

Last modified: 17/06/2022 13:39:00

Skidplate - Front (Remove and Replace)



Correction code 30011002

FRT FRT Pending

NOTE: Unless otherwise explicitly stated in the procedure, the above correction code and FRT reflect all of the work required to perform this procedure, including the linked procedures. **Do not stack correction codes unless explicitly told to do so.**

NOTE: See [Flat Rate Times](#) to learn more about FRTs and how they are created. To provide feedback on FRT values, email LaborTimeFeedback@tesla.com.

NOTE: See [Personal Protection](#) to make sure proper PPE is worn when performing the below procedure.

Warning

This procedure is a DRAFT, although it has been validated. Warnings and Cautions might be missing. Follow safety requirements and use extreme caution when working on or near high voltage systems and components. Provide corrections and feedback to ServiceDevelopment@teslamotors.com.

Remove

1. Raise the vehicle. See [Raise Vehicle - 2 Post Lift](#) .

Last modified: 29/07/2022 09:20:35

Raise Vehicle - 2 Post Lift



Correction code 10000205
FRT 0.05

NOTE: Unless otherwise explicitly stated in the procedure, the above correction code and FRT reflect all of the work required to perform this procedure, including the linked procedures. **Do not stack correction codes unless explicitly told to do so.**

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NOTE: See [Personal Protection](#) to make sure proper PPE is worn when performing the below procedure.

Warning

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**Note**

A vehicle lifting procedure is available for Mobile Service. See [Raise Vehicle - Floor Jack \(Mobile Service\)](#).

Raise

**Warning**

To reduce the risk of personal injury, use appropriate equipment while performing this operation.

**Warning**

Do not work on an incorrectly supported vehicle.

1. Disconnect the charging cable from the vehicle.

**Warning**

Do not attach the charging cable to the charge port while the vehicle is on the lift.

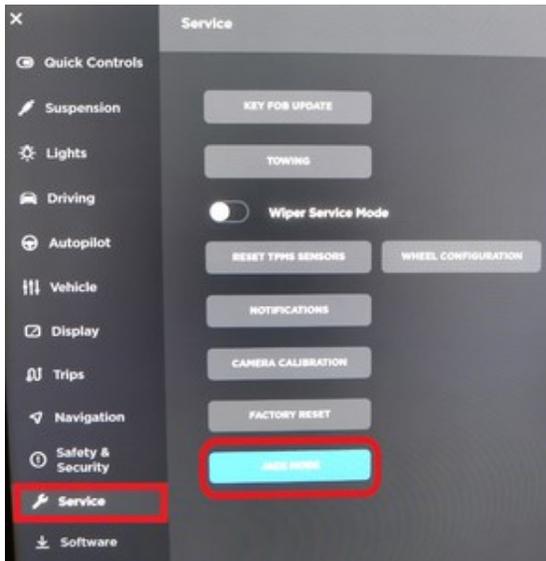
**CAUTION**

Perform a visual check of the lift according to the equipment operator's manual before using the lift.

2. Move the lifting arms fully outward.
3. Move the vehicle to the lift, position the vehicle centrally between the lift posts, and make sure that the steering wheel is in line with the lift posts.



4. On the vehicle touchscreen, touch **Controls > Service > Jack Mode** to activate Jack Mode.



5. Position the front and rear lifting arm pads under the vehicle lift points on the HV battery as shown.

i Note

Some lifting arms extend past the lifting pad and might obstruct separation of the HV battery from the vehicle. In this situation, rotate the lifting pads 90 degrees, so as to provide additional clearance.

