



Tesla, Inc.
Service Bulletin

Swap Triple Camera Coax Cables

SB-22-17-007
May 16, 2022

Classification		Section/Group	Mobile Service	Configuration
Recall Bulletin		17 - Electrical	Can Perform (where permitted)	HW 3.0
Model Year	Model	Country/Region	Build Location	
2021	Model 3, Model Y	United States, Europe	Fremont	

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.

Recall Bulletin: Recall Bulletins are mandatory service procedures that must be carried out by Tesla-certified Service Centers. Recall work performed by uncertified technicians could lead to unsafe conditions or voided warranty provisions.

Condition

Certain Model 3 and Model Y vehicles were equipped with camera harnesses that were not manufactured to internal specifications, resulting in swapped views from the forward-facing fisheye and narrow view cameras. This condition causes Autopilot features to become unavailable.

Correction

Swap the positions of the triple camera coax cables on connector X890. Confirm that the camera feeds are correct, and then complete camera calibration.

Correction Description	Correction	Time (Model 3)	Time (Model Y)
Swap Triple Camera Coax Cables on Connector X890	S012217007	0.40	0.45

Procedure

1. Move the front passenger seat fully rearward.
2. Remove the front passenger footwell cover, but do not remove the puddle light from the cover (refer to Service Manual procedure 14055402; [Model 3](#), [Model Y](#)).
3. **Model Y only:**
 - a. Remove the front passenger floormat.
 - b. Remove the RH center console side panel (refer to Service Manual procedure [15196802](#)).
 - c. Release the clip that attaches the car computer harness to the bracket (Figure 1), and then move the harness inboard (Figure 2).



Figure 1



Figure 2

4. Release the locking tab, and then disconnect the electrical harness (X890) from the car computer (Figures 3 and 4).

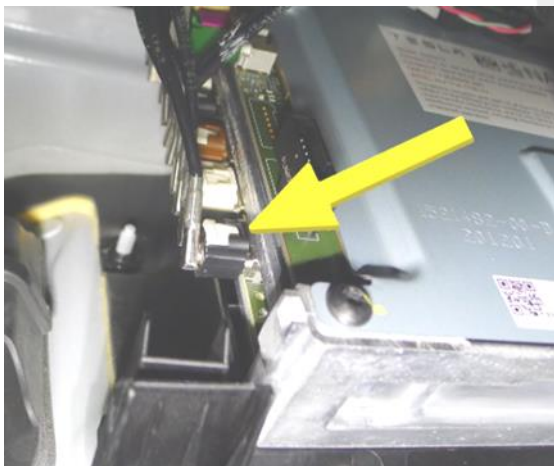


Figure 3 – Model 3

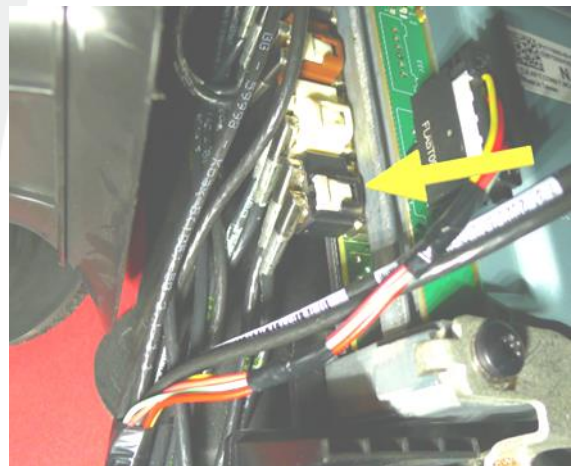


Figure 4 – Model Y

5. **Model Y only:** Carefully remove the tape from the electrical harness (X890) (Figure 5).

⚠ CAUTION: Take care not to damage the coax cables or the surrounding components.



Figure 5

6. Carefully remove the coax retaining tab (Figures 6 and 7).

ℹ TIP: Use a pick to carefully release the sides and center of the retaining tab, as indicated in Figure 6.

⚠ CAUTION: Take care not to damage the retaining tab because it will be reused.

