

Compaq StorageWorks Rear SCSI Mount Kit (DS-SW600-XB)

This document describes how to install a rear SCSI shelf into an Enterprise Storage Array (ESA) 10000 cabinet using a rear SCSI mount kit (DS-SW600-XB). This shelf is capable of holding two hubs, two external cache batteries (ECB), and two power strips. This document also includes procedures for installing the hubs, ECBs, and power strips into the rear SCSI shelf.

The three hubs that are compatible with this rack mount kit include DWZZH-03, -05, and -09.

Rack Mount Kit Contents

Use Table 1 to verify that all mounting kit parts are available.

Table 1 Rack Mount Kit Parts List

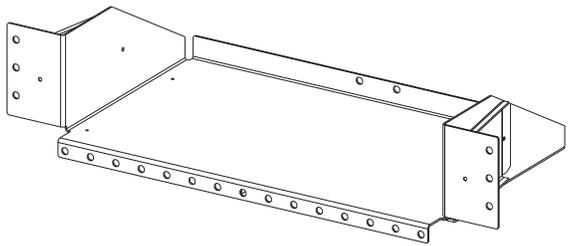
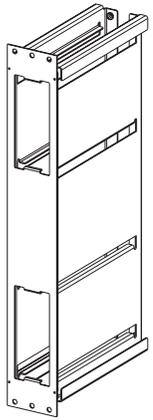
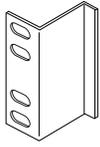
Description	Qty
 <p>Rear-Mount Shelf Support (70-33749-01)</p> <p>CXO6610A</p>	2
 <p>ECB Bracket (70-33750-01)</p> <p>CXO6609A</p>	1

Table 1 Rack Mount Kit Parts List (Continued)

Description	Qty
 <p>Locking Brackets (74-46439-01)</p> <p>CXO6246A</p>	4
Warning Label	1
Power Cords:	
Black	2
Gray	2
SEMS Screws:	
10-32 x 3/8 in Pan Head	4
10-32 x 5/8 in Pan Head	30
U-Nuts	26
Cable Ties	6
Push-Mount Cable Ties	8
Adhesive-Backed Cable Ties	6

Note

The number of cable ties provided in the mounting kit will secure all the power cords and ECB cables for shelf components.

Preliminary Information

The rear SCSI shelf rack mount installs in the rear of a ESA 1000 cabinet. Table 2 identifies:

- Hole locations where u-nuts are required
- Cabinet rail holes for installing the upper and lower rear-mount shelf supports
- Hole locations for connecting the ECB bracket to the upper and lower rear-mount shelf supports

Table 2 Mounting Holes Usage

Bracket	U-Nut/Mounting Hole Locations
Upper rear-mount shelf support	Cabinet rail holes 9, 10, and 11 from the bottom
Lower rear-mount shelf support	Cabinet rail holes 23, 24, and 25 from the bottom
ECB	Upper and lower rear-mount shelf support holes 7, 8, and 9 from the left or right

Note

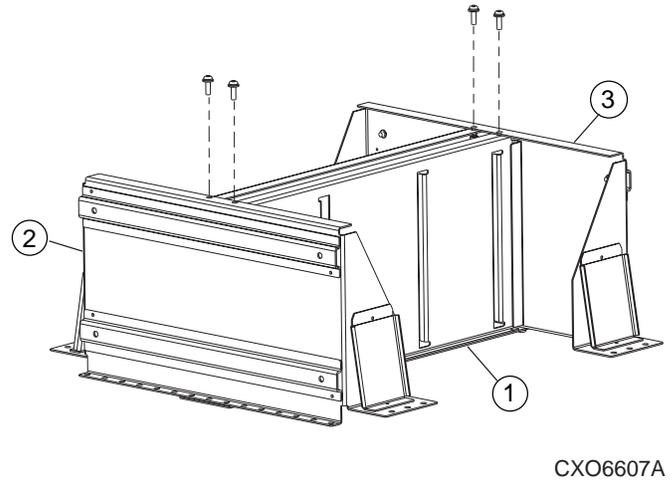
Count cabinet rail holes from the bottom to the top, beginning with hole 1.

