

# Installing the DC Wiring Enclosure for the PROsine™2.0 Inverter .Charger

## IMPORTANT SAFETY INSTRUCTIONS

**WARNING**



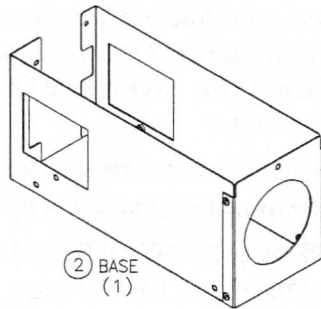
Before attempting to install the DC Wiring Enclosure assembly, read and save these instructions. If you have not yet installed PROsine 2.0, read the installation instructions in the PROsine 2.0 User's Manual before attempting to install either the main unit or this accessory.

**WARNING:ENERGY HAZARD**

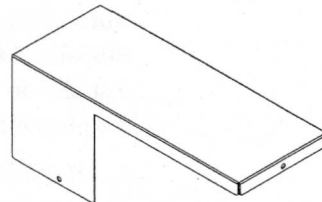


While connected to a battery, the DC wiring has sufficient energy to cause severe burns should jewelry, tools, or other metal objects contact both sides of the circuit. Make sure the DC wiring is disconnected from the battery before proceeding. Xantrex recommends all wiring be done by a certified electrician or technician.

## SUPPLIED PARTS



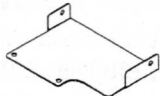
2 BASE  
(1)



@COVER  
(1)



@SRACKET  
(2)



G) ADAPTER PLATE  
(1)



@M4 SCREW  
(11)



G)M4 WASHER  
(11)

Note that the circled numbers are referenced in this installation guide.

## PRODUCT DESCRIPTION

The PROsine 2.0 DC Wiring Enclosure is intended for installations where the applicable electrical code requires DC wiring and connections to be enclosed. For example, this is normally required in residential installations subject to the Canadian Electrical Code or the U.S. National Electrical Code. Since these installations normally require the DC wiring to be run in conduit (or similar protective means), the DC Wiring Enclosure has been designed for use with a 2 Y2" trade size conduit.

## TOOLS REQUIRED

- #2 Phillips screwdriver
- W' socket wrench (13 mm or an adjustable wrench can be substituted)
- DC cabling, conduit, conduit hubs, mounting screws and so on, as required for your installation

**Note:** If using the DC Wiring Enclosure, the connectors used on the PROsine 2.0 end of your DC cables should be crimp-on ring terminals. Most box connectors (set-screw types) are too large to fit in the enclosure without risk of the connector shorting to the wall of the DC Wiring Enclosure. Do not use any connector that does not provide at least 2 mm clearance to the inside wall with the wire in place and the set-screw tightened.

## INSTALLATION

Note: If the DC Wiring Enclosure is being installed at the same time as a new PROsine 2.0 go directly to Step 2 and use these instructions together with the installation procedure in your PROsine 2.0 User's Manual. Otherwise, follow the procedure from Step 1.

1. If this DC Wiring Enclosure is being installed on an existing PROsine 2.0 installation, deactivate PROsine 2.0 as follows:
  - a) Turn the PROsine 2.0 ON/OFF/REM switch to OFF.
  - b) Disconnect PROsine 2.0 from battery power, by opening the DC disconnect or circuit breaker, or removing the DC fuse or the cable at the battery positive terminal.
  - c) Disconnect the positive and negative cables from the DC terminals at the rear of PROsine 2.0.
  - d) Remove PROsine 2.0 from its mounting sufficiently to provide access to the bottom of the unit at the DC end.
2. Attach the Adapter Plate (Item 1) to the underside of PROsine 2.0 as shown in Figure 1a and 1b.

