



SOLAR STIK®

**INSTRUCTION MANUAL  
FOR  
INVERTER/CHARGER  
REPLACEMENT  
IN THE  
PRO-VERTER 7000-120**

P/N: 05-1000075

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

Version 1.0

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## Safety

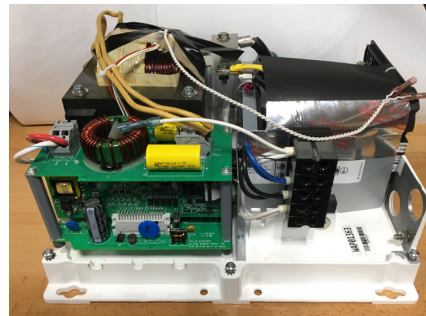
- Remove jewelry.
- Disconnect all power sources to the PRO-Verter such as batteries, Power Hubs, and generators. Ensure all breakers and switches are in OFF position. If in doubt, please contact Solar Stik 24/7 Tech Support at 800-793-4364 Ext. 102.
- Use proper procedures and equipment to prevent damage from electrostatic discharge.
- This procedure requires at least two (2) people.

## Tools Required

- Torx T20 driver
- Wire snips
- #1 cross-tip screwdriver
- #2 cross-tip screwdriver
- #1 flat-tip screwdriver
- #2 flat-tip screwdriver
- 7/16" (or 11 mm) socket
- 7/16" (or 11 mm) wrench
- 13 mm wrench
- 13 mm socket
- Ratchet driver
- Utility knife
- Needle-nose vise grips
- Crimp tool

## Materials Included

- Replacement Inverter/Charger  
Kit for drop-in replacement  
P/N: 05-1000075



## PRO-Verter-Inverter/Charger Connection Types

Both electrical and mechanical connections between the PRO-Verter case and the Inverter/Charger must be managed when replacing the Inverter/Charger.

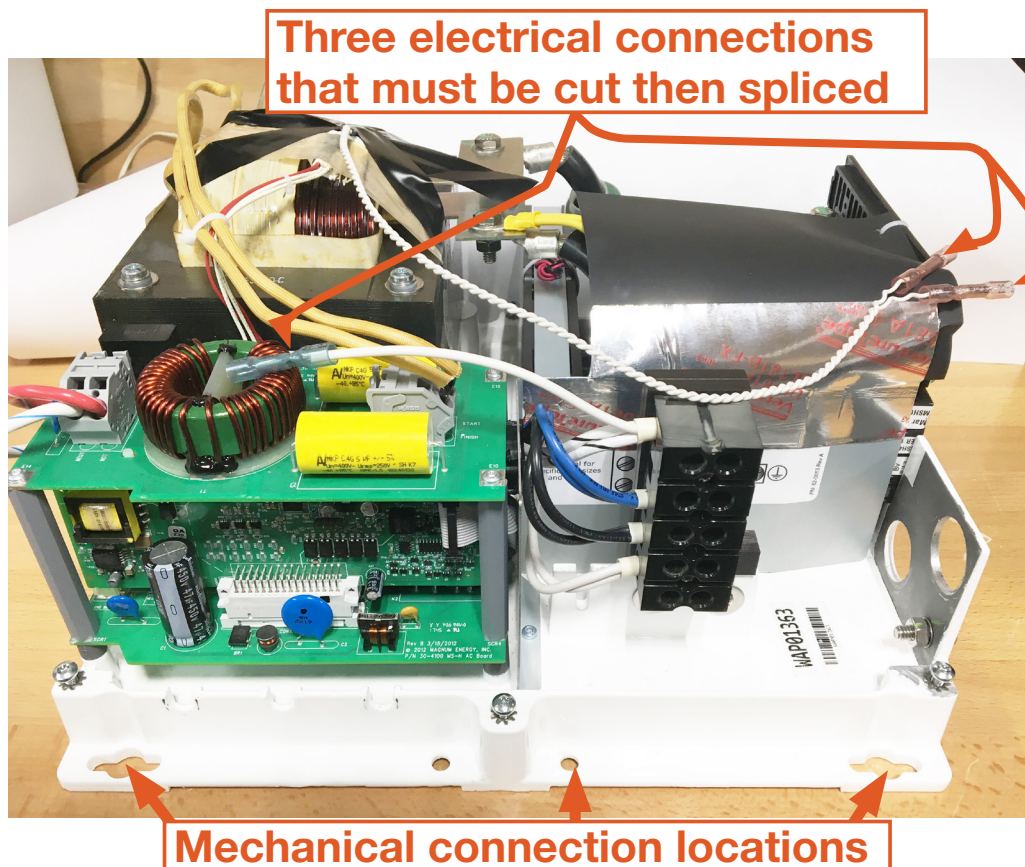
Most of the electrical connections can be simply disconnected to remove the old Inverter/Charger and reconnected when the replacement inverter charger is in place. However, three (3) wires must be cut and then spliced in this process. They are shown below. A butt splice has been fastened to the end of the wire on the replacement Inverter/Charger.

