Compaq StorageWorks

Fibre Channel Switch, 8-/16-Port Universal Mounting Kit

Open Card Completely Before Beginning Installation Procedures
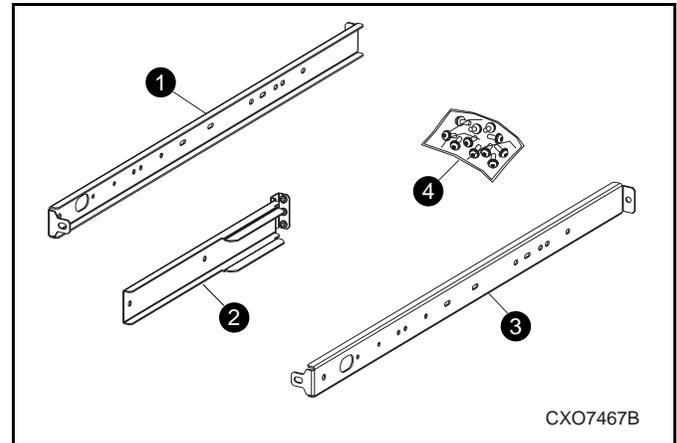
About This Card

This card identifies the contents of the universal mounting kit and provides procedures for mounting Fibre Channel 8-port (380591–B21/ DS–DSGGA–AA or 176219–B21/ DS–DSGGC–AA) and 16-port (380578–B21/ DS–DSGGA–AB or 212776–B21/DS–DSGGC–AB) switches into the following Compaq racks:

*   RETMA 41U or 42U
*   Compaq Classic
*   Metric SW600

Kit Contents

CXO7467B

NOTE: This kit contains parts for multiple rack installations. Not all kit parts are needed for all rack installations.

❶ Mounting brackets (2)

❷ Extender brackets (2)

❸ Slide brackets (2)

❹ Bag of miscellaneous hardware:

*   Snap-on cable ties (2)
*   Clip nuts (4)
*   Alignment washers (8)
*   Pan head SEMS screws, 10-32 x 9/32 inches (4)
*   Pan head SEMS screws, 10-32 x 5/8 inches (16)
*   Flat washers for #10 screws (4)
*   Pan head SEMS screws, 8-32 x 1/4 inches (4)
*   Flat washers for #8 screws (4)

Tools Required

*   No. 2 Phillips screwdriver

Installation Process Orientation

The current or planned configuration of rack components determines which installation process orientation to follow. A key consideration is whether the cables are routed at the front or rear of the rack.

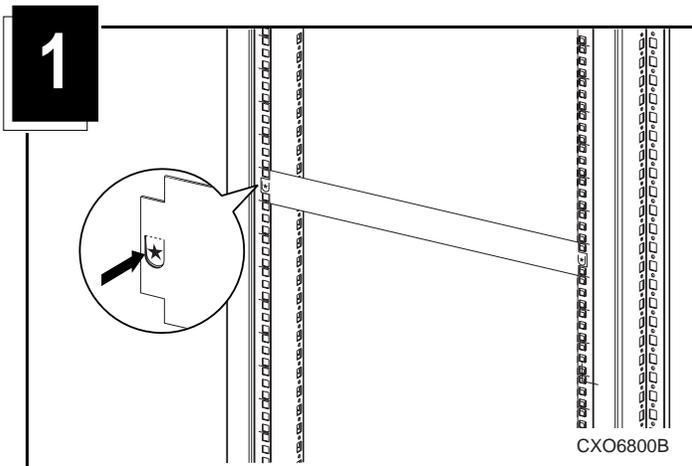General rack configuration guidelines include:

- For RETMA 41U and metric SW600 racks, follow procedures as oriented from the rack-front.

