 8-4](#)
- [Replacing a Supervisor Module in a Single-Supervisor System, page 8-7](#)

## Required Tools

You need a flat-blade or number 2 Phillips-head screwdriver to loosen or tighten the captive screws on the supervisor module.

## Replacing One of Two Supervisor Modules During System Operations

During operations, one supervisor is active while the other supervisor is in standby mode. You can replace either of these two supervisors. If you need to replace the active supervisor, it becomes the standby supervisor as soon as you press its ejector buttons.



### Caution

If you cannot immediately replace a supervisor, either leave the supervisor in its slot until it can be replaced or replace it with a blank module so the system airflow is not disrupted. If the system airflow is disrupted for more than a couple of minutes, the system could overheat and shut down.



### Warning

**Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.** Statement 1034



### Caution

Handle each supervisor or I/O module carefully using an ESD wrist strap, holding the module only on its carrier edges without touching any electronic circuitry, and placing the module on antistatic mats or repacking it in its original packing materials when it is not installed in the Cisco Nexus 7000 Series chassis.

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To replace a supervisor module, follow these steps:

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- Step 1** Place an antistatic mat or antistatic foam where you can place the new and old supervisor modules.
- Step 2** If the replacement supervisor is in a shipping box, prepare the module for installation by following these steps:
- Open the shipping box for the module and remove the module from its antistatic wrapping.
  - If the plastic protector shown in [Figure 8-1](#) is included with the module, remove it by pulling it past the back of the module. Keep the plastic protector and the other packing materials so that you can easily ship the module at a later time.

**Figure 8-1** *Removing the Plastic Protector from the Supervisor Module*



**Caution**

To prevent ESD damage, avoid touching the electronic circuitry and prevent anything else from coming in contact with the circuitry.

- Step 3** On the currently installed supervisor module (the module that you are going to remove), loosen the two captive screws identified in View A of [Figure 8-2](#).

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**Figure 8-2 Unseating a Supervisor Module**



<b>1</b>	Unscrew two captive screws.	<b>2</b>	Simultaneously press both ejector buttons.
<b>3</b>	Simultaneously swing open both ejector levers to unseat the module.		

**Step 4** Press the ejector release buttons on the ends of the module (see View B of [Figure 8-2](#)) to push out the ejector levers and to disconnect the module.

If the chassis has two supervisor modules and you disconnect the active supervisor module, that supervisor goes into standby mode and the other supervisor automatically becomes the active supervisor.




**Note** If you stop this procedure at this point without removing the module and need to power it up instead of replacing it, simultaneously press both ejector levers back to the face of the module until they click, secure both of the module captive screws to the chassis, and then use the **no poweroff module slot\_number** command to power up the module.

**Step 5** Disconnect the cables attached to the front of the module to be removed. Make sure that each cable is labelled for its port on the module.

**Step 6** Simultaneously rotate the two ejector levers outward to unseat the module from the midplane connector (see View C of [Figure 8-2](#)).

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- Step 7** With a hand on each ejector, pull the module part way out of its slot in the chassis.
- Step 8** Grasp the front edge of the module with your left hand and place your right hand under the lower side of the module to support its weight. Pull the module out of its slot.
-   
**Caution** To prevent ESD damage, avoid touching the electronic circuitry and prevent anything else from coming in contact with the circuitry.
- 
- Step 9** If you are removing the module from a Cisco Nexus 7010 chassis, rotate the module 90 degrees counterclockwise so that it is horizontal and you can see its circuitry from above.
- Step 10** Place the removed module on the antistatic mat or repack it in its original packing materials.
- Step 11** On the replacement module, rotate both of the ejector levers away from the front of the module.
- Step 12** If you are inserting the module into a Cisco Nexus 7010 chassis, rotate the module 90 degrees clockwise.
- Step 13** Align the module to the chassis guides for the vacated slot (slot 5 or 6 on the Cisco Nexus 7010 chassis or slot 9 or 10 on the Cisco Nexus 7018 chassis), and slide the module part way into the slot.
- Step 14** With one or both hands on the front of the module, push the module all the way into the slot until it seats on the midplane connector.
- Step 15** Simultaneously push both ejector levers inward until they come in contact with the face of the module. The module should be fully seated in the slot and the captive screws should be aligned with their holes in the chassis. The EMI gasket should close the gap between the new module and the module in the next slot to the right.
- Step 16** Screw in the two captive screws to the chassis and tighten them to 8 in-lb (0.9 N·m).
- Step 17** Reconnect the console cable to the CONSOLE SERIAL PORT as explained in the [“Connecting to the Console”](#) section on page 5-2.
- Step 18** If the previous supervisor module was connected to an asynchronous device through a modem, connect the modem cable to the COM1/AUX SERIAL PORT as explained in the [“Connecting to the Console”](#) section on page 5-2.
- Step 19** Reconnect the network management cable to the MGMT ETH port as explained in [“Setting Up the Management Interface”](#) section on page 5-4.
- Step 20** Reconnect the CMP cable to the CMP MGMT ETH port as explained in [“Connecting the Supervisor CMP Port”](#) section on page 5-5.

## **Replacing a Supervisor Module in a Single-Supervisor System**

If you need to replace the supervisor in a single-supervisor Cisco Nexus 7000 Series system, you must shut down the system before replacing the supervisor.



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**Caution**

Handle the supervisor module carefully using an ESD wrist strap, holding the module only on its carrier edges without touching any electronic circuitry, and placing the module on antistatic mats or antistatic foam when it is not installed in the Cisco Nexus 7000 Series chassis.

To replace a supervisor module in a single-supervisor system and includes the following topics:

- Step 1** Place an antistatic mat or antistatic foam where you can place the new and old supervisor modules.
- Step 2** If the replacement supervisor is in a shipping box, prepare the module for installation by following these steps:
- a. Open the shipping box for the module and remove the module from its antistatic wrapping.
  - b. If the plastic protector shown in [Figure 8-1](#) is included with the module, remove it by pulling it past the back of the module. Keep the plastic protector and the other packing materials so that you can easily ship the module at a later time.

**Figure 8-3 Removing the Plastic Protector from the Supervisor Module**

**Caution**

To prevent ESD damage, avoid touching the electronic circuitry and prevent anything else from coming in contact with the circuitry.

- Step 3** Turn off the power on each of the power supply unit by turning its power switch to standby (STBY).
- Step 4** Disconnect all of the cables attached to the front of the module to be removed.
- Step 5** Loosen the two captive screws identified in View A of [Figure 8-2 on page 8-6](#).
- Step 6** Press the ejector release buttons on the top and bottom ends of the module (see View B of [Figure 8-2 on page 8-6](#)) to push out the ejector levers and to disconnect the module.
- Step 7** Simultaneously rotate the two ejector levers outward to unseat the module from the midplane connector (see View C of [Figure 8-2 on page 8-6](#)).
- Step 8** With a hand on each ejector, pull the module part way out of its slot in the chassis.
- Step 9** Grasp the front edge of the module with your left hand and place your right hand under the lower side of the module to support its weight. Pull the module out of its slot.

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**Caution**

To prevent ESD damage, avoid touching the electronic circuitry and prevent anything else from coming in contact with the circuitry.

- Step 10** If you are removing a module from a Cisco Nexus 7010 chassis, rotate the module 90 degrees counterclockwise so that it is horizontal and you can see its circuitry from above.
- Step 11** Place the removed module on the antistatic mat or repack it in its original packing materials.
- Step 12** On the replacement supervisor module, rotate both of the ejector levers away from the front of the module.

**Caution**

To prevent ESD damage, avoid touching the electronic circuitry and prevent anything else from coming in contact with the circuitry.

