SR1200, SR1300, SR2200, and SR2300 Rail Kit Installation Guide

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Safety Guidelines

Installation Precautions

⚠ WARNINGS

SERVER POWER ON/OFF: The push-button on/off power switch on the front panel of the server does not turn off the AC power. To remove AC power from the server, you must unplug the AC power cord from either the power supply or wall outlet.

HAZARDOUS CONDITIONS—POWER SUPPLY: Hazardous voltage, current, and energy levels are present inside the power supply enclosure. There are no user-serviceable parts inside it; servicing should only be done by technically qualified personnel.

HAZARDOUS CONDITIONS—DEVICES AND CABLES: Hazardous electrical conditions may be present on power, telephone, and communication cables. Turn off the server and disconnect telecommunications systems, networks, modems, and the power cord attached to the server before opening it. Otherwise, personal injury or equipment damage can result.

AVOID INJURY: Lifting the server chassis and attaching it to the rack is a two-person job. If needed, use an appropriate lifting device. A fully loaded SR1200 or SR1300 server weighs approximately 13.6 kg (30 lbs.) and a fully loaded SR2200 or SR2300 server weighs approximately 23.1 kg (51 lbs.).

⚠ CAUTIONS

Temperature: The operating temperature of the server, when installed in an equipment rack, must not go below 5 °C (41 °F) or rise above 35 °C (95 °F). Extreme fluctuations in temperature can cause a variety of problems in your server.

Ventilation: The equipment rack must provide sufficient airflow to the front of the server to maintain proper cooling. It must also include ventilation sufficient to exhaust:

- A maximum of 1200 Btu's per hour for a fully loaded SR1200 or SR1300 server
- A maximum of 1840 Btu's per hour for a fully loaded SR2200 or SR2300 server

It is important to note that this is the maximum, and a minimum or typical system could be much less. You may want to calculate the BTU/hr more accurately for your configuration. An extra 500 BTU/hr over many systems would translate into a large error calculating air conditioning capacity.

Rail Kit Installation Procedures

This rail kit allows you to install the SR1200 1U chassis, SR1300 1U chassis, SR2200 2U chassis and the SR2300 2U chassis in most four-post rack and cabinet systems.

NOTE

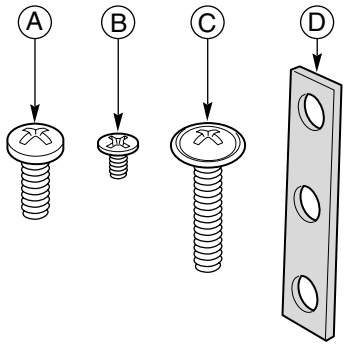
The illustrations show an SR1200 1U chassis, but the instructions apply to all chassis.

Required Tools

- Phillips† screwdriver

Kit Contents

- Slide rail assemblies—qty. 2
- Rail brackets—qty. 4
- Fastener pack—qty. 1



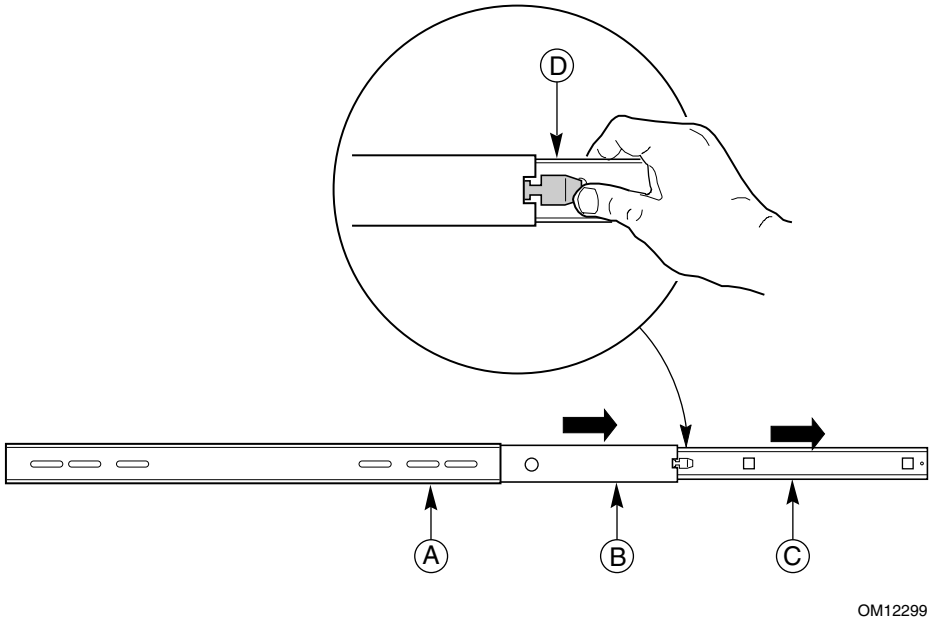
A. Screws, #10-32 x ½-inch—qty. 8
B. Screws, #6-32 x 3/16-inch—qty. 10
C. Screws, #10-32 x 7/8-inch—qty. 2
D. Nut bars—qty. 4

