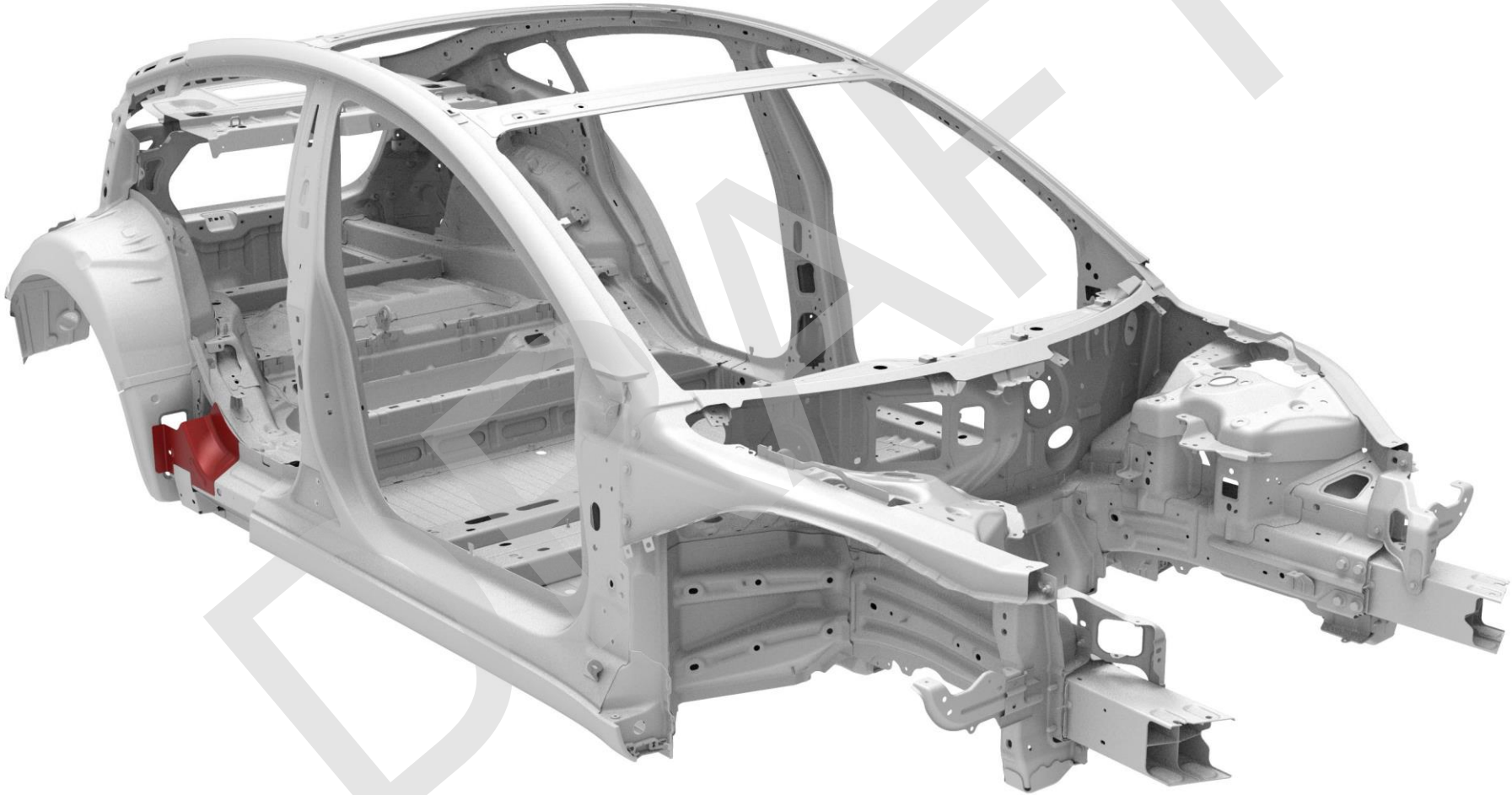
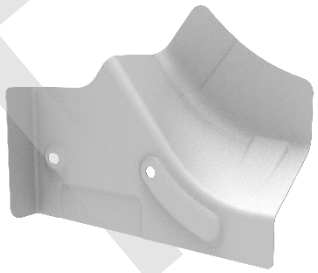
Sill Outer (Rear)



Parts List

Quantity	Part Number	Description	Image / Notes
1	1093317-S0-A - LH 1093318-S0-A - RH	M3 PNL - SILL OUTER REAR	
12 rivets needed; order 20 rivets	1063943-00-A	Structural Bulb Rivet, 6.5 mm	All rivets come in packages of 10; order all rivets in multiples of 10.
1 rivet needed; order 10 rivets	1454538-00-A	High Strength Structural Rivet 6.5 mm	All rivets come in packages of 10; order all rivets in multiples of 10.
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. Refer to BR-17-92-002, "Obtaining Adhesives, Coolant, and Other Chemicals" for information on how to obtain approved structural adhesive.

