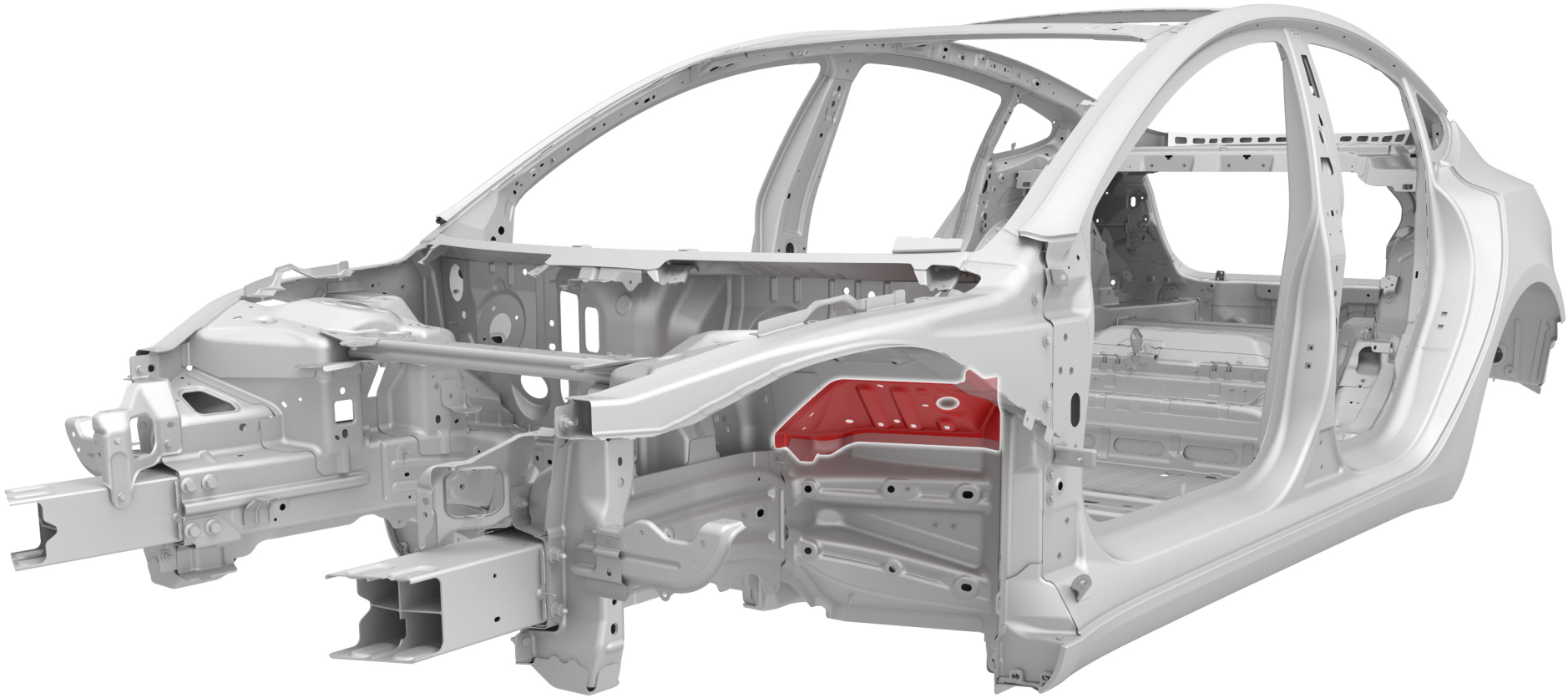
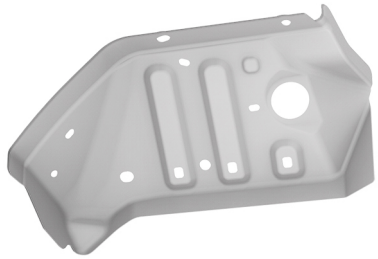
Front Shock Tower Closeout



Parts List

Quantity	Part Number	Description	Image / Notes
1	1084685-S0-A (LH), 1084686-S0-A (RH)	Front Shock Tower Closeout	
14 rivets needed; order 10 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	1062559-00-A	Structural Rivet, 6.5 mm Medium	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.
1	—	Corrosion-Resistant 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

