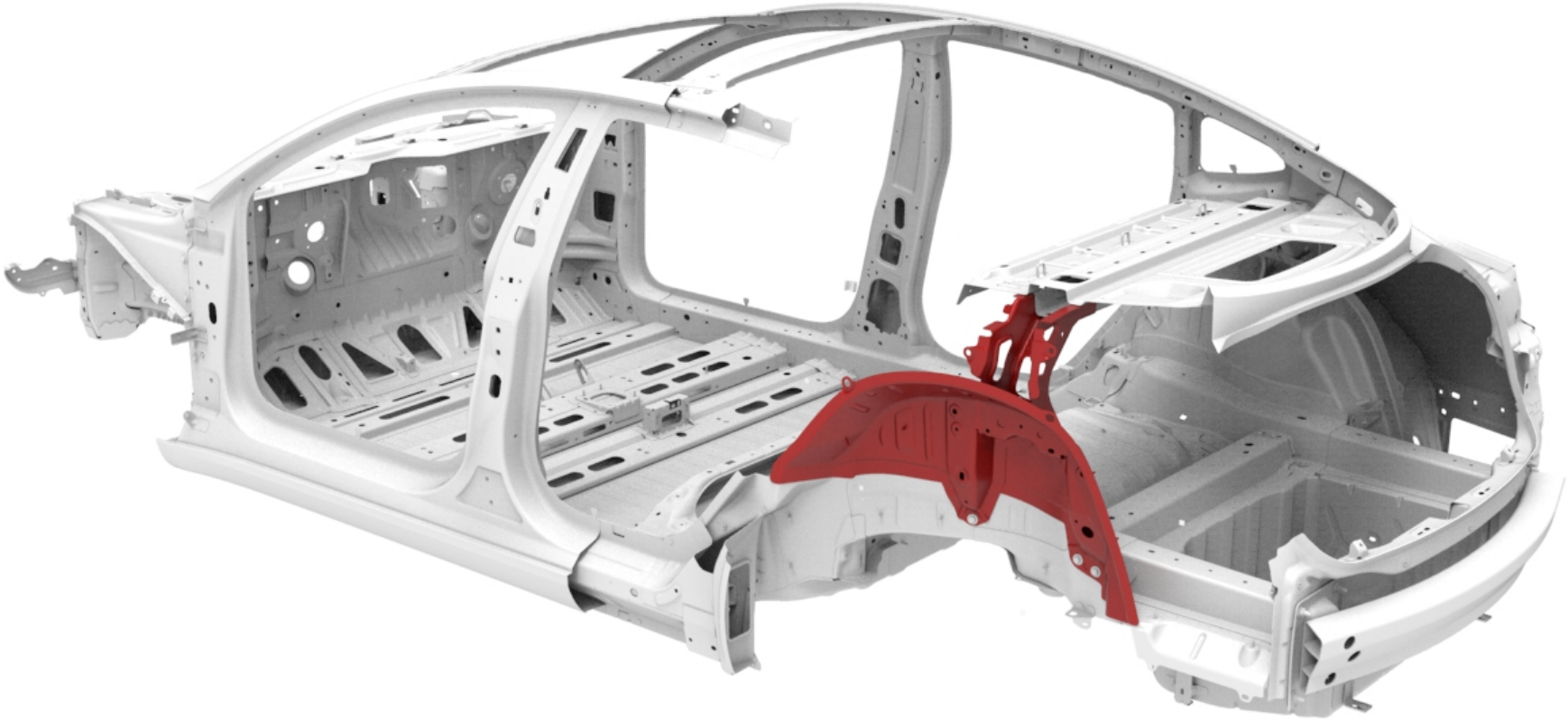
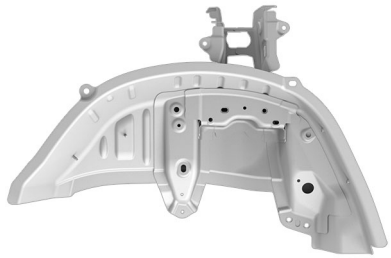
# Wheelhouse Inner Complete Assembly



