| V | Tesla, Ir Service Bull | | Readjust Hood Latch | | | | |
|---|----------------------------------|----|---------------------|-------------------------------|--|--|--|
| | 1-11-003 n 8, 2022 | R2 | | | | | |
| Classification | | | Section/Group | Mobile Service | | | |
| Recall Bulletin | | | 11 - Closures | Can Perform (where permitted) | | | |
| Model Yea | ar Model | | Country/Region | Version | | | |
| 2014 – 202 | 1 Model S | | All | 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. | | | | | | | |

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.

This Service Document supersedes SB-21-11-003 R1, dated 11-Jan-22. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

Condition

On certain 2014 to 2021 Model S vehicles, the secondary hood latch may not latch to the frunk striker as designed.

Correction

Inspect the vehicle for the symptom related to the condition. If the symptom is present, readjust the hood latch to correct alignment specifications.

| Correction Description | Correction | Time |
|--|------------|------|
| Inspect Secondary Hood Latch Functionality; Operating As Designed | S012111003 | 0.05 |
| Inspect Secondary Hood Latch Functionality; Readjust Hood Latch; 2014 To 2016 (Front Fascia Applique Vehicles) | S022111003 | 0.15 |
| Inspect Secondary Hood Latch Functionality; Readjust Hood Latch; 2016 To 2021 (Refresh Vehicles) | S032111003 | 0.30 |
| Unable To Inspect Secondary Hood Latch Functionality Due To Aftermarket Hood, Hood Struts, And/Or Hood Latch | S042111003 | 0.00 |

| | Part Number | Description | Quantity |
|--------------|--------------|--|----------|
| If Necessary | 1016456-00-B | WSHR,6.0x18x1.6mm, EPOXY | 2-6 |
| | 1129025-00-A | Model S Refresh (built after April 2016) when 2-3 shims are installed: BOLT,HF,M6-1.0x30,[88],ZNNI,SMAT | 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 Ruler, measuring tape, or caliper (if necessary) Masking tape (any color but black)

Black marker pen

Procedure

- 1. Open the LH front door and lower the LH front window.
- 2. Press the brake pedal to turn on the drive rails.
- 3. Open the hood through the touchscreen (Figure 1).
 - **NOTE:** Do not close the hood until instructed to do so.

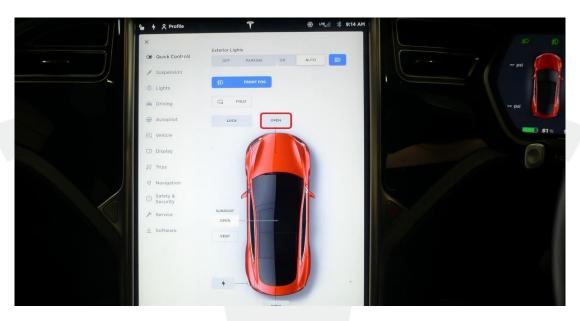


Figure 1

- 4. With the vehicle stationary, firmly press on the brake pedal, shift the vehicle into Drive, and then shift back to Park.
 - NOTE: The warning messages "Front trunk open" (Figure 2) in the instrument cluster and "Front Trunk Unlatched" (Figure 3) in the touchscreen should appear when the vehicle is in Drive.



Figure 2

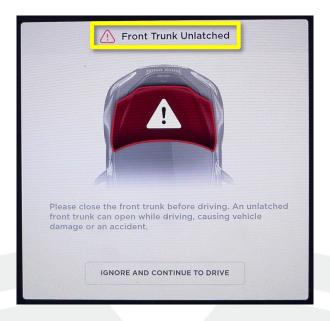


Figure 3

- 5. Step out of the vehicle and attempt to fully open the hood.
 - NOTE: The primary hood latch should have released the hood to a partially open state.
 - If the secondary hood latch prevents the hood from opening fully (Figure 4), the hood latch is working as designed. Close the hood and discontinue this procedure.
 - If the hood opens fully (Figure 5), the secondary hood latch is NOT working as designed. Continue with one of the procedures as follows:
 - o 2014 to 2016 Front Fascia Applique Vehicles (Nose Cone)
 - o 2016 to 2021 Vehicles (Refresh)







Figure 5

2014 to 2016 Front Fascia Applique Vehicles (Nose Cone)

- 1. Open the hood again through the touchscreen (Figure 1) or key fob.
 - NOTE: This action releases the secondary hood latch.
- 2. Wrap the lower portion of the hood latch striker with a piece of masking tape where the hood latch engages with the striker, as shown (Figure 6).



