		Tesla, Inc. Service Bulletin	<i>Insulate A/C Low Pressure Pipe and Install Harness Connector Cover and Retrofit A/C Compressor Pipes With Support Bracket</i>	
SB-21-18-007 R2 March 9, 2022		R2		
Classification		Section/Group		Mobile Service
Campaign Bulletin		18 - Thermal Management		Can Perform (where permitted)
Model Year	Model	Country/Region		Version
2021	Model 3, Model Y	China, Europe		All
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 Document supersedes SB-21-18-007 R1, dated December 16, 2021. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

Condition

Certain Giga Shanghai built Model 3 and Model Y vehicles might experience water condensation dripping from the A/C low pressure pipe onto the A/C compressor HV harness connector.

Correction

Insulate the low pressure pipe at the A/C compressor, and install the harness connector cover.

Correction Description	Correction	Time
Install Harness Connector Cover	S012118007	0.30
Insulate A/C Low Pressure Pipe and Install Harness Connector Cover	S022118007	0.35

Part Number	Description	Quantity
Parts Required		
China		
1735182-00-A	HVAC TUBE PROTECTOR	1
1734193-00-A	SHROUD, HV, HEAT PUMP	1
1117669-00-A	BOLT,5-LOBE,M6X19,[109],ZNNI,MAT,PTP,SEAL	2
EMEA		
1741410-00-A	FOAM INSULATION, 6MM, ERI, SELF-ADHESIVE	1
1734193-00-A	SHROUD, HV, HEAT PUMP	1
1117669-00-A	BOLT,5-LOBE,M6X19,[109],ZNNI,MAT,PTP,SEAL	2
If Necessary		
EMEA		
NBRTAPE50X3X15	NBR TAPE 50X3MM X15M	

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 IPA Wipes
Harness Tape

Procedure

Inspect the low pressure pipe (Figures 1 and 2 for China, and Figures 3 and 4 for Europe) and the harness connector at the A/C compressor (Figures 3 and 4).



Figure 1- Foam Not Installed (China)

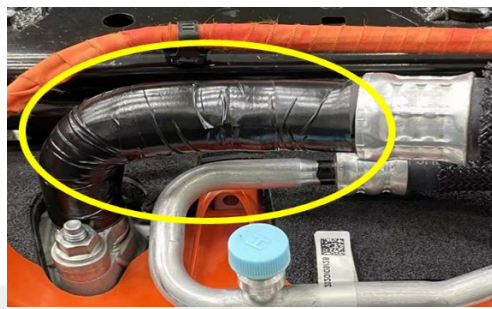


Figure 2- Foam Installed (China)



Figure 3- Foam Not Installed (Europe)



Figure 4- Foam Installed (Europe)



Figure 5 – Cover Not Installed




Figure 6 – Cover Installed

- If insulation foam is already installed, install the AC compressor harness connector cover (refer to section “*Install the A/C Compressor Harness Connector Cover*” in this document).
- If insulation foam is not installed, insulate the A/C compressor low pressure pipe, and install the harness connector cover (refer to section “*Insulate A/C Compressor Low Pressure Pipe and Install Harness Connector Cover*” in this document).

Insulate A/C Compressor Low Pressure Pipe and Install Harness Connector Cover

1. Turn off the climate control.
2. Remove the underhood storage unit (refer to Service Manual procedure 15240702; [Model 3](#), [Model Y](#)).
3. Perform the vehicle electrical isolation check (refer to Service Manual procedure 17010000; [Model 3](#), [Model Y](#)).
4. Use an IPA wipe to clean the A/C low pressure pipe between the supermanifold and the A/C compressor (Figure 7).

 **NOTE:** Allow 1 minute to dry.

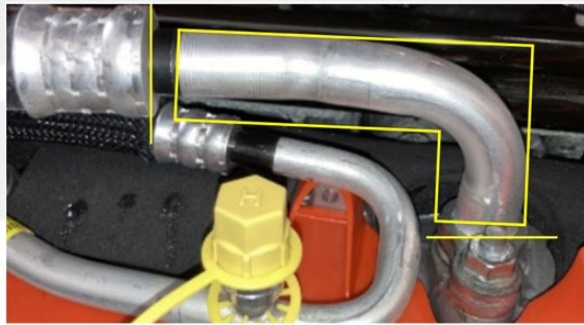


Figure 7

5. Release the clip that attaches the A/C compressor HV harness to the shock tower brace (Figure 8).



Figure 8

6. Align the edge of the foam insulation to the inside curve of the low pressure pipe, starting at the flange (Figure 9).