# Parts List

| Quantity | Part Number | Description | Image / Notes |
|---|---|---|---|
| 1 | 1093335-S0-A (LH)<br>1093336-S0-A (RH) | Rear Wheelhouse Inner Assembly |  |
| 27 rivets needed; order 30 rivets | 1063943-00-A | Structural Bulb Rivet, 6.5 mm | All rivets come in packages of 10; order all rivets in multiples of 10. |
| 3 | 1063260-00-C | Bolt, hex-head | Rear Wheelhouse Inner Assembly to Rear Node |
| 1 | — | Structural Adhesive | **WARNING**: Use only Tesla-approved structural adhesive; refer to BR-15-92-008, "Approved Structural Adhesive and Urethane Sealants" for a list of current approved structural adhesives.<br>Refer to BR-17-92-002, "Obtaining Adhesives, Coolant, and Other Chemicals" for information on how to obtain approved structural adhesive. |
| 1 | — | Corrosion-Resistant Epoxy Primer | Source locally; not available from Tesla. |
| 1 | _ | Seam Sealer | Source locally; not available from Tesla. |

These part numbers were current at the time of publication. Use the revisions listed or later, unless otherwise specified in the Parts Manual.

# Repair Information

| Repair Information | Warnings and Cautions | Special Tools |
|---|---|---|
| This procedure is for the left-hand component; the procedure is identical for the right-hand component. | **WARNING:** Wear the appropriate personal protective equipment (PPE) when performing this procedure. | The special tool listed below is required to perform this procedure:<br>• Frame bench<br>The vehicle must be properly mounted on an approved frame bench to replace this component. Refer to BR-16-92-006, "Approved Frame Bench Systems" for a list of current approved bench repair systems. |

# Prerequisites

1 Disconnect 12V and high voltage power (refer to the appropriate section in BR-17-17-004, "Disconnecting 12V and High Voltage Power on Model 3").

WARNING: Before disconnecting the 12V power supply, make sure that all windows are at least slightly open. Attempting to open a door with a fully-closed window when the 12V power supply is disconnected could result in door glass shatter.

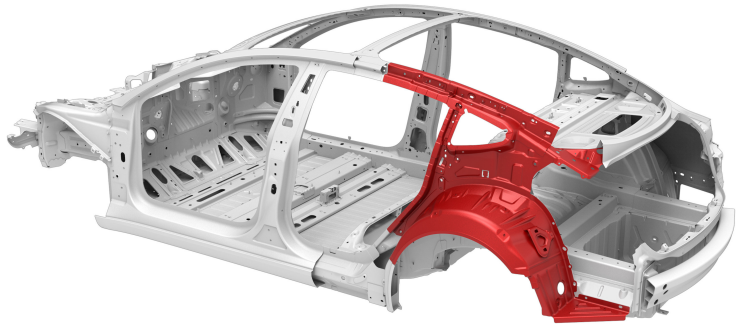
NOTE: Before disconnecting the 12V power supply, make sure that the driver's door window is fully open. Failure to lower the driver's door window before disconnecting the 12V power supply could result in vehicle lockout.

2 Before working on the vehicle, make sure that high voltage current is not present (refer to the appropriate section in BR-17-17-004, "Disconnecting 12V and High Voltage Power on Model 3").

WARNING: Only technicians who have been trained in High Voltage Awareness are permitted to perform the Vehicle Electrical Isolation procedure. Proper personal protective equipment (PPE) and insulating high voltage gloves with a minimum rating of class 0 (1000V) must be worn any time a high voltage cable is handled. Refer to TN-15-92-003, "High Voltage Awareness Care Points" for additional safety information.