Figure 1. Fasteners Provided

Remove the Inside Rails

1. Fully extend a rail assembly (Figure 2). The finger tab (D) for the extension lock is revealed.
2. Press the finger tab and slide the inside rail (C) from the middle rail (B) until it completely separates.

NOTE: The middle rail (B) and outer rail (A) cannot be separated.

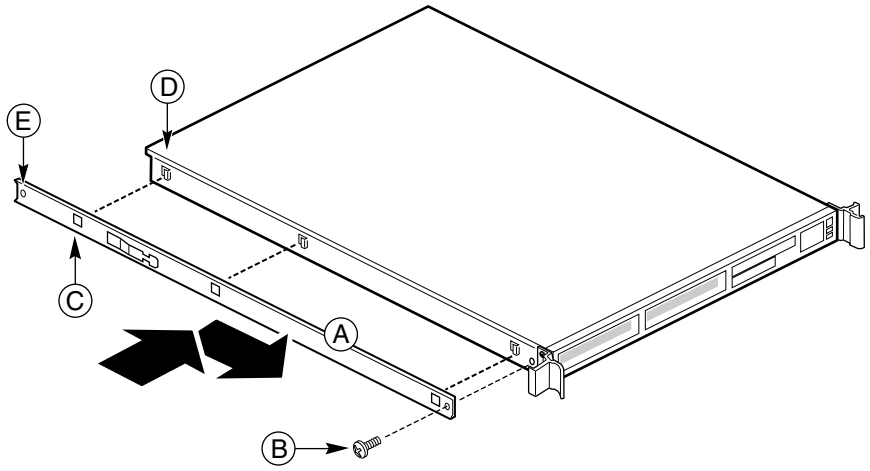


A. Outer rail
B. Middle rail
C. Inner rail
D. Finger tab on extension lock

Figure 2. Fully Extended Rail Assembly

Attach Inside Rails to Chassis

1. Position an inside rail (Figure 3, A) along one side of the chassis with the finger tab facing outward and located closer to the rear of the chassis.
2. Align the holes (C) in the rail with the tabs (D) on the chassis and place the rail against the chassis.
3. Slide the rail as far as it will go toward the front of the chassis to engage the tabs.
4. Fasten the rail to the chassis using one screw (B) at the front of the chassis.
5. In the same manner, attach the other inside rail to the other side of the chassis.

