Replace 12V Positive Jump Post, Cold Weather Regions

Classification	Campaign Bulletin	**Section/Group**	17 - Electrical	**Country/Region**	See Affected VIN(s) Table
Year	2012-2014	**Model**	Model S	**Version**	All

Bulletin Classification: *This campaign bulletin addresses a known non-safety-related condition and provides recommended technical diagnosis and repair procedures. Apply this procedure to all vehicles in the affected VIN range listed. These instructions assume knowledge of motor vehicle and high voltage electricity 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

An upgraded 12V positive jump post is available. The old post is susceptible to corrosion, which might result in poor appearance or prevent external charging of the 12V battery.

Correction

Inspect the 12V positive jump post. If necessary, replace the 12V positive jump post with the upgraded part.

Required Part(s):

Part Number	Description	Quantity
1046217-03-A	MDLS, 12V JUMP POST, SERVICE	1
1048623-00-B	BOLT SO M5x12 PC98 SHLDR MAT	2

Shop Supplies:
Electrical tape

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

Correction Description	Correction	Time
Vehicle Inspection Only; Upgraded 12V Positive Jump Post Not Required	S011517004	0.1
Upgrade 12V Positive Jump Post	S021517004	0.4

Vehicle Inspection

1. Remove the front underhood apron (refer to Service Manual procedure 12251002).

2. Inspect the 12V positive jump post:
   - If the vehicle has the first generation 12V jump post (Figure 1), continue to the “Prepare the New Jump Post” section.
   - If the vehicle has the second generation 12V jump post (Figure 2), discontinue this procedure.

Figure 1

Figure 2

Prepare the New Jump Post

1. Cut and remove the white tape on the jump post side of the corrugated tubing (Figure 3).

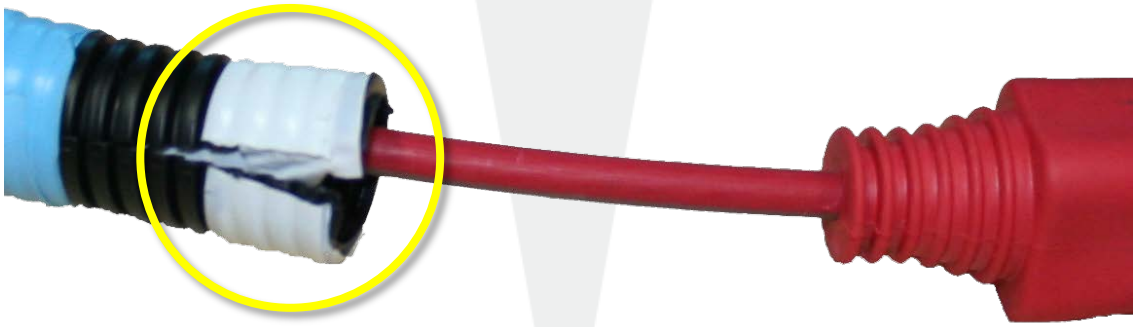

Figure 3

2. Slide the corrugated tubing away from the post.

3. Cut a 200 mm length of electrical tape.

4. At the base of the jump post, apply 3 wraps of electrical tape around the wire (Figure 4).

Figure 4

5. Slide the corrugated tubing over the ribs at the base of the post so that the electrical tape passes through the slit in the tubing (Figure 5).

Figure 5

6. Wrap the rest of the tape around the corrugated tubing, up to the base of the jump post (Figure 6).

Figure 6

Install the New Jump Post

1. Remove the underhood storage unit (refer to Service Manual procedure 15240701).

2. Measure the voltage between the 12V jump post and chassis ground.

NOTE: If voltage is not present, it is possible that fuse F83 has blown or that the harness that connects the jump post and fuse box is damaged, resulting in an inability to externally charge the 12V battery. Ensure that the proper voltage is present before continuing.

3. Disconnect 12V power (Dual Motor vehicles: refer to Service Manual procedure 17010200. Rear wheel drive vehicles: refer to Service Manual procedure 17011002).

4. Inspect the harness that connects the 12V jump post to the main body harness. If the 12V jump post harness is secured to the top of the louver with an adhesive clip, cut the cable tie that secures the harness to the clip. Leave the clip in place.

5. Remove and discard the 2 bolts that secure the jump post (Figure 7). Do not remove the wire from the jump post at this time.

