

Affected Products: Solar Boost™ 50, 3048 and 6024H charge controllers

Purpose: Replacing the main power control circuit board and heatsink assembly

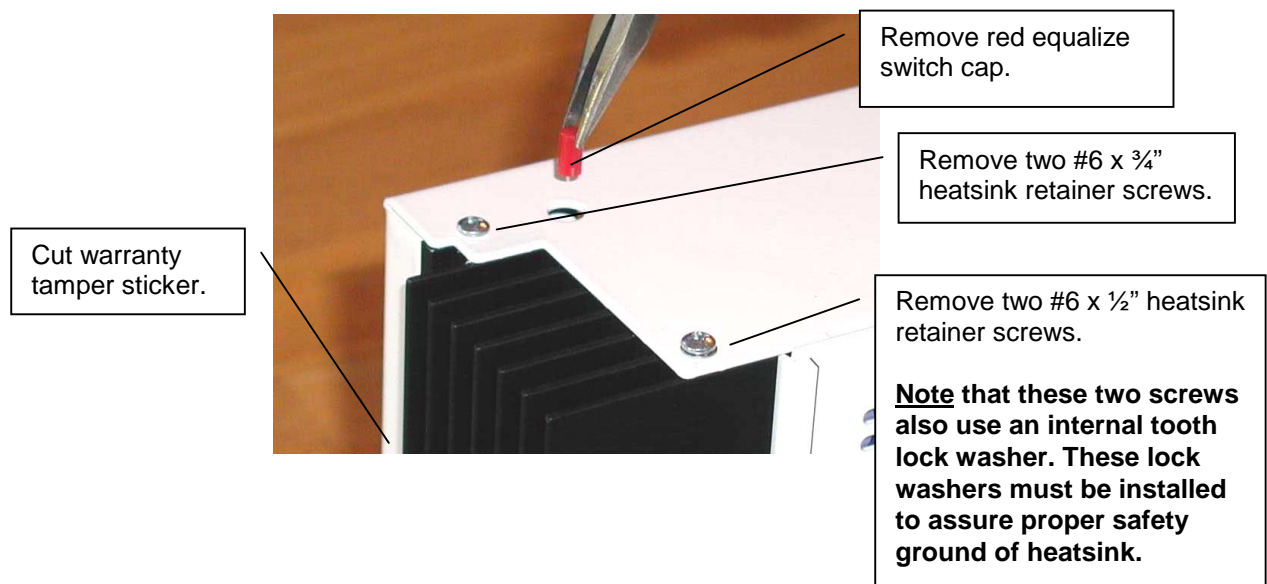
Blue Sky Energy makes every effort to produce high quality high reliability products. But, failures do sometimes occur. Many times the most convenient and expeditious repair can be performed on a Solar Boost 50 type product by exchanging the main power control circuit board. This circuit board assembly includes the heatsink, all power and control electronics except the digital display, and comes fully tested and calibrated. As delivered, the various settings and operating modes are set to factory defaults as described in the appropriate operators manual.

Important Electrostatic Handling Precautions:

While transient voltage protection is provided for terminal block connections, exposed electronic circuits may be damaged by electrostatic discharge during installation and handling. Discharge yourself by touching a water faucet or other electrical ground prior to handling any exposed electronics and avoid touching components on the circuit board to the extent possible. Keep the circuit board in its electrostatic protective bag until it is installed, and place the failed unit back into the electrostatic protective bag as soon as it is removed from the chassis. All electronic circuits may be damaged by static electricity and this product is no different. These instructions combined with special packaging are provided to minimize the possibility of damage. Note that the risk of electrostatic damage is particularly high when relative humidity drops below 40%.

Circuit Board Removal:

1. Carefully remove red actuator cap from the equalize switch, and four heatsink retainer screws. Cut warranty tamper sticker to allow heatsink removal.



2. Gently squeeze locking tabs on three plastic circuit board mounts and carefully lift circuit board from mounts.



Squeeze 3 plastic circuit board mount locking tabs and gently lift circuit board.

3. Carefully remove heatsink and circuit board assembly from chassis. Some spreading of the chassis may be necessary to extract the heatsink.



Circuit Board installation:

1. Circuit board installation is performed in the reverse order of removal. Be sure to remove the red actuator cap from the equalize switch prior to inserting the new circuit board. Reinstall the cap after the replacement circuit board is installed.

Important Documentation Retention:

The warranty tamper evident seal is broken when the circuit board assembly is replaced. If the unit is still under warranty, be certain to retain the invoice or other documents identifying the circuit board replacement. These documents must be made available for subsequent warranty service.