

How to Replace the Xebra SD Chinese Charger with a Delta-Q

Last Updated 04/09/07

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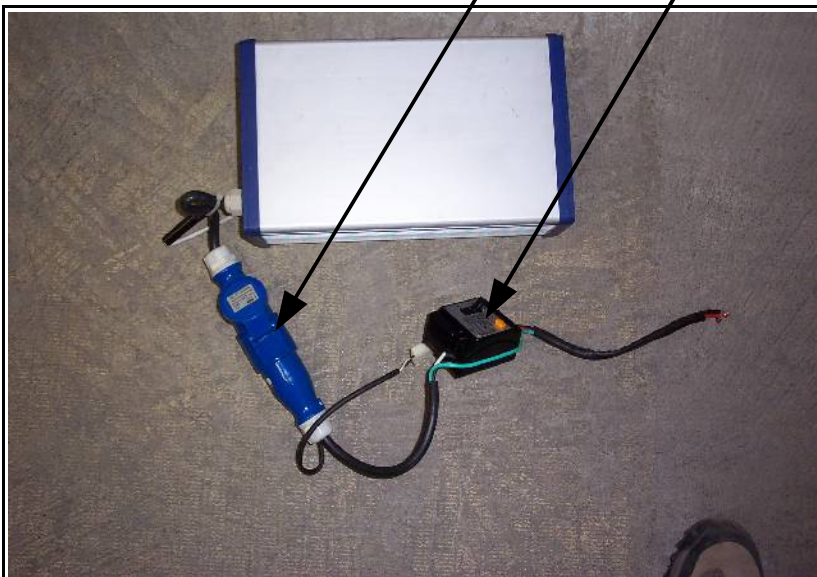
This service bulletin describes how to replace the Xebra's original Chinese battery charger with a Delta-Q "QuiQ" charger in a sedan.

Remove the male charger plug in the vehicle under the "gas" cap lid. There are two large diameter plastic locking nuts which hold the plug in place as shown in the right hand. Reach inside the vehicle to pull the rubber boot down and unscrew the first large locking nut. Then unscrew the second locking nut. Be very careful, these can be broken. Note, picture below shows the assembly outside the vehicle for clarity. You must do this inside the vehicle.



Unbolt the original charger by removing the four bolts holding the charger bracket with charger. As you remove the charger there are two additional connectors that must be disconnected. The first is a large, gray, plastic "Anderson" style plug. The second is a smaller white connector. Cut any tie wraps and unscrew any hold down clamps on the cables. Then remove the charger from the metal bracket by removing the four hold down screws.

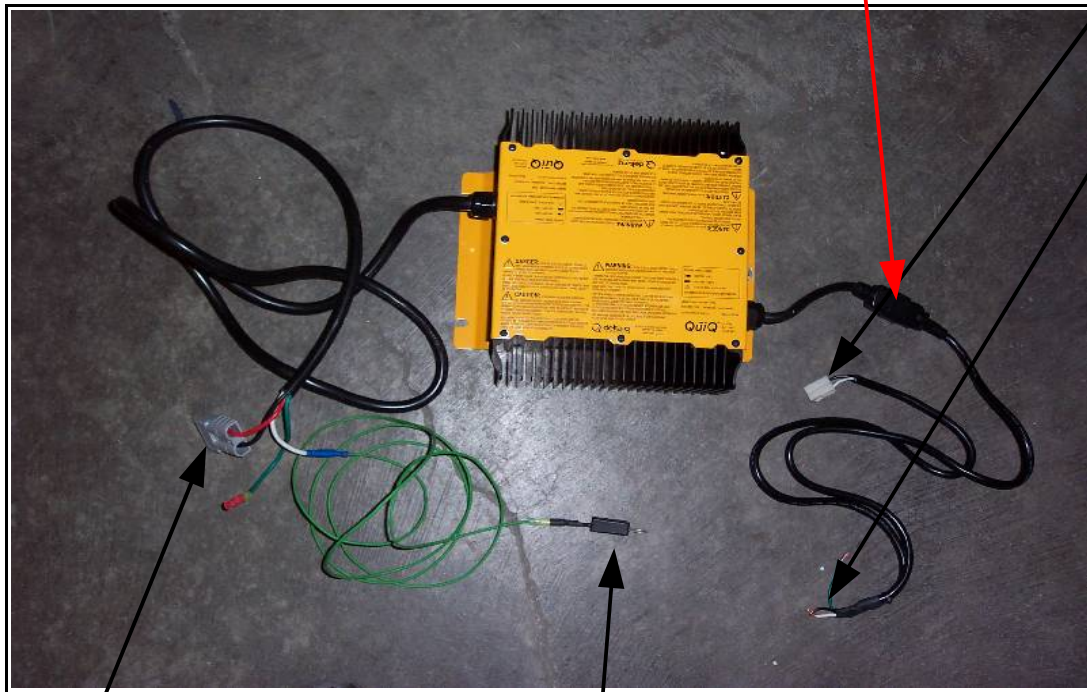
Note, if your vehicle has a large blue connector and GFI breaker, remove these items also. The Delta-Q installation does not require these components.



