| | Tesla, Inc. Service Bulletin | | C. etin | Disable Front Radar Sensor | | |
|----------------------------------|---------------------------------|----------------|-------------------|---|--|----------------------------------|
| SB-23-17-002 June 14, 2023 R1 | | | | | | |
| Classification | | Section/Group | Mobile Service | Configuration | | |
| Campaign Bulletin | | | | 17 - Electrical | Can Perform (where permitted) | All |
| Model Year Model | | Country/Region | Build Location | Build Location | | |
| 2021 - 202 | 2021 - 2022 Model S | | North America | Fremont | Fremont | |
| The model(s) a | nd model year(s | s) listed a | re a genera | al approximation of the affected VIN list | Refer to the VIN/Bulletin Tracker or Custo | mer/Vehicle profile to determine |

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.

This Service Document supersedes SB-23-17-002, dated March 23, 2023. This new revision, R1, revises the procedure to disconnect the front radar sensor electrical connector. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

Condition

In 2021 - 2022 Model S vehicles running software version 2022.20.9 or later, Autopilot and Active Safety Features that were using front radar sensor data transitioned to using camera data (Tesla Vision), making the front radar sensor unnecessary.

Correction

Disconnect the front radar sensor electrical connector, install an electrical harness termination cap in its place, and change the vehicle hardware configuration.

| Correction Description | Correction | Time |
|-----------------------------|------------|------|
| SB-23-17-002 Not Applicable | S012317002 | 0.00 |
| Disable Front Radar Sensor | S022317002 | 0.18 |

| | Part Number | Description | Quantity |
|---------------|-------------------------|--|----------|
| Part Required | 2208813-00-B | CAP FOR REPLACING FEM RADAR | 1 |
| | 1031956-00-A | CLIP - STUD MOUNT - TIESTRAP - M6 | 1 |
| | These part numbers were | e current at the time of publication. Use the revisions listed or later, unles | S |

otherwise specified in the <u>Parts Catalog</u>.

Procedure

- 1. Open the LH front door and lower the LH front window.
- 2. Remove the rear underhood apron (refer to Service Manual procedure 12251102).
- 3. Disconnect LV power (refer to Service Manual procedure <u>17010200</u>).
- 4. Remove the LH and RH underhood aprons (refer to Service Manual procedure 12251202).
- 5. Remove the front underhood apron (refer to Service Manual procedure <u>12251002</u>).



6. Remove the bolts (x6) that attach the front fascia bracket to the front end carrier (Figure 1).



Figure 1

- 7. Insert an inflatable air bag wedge between the front end carrier and the RH side of the front fascia T badge support (Figure 2), and then slightly inflate the wedge (Figure 3).
 - **CAUTION:** Do not inflate the wedge too much to prevent creasing the front fascia.



Figure 2



Figure 3

8. Disconnect the front radar sensor electrical connector using a long pick tool (Figures 4, 5, and 6).

NOTE: Push the locking tab on the electrical connector, and then twist the connector counterclockwise to disconnect it.











Figure 6



9. Lift up the front radar sensor electrical connector through the opening using the long pick tool (Figures 7 and 8).



Figure 7

Figure 8

10. Install the electrical harness termination cap (2208813-00-B) on the front radar sensor electrical connector (Figure 9).



Figure 9

11. Install the stud mount cable tie strap (1031956-00-A) to the front radar sensor electrical connector (Figure 10), and then cut the excess tie flush with the stud mount.



Figure 10

12. Install the stud mount cable tie strap to the front radar mounting bolt protruding from the back of the radar bracket (Figure 11). Use the long pick tool as needed to position the electrical connector into position.

 $\boxed{=}$ NOTE: Make sure that the front radar sensor electrical connector is secured in place.



Figure 11

13. Deflate, and then remove the inflatable air bag wedge from the vehicle (Figure 12).





- 14. Install the front underhood apron (refer to Service Manual procedure 12251002).
- 15. Install the LH and RH underhood aprons (refer to Service Manual procedure 12251202).
- 16. Reconnect LV power (refer to Service Manual procedure <u>17010200</u>).
- 17. Install the rear underhood apron (refer to Service Manual procedure <u>12251102</u>).