**Each wire must be labeled and its location/connection documented by a photograph prior to disconnection to ensure the replacement Inverter/Charger is connected properly.**

Keeping wires in groups (using zip ties or similar) when they all are to be reconnected to a single place will also make installation easier.

The mechanical connections are on the base of the Inverter/Charger and secure it to the PRO-Verter case. The location of two (2) mechanical connections is shown below. Save all hardware for these connections. It will be reused during installation of the replacement.

Following the instructions above will make the replacement simple and straightforward.

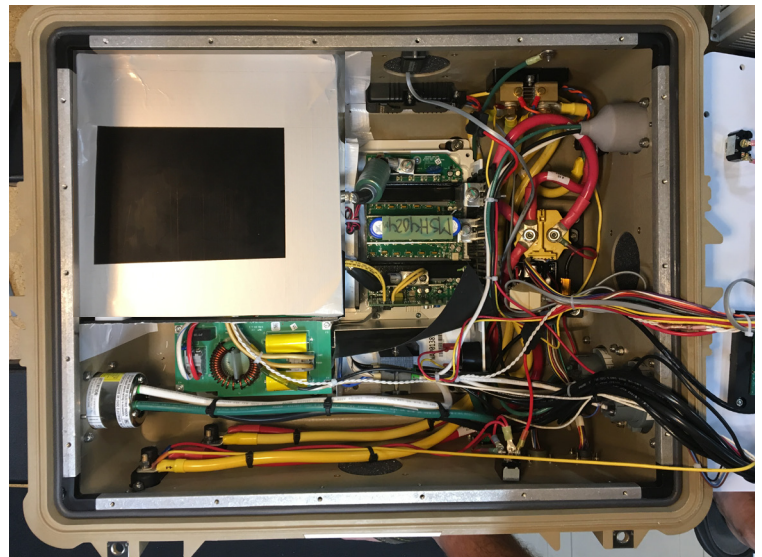


## A. Remove the Faceplate

1. Remove the twenty-two (22) fasteners around the perimeter of the PRO-Verter Faceplate (see orange circles, right) using a #2 cross-tip screwdriver. Retain hardware for reinstallation.



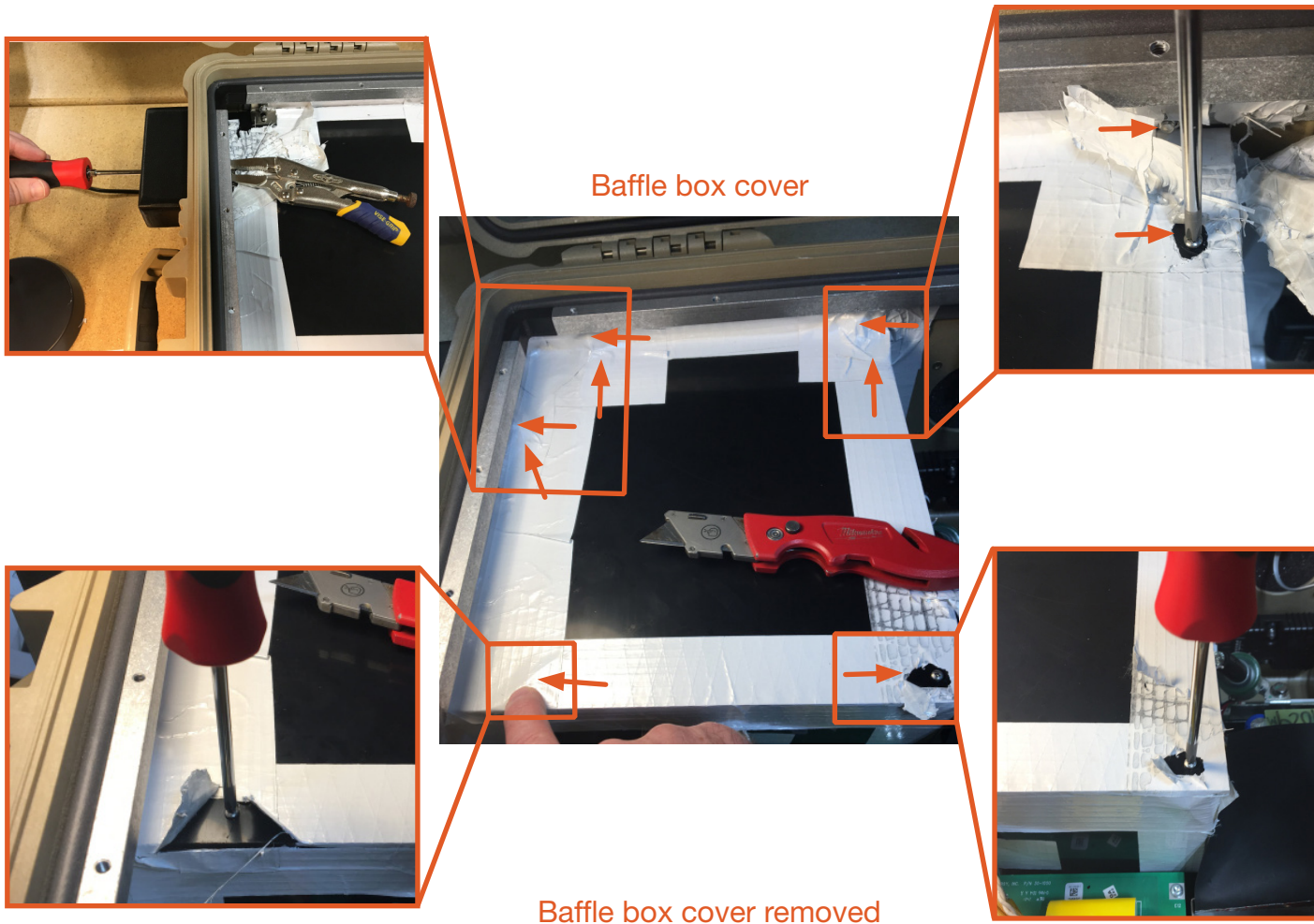
2. Lift the left side of the PRO-Verter Faceplate and swing it open to the right. Support the Faceplate to prevent stressing wired connections between the Faceplate and the interior of the PRO-Verter.