- For RETMA 42U and Compaq Classic racks, either orientation—rack-front or rack-rear—configuration is possible. Install as desired.
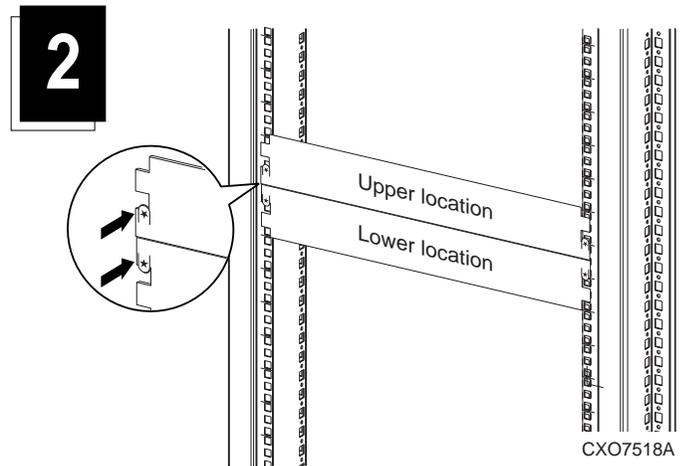
Beginning the Installation Process

If available, use the rack-mounting template shipped with the 8- or 16-port switch to determine the installation location within the rack. Otherwise, read this section and mark rail holes as required, using a mounting bracket.

IMPORTANT: Ensure that the template-front and back are used according to the desired installation orientation. In *rack-front* installations, the template-front is used at the rack-front and template-back is used at the rack-rear. In *rack-rear* installations, the template-front is used at the rack-rear and template-back is used at the rack-front.
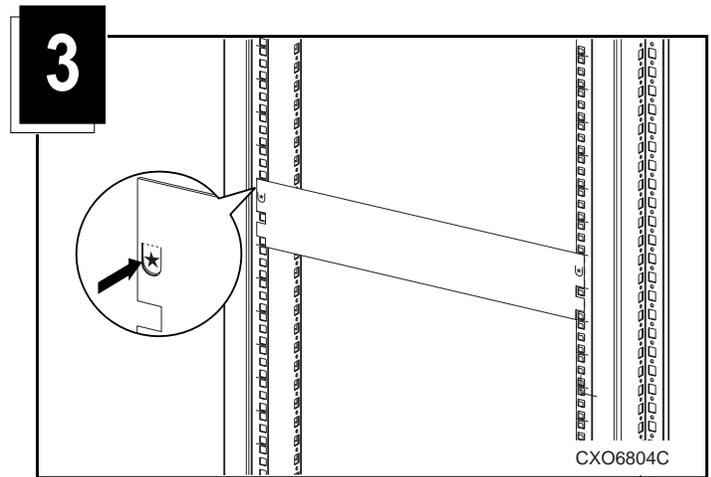
1. Position the template-front on the vertical rails to match the template hole pattern to the rail holes.

   - For 8-port switches, see Figure 1.

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- For 1.5U 16-port switches, see Figure 2.

Upper location
Lower location

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- For 2U 16-port switches, see Figure 3.

CXO6804C

2. Pencil-mark the front mounting bracket holes with an M.

3. Position the template-back on the rack-rear vertical rails, aligning the template parallel with the rack-front pencil markings.

4. Pencil-mark the rear mounting bracket holes with an M.

Attaching the Mounting Brackets

Attach two mounting brackets, using the appropriate procedure for the rack type.
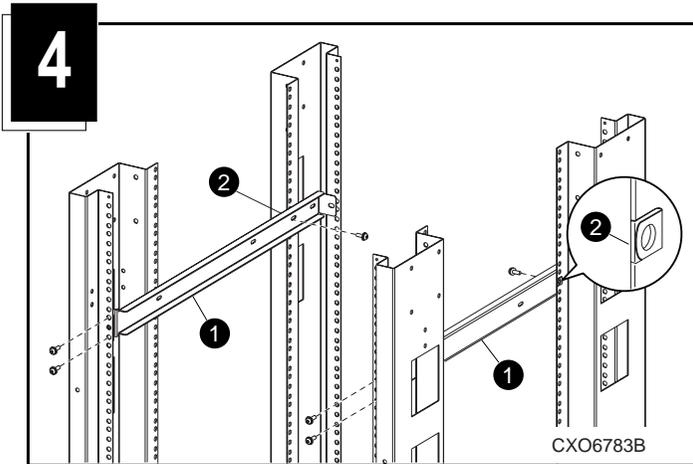
⚠️ **WARNING: To reduce the risk of personal injury or equipment damage during installation, never extend multiple components installed in the rack at the same time. A rack may become unstable if more than one component is extended for any reason.**

