		Tesla, Inc. Service Bulletin		<i>Install Front Body Electrical Harness Cable Tie</i>	
SB-16-17-010 October 31, 2019		R1			
Classification			Section/Group		Mobile Service
Campaign Bulletin			17 - Electrical		Cannot Perform
Model Year	Model	Country/Region			Version
2016	Model S	All			Dual Motor
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.					

Campaign Bulletin: 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 list.

This Service Bulletin supersedes SB-16-17-010, dated 04-Oct-16. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

Condition

On some Model S vehicles, the G625 ground branch of the front body harness might have too much slack. This might cause chafing or other damage to the ground cable.

Correction

Inspect the vehicle for symptoms related to the condition. If symptoms are present, add a cable tie and clip to secure the G625 ground branch. In some circumstances, repair the G625 ground branch or replace the front body harness, and replace the LH front halfshaft assembly if necessary.

Correction Description	Correction	Time
SB-16-17-010 Not Applicable	S011617010	0.00
Add Cable Tie To Secure G625 Ground Branch Of Front Body Harness And Install Front Body Harness Clip	S021617010	0.20
Add Cable Tie To Secure G625 Ground Branch Of Front Body Harness, Replace LH Front Halfshaft Assembly, And Install Front Body Harness Clip	S031617010	2.25
Replace Front Body Harness Due To Damage Near G625	S041617010	7.60
Replace Front Body Harness and LH Front Halfshaft Assembly Due To Damage Near G625	S051617010	9.65
Repair Front Body Harness at G625, Add Cable Tie To Secure G625 Ground Branch Of Front Body Harness, And Install Front Body Harness Clip	S061617010	0.25
Repair Front Body Harness at G625, Replace LH Front Halfshaft Assembly, Add Cable Tie To Secure G625 Ground Branch Of Front Body Harness, And Install Front Body Harness Clip	S071617010	2.30
Inspection Of Front Body Harness; Cable Tie Already Present Near G625; No Repair Needed	S081617010	0.10

Part Number	Description	Quantity
If Necessary 1052691-00-A	FIR TREE 6MM, 0.7-7 GRP,ZIP TIE 183MM	1
1030615-00-A	FRONT LEFT HALFSHAFT- DUAL MOTOR	1
*	FRONT BODY HARNESS	1

* Refer to the [Parts Catalog](#) to obtain the correct part number for the vehicle.

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

Shop Supplies Cable Tie
Harness tape

Procedure

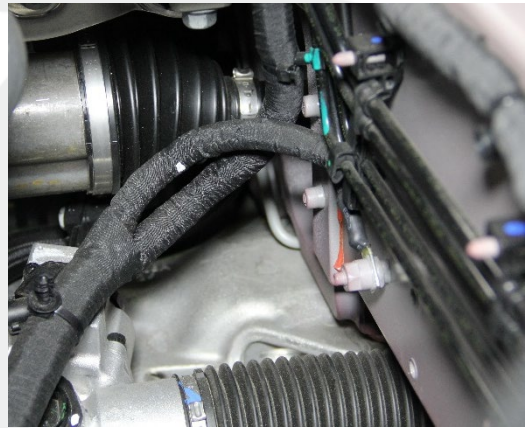
1. Remove the HEPA filter outlet duct (refer to Service Manual procedure 18105202).
2. Look through the space between the 12V battery and the shock tower to inspect the LH side of the front body harness near the LH front inner halfshaft assembly:
 - If a cable tie or electrical tape secures the G625 ground branch to the front body harness and no excessive wear is found on the G625 ground branch (Figure 1), reinstall the components that were removed for access and discontinue this procedure.
 - If there is no cable tie securing the G625 ground branch to the front body harness (Figure 2), continue to the next step.



NOTE: Components have been removed from the following images for clarity.



✓ **Figure 1 – Cable tie highlighted**



✗ **Figure 2– Cable tie missing**

3. Remove the underhood storage unit (refer to Service Manual procedure 15242301).
4. Disconnect the electrical connector from the 4-way coolant valve (Figure 3).