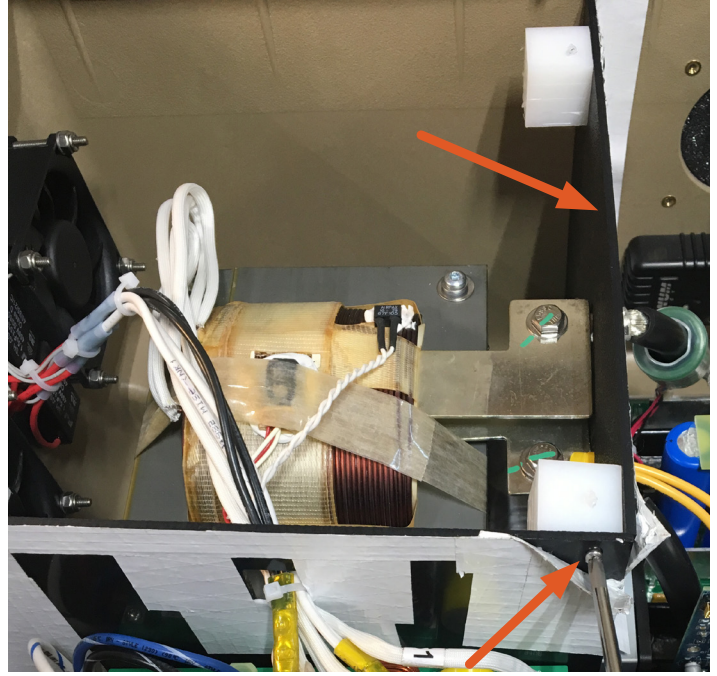
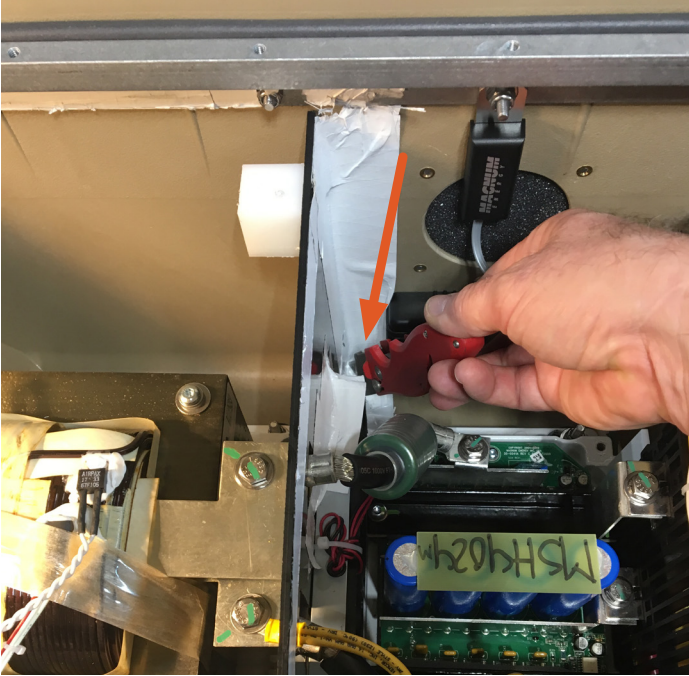


## B. Remove the Baffle Box

1. Use a utility knife to expose eight (8) fasteners (each indicated by an arrow) that secure the top plate of the baffle box. Use a #1 cross-tip screwdriver and needle-nose vise grips (when required) to remove the fasteners that secure the top plate of the baffle box. Retain all hardware for reassembly.



