

StorageWorks SW800 Series Data Center Cabinet

Cable Distribution Unit Installation Guide

Order Number: EK-SWCDU-IS. A01

This document contains instructions for replacing StorageWorks™ SW800 data center cabinet cable distribution units (CDUs) and for installing the dual power option.

October 1993

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Any changes or modifications made to this equipment may void the user's authority to operate the equipment.

Operation of this equipment in a residential area may cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

The equipment described in this manual is listed by the Underwriters Laboratories Incorporated and bears the UL Listing mark. SW500-series cabinets are also certified by the Canadian Standards Association and TÜV Product Service GmbH and bear both the CSA certification and TÜV GS marks. The equipment also complies with the requirements for CE-mark Class A.

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1 Cable Distribution Unit Replacement Procedure

The following procedure describes how to install a replacement cable distribution unit (CDU).

1. Check the contents of the field-replaceable unit (FRU) kit against the appropriate parts list shown in Tables 1 and 2 to verify that it is complete.

Table 1 Cable Distribution Unit 60 Hz FRU Kit Parts List

Kit part number 70-30101-03 (120/208V, 60 Hz)		
Digital Part Number	Description	Quantity
EK-SWCDU-IS	CDU installation guide	1
90-00063-39	Screw, #10 Phillips, 1/2"	4
90-07032-00	U-nut, #10	4
70-30101-01	Cable distribution unit, 60 Hz	1

Table 2 Cable Distribution Unit 50 Hz FRU Kit Parts List

Kit part number 70-30101-04 (380-415V, 50 Hz)		
Digital Part Number	Description	Quantity
EK-SWCDU-IS	CDU installation guide	1
90-00063-39	Screw, #10 Phillips, 1/2"	4
90-07032-00	U-nut, #10	4
70-30101-02	Cable distribution unit, 50 Hz	1

2. If the CDU to be replaced is installed in a single power system, spin down all disk drives and halt all tape drives in the cabinet.
(This step may not be necessary if the cabinet is configured with the dual power option. The system can be left turned on while the defective CDU is replaced.)

WARNING

Hazardous voltage is present within the cabinet. Use extreme caution when working around components to which power is applied.

3. Open the cabinet door to expose the CDU to be replaced.
4. Switch the circuit breaker on the front panel of the CDU to the ○ (OFF) position.
5. Disconnect the CDU's primary power cable from the power source.
6. While supporting the CDU, remove and retain the screws holding the CDU to the cabinet chassis rails.

WARNING

Cabinet rail edges may be sharp and can slice or abrade skin and cable insulation.

7. Gently pull the CDU from the cabinet while carefully guiding the cables attached to it through the cabinet openings.
8. Support the CDU while disconnecting the ac power cables from its rear panel. The cables need not be labeled.
9. Remove the CDU completely from the cabinet while guiding the primary power cable through its cabinet openings.
10. Guide the primary power cable of the replacement CDU back through the same cabinet openings and position the CDU near the previously-removed power cables.
11. Connect the power cables to the connectors on the rear panel of the CDU, starting at the top-most connector and working down.
12. Slide the CDU into its mounting position while guiding the cables through the openings in the cabinet.
13. Mount the CDU using the screws retained in step 6.
14. Connect the CDU's power cable to the appropriate power source.
15. Switch the front-panel circuit breaker on the CDU to the | (ON) position.
16. Close and secure the cabinet door.
17. Restart all disk and tape drives and check them for proper function.

2 Data Center Cabinet Dual Power Option Installation Procedure

The following procedure describes how to install the dual power option kit.

1. Check the contents of the dual power option kit against the appropriate parts list shown in Tables 3 and 4 to verify that it is complete.