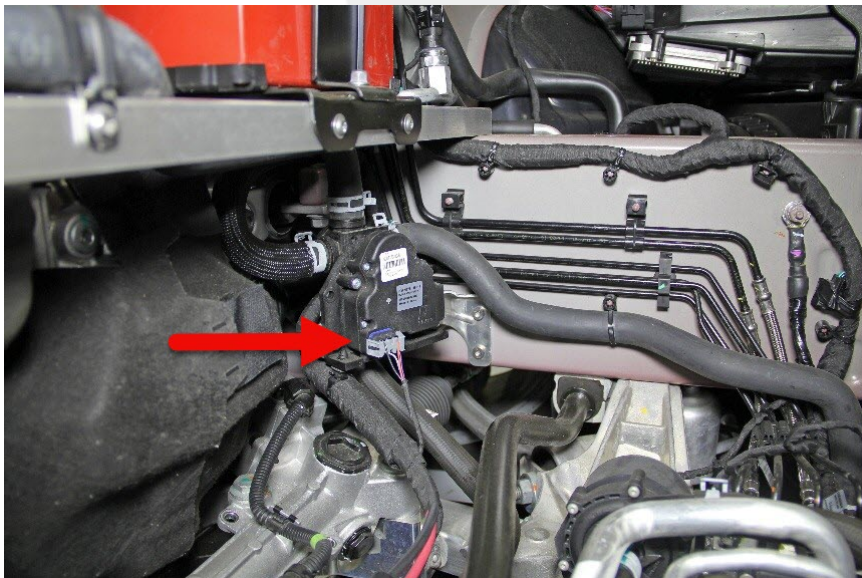


Figure 3

5. Release the clip that attaches the front body electrical harness to the 4-way coolant valve (Figure 4).

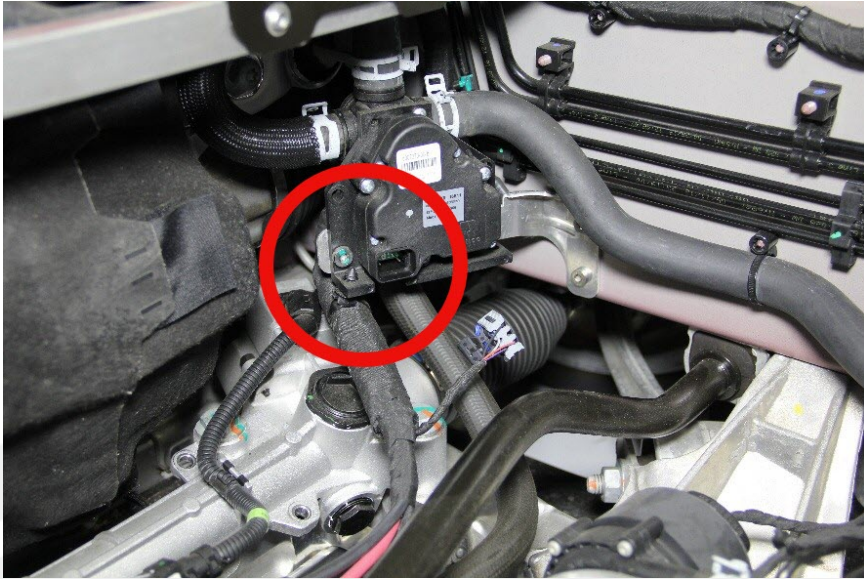


Figure 4

6. Remove the 2 bolts that attach the 4-way coolant valve to the side rail (Figure 5), and then set the valve aside.

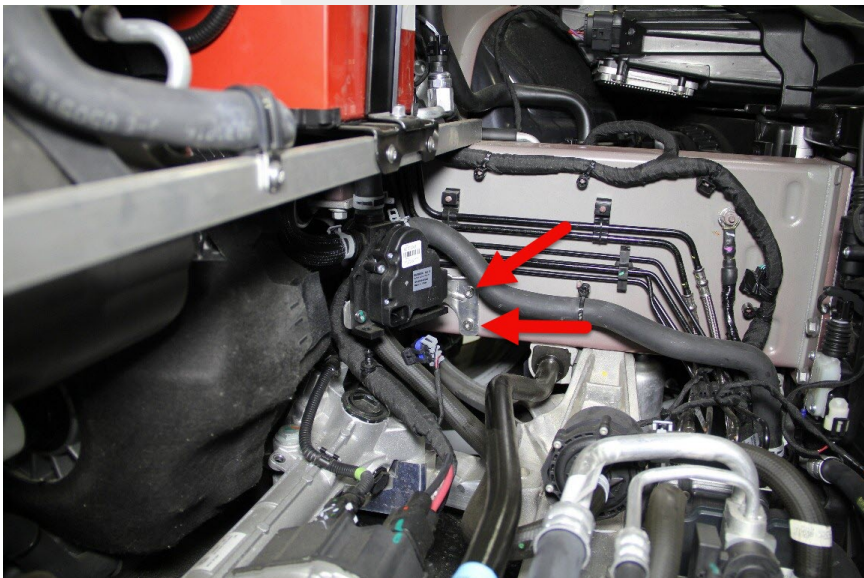


Figure 5

7. Inspect the G625 ground branch of the harness where it faces the LH front inner halfshaft:
 - If the ground branch is chafed or has other minor damage to the insulation, wrap the affected ground branch with additional harness tape, and then continue to the next step.
 - If the ground branch has visibly exposed copper wires, repair the wires. Refer to SI-17-17-002, "Electrical Harness Repair". If the wires cannot be repaired, replace the front body harness (refer to Service Manual procedure 17103002), and then continue to the next step.
 - If the ground branch does not have any visible damage, continue to the next step.
8. If the LH front inner halfshaft boot is damaged, replace the halfshaft (refer to Service Manual procedure 39302002).