2. Use a utility knife, a #1 cross-tip screwdriver, and a Torx T20 driver to remove all other fasteners that secure the walls of the baffle box to the interior of the PRO-Verter. Remove the baffle wall pieces. Retain all hardware for reassembly. The tape that seals the edges must be cleaned from the baffle wall pieces after removal. Replacement tape is provided with the kit and should be applied at the end of the replacement process.





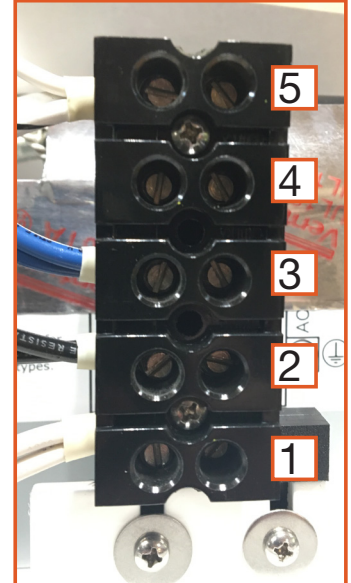
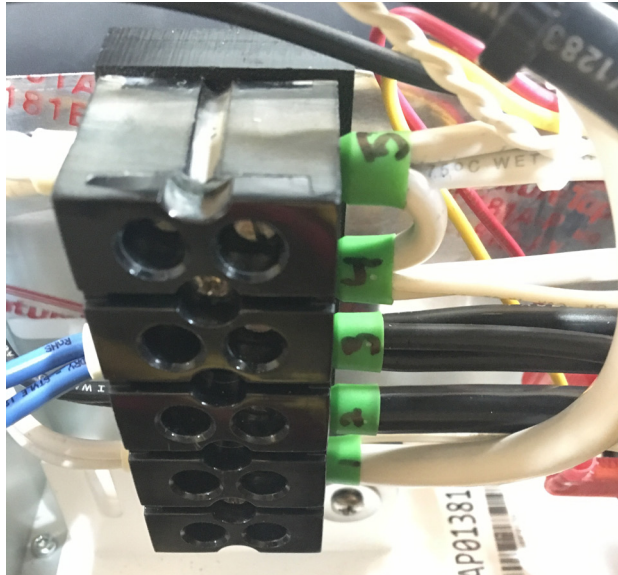
## C. Electrical Connections

Simple electrical connections to be disconnected will be illustrated first. Connections that must be cut and later spliced will be illustrated second.

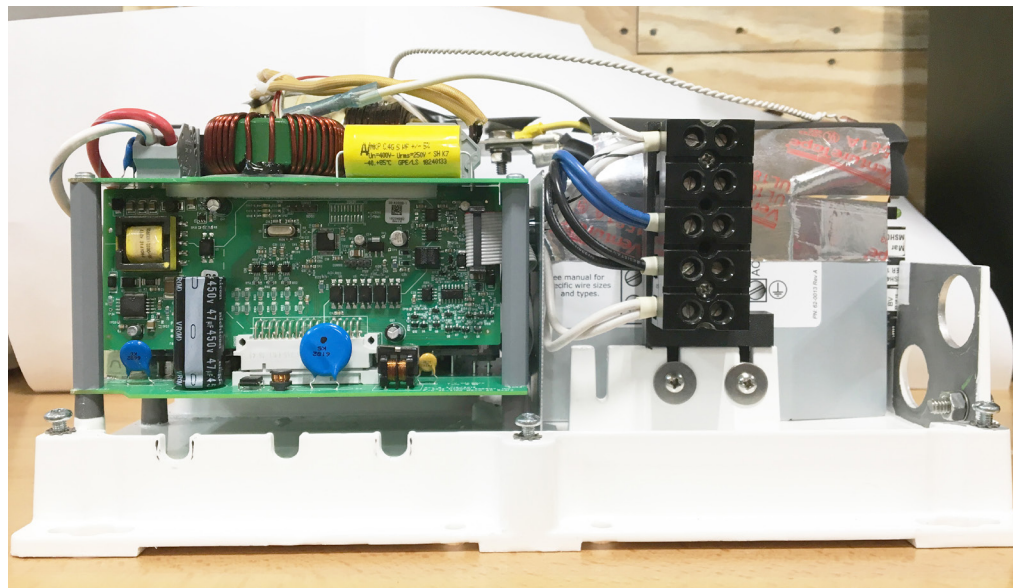
### Terminal Block Connections

1. The Terminal Block has five (5) electrical connections. Label the wires as shown below prior to disconnecting the wires from the old Inverter/Charger. Use a #1 flat-head screwdriver to loosen the set screw in the terminal block and then slide out the ferrule-ended wires.

