



Tesla, Inc.
Service Bulletin

Install Flat Flex Cable Harness Guide

SB-24-17-004

September 10, 2024

Classification		Section/Group	Mobile Service	Configuration
Campaign Bulletin		17 - Electrical	Cannot Perform	All
Model	Model Year	Country/Region	Build Location	
Cybertruck	2024	United States	Giga Texas	

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 non-safety-related condition and provides recommended technical diagnosis and repair procedures. Apply this procedure to the applicable vehicles.

Condition

On certain Cybertruck vehicles, the backbone harness Flat Flex Cable (FFC) might have been misrouted, which may cause damage to the cable.


Correction

Reroute the FFC into the correct position or replace the backbone harness if the FFC is damaged, and install a harness guide.

 **NOTE:** If this bulletin is applicable to the vehicle, perform the correction without any need for inspection.

Correction Description	Correction	Time
Inspect Flat Flex Cable; Reroute Flat Flex Cable, Install Harness Guide	S012417004	0.66
Inspect Flat Flex Cable; Replace Backbone Harness, Install Harness Guide	S022417004	0.96

	Part Number	Description	Quantity
Parts Required	2044121-00-A	FUB BACKBONE BRACKET, CT	1
If Necessary	1682221-00-G	HARNESS-MID VOLTAGE BACKBONE	1
	1879451-99-A	CLASS-G ANTI-ABRASION TAPE [50 x 150 MM]	1
	or	or	
	1879451-00-B	LV ABRASION STICKER, XM, HVB, CTSB	1

 **NOTE:** Use PN: 1879451-99-A, if available. If PN: 1879451-99-A is not available, use PN: 1879451-00-B.

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

Special Tools 1076972-00-A Non-marring scraper set

Shop Supplies Electrical tape
IPA wipes
Paint Pen

Procedure

1. Open all the doors and lower all the windows.
2. Remove the RH mid A-pillar trim (refer to Service Manual procedure [1518006131](#)).
3. Remove the RH lower A-pillar trim (refer to Service Manual procedure [1518006111](#)).
4. Remove the footwell cover (refer to Service Manual procedure [1405028111](#)).
5. Remove the RH center floor rail (refer to Service Manual procedure [1530083031](#)).
6. Fold the RH front carpet rearward (Figure 1).



Figure 1

7. Lift the RH front carpet support foam upwards from the rear edge, and then remove the support from the vehicle (Figure 2).

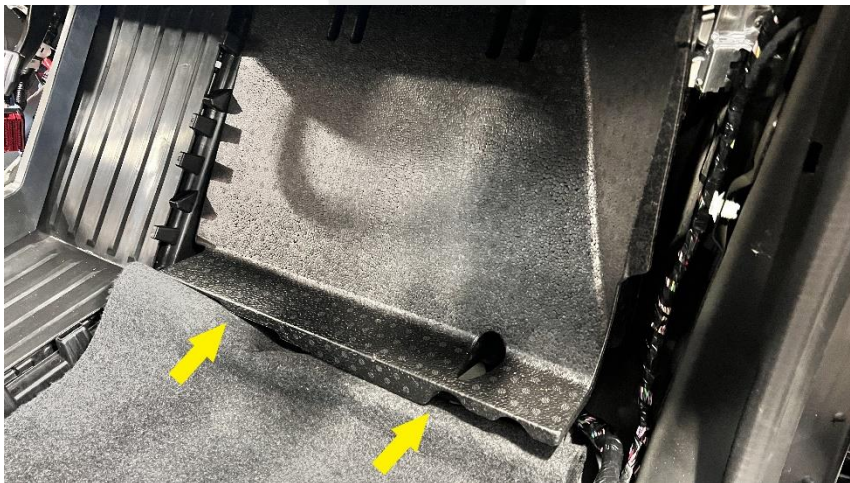


Figure 2

8. Remove the rear carpet (refer to Service Manual procedure [1530083091](#)).

9. Inspect the front passenger (Figure 3) and rear passenger (Figure 4) sections of the FFC for abrasions and damage.

! CAUTION: Make sure to inspect the topside and underside of the FFC.