RETMA 41U Racks

1. Position each mounting bracket (see Figure 4, ❶) with the rail holes pencil-marked M.
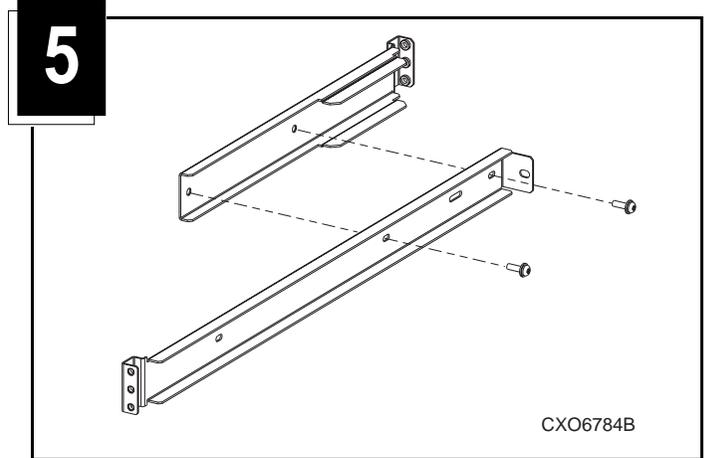
   IMPORTANT: Finger-tighten all three mounting bracket screws to facilitate alignment. Then secure screws in the top and bottom mounting bracket holes prior to securing the single screw at the rear of the bracket. Ensure that the mounting bracket is parallel in the rack from front to back.

2. Install a clip nut ❷ and secure, using pan head SEMS screws (10-32 x 5/8 inches).
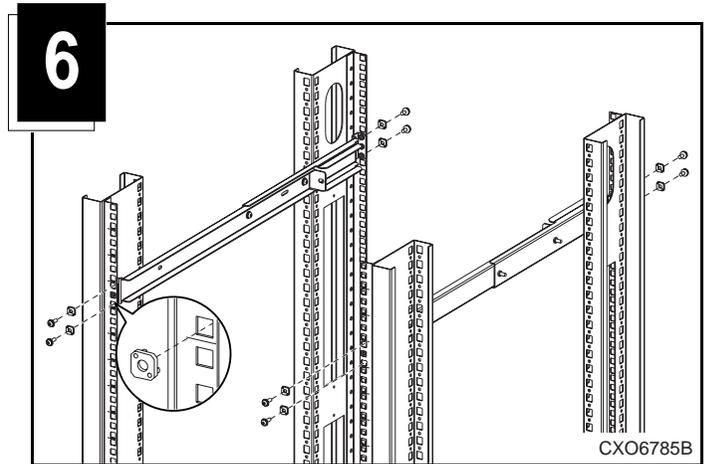

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RETMA 42U and Compaq Classic Racks

1. Connect an extender bracket to each mounting bracket (see Figure 5) and finger-tighten two pan head SEMS screws (10-32 x 5/8 inches).

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2. Position each mounting bracket behind the vertical rail, aligning it with the rail holes pencil-marked M.

3. Secure each mounting bracket using alignment washers and pan head SEMS screws (10-32 x 5/8 inches) as shown in Figure 6.

   IMPORTANT: Position each alignment washer to mate smoothly against the vertical rail prior to fully tighting the screw.
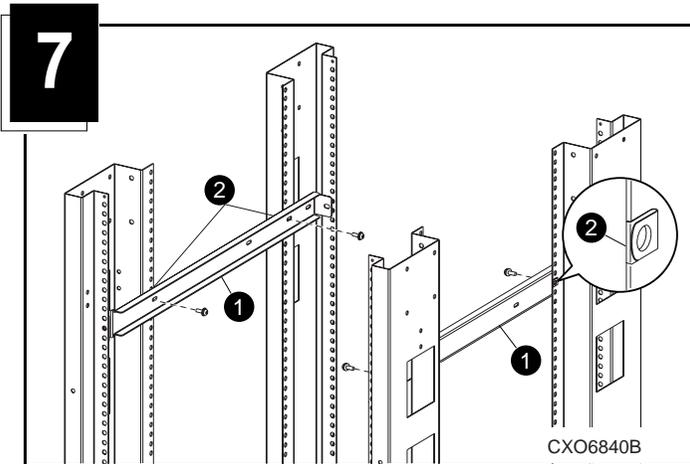

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4. Fully tighten the four screws installed in step 1 (see Figure 5).

   IMPORTANT: To establish full strength of the extended bracket, ensure that screws bonding the mounting bracket and extender bracket are fully tightened prior to proceeding.

