

H7267 BATTERY BACKUP INSTALLATION CARD

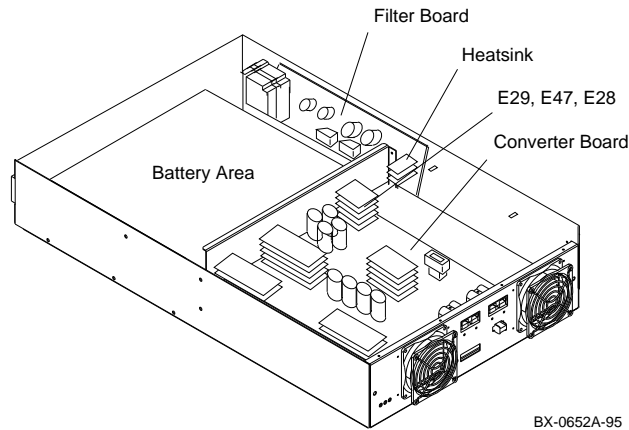
Use this card as a quick reference to install the H7267 battery backup (BBU) option in an AlphaServer 8200 system. First, install the BBU assembly, and then install the filter board shield. After you have mounted the power regulator in the cabinet, install the battery packs. Refer to the *AlphaServer 8200/8400 Service Manual* (EK-T8030-SV) for more information.

Installation Preparation

1. Perform an orderly shutdown of the system.
2. Remove the rear door by loosening the two bolts at the bottom of the cabinet and lifting the door off the two brackets.
3. Push the power regulator circuit breaker to the Off position. Disconnect the power cord.
4. Remove the power regulator from the cabinet. Refer to the *AlphaServer 8200/8400 Service Manual* for removal instructions.
5. Attach the battery recycling warning label to the front surface of the power regulator chassis, underneath the right-hand fan.
6. At the rear of the chassis, remove the power regulator air outlet screen (2 flathead screws from the side of the unit and 2 panhead screws from the rear of the unit).
7. Remove the 16 flathead screws and 2 panhead screws that secure the top cover to the chassis. Lift the front of the top cover to remove it.
8. If necessary, bend up (by 30 degrees) the ring terminals on the three cables (two black cables, E29

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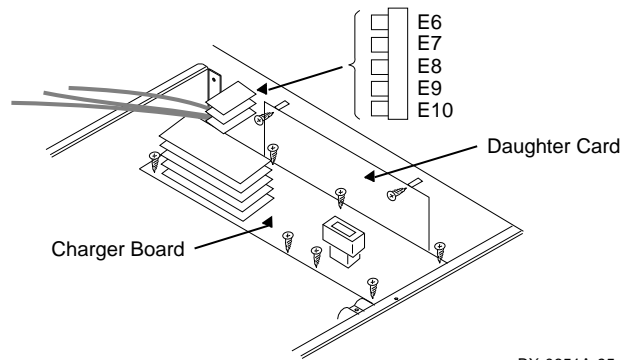
and E47, and one red cable, E28) from the converter board to the filter board, so that the BBU assembly can be installed without interference.



Installing the BBU Assembly

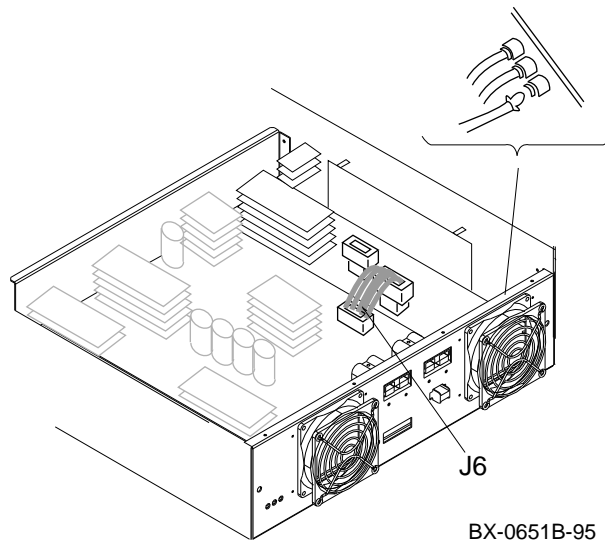
CAUTION: Be sure to wear a wrist wrap when handling the BBU assembly. Use a conductive mat if you must place the option down after unpacking. Before installing the option, touch the power regulator chassis and then the circuit boards to prevent damage from electrostatic discharge.

1. Unpack the BBU assembly. The assembly consists of two circuit boards; the charger board is secured to the bottom of the chassis, the daughter card is secured to the side of the chassis.
2. Carefully install the BBU assembly. First, seat the end of the assembly that is nearest to the battery area. This end must be positioned under the filter board heatsink. Then, seat the LED end of the assembly. Be careful not to scrape the daughter card against the standoffs on the side of the chassis.
3. Attach the charger board to the bottom standoffs using seven M3x10 mm screws and star washers.