Figure 3 – Front passenger section; seat and trim removed for clarity

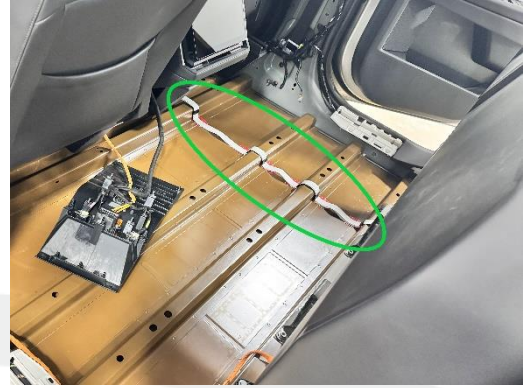


Figure 4 – Rear passenger section

- If damage to the FFC such as exposed inner wires is found (Figures 5 and 6), replace the Mid Voltage (MV) backbone harness (refer to Service Manual procedure [1710013032](#)) and discontinue this procedure. Use Correction Code S022417004.



Figure 5 – Example damage at the front passenger section of the FFC



Figure 6 – Example damage at the rear passenger section of the FFC

- If only abrasions to the outer cover are found (Figures 7 and 8), the FFC does not need to be replaced. Continue to step 10.



Figure 7 – Example Abrasion 1



Figure 8 – Example Abrasion 2

- If no damage or abrasions is found, skip to step 11.

10. Apply 3M VHB Foam (PN: 1879451-00-B) to the FFC over the abrasions (Figures 9 and 10).

⚠ CAUTION: Do not wrap the cable in the 3M VHB foam. Only apply the foam to the flat side of the cable. Wrapping the cable may cause damage to the cable due to excessive heat.

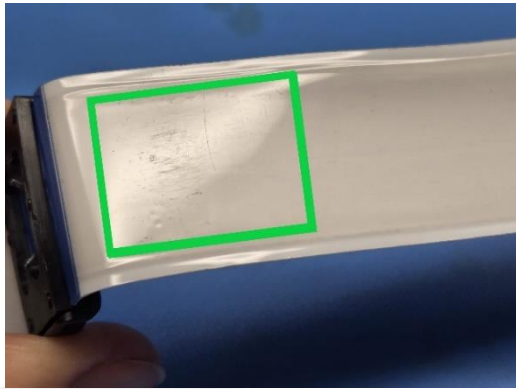


Figure 9 – The green box shows the correct application area of the 3M VHB Foam

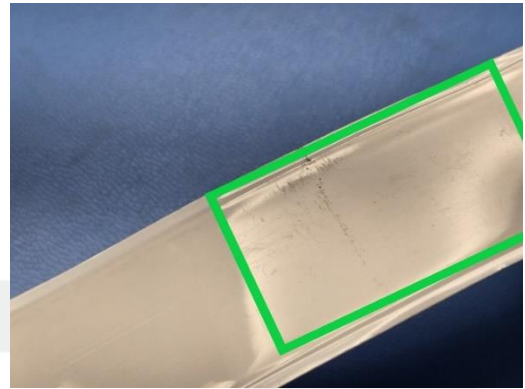


Figure 10 – The green box shows the correct application area of the 3M VHB Foam

11. At the rear passenger section of the FFC, position the cable so that it lays flat (Figure 11).



Figure 11 – Correct



Figure 12 – Incorrect

12. Check for availability of black anti-abrasion tape (PN: 1879451-99-A) to determine the direction in the next step.

13. Inspect the rearmost rib under the FFC for the presence of red 3M VHB foam (PN: 1879451-00-B) (Figure 13) or black anti-abrasion tape (Figure 14), or if the tape is missing.