- Step 13** If you are inserting the module into a Cisco Nexus 7010 chassis, rotate the module 90 degrees clockwise.
- Step 14** Align the module to the chassis guides for the vacated slot (slot 5 or 6 on a Cisco Nexus 7010 chassis or slot 9 or 10 on a Cisco Nexus 7018 chassis), and slide the module part way into the slot.
- Step 15** With one or both hands on the front of the module, push the module all the way into the slot until it seats on the midplane connector.
- Step 16** Slide the module into the slot until it seats on the midplane.
- Step 17** Simultaneously push both ejector levers inward until they come in contact with the face of the module. The module should be fully seated in the slot and the captive screws should be aligned with their holes in the chassis. The EMI gasket should close the gap between the replacement module and the module in the next slot.
- Step 18** Screw in the two captive screws to the chassis and tighten them to 8 in-lb (0.9 N·m).
- Step 19** Reconnect the console cable to the CONSOLE SERIAL PORT as explained in the [“Connecting to the Console” section on page 5-2](#).
- Step 20** If the previous supervisor module was connected to an asynchronous device through a modem, connect the modem cable to the COM1/AUX SERIAL PORT as explained in the [“Connecting to the Console” section on page 5-2](#).
- Step 21** Reconnect the network management cable to the MGMT ETH port as explained in [“Setting Up the Management Interface” section on page 5-4](#).
- Step 22** Reconnect the CMP cable to the CMP MGMT ETH port as explained in [“Connecting the Supervisor CMP Port” section on page 5-5](#).

## Replacing an I/O Module

The Cisco Nexus 7010 switch has up to eight I/O modules, and a Cisco Nexus 7018 has up to 16 I/O modules. These modules are located on the front of the chassis. You can replace one of these modules at a time while the switch is operating.

This section describes how to replace I/O modules and includes the following topics:

- [Required Tools, page 8-10](#)
- [Replacing an I/O Module, page 8-10](#)

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## Required Tools

You need a flat-blade or number 2 Phillips-head screwdriver to loosen or tighten the captive screws on the I/O module.

## Replacing an I/O Module

A Cisco Nexus 7000 Series switch includes one or more of the following types of I/O modules:

- 48-port 10/100/1000 Ethernet module
- 48-port 1 Gigabit Ethernet SFP module
- 32-port 10 Gigabit Ethernet SFP+ module

You can replace each of these I/O modules with another module of the same type while the Cisco Nexus 7000 Series switch is operational. To do this action, you must first remove an I/O module from the chassis, then install a new or replacement I/O module in the newly vacated slot within a couple of minutes to maintain the designed airflow.



### Warning

**Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.** Statement 1034



### Caution

Make sure that you wear an ESD wrist strap while you handle each I/O module. Hold the module only on its carrier edges without touching any electronic circuitry, and place it on antistatic mats or repack it in its original packing material when it is not installed in the chassis.



### Caution

If you cannot immediately replace an I/O module, either leave the I/O module in its slot or replace it with a blank module so the system airflow is not disrupted. Leaving an I/O module slot open for more than a couple of minutes can disrupt the system airflow causing the system to overheat and shutdown.

To replace an I/O module, follow these steps:

- Step 1** Place antistatic mats or antistatic foam where you can place the old and new I/O modules. Choose a place that prevents damage to the module while it is outside the chassis.
- Step 2** Unpack and place the replacement I/O module on an antistatic mat or antistatic foam.
- Step 3** Disconnect each I/O cable from the front of the module by doing the following:
  - For the 48-port 10/100/1000 Ethernet module, unplug each cable.
  - For the 48-port 1-Gigabit Ethernet module, remove the fiber-optic cables then remove the SFP transceivers.
  - For the 32-port 10-Gigabit Ethernet module, remove the fiber-optic cables then remove the SFP+ transceivers.



### Note

To prevent contaminants from entering the fiber optic lines or transceivers, cover the fiber-optic openings with a plug.

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**Warning**

**Invisible laser radiation may be omitted from disconnected fibers or connectors. Do not stare into beams or view directly with optical instruments.** Statement 1051

**Step 4** Loosen the two captive screws identified in View A of [Figure 8-4](#).

**Figure 8-4 Unseating an I/O Module**



<b>1</b>	Unscrew two captive screws.	<b>2</b>	Simultaneously press both ejector buttons.
<b>3</b>	Simultaneously swing open both ejector levers to unseat the module.		

- Step 5** Press ejector release buttons on the top and bottom ends of the module (see View B in [Figure 8-4](#)) to push out the ejector levers and to disconnect the module.
- Step 6** Simultaneously rotate the two ejector levers outward to unseat the module from the midplane connector (see View C in [Figure 8-4](#)).
- Step 7** With a hand on each ejector, pull the module part way out of its slot in the chassis.
- Step 8** Grasp the front edge of the module and place your other hand under the module to support its weight. Pull the module out of its slot. Do not touch the module circuitry.

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**Caution**

To prevent ESD damage, avoid touching the electronic circuitry and prevent anything else from coming in contact with the circuitry.

- Step 9** If you are removing the module from a Cisco Nexus 7010 chassis, rotate the module 90 degrees counterclockwise so that it is horizontal (with the circuitry seen from above).
- Step 10** Place the module on an antistatic mat or repack it in its original packing materials.
- Step 11** On the replacement I/O module, rotate both ejector levers fully away from the front of the module.
- Step 12** If you are inserting the module into a Cisco Nexus 7010 chassis, rotate the module 90 degrees clockwise.
- Step 13** Align the module to the chassis guides for the vacated slot, and slide the module part way into the slot.
- Step 14** With one or both hands on the front of the module, push the module all the way into the slot until it seats on the midplane connector.
- Step 15** Simultaneously push both ejector levers inward until they come in contact with the face of the module.

**Note**

Verify that the ejector levers are fully closed before tightening the captive screws. Failure to fully seat the module in the backplane connector can result in error messages.

- Step 16** Tighten the two captive screws on the I/O module to 8 in-lb (0.9 N·m).
- Step 17** Reconnect the I/O cables to the ports or the transceivers on the fiber-optic cables to the ports on the module.

## Replacing a Fabric Module During System Operations

The Cisco Nexus 7000 Series switches have three to five fabric modules located on the backside of the chassis. You can replace one of these fabric modules at a time while the switch is operating.

This section describes how to replace fabric modules and includes the following topics:

- [Required Tools, page 8-12](#)
- [Replacing a Fabric Module, page 8-12](#)

### Required Tools

You need a flat-blade or number 2 Phillips-head screwdriver to loosen or tighten the captive screws on the fan tray.

### Replacing a Fabric Module

You should replace a fabric module with another fabric module within a couple minutes to maintain the designed system airflow. If you cannot replace the fabric module, you must fill the slot with a blank module.

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**Warning**

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**Caution**

Make sure that you wear an ESD wrist strap while you handle each I/O module. Hold the module only on its carrier edges without touching any electronic circuitry, and place it on antistatic mats or repack it in its original packing materials when it is not installed in the chassis.

To replace a fabric module, follow these steps:

- Step 1** Place an antistatic mat or antistatic foam where you can place the fabric modules. Choose a place that prevents damage to the module while it is outside the chassis.
- Step 2** Unpack and place the replacement fabric module on the antistatic mat or antistatic foam.
- Step 3** Loosen the two captive screws on the module that you are removing (see View A in [Figure 8-5](#)).

**Figure 8-5 Unseating a Fabric Module**



<b>1</b>	Loosen two captive screws (one on each end of the module).	<b>2</b>	Press both eject buttons.
<b>3</b>	Simultaneously rotate out both ejectors away from the face of the module.		

- Step 4** Press both ejector release buttons to release the ejector levers (see View B in [Figure 8-5](#)).
- Step 5** Simultaneously rotate both ejectors away from the face of the module to unseat the module from the midplane connector (see View C in [Figure 8-5](#)).

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- Step 6** Holding each ejector lever, pull the module part way out of its slot.
- Step 7** Grasp the front edge of the module and place your other hand under the module to support its weight. Pull the module out of its slot. Do not touch the module circuitry.



**Caution** To prevent ESD damage, avoid touching the electronic circuitry and prevent anything else from coming in contact with the circuitry.

