



## Maintaining the Power System in the Cisco cBR Chassis

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# Maintaining the Power System in the Cisco cBR Chassis

## Removing the AC Power Connections from the Cisco cBR Chassis



**Warning** The chassis ground connection must always be made first and disconnected last.



**Warning** Only trained and qualified personnel should be allowed to install, replace, or service this equipment. **Statement 1030**

### Before you begin

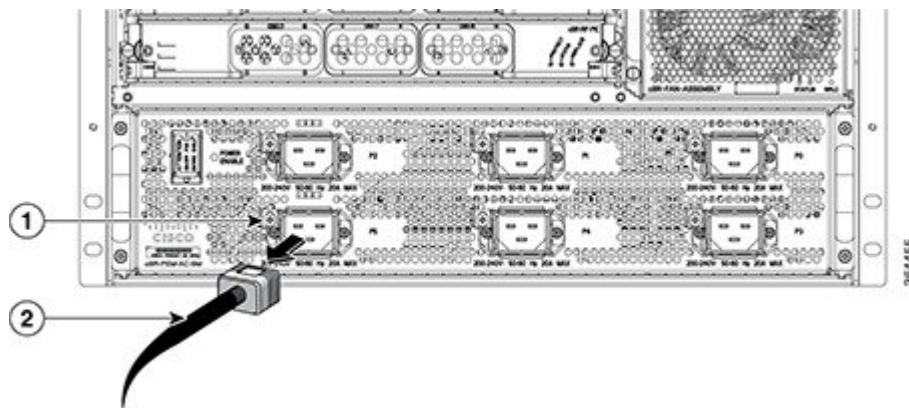
#### Required Tools and Equipment

- #2 Phillips screwdriver

### Procedure

- Step 1** Power down the AC FPEM using the power switch.
- Step 2** Power down the AC circuit or power source to which the AC power cord is connected.
- Step 3** Loosen the Phillips-head screw on the cable retaining bracket using a #2 Phillips screwdriver.
- Step 4** Unplug the AC power cord from the receptacle on the AC FPEM.

*Figure 1: Removing AC Power Cord from the AC FPEM*



1	Screw on the cable retaining bracket	2	AC power cord
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**Step 5** Repeat [Step 2, on page 2](#) to [Step 4, on page 2](#) for each AC power connection.

# Removing the DC Power Connections from the Cisco cBR Chassis



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**Warning** The terminal block covers are an integral part of the safety design of the product. Do not operate the unit without the covers installed. **Statement 1077**

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**Warning** When you install the unit, the ground connection must always be made first and disconnected last. **Statement 1046**

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**Warning** Before performing any of the following procedures, ensure that power is removed from the DC circuit. **Statement 1003**

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**Warning** Only trained and qualified personnel should be allowed to install, replace, or service this equipment. **Statement 1030**

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## Before you begin

### Required Tools and Equipment

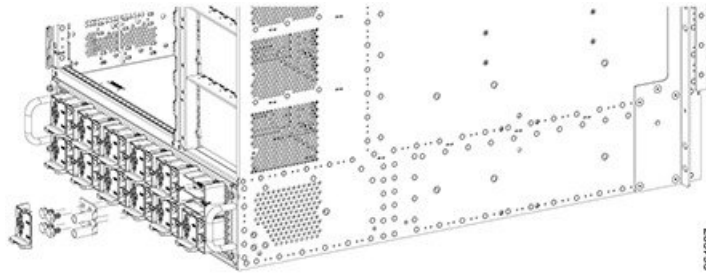
- Torque wrench
- 7/16" hex socket

### Procedure

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- Step 1** Power down the DC FPDM using the power switch.
- Step 2** Power down the circuit or power supply to which the positive and negative lead cables are connected.
- Step 3** Remove the terminal block cover on the terminal block, from which you need to disconnect power, by pushing down on the bottom tab then pivoting the bottom out.
- Step 4** Loosen the 1/4-20 terminal bolts using a torque wrench and 7/16" hex socket and remove them. Disconnect the positive lead cable.
- Step 5** Loosen the 1/4-20 terminal bolts using a torque wrench and 7/16" hex socket and remove them. Disconnect the negative lead cable.