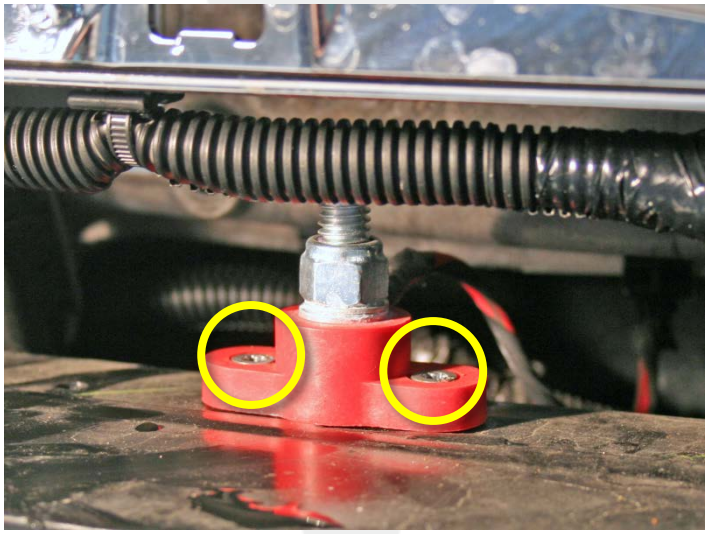

Figure 7

6. Set the old jump post aside.

7. Route the new 12V jump post harness beneath the front bumper carrier.

8. Thoroughly clean any corrosion from the front bumper.

9. Position the new jump post onto the bumper and install the 2 bolts (torque 5 Nm).

NOTE: The old jump post has one bolt on each side of the terminal. The updated jump post has both bolt holes on the right side of the terminal.

10. Cut the old 12V jump post wire approximately 70 mm from where it connects to the main body harness (Figure 8). Discard the old 12V jump post wire.

Figure 8 (Old 12V jump post harness highlighted in yellow)

11. Remove the tape from the remaining vehicle-side jump post wire (Figure 9).

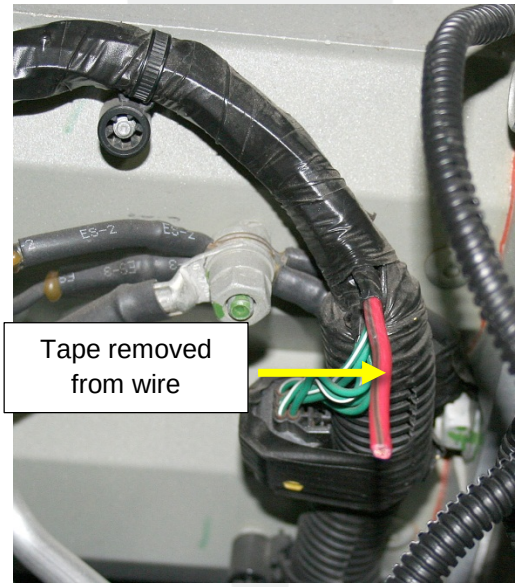

Figure 9

12. Strip approximately 5 mm of insulation from the vehicle-side wire (Figure 10).

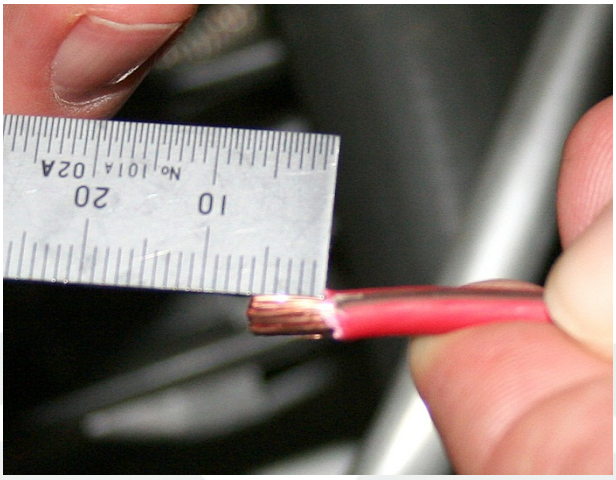

Figure 10

13. Gently pull the 12V jump post harness from the corrugated tubing to expose the splice terminal.

14. Insert the exposed wires on the vehicle-side harness into the splice terminal (Figure 11). Crimp the terminal. Gently pull on both sides of the crimp to ensure that the wires are secure.

