		Tesla, Inc. Service Bulletin	<i>Inspect HV Battery Positive Thermal Coefficient Heater and A/C Compressor Connector</i>	
SB-20-44-003 October 19, 2020				
Classification		Section/Group	Mobile Service	
Campaign Bulletin		44 - High Voltage System	Cannot Perform	
Model Year	Model	Country/Region	Version	
2019 - 2020	Model 3	China	Giga Shanghai	
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.

Condition

On certain Giga Shanghai-built Model 3 vehicles, the HV battery positive thermal coefficient (PTC) heater and A/C compressor connector may not be fully latched.

Correction


Inspect the HV battery PTC heater and A/C compressor connector for symptoms related to the condition. If the symptoms are present, disconnect and reconnect the connector.

Correction Description	Correction	Time
SB-20-44-003 Not Applicable	S012044003	0.00
Inspect HV Battery PTC Heater And A/C Compressor Connector; No Repairs Needed	S022044003	0.50
Inspect HV Battery PTC Heater And A/C Compressor Connector; Reconnect	S032044003	0.75

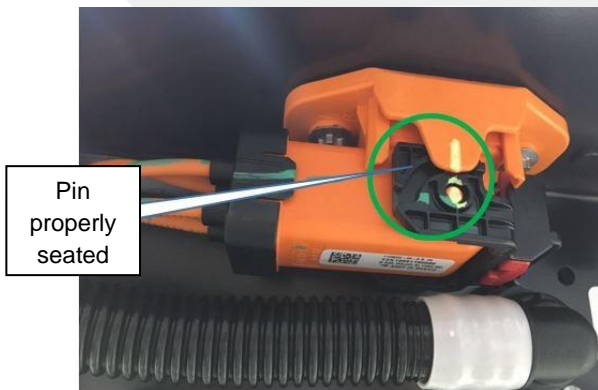
	Part Number	Description	Quantity
Parts Required	1117669-00-A	BOLT, 5-LOBE, M6x19, [109], ZNNI, MAT, PTP, SEAL	2
	These part numbers were current at the time of publication. Use the revisions listed or later, unless otherwise specified in the Parts Catalog .		
Shop Supplies	000-0474-001 – THREADLOCKER, LOCTITE 222, PURPLE		
	1135762-00-A – KIT, SVC PLUG, COOLING HOSE, MODEL 3		

Procedure

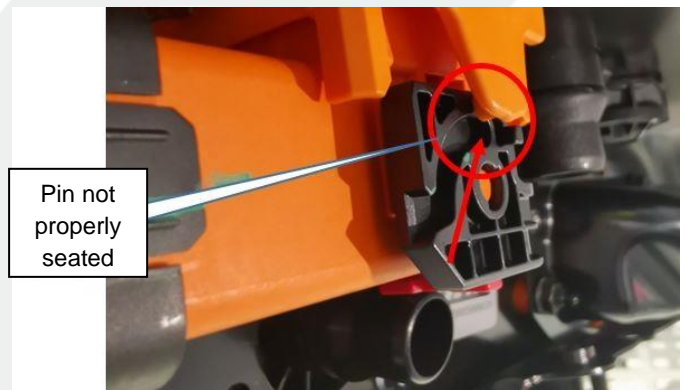
1. Support and slightly raise the vehicle (refer to Service Manual procedure [10000205](#)).
2. Disconnect 12V power (refer to Service Manual procedure [17010200](#)).
3. Perform vehicle electrical isolation procedure (refer to Service Manual procedure [17010000](#)).
4. Remove the mid aero shield panel (refer to Service Manual procedure [12030502](#)).
5. Remove the rear HV battery skid plate (refer to Service Manual procedure [16102202](#)).
6. Visually inspect the HV battery PTC heater and A/C compressor connector to confirm the retention pin is properly seated in the handle on both sides of the connector (Figures 1 and 2).

 **NOTE:** Use a rectangular inspection mirror and a flashlight to confirm the inside retention pin is properly seated in the handle (Figure 3).