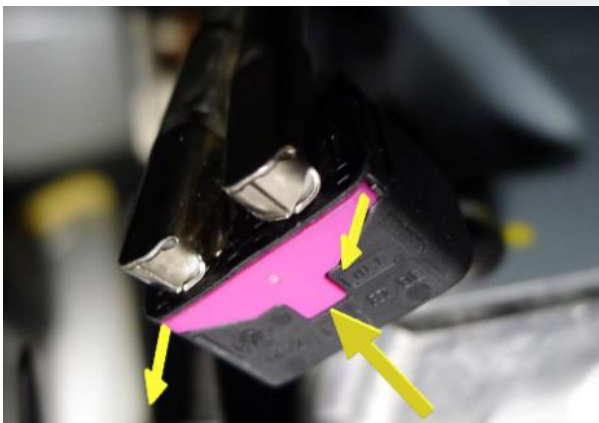


Figure 6 – Model 3 shown; Model Y similar

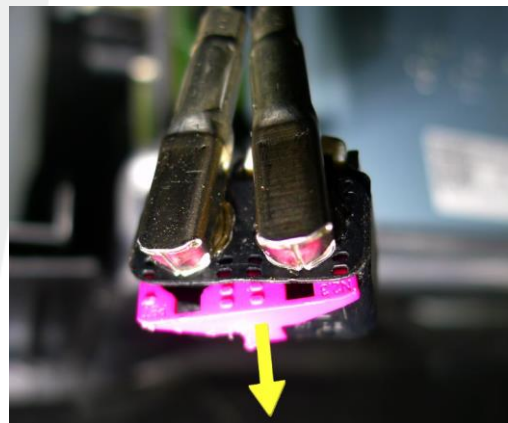


Figure 7 – Model 3 shown; Model Y similar

7. Use a marker on the coax cable barrels to help remember the current position of the coax cables.

8. Remove both coax cables from the connector housing (Figure 8).

ℹ TIP: Insert a pick between the coax barrel and the connector housing to wedge the cable out of the housing.

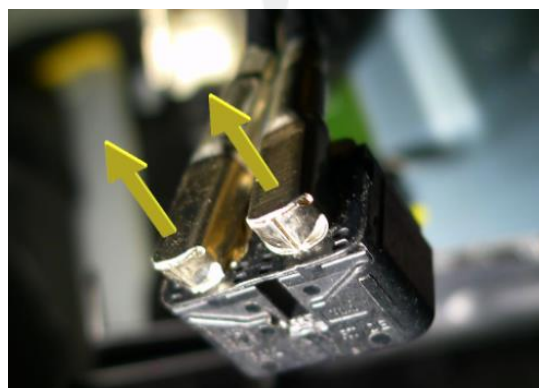


Figure 8

9. Swap the positions of the coax cables (Figure 9), and then install the cables in the connector housing (Figures 10 and 11).

NOTE: Model 3 coax cables should overlap the white connector locking tab (Figure 10). Model Y coax cables should NOT overlap the white connector locking tab (Figure 11).

NOTE: The cables will lock in place with an audible “click” and should not be easily removed from the housing.



Figure 9

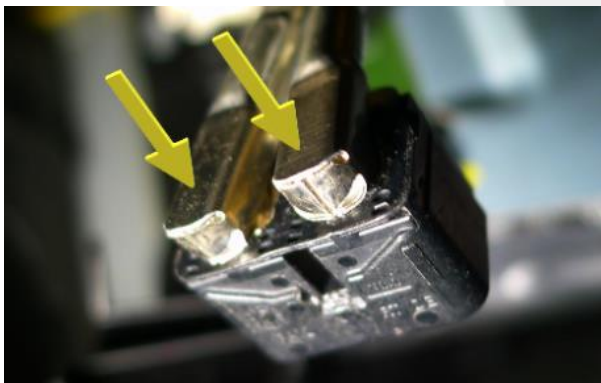


Figure 10 – Model 3

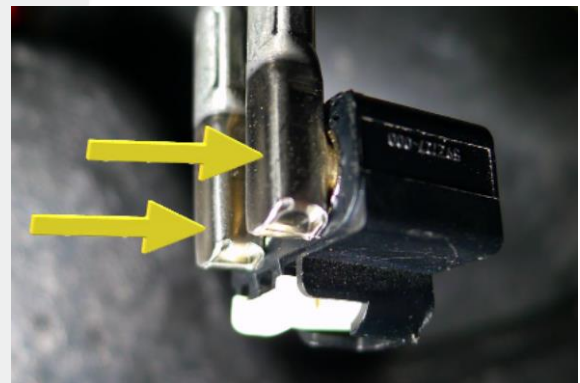


Figure 11 – Model Y

10. Install the coax retaining tab in the connector housing (Figures 12 and 13).

CAUTION: Take care not to bend the plastic tabs, and make sure the entire retaining tab is flush with the connector.