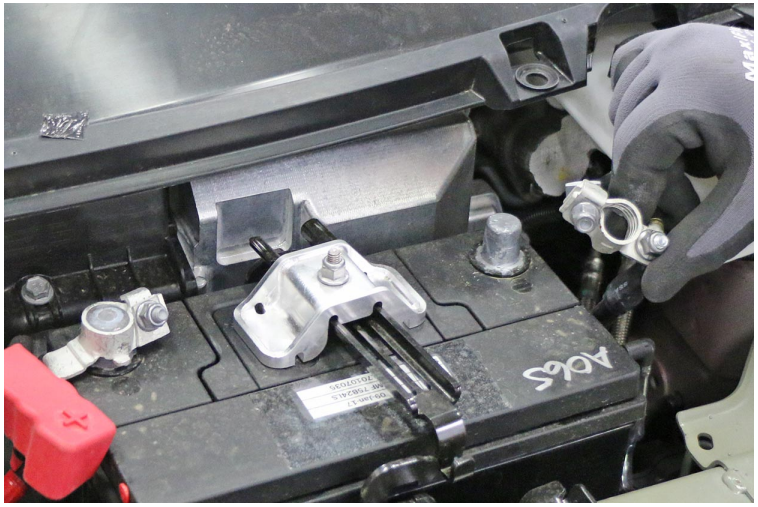
Repair Information	Warnings and Cautions	Special Tools
This procedure is for the right-hand component; the procedure is identical for the left-hand component.	**WARNING:** Wear the appropriate personal protective equipment (PPE) when performing this procedure. **CAUTION:** This procedure involves only steel components. Use the appropriate tools to avoid cross-contamination.	No special tools are required to perform this procedure.

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: If the 12V power supply is disconnected, do not attempt to open any doors with the door glass in a closed position. Attempting to open a door 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.

