



12V Battery Positive Terminal Update

Classification	Repair Bulletin - Level II	Section/Group	17 - Electrical	Country/Region	North America
Year	2012	Model	Model S	Version	All

Bulletin Classification: Repair Bulletin – Level II is issued to address a known non-safety related condition and provide recommended technical diagnosis & repair procedures. Apply this procedure to all vehicles in the affected VIN range listed.

Condition

Some 12V battery positive terminals might have casting porosity, making them more susceptible to weakening and breakage, especially if they are over-torqued. If the terminal fails, the vehicle still drives normally, but does not restart after the ignition is turned off.

Correction

Replace the 12V battery positive terminal with an improved part. Torque the positive terminal to the revised specification of 3.6 Nm.

Procedure

1. Remove the left and right underhood aprons (Figure 1).

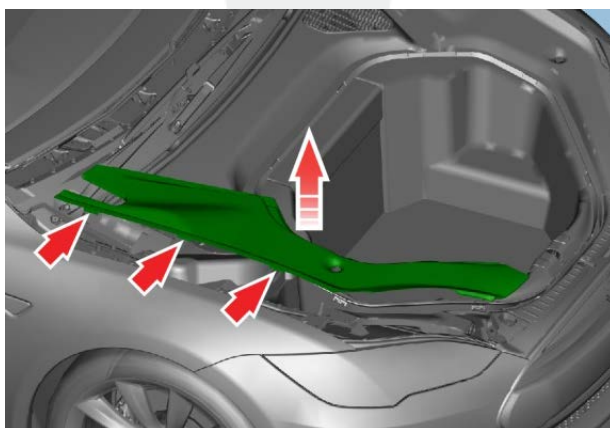


Figure 1

2. Release the clips that hold the rear underhood apron to the plenum, and remove the apron (Figure 2).

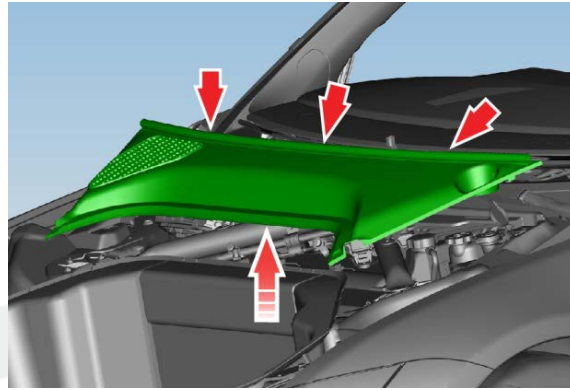


Figure 2

3. Remove the nuts that hold the wiper arms to the spindles (torque 25 Nm), then remove the wiper arms.
4. Remove the HVAC filter.
5. Remove the 6 scrivenets that hold the cowl screen panel to the body (Figure 3), then remove the cowl screen.

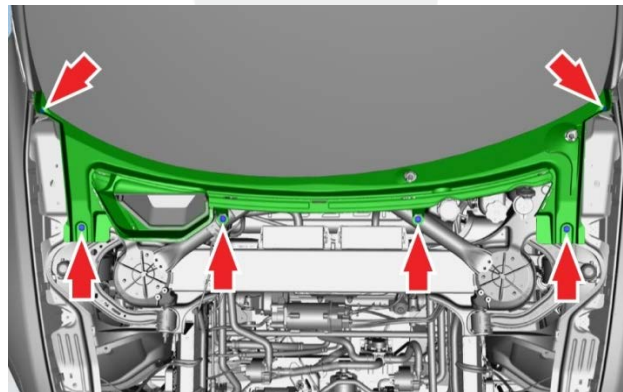


Figure 3

6. Remove the 2 bolts holding the front section of the HVAC filter housing (torque 6 Nm), then pull the front section of the housing forward to remove it.

7. Remove the 2 nuts holding the HVAC intake drain diverter (torque 6 Nm), then remove the diverter (Figure 4).

NOTE: The rear section of the HVAC filter housing does not need to be removed.