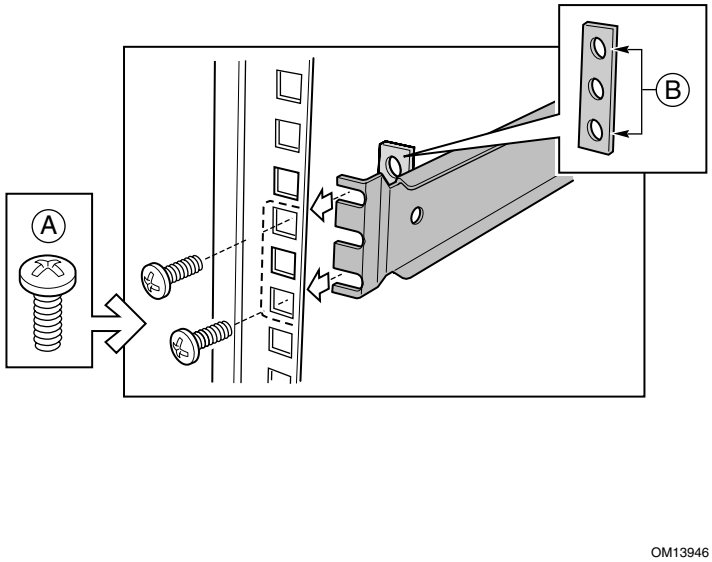


A. Inside rail
B. #6-32 x 3/16-inch screw
C. Attachment hole
D. Attachment tab
E. Attachment hole for cable manager (available from others)

Figure 3. Attaching an Inside Rail to the Chassis

Attach Rail Brackets to Posts

1. Using two screws (Figure 4, A), attach one nut bar (B) to the inside of the rack post. Do not completely tighten the screws—leave them loose enough to allow insertion of the brackets in the next step.
2. Insert the slotted foot of a rail bracket between each nut bar and post.
3. Align the face of the bracket foot with the inside edge of the rack post and firmly tighten the screws.



