

# PURKEYS

CRETE INVERTER HARNESS

INSTALLATION GUIDE

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# Crete Inverter Harness Installation Guide

## Tools Required for Installation

- Center punch and hammer
- 5/32" drill bit
- 3-1/2" hole saw
- Phillips screwdriver
- Adjustable wrench

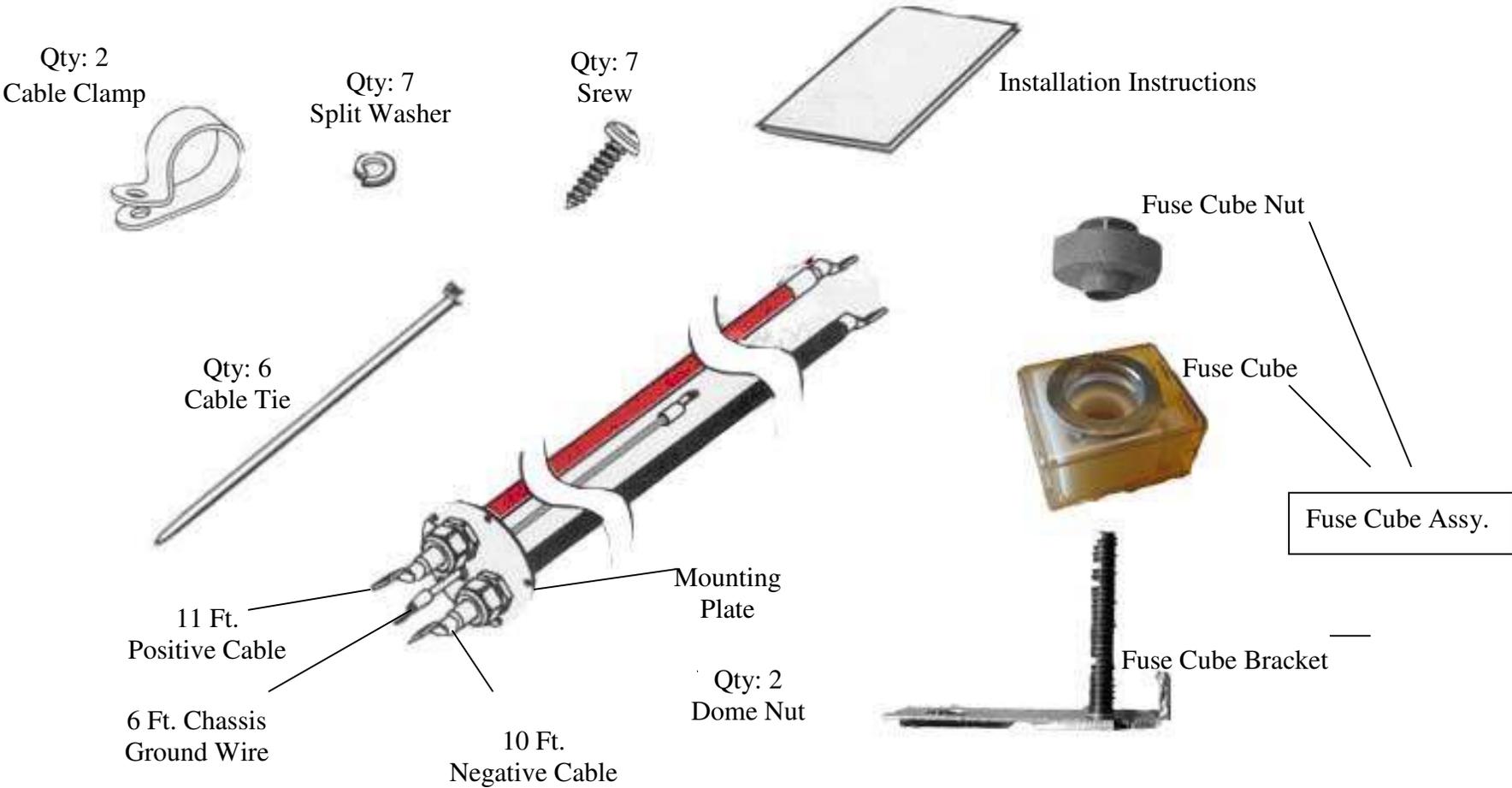


Figure 1 – Materials List

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## Installing the Harness and Inverter

NOTE: Remember to read the Owner's Guide accompanying your inverter for detailed explanations of its installation and operation.