Metric Racks

1. Position each mounting bracket (see Figure 7, ❶) with the rail holes pencil-marked M.

2. Identify clip nut ❷ mounting holes and install two clip nuts for each mounting bracket.

3. Secure each mounting bracket, using pan head SEMS screws (10-32 x 5/8 inches).

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Attaching the Slide Brackets
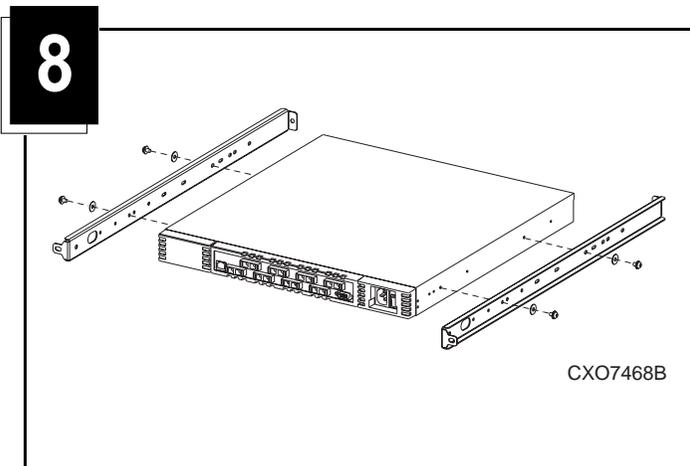
Secure two slide brackets to each switch.

⚠ **CAUTION:** Ensure that the mounting screws are the proper length and that flat washers are used. Installing screws longer than 9/32 inch or without a flat washer may damage the switch.

• For older 8-port switches (380591–B21/ DS–DSGGA–AA) in rack-front and rear installations, see Figure 8.

  Use four pan head SEMS screws (10-32 x 9/32 inches) and four flat washers to attach the mounting brackets to the switch.

  IMPORTANT: Attach the slide brackets using a flat washer with each screw. Without the flat washers, the screws contact with the power supply assembly inside the switch chassis.
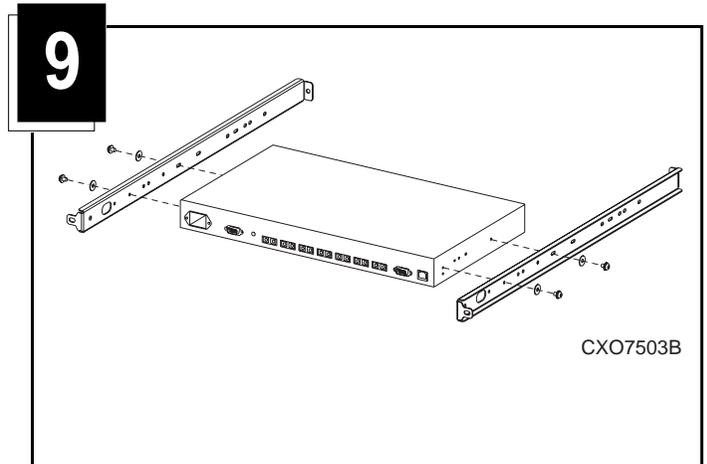

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• For newer 8-port switches (176219–B21/DS–DSGGC–AA), see Figures 9 and 10.

  Use four pan head SEMS screws (8-32 x 1/4 inches) and four flat washers to attach the mounting brackets to the switch.
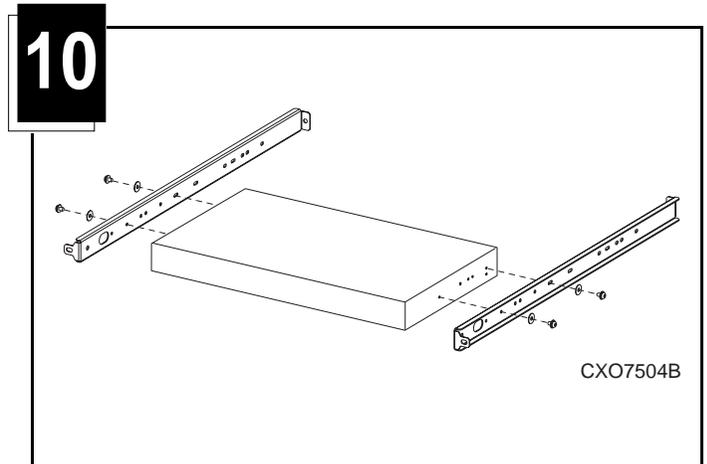
  IMPORTANT: Attach the slide brackets using a flat washer with each screw. Without the flat washers, the screws may contact components inside the switch chassis.