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 right-hand component; the procedure is identical for the left-hand component.	**WARNING:** Wear the appropriate personal protective equipment (PPE) when performing this procedure.	The special tools listed below are required to perform this procedure: • Resistance Spot Welder Use only an approved resistance spot welder. Refer to BR-16-92-007, "Approved Welders" for a list of current approved resistance spot welders.

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.

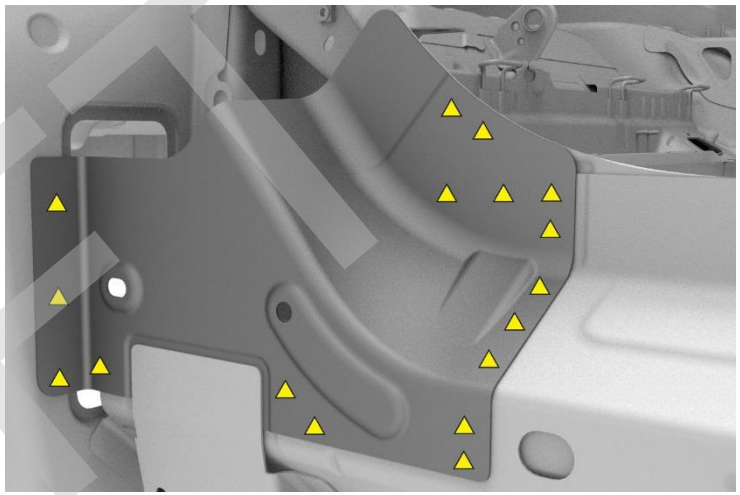
2 Remove the C-Pillar Reinforcement.

Removal

1 Remove the original component (continued).

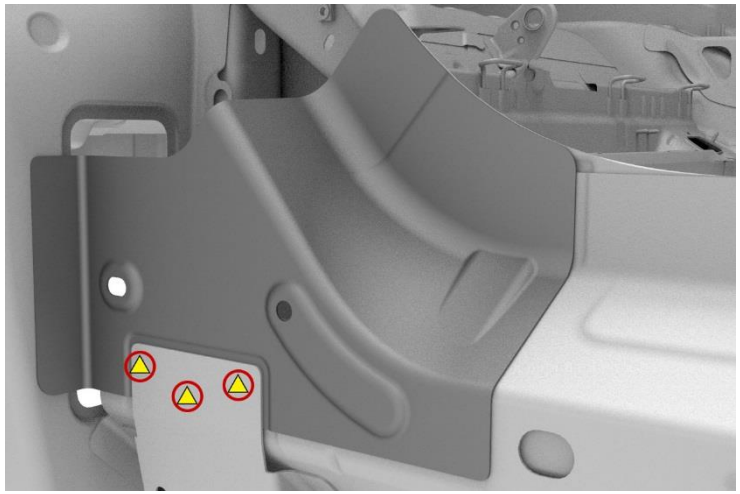
A Use a drill with a spot weld bit to drill out the factory spot welds in the area shown. Use a belt sander for any factory spot welds that cannot be accessed with a drill.

△ Factory Spot Welds



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

△ Drill Through Factory Spot Weld



Removal

1 Remove the original component (continued).

C Use a hammer and chisel to remove the remaining pieces of the component.

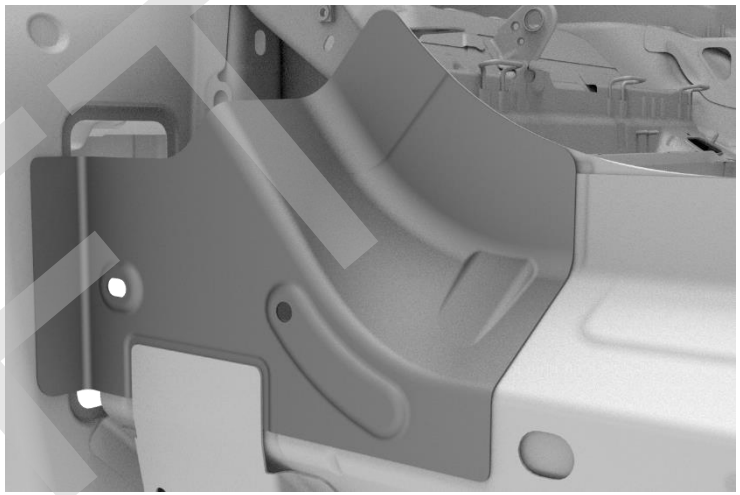
D Use a disc sander with a medium-abrasive surface conditioning disc to remove any remaining materials from the mating surfaces. Use a belt sander with a medium-abrasive belt for any areas that cannot be reached with a disc sander. Vacuum any adhesive dust.