Figure 1. Lifting arm obstructing separation of HV battery from vehicle

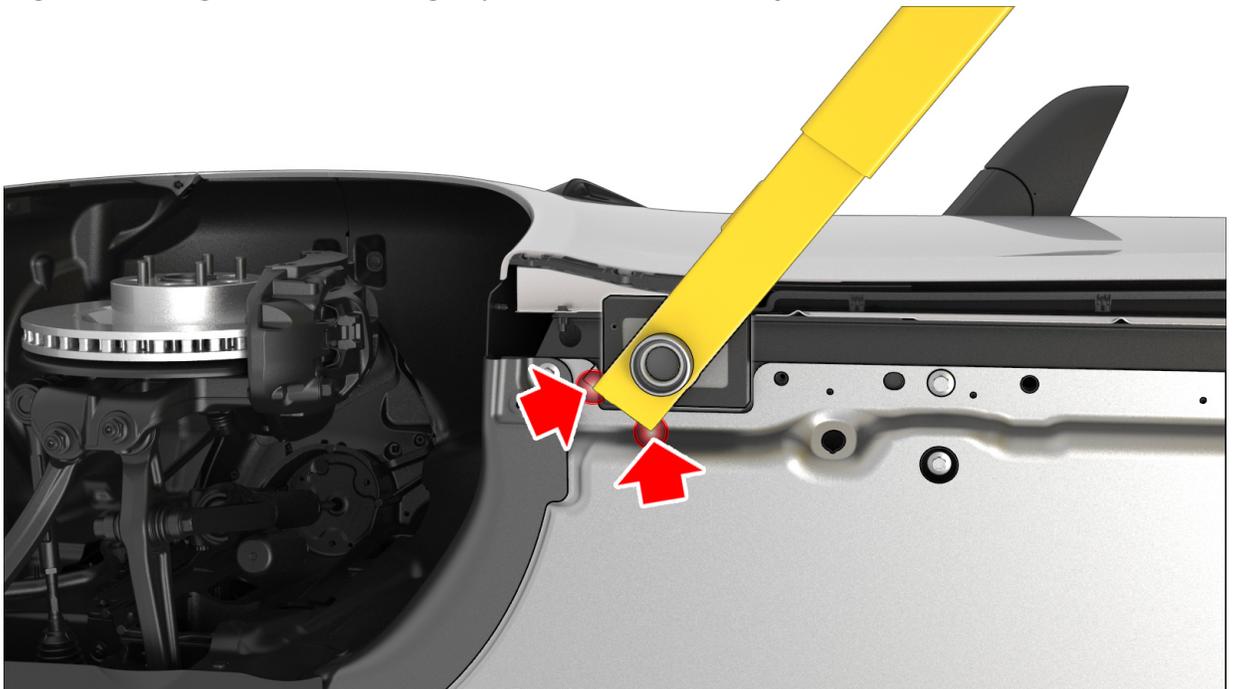