Assembling a Rear SCSI Shelf

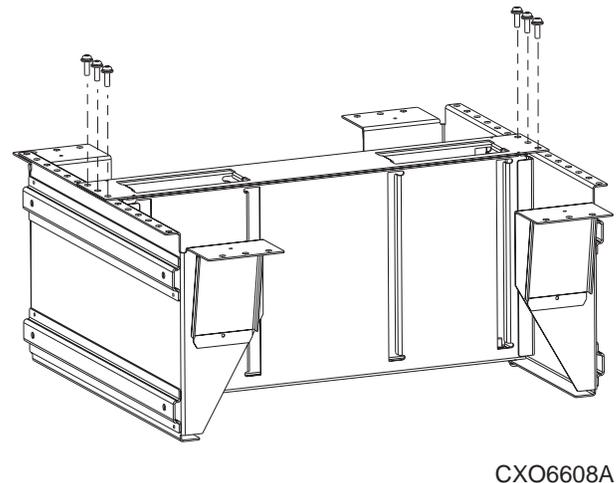
Complete the procedure in Table 3 to assemble a rear SCSI shelf.

Table 3 Rear SCSI Shelf Assembly Procedure

1. Insert three u-nuts in holes 7, 8, and 9 on both the upper and lower rear-mount shelf supports.
2. Using four (10-32 x 5/8 in) screws, secure the two rear-mount shelf supports to the ECB bracket.



3. Turn the three bracket assembly over (upside-down), exposing the face of shelf.



4. Using six (10-32 x 5/8 in) screws, secure the front of the ECB bracket to the upper and lower rear-mount shelf supports.

Installing a Rear SCSI Shelf

Complete the procedure in Table 4 to install a rear SCSI shelf into an ESA 1000 cabinet.

Table 4 Rear SCSI Shelf Installation Procedure

1. If applicable, remove all cable ties securing cables that may interfere with installing the shelf in the cabinet. Ensure all power cords and data cables are clear of the shelf installation area.
2. Bundle one black and one gray power cord together (leaving approximately 12 inches exposed at both ends) using an adhesive-backed cable tie.
3. Orient the cable bundle so that the female connector ends are directed toward the bottom of the cabinet and the male connector ends are directed toward the top of the cabinet.
4. Peel off the protective cover and attach the power cord bundle between the cabinet left inner and outer rails in the vicinity of rail holes 23 through 25.
5. Repeat steps 2 through 4 for the right side of the cabinet.
<p>Note</p> <p>The two power cords going down the left side of the cabinet provide power to the left hub; those going down the right side of the cabinet provide power to the right hub.</p>
6. Insert a u-nut in the following left and right cabinet rail holes, counting upward from the bottom: 9, 10, 11, 23, 24, and 25.

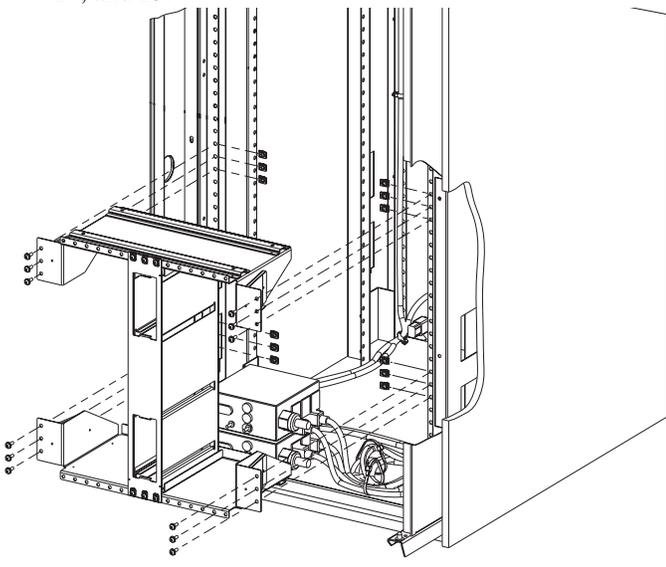


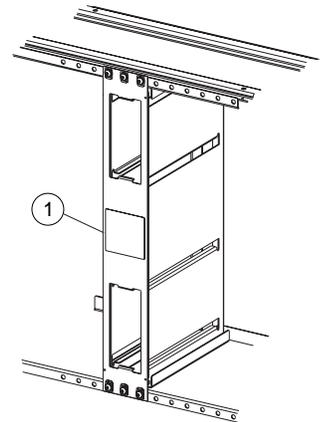
Table 4 Rear SCSI Shelf Installation Procedure (Continued)

7. Align the upper rear-mount shelf support holes with the u-nuts installed in the cabinet rail holes 23, 24, and 25, and secure the upper rear-mount shelf support with six (10-32 x 5/8 in) screws.
8. Secure the lower rear-mount shelf support with six (10-32 x 5/8 in) screws.
9. Reconnect and secure any cabling affected in step 1.