  NOTE: Install this 8-port switch with the cables at either the front or the rear of the rack.

  — For cable-front installations, attach the brackets as shown in Figure 9.

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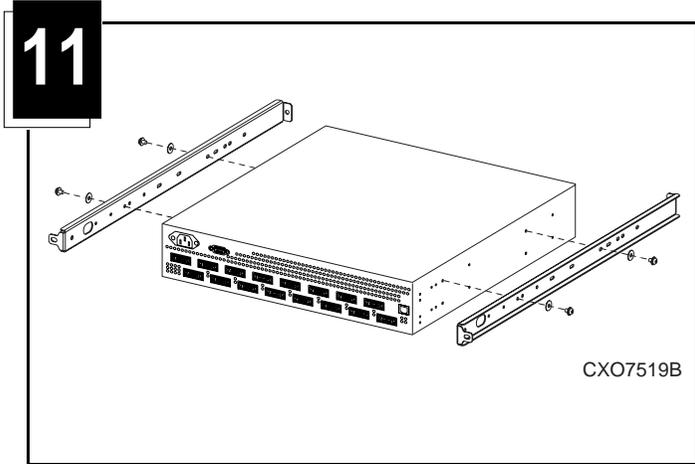 — For cable-rear installations, attach the brackets as shown in Figure 10.

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- For 1.5U 16-port switches (such as 212776–B21/ DS–DSGGC–AB)—Positioned approximately three inches from the rack front for cable-front installations (see Figures 11 and 12), or one inch from the rack-front for cable-rear installations (see Figures 13 and 14).

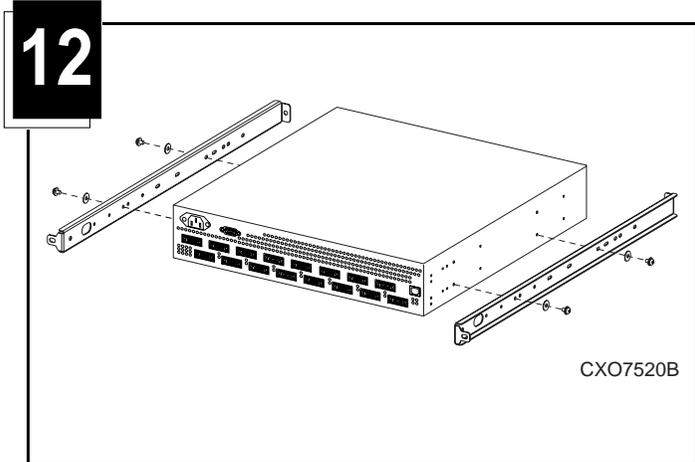 Use four pan head SEMS screws (10-32 x 9/32 in) and four flat washers to attach the mounting brackets to the switch.

  NOTE: Install this 16-port switch with the cables at either the front or the rear of the rack.

  This switch is 1.5U (1.75 in) in height and may be installed in pairs, using a second universal mounting kit to occupy a 3U space in the rack.