9. Use a cable tie to secure the G625 ground branch to the front body harness as shown in Figure 6.



Figure 6 – Cable tie highlighted

10. Put the 4-way coolant valve onto the side rail, and then install the 2 bolts that attach the 4-way coolant valve to the side rail (torque 5.5 Nm) (Figure 7).

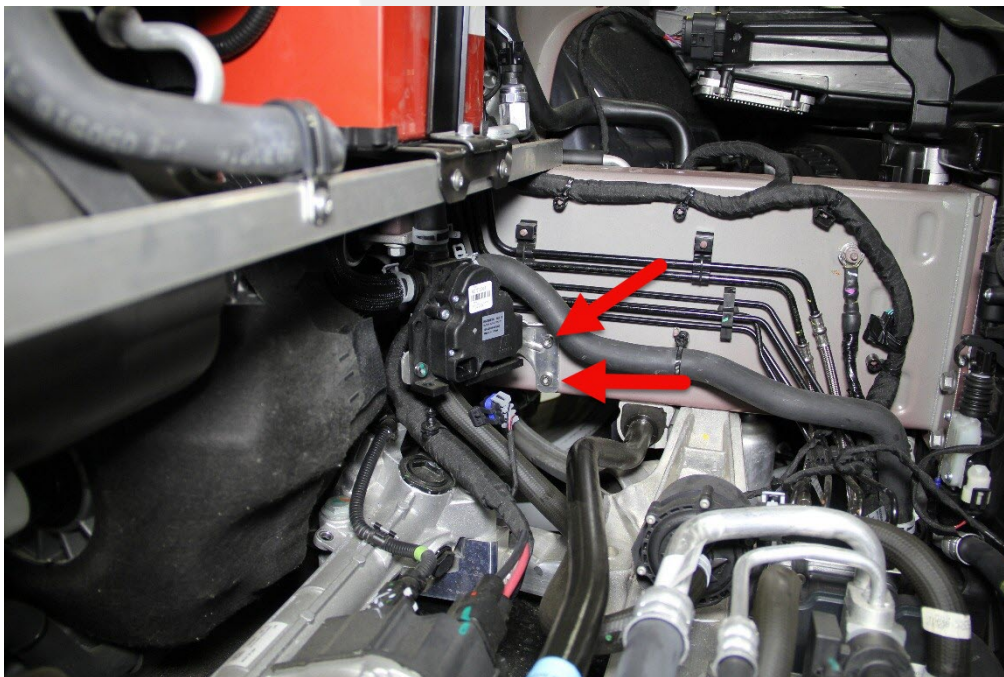


Figure 7

11. Remove and discard the clip that attaches the front body harness to the 4-way coolant valve (Figure 8).

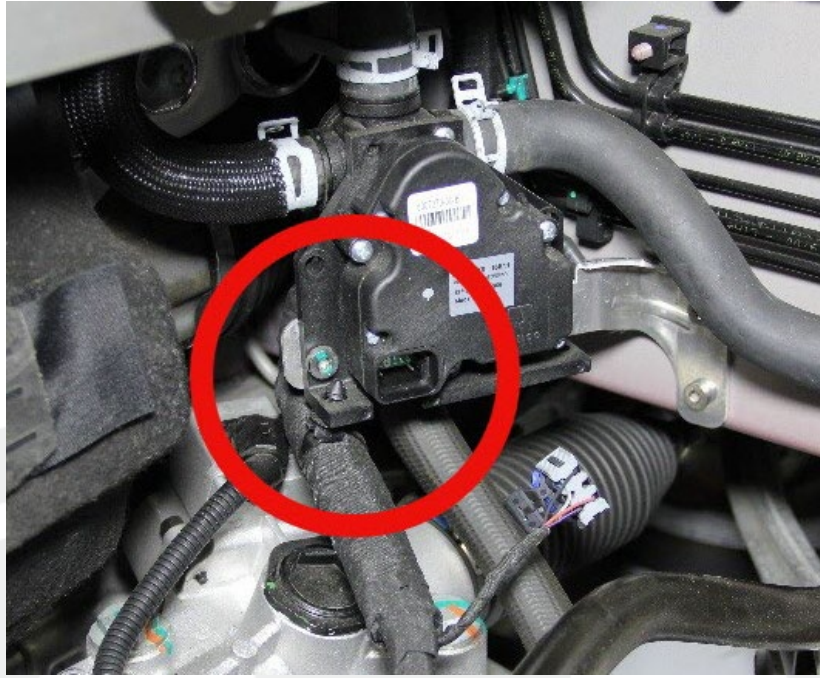


Figure 8

12. Pull the front body harness forward 1 in. (25 mm) to reduce the chances of interference with the LH front inner halfshaft.