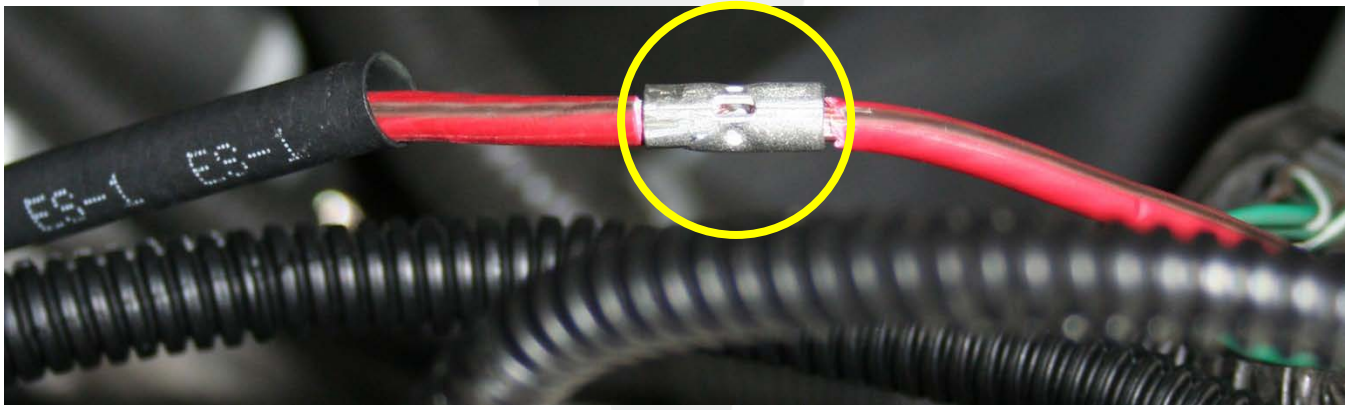

Figure 11

15. Remove the white tape that secures the heat shrink tube to the wire.

16. Slide the heat shrink tube so that it is centered over the splice terminal.

⚠ **WARNING:** Put on mechanic's gloves before continuing.

17. Use a heat gun to heat the shrink tube (Figure 12). The shrink tube contracts as heat is applied.

NOTE: A small amount of adhesive might drip out of the ends of the tube during heating. This indicates a watertight seal.

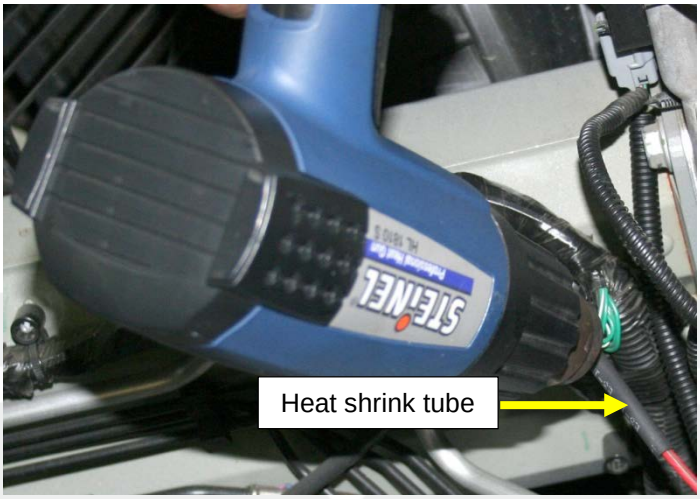

Figure 12

18. Surround the 12V jump post wire with the corrugated tubing; ensure that the jump post wire and splice are completely covered. Cut off any excess tubing.

19. Peel back a small section of the corrugated tubing near the junction of the 12V jump post harness and the main harness.

20. Apply 2 wraps of electrical tape around the 12V jump post harness.

21. Route the electrical tape through the slit in the corrugated tubing (Figure 13).

Figure 13

22. Reinstall the corrugated tubing.

23. Apply 2 wraps of electrical tape around the junction of the corrugated tubing and the main harness (Figure 14). Ensure that the tape is secure so that the corrugated tubing does not slide on the wire; if necessary, add additional tape.

Figure 14

24. Use alcohol to clean the top of the center active louver.

25. Secure the adhesive clip to the top of the active center louver.

26. Reconnect electrical power.

27. To verify installation, ensure that there is voltage at the 12V jump post.

28. Reinstall all components that were removed for access.

Affected VIN(s) Affected Model S vehicles in the following areas built before approximately November 7, 2014:

- United States “Salt Belt” States
- Canada
- Norway
- Switzerland
- Austria

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.

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