Old  
Inverter/Charger  
in PRO-Verter



Replacement  
Inverter/Charger



## Power Terminal Posts (+, -, GND) Connections

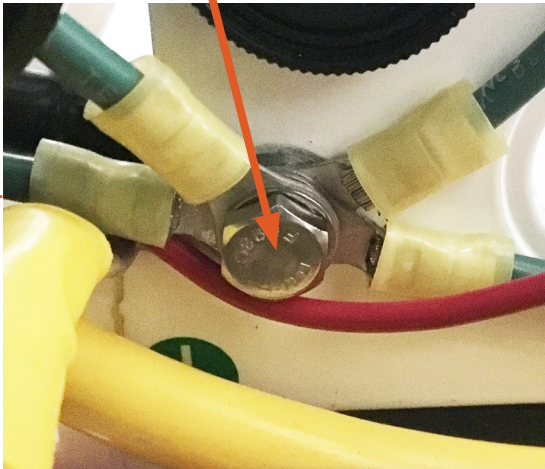
2. There are multiple wires connected to the positive (+) and GND posts. Label the wires appropriately and secure them as a group using a zip tie or similar. Use 11 and 13 mm wrenches to remove the wires from the posts.

Right end of Inverter/Charger

Replacement  
Inverter/Charger



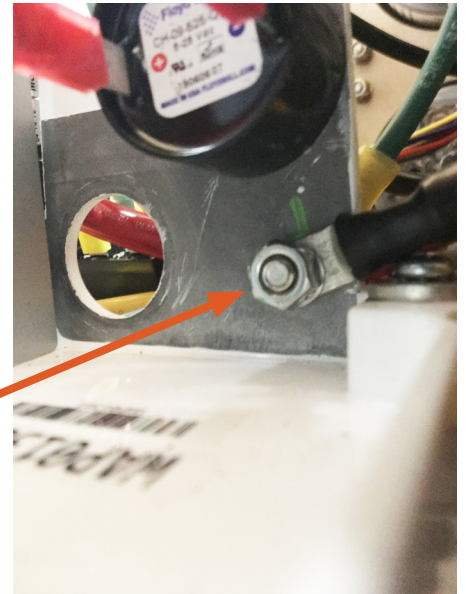
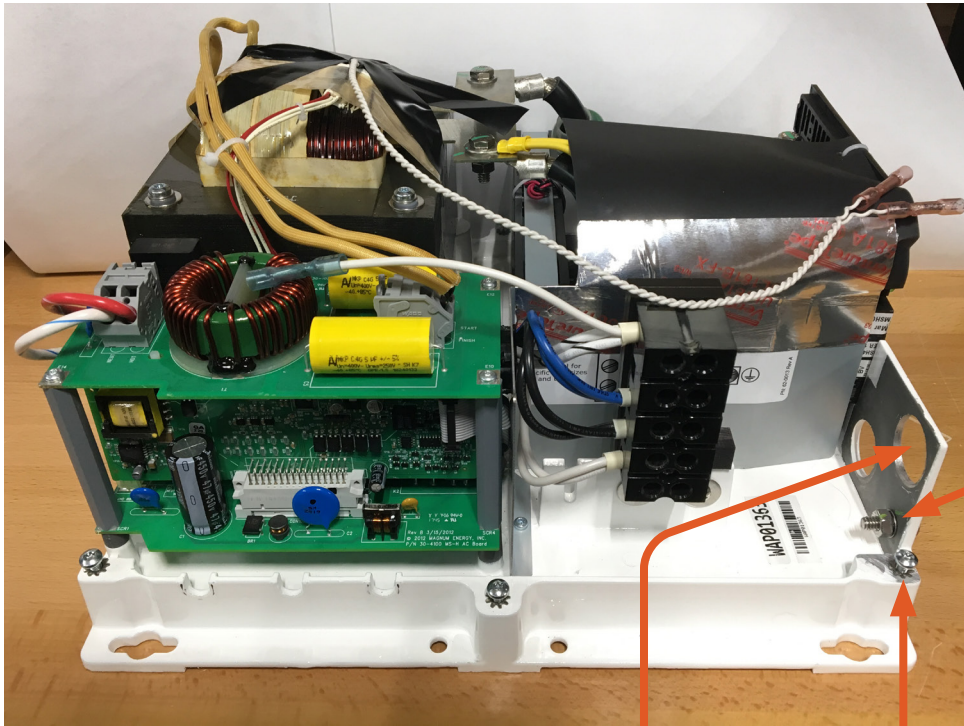
Old  
Inverter/Charger  
in PRO-Verter