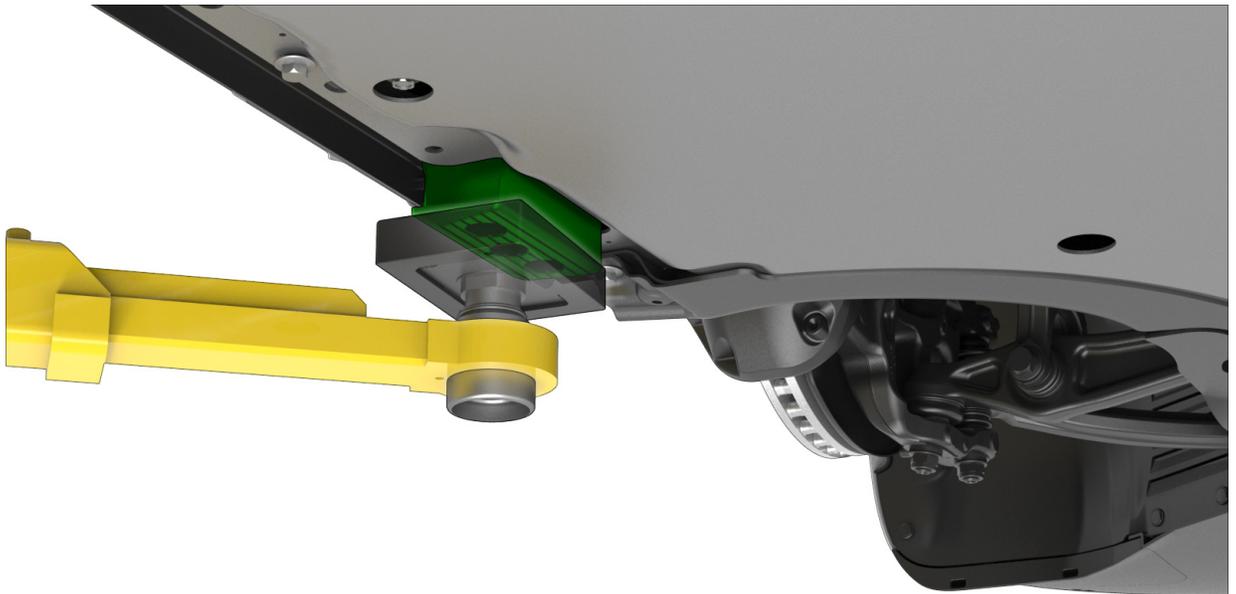
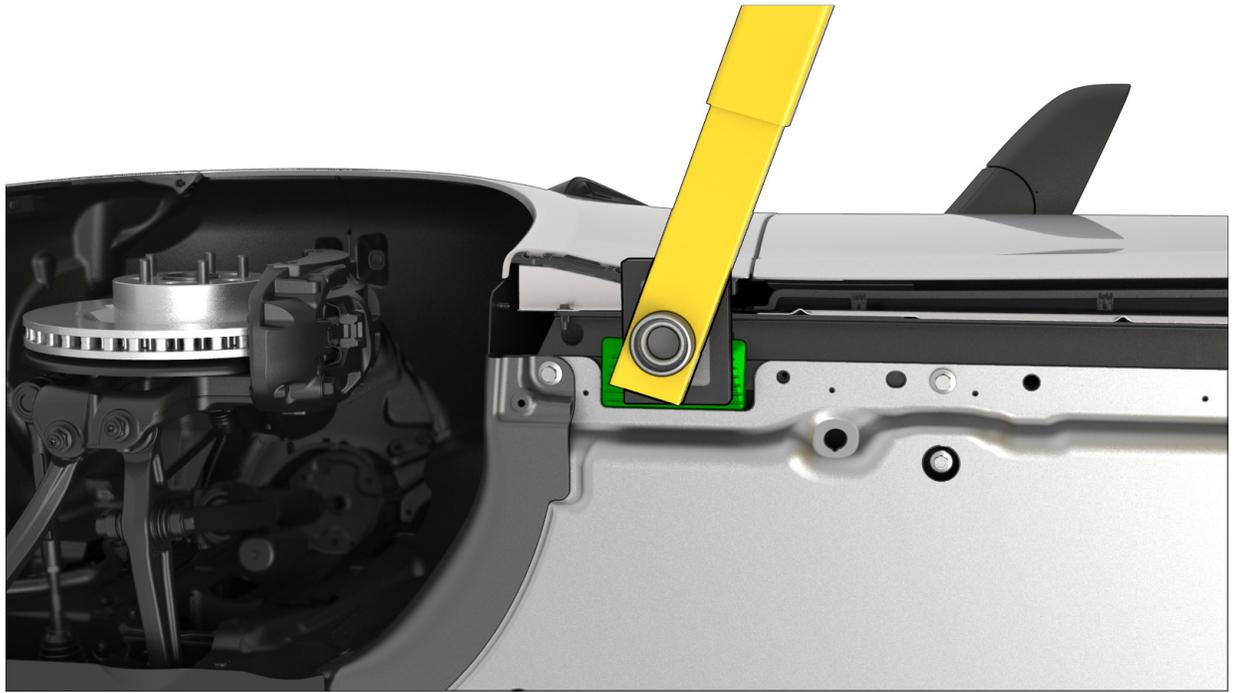
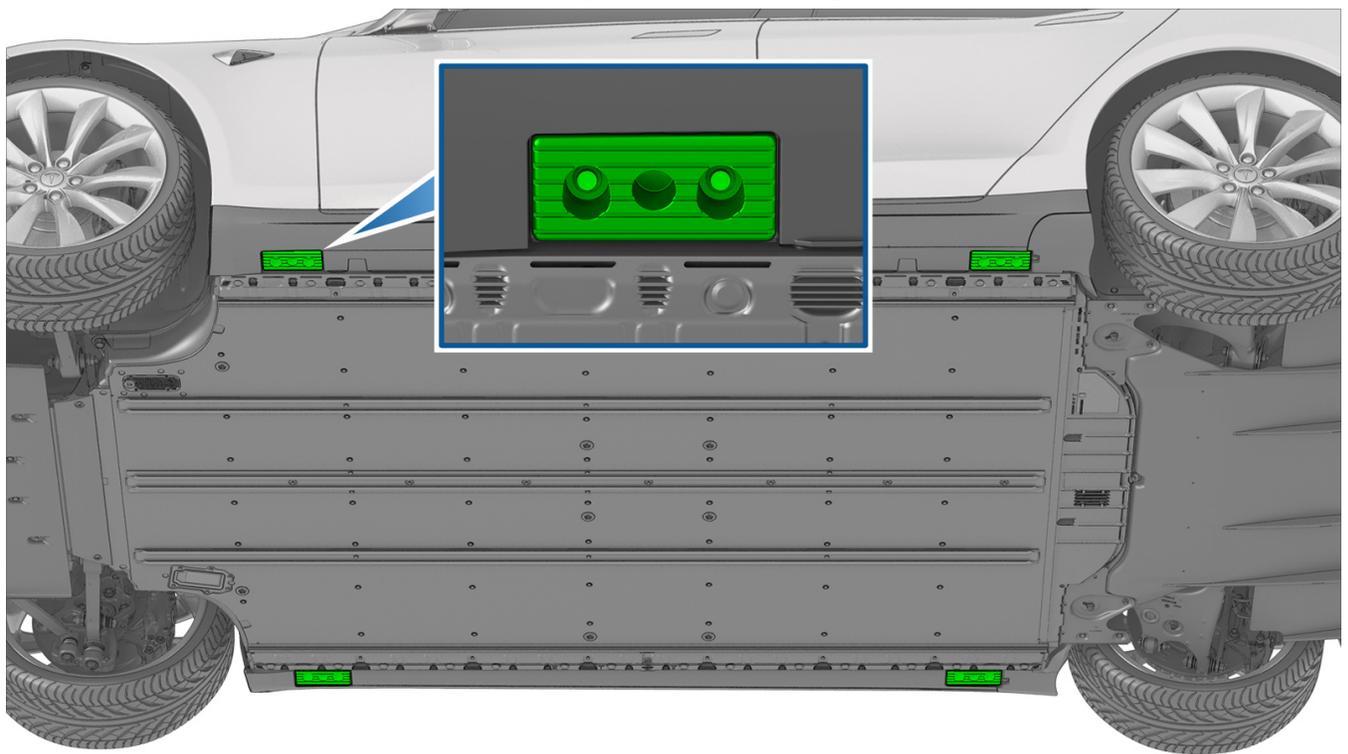