- Step 8** If you are removing the module from a Cisco Nexus 7018 chassis, turn the module counterclockwise so that it is horizontal.
- Step 9** Place the module on the antistatic mat or repack it in its original packing materials.
- Step 10** On the replacement module, rotate the two ejector levers fully away from the face of the module.
- Step 11** If you are inserting the module into a Cisco Nexus 7018 chassis, turn the module 90 degrees clockwise.
- Step 12** With one hand holding each side of the module, align the backside of the module to the slot guides in the vacated slot, and slide the module part way into the slot.



**Caution** To prevent ESD damage, avoid touching the electronic circuitry and prevent anything else from coming in contact with the circuitry.

- Step 13** With one or both hands on the face of the module, push the module all the way into the slot until it seats on the midplane connector. The EMI gasket will close the gap between this module and any module or chassis edge that is immediately above the module that you just installed.
- Step 14** Simultaneously push both ejector levers inward until they come in contact with the face of the module. The captive screws should be aligned to their holes in the chassis.
- Step 15** Tighten the two captive screws on the fabric module to 8 in-lb (0.9 N·m).

# Replacing a Cisco Nexus 7010 System Fan Tray During System Operations

The Cisco Nexus 7010 system has two system fan trays located on the upper backside of the chassis (see [Figure 1-3 on page 1-4](#)).



**Warning** **Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.** Statement 1034

This section explains how to replace a fan tray and includes the following topics:

- [Required Tools, page 8-15](#)
- [Replacing a Cisco Nexus 7010 System Fan Tray, page 8-15](#)

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## Required Tools

You need a flat-blade or number 2 Phillips-head screwdriver to loosen or tighten the captive screws on the fan tray.

## Replacing a Cisco Nexus 7010 System Fan Tray

The Cisco Nexus 7010 system fan tray is designed to be removed and replaced while the system is operating, but you should replace the fan tray within a couple of minutes to maintain the designed system airflow.



### 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 replace a Cisco Nexus 7010 system fan tray, follow these steps:

- Step 1** Place an antistatic mat or antistatic foam where you can place two fan trays.  
Choose a place that prevents damage to the fan trays while they are outside the chassis.
- Step 2** Unpack and place the replacement fan tray on the antistatic mat or antistatic foam.
- Step 3** Loosen the two captive screws on the fan tray that you are replacing by turning them counterclockwise until they are free of the chassis.
- Step 4** Grasp the fan tray handle with one hand and pull it part way out of the chassis.  
If the fan tray power connector does not easily unseat from the backplane, rock it gently.
- Step 5** Place the other hand under the fan tray to support its weight, pull the fan tray completely out of the chassis, and place the fan tray on an antistatic mat or repack it in its original packing materials.
- Step 6** Make sure that the replacement fan tray is oriented so that the fans are on top and the fan status LED is on the right when you are looking at the front side with the handle.
- Step 7** Grasp the replacement fan tray handle with one hand and place the other hand beneath the fan tray to support it, lift the fan tray to the open fan tray slot in the chassis, align the fan tray to the chassis guides, and push the fan tray into the slot until the power connector seats in the backplane and the captive screws are aligned to their holes in the chassis.
- Step 8** Tighten the captive screws to 8 in-lb (0.9 N·m).
- Step 9** Make sure that the STATUS LED turns on and is green.

## Replacing a Cisco Nexus 7010 Fabric Fan Tray During System Operations

The Cisco Nexus 7010 system has two fabric fan trays located on the backside of the chassis immediately above the fabric modules (see [Figure 1-3 on page 1-4](#)).

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**Warning**

**Hazardous voltage or energy is present on the backplane when the system is operating. Use caution when servicing.** Statement 1034

This section explains how to replace fan trays and includes the following topics:

- [Required Tools, page 8-15](#)
- [Replacing a Cisco Nexus 7010 System Fan Tray, page 8-15](#)

## Required Tools

You need a flat-blade or number 2 Phillips-head screwdriver to loosen or tighten the captive screws on the fabric fan tray.

## Replacing a Cisco Nexus 7010 Fabric Fan Tray

The Cisco Nexus 7010 fabric fan tray is designed to be removed and replaced while the system is operating without presenting damaging the system. It is best to replace the fan tray within a couple of minutes to maintain the designed airflow.



**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 replace a Cisco Nexus 7010 fabric fan tray, follow these steps:

- 
- Step 1** Place an antistatic mat or antistatic foam where you can place two fabric fan trays. Choose a place that prevents damage to the fan trays while they are outside the chassis.
- Step 2** Unpack and place the replacement fabric fan tray on the antistatic mat or antistatic foam.
- Step 3** Loosen the two captive screws on the fabric fan tray that you are replacing by turning them counterclockwise until they are free of the chassis.
- Step 4** Grasp the fan tray handle with one hand, pull the fan tray out of its slot on the chassis, and place the fan tray on an antistatic pad or antistatic foam.
- If the fan tray power connector does not easily unseat from the backplane, rock it gently.
- Step 5** Grasp the handle for the replacement fan tray in one hand and orient it so that the side with two captive screws is on the left. Place your other hand under the fan tray to support its weight.
- Step 6** Lift the fan tray to the open fabric fan tray slot and push the fan tray into the slot until the power connector seats in the backplane and the captive screws are aligned to their holes in the chassis.
- Step 7** Tighten the captive screws to 8 in-lb (0.9 N·m).
- Step 8** Make sure that the STATUS LED turns on and is green.
-

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## Replacing a Cisco Nexus 7018 Fan Tray During System Operations

The Cisco Nexus 7018 fan tray is designed to be removed and replaced while the system is operating, but you should replace the fan tray within a couple of minutes to maintain the designed system airflow. The Cisco Nexus 7018 includes two of these fan trays for cooling the supervisor, I/O, and fabric modules. You can find them on the back side of the Cisco Nexus 7018 chassis as shown in [Figure 1-9 on page 1-10](#).



### 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 replace a Cisco Nexus 7018 fan tray, follow these steps:

- Step 1** Place an antistatic mat or antistatic foam where you can place two fan trays. Choose a place that prevents damage to the fan trays while they are outside the chassis.
- Step 2** Unpack and place the replacement fan tray on the antistatic mat or antistatic foam.
- Step 3** Loosen the four captive screws on the fan tray that you are replacing by turning them counterclockwise until they are free of the chassis.
- Step 4** Grasp the fan tray handle with one hand and pull the fan tray part way out of its slot on the chassis. If the fan tray power connector does not easily unseat from the backplane, rock it gently.
- Step 5** Place a hand under the bottom side of the fan tray to support it and pull the fan tray out of the chassis.
- Step 6** Place the fan tray on an antistatic pad or repack it in its original packing materials.
- Step 7** Grasp the handle for the replacement fan tray in one hand and orient the fan tray so that the lettering on the LED labels is upright and readable.
- Step 8** Place one hand under the bottom side of the fan tray, lift the fan tray to the open fan tray slot, align the fan tray with the top and bottom chassis guides for the slot, and push the fan tray into the chassis until the power connector seats in the backplane and the captive screws are aligned to their holes in the chassis.
- Step 9** Tighten the captive screws to 8 in-lb (0.9 N·m).
- Step 10** Make sure that the STATUS LED turns on and is green.

## Replacing a CompactFlash Card

You can replace a CompactFlash card in either flash memory reader on any supervisor module. The replacement card must already be formatted for the reader or you must reformat the card after installing it.