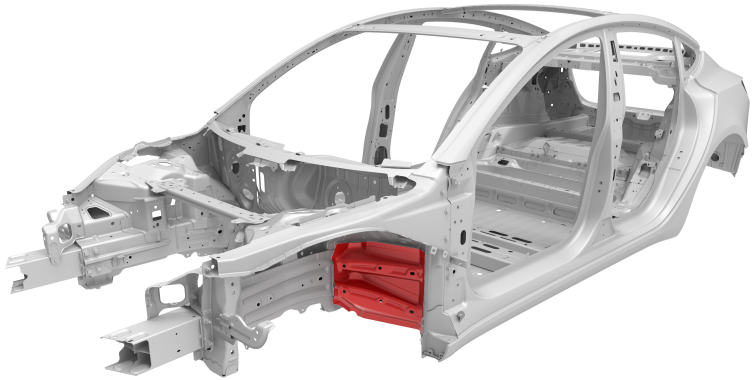


Prerequisites

2 Remove the items listed below. Refer to the applicable Service Manual procedure.

- Fender
- Front Suspension

3 Remove the Torque Box Outer.

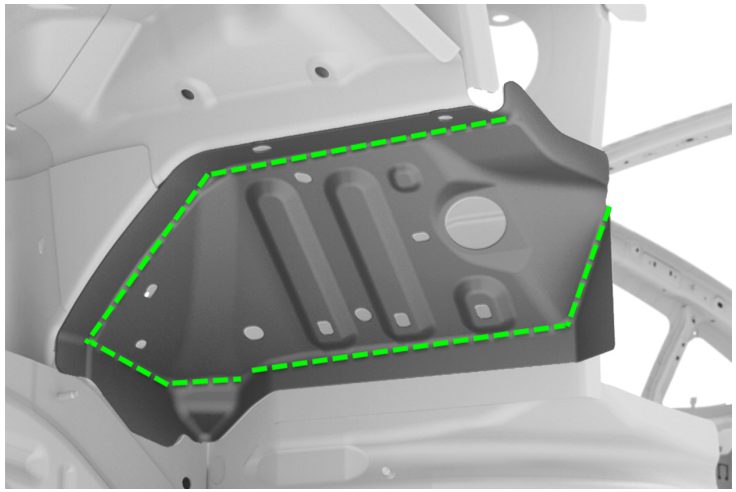


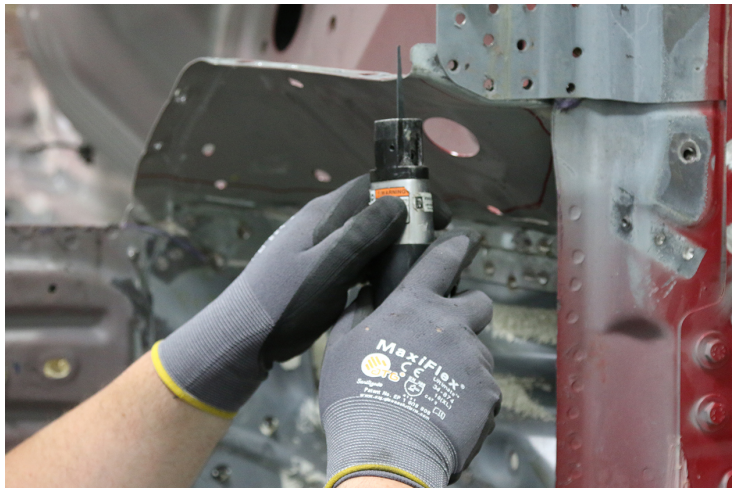
Removal

1 Remove the original component.

A Cut away the bulk of the original component.

Cut Line





Removal

1 Remove the original component (continued).

B Remove the bulk of the original Front Shock Tower Closeout.

Removal

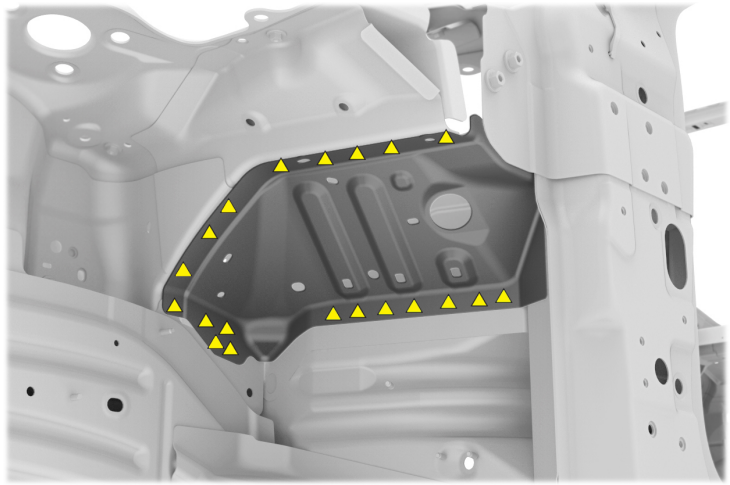
1 Remove the original component (continued).

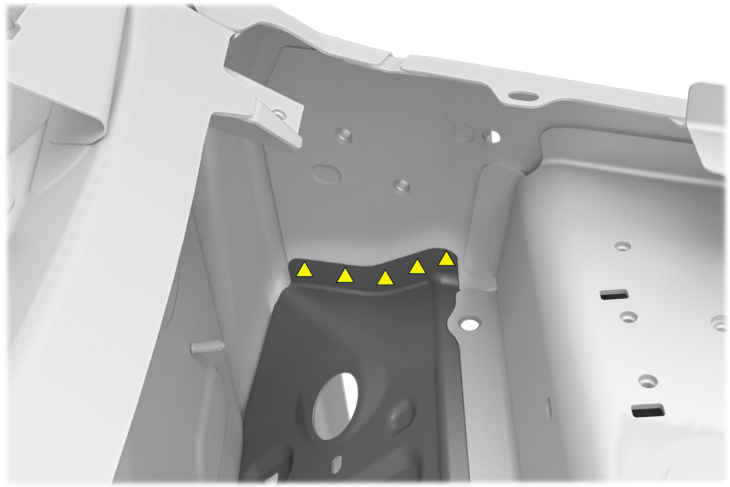
C Use a drill with a spot weld bit to drill out the factory spot welds. Use a belt sander to sand down any factory spot welds that cannot be reached with a drill.

△ Factory Spot Weld

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

NOTE: The 1st image shows the Shock Tower Closeout from below, and the 2nd image is from above.





Removal

1 Remove the original component (continued).

C Use a drill with a spot weld bit to drill out the factory spot welds Use a belt sander to sand down any factory spot welds that cannot be reached with a drill (continued).

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

Removal

1 Remove the original component (continued).

E Use a wire wheel to remove any foam on the vehicle.