  References to upper and lower location—the top 1.5U or bottom 1.5U—are used to indicate the placement of the switch within a 3U space. Mount the switch so that no gap exists between the switch and the nearest enclosure.
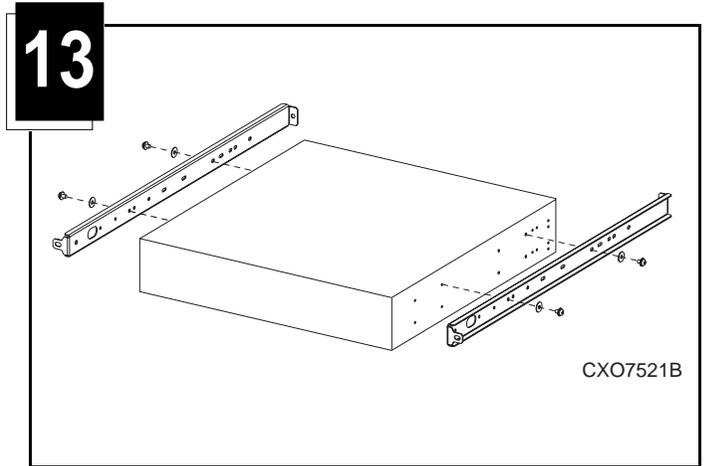
  — For cable-front installations in an upper location, attach the brackets as shown in Figure 11.
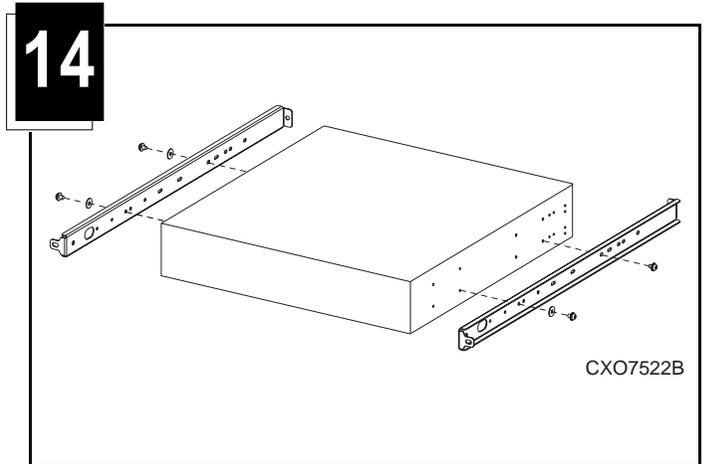

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  — For cable-front installations in a lower location, attach the brackets as shown in Figure 12.

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  — For cable-rear installations in an upper location, attach the brackets as shown in Figure 13.
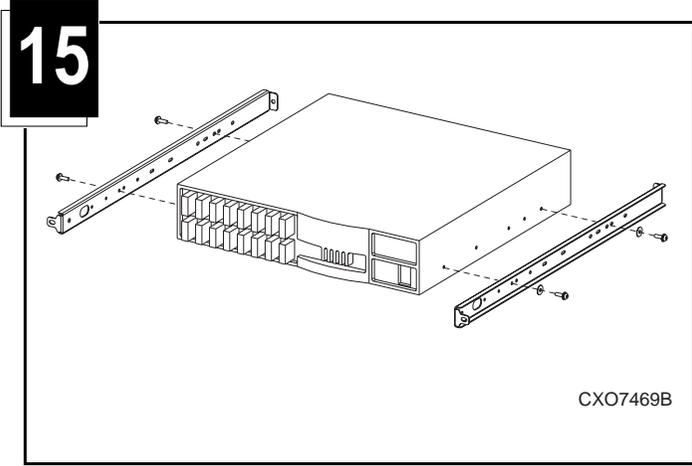

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  — For cable-rear installations in a lower location, attach the brackets as shown in Figure 14.
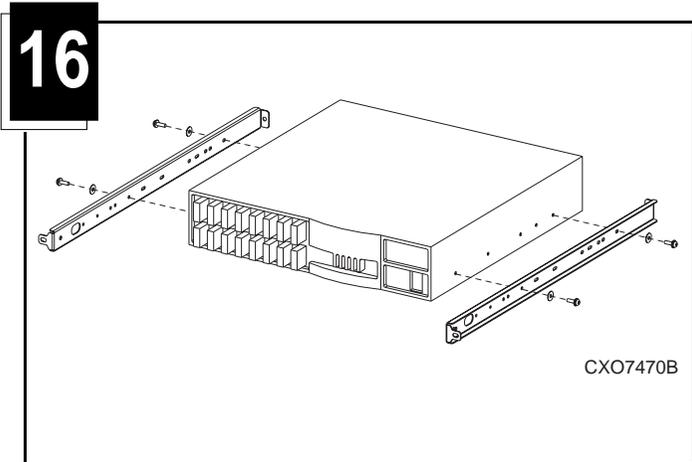

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- For 2U 16-port switches (such as 380578–B21/ DS–DSGGA–AB) in rack-front and rack-rear installations, see Figures 15 and 16.

  Use four pan head SEMS screws (10-32 x 9/32 inches) and four flat washers to attach the mounting brackets to the switch.

  — For rack-front installations, attach the brackets as shown in Figure 15.