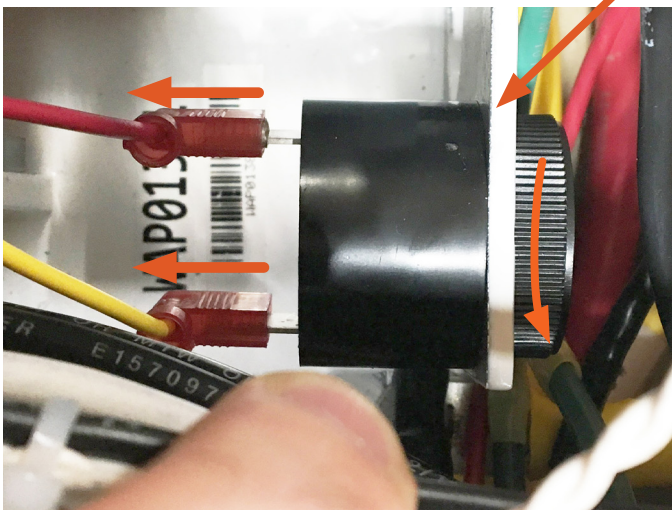


### Ground Lug Connection

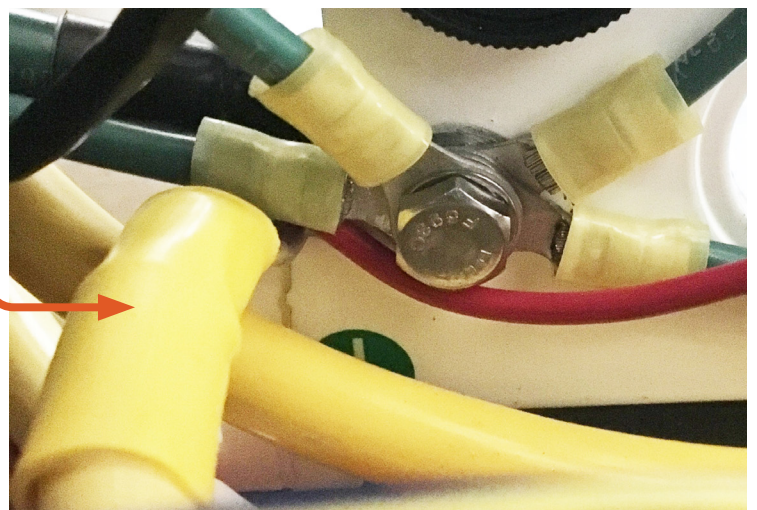
3. Use 11 mm driver or wrench to remove the nut holding the single black wire on the “back side” of the ground lug. Label this wire appropriately to facilitate installation of the replacement Inverter/Charger.



### Alarm/Buzzer Connection



### DC Ground Wire Connection



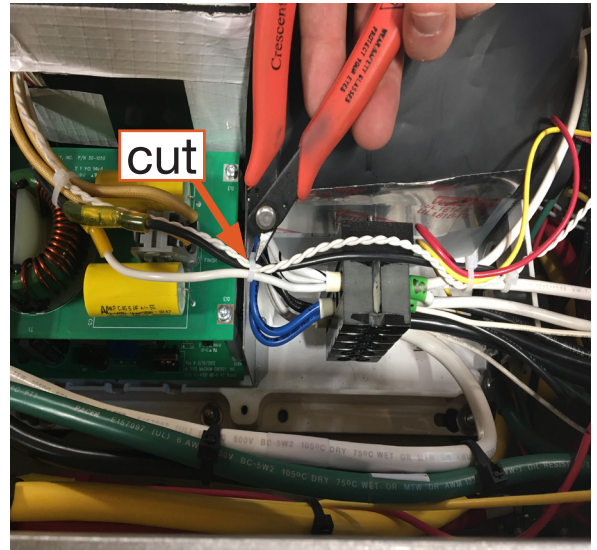
4. Remove the alarm/buzzer by unscrewing the bezel and sliding it out of the frame.