## Prerequisites

3 Remove the Rear Quarter Inner Assembly.

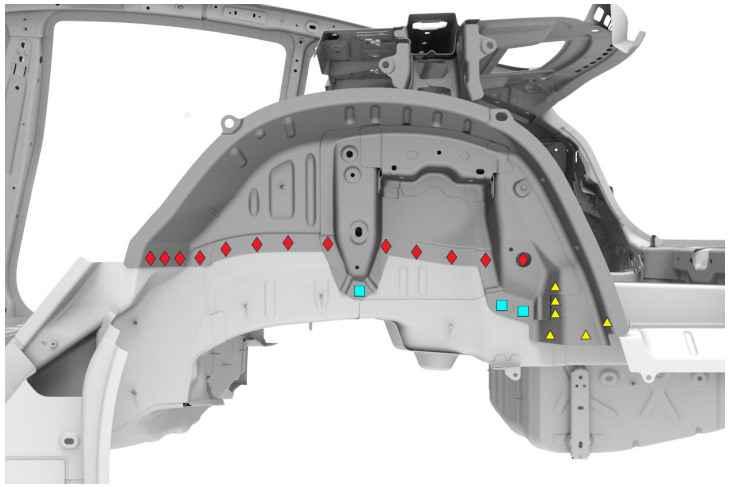


# Removal

1 Remove the original component.

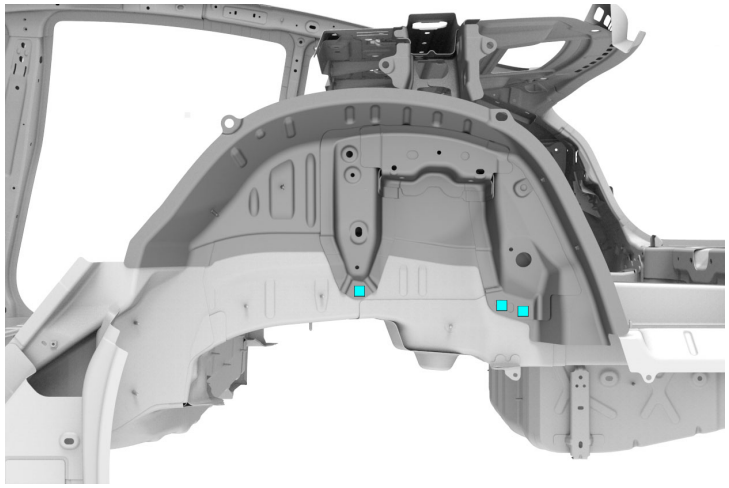
A Identify the fasteners.

- Bolt, hex-head (x3)
- SPR, 5x4.5 (x13)
- Factory Spot Weld (x6)



B Remove and discard the bolts.

- Bolt, hex-head (x3)