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

Replacement

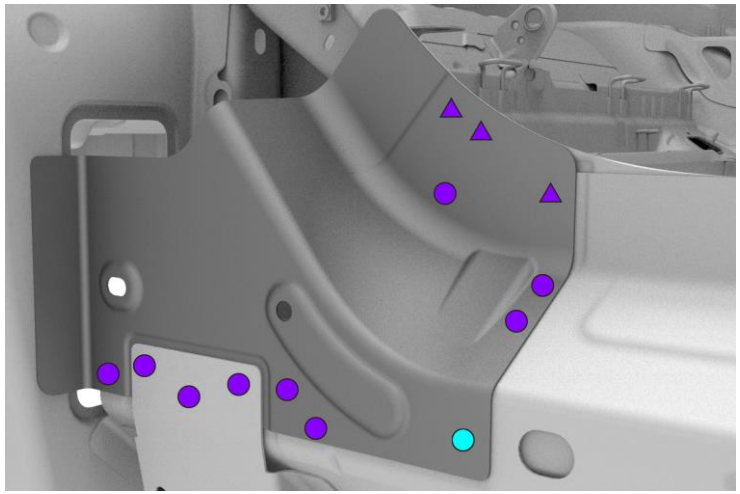
2 Prepare for installation.

A Put the new component into position and secure it in place.



B Mark the fastener locations on the new component.

- Structural Bulb Rivet 6.5mm (x11)
- High Strength Structural Rivet 6.5 mm (x1)
- Installation Spot Weld (x3)



Replacement

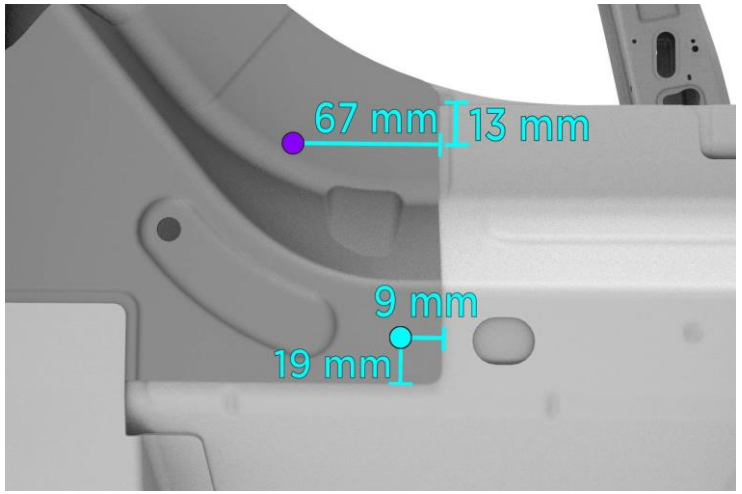
2 Prepare for installation (continued).

B Mark the fastener locations on the new component (continued).

C Mark additional fastener locations as shown.

- Structural Bulb Rivet 6.5 mm (x1)
- High Strength Structural Rivet 6.5 mm (x1)

NOTE: These rivets are not replacing factory fasteners or welds.



Replacement

2 Prepare for installation (continued).

D Use a drill with a 6.7 mm bit to drill holes for 6.5 mm structural rivets.

- Structural Bulb Rivet 6.5 mm
- High Strength Structural Rivet 6.5 mm

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

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

Replacement

2 Prepare for installation (continued).

F Remove the new component.

3 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

3 Prepare the surfaces (continued).

B Use a disc sander with a medium-abrasive surface conditioning disc to remove the e-coat from the mating surfaces and weld areas of the new components and the vehicle. Use a belt sander with a medium-abrasive belt for any areas that cannot be reached with a disc sander.

WARNING: Do not remove e-coat in areas where steel and aluminum make direct contact.

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

C Clean all the bond paths and weld areas on the new component or components and on 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.

Replacement

4 Apply structural adhesive.

A Spread a thin coating of structural adhesive as a primer layer on the bond paths on the vehicle and the new component.

CAUTION: If any bare metal bond paths have been exposed for two hours or longer, abrade the bond paths again to remove oxidation, then clean the bond paths with isopropyl alcohol (IPA).