- If the pin is not properly seated in the handle on either side of the connector, skip to step 8.
- If the pin is properly seated in the handle on both sides of the connector, continue to the next step.



✓ Figure 1



✗ Figure 2



Figure 3

7. Physically inspect the HV battery PTC heater and A/C compressor connector to verify a secure connection (Figure 4).

⚠ WARNING: To reduce the risk of personal injury, use appropriate equipment while performing this operation.

📄 NOTE: Gently wiggle the connector in all directions to check for looseness.

- If the connector is secure, no repairs are needed. Install all parts that were removed for access, and then discontinue this procedure.
- If the connector is loose, continue to the next step.



Figure 4

8. Position the coolant drain container underneath the RH rear of the HV battery.
9. Release the RH inner coolant hose clip, disconnect the hose from the rear of the HV battery, and then immediately plug the male and female fittings (Figure 5).

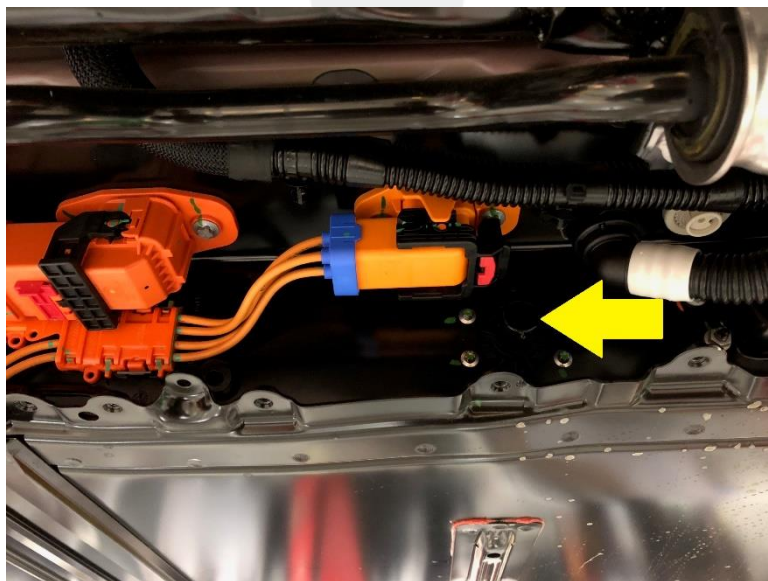


Figure 5

10. Remove the coolant drain container from underneath the vehicle.

11. Release the connector lock, and then rotate the lever arm to disconnect the A/C compressor and PTC heater HV harness connector from the RH rear of the HV battery (Figures 6 and 7).



Figure 6



Figure 7

12. Connect the A/C compressor and PTC heater HV harness to the RH rear of the HV battery (Figures 8 and 9).

NOTE: Hold the connector level with the header and apply even upward force. While still applying upward pressure, rotate the lever arm upward and then engage the locking tab. Verify that the latch is fully secured and not damaged.



Figure 8



Figure 9

13. Visually inspect the HV battery PTC heater and A/C compressor connector to confirm the retention pin is properly seated in the handle on both sides of the connector.

14. Position the coolant drain container underneath the RH rear of the HV battery.

15. Remove the plugs from the hose and manifold, and then immediately connect the RH inner coolant hose to the rear of the HV battery (Figure 10).

