Replacing an Inverter Module of the StorEdge PCE

Note: SolarEdge replaceable inverter modules are mechanically interlocked with the DC Switch Disconnector, located within the StorEdge Connection Unit section.

1. Turn OFF the inverter ON/OFF switch, and wait until the LCD indicates that the DC voltage is safe (<50V), or wait five minutes before continuing to the next step.

> WARNING!
> If you cannot see the inverter panel, or if a malfunction is indicated on the LCD panel, wait five minutes for the input capacitors of the inverter to discharge.

2. Isolate the AC to the inverter by turning OFF and locking out the adjacent "AC Isolator" or circuit breaker of the distribution panel.
3. Turn OFF the StorEdge Connection Unit section interlocked "PV Array DC Isolator".
4. Release the six Allen screws and remove the Connection Unit section cover. Remove the additional shield underneath.
5. Open the inverter module cover as described in *Removing the Inverter Cover* in the *Installation Guide*.
6. Disconnect the DC and AC power cables from the inverter module and draw these down into the DC Safety Unit section. Remove the DC and AC wires ferrite beads and set them aside.
7. Disconnect the inverter "ON/OFF" toggle switch wiring loom from within the Connection Unit DC switch signal terminals on the front of the DC Switch Disconnector and draw these up into the inverter.

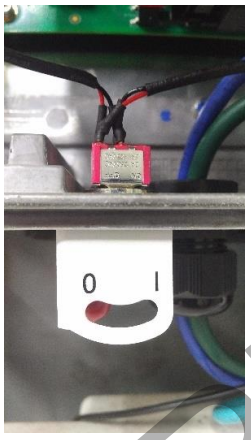

Figure 1: ON/OFF toggle switch

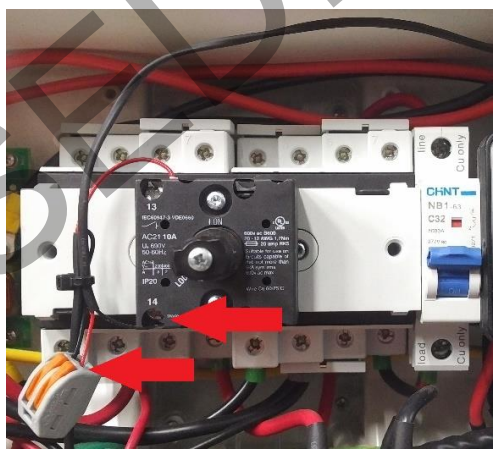

Figure 2: Release toggle loom from DC Switch signal terminal

8. Disconnect the control loom plugs from the inverter digital board and draw these down into the StorEdge Connection Unit.
9. Disconnect and withdraw any additional wires that may be connected to the inverter module, including:
   - Antenna cable from the communication board
   - LAN cable
   - RS485 cables
   - DRM0 or RRCR cables
10. Release the replaceable inverter module by unscrewing the two conduit nuts that secure the module to the Connection Unit section of the inverter.

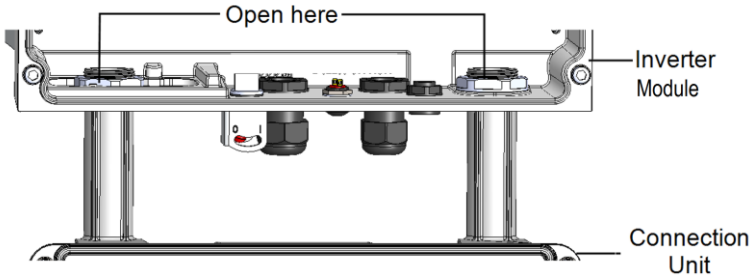

Figure 3: Releasing the inverter module conduit locknuts

11. Remove the screws securing the inverter module to the mounting brackets and lift the inverter module from the mounting bracket and Connection Unit section.

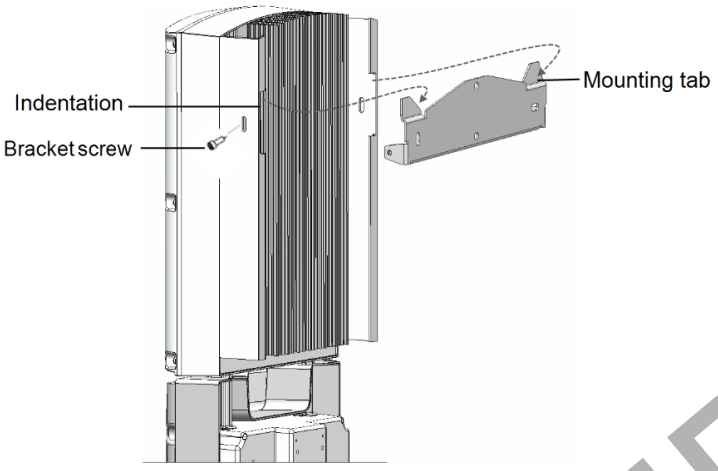

Figure 4: Inverter mounting bracket screw

NOTE

If you remove the old inverter module and do not immediately install a new one, then:

a) Fit insulated terminals to the ends of each of the AC and DC power wires.
b) Seal the conduits with 28mm rubber tube caps to prevent water ingress, secure each cap with a nylon cable tie.
c) Switch the AC Bypass selector to the #2 (Bypass) position to permit mains AC power to the backed up circuits.
d) Install the inner shield and Close the Connection Unit section cover.
e) Lock the DC Safety Unit in the OFF position using a lock on the switch handle.
f) Switch on the AC supply to the inverter, in order to energise the backed up circuits output.

Figure 5: AC Selector Switch in Bypass, inc inner shield

Figure 6: Conduit caps fitted and secured

12. Place the new inverter module over the Connection Unit conduits and mounting bracket and secure it using the screws.
13. Insert the AC and DC wires from the Connection Unit section up into the openings in the inverter module.
14. Fasten the nuts securing the inverter module to the Connection Unit conduits.
15. Reconnect the AC and DC cables from the Connection Unit section into the inverter module AC and DC terminals. Thread the AC cables through the Ferrite bead.
16. Reconnect all the cables removed at steps 7, 6 and 9.
17. Ensure the Bypass switch is set to the #1 (normal operation) position
18. Close the inverter module and StorEdge Connection Unit section covers.
19. Perform the test and commissioning steps as described in Commissioning the Installation in the Installation Guide, including meter and battery programming, and firmware installation.