Now mark the left and right sides of the metal bracket for new holes, drill and mount the new deltaQ charger with bolts and nuts.



In the picture below, the AC power enters on the right. The power cord with the bare wire ends connects to the male AC charging plug under the gas cap. Spliced to this cable is a second cable with white connector. This second cable provides AC power to relay JDac to prevent the vehicle from being driven when AC power is applied to the charger. Wrap connection in waterproof electrical tape.

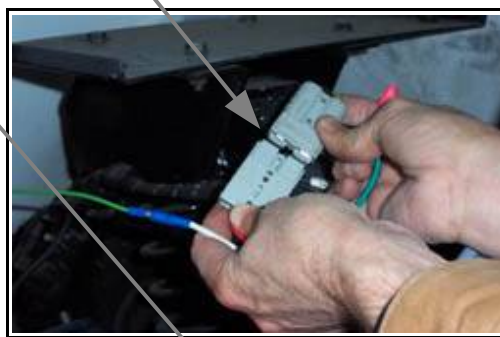
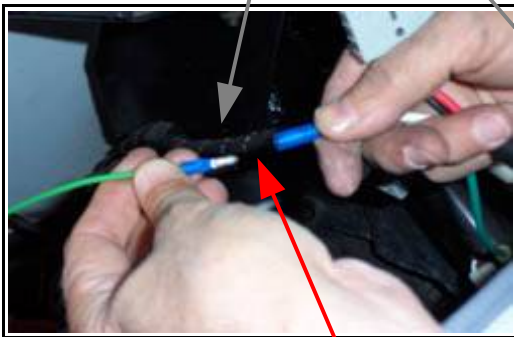


The cable on the left side of charger provides the +72VDC charging current through the gray "Anderson" connector. The green wire connects to the thermistor which connects to the negative side of the negative most battery on the 72V traction pack battery string. This temperature probe provides temperature compensation for battery charging, optimizing the charge for a given temperature. The large green wire with red end is not used.

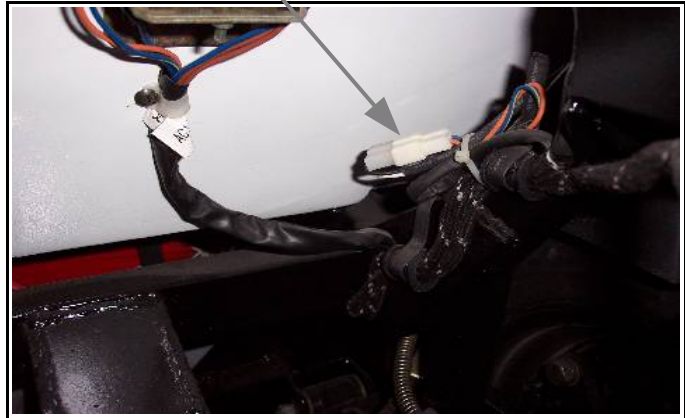
Now bolt the new charger assembly into place eliminating the rubber grommets. Connect the AC power cord to the male charging adapter and reinstall. Put white wire on this side and black here with green on bottom.



Connect the thermistor wire, white AC relay and Anderson connectors. (Note, This Anderson connector is plugged in for three seconds and released to enter and program the unit as described below.)



You must unplug the thermistor to perform reprogramming as discussed below. Neatly tie wrap and secure the wiring but wait until after programming.



Route the long, small green wire with thermistor over the batteries to the negative terminal of the most negative battery. This is the lug closest to the dash board in the sedan. Now bolt the thermistor to the battery. Tie wrap the green wire to the battery handles in several places.



Make sure the Delta-Q is programmed with the proper charging algorithm for your batteries. Use algorithm 6 for DeKa gel batteries and algorithm 5 for Discover and Interstate AGM batteries. To check the charging algorithm refer to the “Check and Change Delta-Q Algorithm” manual.

You must return the original charger to Zap to receive the warranty credit.