

# Iota Transfer Replacement



#### **Parts Needed for Installation:**

Qty. 1 PowerMax Transfer Switch E-ONE part# 538550

#### **Supplies Needed for Installation:**

1-3/4" Hole Saw Qty. 4 Wood Screws ½" #2 Square Screwdriver Small Straight Blade Screwdriver Voltmeter

### **Instructions:**

#### **Electrical Disconnection**

#### Step 1.

Disconnect and turn off all electrical power sources from the vehicle.

- Disconnect shoreline cord.
- Disconnect any battery charger cords.
- Turn off main battery switch.



FAILURE TO DISCONNECT POWER SOURCES CAN RESULT IN PERSONAL INJURY.



#### **Transfer Switch Replacement**

#### Step 1.

Locate transfer switch and remove the cover.

#### Step 2.

Using a voltmeter, verify all circuits are de-energized.

#### Step 3.

Label all wires on the truck side of transfer switch.

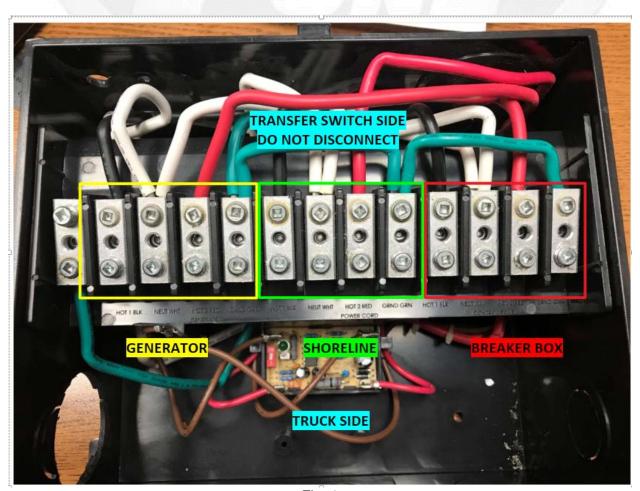


Fig. 1



#### Step 4.

Disconnect all wires from the truck side of the transfer switch. Inspect wires for any type damage. If necessary, cut the damaged section from the wire.

#### Step 5.

Remove old transfer switch and discard.

#### Step 6.

The new switch is slightly different in its shape as compared to the old switch. This may require a different orientation from what the old switch was. Orient the new switch so that it will allow a 1-3/4" hole to be cut in one of the three wire entry point areas. See Fig. 2

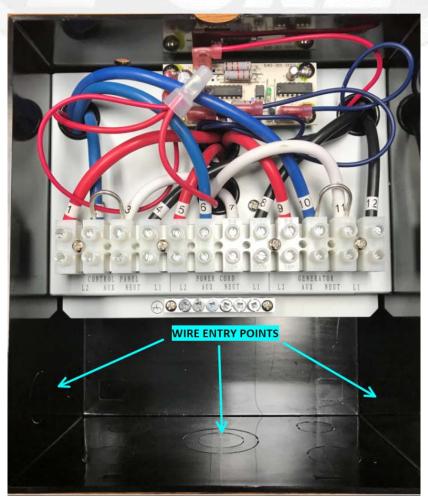
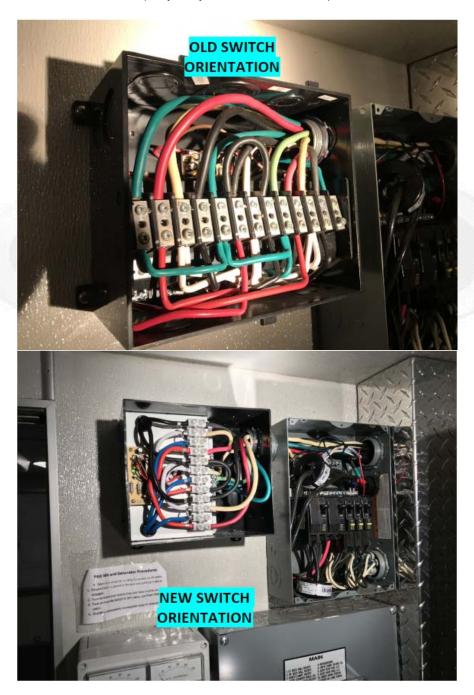


Fig. 2



## Example of switch orientation (May very from truck to truck)



5



#### Step 7.

Attach the new switch. This may require using new screws because of the differences in the boxes.