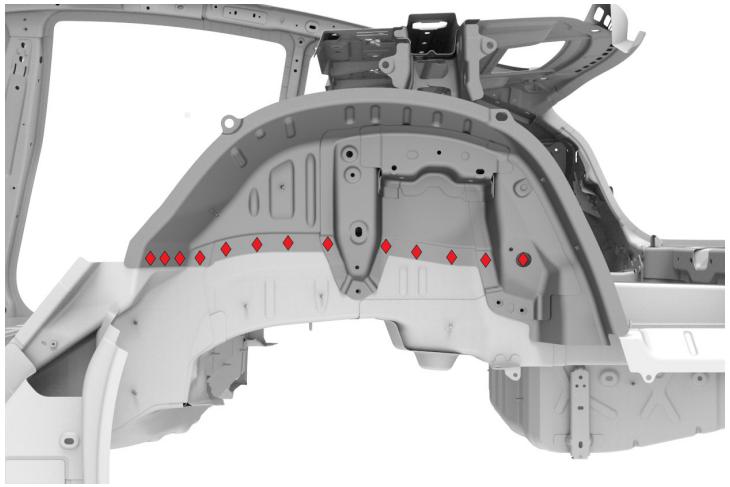


# Removal

1 Remove the original component (continued).

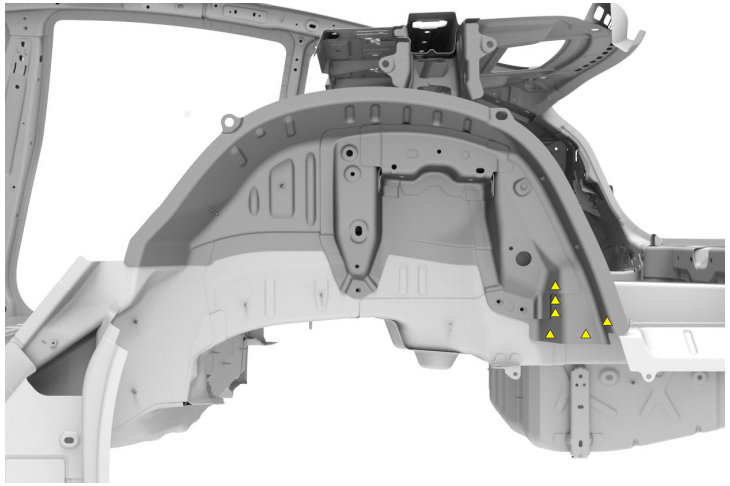
C Use an SPR removal tool or a drill with a high-strength steel bit to remove the factory self-piercing rivets. Use a belt sander for any factory self-piercing rivets that cannot be removed with an SPR removal tool or a drill.

♦ SPR, 5x4.5 (x13)



D Use a drill with a spot weld bit to drill out the factory spot weld.

△ Factory Spot Weld (x6)



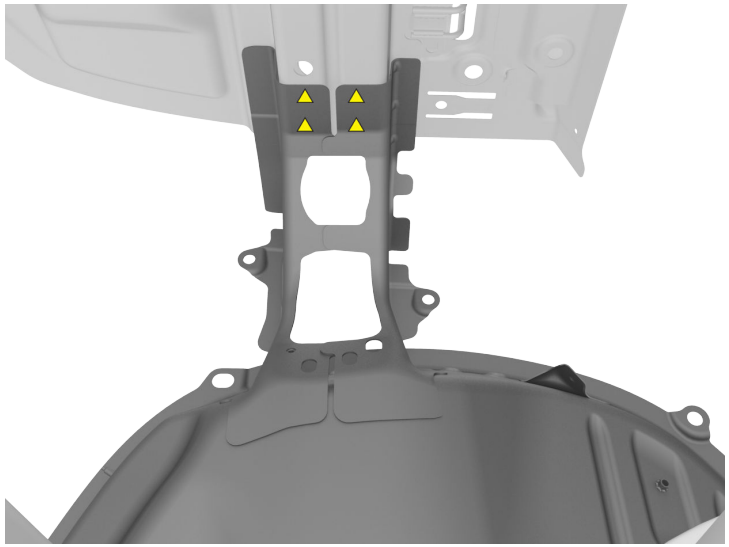
**NOTE:** Factory spot weld locations shown are approximate. Exact spot weld locations and number vary from vehicle to vehicle.

# Removal

1 Remove the original component (continued).

E Use a drill with a spot weld bit to drill out the factory spot weld.

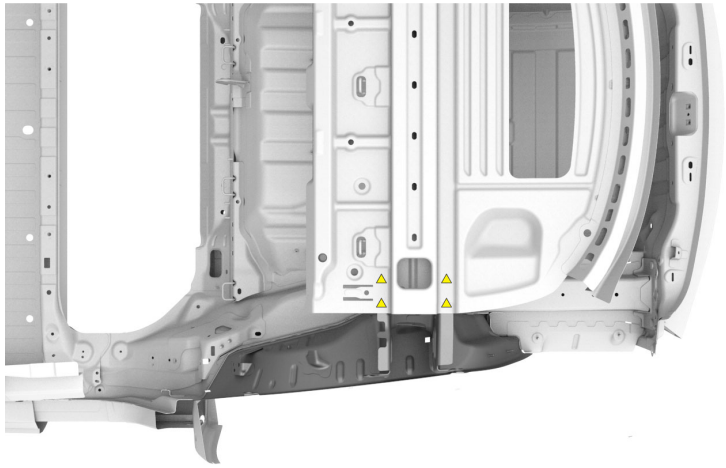
△ Factory Spot Weld (x4)



**NOTE:** Factory spot weld locations shown are approximate. Exact spot weld locations and number vary from vehicle to vehicle.