Table 3 SW800 Series Data Center Cabinet 60 Hz Dual Power Option Kit Parts List

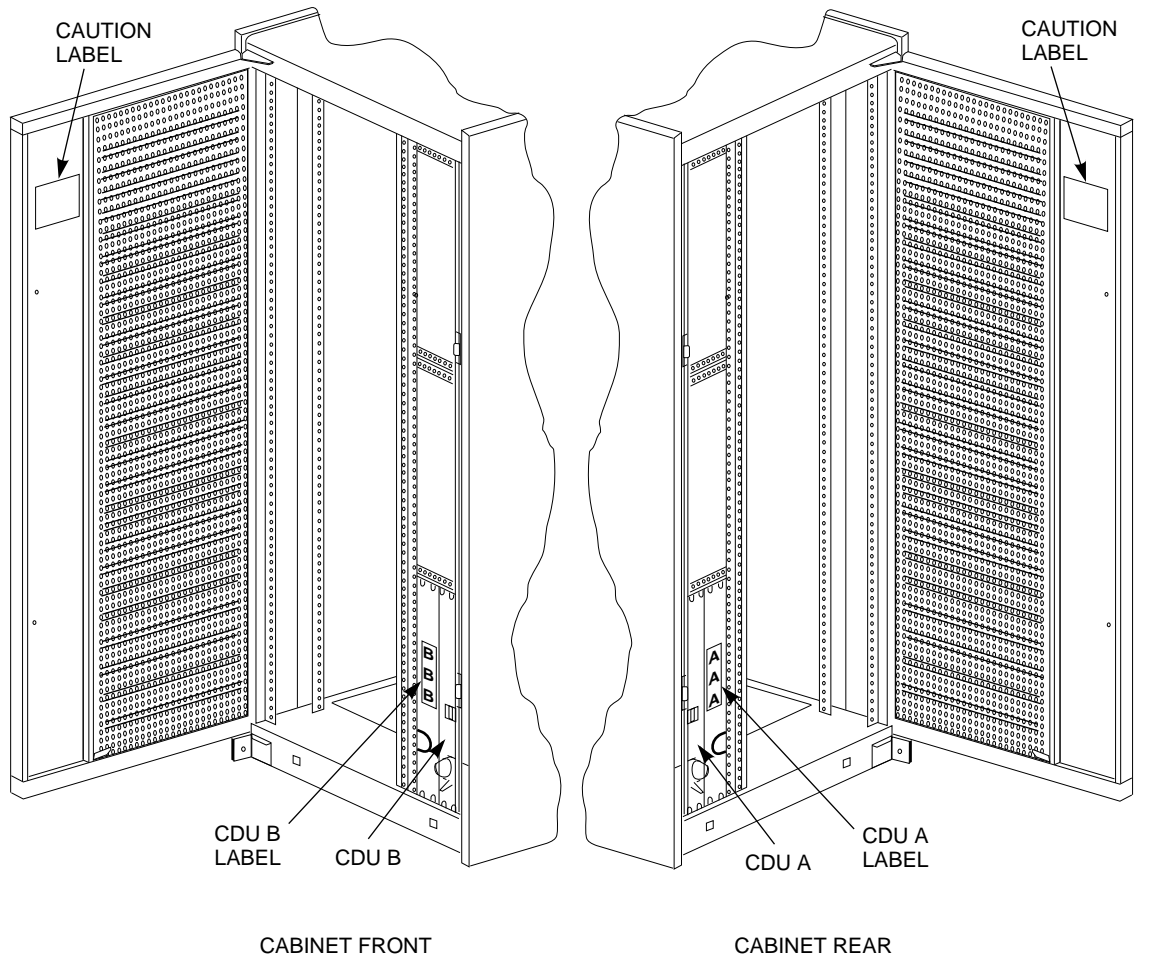
Kit option number SW8xP-AA (120/208V, 60 Hz) Kit part number 70-30101-05		
Digital Part Number	Description	Quantity
EK-SWCDU-IS	CDU installation guide	1
90-00063-39	Screw, #10 Phillips, 1/2"	16
90-07032-00	U-nut, #10	16
70-30101-01	Cable distribution unit, 60 Hz	1
17-03718-03	Cable, ac power, gray, 5'	4
17-03718-05	Cable, ac power, gray, 7'	12
17-03718-07	Cable, ac power, gray, 9'	8
74-44473-02	Filler panel	2
36-38274-01	Label, ID	2

Table 4 SW800 Series Data Center Cabinet 50 Hz Dual Power Option Kit Parts List

Kit option number SW8xP-AB (380-415V, 50 Hz) Kit part number 70-30101-06		
Digital Part Number	Description	Quantity
EK-SWCDU-IS	CDU installation guide	1
90-00063-39	Screw, #10 Phillips, 1/2"	16
90-07032-00	U-nut, #10	16
70-30101-02	Cable distribution unit, 50 Hz	1
17-03718-03	Cable, ac power, gray, 5'	4
17-03718-05	Cable, ac power, gray, 7'	12
17-03718-07	Cable, ac power, gray, 9'	8
74-44473-02	Filler panel	2
36-38274-01	Label, ID	2

2. See Figure 1 to familiarize yourself with the location and identification of each of the CDUs to be configured for the dual power option.
3. Spin down all disk drives and halt all tape drives in the cabinet.
4. Open the rear cabinet door to expose CDU A.
5. Switch the circuit breaker on the front panel of the CDU to the (OFF) position.

Figure 1 CDU and Label Locations



CXO-3777A-MC

6. Disconnect the CDU's primary power cable from the power source.
7. Isolate the cabinet electrically by powering down the host computer.

NOTE

In some cases, it may be desirable to allow the host computer system to operate while the dual power option kit is being installed. In this instance, the cabinet may be isolated from power by disconnecting the host computer interface cable(s). Refer to the documentation for the host computer configuration for the steps necessary to disconnect the cables.

