Installing an External Cache Battery Cable

Use these instructions to replace or install a second external cache battery (ECB) cable into a Departmental or Data Center cabinet. In either case, these instructions assume that the cache module and ECB are in place. See the *HSZ70 Array Controller HSOF Version 7.0 Service Manual* for help on installing an ECB or cache module.

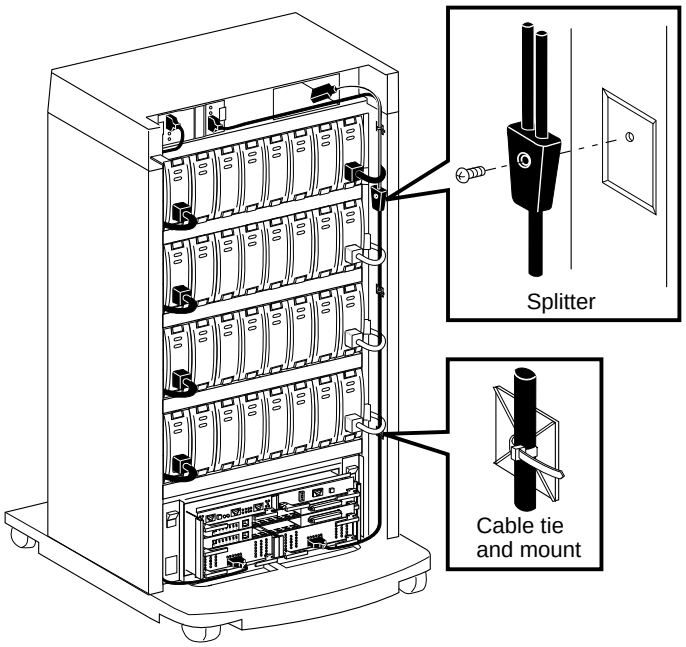
Precautions

The ECB cable uses very-high density cable interconnect connectors (VHDCI). These connectors have very small mating surfaces that can be adversely affected by dust and movement. Follow these precautions when you're connecting VHDCI cables:

- Clean the mating surfaces with a blast of clean air.
- Mate the connectors by hand, then tighten the retaining screws to 1.5 inch-pounds—approximately 1/4 additional turn after the connectors have fully mated.
- Test the assembly by gently pulling on the cable, which should not produce visible separation.

Departmental Cabinet

Figure 1. Routing the ECB Cable in a Departmental Cabinet



CXO5894A

1. Ensure that the ECB and cache module are in place as shown in Figure 1 and that the subsystem is shut down. See the service manual for installation and shutdown instructions.
2. Attach the splitter, countersink facing outward, in its recess as shown in Figure 1.
3. Attach three adhesive-backed cable tie mounts to the inside of the cabinet at the locations shown in Figure 1.
4. Connect the long "y" leg of the ECB cable to the right connector on the ECB.
5. If power supplies are used on the ECB-cable side of the cabinet, route the single leg of the ECB cable through the loops formed by the power supply cords.
6. Connect the single leg of the ECB cable to the cache module.
7. Install the cable ties and secure the ECB cable—tie both "y" legs of the ECB cable with the top cable tie.
8. Straighten the ECB cable and tighten the cable ties.
9. Restart the subsystem as described in the service manual.

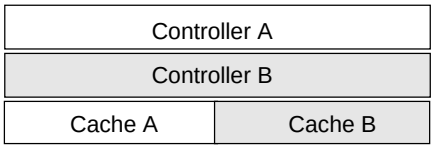
The DIGITAL logo is a trademark of Digital Equipment Corporation.
Copyright 1997 Digital Equipment Corporation
EK–HSZ70–TE. A01

Data Center Cabinet

The Data Center cabinet may require up to four ECB cables, one for each of the following cache modules:

- Top cache “A”
- Top cache “B”
- Bottom cache “A”
- Bottom cache “B”

Figure 2. Cache Modules “A” and “B”