F Use a drill with a 6.7 mm bit to drill completely through the spot welds shown.

△ Factory Spot Weld (x4)



**NOTE:** Factory spot weld locations shown are approximate. Exact spot weld locations and number vary from vehicle to vehicle.

**NOTE:** Drill spot weld circled from underside with a spot weld drill bit only drilling 1 layer of metal as this will not be replaced with a rivet during installation.

# Removal

1 Remove the original component (continued).

G Use a heat gun to heat the adhesive joints, and then use a hammer and chisel to remove the remaining pieces of the original component.

WARNING: Do not heat the adhesive joints above 100°C (212°F). Heating the adhesive joints above 100°C (212°F) can weaken the aluminum and compromise vehicle crash integrity.

WARNING: Do not heat any adhesive joints of components that are not being removed. Heating adhesive joints weakens the adhesive bond and could compromise vehicle crash integrity.

2 Use a disc sander with a medium-abrasive surface conditioning disc to remove any remaining materials from the mating surfaces. Use a belt sander with a medium-abrasive belt for any areas that cannot be reached with a disc sander. Vacuum any adhesive dust.

WARNING: Remove the epoxy adhesive in a well-ventilated area. Wear suitable personal protective equipment.

WARNING: Use only sanding wheels and belts that are 80 grit or finer on aluminum components. Using sanding wheels or belts that are coarser than 80 grit can cause fractures in the aluminum.

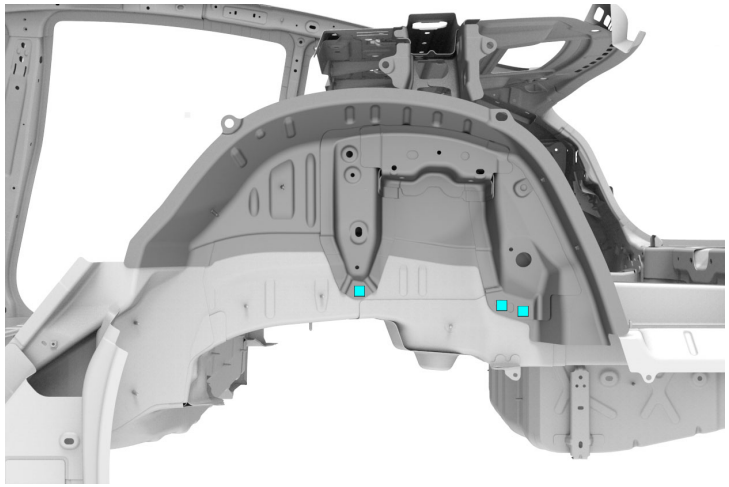
# Replacement

1 Prepare for installation.

A Put the new component into position and temporarily insert the new bolts to hold it in place.

- Bolt, hex-head (x3)

**NOTE:** Do not tighten the bolts at this time.



B Put the new component into position and align it to the frame bench jig points.

# Replacement

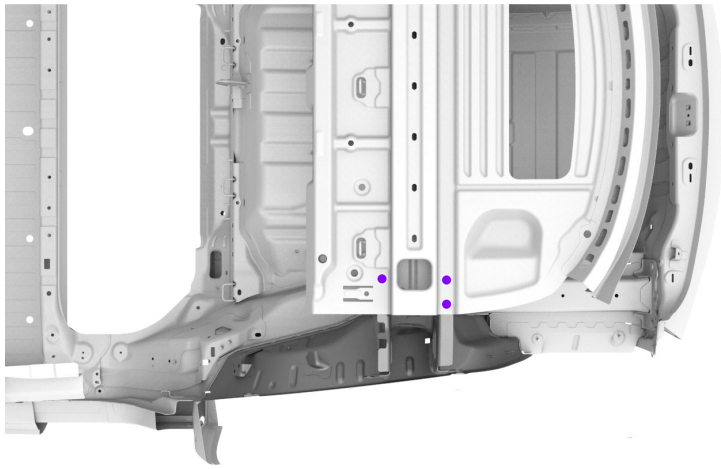
1 Prepare for installation (continued).

