

SolarEdge TerraMax™ Inverter P/1/0 switch replacement - Support kit manual

This manual describes the procedure for replacing the SolarEdge TerraMax Inverter P/1/0 switch and cable.

Revision history

- Version 1.2, July 2024 – Updated required tools list
- Version 1.1, March 2024 – Changed name to TerraMax
- Version 1.0, January 2024 – Initial release

Kit contents

SolarEdge TerraMax Inverter P/1/0 switch and cable replacement kit
PN: FLD-3PH-OR-SW-3WAY

Required tools

- Torque screwdriver
- 4mm hex bit
- 14mm deep socket and socket wrench
- Voltmeter

Before you begin

1. Set the P/1/0 switch to "0" (OFF).
2. Turn the DC Disconnect (DCD) switch to the OFF position.



3. To lock the DCD switch, pull the white tab out away from the blue handle and insert a padlock through one of the holes.

4. Lock the padlock.



DCD switch safety padlock

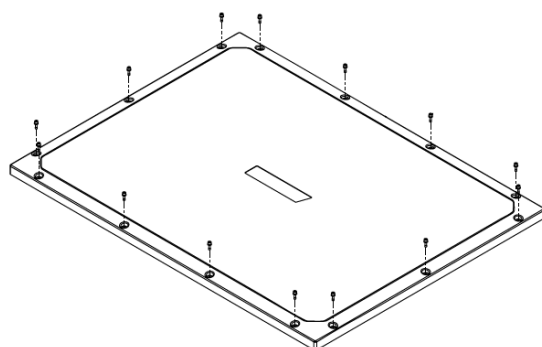
5. Disconnect AC power to the inverter by turning OFF the circuit breaker in the power distribution panel.
6. Wait at least five minutes for the DC Voltage inside the inverter to drop to a safe level.
7. As an additional safety precaution, lock the power distribution panel.

Remove the cover

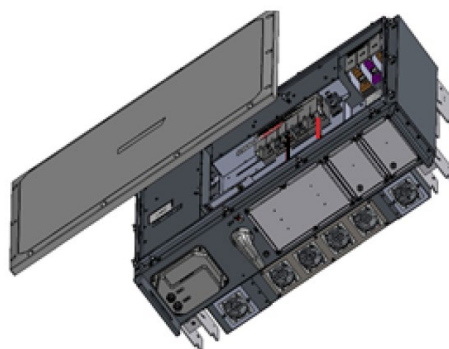
NOTE

The inverter cover assembly is too big for one person to handle safely. SolarEdge recommends that two people remove and handle the cover assembly.

To remove the cover, use a screwdriver with a 4mm hex bit to release the screws holding the cover in place.



Inverter Cover Assembly

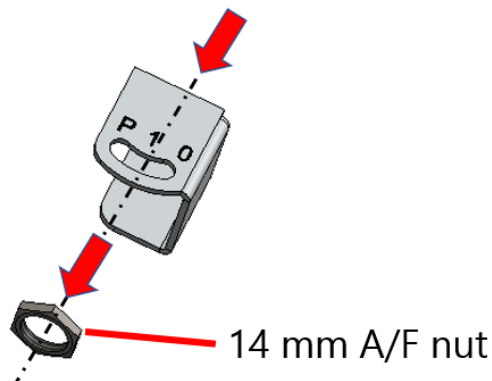


WARNING!

Before doing any maintenance work on the inverter, test for safe AC and DC voltages.

Remove the damaged P/1/0 switch and cable

1. Using the 14mm deep socket and wrench, remove the nut and washer holding the P/1/0 switch in place.
2. Remove the switch shield.

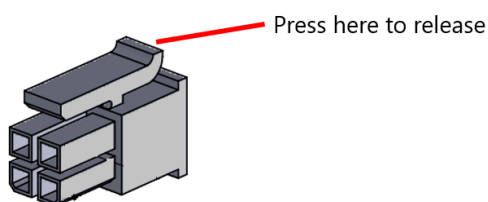


Remove nut & shield

3. Disconnect the P/1/0 switch cable plug from its socket.

NOTE

The connector is fitted with a locking mechanism. Press the lever to release the locking mechanism before trying to disconnect the connector from its socket. Do not pull on the wires to remove the connector from the socket.

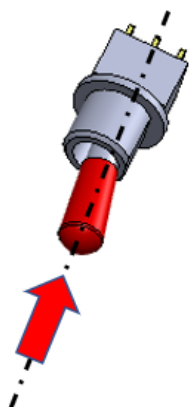


Connector locking mechanism

4. Using the special tool, release the bead from around the cable. If the bead is secured with a zip-tie, cut the zip-tie.



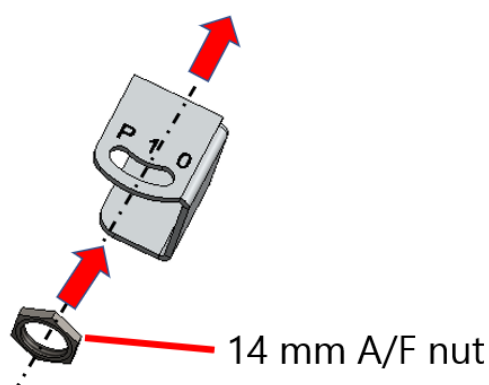
5. Push the switch inside the inverter and remove the switch and cable.



Remove the switch and cable

Install the replacement P/1/0 switch and cable

1. Insert the new switch into position from inside the inverter.
2. Place the shield over the switch from under the inverter.
3. Put the washer in place and screw the nut tight by hand.

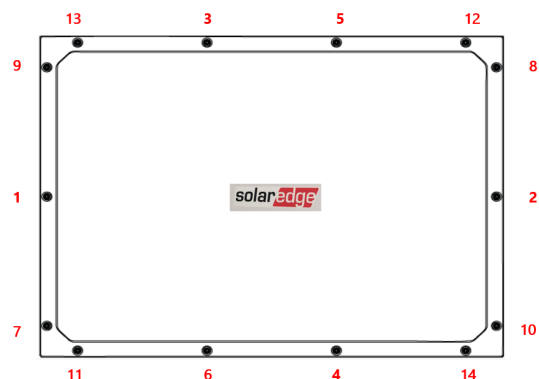


Put nut and shield in place

4. Using the 14mm deep socket and wrench, tighten the nut to a torque of 1.3N·m (11.5 lbf·in). Make sure the shield is straight before tightening the nut.
5. Connect the cable plug to its socket. Pull the cable gently to make sure they are properly connected.
6. Clamp the bead around the cable. If necessary secure the bead with a zip-tie.

Reattach the cover assembly

1. Place the cover assembly in position and, using a torque wrench with a 4mm hex bit, tighten the screws to a torque of 3.9N·m (34.5lbf·in).
2. Tighten the screws in the following sequence:



Screw tightening sequence

Turn on the power

1. Unlock the power distribution panel and turn ON the AC circuit breaker/s.
2. Remove the padlock and turn the DCD switch ON.
3. Set the P/1/0 switch to "1" (ON).