13. Loosely install a new clip on the front body harness (Figure 9), and then attach the clip to the 4-way coolant valve (Figure 10).

⚠ CAUTION: Do not allow the front body harness to touch the suspension front sway bar (Figure 11).

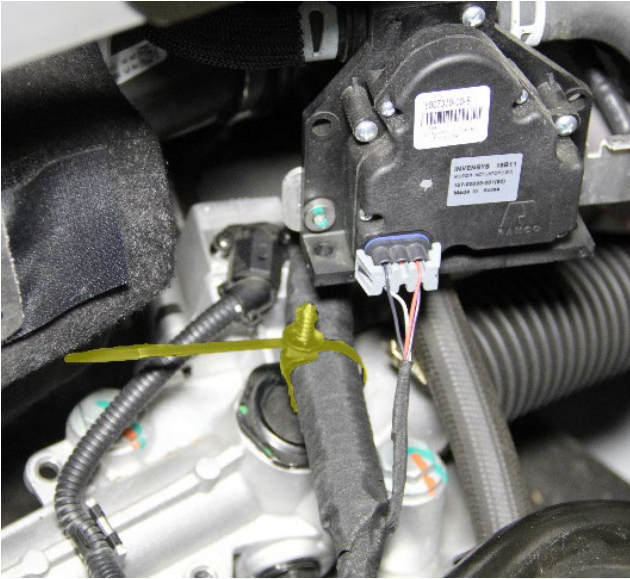


Figure 9

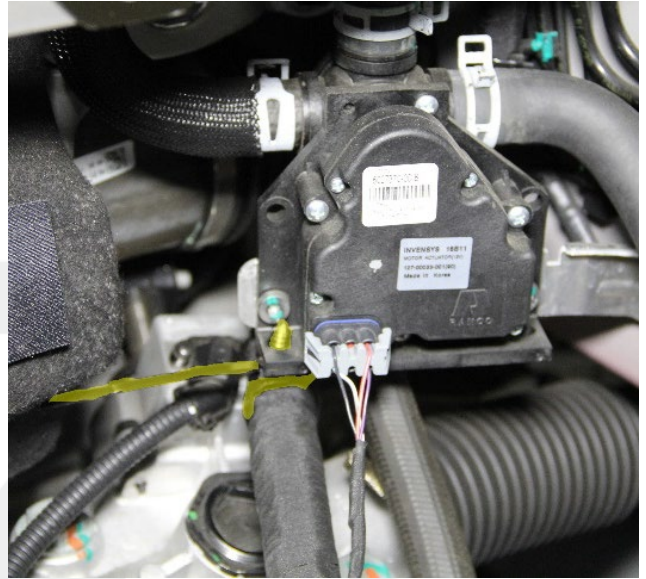


Figure 10

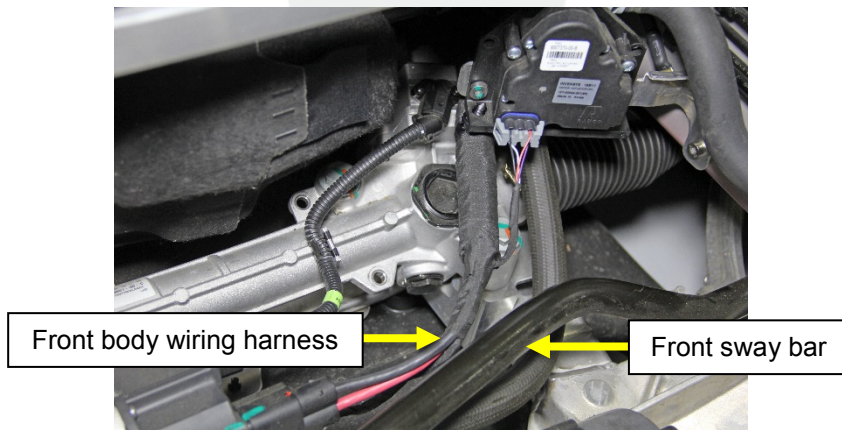


Figure 11 – Do not allow harness to touch sway bar

14. Carefully pull the front body harness forward, and then tighten the new clip around the front body harness. Cut the excess cable tie from the clip.
15. Reinstall the components that were removed for access.