**WARNING: Explosion or Fire**

Be sure the battery compartment is well ventilated. Flammable fumes are often present when working with batteries.



**CAUTION: Reverse Polarity**

Power connections to the inverter must be positive to positive and negative to negative.



**CAUTION: Reverse Polarity**

A reverse polarity connection (positive to negative) will permanently damage the unit. Damage caused by a reverse polarity connection will not be covered under warranty.

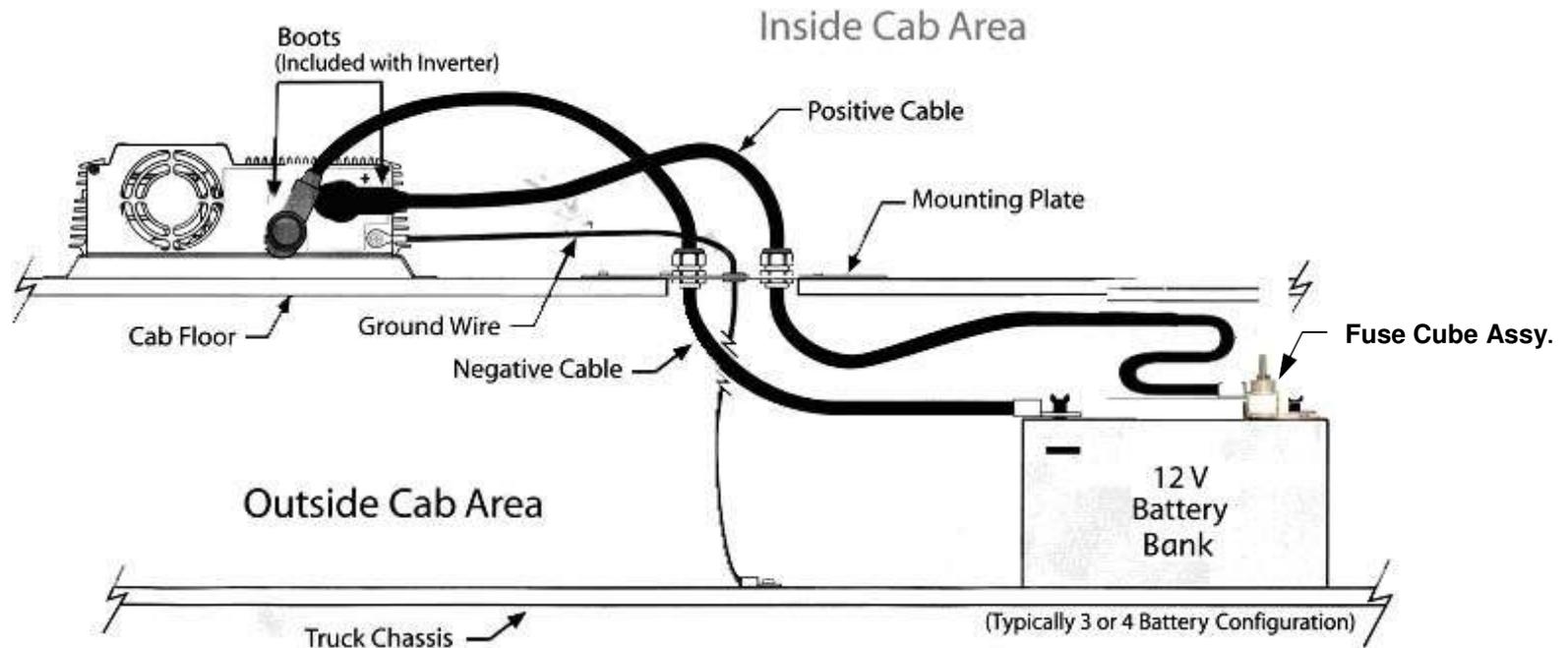


Figure 2 – Cable Layout

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## Locating and Installing the Mounting Plate:

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1. Find a suitable location for the inverter in the cab (refer to section “Choosing a Location” in the Owner’s Guide.) Be sure the battery cables can reach (max 10 ft.) from the batteries, through the cab floor, to the inverter (Figure 2). Do not mount or install the inverter at this time.
  2. Remove the floor covering where the mounting plate will be placed.
  3. Using the template (Figure 4), a center punch and a hammer, mark the locations for drilling the access hole (3-1/2”) and the mounting screw holes.
  4. If you are installing the mounting plate, onto wood, skip to step 5. Using the 5/32” drill bit, drill 6 pilot holes, 5 for the screws and one for the 3-1/2” access hole.
  5. Drill a 3-1/2” diameter hole using the center pilot hole with the 3-1/2” hole saw.
  6. Cover the positive and negative ring terminals, which will be connected to the inverter’s DC terminals, with the boots provided with the inverter. This will reduce the potential for any short circuits during handling and installation.
  7. Run the battery cables and the ground wire through the access hole. See Figure 3 for correct orientation.
  8. Secure the mounting plate onto the floor with the screws and washers provided.
  9. Making sure the dome nuts are loose, provide enough battery cable and ground wire to attach their respective terminals to the locations as shown in Figure 2.
  10. Carefully tighten the dome nuts with the adjustable wrench.
  11. Find a suitable location to mount the fuse block that allows the short positive cable to be attached to the battery’s positive terminal. Mark and drill pilot holes using the 5/32” drill bit. Do not connect the short positive cable to the battery at this time.
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## Installing the Inverter:

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Decide on the configuration for your AC output. If you choose to use AC outlets other than the GFCI receptacles on the inverter, refer to the section, “Connection To An Existing AC Circuit,” in the Owner’s Guide. If you choose to use the inverter’s GFCI receptacle, continue with the steps below.

1. Make sure the inverter switch is in the OFF position and the truck’s engine is off.
2. Position the inverter so you can easily access the AC outlets, the DC terminals and to allow sufficient airflow through the vents on the bottom and sides of the inverter.
3. If you are going to use the remote switch, plug the cable into the jack on the bottom of the inverter. Consult the Owner’s Guide for more detailed information.
4. Attach one end of the chassis ground wire (small black) to the inverter and the other end to an unpainted portion of the truck’s chassis as close to the battery’s ground connection as possible.
5. Connect the “Fuse Cube Assy.” to the Positive post of the battery together with any battery cable previously disconnected.
6. Attach the battery cables to the inverter’s DC terminals and to the battery in the following sequence to minimize the possibility of sparks or explosions.
  - a. Positive battery cable to the Positive DC terminal on the inverter (torque to 9-10 ft-lbs. or 12.2-13.6 N-m).
  - b. Positive battery cable to the “Fuse Cube Assy.” (between the Fuse Cube and the Fuse Cube Nut) that you previously connected to the Positive post of the battery.
  - c. Negative battery cable to the Negative post on the battery together with any battery cable previously disconnected.
  - d. Negative battery cable to the Negative DC terminal on the inverter (torque to 9-10 ft-lbs. or 12.2-13.6 N-m).
7. Secure the battery cables and ground wire along the chosen route using the cable ties provided.
8. Permanently mount the inverter with the supplied screws and washers, following the instructions in the section “Mounting The Inverter” in the Owner’s Guide.
9. Install a cable clamp (provided) on the positive cable inside the battery box just before the cable exits the battery box by drilling pilot holes using the 5/32” drill bit and mounting the cable clamps with the screws provided. This will reduce any stress on the “Fuse Cube Assy.”
10. Mount the remote switch (if used) using the template supplied in the Owner’s Guide.
11. Refer to the Owner’s Guide for operating instructions.