Figure 6

- 3. Remove the front underhood apron (refer to Service Manual procedure 12251002).
- 4. Rotate the hood latch to the secondary position manually with a flathead screwdriver (Figure 7).



Figure 7

- 5. Generously mark the top portion of the hood latch with a black marker (Figure 8).
 - NOTE: Promptly proceed to the next steps before the ink from the black marker dries. Ink will transfer to the hood latch striker masking tape during the next step.



Figure 8

6. Slowly close the hood latch to the secondary hood latch only (Figure 9).



Figure 9

7. Open the hood through the touchscreen (Figure 1) or key fob.

8. Measure with a caliper the distance between the rear of the hood latch striker and the bottom of the ink mark left by the secondary lever on the masking tape (Figure 10). Record the measured distance because it will be used in step 11.

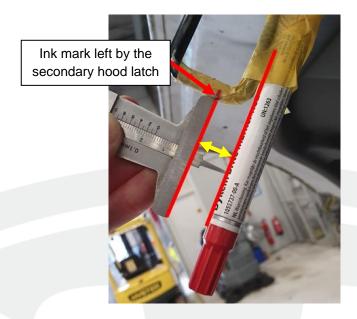


Figure 10

9. Disconnect the hood latch electrical connector (Figure 11).



Figure 11

10. Remove the bolts (x2) that attach the hood latch to the front end carrier (Figures 12 and 13).



Figure 12 – RH hood latch bolt

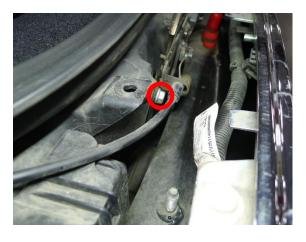


Figure 13 – LH hood latch bolt

- 11. Determine the number of shims to be added to the hood latch bolts per the measured distance taken in step 8:
 - If the measured distance is 8–9 mm: add 1 shim to each bolt.
 - If measured distance is 6-7.9 mm: add 2 shims to each bolt.
 - If measured distance is 4-5.9 mm: add 3 shims to each bolt.
 - 12. Position the shim(s) between the hood latch and the front end carrier, and then temporarily hand-tighten the LH hood latch bolt to the front end carrier. Repeat this step for the RH hood latch bolt.
 - 13. Secure the hood latch by fully pushing down on the hood latch assembly (Figure 14), and then tighten the hood latch bolts (torque 8 Nm).



Figure 14 - LH hood latch bolt shown; RH similar

- 14. Connect the hood latch electrical connector (Figure 11).
- 15. Remove the masking tape from the hood latch striker.
- 16. Slowly close the hood latch to the secondary hood latch only and attempt to open the hood. Verify that the secondary hood latch securely holds the hood in place.
- 17. Reinstall the components that were removed for access.

2016 to 2021 Vehicles (Refresh)

- 1. Open the hood again through the touchscreen (Figure 1) or key fob.
 - NOTE: This action releases the secondary hood latch.
- 2. Wrap the lower portion of the hood latch striker with a piece of masking tape where the hood latch engages with the striker, as shown (Figure 15).



Figure 15

- 3. Remove the underhood storage unit (refer to Service Manual procedure <u>15242301</u>).
- 4. Rotate the hood latch to the secondary position manually with a flathead screwdriver (Figure 16).

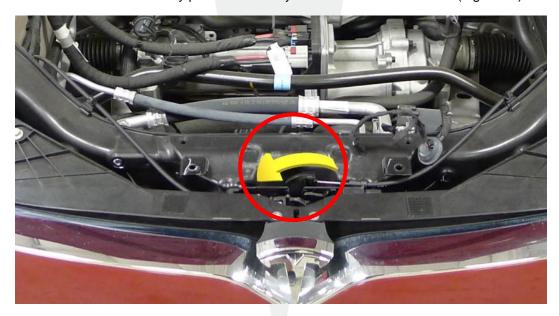


Figure 16

5. Generously mark the top portion of the hood latch with a black marker (Figure 17).

NOTE: Promptly proceed to the next steps before the ink from the black marker dries. Ink will transfer to the hood latch striker masking tape during the next step.



