

Converting Line-Powered Units to Battery Power & Battery-Powered Units to Line Power (115 VAC only)

Installation Instruction

CONVERTING LINE-POWERED UNIT TO BATTERY-POWERED UNIT

1. Disconnect power to the unit.
2. Remove the four screws from the pump enclosure face plate (control bezel) and lift the bezel off the enclosure. Be careful not to drop the screws or damage the enclosure gasket.
3. Detach the black and red wire harness connecting the power PCB to the main PCB.
4. Place the control bezel and the four screws aside.
5. To keep the unit water resistant, we recommend that you leave the transformer and power cord in place. They will not interfere with operation. However, if you want to remove the transformer and power cord, you will need to insert a hole plug into the power cord strain relief that is the same diameter as the power cord in order to maintain water resistance.
6. From Install Kit, remove battery enclosure and battery compartment bezel. Mount the bezel on to the battery enclosure for optimum structural support while removing the knockout.
7. Punch out the knockout on the right side of the battery enclosure and the left side of the pump enclosure. To do this, insert a screwdriver into the groove in the middle of the knockout. Rock the screwdriver back and forth while applying pressure, working the screwdriver through the plastic. Be careful to only break the plastic of the knockout. Once you have punctured the knockout, gently but firmly pry upward. Work from the center of the knockout toward one side and then around, gently prying the knockout plastic free. Scrape out any plastic burs that remain.
8. From the inside of the battery enclosure, insert conduit fitting into the knockout hole.
9. Place the foam circular gasket over the conduit fitting, adhering it to one side.

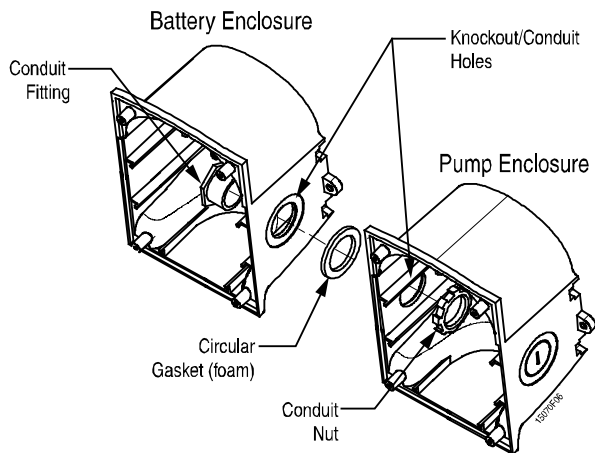


Figure 1. Connecting Battery and Pump Enclosures.



To ensure water-resistance, it is very important that you use the foam circular gasket when connecting the two enclosures.

10. Connect the pump enclosure to the battery enclosure so that the conduit fitting fits into the left side of the pump enclosure and the circular gasket is between the two enclosures.
11. Tighten the conduit nut onto the conduit fitting so that the flat side of the nut is against the enclosure wall.
12. Place battery holder inside the battery enclosure.
13. Feed the black and red battery-power harness wires through the conduit hole into the pump enclosure.
14. Connect battery-power harness wires to the “+6 VDC” terminal on the main pump PCB.
15. Remount the pump enclosure control bezel and tighten the screws, being careful not to damage the gasket.
16. Place four D-Cell batteries (not included) into the battery holder.
17. Remove the backing from the adhesive bezel gasket and place the gasket on the battery enclosure.

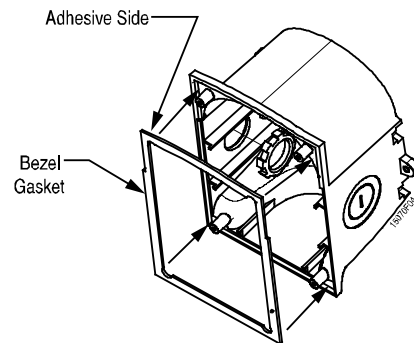


Figure 2. Placing Bezel Gasket on Battery Enclosure.

18. Remount the battery compartment bezel onto the front of the battery enclosure and tighten the four screws into place.

Your pump is now ready for normal battery operation.

CONVERTING BATTERY-POWERED UNIT TO LINE-POWERED UNIT (115 VAC ONLY)

1. Remove the four screws from the pump enclosure face plate (control bezel) and lift the bezel off the enclosure. Be careful not to drop the screws or damage the enclosure gasket.
2. Disconnect the black and red wire harness connecting the battery holder to the main pump PCB.
3. Place the bezel and four screws aside.