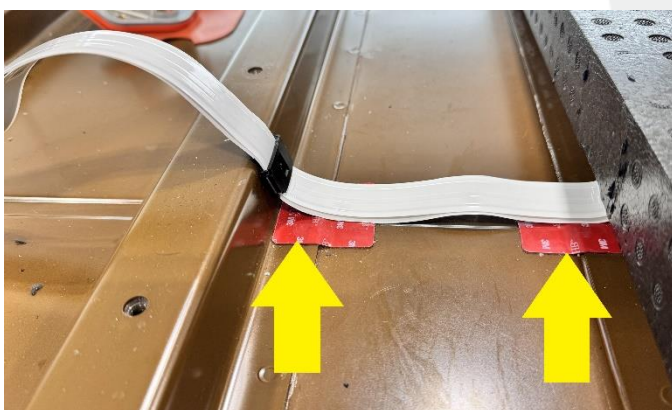


Figure 13 – Red 3M VHB Foam

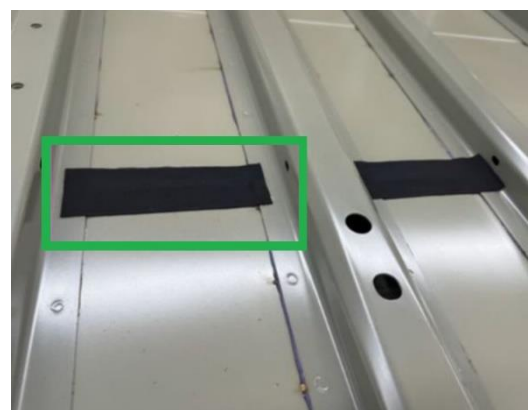


Figure 14 – Black Anti-Abrasion Tape

- If black anti-abrasion tape is installed (Figure 14), no action is required. Skip to step 19.
- If red 3M VHB Foam is installed on both seams (Figure 13), and black anti-abrasion tape is not available, no action is required. Skip to step 19.
- If black anti-abrasion tape is available, or if tape is not installed on either seam, continue to step 14.

14. Release the clip that attaches the FFC to the rearmost rib (Figure 15).

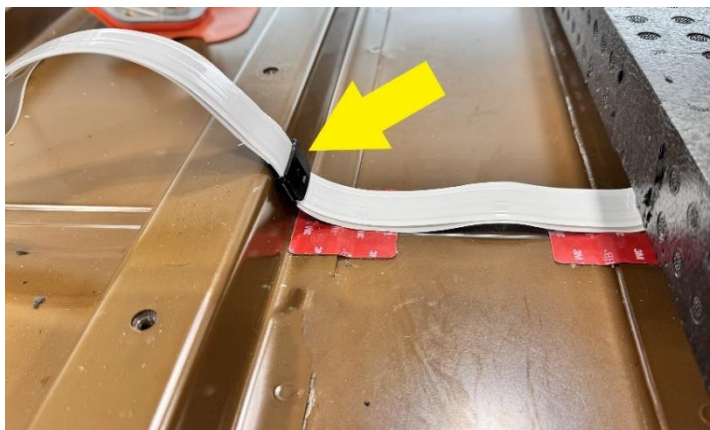


Figure 15


15. If black anti-abrasion tape is available, remove any existing red 3M VHB Foam (Figure 13).

16. Use a non-marring scrape tool to remove any remaining residue from the removed 3M VHB Foam, and then use an IPA wipe to thoroughly clean the area (Figure 16). Allow 1 minute of dry time before continuing to the next step. Complete this step for areas that did not have tape installed.



Figure 16

17. If black anti-abrasion tape is available, apply the tape to the vehicle, making sure the tape covers both seams where the FFC may contact the vehicle (Figure 14). If black anti-abrasion tape is not available, apply red 3M VHB Foam to the exposed seam(s) (Figure 13).

 **NOTE:** Apply the sticker to the vehicle, not the FFC.

18. Secure the clip that attaches the FFC to the rearmost rib (Figure 15).

19. At the front passenger section of the FFC, if present, remove any anti-abrasion tape that attaches the FFC to the front casting, and remove any anti-abrasion tape installed on the front casting (Figure 16).



Figure 16

20. Route the FFC through the LH channel of the cast ribbing (Figure 17).

! CAUTION: Make sure the cable is flat against the casting and is not twisted.



Figure 17 – Correctly routed through LH channel



Figure 18 – Incorrectly routed through RH channel

21. Remove and discard the clip (Figure 19) that attaches the FFC to the lower edge of the front casting.



Figure 19

22. Lift the FFC away from the casting, and then install the harness guide onto the front casting (PN: 2044121-00-A or later) (Figure 20).



Figure 20

23. Position the FFC so that it lays flat on the harness guide, and then use a paint pen to mark the FFC at the front (Figure 21) and rear (Figure 22) edges of the harness guide.