Figure 17

6. Slowly close the hood latch to the secondary hood latch only (Figure 18).



Figure 18

7. Open the hood through the touchscreen (Figure 1) or key fob.

8. Measure with a caliper the distance between the back of the hood latch striker and the bottom of the ink mark left by the secondary lever on the masking tape (Figure 19). Record the measured distance because it will be used in step 13.

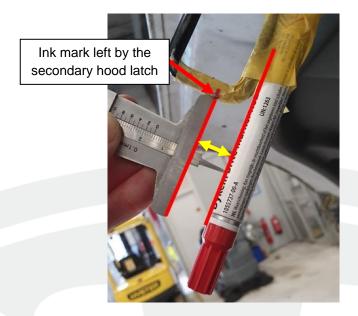


Figure 19

9. Remove the bolts (x4) that attach the front fascia bracket to the carrier assembly (Figure 20).



Figure 20

10. Position the front fascia bracket away from the carrier assembly by folding up 2 shop towels, and then insert them underneath and between the front fascia bracket and carrier to increase the gap between hood latch and fascia (Figures 21 and 22).



Figure 21



Figure 22

11. Disconnect the hood latch electrical connector (Figure 23).

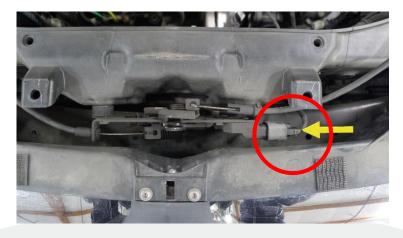


Figure 23

- 12. Remove the bolts (x2) that attach the hood latch to the front end carrier (Figures 24 and 25).
 - NOTE: Retain currently installed spacers, if present (Figure 26).





Figure 24 Figure 25

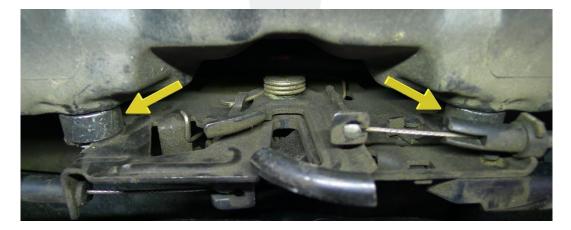


Figure 26

- 13. Determine the number of shims to the added to the hood latch bolts per the measured distance taken in step 8:
 - If the measured distance is 8–9 mm: Add 1 shim to each bolt.
 - If measured distance is 6–7.9 mm: Replace the hood latch bolts with the longer ones, and add 2 shims to each bolt.
 - If measured distance is 4–5.9 mm: Replace the hood latch bolts with the longer ones, and add 3 shims to each bolt.

CAUTION: If installing 2 or 3 shims, the hood latch bolts must be replaced (1129025-00-A) with the longer bolts.

- 14. Position the shim(s) between the hood latch, retained spacers (Figure 26), and the front end carrier, and then temporarily hand-tighten the LH hood latch bolt to the front end carrier. Repeat this step for the RH hood latch bolt.
- 15. Secure the hood latch by fully pushing down on the hood latch assembly (Figure 27), and then tighten the hood latch bolts (torque 8 Nm).

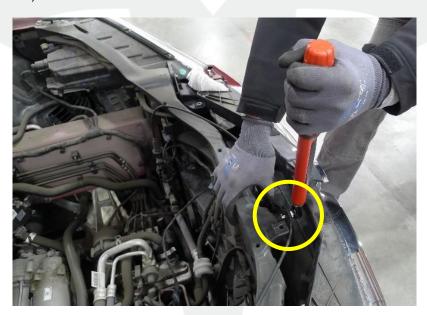


Figure 27 - LH hood latch bolt shown, RH similar

- 16. Connect the hood latch electrical connector (Figure 23).
- 17. Remove the masking tape from the hood latch striker.
- 18. Slowly close the hood latch to the secondary hood latch only and attempt to open the hood. Verify that the secondary hood latch securely holds the hood in place.
- 19. Reinstall the components that were removed for access.