



JuiceBox EVSE Relay Replacement (Old style)

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PARTS:

- [JQX-62F-2Z Relay \(12v coil, 80a capacity\)](#) (1)

Step 1 — Removing the old relay



- Unplug the box (of course) and remove the cover.
- Remove the relay with a Philips #2 screwdriver and cut any burned cables away - don't try to unscrew the burned terminals, they're likely now part of the relay forever.
- Remove the relay using a 1 1/32" hex socket on the two nuts on the sides of the relay.
- Clean the affected area, removing smoke residue from the chassis and the board as much as possible.
- You may need to remove the board to clean residue from around the board as well.

Step 2 — Cleaning the cable and adding new lugs



- Trim back the affected wire(s) past the point of burned insulation - usually about 3-6 inches.
- Install new lugs. These can either be soldered (if you have a powerful soldering iron, 65 watts or more, like a TS100 running on a 6S LiPo), or crimped if you have the tool to do it. Lugs can often be found in the electronic tools section of a hardware store - buy ones to fit the 10 or 8 AWG wires and the #8 screws.
- If soldering, note that burned wire doesn't like to take solder - it will take a good amount of flux to do it, and it should be fully "wet" when done properly.

Step 3 — Acquiring and installing a new relay



- The relay must have a 12-volt coil, not 240v or 120v. The original OEM part is linked in the header of this guide.
- Screw the relay wires (usually yellow/white) to the relay coil contacts.
- Install the AC mains feed into the lower terminals where they fit, while also adding the AC board supply (red/black) small wires on TOP of the AC mains wires (between screw & lug, not between lug & relay).
- Finally, install the AC output (J1772 cable) lines on the upper terminals where they fit, while also adding the relay sense wires (usually orange and blue) on top of the lugs similar to the AC supply wires.

Step 4 — Finishing touches



- Make sure the lugs are tightened with German torque - *Gutentite*. Loose lugs burn relays. It's hard to be "too tight".
- Make sure the wires are arranged out of the way of the relay operation.
- You're done! You can replace the lid and charge on.

To reassemble your device, follow these instructions in reverse order.