- 18. Connect a laptop with Toolbox 3 to the vehicle (refer to <u>Service Manual procedure</u>), and then perform these substeps to update the vehicle hardware configuration:
 - a. Click the Dashboards tab (Figure 13), and then click Infotainment Dashboard.



Figure 13

b. Click the Vehicle Configuration tab (Figure 14).

NOTE: Vehicle configuration values should load automatically. If not, click **Read Config**, and then click **Run** to load.







c. Scroll down to "forwardRadarHw" and change it from "CONTI_ARS410" (Figure 15) to NONE (Figure 16).

NOTE: Click on the current front radar configuration, and then click the new front radar configuration from the drop down menu.

| Infotainment Dashbo Actions for diagnosing and r | ard epairing the infotainment system | | i |
|---|---|-----------|-----------------|
| Vehicle Configuration | Infotainment Tasks | | |
| Vehicle Configuration | on Update | | |
| Warning! Applying chan | ges reboots the Gateway | | |
| Learn about Vehicle Cont | iguration | | |
| exteriorColor: Exterior vehicle color | | | MIDNIGHT_SILVER |
| forwardRadarHw: Type of forward radar install | ed | | CONTI_ARS410 |
| | | Figure 15 | |
| Infotainment Dashbo Actions for diagnosing and | Dard repairing the infotainment system | | 1 |
| Vehicle Configuration | Infotainment Tasks | | |
| Vehicle Configurati | ion Update | | |
| Warning! Applying cha | nges reboots the Gateway | | |
| Learn about Vehicle Cor | figuration | | |
| exteriorColor: Exterior vehicle color | | | MIDNIGHT_SILVER |
| forwardRadarHw: Type of forward radar insta | lled | | NONE |

Figure 16

d. Click **Apply Changes** (Figure 17), and then click **Run** to save the updated the vehicle hardware configuration.

NOTE: The touchscreen reboots and the Toolbox connection is lost.

NOTE: Click the **X** at the top right of the window to close once completed.

| Infotainment Dashboard Actions for diagnosing and repairing the infotainment system | 8 | |
|--|--|--|
| Vehicle Configuration Infotainment Tasks | | |
| Vehicle Configuration Update | | |
| Warning! Applying changes reboots the Gateway | | |
| | Learn about Vehicle Configuration | |
| compressorType: Type of refrigerant compressor, correlates with CMP uds node | 11K_COP1_ENABLED | |
| connectivityPackage: Purchasable connectivity package | PREMIUM | |
| coolantPumpType: Number of coolant loop pumps installed | Two coolant pumps installed, mixed pole pair batches | |
| dasHw: Driver Assist hardware | Tesla Ap 3 | |
| devSecurityLevel: Gateway debug security level for DEV-configured cars | - | |
| drivetrainType: Number of motors | AWD | |
| eBuckConfig: Configuration to identify development bucks from vehicles | NONE | |
| epasType: Type of EPAS ECU installed | MANDO_VGR66_GEN3 | |
| ethernetTunerType: Type of ethernet tuner installed | Harman tuner installed | |
| exteriorColor: exterior vehicle color | Midnight Silver | |
| headlamps: Type of headlamps installed. Premium headlamps contain additional LEDs | PREMIUM | |
| homelinkType: Type of homelink module installed | Homelink V Opt 2 | |
| interiorLighting: Type of interior lighting package installed | BASE | |
| InteriorTrimType: Interior trim type for UI vehicle assets | White interior color with original center console | |
| mapRegion: Region specifier for navigation maps | Us | |
| numberHVILNodes: | 0 | |
| Read Config Help | Clear Changes Apply Changes | |

Figure 17

19. Disconnect the laptop with Toolbox 3 from the vehicle (refer to Service Manual procedure).

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For feedback on the accuracy of this document, email ServiceBulletinFeedback@tesla.com