Figure 2. Lifting pad at 90 degrees





6. Adjust the lifting arm pads to the optimum height.
7. Make sure that the hood, liftgate, and all doors are closed, unless necessary for the work to be performed.
8. Check that the arms are correctly located, and make sure that no part of the vehicle is in danger of contacting the ceiling, tool boxes, or other items in the service area when the vehicle is raised.
9. Raise the vehicle slightly, and check the following:
 - Make sure all 4 pads are in the correct position.
 - Check the balance of the vehicle.
 - Make sure that the four arms are properly locked and cannot rotate.

⚠ CAUTION

If the procedure requires the hood, liftgate, or doors to be open while the vehicle is raised, closely watch their position as the vehicle is being raised to avoid contact with the lift mechanism, ceiling, or objects hanging from the ceiling.

10. Raise the vehicle to the necessary service height, and then lower the lift until the safety locks are properly engaged.

Lower

1. Make sure that no tools, equipment, other items, or personnel are under the vehicle or under any open doors.
2. Disengage any lift safety locks, and fully lower the vehicle.

i Note

Make sure there's an audible click of the locks on both sides before lowering, otherwise vehicle may tilt to the side.

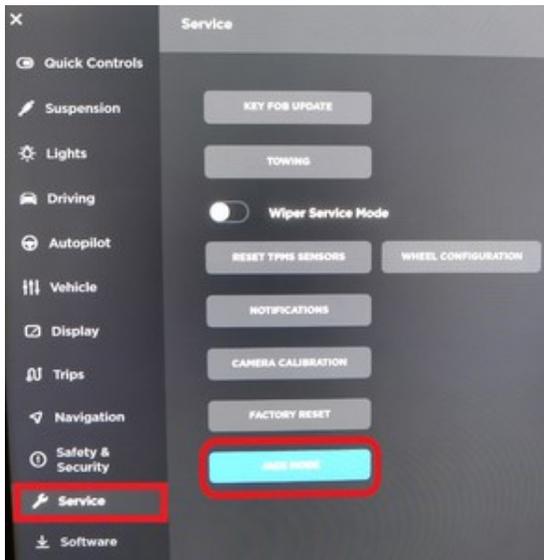
CAUTION

To avoid injuries, stay clear from the vehicle.

- 3. Move the lifting arms fully out from under the vehicle, and lower the lifting pads.



- 4. Close any open hood, liftgate, or doors as necessary.
- 5. On the vehicle touchscreen, touch **Controls > Service > Jack Mode** to deactivate Jack Mode.



- 6. Remove the vehicle from the lift.

- 3. Remove the front aero shield panel. See [Panel - Aero Shield - Front \(Remove and Replace\)](#) .