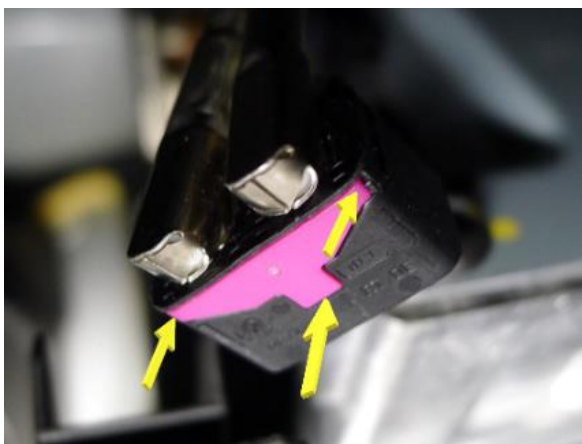


Figure 12 – Model 3

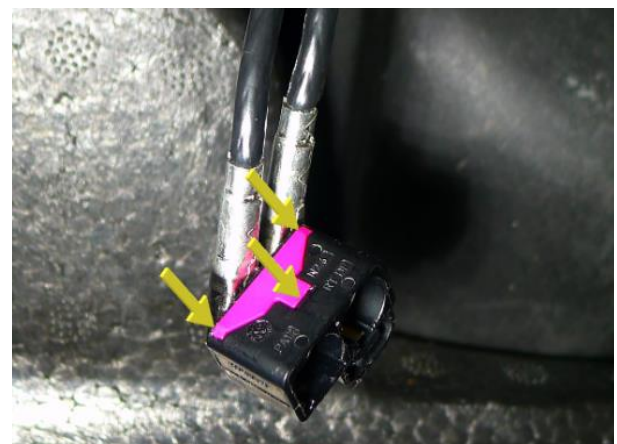


Figure 13 – Model Y

11. Connect the electrical harness (X890) on the car computer, and then engage the locking tab (Figures 3 and 4).
12. **Model Y only:**
 - a. Install the clip that attaches the car computer harness to the bracket (Figure 1).
 - b. Install the RH center console side panel (refer to Service Manual procedure [15196802](#)).
 - c. Install the front passenger floor mat.
13. Install the front passenger footwell cover (refer to Service Manual procedure 14055402; [Model 3](#), [Model Y](#)).
14. Return the front passenger seat to its original position.
15. Connect a laptop with Toolbox 3 to the vehicle.
16. Select the **Dashboards** tab, search for “Service Tools”, and then select **Service Tools** (Figure 14).

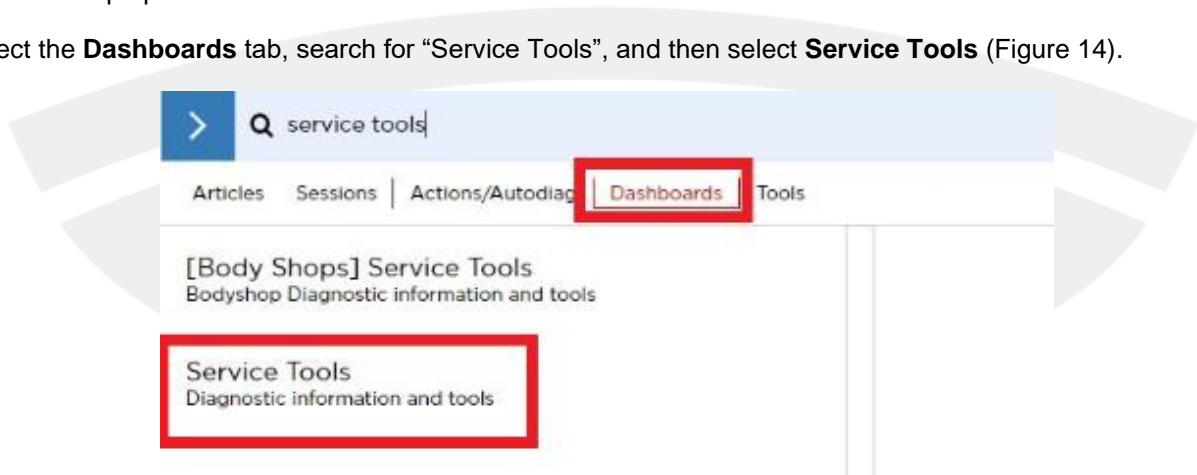



Figure 14

17. Select **DAS Image Capture**.
18. After the image loads, review the image to confirm that the cable swap was successful (Figure 15).