**Note** The LOG FLASH and EXPANSION FLASH readers require different formats for their cards.

To replace a CompactFlash card, follow these steps:

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- 
- Step 1** Press the Eject Request button for the reader that has the card to be replaced.
- Step 2** Wait for the reader LED to turn off.
- If you are removing a log flash card, you will see the following message:  

```
switch# 2008 Mar 15 10:00:00 switch %$ VDC-1 %$ %IDEHSD-2-UMOUNT:logflash:offline
```
  - If you are removing an expansion flash card, you will see the following message:  

```
switch# 2008 Mar 15 10:00:00 switch %$ VDC-1 %$ %IDEHSD-2-UMOUNT:slot0:offline
```
- Step 3** Press the Eject button next to the reader.
- The reader ejects the card part way out of the slot.
- Step 4** Remove the card from the reader.
- Step 5** Align the replacement card to the CompactFlash reader slot as shown in [Figure 2-10 on page 2-17](#). The grooves on the thin side of the card must begin on the end of the card that goes into the reader first.
- Step 6** Push the card all the way into the reader.
- If the card does not fit easily into the slot, flip the card so the bottom edge is on top, and try pushing the card into the slot.
- Step 7** Wait for the reader LED to turn green and for a message to appear on the console.
- If you are installing a card into the log flash reader, the message will end with “logflash:online.”  

```
switch# 2008 Mar 15 08:00:00 switch %$ VDC-1 %$ %IDEHSD-2-MOUNT: logflash:online
```
  - If you are installing a card into the expansion flash reader, the message will end with “slot0:online.”  

```
switch# 2008 Mar 15 08:00:00 switch %$ VDC-1 %$ %IDEHSD-2-MOUNT: slot0:online
```
  - If you see an offline message or do not see a message, either the card is not fully pushed into the reader or it is improperly formatted.  

```
switch# 2008 Dec 1 12:00:00 switch %$ VDC-1 %$ %IDEHSD-2-UMOUNT:logflash:offline
```
- Make sure that the card is fully inserted inside the reader. If the card is fully inserted, either format the card (see the *Cisco NX-OS Fundamentals Configuration Guide, Release 4.1*) or replace the card with another card that is properly formatted for the reader.
- 

## Replacing the Front Doors and Frame Assembly on the Cisco Nexus 7010 Chassis

If the front door and frame assembly are already attached to the chassis when you need to ship the chassis or move the chassis from one rack to another, you should remove the front doors and frame assembly for safer and easier handling of the chassis.

This section describes how to remove and install the front doors and frame assembly, and it includes the following topics:

- [Required Tools, page 8-19](#)
- [Removing the Front Doors and Frame Assembly, page 8-19](#)
- [Installing the Front Doors and Frame Assembly, page 8-24](#)

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## Required Tools

You need a flat-blade or number 2 Phillips-head screwdriver to loosen or tighten the screws that hold the frame members to the chassis.

## Removing the Front Doors and Frame Assembly

Removing the optional front doors and frame assembly involves removing the side frames from the EMI frame, removing the bottom frame assembly, and removing the two front doors.

**Note**

If you are installing a new chassis, you do not need to perform this task because the chassis is not shipped with these assemblies attached to it.

To remove the front doors and frame assemblies, do the following:

- Step 1** Remove the two lower side frames from the EMI air filter frame by first removing the EMI panel from the chassis, then unscrewing the side frame pieces. When done, replace the EMI frame on the chassis. The following steps explain each of these tasks.
- a. On the EMI panel, which covers the air intake area on the lower front side of the chassis, loosen and completely unscrew each of the four captive screws that hold the panel to the chassis.
  - b. Pull the EMI panel away from the chassis, along with the attached side frame members and optional air filter (if attached) (see [Figure 8-6](#)).

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**Figure 8-6**      **Removing the EMI Panel From the Chassis**



<b>1</b>	Unscrew four captive screws from the chassis	<b>2</b>	Remove the EMI panel from the chassis.
----------	--	----------	--

- c. From the back of the EMI panel, unscrew each of the four screws that attach the two side frame pieces to the EMI panel, and remove the side frame pieces (see [Figure 8-7](#)).

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**Figure 8-7**      **Removing the Side Frame Assemblies From the EMI Panel**



<b>1</b>	Right side frame	<b>2</b>	Left side frame
<b>3</b>	Unscrew two 6-32 x 1/2-inch flat-head screws to remove the right side frame.	<b>4</b>	Unscrew two 6-32 x 1/2-inch flat-head screws to remove the left side frame.

- d. Re-align the EMI panel to the air intake area on the chassis and tighten its four captive screws to 8 in-lb (0.9 N·m).

**Step 2** Remove the front doors by following these steps:

- a. Unscrew the three screws that hold one door frame assembly to the chassis until the screws are no longer in the chassis. Remove the door assembly from the chassis. See [Figure 8-8](#).
- b. Repeat step 4a for the other door assembly.

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**Figure 8-8**      ***Removing the Front Door Assemblies***



<b>1</b>	On each door frame, loosen three captive screws and remove the door frame from the chassis.		
----------	---	--	--

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- Step 3** Remove the bottom frame assembly by completely unscrewing the four M4 x 6 mm screws identified in [Figure 8-9](#).

**Figure 8-9** *Removing the Bottom Frame*



<b>1</b>	Bottom frame	<b>2</b>	Unscrew four M4 x 6 mm screws that hold the bottom frame to the chassis
----------	--------------	----------	---

- Step 4** If you are returning the frame components to Cisco, repack them in their original packing materials.

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## Installing the Front Doors and Frame Assembly

After you have finished moving the chassis to its rack (or after you have removed the doors and frame for their replacement), you can install the front doors and frame assemblies.

To install the front doors and frame assembly, follow these steps:

- 
- Step 1** Align the bottom frame assembly so that its four screw holes align to screw holes in the bottom of the chassis, and then screw in four M4 x 6 mm screws to attach the bottom frame to the chassis (see [Figure 8-10](#)).

***Figure 8-10***     ***Installing the Bottom Frame***



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<b>1</b>	Bottom frame assembly with screw holes aligned to screw holes in chassis	<b>2</b>	Tighten four M4 x 6 mm screws
----------	--	----------	-------------------------------

**Step 2** For each of the two front doors, match the two alignment pins on the door frame to the alignment holes on the chassis. Position each door frame immediately under the cable management area (see [Figure 8-11](#)).

**Figure 8-11** *Installing the Front Doors*



<b>1</b>	Front door frames	<b>2</b>	Cable management area
<b>3</b>	Place each door frame on front edge of chassis and immediately under the cable management area.		

**Step 3** Tighten three captive screws for each door frame (see [Figure 8-12](#)).

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**Figure 8-12**     *Attaching the Door Frames to the Chassis*