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## Troubleshooting the Installation:

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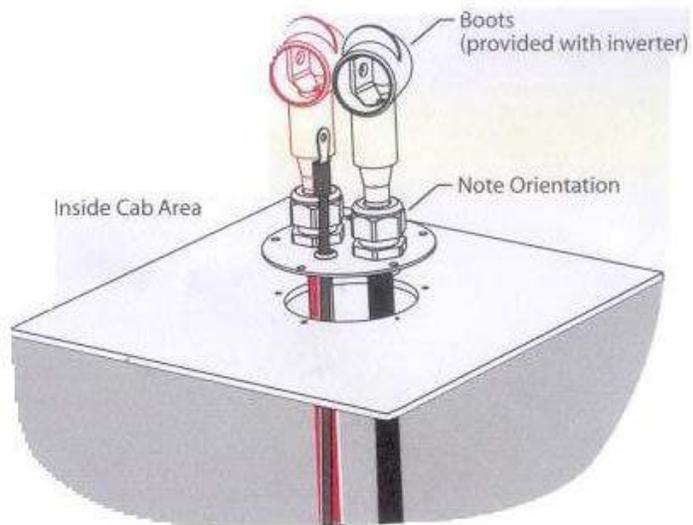
Note: Before troubleshooting, ensure that:

1. The battery and the inverter are connected per instructions.
2. The truck's engine is turned off.
3. The inverter's ON/OFF switch is turned ON.
4. No appliance or equipment is plugged into the inverter.

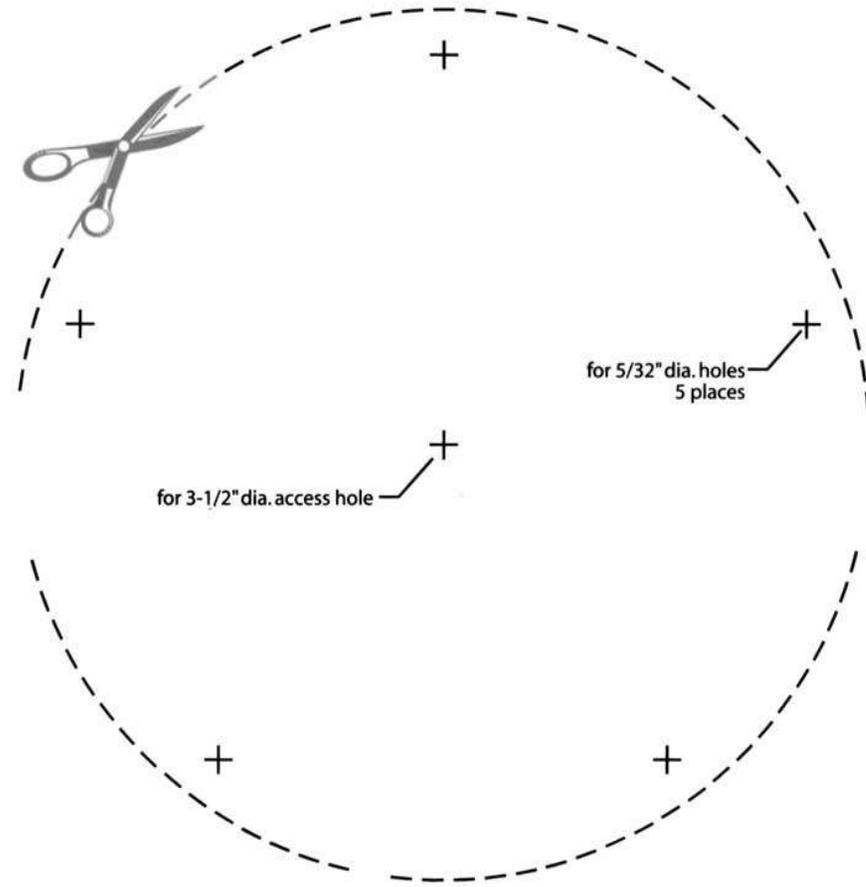
<b>Problem</b>	<b>Possible Cause</b>	<b>Suggested Remedy</b>
GFCI receptacle power light is off. All other AC panel LEDs are off.	No power to the inverter.	If no voltage at DC terminals, but voltage is present at battery, then re-check all DC cables. If no voltage at DC terminals and no voltage at battery terminals, then test battery and replace if necessary.
	Fuse is blown.	Replace fuse with same rating.
	Short circuit in wiring causing fuse to blow.	Check wiring and replace fuse with same rating.
	Reverse Polarity.	Have inverter tested and replaced if necessary.
GFCI receptacle power light is off. All other AC panel LEDs are on.	GFCI reset button has popped out.	Push the GFCI reset button into reset position.
	High input voltage.	Refer to troubleshooting section in the inverter's Owner's Guide.
	Low input voltage.	Refer to troubleshooting section in the inverter's Owner's Guide.