Last modified: 01/09/2021 10:55:02

Panel - Aero Shield - Front (Remove and Replace)



Correction code 12030102
FRT 0.20

NOTE: Unless otherwise explicitly stated in the procedure, the above correction code and FRT reflect all of the work required to perform this procedure, including the linked procedures. **Do not stack correction codes unless explicitly told to do so.**

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NOTE: See [Personal Protection](#) to make sure proper PPE is worn when performing the below procedure.

Warning

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Remove

1. Raise and support the vehicle on a 2 post lift. See [Raise Vehicle - 2 Post Lift](#) .
2. Release the push clips (x2) that attach the front aero shield panel to the LH and RH front wheel arch liners.



3. Release the push clips (x3) that attach the front aero shield panel to the underbody.



4. Remove the bolts (x9) that attach the front aero shield panel to the front subframe, and then remove the panel from the vehicle.



Install

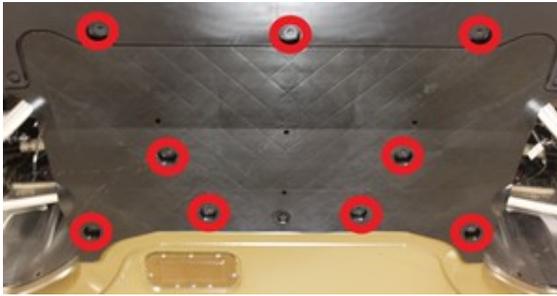
1. Apply a drop of Loctite 222 onto the threads of each front aero shield panel bolt.



2. Install the front aero shield panel to the front subframe, and then install the bolts (x9) that attach the panel to the subframe.



6 Nm (4.4 lbs-ft)



3. Fasten the push clips (x3) that attach the front aero shield panel to the underbody.



4. Fasten the push clips (x2) that attach the front aero shield panel to the LH and RH front wheel arch liners.



5. Remove the vehicle from the lift. See [Raise Vehicle - 2 Post Lift](#) .

5. Release the clips (x4) that attach the LH and RH front wheel arch liners to the front skid plate.



6. Remove bolts (x2) that attach the front skid plate to the LH and RH body sills.



7. Remove the bolts (x2) that attach the front skid plate to the front body casting.



8. Remove the bolts (x4) that attach the front skid plate to the front subframe, and then remove the skidplate from the vehicle.



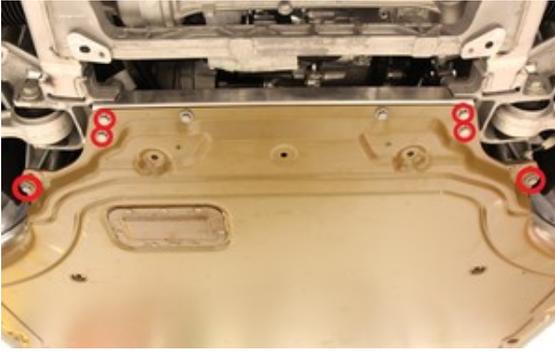
Install

1. Position the front skid plate to the front subframe, and then hand-install all of the bolts (x8) to be hand tight.



Note

The bolts are torqued in subsequent steps. 4x bolts, 15mm, 70 Nm, 2x bolts, 15mm, 60 Nm, 2x bolts, 15mm, 30 Nm, Torque at later step.



2. Tighten the bolts (x4) that attach the front skid plate to the front subframe.



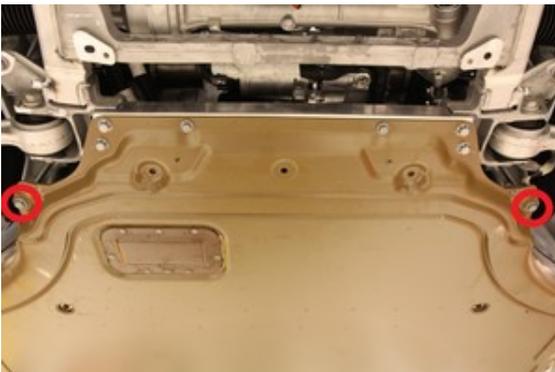
70 Nm (51.6 lbs-ft)



3. Tighten the bolts (x2) that attach the front skid plate to the front body casting.



60 Nm (44.2 lbs-ft)



4. Tighten the bolts (x2) that attach the front skid plate to the LH and RH body sills.



30 Nm (22.1 lbs-ft)



5. Fasten the clips (x4) that attach the LH and RH front wheel arch liners to the front skid plate.



6. Install the front aero shield panel. See [Panel - Aero Shield - Front \(Remove and Replace\)](#) ○ .
7. Lower the vehicle. See [Raise Vehicle - 2 Post Lift](#) ○ .