C Clamp the new component into place.

D Mark the fastener locations on the new component.

- Structural Bulb Rivet, 6.5 mm (x3)

**NOTE:** Mark holes in the new component through any existing holes on the vehicle created during removal.



# Replacement

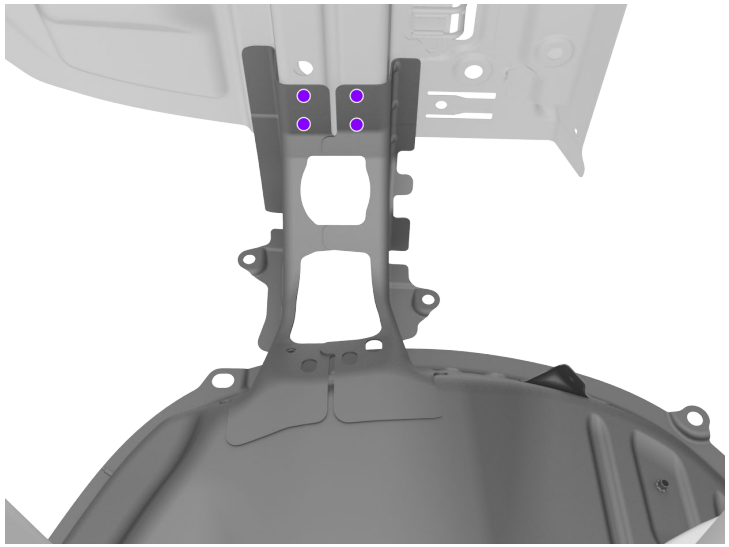
1 Prepare for installation (continued).

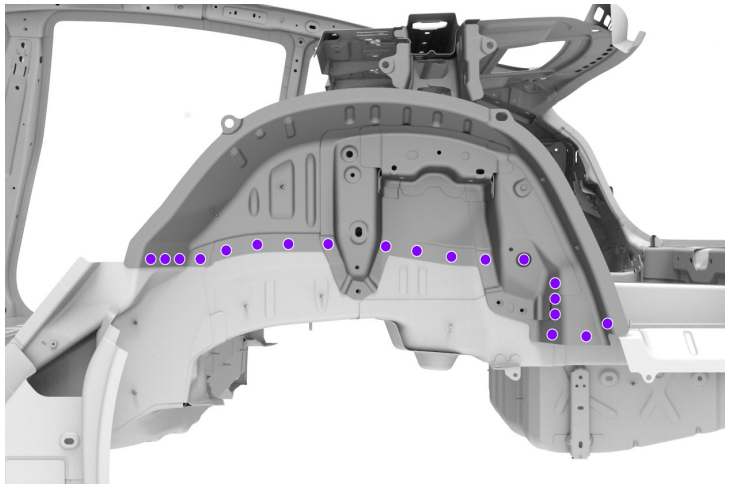
E Mark the fastener locations on the new component.

- Structural Bulb Rivet, 6.5 mm (x23)

**NOTE:** Mark holes in the new component through any existing holes on the vehicle created during removal.

**NOTE:** Rivets replacing factory SPR locations will go through the exiting SPR holes int he vehicle.





# Replacement

1 Prepare for installation (continued).

F Drill 6.7 mm holes for structural bulb rivets.

**NOTE:** Install a grip screw after drilling each hole to keep the panel aligned while drilling the remaining holes.

**NOTE:** Drill holes in the new component through any exiting holes on the vehicle created during removal.

G Mark boundary lines along all mating surfaces between the new components and the vehicle for surface preparation.

# Replacement

1 Prepare for installation (continued).

H Remove the new component.

2 Prepare the surfaces.

A Use a red Scotch-Brite pad or equivalent to scuff the e-coat on the mating surfaces of the new component and the vehicle.

# Replacement

2 Prepare the surfaces (continued).

B Clean all the mating surfaces of the new component or components and the vehicle with isopropyl alcohol (IPA).

**WARNING:** Wipe off the remaining isopropyl alcohol with a clean, dry towel immediately after application. Do not let the remaining isopropyl alcohol air dry. Allowing the remaining isopropyl alcohol to air dry can compromise the adhesive bond.