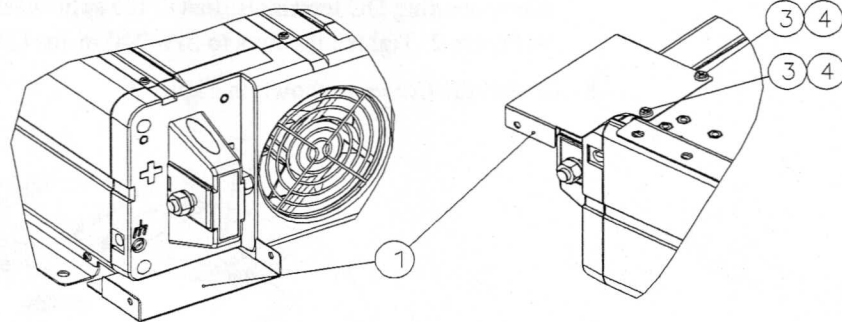


Figure 1a

Figure 1b

3. Attach the Base (Item 2) as shown in Figure 2.
4. Attach one bracket (Item 5) to each side of the Base (also shown in Figure 2). Fasten the brackets to the mounting surface using suitable fasteners for your installation (not supplied).

Step 4 is required because the PROsine 2.0 endcap is not designed to support the leveraged stress that could be caused by the conduit deflecting the end of the DC wiring enclosure.

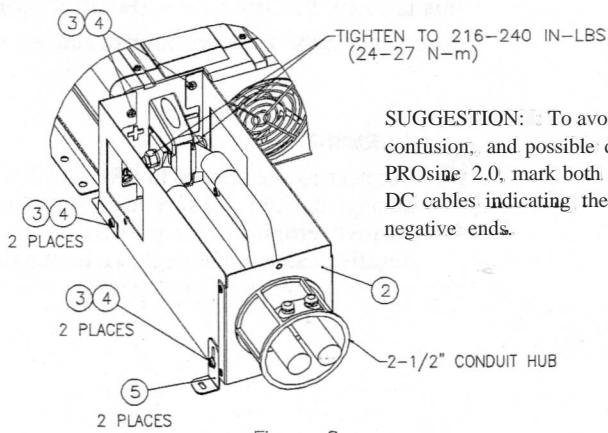


Figure 2

5. Install a 2 1/2" trade size conduit hub into the Base and connect conduit to the hub.
6. Pull the DC cables through the conduit between the battery location and PROsine 2.0 and into the DC Wiring Box. **Do not connect to the battery yet.**

7. Terminate the cables with crimp terminals and connect the cables to the DC terminals on PROsine 2.0 using the nuts and split-washers supplied with the unit. The crimp terminals must seat directly against their corresponding DC terminals. Install the split-washers and nuts as shown in Figure 2. Tighten the nuts to 216-240 in-lbs (24-27 N-m).
8. Install the Cover as shown in Figure 3.

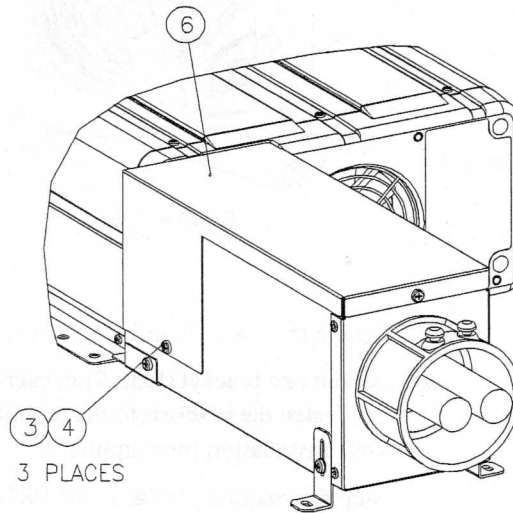


Figure 3

9. Reconnect to the battery bank (which was disconnected in step 1b), or if this is a new PROsine 2.0 installation, connect the cables to the battery according to the installation instructions supplied with PROsine 2.0.

**WARNING**

Connecting the battery to PROsine 2.0 with incorrect polarity will damage the unit. Be sure to connect the cable connected to the battery positive terminal to the positive terminal of PROsine 2.0, and the negative cable to the negative terminal.