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

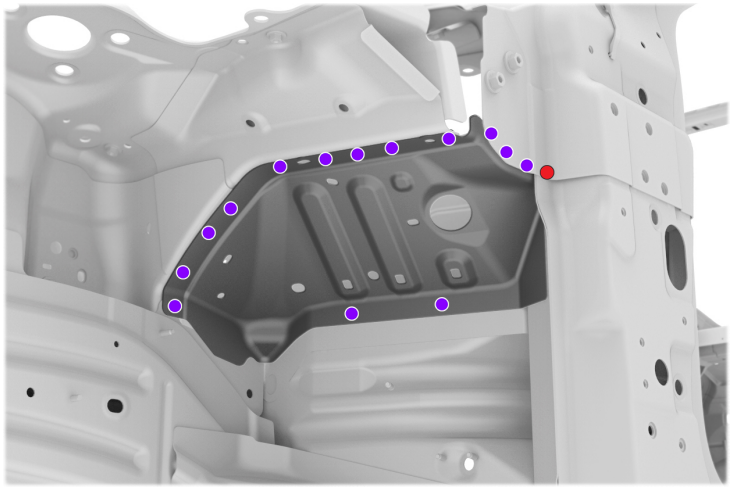
Replacement

1 Prepare for installation.

A Put the new component into position and clamp it into place.

B Use a drill with a 6.8 mm (17/64 in) bit to drill holes for structural bulb rivets and a structural rivet.

- Structural Bulb Rivet, 6.5 mm (x14)
- Structural Rivet, 6.5 mm Medium (x1)



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

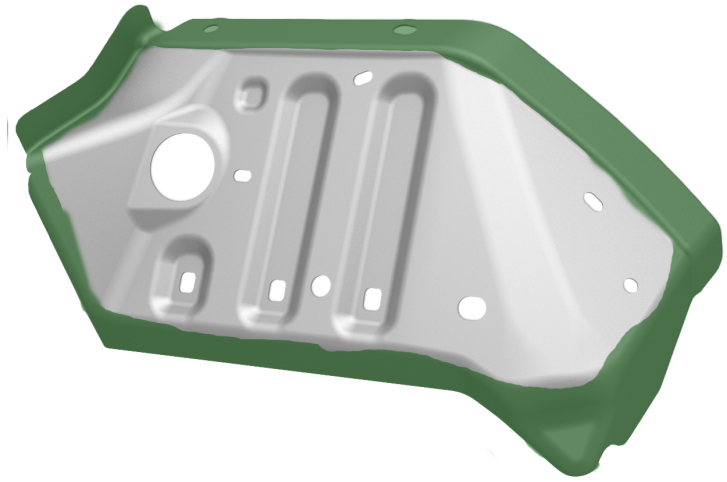
Replacement

1 Prepare for installation (continued).

B Use a drill with a 6.8 mm (17/64 in) bit to drill holes for structural bulb rivets and a structural rivet (continued).

C Mark the vehicle and the new component in the areas that need to have e-coat removed.

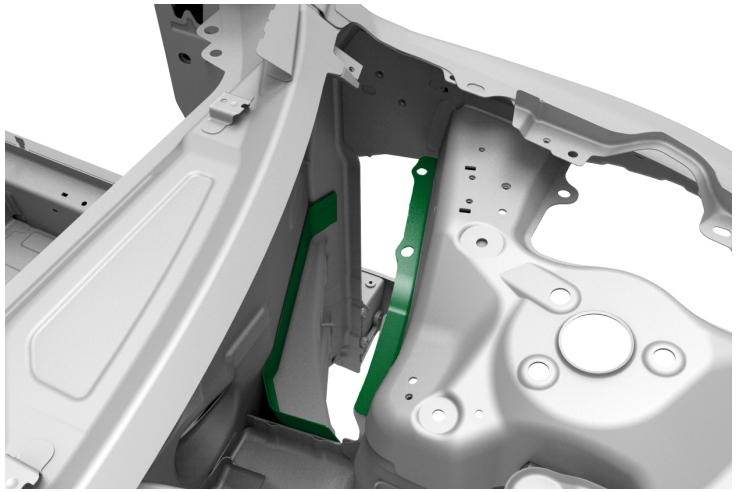
Steel-to-Steel Bond Path



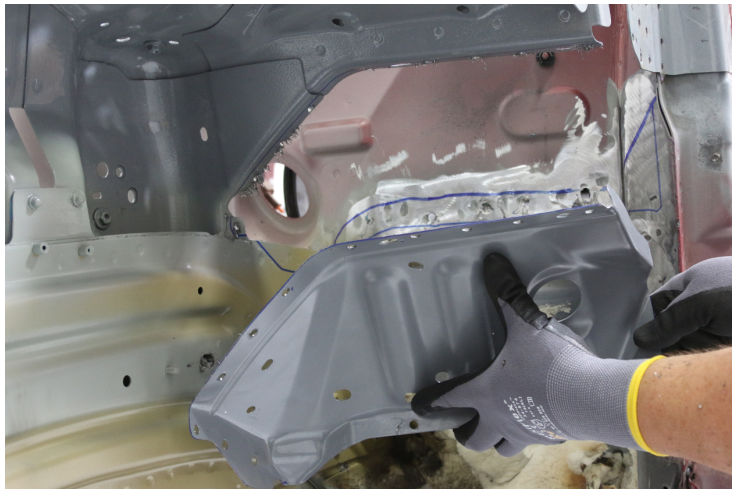
Replacement

1 Prepare for installation (continued).

C Mark the vehicle and the new component in the areas that need to have e-coat removed (continued).