3 Apply structural adhesive.

A Spread a thin coating of structural adhesive as a primer layer on the mating surfaces of the vehicle, the backing plate, and the new component.

**NOTE:** Assembly must be performed while the primer layer is still wet. The drying time of the adhesive varies depending on temperature and humidity.

# Replacement

3 Apply structural adhesive (continued).

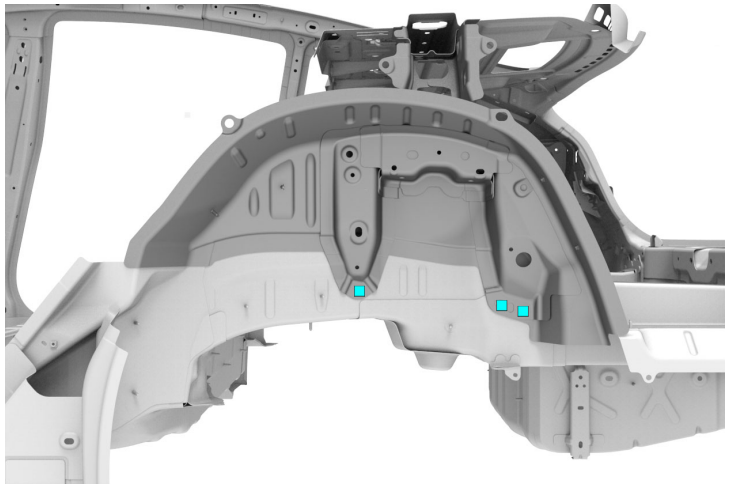
B While the primer layer is still wet, apply a bead of structural adhesive on top of the primer layer on the new component.

4 Install the new component.

A Put the new component into position and insert the new bolts.

Bolt, hex-head (x3)

**NOTE:** Do not tighten the bolts at this time.

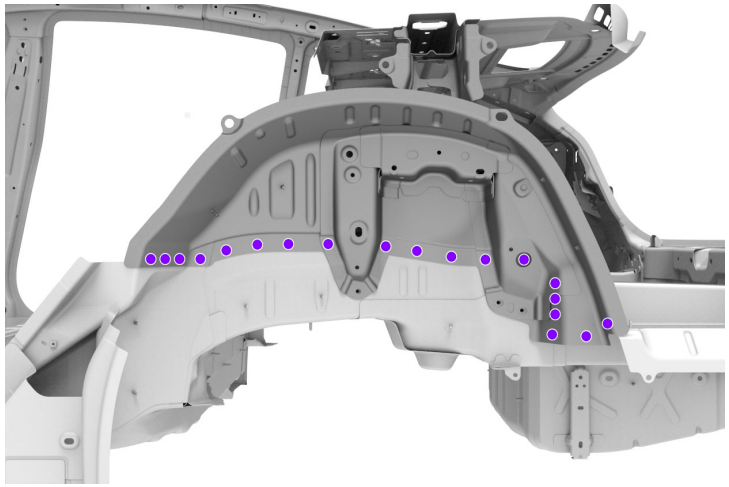


# Replacement

4 Install the new component (continued).

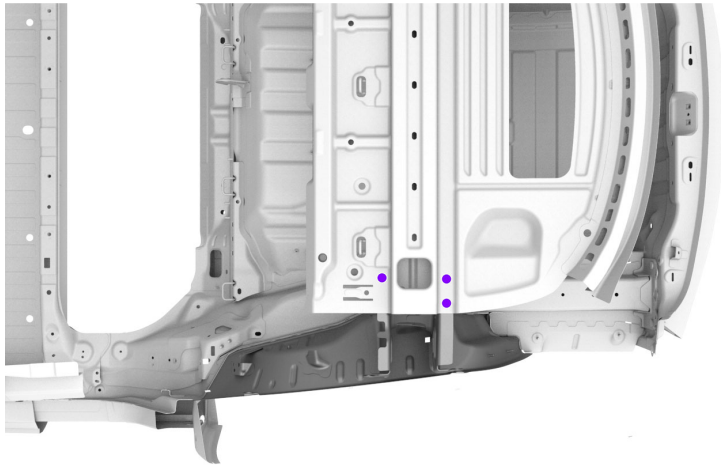
B Insert the structural bulb rivets.

