



Tesla, Inc.
Service Bulletin

Install Relay Box To Enable 32A Single Phase Charging

SB-15-44-006
March 15, 2023

R2

| Classification | | Section/Group | Mobile Service | Configuration |
|-----------------|---------|--------------------------|----------------|----------------|
| Repair Bulletin | | 44 - High Voltage System | Cannot Perform | Single Charger |
| Model Year | Model | Country/Region | Build Location | |
| 2013 - 2015 | Model S | Europe | Fremont | |

The model(s) and model year(s) listed are a general approximation of the affected VIN list. Refer to the VIN/Bulletin Tracker or Customer/Vehicle profile to determine applicability of this bulletin for a particular vehicle.

Repair Bulletin: This repair bulletin provides instructions on addressing a possible customer concern regarding the operation of Tesla vehicles. These instructions should only be performed by trained professionals.

This Service Bulletin supersedes SB-15-44-006 R1, dated 11-Feb-16. This new revision, R2, clarifies paytype guidance and updates part numbers. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

Condition

Some customers in Europe have vehicles with one charger, which limits the vehicle's charging rate to 16 A when the vehicle is connected to a charging station capable of supplying more than 16 A single phase. The vehicle's 3-phase charging capability is unaffected.

Correction

Upon customer complaint of charging rate limited to 16 A on a single phase charging station that provides more than 16 A, install a relay box to increase charging capability to 32 A single phase.

| Correction Description | Correction | Time |
|---|------------|------|
| SB-15-44-006 Not Applicable | S011544006 | 0.00 |
| Vehicle Inspection Only; Vehicle Not Eligible For Relay Box | S021544006 | 0.05 |
| Install Relay Box to Enable 32 A Single Phase Charging | S031544006 | 1.05 |

| Part Number | Description | Quantity |
|------------------------------------|--|----------|
| Parts Required 1046439-00-C | RELAY BOX ASSEMBLY | 1 |
| 1046994-00-B | HIGH VOLTAGE JUNCTION BOX TO RELAY BOX MASTER HARNESS ASSEMBLY | 1 |
| 1046995-00-C | HIGH VOLTAGE JUNCTION BOX TO RELAY BOX SLAVE HARNESS ASSEMBLY | 1 |
| 1046469-00-C | HIGH VOLTAGE JUNCTION BOX ADAPTER HARNESS | 1 |
| 1008246-00-B | DUAL LOCK, 25.0 X 20.0 | 2 |
| One of the following: | | |
| 1060341-00-A | BOLT,M6,12.7MM,TF | 2 |
| 1008727-00-A | BOLT, M6-1.0X16MM - UNPLATED WITH PATCH | 2 |

These part numbers were current at the time of publication. Use the revisions listed or later, unless otherwise specified in the [Parts Catalog](#).

Procedure

1. Use Toolbox 3 to verify the “Charger Type” configuration variable. If it is **Single 10 kW**, continue this procedure. If not, this bulletin is not applicable to this vehicle; discontinue this procedure.
2. Remove the High Voltage Junction Box (HVJB) cover (refer to Service Manual procedure [44301102](#)).

⚠ WARNING: Carry out all High Voltage procedure checks in the Service Manual before continuing.

3. Disconnect the slave charger harness connector from the HVIL termination connector (Figure 1).

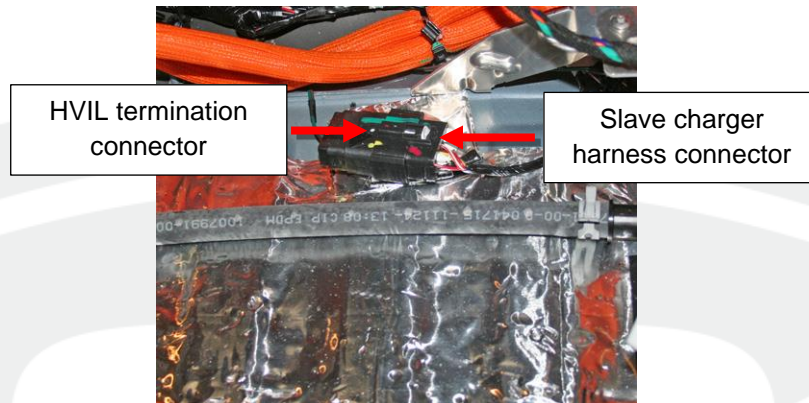


Figure 1

4. Install the relay box harness between the 2 loose ends of the slave charger harness (Figure 2). Use adhesive Dual Lock strips to secure the connectors to the body.

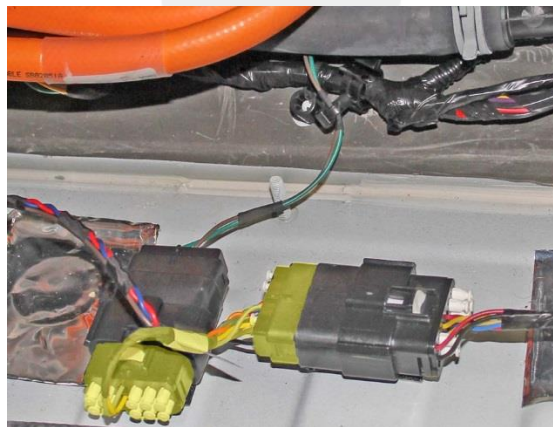


Figure 2 (Relay box harness highlighted)