Affixing the Warning Label

Affix the “Warning, High Leakage Current” label (CALLOUT 1) on the ECB bracket as shown in Figure 1. Ensure the text is positioned horizontally and readable from left to right.

Figure 1 Label Placement



CXO6601A

Grounding the PDUs

PDUs within the cabinet must be grounded to dissipate high-leakage current. Compaq recommends connecting a separate grounding wire from the PDU to an electrical ground outside the cabinet.

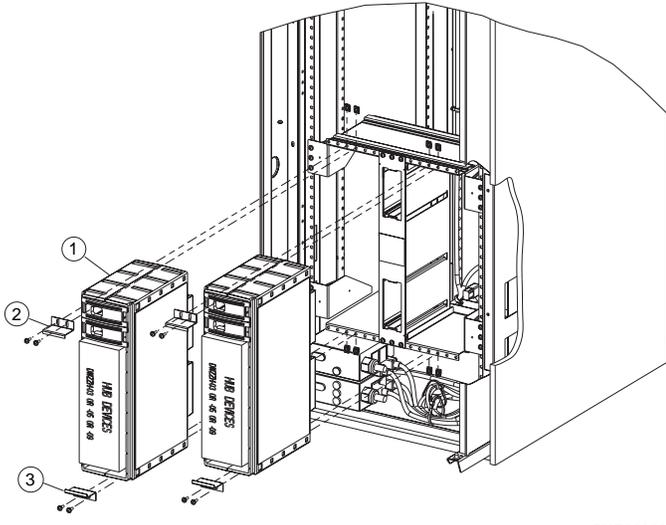
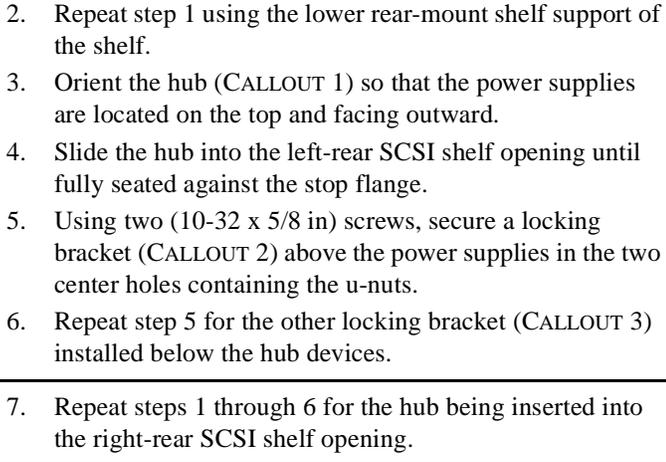
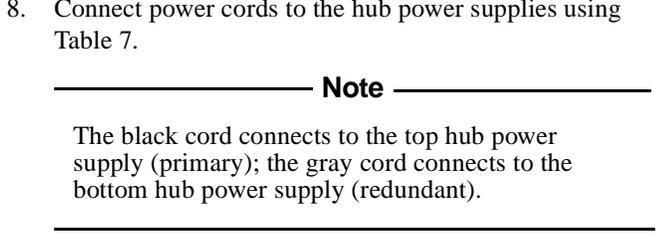
WARNING!

Secure a grounding wire to the rear of the PDU with the proper hardware. The end product user is responsible for meeting local and national electrical codes.

Installing a Hub

Complete the procedure in Table 5 to install a hub in a rear SCSI shelf.