**Figure 2: Removing the DC Power Connection from the DC FPDM**



- Step 6** Repeat [Step 2, on page 3](#) and [Step 5, on page 3](#) to disconnect each terminal block connection.
- Step 7** Insert the 1/4-20 terminal bolts and secure them using a torque wrench and 7/16" hex socket with a torque of 45-50 in-lb (5.08-5.65 Nm).
- Step 8** Reinstall the terminal block covers by clipping them on the top edge of the terminal block housing and then rotating them down until they snap into place.
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## Removing the Power Module from the Cisco cBR Chassis

### Before you begin

- Attach an ESD-preventive wrist strap to your wrist and connect the other end to the grounding lug connected to the chassis.
- Be aware of the weight and size of the equipment. Handle it with care.

### Restrictions

- For the DC-powered Cisco cBR with N+1 redundancy, ensure that the chassis has at least five operational DC Power Modules for the chassis to be functional.
- For the AC-powered Cisco cBR with N+1 redundancy, ensure that the chassis has at least four operational AC Power Modules for the chassis to be functional.
- For the AC-powered Cisco cBR with 1+1 redundancy, ensure that the chassis has six operational AC Power Modules for the chassis to be functional.

### Required Tools and Equipment

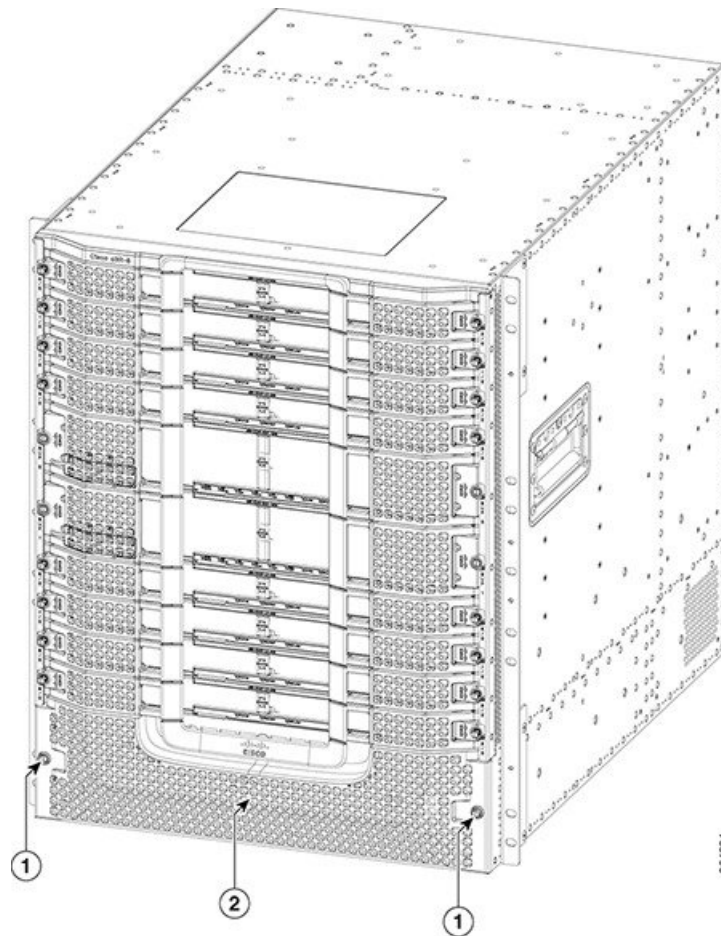
- ESD-preventive wrist strap
- 3/16" flat-blade torque screwdriver
- Antistatic bag

