Compaq StorageWorks

HSV Controller Cache Battery Replacement Instructions

Open Card Completely Before Beginning Installation Procedures

About This Card

This installation card describes how to replace the HSV Controller cache battery. The procedure described in this card differs from and should be used instead of the procedure described in "Replacing a Cache Battery," in *Compaq StorageWorks™ Enterprise Virtual Array HSV Controller User Guide*.

NOTE: Compaq recommends installing new batteries within the date specified on the battery's shipping container.

Determining the Status of a Cache Battery

The status of a cache battery is reported in two ways. First, internal monitoring circuits provide information to the controller, which passes this information to the *Compaq SANworks™* HSV Element Manager software. Second, a status LED in the lower right corner of the cache battery specifies the condition of cache battery cells. This status LED is normally off. If any cell fails, an amber status LED will be on. When the amber LED is on, you must replace the cache battery.

Battery Replacement Guidelines

CAUTION: To prevent battery drain, when powering off the system for more than 48 hours:

1) Use the Compaq SANworks HSV Element Manager to power off the system, or follow the controller power- off procedures detailed in the HSV Controller user guide.

2) Remove both cache batteries from both controllers.

When reactivating the system, power on the system first, and then install cache batteries.

Replacing a cache battery requires you to comply with the following conditions:

1. Only replace a cache battery when the controller has power applied.

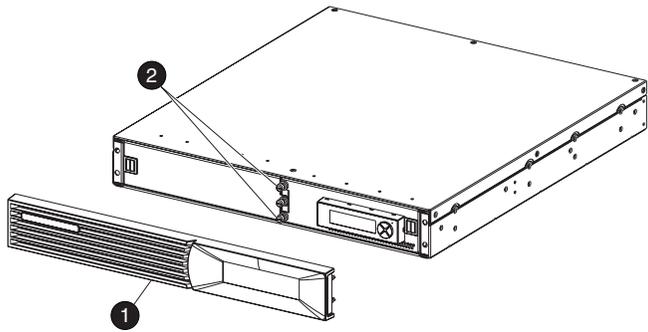2. Replace any cache battery when the amber status LED is on.

IMPORTANT: In rare circumstances, a failure in one cache battery can cause the status LEDs on both cache batteries to illuminate. If this occurs, you must replace both cache batteries, and power cycle the controller. There is no way to isolate a cache battery failure problem to a single cache battery so both batteries must be replaced.

3. After a failed battery has been removed, the battery can never be installed again. Dispose of a failed cache battery as described on the cache battery label.

Replacing a Cache Battery

Complete the following procedure if one or both cache batteries must be replaced.
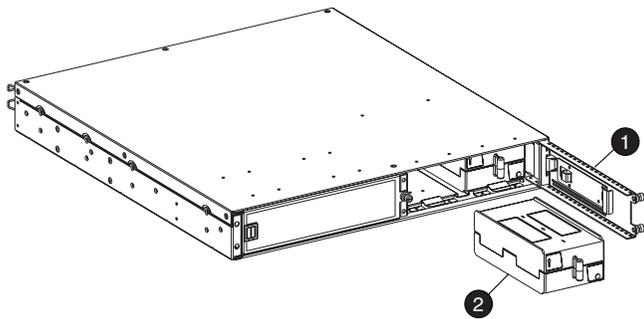
1. Grasp the bezel (❶, Figure 1) at both ends. Then pull the bezel away from the controller.

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Figure 1: Accessing and opening the cache battery compartment

2. Loosen the cache battery compartment door captive thumbscrews (❷, Figure 1).

3. Pull out on the cache battery door (❶, Figure 2) until it is in the full, open position.

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Figure 2: Replacing a battery

4. Remove any cache battery with an amber status LED that is on. If both cache batteries show the amber status LED, then you must remove both batteries from the compartment, together at the same time, prior to installing two new cache batteries.

⚠ **CAUTION:** If the amber status LED is illuminated on both batteries, you must first remove the two failing cache batteries, install the new cache batteries, then power cycle the controller. Failure to remove both batteries showing an amber LED, together at the same time, prior to installing the new batteries, may cause the original failure to be propagated to the newly installed cache battery.

5. Align the replacement cache battery ❷ edge connector with the controller connector. Insert the cache battery into the controller until the cache battery is fully seated.

When inserting the cache battery into a controller with power applied, the amber status LED in the lower right corner will initially be on. Based on the system operation, the light may remain on for up to two minutes, after which time, the light will turn off.

6. Repeat step 5 for the second cache battery if you are replacing both batteries, then proceed to step 7. If replacing only one cache battery, proceed to step 7.

7. Close the cache battery door, and finger tighten the cache battery door captive thumbscrews.

8. Align the bezel mounting studs with the controller enclosure mounting holes. Firmly press on the bezel until it is fully seated on the controller enclosure.

9. Allow between 4–8 hours for the battery to become fully charged.

For additional information, visit our website at: http://www.compaq.com. Or in North America, call Compaq technical support at 1-800-OK-COMPAQ. Outside North America, call Compaq technical support at the nearest location. Telephone numbers for worldwide technical support are listed on the Compaq website. For continuous quality improvement, calls may be recorded or monitored.