Figure 4

⚠ CAUTION: Prior to disconnecting the 12 volt power supply, make sure that the driver's window is in the fully open position. Failure to follow this instruction could result in vehicle lockout.

⚠ CAUTION: If the 12 volt power supply is disconnected, do not attempt to open any doors with the windows in the closed position. Failure to follow this instruction could result in window shattering.

8. On the touchscreen, touch CONTROLS > E-BRAKE & POWER OFF > POWER OFF.

⚠ WARNING: Unless the first responder loop has been disconnected, the vehicle can go into support mode after being idle for a period of time. This can re-enable high voltage. Always disconnect the first responder loop after touching POWER OFF on the touchscreen. Failure to follow this instruction could result in serious injury or death due to exposure to high voltage.

9. Disconnect the first responder loop (X536). Do not cut the loop; disconnect it as shown in Figure 5.

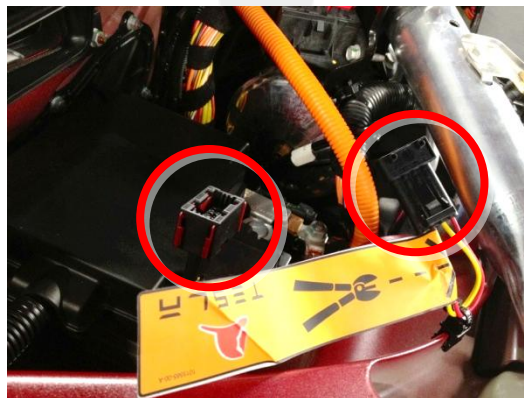


Figure 5

10. Disconnect the 12V battery ground (torque 5 Nm).

⚠ WARNING: Before starting work on electrical components, wait at least 5 minutes for all electrical circuits to fully discharge. Failure to follow this instruction could result in exposure to shock hazard.

11. Remove the battery fuse box cover.

12. Remove the body harness nut (torque 6 Nm) and fuse box mounting nut (torque 6 Nm) (Figure 6).

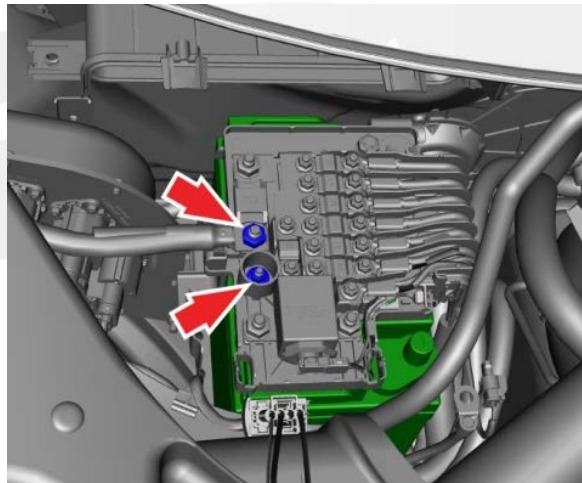


Figure 6

13. Working from the inboard rear corner of the battery, loosen the 12V battery positive terminal nut (torque 3.6 Nm) (Figure 7).

NOTE: The torque specification for this nut has been reduced. Torque the nut to 3.6 Nm when re-installing the positive terminal. The torque specification for the negative terminal remains 5 Nm.

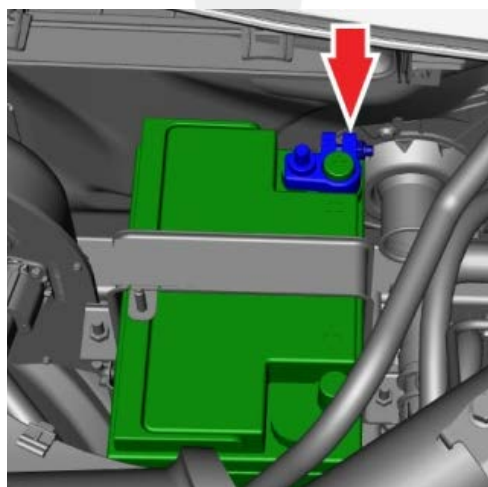


Figure 7 (Shown with battery fuse box removed for clarity)

14. Tilt the fuse box up, and check the serial number on the label on the bottom of it (Figure 8). If the serial number starts with IT12G or IT12H, continue this procedure to replace the 12V battery positive terminal.