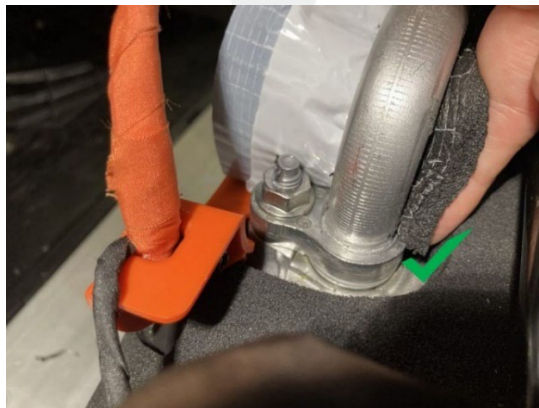


Figure 9

7. **For China only:** Wrap the foam insulation with tape, closing the gap between the edges of the foam (Figure 10).


 **NOTE:** Make sure there is no gap between the edges of the foam, as it is crucial that the pipe is completely insulated (Figure 11).




Figure 10



Figure 11

8. **For Europe only:** Gently stretch the foam insulation as it applied along the inside curve of the low pressure pipe.
9. **For Europe only:** Peel off the remaining backing, and then wrap the foam insulation around the pipe, closing the gap (Figure 12).

 **NOTE:** Make sure there is no gap between the edges of the foam, as it is crucial that the pipe is completely insulated (Figure 13).


 **TIP:** To fully cover the pipe, it is optional to apply a piece of tape on top of the insulation foam.



Figure 12



Figure 13

10. Disconnect the HV harness connector from the A/C compressor (Figure 14 and 15).

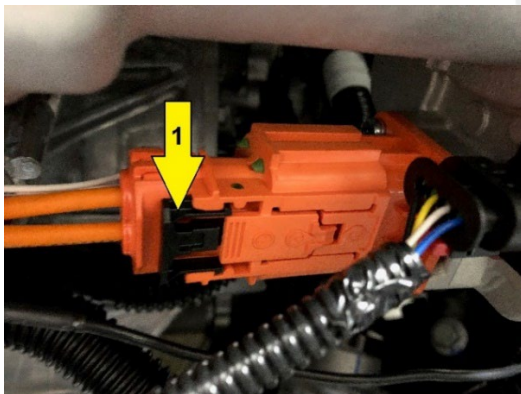


Figure 14

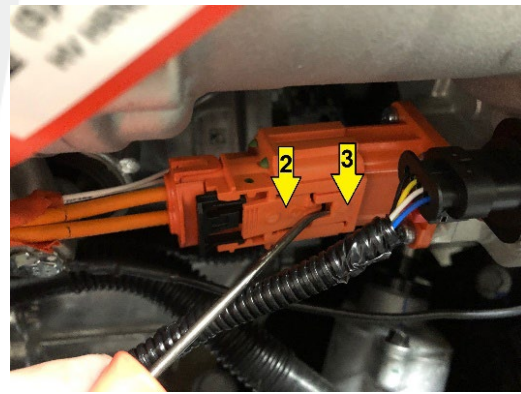



Figure 15

11. Install cover to A/C compressor harness connector (Figure 16).

 **NOTE:** Make sure the ribs on the cover should not get twisted.

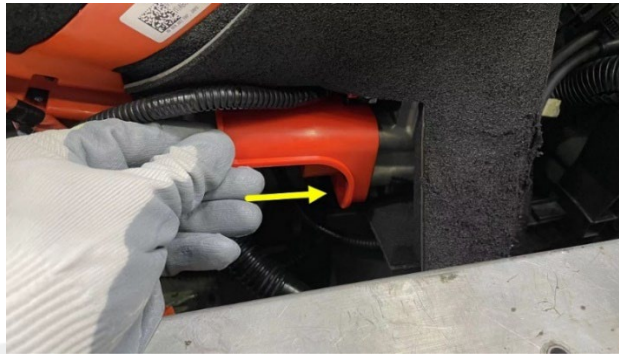



Figure 16

12. Carefully squeeze the cover around the A/C compressor so that it is securely attached, and then connect the HV harness to the A/C compressor.