CXO5608A

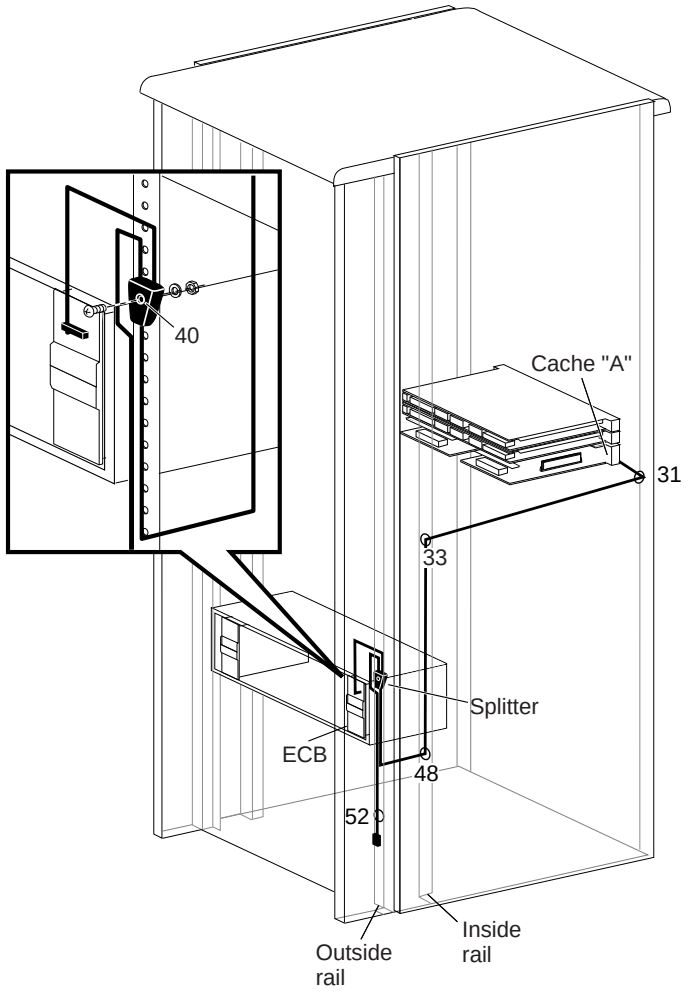
Figure 2 shows the relative location of cache modules “A” and “B” in an SW370 rack-mountable enclosure.

NOTE: *All directions are relative to your view of the cabinet. For example, “left, front” refers to the left side of the cabinet when you are in front of the cabinet. Likewise, “left, rear” refers to the left side of the cabinet when you are behind the cabinet.*

Installing the ECB Cable for the Top Cache “A”

1. Ensure that the ECB and cache module are in place as shown in Figure 3 and that the subsystem is shut down. See the service manual for installation and shutdown instructions.
2. Attach the splitter, countersink facing outward, at hole 40 of the right, rear outside rail as shown in Figure 3. Locate hole 40 by counting from the top of the cabinet (hole 1) to the bottom of the cabinet (hole 62).
3. Install the four snap-in cable ties at holes 31, 33, 48, and 52 as shown in Figure 3.
4. Connect the short “y” leg of the ECB cable to the top connector of the ECB as shown in Figure 3.
5. Tie the long “y” leg of the ECB cable at hole 52 as shown in Figure 3.
6. Route the ECB cable through the cable ties 48, 33, and 31 as shown in Figure 3. Do not tighten the cable ties.
7. Connect the single leg of the ECB cable to cache “A.”
8. Straighten the ECB cable and tighten the cable ties to hold it securely into place.
9. Restart the subsystem as described in the service manual.