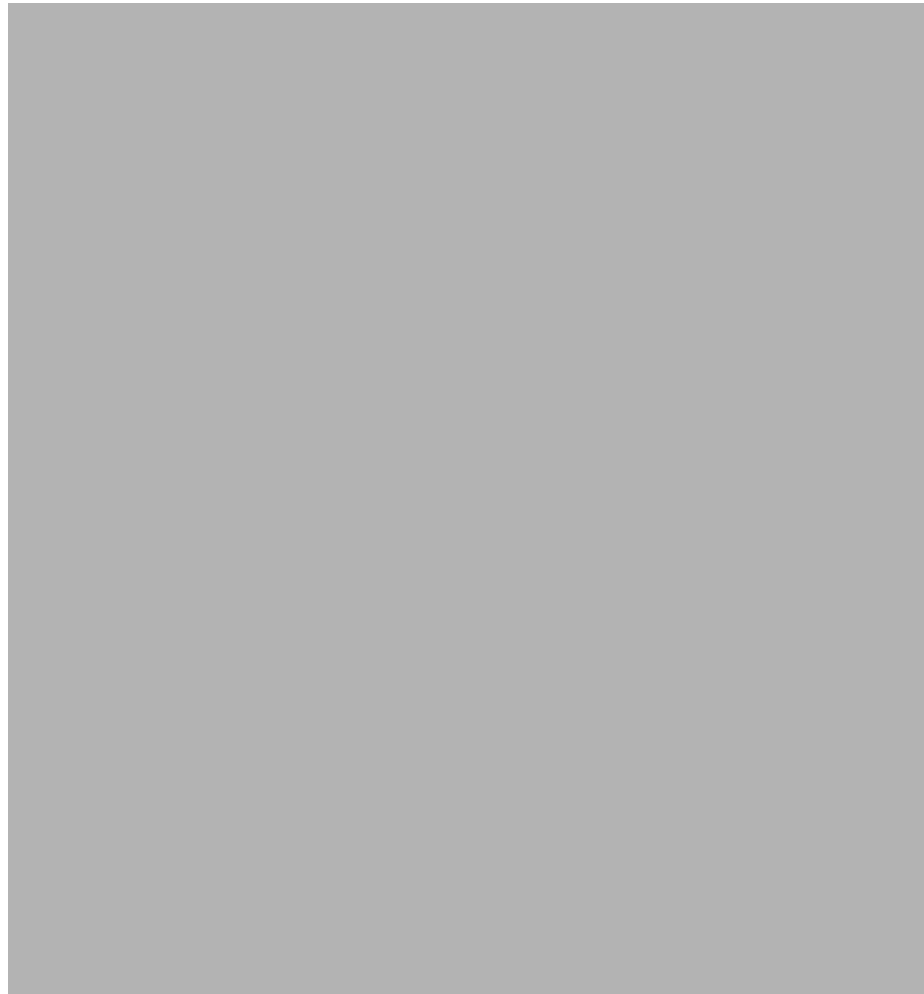


1	Tighten three captive screws for each door frame.		
---	---	--	--

**Step 4**     On the EMI panel, unscrew four captive screws and remove the panel from the chassis (see [Figure 8-13](#)).

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**Figure 8-13**     **Removing the EMI Panel**



- Step 5**     On the right side of the EMI panel (as seen from the front), align the right frame piece (the one with the notch in one of the two extensions) so that its two screw holes align to two screw holes on one side of the EMI panel and secure the side frame to the panel with two 6-32x1/2 inch flat head screws. Tighten the screws to 8 in-lb (0.9 N·m). See [Figure 8-14](#).
- Step 6**     On the left side of the EMI panel, align the left frame piece (no notch on its extensions) so that its two screw holes align to two screw holes on one side of the EMI panel and secure the side frame to the panel with two 6-32x1/2 inch flat head screws. Tighten the screws to 8 in-lb (0.9 N·m). See [Figure 8-14](#).

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**Figure 8-14** *Attaching the Side Frame Assemblies to the EMI Panel*



<b>1</b>	Right side frame	<b>2</b>	Left side frame
<b>3</b>	Use two 6-32 x 1/2-inch flat-head screws to attach the right side frame to the right side of the EMI panel. Tighten the screws to 8 in-lb (0.9 N·m).	<b>4</b>	Use two 6-32 x 1/2-inch flat-head screws to attach the left side frame to the left side of the EMI panel. Tighten the screws to 8 in-lb (0.9 N·m).

**Step 7** Realign the EMI panel to the air intake area on the chassis, screw its four captive screws to the chassis, and tighten the captive screws to 8 in-lb (0.9 N·m).

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# Replacing the Cable Management Frame on the Cisco Nexus 7018 Chassis

This section describes how to remove cable management frame components and install the components for a replacement frame. The cable management frame includes two lower cable management assemblies, two upper cable management assemblies, and a top cover.

This section includes the following topics:

- [Required Tools](#), page 8-29
- [Removing the Cable Management Frame](#), page 8-29
- [Installing a Cable Management Frame](#), page 8-33

## Required Tools

You need a flat-blade or number 2 Phillips-head screwdriver to loosen or tighten the screws that hold the cable management assemblies to the chassis.

## Removing the Cable Management Frame

When you remove the cable management frame from the Cisco Nexus 7018 chassis, you must remove a top cover and four cable management assemblies.



### Note

Before you can remove the cable management frame from the Cisco Nexus 7018 chassis, you must remove the front door and its bracket if they are installed on the cable management frame. For information on removing the front door and its bracket, see the [“Replacing the Front Door and Air Intake Assemblies on the Cisco Nexus 7018 Chassis”](#) section on page 8-38.

To remove the cable management frame assemblies, follow these steps:

- Step 1** Loosen and remove the eight M4x8 pan-head screws that fasten the top cover to the upper cable management assemblies and chassis (see [Figure 8-15](#)).

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**Figure 8-15** Detaching the Top Cover from the Upper-Cable-Management Assemblies and Chassis



<b>1</b>	Four M4x8 pan-head screws fastened to the chassis	<b>2</b>	Four M4x8 pan-head screws fastened to the two upper cable management assemblies
----------	---	----------	---

- Step 2** Remove the top cover from the chassis and the two upper cable management assemblies.
- Step 3** For the upper cable management assembly on the left, loosen and remove five M4x10 screws, and then lift off the assembly as shown in [Figure 8-16](#).
- Step 4** Repeat Step 3 for the upper cable management assembly on the right side.

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**Figure 8-16** *Removing an Upper-Cable-Management Assembly*

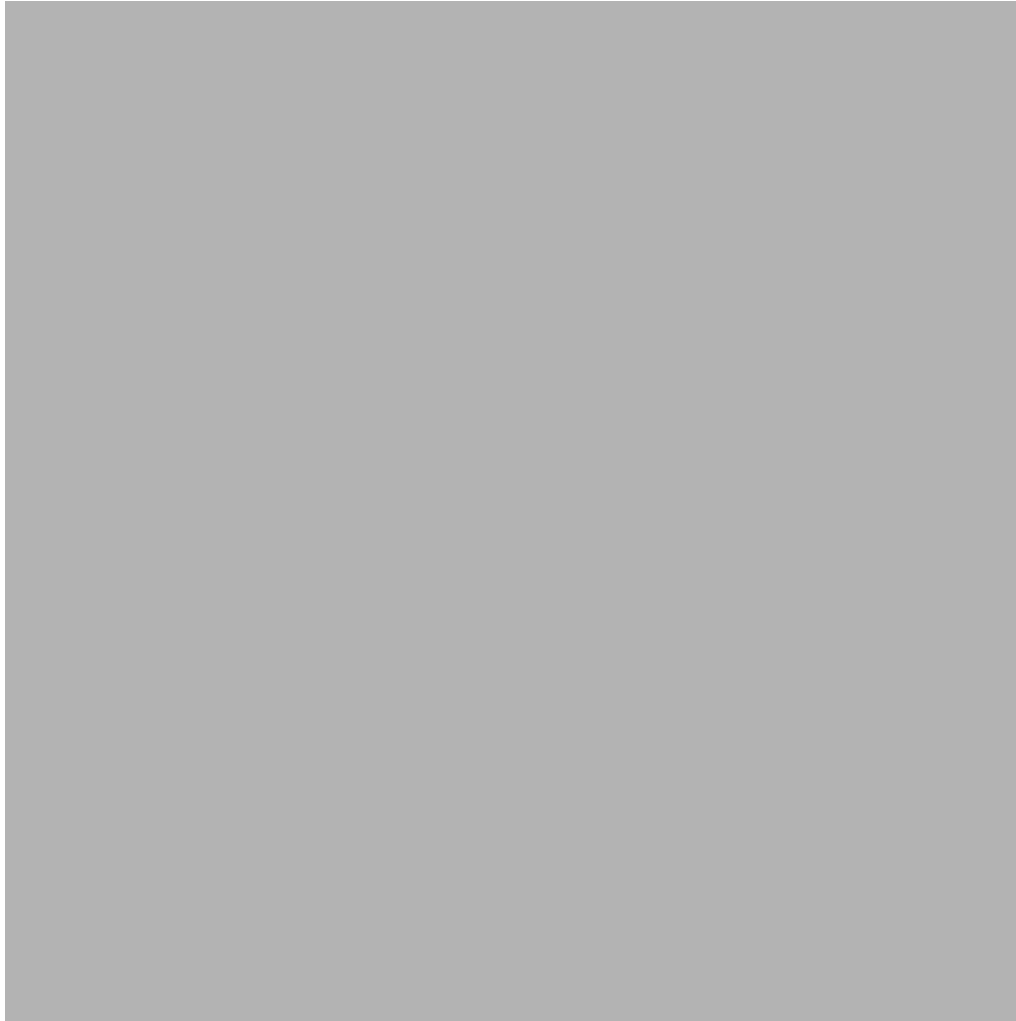


<b>1</b>	Rack-mount bracket.	<b>2</b>	Upper cable management assembly.
<b>3</b>	Loosen and remove five M4x10 screws.	<b>4</b>	Lift the upper cable management assembly off the rack-mount bracket hooks.