D Remove the new component.



Replacement

2 Prepare the surfaces.

A Use a disc sander with a medium-abrasive surface conditioning disc to remove the e-coat on the new Front Shock Tower and the vehicle in the bond path areas. Use a belt sander with a medium-abrasive belt for any areas that cannot be reached with a disc sander.

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

CAUTION: Within two hours of removing the e-coat or paint, cover the abraded areas in the bond path with a thin primer layer of structural adhesive. If the abraded areas are not primed within two hours, they must be abraded again to remove any oxidation.

B Clean all the bond paths 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

3 Apply structural adhesive.

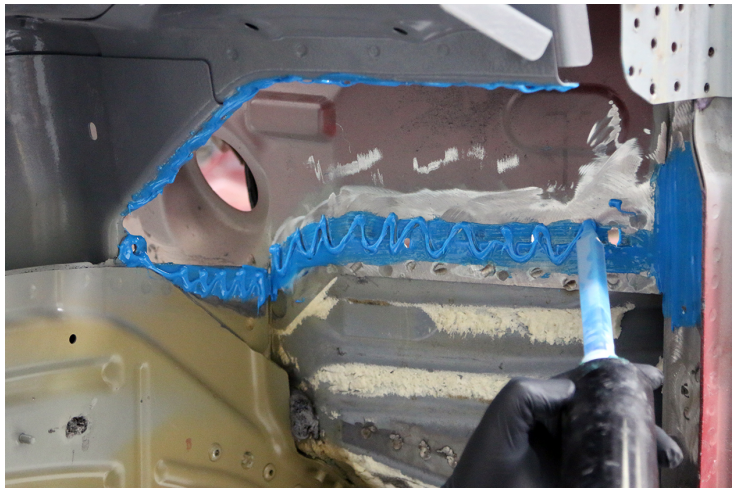
A Spread a thin coating of structural adhesive as a primer layer on the bond paths on the vehicle and the new component.

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 vehicle.



4 Install the new component.

A Put the new component into position and clamp it into place.

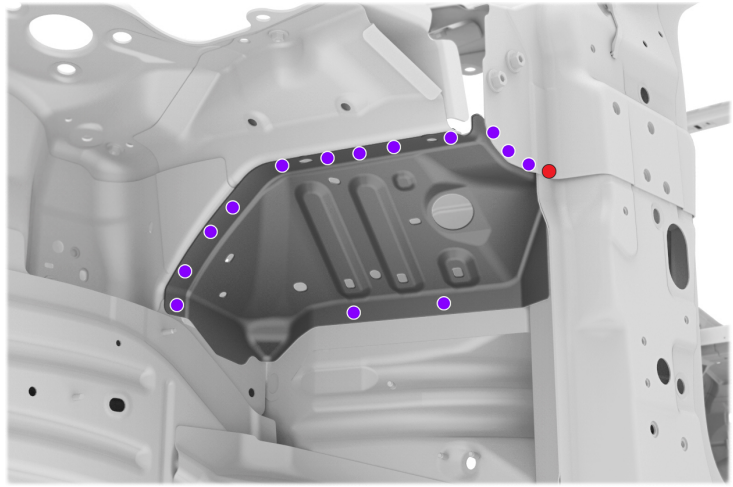
Replacement

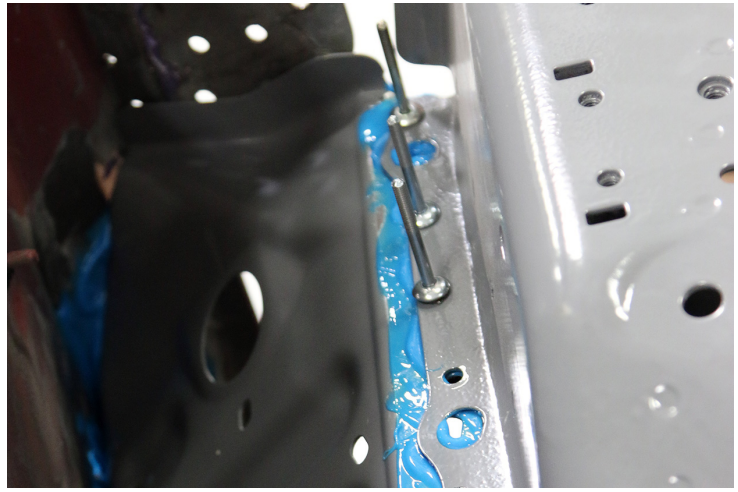
4 Install the new component (continued).