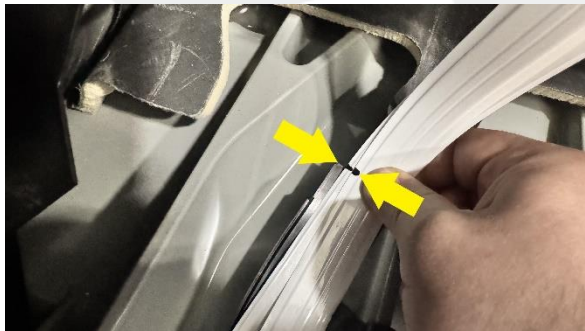


Figure 21 – Mark FFC at front edge of harness guide



Figure 22 – Mark FFC at rear edge of harness guide

24. Remove the harness guide from the casting once the FFC has been marked.
25. Position the FFC into the harness guide using the alignment marks (Figures 21 and 22) made in the previous step, and then use electrical tape to secure the harness to the guide.

NOTE: Refer to Figure 23 for electrical tape positions (x3).

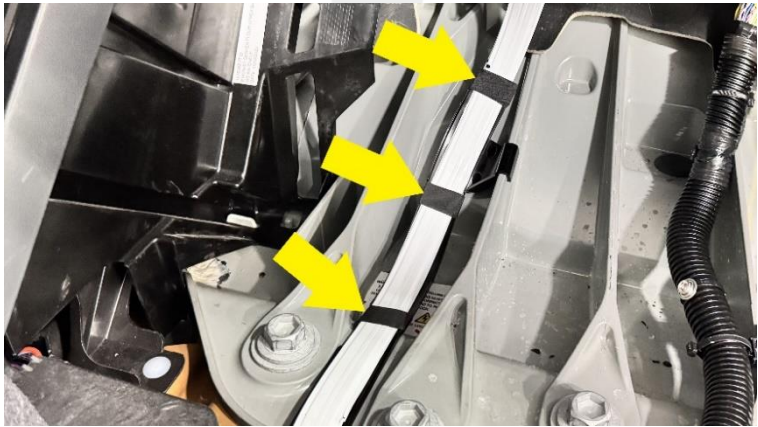



Figure 23 – Electrical tape positions

26. Secure the backbone harness and harness guide to the front casting (Figure 24).

 **NOTE:** Make sure the rib groove is aligned and engaged correctly. The lower engagement point will make an audible click when secured.

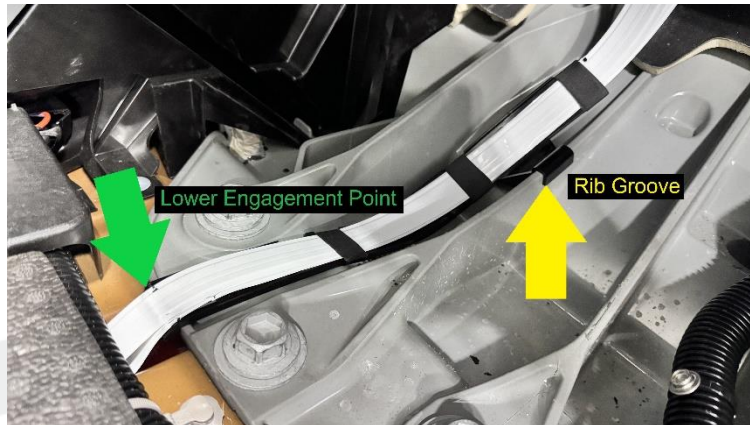


Figure 24

27. Install the rear carpet (refer to Service Manual procedure [1530083091](#)).

28. Install the RH front carpet support foam (Figure 2).

29. Unfold the RH front carpet back to its original position (Figure 25).



Figure 25

30. Install the RH center floor rail (refer to Service Manual procedure [1530083031](#)).

31. Install the footwell cover (refer to Service Manual procedure [1405028111](#)).

32. Install the RH lower A-pillar trim (refer to Service Manual procedure [1518006111](#)).

33. Install the RH mid A-pillar trim (refer to Service Manual procedure [1518006131](#)).

34. Raise all the windows and close all the doors. Use Correction Code S012417004.