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4. Attach the daughter card to the side standoffs using two M3x16 mm screws and star washers.
5. Connect the three black cables from the charger board to E8, E9, and E10 on the filter board. Connect the two red cables from the charger board to E6 and E7 on the filter board. If available, use a pen light to locate the E connectors. If necessary, use a needlenose pliers to connect the terminals.
NOTE: Make sure the core on the cables to the main converter board does not touch any metal heatsinks.
6. Plug the 2x8 connector into the converter board at J6.



7. Snap the LEDs into the lenses as follows:
 - Green LED into BATTERY CHARGING
 - Yellow LED from E22 into REPLACE BATTERY
 - Yellow LED from E27 into ON BATTERY

NOTE: If the power regulator is a Rev. B01 unit, you must remove the battery hold-down bracket by removing 2 flathead screws from the side of the chassis and 2 nuts from the internal rear panel.

Installing the Filter Board Shield

1. On the filter board, remove the top center mounting screw and the top screw nearest the circuit breaker. Attach the filter board shield bracket to the component side of the filter board using two M3x10 mm screws. (Use the following installation order: screw, star washer, flat washer, shield bracket ear, filter board, and standoff.) Start the screws in the holes, slide the bracket into position, and then tighten the screws.

2. Plug the red/black twisted pair connector into the circuit breaker connector. Tuck the connector pair in between the filter board and the circuit breaker below the level of the filter board shield bracket.
3. Wrap the P-clamps around the twisted pair. The flat side of the clamps should be facing downward, and the mounting holes should be near the battery pack area.
4. Install the filter board shield to the bracket using two M3x10 mm screws. Position the twisted pair connectors behind the filter board shield.

The cable running to the top of the shield must be inside the plastic grommet in the shield keyhole; or the cable must run past the shield edge where it is taped to avoid sharp edges.

5. Position the P-clamps so that they are as close as possible to the chassis side (away from the battery area) and secure the P-clamps with two screws.

NOTE: The battery cables consist of two 3-cable sets. One 3-cable set is longer than the other. Orient the battery connector bracket so that the connector for the longer set of cables is on the bottom.

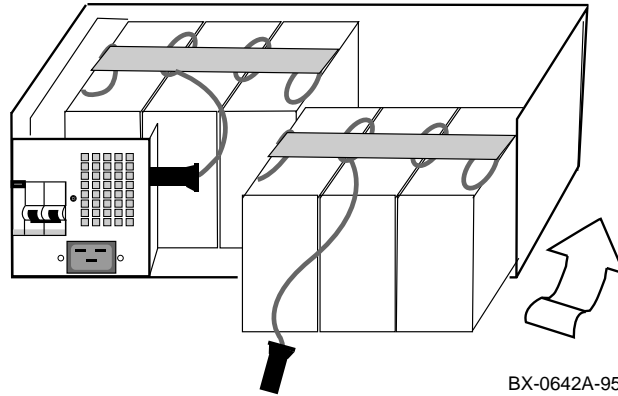
6. Attach the battery connector bracket behind the jog in the chassis, using two M3 5x8 mm screws and star washers.
7. Dress and tie the two sets of battery cables. Tie one end of the cables to the filter board shield, using a cable tie through the pair of holes at the top corner of the shield. Tie the other end of the cables through the square hole on the raised part of the chassis bulkhead. Stretch the cable bundle tight and then tighten the last tie.

NOTE: The cables must be dressed so that the battery packs can be removed and replaced while the power regulator is still mounted in the cabinet.

8. Replace the power regulator top cover.

Installing the Battery Packs

1. Install the power regulator (without battery packs) in the cabinet. Push the power regulator into the cabinet, leaving 2 inches of the power regulator protruding from the cabinet.
2. Install the battery packs. Slide the first battery pack to the left so that you can install the second one.



3. Install the battery hold-down bracket using two M3.5x8 mm flathead screws, star washers, and nuts.
4. Connect the two battery cables to the power cable connectors.
5. Replace the air outlet screen.
6. Fully seat the power regulator in the cabinet.

Verification

Use the following procedure to test the batteries. After testing, replace the rear door and power up the system.

1. Connect the power cord and set the circuit breaker to the On position. Push the control panel On/Off switch to On. The MODULE OK LED (green) should go on, and the BATTERY CHARGING LED (green) should flash.

2. Disconnect the power cord (do not turn off the circuit breaker). The following LEDs should be lit: ON BATTERY (yellow), MODULE OK (green), and BATTERY CHARGING (green).
3. Reconnect the power cord. The MODULE OK LED (green) should be on, and the BATTERY CHARGING LED (green) should flash. All other LEDs should be off.
4. Turn the circuit breaker off. All LEDs will go off and the fans will stop.