NOTE: If the serial number does not start with IT12G or IT12H, the terminal does not need to be replaced. Re-assemble the vehicle, following the previous steps in reverse order. When reinstalling the wiper arms, align the tips of the wipers with the L-shaped alignment marks on the windshield.



Figure 8

15. Remove the nut and bolt that hold the 12V battery positive terminal to the fuse box (Figure 9), then remove the 12V battery positive terminal. Discard the nut, bolt, and terminal.



Figure 9

16. Position the replacement 12V battery positive terminal in the holder on the bottom of the fuse box. Install the included nut and bolt to secure the terminal to the fuse box (torque 11 Nm).

17. Reassemble the vehicle, following the previous steps in reverse order.

NOTE: When reinstalling the wiper arms, align the tips of the wipers with the L-shaped alignment marks on the windshield.

Affected Part(s) 1020639-00-A Term, Batt+, Battery Fusebox

Affected VIN(s) This information is for reference purposes only. This list is not intended to be the sole information source for updates.

5YJSA1DP6CFP01201	5YJSA1DP2CFS00029	5YJSA1DP1CFS00099
5YJSA2AP6CFP01211	5YJSA1DP6CFS00048	5YJSA1DN6CFS00100
5YJSA1DN2CFP01212	5YJSA1DP1CFS00068	5YJSA1DP8CFS00102
5YJSA1DP2CFP01213	5YJSA1DP3CFS00072	5YJSA1DN3CFS00104
5YJSA1DP6CFP01215	5YJSA1DP9CFS00075	5YJSA1DP3CFS00105
5YJSA1DP3CFP01219	5YJSA1DN2CFS00076	5YJSA1DP5CFS00106
5YJSA1DPXCFP01220	5YJSA1DP2CFS00077	5YJSA1DP7CFS00107
5YJSA1AP8CFP01222	5YJSA1DP6CFS00082	5YJSA1DP9CFS00108
5YJSA1APXCFP01223	5YJSA1DP8CFS00083	5YJSA1DN4CFS00113
5YJSA1DP4CFS00002	5YJSA1DPXCFS00084	5YJSA1DN6CFS00114
5YJSA1DP1CFS00006	5YJSA1DP1CFS00085	5YJSA1DN8CFS00115
5YJSA1DP5CFS00008	5YJSA1DP3CFS00086	5YJSA1DN3CFS00118
5YJSA1DP3CFS00010	5YJSA1DP7CFS00088	5YJSA1DN3CFS00121
5YJSA1DP7CFS00012	5YJSA1DN0CFS00089	5YJSA1DN7CFS00123
5YJSA1DP0CFS00014	5YJSA1DP5CFS00090	5YJSA1DN2CFS00126
5YJSA1DP4CFS00016	5YJSA1DP7CFS00091	5YJSA1DN4CFS00127
5YJSA1DP6CFS00017	5YJSA1DP9CFS00092	5YJSA1DP6CFS00132
5YJSA1DP8CFS00018	5YJSA1DP2CFS00094	5YJSA1DN3CFS00135
5YJSA1DN1CFS00019	5YJSA1DP4CFS00095	5YJSA1DN5CFS00136
5YJSA1DP6CFS00020	5YJSA1DP6CFS00096	5YJSA1DN9CFS00138
5YJSA1DP8CFS00021	5YJSA1DP8CFS00097	5YJSA1DN0CFS00139
5YJSA1DPXCFS00022	5YJSA1DPXCFS00098	5YJSA1DN7CFS00140

Warranty/DMS Coding:

Description	Complaint	Cause	Correction
Vehicle Inspection Only; 12V Positive Terminal Replacement Not Required	A091	B053	S011217013
Replace 12V Battery Positive Terminal	A091	B053	S021217013