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  — For rack-rear installations, attach the brackets as shown in Figure 16.

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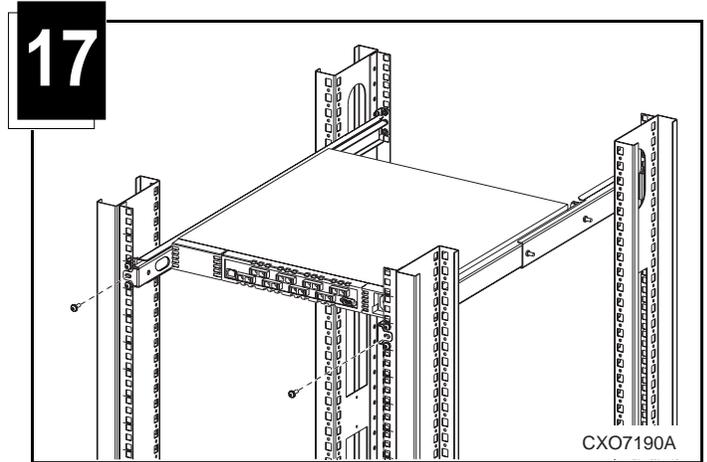
Installing the Switch into the Rack

⚠ **CAUTION:** Keep the switch parallel to the floor while sliding the slide brackets into the mounting brackets. Tilting the switch up or down may result in damage to the brackets.
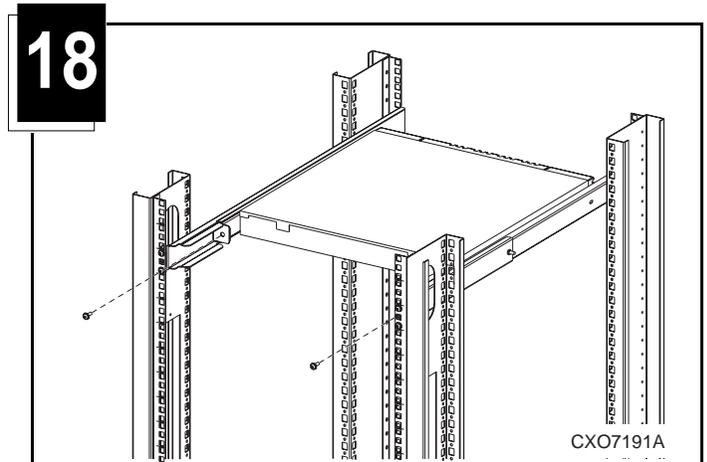
IMPORTANT: All switches use the same cable routing method, so a representative example is used here to illustrate this process.

Insert the switch slide brackets into the rack mounting brackets until fully seated, and secure the front and rear, using pan head SEMS screws (10-32 x 5/8 inches).

- Secure the front of the switch as shown in Figure 17 (representative example).
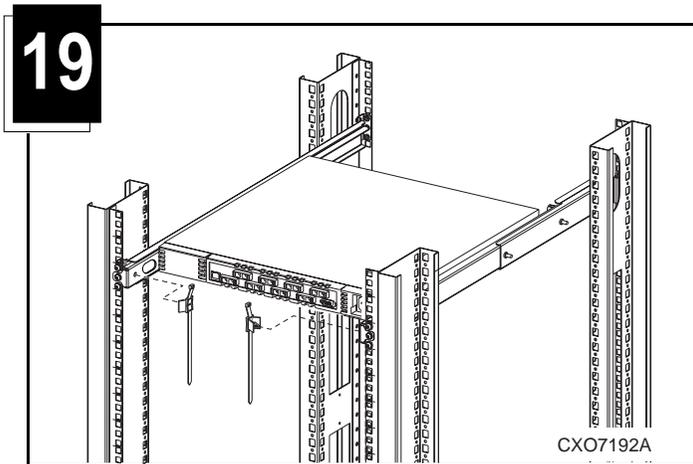
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- Secure the rear of the switch as shown in Figure 18 (representative example).

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Routing Power and Data Cables

IMPORTANT: All switches use the same cable routing method, so a representative example is used here to illustrate this process.

Install a snap-on cable tie into each slide bracket, as shown in Figure 19 (representative example), as desired, and route the power cables downward along the rack vertical rail. Route data cables based upon the current or planned rack configuration.

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This completes the hardware installation.