### Procedure

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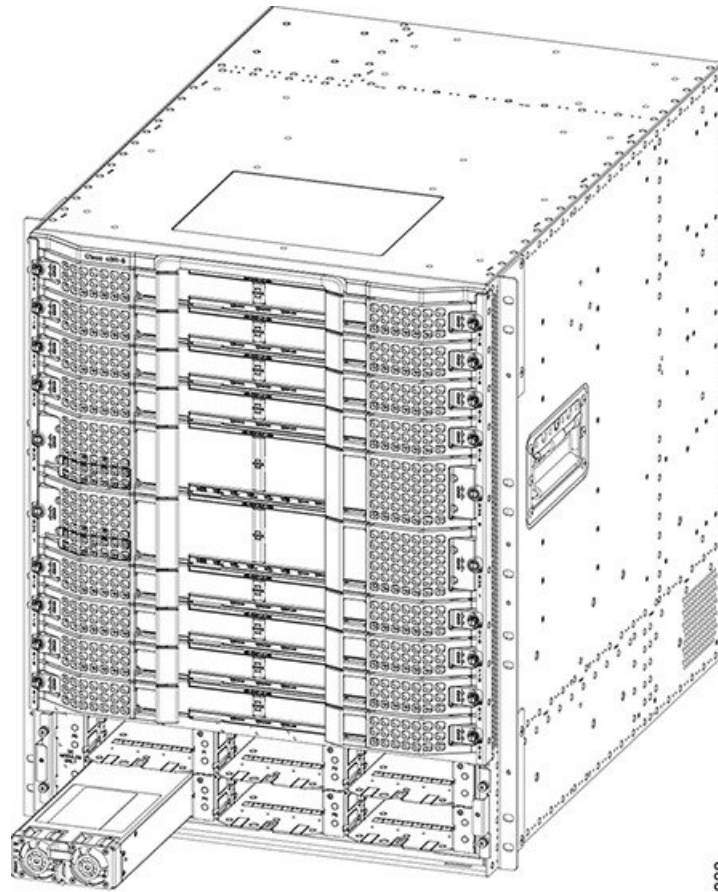
- Step 1** Loosen the two screws on the front power entry bezel using a 3/16" flat-blade torque screwdriver. Remove the front power entry bezel from the chassis.

**Figure 3: Removing the Front Power Entry Bezel from the Chassis**



- Step 2** Loosen the screw on the Power Module using a 3/16" flat-blade torque screwdriver.
- Step 3** Pull the handle down to disengage the Power Module from the chassis.
- Step 4** Slide the Power Module out of its bay with one hand while supporting the base of the module with your other hand.

**Figure 4: Removing the Power Module**



**Step 5** Place the removed Power Module in an antistatic bag.

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#### What to do next

- [Replace the Power Module](#) (if required).
- Position the front power entry bezel on the chassis. Insert and tighten the two screws using a 3/16" flat-blade torque screwdriver with a torque of 5-7 in-lb (0.56-0.79 Nm) to secure the bezel.

## Removing the FPEM from the Cisco cBR Chassis

#### Before you begin

- For an AC-powered Cisco cBR chassis, [remove the AC power connections](#).  
For an DC-powered Cisco cBR chassis, [remove the DC power connections](#).
- Attach an ESD-preventive wrist strap to your wrist and connect the other end to the grounding lug connected to the chassis.

- [Remove the Power Modules.](#)
- If you are replacing the entire power system, [remove the Power Cassette Module.](#)
- Be aware of the weight and size of the equipment. Handle it with care.