5. Use a Torx T20 driver to remove the heavy gauge yellow wire from the Inverter/Charger base.

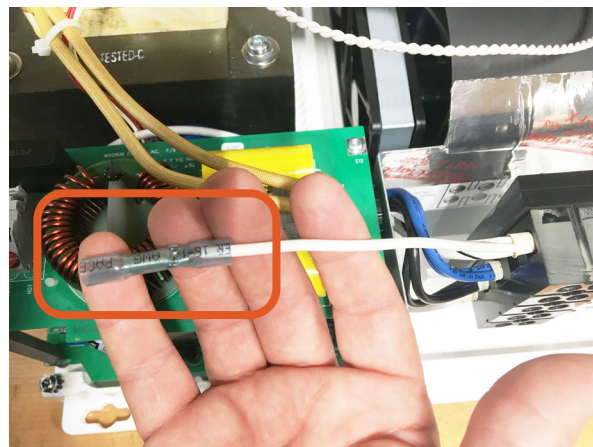
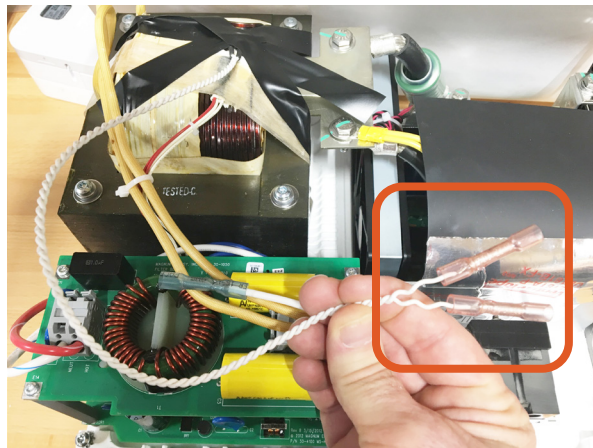


## Cut-and-splice Electrical Connections

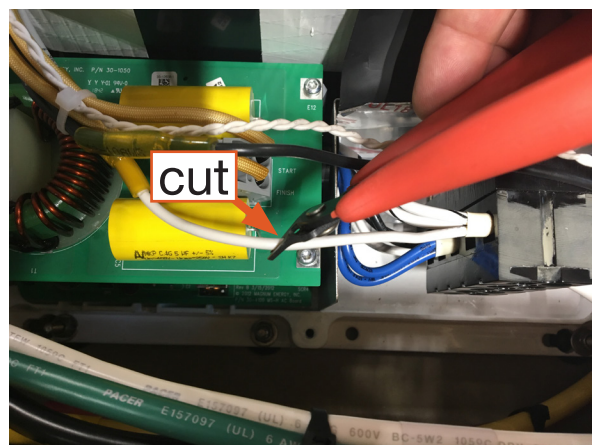
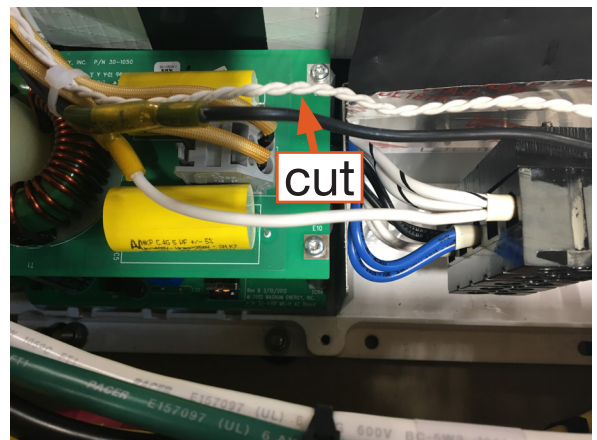
6. Use wire cutters to remove the zip tie that bundles the wires shown. Cut the white, twisted pair and then the white wire shown below. The wires to which these wires will be spliced in the replacement Inverter/Charger are shown below in the left column. A crimp tool for butt splices is required for splicing these wires during installation of the replacement Inverter/Charger.