**Step 5** For the lower cable management assembly on the left, loosen and remove four M4x10 screws, and then lift off the assembly as shown in [Figure 8-17](#).

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**Figure 8-17** *Removing a Lower Cable Management Assembly*



<b>1</b>	Lower cable management assembly.	<b>2</b>	Left rack-mount bracket.
<b>3</b>	Loosen and remove four M4x10 screws.	<b>4</b>	Lift the lower cable management assembly off the rack-mount bracket hooks.

**Step 6** Repeat Step 5 for the lower cable management assembly on the right side.

**Step 7** Pack the two lower cable management assemblies, two upper cable management assemblies, the top cover, and their screws in their original packing materials.

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## Installing a Cable Management Frame

When you install a cable management frame, you attach four cable management assemblies to the chassis and then attach a top cover to the top two cable management assemblies and the chassis.

To install the cable management frame on the Cisco Nexus 7018 switch chassis, follow these steps:

---

**Step 1** Open the Cable Management kit (69-1961-01) and verify that you have the following parts:

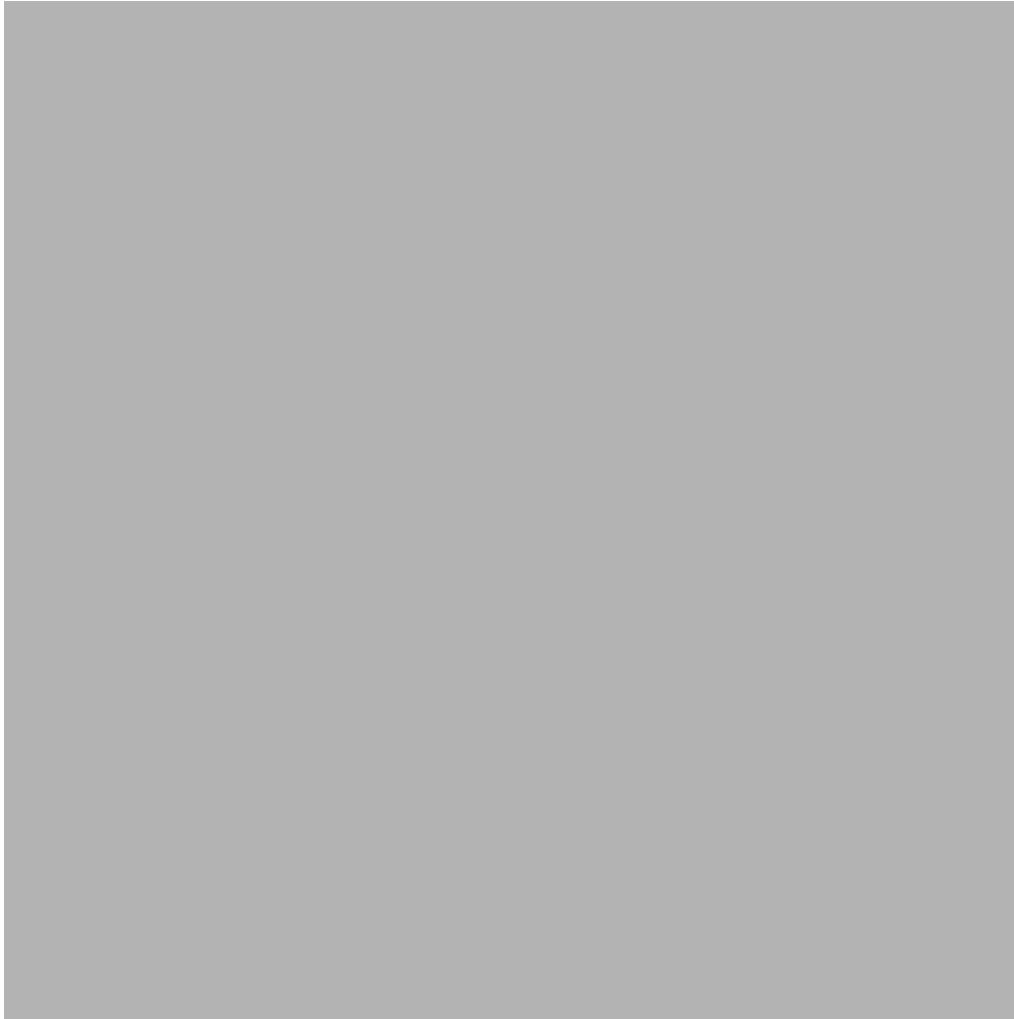
- 2 lower cable management assemblies (800-31343-01)
- 2 upper cable management assemblies (800-31342-01)
- 1 top cover (800-31269-01)
- 8 M4x8 pan-head screws (48-0398-01)
- 18 M4x10 flat-head screws (48-2518-01)

If the kit is not complete, contact TAC and arrange for a complete kit.

**Step 2** Attach a lower cable management assembly onto the two hooks that protrude from the lower half of the left rack-mount bracket that is attached to the Cisco Nexus 7018 switch chassis, and loosely fasten the assembly to the chassis with four flat-head M4x10 screws as shown in [Figure 8-18](#).

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**Figure 8-18** *Attaching a Lower Cable Management Assembly to a Rack-Mount Bracket*



<b>1</b>	Lower cable management assembly.	<b>2</b>	Rack-mount bracket.
<b>3</b>	Position the assembly so that the two lower hooks on the rack-mount bracket fit inside the two holes on the assembly, and then slide the assembly down so that it is held by the hooks.	<b>4</b>	Loosely fasten the assembly to the rack-mount bracket with four M4x10 screws. Do not tighten these screws.

- Step 3** Repeat Step 1 to attach a lower cable management assembly to the right side of the chassis.
- Step 4** Attach an upper cable management assembly onto the two hooks that protrude from the upper half of the left rack-mount bracket that is attached to the Cisco Nexus 7018 switch chassis, and loosely fasten the assembly to the chassis with four flat-head M4x10 screws as shown in [Figure 8-19](#).

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**Figure 8-19** Attaching an Upper Cable Management Assembly to a Rack-Mount Brackets



<b>1</b>	Rack-mount bracket.	<b>2</b>	Upper cable management assembly.
<b>3</b>	Position the assembly so that the two upper hooks on the rack-mount bracket fit inside the two holes on the assembly, and then slide the assembly down so that it is held by the hooks.	<b>4</b>	Loosely fasten the assembly to the rack-mount bracket with four M4x10 screws. Do not tighten these screws.

**Step 5** Repeat Step 3 to attach an upper cable management assembly to the upper right side of the chassis. When completed, the chassis will appear as shown in [Figure 8-20](#).

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**Figure 8-20** Cable Management Assemblies Attached to the Rack-Mount Brackets



<b>1</b>	Lower cable management assembly	<b>2</b>	Upper cable management assembly
----------	---------------------------------	----------	---------------------------------

- Step 6** Place the top cover on top of the two upper cable management assemblies that are already installed. Make sure that the side of the top cover that is closest to the chassis has two alignment pins that align with the alignment holes in the chassis as shown in [Figure 8-21](#). Push the top cover towards the chassis so that its alignment pins enter the alignment holes and the top cover rests against the chassis.

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**Figure 8-21**     ***Positioning the Top Cover with the Upper Cable Management Assemblies and the Switch Chassis***



<b>1</b>	Alignment pins	<b>2</b>	Alignment holes
----------	----------------	----------	-----------------

**Step 7** Use four M4x8 pan-head screws to loosely fasten the top cover to the chassis (see Callout 1 in [Figure 8-22](#)).