 **NOTE:** Perform push-pull-push test to make sure proper seating, and make sure to engage the locking tab (Figure 17).

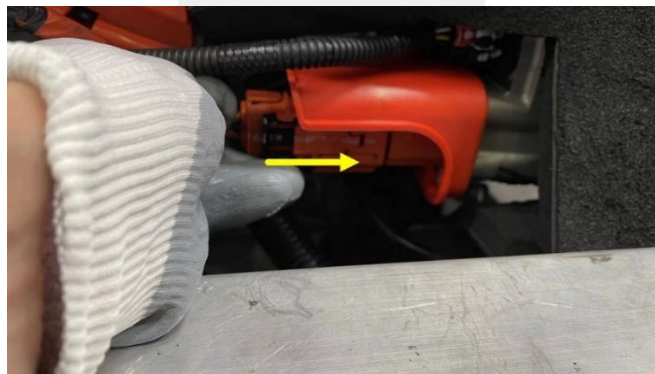


Figure 17

13. Install the clip that attaches the A/C compressor HV harness to the shock tower brace.

14. Install the 2nd row seat cushion (refer to Service Manual procedure 13051002; [Model 3](#), [Model Y](#)).

15. Connect 12V negative terminal (refer to Service Manual procedure 17010200; [Model 3](#), [Model Y](#)).

16. Install the underhood storage unit (refer to Service Manual procedure 15240702; [Model 3](#), [Model Y](#)).

17. Move the front seats back to their original position.

Install the A/C Compressor Harness Connector Cover

1. Remove the underhood storage unit (refer to Service Manual procedure 15240702; [Model 3](#), [Model Y](#)).
2. Perform the vehicle electrical isolation check (refer to Service Manual procedure 17010000; [Model 3](#), [Model Y](#)).
3. Disconnect the HV harness connector from AC compressor (Figure 18 and 19).

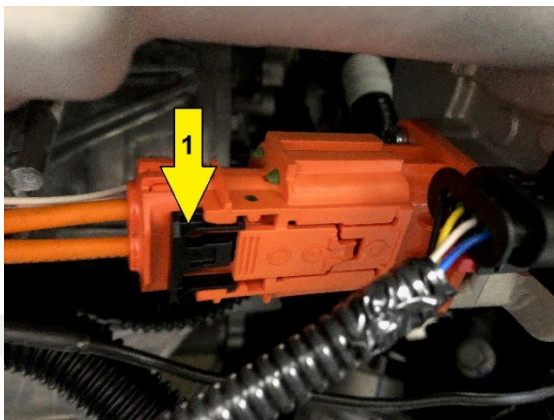


Figure 18

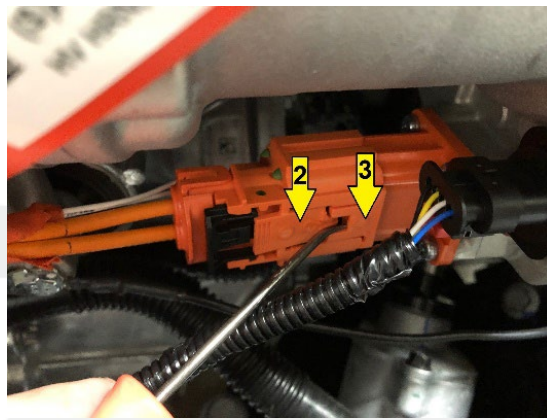


Figure 19

4. Install cover to A/C compressor harness connector (Figure 20).



 **NOTE:** Make sure the ribs on the cover should not get twisted.



Figure 20

5. Carefully squeeze the cover around the A/C compressor so that it is securely attached, and then connect the HV harness to the A/C compressor (Figure 21).

 **NOTE:** Perform push-pull-push test to make sure proper seating.

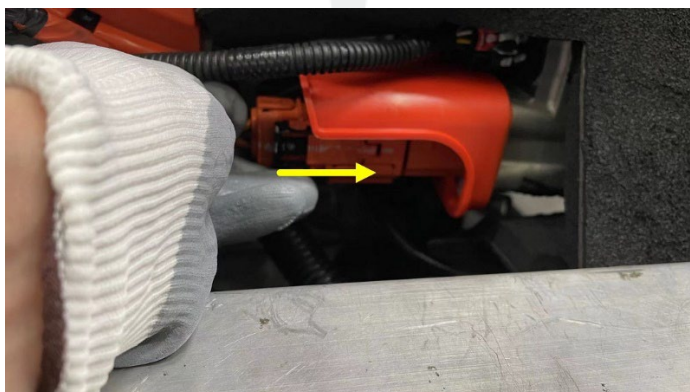


Figure 21

6. Install the 2nd row seat cushion (refer to Service Manual procedure 13051002; [Model 3](#), [Model Y](#)).
7. Connect 12V negative terminal (refer to Service Manual procedure 17010200; [Model 3](#), [Model Y](#)).
8. Install the underhood storage unit (refer to Service Manual procedure 15240702; [Model 3](#), [Model Y](#)).
9. Move the front seats back to their original position.

