

MSA Evolution[®] 5000 Series Truck Charger 110 to 12 Volt Standard Plug Adaptor Instructions

Tools Required

- 18 Gauge Wire Strippers
- Wire Cutters
- Soldering Iron
- Solder
- Pliers
- Vice (suggested)



Figure 1. Tools Required

Parts Required

- Charger (P/N 10041100) (FIGURE 2)
- Truck Mounted Charger (P/N 10038977) (FIGURE 3)
- Conversion Kit/ Adaptor (P/N 10058173)



Figure 2. Charger



Figure 3. Truck-Mounted Charger

1. Start by cutting the gray Truck Charger wire to the desired length. Coil and tie off the excess wire if it is to be used as a 12 volt vehicle mount in the future.
2. Use wire cutters strip off 1" of the outer (grey) insulation from the Truck Charger, and cut off the white fiberglass insulation.
3. Cut the black wire so that it is ¼" shorter than the red wire.
4. Strip off ¼" of insulation from both the red and black wire.

NOTE: Twist and tin the individual ends of the wires in order to make the wires easier to work with later (FIGURE 4). To tin the wires, first twist the end; then using the soldering iron, heat the wire and apply solder. Allow to cool.

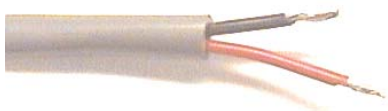


Figure 4. Stripping Insulation

5. **Unscrew the inline power adaptor and place the black plastic end on the wire with the threads facing towards the exposed wire (FIGURE 5).**



Figure 5. Black Plastic End

6. Apply solder to the metal part of the DC adaptor as shown (FIGURE 6).

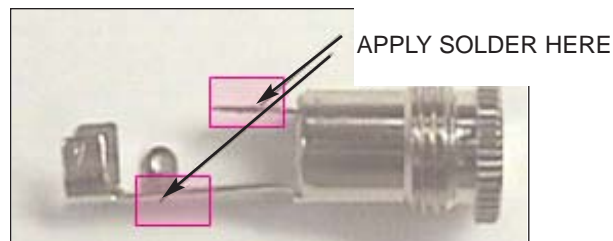


Figure 6. Applying Solder

NOTE: It is not required to feed the wire through the holes prior to soldering.

7. **Cut a ½" piece of the black tubing and slide it over the red wire (FIGURE 7).**



Figure 7. Cutting Vinyl Insulation

8. **Using the iron and solder, carefully solder the black wire to the middle of the longer bottom piece exactly as shown (FIGURE 8).**

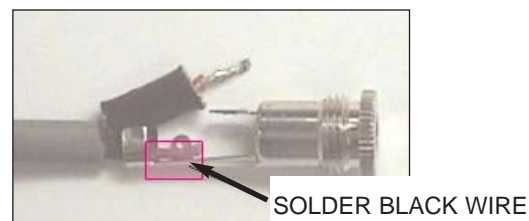


Figure 8. Solder Black Wire

9. **Using the iron and solder, carefully solder the red wire to the short top piece exactly as shown in the (FIGURE 9) picture, making sure to leave a gap between the wire tip and the adaptor.**



Figure 9. Solder Red Wire

10. Slide the black tubing up to cover the exposed red wire and solder joint. Then, using pliers, clamp down the wire clamp on the end of the metal DC adaptor (FIGURE 10).

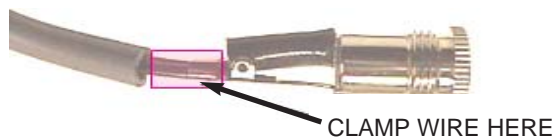


Figure 10. Clamping Wire

11. Visually inspect the DC adaptor to make sure that it has not shorted and that the insulation covers the exposed red lead. Slide the black cover up to the metal adaptor and screw it on (FIGURE 11).



Figure 11. Inspect DC Adaptor

NOTE: It is very important to inspect the wire for shorts, as a fire may result if improperly wired. Make sure that the exposed portions of the red and black wires do not touch and that there is no solder bridging the inner and outer portions of the adaptor.

Charger Mounting and Final Setup

1. Follow the mounting instructions included with the Truck Charger (P/N 10042265) to mount it in the desired location.
2. Plug the Lenmar DC Adaptor into the DC adaptor on the end of the grey truck charger wire before plugging into the wall (FIGURE 12).



Figure 12. Lenmar DC Adaptor



Figure 13. Charging Cradle

3. Plug the Lenmar DC Adaptor into the wall or other 110 volt outlet. Insert a battery into the truck charger and make sure that the flashing green light comes on. Then insert a camera and check to make sure that the flashing green charging light for the camera is activated.

NOTE: The charging cradle is not required for the 110 volt Truck Charger adaptor.