B Insert the structural rivets.

- Structural Bulb Rivet, 6.5 mm (x14)
- Structural Rivet, 6.5 mm Medium (x1)

NOTE: Insert the rivets through the Front Shock Tower and through the Hinge Pillar.



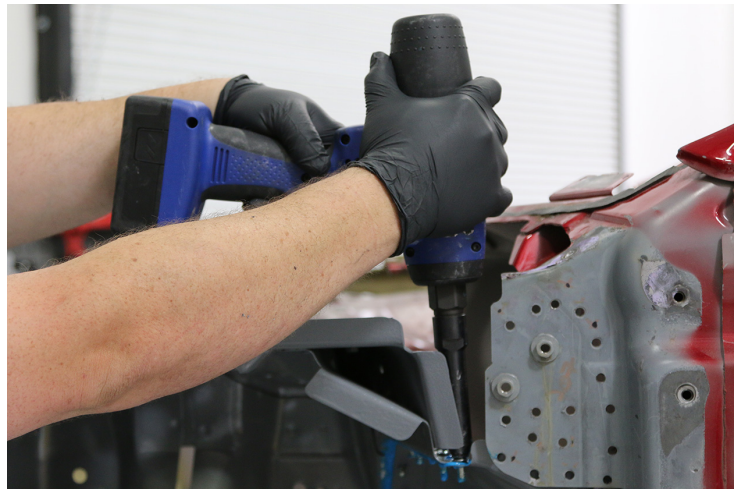


Replacement

4 Install the new component (continued).

C Clamp any area that will not be secured with a fastener.

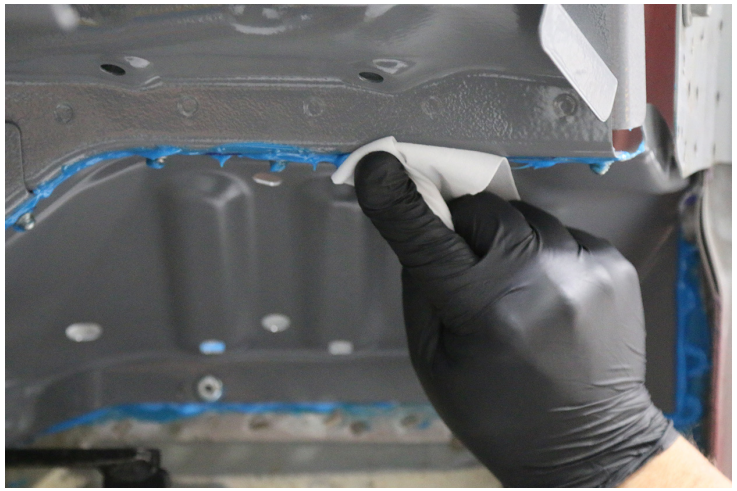
D Install the structural bulb rivets and the structural rivet.



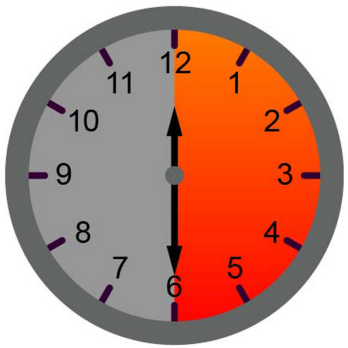
Replacement

4 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.



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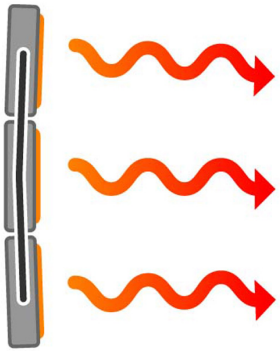

60°C–80°C

Replacement

4 Install the new component (continued).

G Prime any bare metal with a suitable corrosion-resistant primer.

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

Replacement

4 Install the new component (continued).

1 After the adhesive is dry, remove the two bulb rivets. These will be installed with the new Torque Box Outer Assembly.

5 Install the Torque Box Outer Assembly.