

# Install Conductive Tape on HV Junction Box and Chargers to Reduce Radio Noise

Classification Repair Bulletin Section/Group 21 - Country/Region All

Infotainment

Year 2012-2015 Model Model S Version All except 70D,

85D

**Bulletin Classification:** This repair bulletin provides instructions and guidelines for a noted condition or a customer concern. The information provided can address a broad range of known or perceived issues with the operation of Tesla vehicles. This bulletin might not be VIN-specific. These instructions assume knowledge of motor vehicle and high voltage electrical component repairs, and should only be executed by trained professionals. Tesla Motors assumes no liability for injury or property damage due to a failure to properly follow these instructions or repairs attempted by unqualified individuals.

## Condition

Electrical interference might cause noise on FM radio stations between 102.5-103.5 MHz and/or poor digital audio broadcasting (DAB) reception.

### Correction

Upon customer complaint, apply conductive tape to the high voltage junction box (HVJB) and charger(s) or relay box.

NOTE: Only vehicles with a large rear drive unit are affected. This bulletin does not apply to Model S 70D and 85D.

| Correction Description   | Correction | Time |
|--|------------|------|
| Vehicle Inspection Only; Conductive Tape For Radio Noise Not Required  | S011621001 | 0.10 |
| Install Conductive Tape To Reduce Radio Noise (Single Charger, Standard 2 <sup>nd</sup> Row Seats)             | S021621001 | 0.10 |
| Install Conductive Tape To Reduce Radio Noise (Single Charger, Executive 2 <sup>nd</sup> Row Seats)            | S031621001 | 0.20 |
| Install Conductive Tape To Reduce Radio Noise (Dual Charger or Relay Box, Standard 2 <sup>nd</sup> Row Seats)  | S041621001 | 0.15 |
| Install Conductive Tape To Reduce Radio Noise (Dual Charger or Relay Box, Executive 2 <sup>nd</sup> Row Seats) | S051621001 | 0.20 |

Required Part(s): Part Number Description Quantity As required

1013211-00-A TAPE, COPPER FOIL, 2.6MIL, 1.5IN WIDE

NOTE: Each roll of tape contains enough material for

approximately 30 vehicles.

HIGH VOLTAGE WARNING LABEL FOR PHASE OUT 0-2 6008307

**COVER** 

#### Shop supplies:

Alcohol wipes (1054788-00-A or equivalent)

These part numbers were current at the time of publication. Use the revisions listed or later, unless otherwise specified in the Parts Manual.

#### **Procedure**

- Test drive the vehicle with the radio tuned to an FM station between 102.5-103.5 MHz to confirm the customer's complaint of radio noise.
- 2. Remove the 2<sup>nd</sup> row seat cushion:
  - Vehicles with standard 2<sup>nd</sup> row seating: Refer to Service Manual procedure 13021101.
  - Vehicles with executive 2<sup>nd</sup> row seating: Refer to Service Manual procedure 13020702.
- 3. If the vehicle already has conductive tape applied to the charger(s) and HVJB, reinstall the 2<sup>nd</sup> row seat cushion and discontinue this procedure.
- Use alcohol wipes to thoroughly clean the HVJB cover, the top of the charger(s), and the top of the relay box (if equipped). Allow the alcohol to fully dry before continuing.
- 5. Apply conductive tape over the joint between the HVJB cover and HVJB enclosure:
  - At the front of the HVJB (Figures 1 and 2):

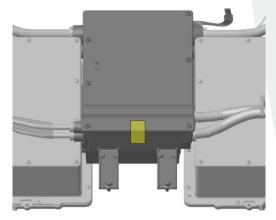


Figure 1 (1st generation; conductive tape highlighted)

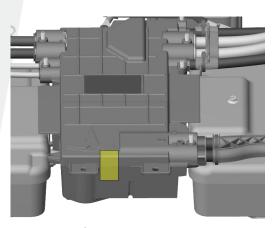


Figure 2 (2<sup>nd</sup> generation; conductive tape highlighted)

• At the rear of the HVJB (Figures 3 and 4):

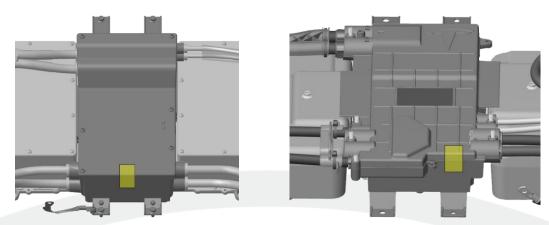


Figure 3 (1st generation; conductive tape highlighted)

Figure 4 (2<sup>nd</sup> generation; conductive tape highlighted)

6. Apply conductive tape over the joint between the master charger and the HVJB (Figures 5 and 6). Ensure that the tape has enough slack to allow movement between the 2 components during normal vehicle operation.

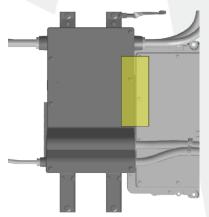


Figure 5 (1st generation; conductive tape highlighted)

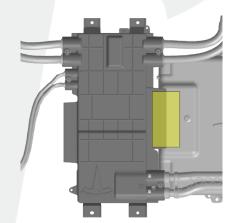


Figure 6 (2<sup>nd</sup> generation; conductive tape highlighted)

- 7. Repeat the previous step for the LH (slave) charger or relay box, if equipped.
- 8. Use a plastic trim tool to firmly smooth out the tape to ensure that it is fully secured.
- 9. Install a new high voltage warning label on the top of the charger(s) if the original warning label is covered by the conductive tape.
- 10. Reinstall the components that were removed for access.

## Affected VIN(s)

Affected Model S vehicles with a large base drive unit built before approximately May 22, 2015. Affected Model S vehicles with a large sport drive unit built before approximately April 11, 2015.

**NOTE:** This is a simplified summary 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.