- Structural Bulb Rivet, 6.5 mm (x19)



C Insert the structural bulb rivets.

- Structural Bulb Rivet, 6.5 mm (x3)

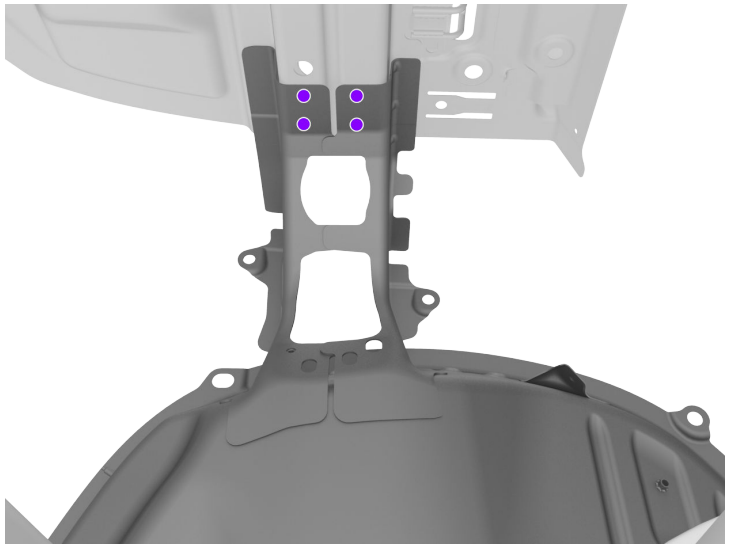


# Replacement

4 Install the new component (continued).

D Insert the structural bulb rivets.

- Structural Bulb Rivet, 6.5 mm (x4)



E Put the new component into position and align it to the frame bench jig points.

# Replacement

4 Install the new component (continued).

F Tighten the bolts but do not torque them fully at this time.

G Install the structural bulb rivet.

# Replacement

4 Install the new component (continued).

H Wipe off any excess adhesive.

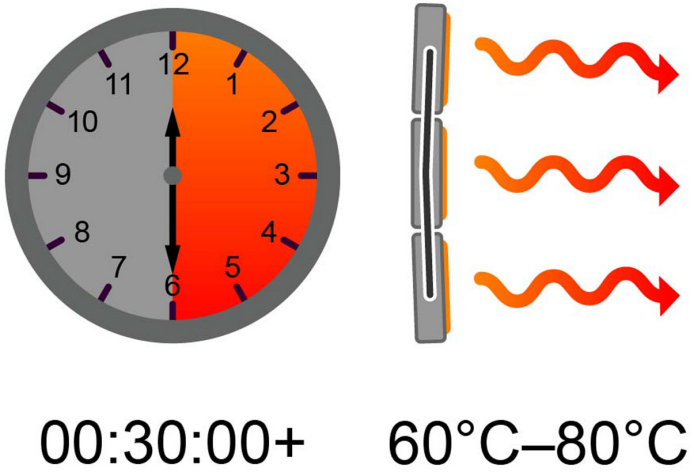
I Torque the bolts to 24 Nm.

# Replacement

4 Install the new component (continued).

J Bake the structural adhesive so that the bonded panels reach a temperature of 60°C–80°C (140°F–176°F) for at least 30 minutes to achieve full strength.

**WARNING:** Do not allow the High Voltage Battery to reach a temperature above 74°C (165°F). Heating the High Voltage Battery above 74°C (165°F) for an extended period could result in injury to personnel and/or damage to the battery.




5 Prime any bare metal that will not be covered with weld-through primer or structural adhesive in a subsequent repair with a suitable corrosion-resistant epoxy primer.

## Replacement

6 Seal the seams in the factory locations, and as necessary.

7 Install the new Rear Quarter Inner Assembly