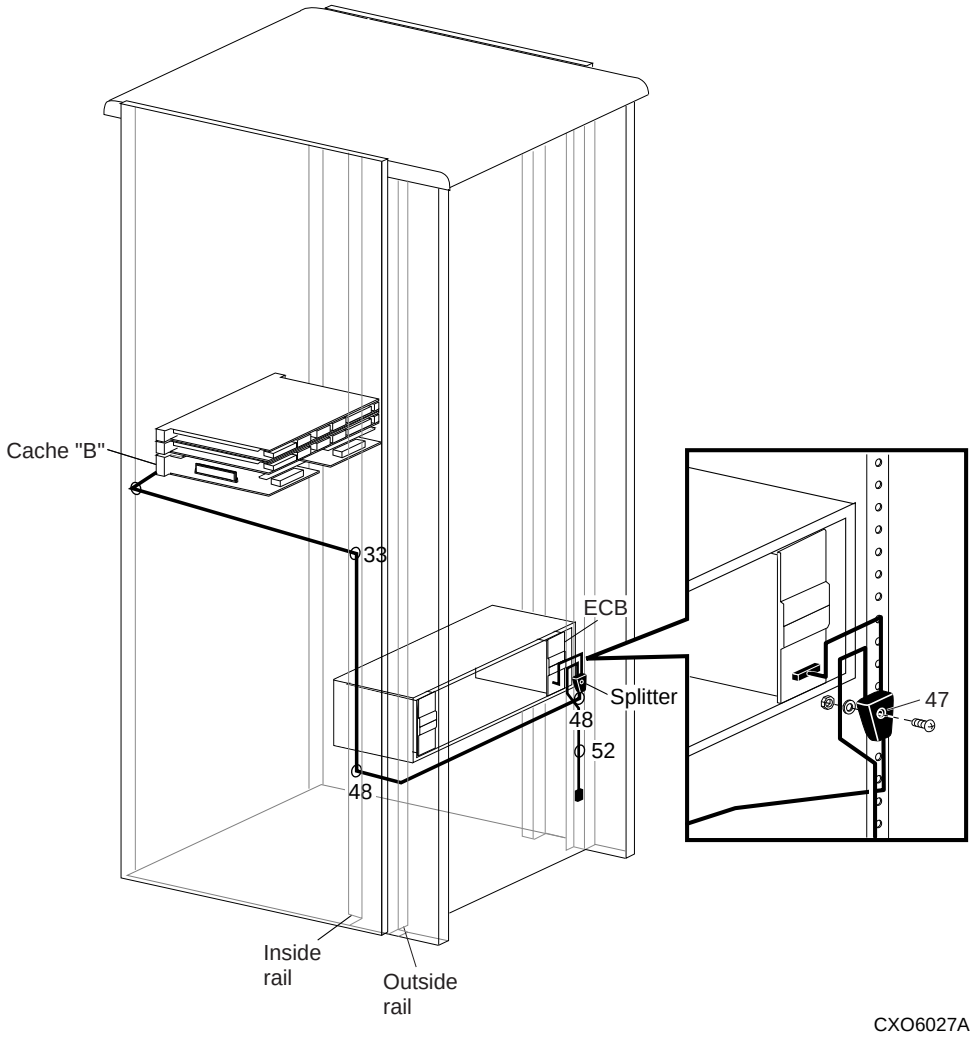
Figure 3. Top Cache “A” to ECB



CXO6025A

Installing the ECB Cable for the Top Cache “B”