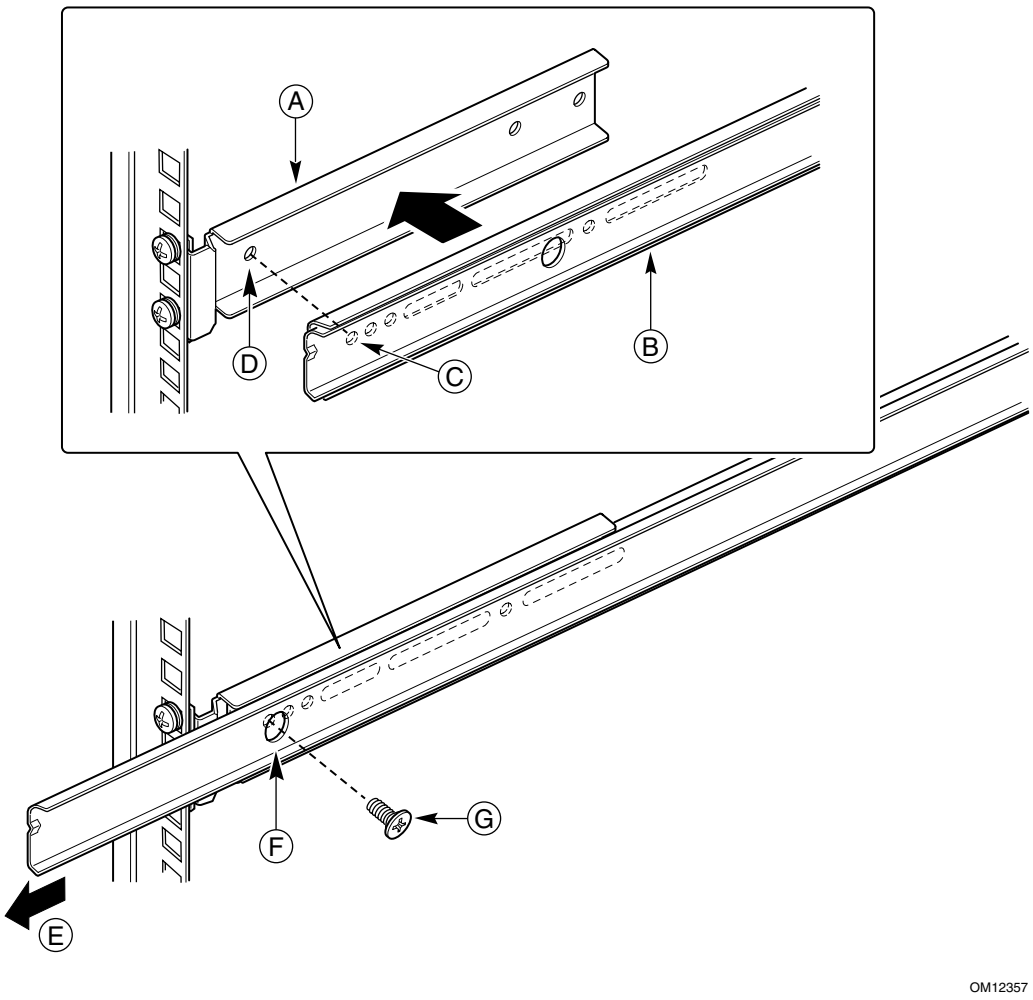
A. #10-32 x ½-inch screw
B. Nut bar

Figure 4. Attaching a Rail Bracket to a Rack Post

4. Repeat steps 1 to 3 above to install the other 3 brackets (2 Front & 2 Back). Ensure all Brackets are at the same height on the rack.

Attach a Rail Assembly to a Front Bracket

1. Position a rail assembly (middle and outer rails) with its black plastic end caps toward the rear of the rack and its outer rail closest to the brackets.
2. Align the front screw hole (Figure 5, C) in the outer rail (B) with the threaded hole (D) nearest the front of the front bracket (A) and fit the rail assembly into the front and rear brackets.
3. Slide the middle rail toward the front (E) until the access hole (F) in the middle rail is aligned with the front screw hole (C) in the outer rail.
4. Insert screw (G) through the access hole and loosely attach the outer rail to the front bracket.
5. In a similar manner to steps 2 through 4, install a screw through a slot in the outer rail and into the rear-most threaded hole in the front bracket. Firmly tighten this screw.
6. Firmly tighten the front screw (G) installed loosely in step 4.
7. In the same manner, attach the other rail assembly to the other side.

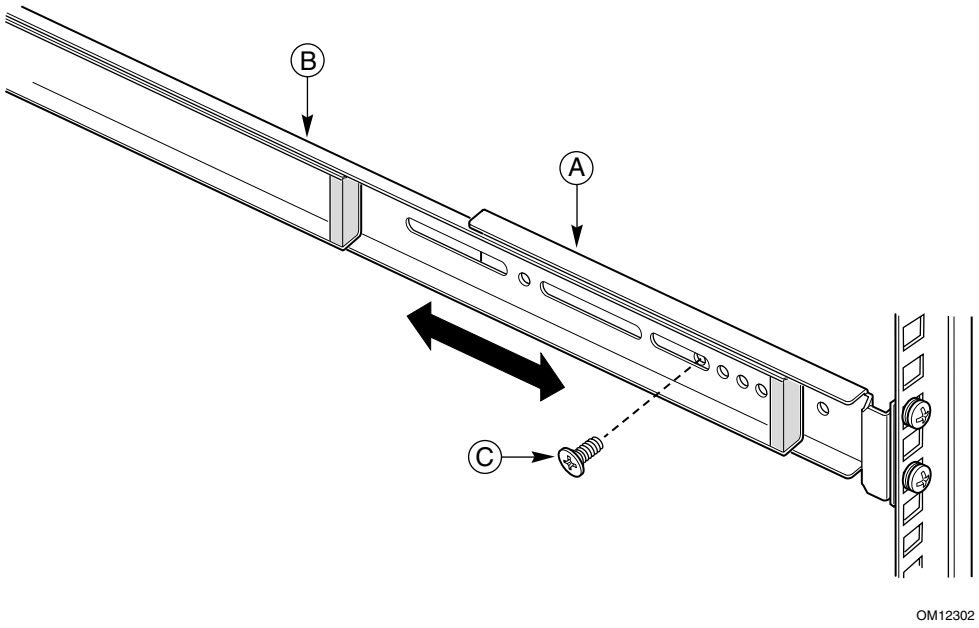


A. Front bracket
B. Outer rail
C. Screw hole
D. Threaded hole
E. Middle rail
F. Access hole
G. #6-32 x 3/16-inch screw

Figure 5. Attaching a Rail Assembly to a Front Bracket

Attach a Rail Assembly to a Rear Bracket

1. Slide the middle rail toward the front until the rear bracket area is accessible.
2. Attach the rear end of the outer rail (B) to the rear bracket (A) with at least one screw (C). If possible, attach at two places.
3. In the same manner, attach the other rail assembly to the other side.