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**Figure 8-22** *Fastening the Top Cover to the Chassis and Cable Management Assemblies*



<b>1</b>	Four M4x8 pan-head screws that fasten the top cover to the chassis.	<b>2</b>	Four M4x8 pan-head screws that fasten the top cover to the left and right cable management assemblies.
----------	---	----------	--

- Step 8** Use four M4x8 pan-head screws to loosely fasten the top cover to each of the two upper cable management assemblies (see Callout 2 in [Figure 8-22](#)).
- Step 9** Tighten each of the four screws that fasten the top cover to the chassis to 11 to 15 in-lb (95 to 130 N·m).
- Step 10** Tighten each of the four screws that fasten the top cover to the upper cable management assemblies to 11 to 15 in-lb (95 to 130 N·m).
- Step 11** Tighten each of the 18 screws that fasten the upper and lower cable management assemblies to the rack-mount brackets to 11 to 15 in-lb (95 to 130 N·m).

## Replacing the Front Door and Air Intake Assemblies on the Cisco Nexus 7018 Chassis

If you are going to move the Cisco Nexus 7018 chassis or if you need to replace the door and air intake assembly, you must first remove the installed door and air intake assemblies.



**Note**

For the double-hinged door to easily open or close in either direction, make sure that the chassis is level. If necessary, remove the chassis from the rack and adjust the bottom-support rails so that the chassis is level. Also, make sure that the cable management assemblies are aligned to the vertical sides of the chassis and that the cable management top cover is level when you install those components.

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This section includes the following topics:

- [Removing the Front Door and Air Intake Assemblies, page 8-39](#)
- [Replacing the Air Filter on the Cisco Nexus 7010 Chassis, page 8-53](#)

## Removing the Front Door and Air Intake Assemblies

When you remove the front door and air intake assemblies, you remove the door, air intake assembly, and the hardware used to hold those components to the chassis.

To remove the front door and air intake assemblies on the Cisco Nexus 7018 chassis, follow these steps:

- 
- Step 1** Remove the front door by following these steps:
- a. Open the door by pulling one of its latch handles out until it clicks (the handle clicks when you pull it out about 30 degrees) and rotating the door away from the chassis (see Callouts 1 and 2 in [Figure 8-23](#)).

**Figure 8-23**     **Removing the Front Door**



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<b>1</b>	Open the latch handle until it clicks.	<b>2</b>	Swing open the door.
<b>3</b>	Close the latch handle by pressing the locking button on the inside surface of the door (see <a href="#">Figure 8-24</a> ).	<b>4</b>	Open the other latch handle until it clicks.
<b>5</b>	Use both hands to pull the door off the chassis.		

- b. Press the locking button on the back side of the door (behind the opened latch handle) so that the latch handle flattens to the front side of the door (see [Figure 8-24](#)).

**Figure 8-24** *Flattening the Latch Handle to the Door*



<b>1</b>	Press the locking button to flatten the latch handle to the front side of the door.		
----------	---	--	--

- c. Hold the opened side of the door with one hand and use your other hand to open the latch handle on the hinged side of the door until the handle clicks (see Callout 4 in [Figure 8-23](#)).
- d. Holding the door with both hands, pull the door away from the chassis (see Callout 5 in [Figure 8-23](#)).
- e. Press the locking button on the inside surface of the door behind the opened latch to flatten the latch handle to the front side of the door.
- f. Repack the door in its original packing materials.

**Step 2** Remove the air intake assembly by following these steps:

- a. Loosen the two captive screws on the air intake frame (there is one captive screw on each side) so that they are no longer in contact with the chassis (see Callout 1 in [Figure 8-25](#)).

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**Figure 8-25**     *Removing the Air Intake Assembly*



<b>1</b>	Loosen two captive screws until they are clear of the chassis.	<b>2</b>	Remove the air intake assembly from the chassis.
----------	--	----------	--

- b. Pull the air intake assembly off the chassis.
- c. Loosen and remove the four ball-point studs shown in [Figure 8-26](#).
- d. Repack the air intake frame and ball-point studs in their original packing materials.

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**Figure 8-26** *Removing the Four Ball-Headed Studs*



**Step 3**

<b>1</b>	Ball-point stud		
----------	-----------------	--	--

**Step 4**

Remove and repack the lower door bracket and door stoppers by following these steps:

- a. Loosen and remove the eight screws holding the bottom hinge bracket for the door. Four of the screws are attached to the right and left side of the cable management frame (two screws on each side) and four of the screws are attached to the chassis (see [Figure 8-27](#)).

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**Figure 8-27 Removing the Bottom Hinge Bracket**



**b.**

<b>1</b>	Remove four M4x8 pan-headed screws from the chassis.	<b>2</b>	Remove four M4x8 screws from the cable management assemblies (two screws on each side).
----------	--	----------	---

- c.** Remove the bracket from the chassis.
- d.** Loosen and remove the two M3x10 screws that hold the right door stopper to the right cable management frame.
- e.** Loosen and remove the two M3x10 screws that hold the left door stopper to the left cable management frame.
- f.** Repack the bracket, two door stoppers, and their screws in the original packing materials.

To replace the front door and air intake assemblies, see the [“Replacing the Air Filter on the Cisco Nexus 7010 Chassis”](#) section on page 8-53.

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## Installing a Front Door and Air Intake Assemblies

When you install a front door and air intake assembly components, you install hardware to hold the door and air intake assemblies, attach the door, and then attach the air intake assembly.

To install the front door and air intake assembly components, follow these steps:

- 
- Step 1** Open the Front Door and Air Intake kit (69-1962-01) and verify that it includes the following components:
- 1 front door (800-31268-01)
  - 1 air intake frame (800-31270-01)
  - 1 bottom hinge bracket (700-28491-02)
  - 1 left door stopper (has an L on its base) (700-27454-01)
  - 1 right door stopper (has an R on its base) (700-27592-01)
  - 8 M4x8 pan head screws (48-0398-01)
  - 4 M3x14 pan head screws (48-1699-01)
  - 4 ball-point studs (51-5171-01)
- Step 2** Position the left door stopper (has an L on its base) on the middle of the left side of the cable management frame and fasten it with two M3x14 pan-head screws as shown in [Figure 8-28](#). Tighten these two screws to 8.4 to 11 in-lb (0.9 to 1.2 N·m).

**Figure 8-28** *Attaching the Left Door Stopper*



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<b>1</b>	Left door stopper identified with an L on the bottom of the base.	<b>2</b>	Two M3x14 screws that fasten the stopper to the left side of the cable management assembly.
<b>3</b>	Screw holes on the cable management assembly.		

- Step 3** Position the right door stopper (has an R on its base) on the middle of the right side of the cable management frame and fasten it with two M3x14 pan-head screws as shown in [Figure 8-29](#). Tighten these two screws to 8.4 to 11 in-lb (0.9 to 1.2 N·m).

**Figure 8-29 Attaching the Right Door Stopper**



<b>1</b>	Right door stopper identified with an R on the bottom of the base.	<b>2</b>	Two M3x14 screws that fasten the stopper to the right side of the cable management assembly.
<b>3</b>	Screw holes on the right side of the cable management frame.		

- Step 4** Position the bottom hinge bracket at the bottom of both sides of the cable management frame. Make sure that the side of the bracket that is closest to the chassis has two alignment pins that align with the alignment holes in the chassis as shown in [Figure 8-30](#). Push the bracket towards the chassis so that its alignment pins enter the alignment holes and the bracket rests against the chassis.