Replacement  
Inverter/Charger



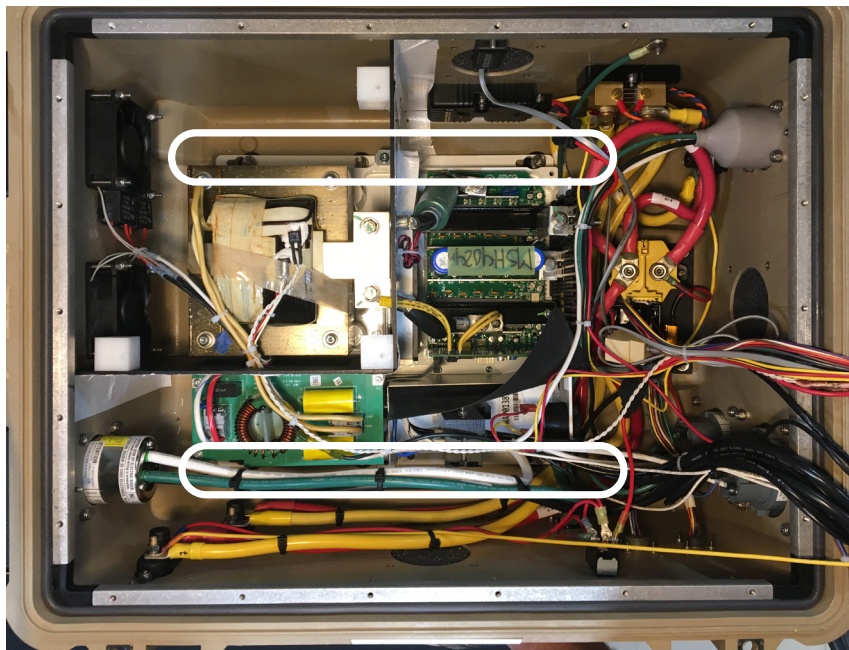
Old  
Inverter/Charger  
in PRO-Verter



## D. Mechanical Connections

The locations of the mechanical connections that secure the Inverter/Charger to the PRO-Verter case are shown below. There are three (3) on the base at the back and three (3) on the base at front. To remove these fasteners, use a socket wrench with extension to loosen and remove the Nyloc nuts in the PRO-Verter interior.

Back

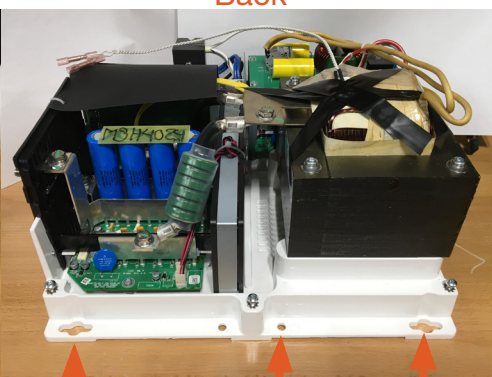
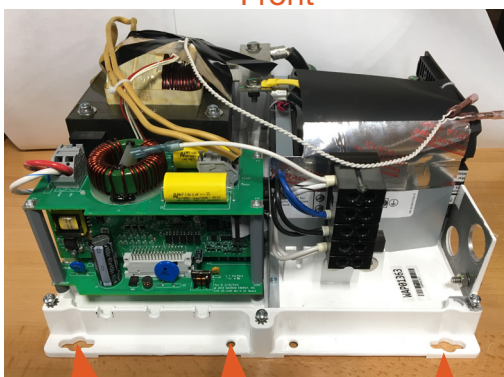


Front

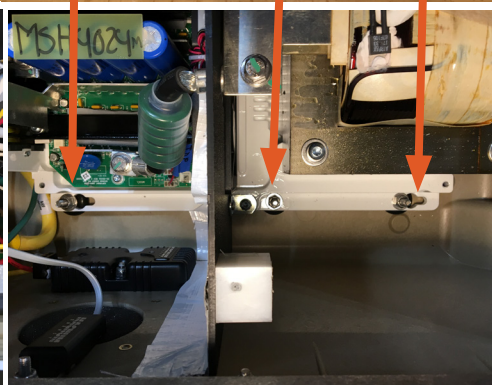
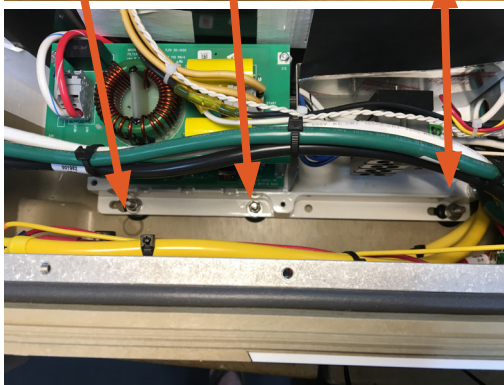
Front

Back

Replacement  
Inverter/Charger



Old  
Inverter/Charger  
in PRO-Verter





## **E. Installation of the Replacement Inverter/Charger**

1. After disconnecting all electrical and mechanical connections, carefully lift out the old Inverter/Charger while checking for any missed electrical connections.
2. Lower the replacement unit down into the PRO-Verter, taking great care not to stress or break any wires in the PRO-Verter case. This step will require at least two people.
3. Reestablish all electrical and mechanical connections using this Instruction Manual and the images taken during disassembly.
4. Rebuild the baffle box. Remove the old tape from the plastic walls before reinstalling. Replacement tape is included in the kit.

## **F. PRO-Verter Functional Test**

1. Move the Faceplate back into its normal, operating location.
2. Connect the PRO-Verter to an active 24 VDC battery. Turn on the PRO-Verter main power breaker. Observe power-up on PRO-Verter LCD user interface.
3. If the PRO-Verter does not power up, ensure all original connections are reestablished.