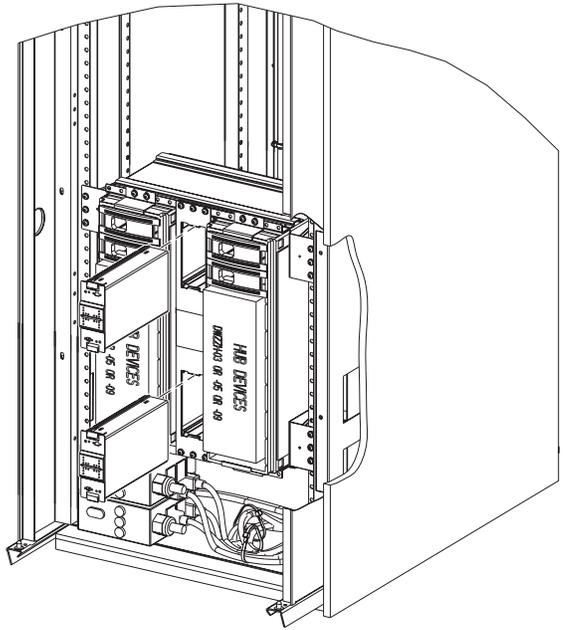
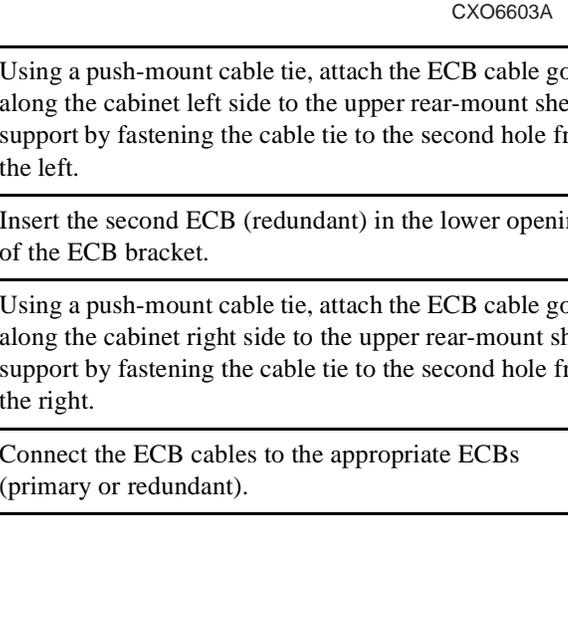
Table 5 Hub Installation Procedure

<ol style="list-style-type: none"> 1. Insert two u-nuts into holes 3 and 4 from the left side of the rear SCSI shelf upper rear-mount shelf support. 	 <p>CXO6602A</p>
<ol style="list-style-type: none"> 2. Repeat step 1 using the lower rear-mount shelf support of the shelf. 3. Orient the hub (CALLOUT 1) so that the power supplies are located on the top and facing outward. 4. Slide the hub into the left-rear SCSI shelf opening until fully seated against the stop flange. 5. Using two (10-32 x 5/8 in) screws, secure a locking bracket (CALLOUT 2) above the power supplies in the two center holes containing the u-nuts. 6. Repeat step 5 for the other locking bracket (CALLOUT 3) installed below the hub devices. 	 <p>CXO6602A</p>
<ol style="list-style-type: none"> 7. Repeat steps 1 through 6 for the hub being inserted into the right-rear SCSI shelf opening. 	 <p>CXO6602A</p>
<ol style="list-style-type: none"> 8. Connect power cords to the hub power supplies using Table 7. <p style="text-align: center;">Note</p> <p>The black cord connects to the top hub power supply (primary); the gray cord connects to the bottom hub power supply (redundant).</p>	

Installing an ECB

Complete the procedure in Table 6 to install an ECB in the rear SCSI shelf.

Table 6 ECB Installation Procedure

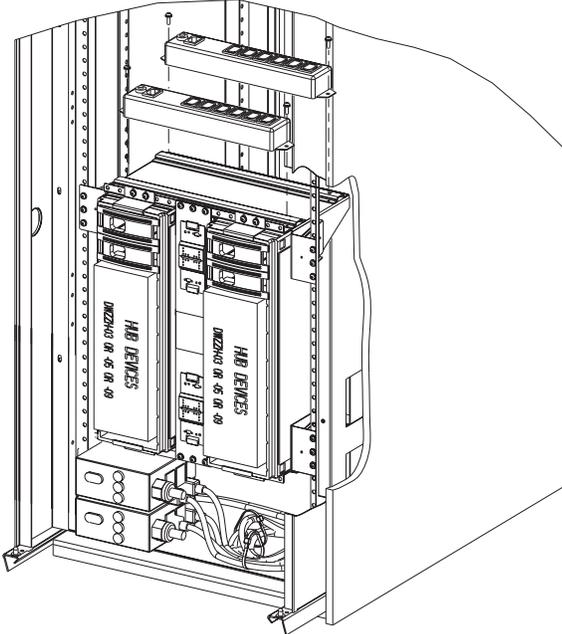
<ol style="list-style-type: none"> 1. Insert the first ECB (primary) in the upper opening of the ECB bracket. 	 <p>CXO6603A</p>
<ol style="list-style-type: none"> 2. Using a push-mount cable tie, attach the ECB cable going along the cabinet left side to the upper rear-mount shelf support by fastening the cable tie to the second hole from the left. 	 <p>CXO6603A</p>
<ol style="list-style-type: none"> 3. Insert the second ECB (redundant) in the lower opening of the ECB bracket. 	 <p>CXO6603A</p>
<ol style="list-style-type: none"> 4. Using a push-mount cable tie, attach the ECB cable going along the cabinet right side to the upper rear-mount shelf support by fastening the cable tie to the second hole from the right. 	
<ol style="list-style-type: none"> 5. Connect the ECB cables to the appropriate ECBs (primary or redundant). 	