### Required Tools and Equipment

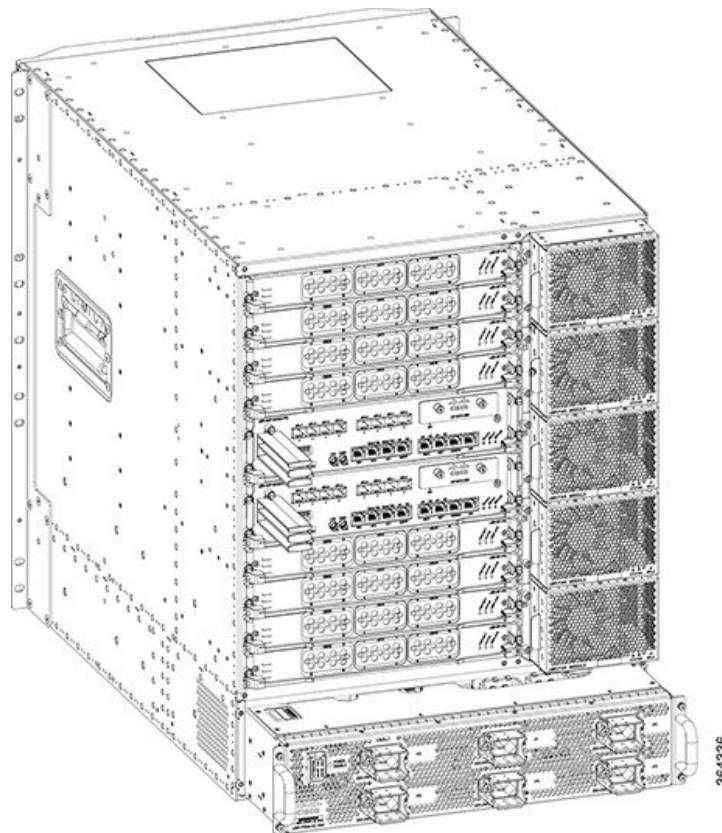
- ESD-preventive wrist strap
- T10 Torx screwdriver
- Antistatic bag

### Procedure

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**Step 1** Loosen and remove the four #6-32 Torx-head screws on the mounting flanges of the FPEM using a T10 Torx screwdriver.

*Figure 5: Removing the FPEM from the Chassis*



**Step 2** Slide the FPEM out of the chassis using the handles on either side applying even pressure to both handles.

**Step 3** Place the removed FPEM in an antistatic bag.

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**What to do next**

[Replace the FPEM](#) (if required).

## Removing the Power Cassette Module from the Cisco cBR Chassis

**Before you begin**

- [Remove the Power Modules](#).
- Be aware of the weight and size of the equipment. Handle it with care.