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

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

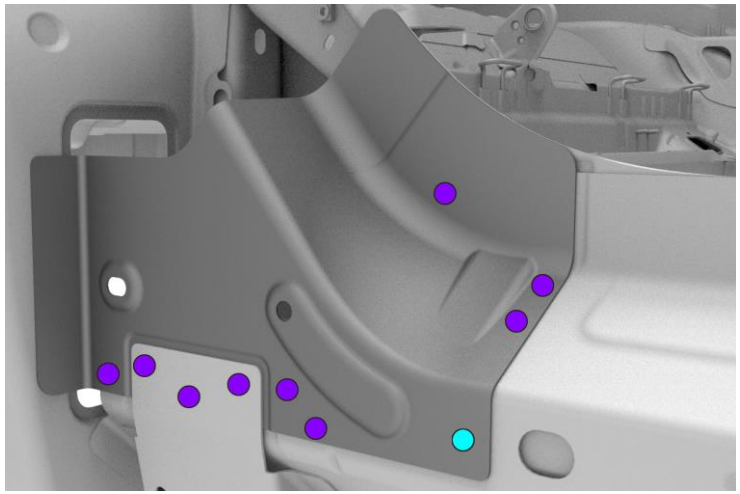
Replacement

5 Install the new component.

A Put the new component into position and secure it in place.

B Insert the structural rivets.

- Structural Bulb Rivet, 6.5mm (x11)
- High Strength Structural Rivet 6.5 mm (x1)



Replacement

5 Install the new component (continued).

B Insert the structural rivets (continued).

NOTE: These rivets are inserted from the inside the Wheel Well.

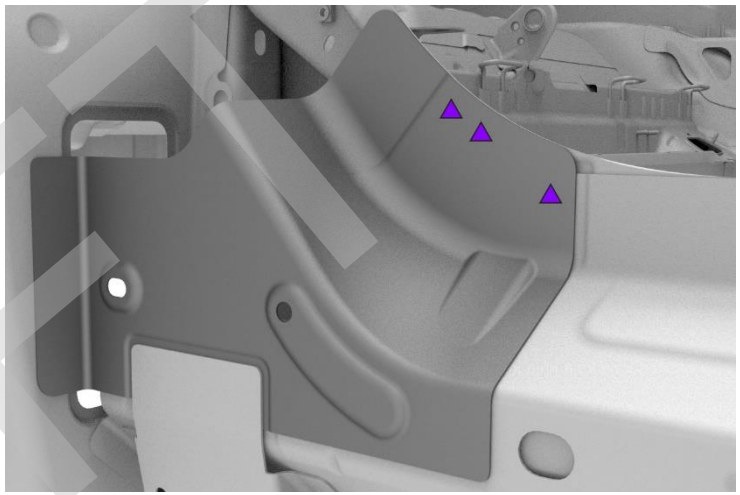
C Install the structural rivets.

Replacement

5 Install the new component.

D Perform resistance spot welding.

▲ Installation Spot Weld (x3)



WARNING: Failure to follow all welding safety precautions, including the use of personal protective equipment, could result in serious injury or property damage. Only technicians who have successfully met Tesla's requirements for welding training are authorized to weld structural components on Tesla vehicles.

CAUTION: Do not weld on a Tesla vehicle with an energized high voltage or 12V system. Welding on a Tesla vehicle with an energized high voltage or 12V system might damage vehicle components.

CAUTION: Use only insulated clamps within 200 mm (8 in) of resistance spot weld locations. Do not perform resistance spot welding when there is an uninsulated clamp within 200 mm (8 in) of the spot weld location.

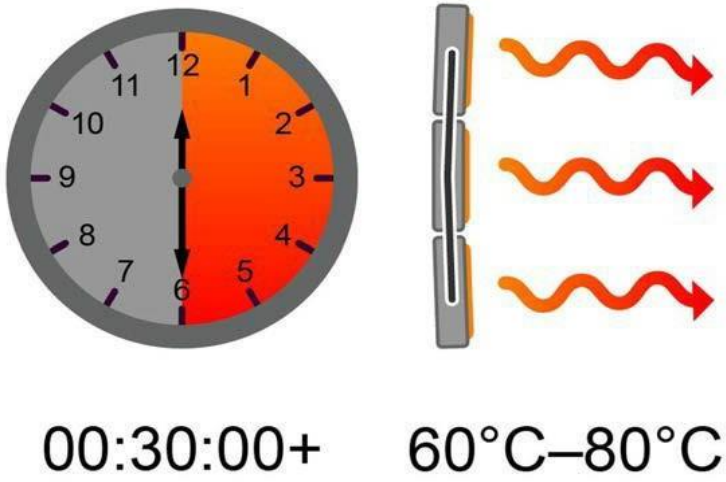
Replacement

5 Install the new component (continued).

E Wipe off any excess adhesive.

F 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.



Replacement

6 Install the new C-Pillar Reinforcement.