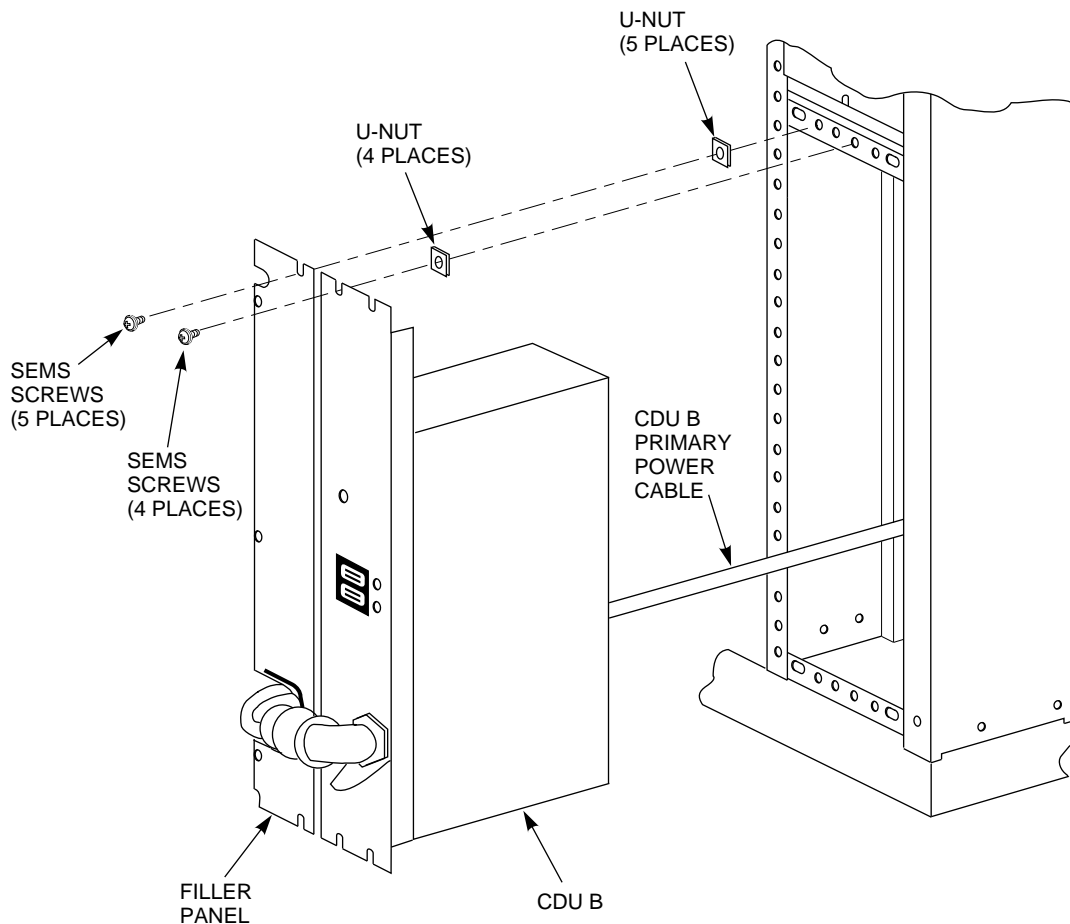
8. To install CDU B, there must be free access to the interior area of the front and rear CDU mounting slots. If necessary, gain access to the cabinet interior by separating the cabinet from adjacent ones and removing its side panels. Refer to the *SW800 Series Data Center Cabinet Installation Guide* for details on cabinet hardware.

WARNING

Cabinet rail edges may be sharp and can slice or abrade skin and cable insulation.