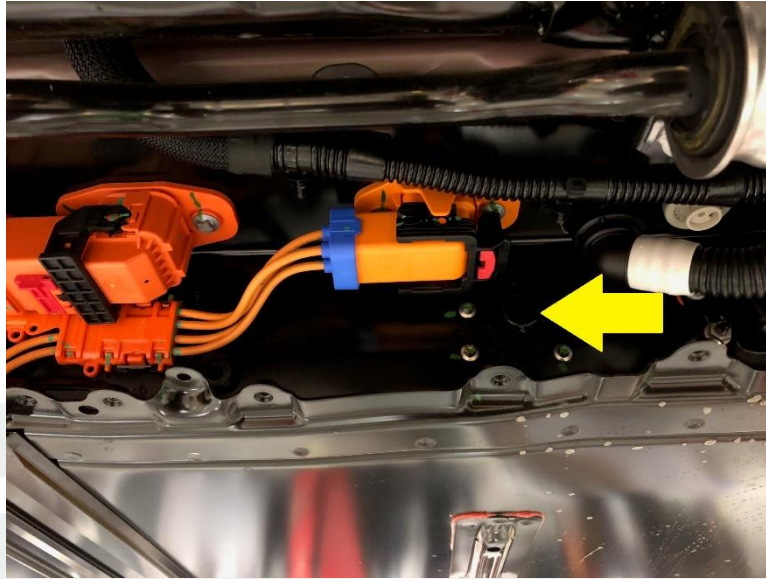


Figure 10

16. Remove the coolant drain container from underneath the vehicle.
17. Install the rear HV battery skid plate (refer to Service Manual procedure [16102202](#)).
18. Install the mid aero shield panel (refer to Service Manual procedure [12030502](#)).
19. Fully lower the vehicle.
20. Remove the logic cap and connect the HVC logic connector (Figures 11 and 12).


 **NOTE:** Align the logic connector, and then pull the connector handle upward to the locking position.



Figure 11



Figure 12

21. Install the 12V cap to the penthouse (Figure 13).



Figure 13

22. Connect the 12V negative terminal (Figure 14).



Figure 14

23. Connect laptop with Toolbox 3.0 to vehicle.

24. Remove the superbottle cap (Figure 15).



Figure 15

25. Fill with coolant so that the fluid level is 5mm above the “Max” line (Figure 16).



Figure 16 – Fill coolant to 5 mm above “Max” line

26. In Toolbox, click the **Actions/Autodiag** tab, and then search for “vcfront”.

27. Click **TEST_VCFRONT_X_THERMAL-COOLANT-AIR-PURGE**, click **Run**, and allow routine to complete (Figure 17).

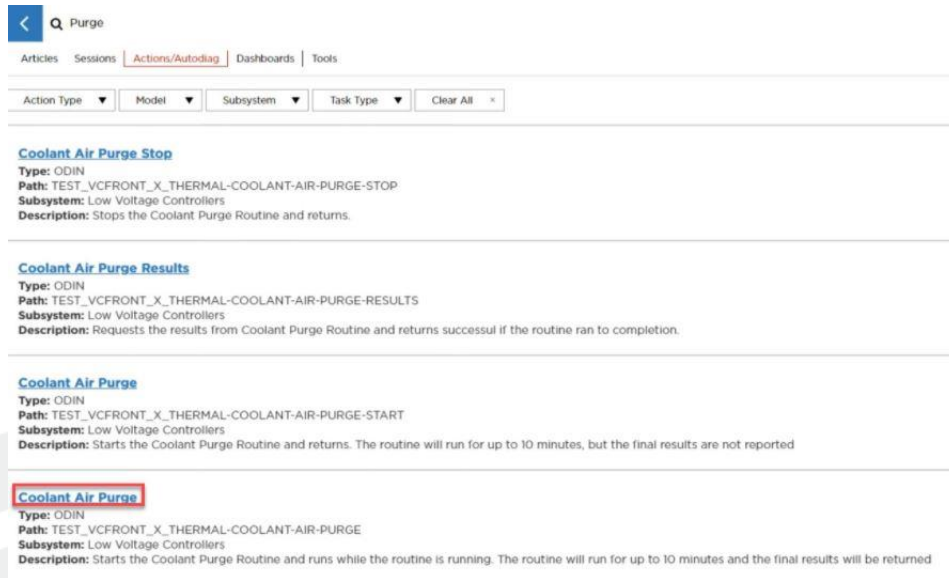


Figure 17

28. Inspect coolant level and top off as necessary.
29. Install the superbottle cap.
30. Install the rear underhood apron (refer to Service Manual procedure [12251102](#)).
31. Disconnect the laptop from the vehicle.
32. Install the 2nd row lower seat cushion (refer to Service Manual procedure [13051002](#)).
33. Remove the vehicle from the lift.