A. Rear bracket
B. Outer/middle rail assembly
C. #6-32 x 3/16-inch screw

Figure 6. Attaching a Rail Assembly to a Rear Bracket

Install the Chassis on the Rails

1. Fully extend the left and right rails (Figure 7, A) until the extension locks have engaged and the rails will not push back in. The rail system is now ready to receive the chassis.

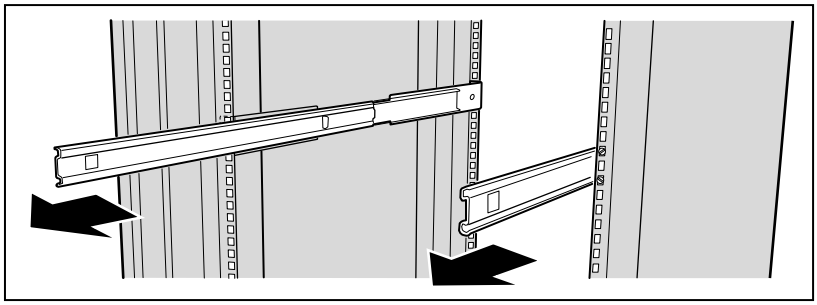


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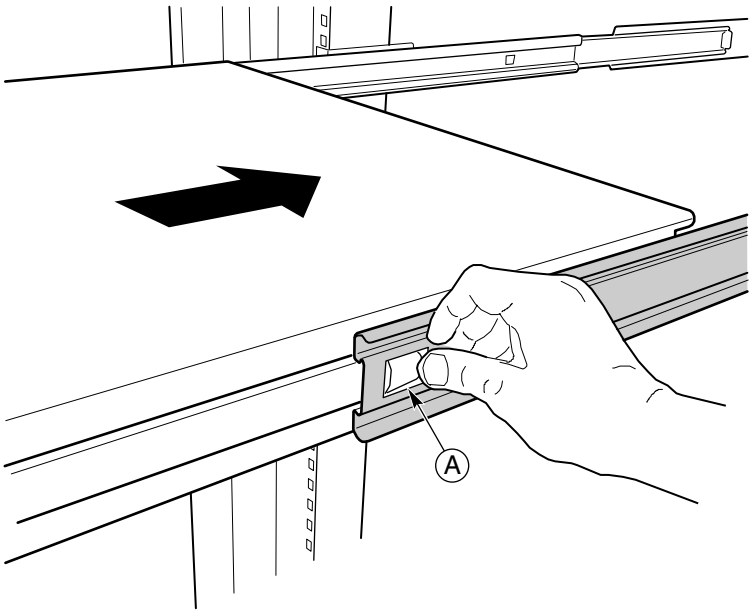
Figure 7. Rails Fully Extended

⚠ **CAUTION**

Lifting and placing the chassis in the rails is a two-person job. If needed, use an appropriate lifting device. A fully loaded SR1200 or SR1300 server weighs approximately 13.6 kg (30 lbs.) and a fully loaded SR2200 or SR2300 server weighs approximately 23.1 kg (51 lbs.).

2. With the chassis front facing you, lift the chassis and carefully insert the rails attached to the chassis in the extended rails.
3. Slide the chassis toward the rear of the cabinet until the rails lock together.

4. Depress and hold down the finger tabs (Figure 8, A) on both extension locks while sliding the chassis toward the rear.



A. Finger tab on extension lock

Figure 8. Releasing the Extension Locks

5. Slide the chassis all the way into the rack until the chassis handles are against the front posts.