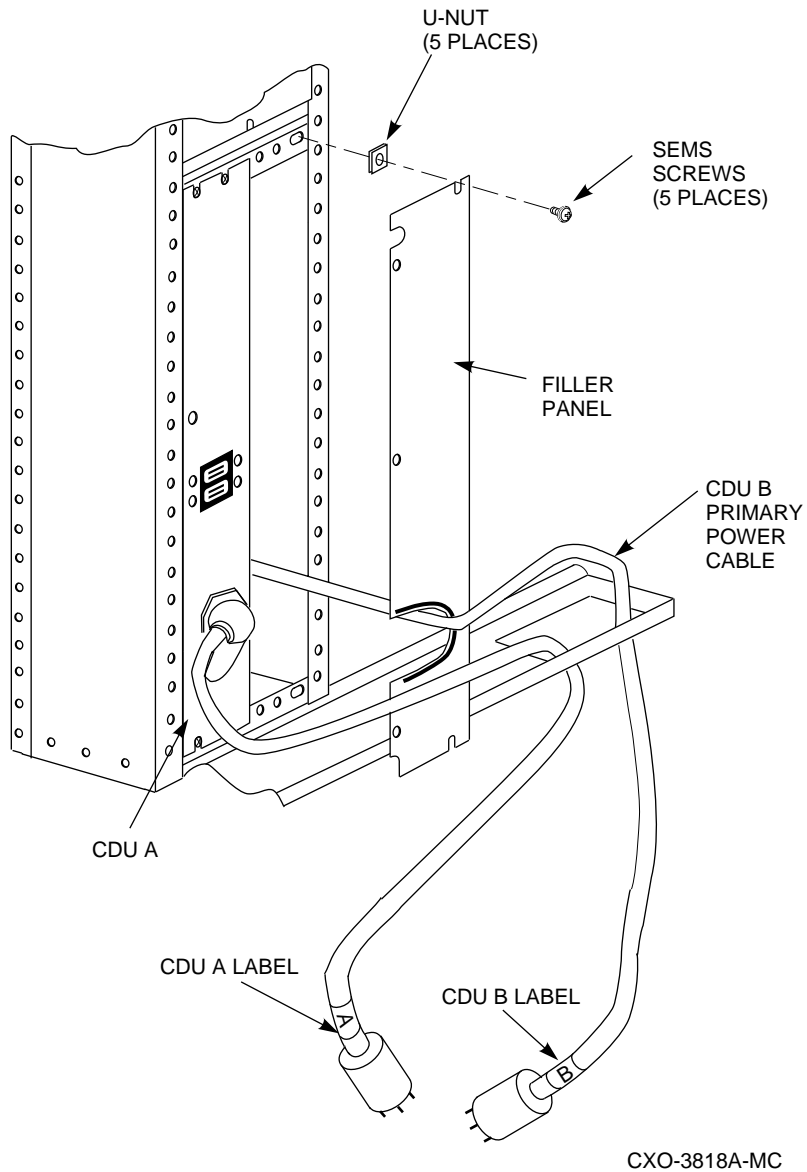
9. Remove the new CDU (to be installed as CDU B) from its packing material. Thread the primary power cable through the cabinet as shown in Figures 2 and 3.
10. Using the hardware provided in the kit, mount CDU B to the cabinet chassis rails as shown in Figure 2.
11. The installation of filler panels next to the CDUs is optional. If required by the configuration of your cabinet, install the two filler panels from the kit as shown in Figures 2 and 3.

Figure 2 CDU B Installation



CXO-3778A-MC

Figure 3 Rear Filler Panel and Power Cable Installation



NOTE

To prevent confusion resulting from the fact that the cabinet uses two power cables with the dual power option, it is important that safety labels be properly applied. Install the cable and cabinet labeling carefully in accordance with the instructions in steps 12 through 16.

12. Remove one of the yellow "A" labels in the kit from its backing paper and place it on the filler panel next to CDU A as shown in Figure 1. If the filler panel is not used in your cabinet configuration, wrap the label around the primary power cable of CDU A as close to the unit as possible.

13. Remove another of the yellow "A" labels in the kit from its backing paper and wrap it around the plug end of the primary power cable of CDU A as shown in Figure 3.
14. Remove one of the yellow "B" labels in the kit from its backing paper and place it on the filler panel next to CDU B as shown in Figure 1. If the filler panel is not used in your cabinet configuration, wrap the label around the primary power cable of CDU B as close to the unit as possible.
15. Remove another of the yellow "B" labels in the kit from its backing paper and wrap it around the plug end of the primary power cable of CDU B as shown in Figure 2.
16. Remove the two yellow "CAUTION" labels from their backing papers and place them at eye level on the inside of each door as shown in Figure 1.
17. Ensure that the second dc power supply required for the dual power option is installed in each shelf.
18. A complete set of gray ac power cables of various lengths is supplied in the kit. The ac power cables for each shelf location must be of a minimum length to reach CDU B. Refer to the chapter pertaining to your particular cabinet configuration in the *SW800 Series Data Center Cabinet Installation and User's Guide* to determine the correct cable length for each shelf.
19. Plug the gray cable of the appropriate length into the second dc power supply in each shelf and route the cable to CDU B. (The second dc power supply is the right one for horizontal shelves, and the lower one for vertical shelves.) Route each added cable to CDU B along the same path as the shelf's existing black ac power cable. Attach the added cable to the cabinet rails using the existing cable clamps.
20. Connect the gray power cable(s) to the connector(s) on the rear panel of CDU B, starting at the top-most connector and working down.
21. If the cabinet's host computer interface cable(s) was disconnected in step 7, reconnect the cable(s).
22. Replace the cabinet side panels and reposition the cabinet next to the adjacent ones as appropriate.
23. Reconnect the primary power cable from CDU A to its source.
24. Connect the primary power cable from CDU B to the auxiliary power source.
25. Switch the circuit breakers on both CDUs to the | (ON) position.
26. Close and secure the cabinet doors.
27. Restart all disk and tape drives and check them for proper function.