**Required Tools and Equipment**

- 3/16" flat-blade torque screwdriver
- T10 Torx screwdriver

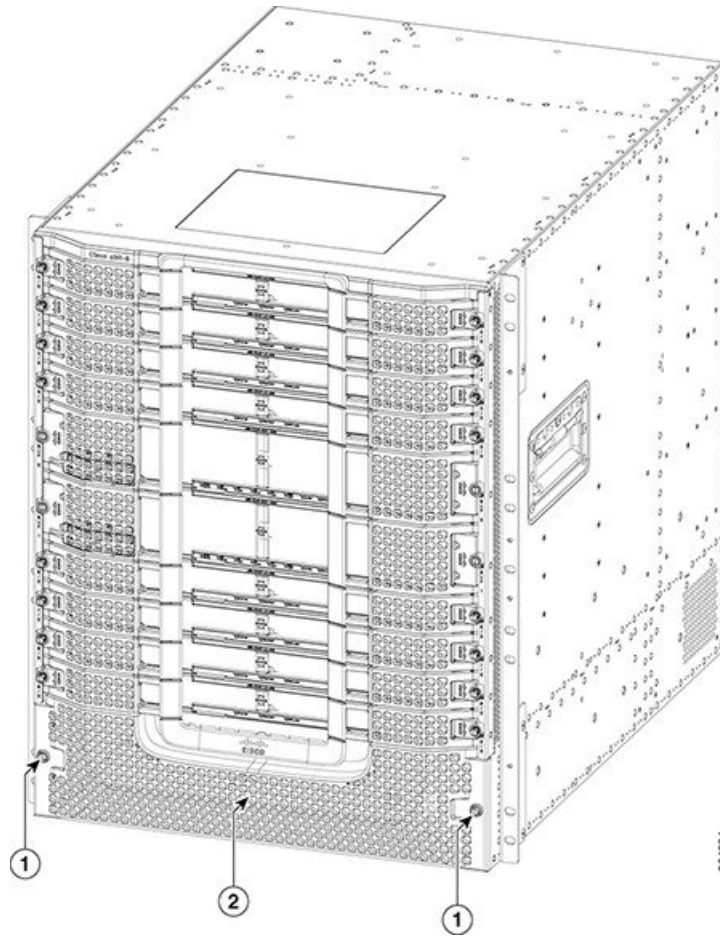
**Procedure**

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- Step 1** Loosen the two screws on the front power entry bezel using a 3/16" flat-blade torque screwdriver. Remove the bezel from the chassis.



**Figure 6: Removing the Front Power Entry Bezel from the Chassis**

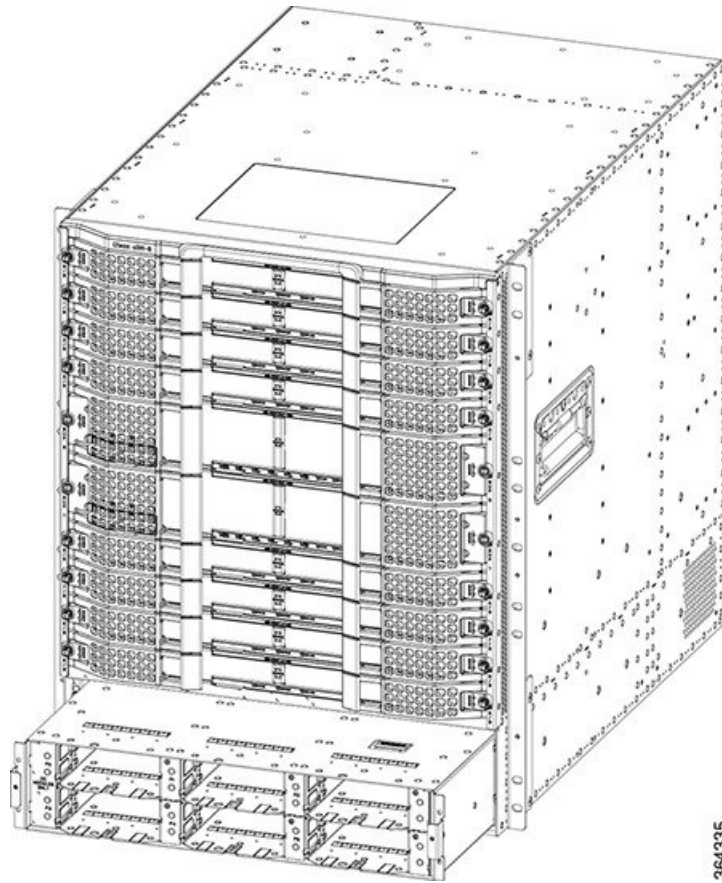


1	Screw	2	Front power entry bezel
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**Step 2** Loosen and remove the four #6-32 Torx-head screws on the Power Cassette Module using a T10 Torx screwdriver.

**Step 3** Hold the side flanges on the Power Cassette Module with both your hands. Pull and slide the module out of the chassis applying even pressure to both your hands.

**Figure 7: Removing the Power Cassette Module from the Chassis**



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**What to do next**

- [Replace the Power Cassette Module](#) (if required).
- Position the front power entry bezel on the chassis. Insert and tighten the two screws using a 3/16" flat-blade torque screwdriver with a torque of 5-7 in-lb (0.56-0.79 Nm) to secure the bezel.





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