 **NOTE:** The “narrow” view should appear magnified, and the “fisheye” view should appear wide-angled.

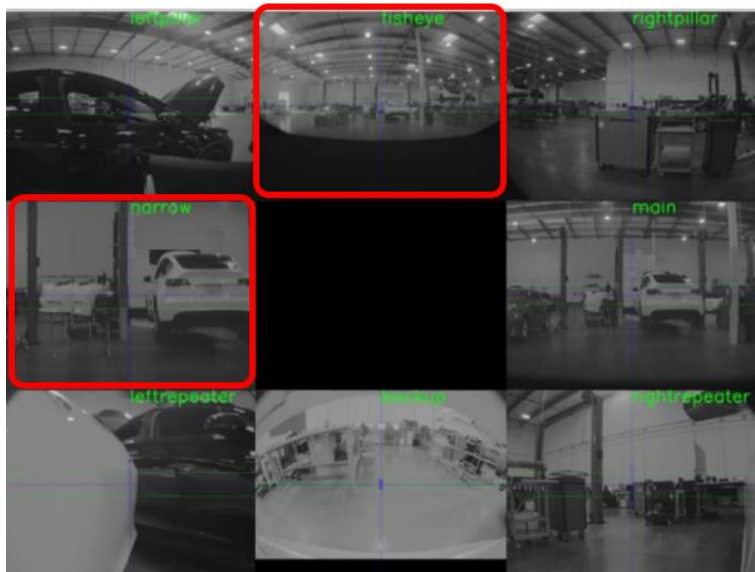


Figure 15

19. Disconnect the laptop from the vehicle.

20. On the vehicle touchscreen, touch **Controls** > **Service** > **Camera Calibration** > **Clear Calibration**, and then wait for the calibration data to clear and for the calibration window to automatically close (Figure 16).

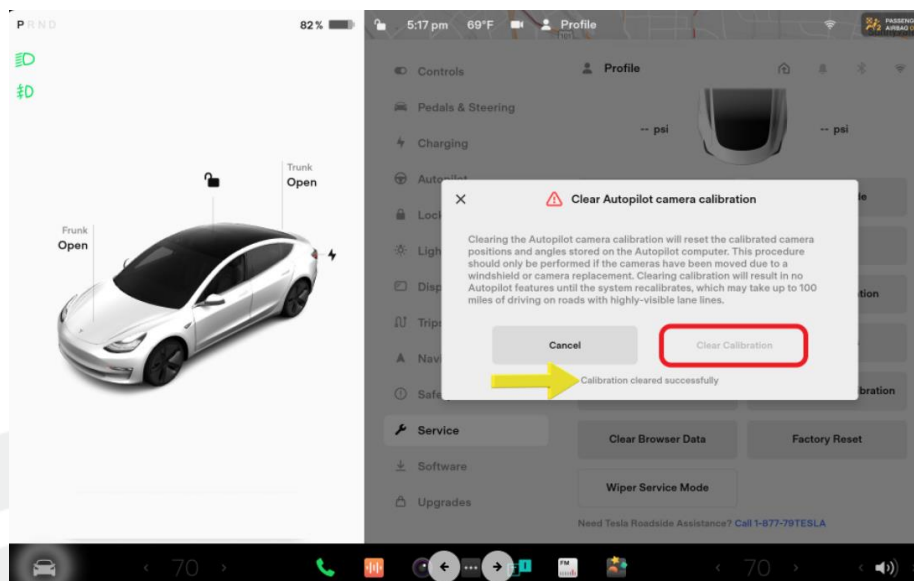


Figure 16 – Model 3 shown; Model Y similar

21. Drive the vehicle until camera calibration is complete and no user-facing alerts related to the Autopilot camera system are present.

NOTE: Most vehicles will finish calibration within 10 miles of driving. If Autopilot camera system alerts persist after 25 miles of driving, diagnose and repair as necessary.

TIP: Calibration completes quicker when driving on a straight road with multiple lanes (such as a controlled-access highway), with highly-visible lane markings (in the driving lane as well as the adjacent lanes).

22. After calibration completes and all Autopilot camera system alerts have cleared, activate Autopilot features to confirm proper functionality.