NOTE: If the inverter still does not operate, refer to the "Troubleshooting Section" in the inverter's Owner's Guide for more information.

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**Figure 3 – Mounting Plate Orientation**



**Figure 4 – Mounting Plate Template**

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## LIMITED COMMERCIAL WARRANTY POLICY

Purkeys Fleet Electric, Inc. (hereafter “Purkeys”), warrants each product to be free of defects in material or workmanship under normal use and service. This warranty is for the benefit of Original Equipment Manufacturers, Dealers, Warehouse Distributors, Fleets, or other End Users (hereafter “Customers”) and covers products manufactured by Purkeys and sold new to Customers either directly by Purkeys or by its authorized dealers, distributors, or agents. The length of the Warranty Period is 24 months.

The warranty period commences on the in-service or install date and is not transferable. Failure to provide the in-service or install date on the warranty claim form will cause the warranty period to begin on the date the part was manufactured or date of sale recorded on the original sales invoice, whichever is earlier.

A completed warranty claim form should accompany all parts submitted to Purkeys for consideration for repair or replacement under warranty. The submitted claim form should contain all of the information required. Lack of a properly or fully completed claim form will result in delay or denial of warranty claim. Claims must be submitted no later than 30 days after part is removed.

This warranty does not apply if, in sole judgement of Purkeys, the product has been damaged or subjected to accident, faulty repair, improper adjustment, improper installation or wiring, neglect, misuse, or alteration or if the product failure is caused by defects in peripheral vehicle components or components attached to the Product or failure of a part not manufactured by Purkeys.

This warranty shall not apply if any Purkeys product is used for a purpose for which it is not designed or is in any way altered without the specific prior written consent of Purkeys. ANY Product alleged by a Customer to be defective must be inspected by Purkeys as a part of the warranty claims process in order to confirm that the part has failed as a result of a defect in material or workmanship.

Transportation for products and parts submitted to Purkeys for warranty consideration must be prepaid by Customer. Repaired or replaced products and or components will be returned to Customer pre-paid by Customer or “freight collect” to the address provided by Customer in the warranty claim form. No charge will be made for labor or material in effecting such repairs.

The Warranty provided by Purkeys hereunder is specifically limited to repair or replacement of the Product as Purkeys deems most appropriate in its sole discretion. Purkeys neither assumes nor authorizes any other person to assume on its behalf any other warranty or liabilities in connection with Purkeys products. The Warranty does not apply to fuses or other “consumable” or maintenance items which are or may be a part of any Purkeys product.

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THIS WARRANTY DOES NOT APPLY TO LOSS OF VEHICLE OR EQUIPMENT, LOSS OF TIME, INCONVENIENCE, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. PURKEYS SPECIFICALLY DISCLAIMS AND SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES arising out of or from the use of Purkeys products by the Customer.

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