4. Remove the battery enclosure bezel as you did the pump enclosure bezel in step 1.
5. Remove the other end of the black and red wire harness from the battery holder.
6. If desired, you may remove the battery holder from the battery enclosure.



If desired, you may remove the entire battery compartment enclosure by turning the conduit nut counterclockwise and removing the conduit fitting connecting the two enclosures. However, we do not recommend this because removing the battery enclosure will compromise the unit's water resistance.

7. On the bottom of the pump enclosure, punch out one of the smaller knockouts using the method described in step 5 of **CONVERTING LINE-POWERED UNIT TO BATTERY-POWERED UNIT**.
8. Align the power PCB in the pump enclosure and secure it into position with the two screws provided. See Figure 3.

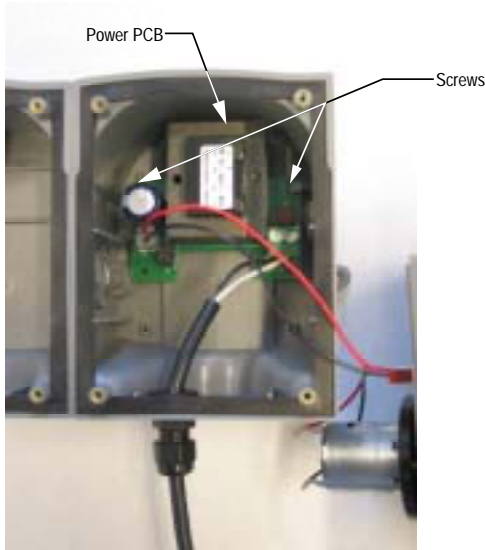


Figure 3. Pump Enclosure with Power PCB.

We recommend that you first twist the screws into the holes in the power PCB completely before placing it into the enclosure.

9. Remove the flat nut from the strain relief and feed power cord through the strain relief so that lead wires and about 2" of power cord stick out from the top of the strain relief.

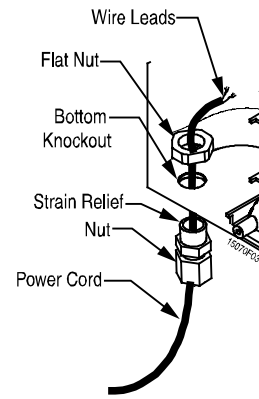


Figure 4. Feeding Power Cord with Strain Relief into Pump Enclosure

10. Insert power cord and strain relief into the pump enclosure through the bottom knockout and tighten the nut on the bottom of the strain relief.
11. From inside the pump enclosure, feed the end of the power cord through the flat nut and tighten the flat nut onto the strain relief.
12. Attach the black and white wire leads to the terminal block on the power PCB, connecting the white wire lead to the "0" terminal, and the black wire to the "115" terminal.
13. Connect the larger clip side of the power wire harness to the "+6VDC OUT" terminal on the power PCB. Connect the clip on the other end of the power wire harness to the "+6VDC" terminal on the main PCB.

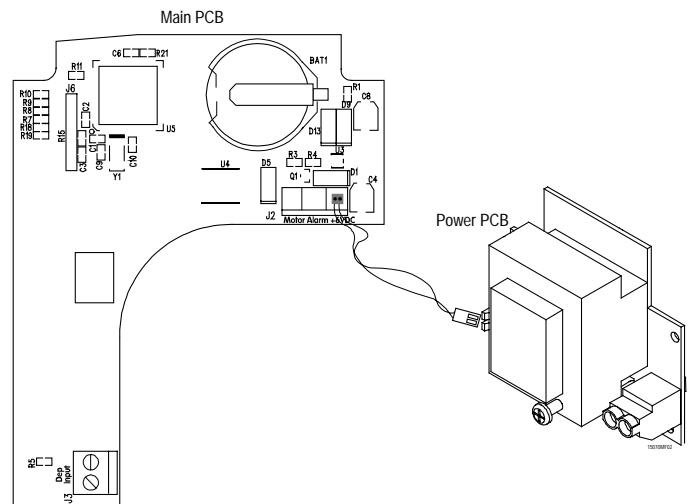


Figure 5. Connecting Main PCB to Power PCB with Wire Harness.

14. Remount the pump enclosure control bezel and tighten the screws, being careful not to damage the gasket.
15. If battery compartment enclosure is still attached, remount the battery compartment bezel.

Your pump is now ready for normal line-power operation.