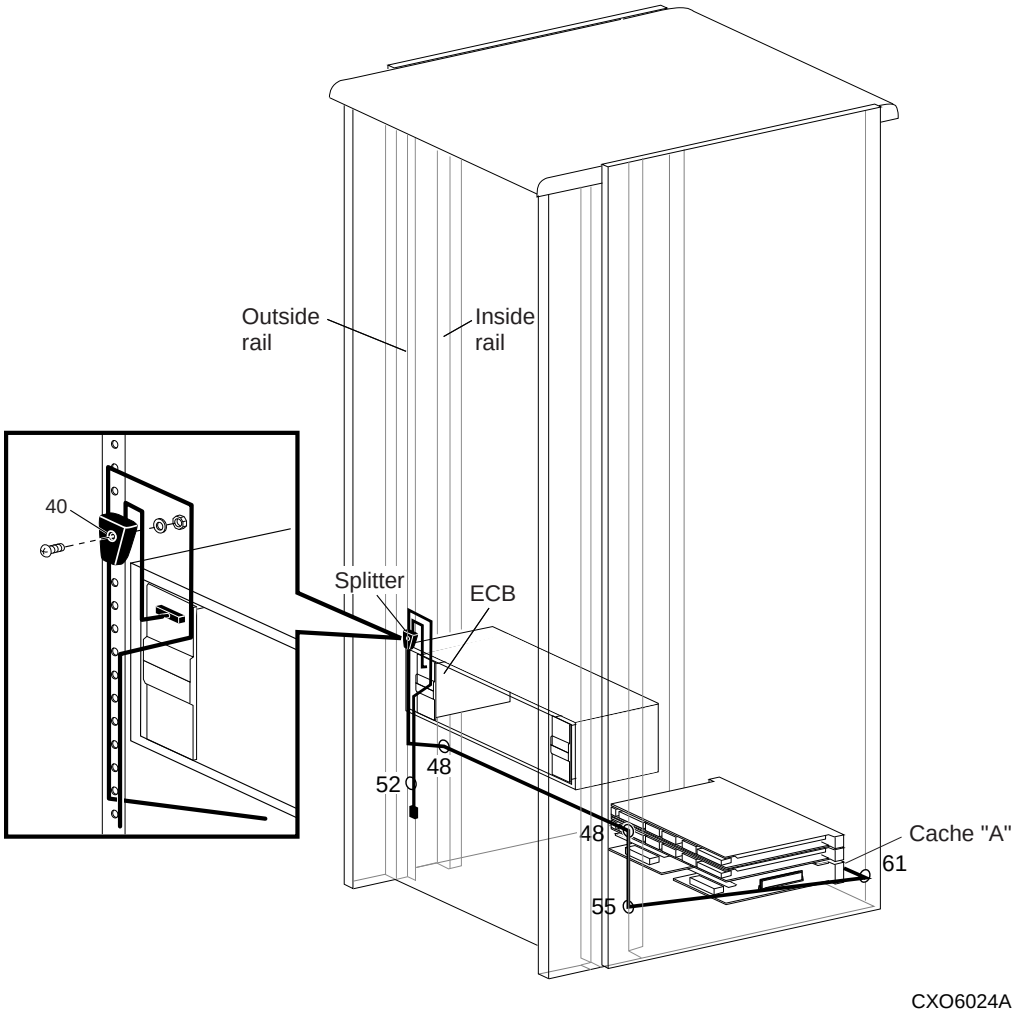
Figure 4. Top Cache “B” to ECB



1. Ensure that the ECB and cache module are in place as shown in Figure 4 and that the subsystem is shut down. See the service manual for installation and shutdown instructions.
2. Attach the splitter, countersink facing outward, at hole 47 of the right, rear outside rail as shown in Figure 4. Locate hole 47 by counting from the top of the cabinet (hole 1) to the bottom of the cabinet (hole 62).
3. Install the five snap-in cable ties at holes 31, 33, (right) 48, (left) 48, and 52 as shown in Figure 4.
4. Connect the short “y” leg of the ECB cable to the bottom connector of the ECB as shown in Figure 3.
5. Tie the long “y” leg of the ECB cable at hole 52 as shown in Figure 4.
6. Route the ECB cable through the cable ties (right) 48, (left) 48, 33, and 31 as shown in Figure 4. Do not tighten the cable ties.
7. Connect the single leg of the ECB cable to cache “B.”
8. Straighten the ECB cable and tighten the cable ties to hold it securely into place.
9. Restart the subsystem as described in the service manual.

Installing the ECB Cable for the Bottom Cache "A"