Installing a Power Strip

Complete the procedure in Table 7 to install two power strips (primary and redundant) on a rear SCSI shelf.

Table 7 Power Strip Installation Procedure

1. Align the first power strip (primary; rear location) with the screw hole openings on the second raised rail—located on the top and rear SCSI shelf upper rear-mount shelf support.



CXO6605A

2. Using two (10-32 x 3/8 in) screws, secure the power strip to the shelf.
3. Repeat steps 1 and 2 for the second power strip (redundant; front location) using the front raised rail on the upper rear-mount shelf support.

Table 7 Power Strip Installation Procedure (Continued)

4. Connect all power cords according to Figure 2.

WARNING!

Remove all power to the cabinet prior to installing the power strips.

To prevent the possibility of injury or death as a result of electrical shock, always install the power cords exactly as shown in the Figure 2.

Note

To maintain power redundancy, never connect both power strips to the same PDU and never connect both hub power supplies to the same power strip.

Black cords connect to the primary power strip and primary hub power supplies. Gray cords connect to the redundant power strip and redundant hub power supplies.

Route power cords going from the power strips to the left hub along the left cabinet wall, down through the opening between the wall and rear SCSI shelf, and out to the front of the hub. For the right hub, route power cords the same way, but along the right wall.

Figure 2 AC Wiring Schematic

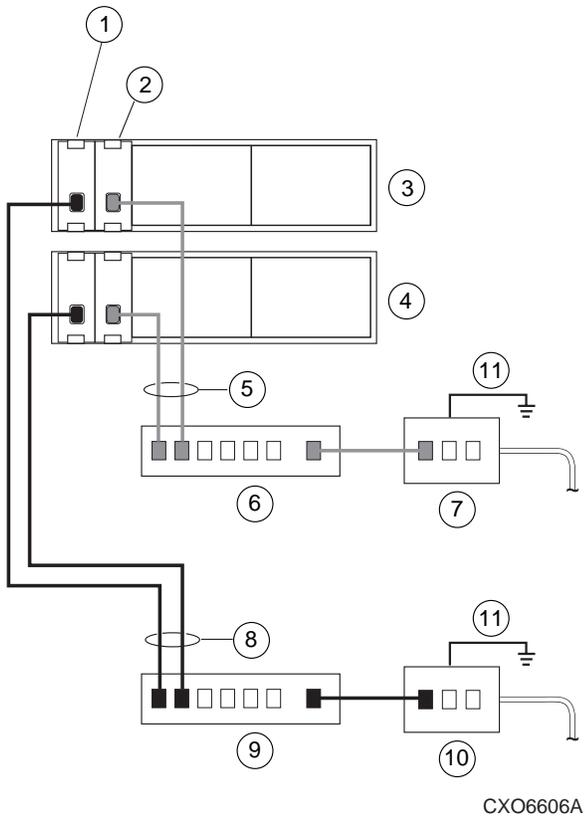


Figure CALLOUTS Legend

- | | |
|----------------------------------|-------------------------------|
| 1. Primary power supply | 7. Redundant PDU (top) |
| 2. Redundant power supply | 8. Black cords |
| 3. Left hub | 9. Primary power strip (rear) |
| 4. Right hub | 10. Primary PDU (bottom) |
| 5. Gray cords | 11. Ground wire |
| 6. Redundant power strip (front) | |