#### Step 8.

Reconnect the Breaker Box, Shoreline and Generator wires. **Ensure that all connections are tight.** 

**Note:** AUX will not be used and jumper can remain installed on transfer switch side.

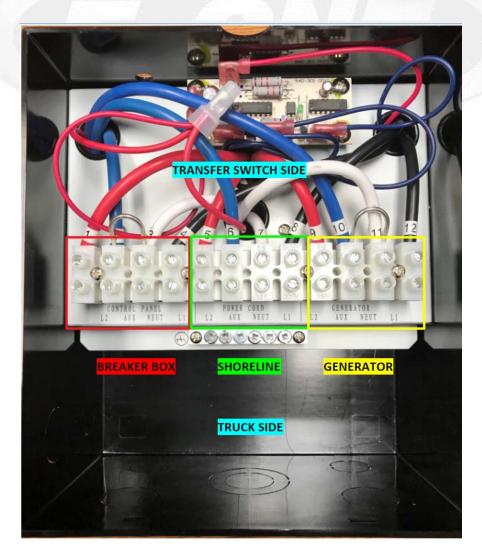
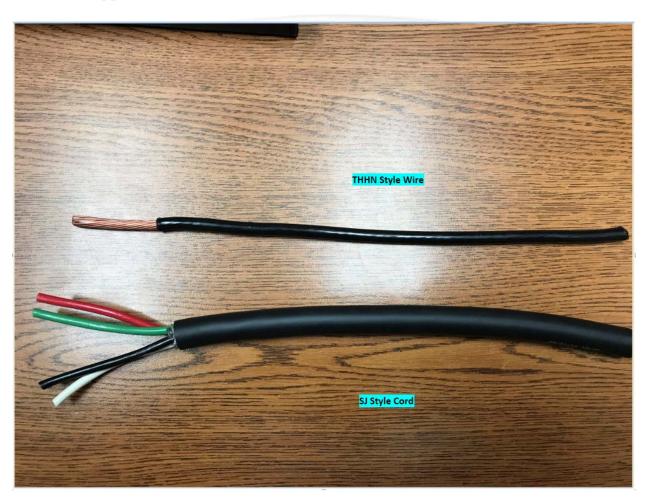


Fig. 3



#### **Step 8.1**

Due to the orientation of the new switch, some wires may not be long enough. In the event this happens, open up the breaker box(s) and wire ties may be cut to allow the wires to be lengthened. I rare cases new wires may need to be run. Wire (6ga THHN or 6ga SJ style cord) can be acquired at a local home improvement or electrical supply house.



**Step 9.** Reinstall any breaker box covers that may have been removed.

7



#### **Step 10.**

Reconnect shoreline and verify correct voltage inside the transfer switch.

- Shoreline (110 120 volt feed)
  - 1. L1(Black) to Neut(White) = 110 120 volts
  - 2. L2(Red) to Neut(White) = 110 120 volts
- Breaker Box
  - 1. L1(Black) to Neut(White) = 110 120 volts
  - 2. L2(Red) to Neut(White) = 110 120 volts

#### Step 11.

Disconnect shoreline and engage generator. Verify correct voltage inside transfer switch.

**Note:** Transfer switch may 30 to 40 seconds to transfer.

- Generator (220-240 volt feed)
  - 1. L1 (Black) to Neut(White) = 110 120 volts
  - 2. L2 (Red) to Neut(White) = 110 -120 volts
  - 3. L1 (Black) to L2 (Red) = 220 240 volts
- Breaker Box
  - 1. L1(Black) to Neut(White) = 110 120 volts
  - 2. L2(Red) to Neut(White) = 110 120 volts
  - 3. L1(Black) to L2(Red) = 220 240 volts

#### Step 12.

Replace transfer switch cover.

If during the installation you have any questions or concerns. Please contact E-ONE Tech Support at 352-237-1122.



#### **Notes:**



9