5. Remove the lockout cover from the LH side of the HVJB (Figure 3).

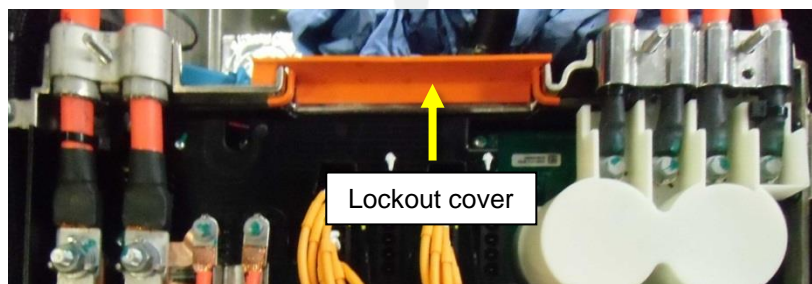


Figure 3

6. Inspect the holes beneath the lockout cover to determine whether they are threaded or unthreaded.

7. Install the 2 screws to secure the relay box to the HVJB (torque 8 Nm) (Figure 4):

- If the holes are unthreaded, use 1060341-00-A.
- If the holes are threaded, use 1008727-00-A.

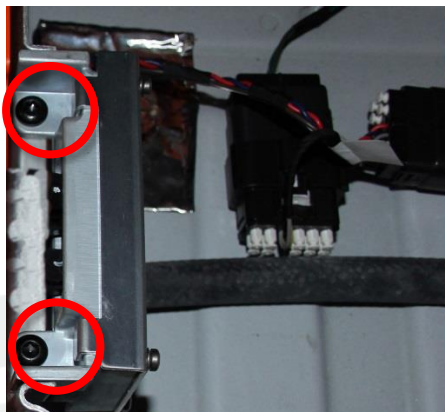


Figure 4

8. Connect the relay box harness to the rear of the relay box (Figure 5).



Figure 5

9. Remove and discard the forward harness that connects the HVJB and master charger (Figure 6).

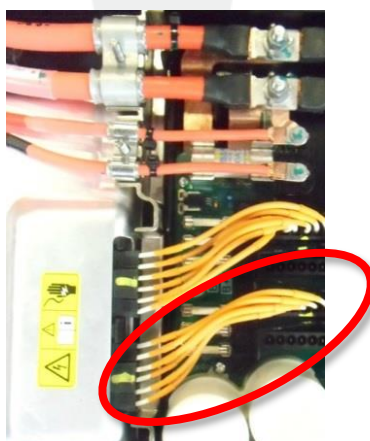


Figure 6

10. Install the relay box harnesses inside the HVJB as shown (Figure 7).

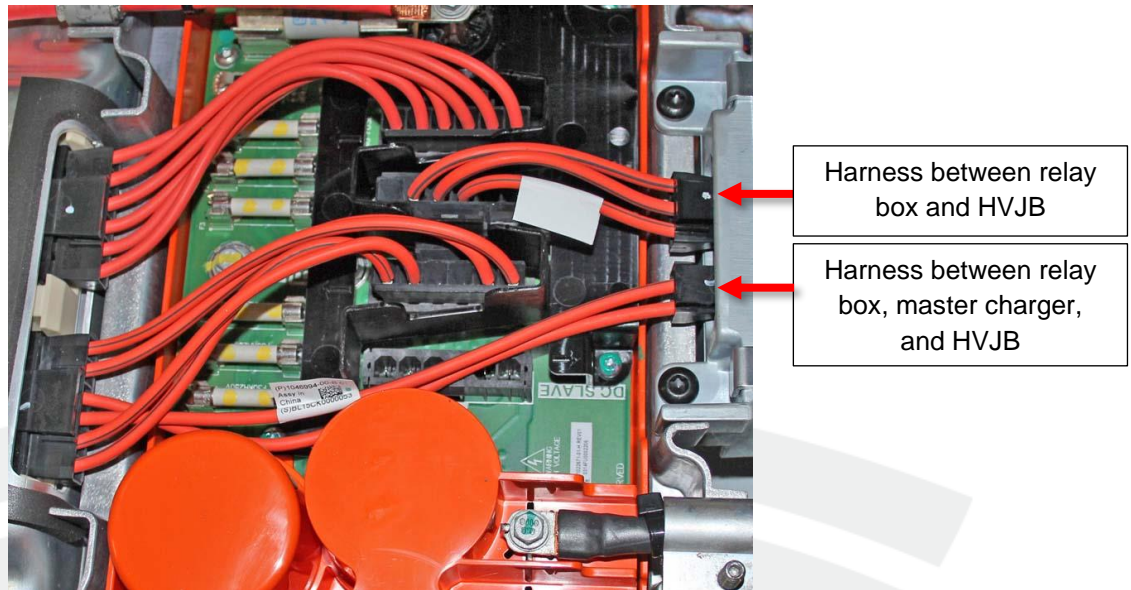



Figure 7

11. Reinstall all components that were removed for access. Reconnect all HV and 12V power.

12. Use Toolbox 3 to change the “Charger Type” configuration variable to **Single 10 kW with Relay**:

- a. Connect a laptop with Toolbox 3 to the vehicle.
- b. In Toolbox 3, click **Dashboards**, and then type “Infotainment” in the search field.
- c. Click **Infotainment Dashboard**, and then click **Vehicle Configuration**.
- d. Click **Read Config**.
- e. Expand the drop down next to “chargertype”, and then select **singleRelay**.
- f. Click **Apply Changes**, and then click **Run** to save the updated configuration.

 **NOTE:** The gateway reboots. Wait for the reboot before continuing to the next step.

- g. Verify that the configuration change was successful.

13. While in Service Mode, on the vehicle touchscreen, touch **Controls**, touch **Software**, touch **Software reinstall**, and then touch **CAN only**.

14. Allow the firmware update to complete.