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**Figure 8-30** Positioning the Hinge Bracket to the Cable Management Frame and Chassis

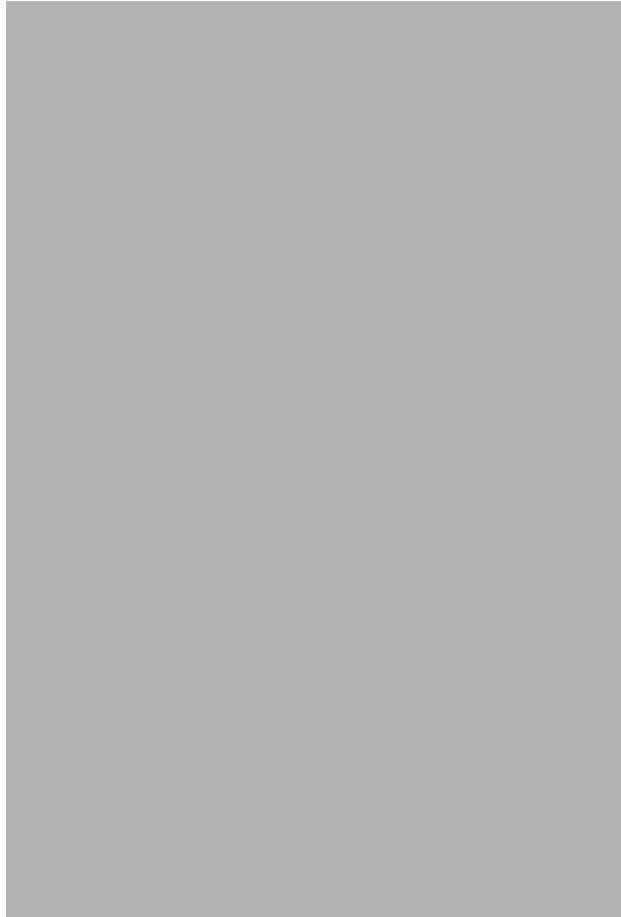


<b>1</b>	Alignment pins	<b>2</b>	Alignment holes
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- Step 5** Attach the bottom hinge bracket to the chassis with eight loosely fastened M4x8 screws (see Callout 1 in [Figure 8-31](#)).
- Step 6** Attach the bottom hinge bracket to the bottom of both sides of the cable management frame (see Callout 2 in [Figure 8-31](#)).

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**Figure 8-31 Attaching the Hinge Bracket to the Cable Management Frame and Chassis**



<b>1</b>	Four M4x8 pan-head screws that fasten the bottom hinge bracket to the chassis.	<b>2</b>	Four M4x8 pan-head screws that fasten the bottom hinge bracket to the left and right sides of the cable management frame.
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- Step 7** Tighten the four M4x8 screws that fasten the bottom hinge bracket to the chassis to 11 to 15 in-lb (1.2 to 1.7 N·m).
- Step 8** Tighten the four M4x8 screws that fasten the bottom hinge bracket to the cable management frame to 11 to 15 in-lb (1.2 to 1.7 N·m).
- Step 9** Fasten the four ball-point studs to the bottom portion of the chassis, one stud by each corner of the air intake area as shown in [Figure 8-32](#).

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**Figure 8-32** Fastening Ball-Point Studs to the Air Intake Area



<b>1</b>	Ball-point stud		
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- Step 10** Align the air intake frame to the four ball-point studs and press the frame onto the chassis, as shown in [Figure 8-33](#). The two captive screws on the air-intake frame should align with their screw holes in the chassis.

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**Figure 8-33** Positioning the Air Intake Frame on the Chassis



<b>1</b>	Ball-point studs	<b>2</b>	Air-intake frame with holes to be aligned with the ball-point studs
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- Step 11** Fasten the captive screws on the air intake frame to the chassis and tighten to 11 to 15 in-lb (95 to 130 N·m).
- Step 12** On the chassis door, pull the door handle open on one of the two sides of the door until the handle clicks (the handle clicks when you pull it out about 30 degrees).
- Step 13** Move the side of the door with the opened handle onto the two hinge pins as shown in [Figure 8-34](#). Make sure that the hinge pins on the top cover and bottom hinge bracket fit through the slots on the top and bottom of that side of the door. Position the door so the hinge pins are located at the ends of the slots.



**Note**

The double-hinged door can be installed and opened on either side. The figures in this procedure show how to install the door on the left side first, but you can use the instructions to install it on either side first.

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**Figure 8-34** *Attaching One Side of the Door to the Chassis*



<b>1</b>	Open the latch handle until it clicks.	<b>2</b>	Move one side of the door to the hinge pins on the same side of the chassis.
<b>3</b>	Hinge pins	<b>4</b>	Slot for hinge pin

**Step 14** Use one hand to hold the door on the hinge pins and use your other hand to press the locking button on the interior side of the door (see [Figure 8-35](#)). This action locks the latches on one side of the door to the hinge pins so that you no longer need to hold the door.

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**Figure 8-35**      **Locking the door onto the Chassis**



<b>1</b>	Press the locking button to lock the door onto the hinge pins.		
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**Note**

Be sure that the door is firmly latched to the two hinge pins. If both of the hinge pins are not secured behind the door latch, hold the door securely with one hand while opening the door handle for the unsecured side until the handle clicks, press that side of the door so that both of the pins are positioned all the way inside the door slots, press the door latch button on the interior side of the door, and then make sure that the door is firmly secured to both hinge pins.

- Step 15** Open the door handle on the open side of the door until it clicks. This action opens the latches on the open side of the door. See [Figure 8-36](#).

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**Figure 8-36** *Attaching the Right Side of the Door*



<b>1</b>	Pull the latch handle outwards until it clicks.	<b>2</b>	Swing the door closed.
<b>3</b>	Hinge pins.	<b>4</b>	Slots for hinge pins.

**Step 16** Swing the door closed so that the remaining two pins on the bottom hinge bracket and top cover fit inside the slots on the top and bottom of the door. When you close the door, the door stopper automatically presses the lock button on the inside of the door so that the door is locked on the hinge pins. If the door stopper does not close the latches, press the door closed at the handle until you hear the latches click. Make sure that the door is fully secured to the frames on both sides.



**Note**

If a hinge pin is not secured behind a door latch, open the door handle for that side of the door until it clicks, open that side of the door, and then press the door closed so that the pins are positioned all the way inside the door slots. When you close the door, the door stopper automatically closes the door latches. If you do not hear the latches click, press the door at the handle to fully close it and to activate the latches. Test the door to make sure that it is fully secured to the four hinge pins.

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**Tip**

Whenever you need to open the door, pull one of the latch handles open until it clicks and then swing that side of the door open.

**Note**

If the double-hinged door and its holders are not level, it is possible that you will have some difficulty opening or closing the door on one or both sides without the door being defective. Either push in the bottom portion of the door or slightly lift up the door on that side just before closing. If the problem persists, open the door from the other side, which should be free of this problem, or adjust the cable management system and hinge bracket so that they are level.

## Replacing the Air Filter on the Cisco Nexus 7010 Chassis

You can replace the optional air filter while the Cisco Nexus 7010 system is operational.

**Note**

Only the Cisco Nexus 7010 chassis includes an optional air filter.

To replace the air filter, follow these steps:

- Step 1** On the left and right side of the existing air filter, loosen the two captive screws so they are no longer attached to the chassis. The air filter can be found covering the air intake area at the bottom of the front side of the chassis (see [Figure 1-2 on page 1-3](#)).
- Step 2** With one hand holding the air filter in place, use the other hand to pull out the spring pin on one side of the air filter. Pull that side of the air filter away from the chassis and release the spring pin when it is clear of the bracket on the EMI frame.
- Step 3** Switch the hands holding the air filter and use the other hand to pull out the spring pin on the other side of the air filter. Pull the air filter away from the chassis and release the spring pin.
- Step 4** Align the replacement air filter to the EMI frame covering the air intake area.
- Step 5** Use one hand on the air filter to hold it in place while you use the other hand to pull out the spring pin on one side of the air filter. Adjust the air filter so that the spring pin will be released into its hole in the EMI frame bracket.
- Step 6** Switch the hands holding the air filter and use the other hand to pull out the other spring pin on the other side of the air filter. With the spring pin pulled out, position the air filter so that the pin will be released into its hole on the EMI frame bracket. Release the spring pin and make sure that it holds the air filter on to the EMI frame.
- Step 7** Screw in and tighten both captive screws, one on each side of the air filter.

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