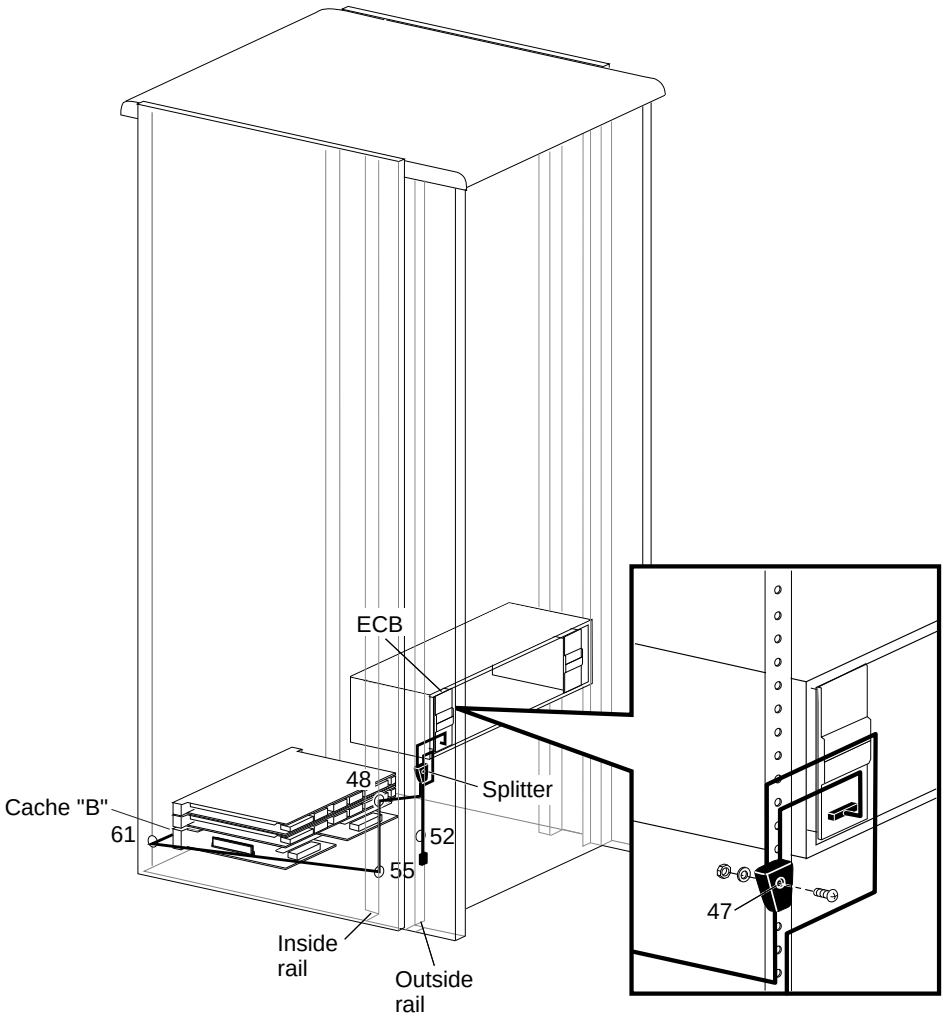
Figure 5. Bottom Cache "A" to ECB



1. Ensure that the ECB and cache module are in place as shown in Figure 5 and that the subsystem is shut down. See the service manual for installation and shutdown instructions.
2. Attach the splitter, countersink facing outward, at hole 40 of the left, rear outside rail as shown in Figure 5. Locate hole 40 by counting from the top of the cabinet (hole 1) to the bottom of the cabinet (hole 62).
3. Install the five snap-in cable ties at holes 61, 55, (left) 48, (right) 48, and 52 as shown in Figure 5.
4. Connect the short "y" leg of the ECB cable to the top connector of the ECB as shown in Figure 5.
5. Tie the long "y" leg of the ECB cable at hole 52 as shown in Figure 5.
6. Route the ECB cable through the cable ties (left) 48, (right) 48, 55, and 61 as shown in Figure 5. Do not tighten the cable ties.
7. Connect the single leg of the ECB cable to cache "A."
8. Straighten the ECB cable and tighten the cable ties to hold it securely into place.
9. Restart the subsystem as described in the service manual.

Installing the ECB Cable for the Bottom Cache “B”

Figure 6. Bottom Cache “B” to ECB



1. Ensure that the ECB and cache module are in place as shown in Figure 6 and that the subsystem is shut down. See the service manual for installation and shutdown instructions.
2. Attach the splitter, countersink facing outward, at hole 47 of the left, rear outside rail as shown in Figure 6. Locate hole 47 by counting from the top of the cabinet (hole 1) to the bottom of the cabinet (hole 62).
3. Install the four snap-in cable ties at holes 61, 55, 48, and 52 as shown in Figure 6.
4. Connect the short “y” leg of the ECB cable to the bottom connector of the ECB as shown in Figure 6.
5. Tie the long “y” leg of the ECB cable at hole 52 as shown in Figure 6.
6. Route the ECB cable through the cable ties 48, 55, and 61 as shown in Figure 6. Do not tighten the cable ties.
7. Connect the single leg of the ECB cable to cache “B.”
8. Straighten the ECB cable and tighten the cable ties to hold it securely into place.
9. Restart the subsystem as described in the service manual.