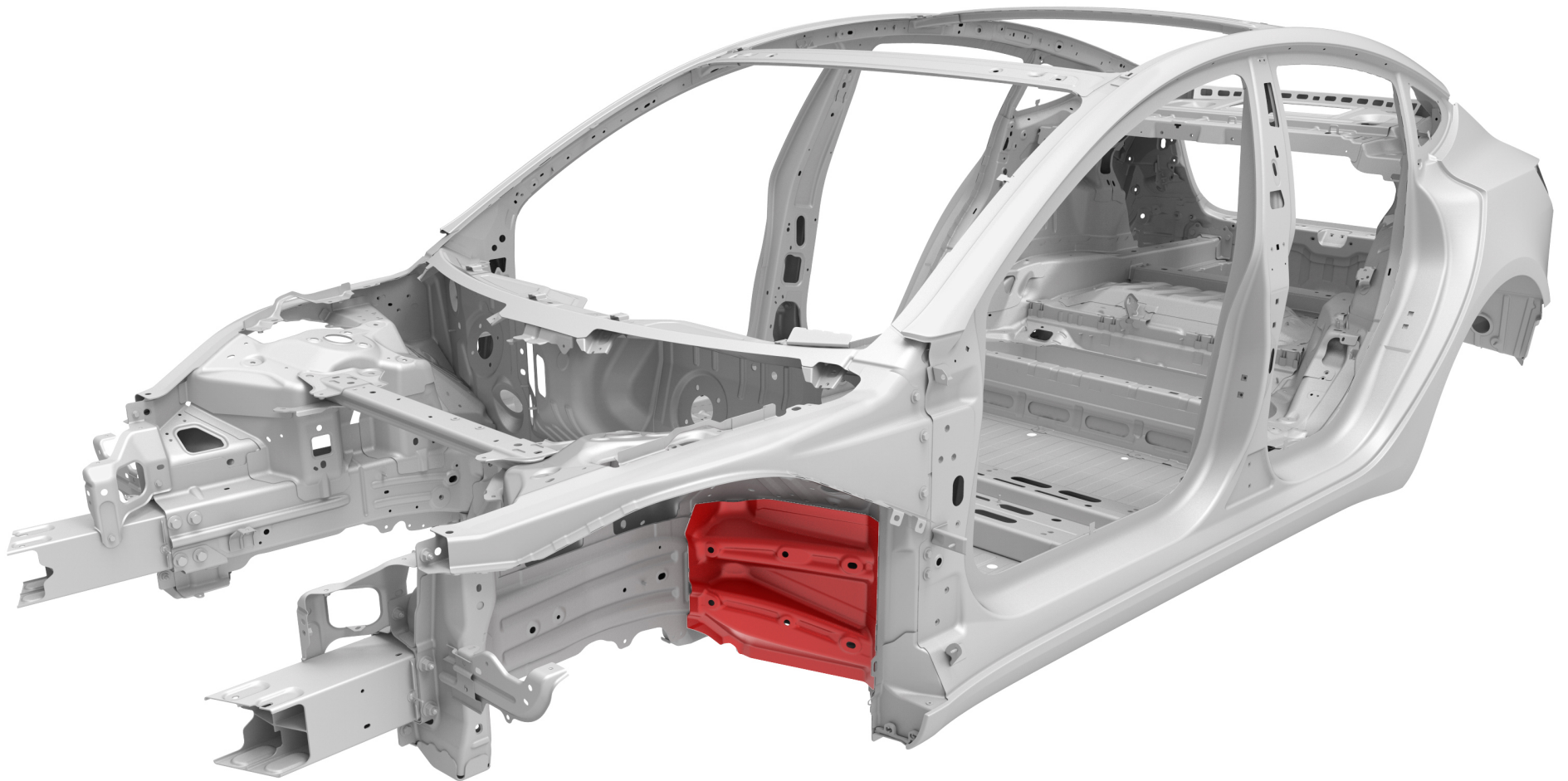


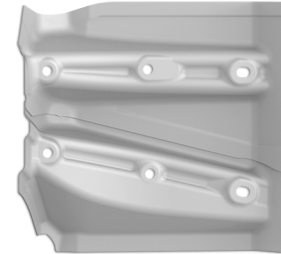




Torque Box Cover Assembly







Parts List

Quantity	Part Number	Description	Image / Notes
1	1075945-S0-A (LH) 1075946-S0-A (RH)	Torque Box Cover Assembly	
58 rivets needed; order 60 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.
1	—	Corrosion-Resistant Epoxy Primer	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
<p>This procedure is for the left-hand component; the procedure is identical for the right-hand component.</p>	<p> WARNING: Wear the appropriate personal protective equipment (PPE) when performing this procedure.</p> <p> CAUTION: This procedure involves only steel components. Use the appropriate tools to avoid cross-contamination.</p>	<p>No special tools are required to perform this procedure.</p>



Removal

1 Remove the original component.

A Remove any seam sealer as necessary to identify the factory spot welds.



B 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 (x52)

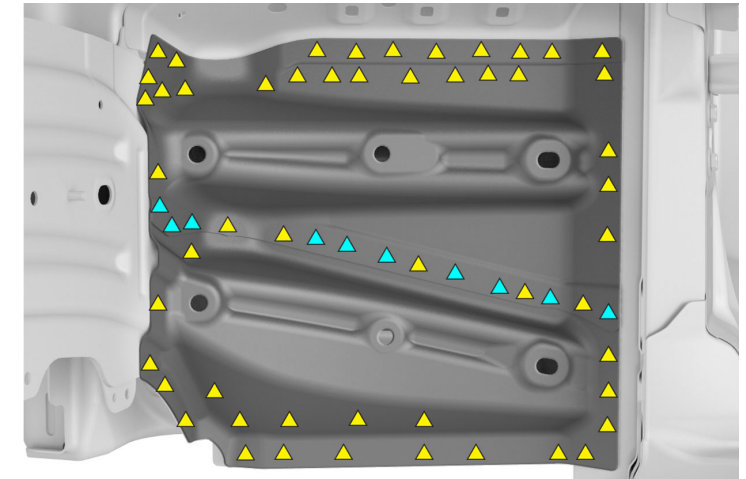
▲ Factory Spot Weld (2 layers) (x10)



NOTE: Factory spot welds indicated by a light blue triangle need to be drilled out through 2 layers of material.



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

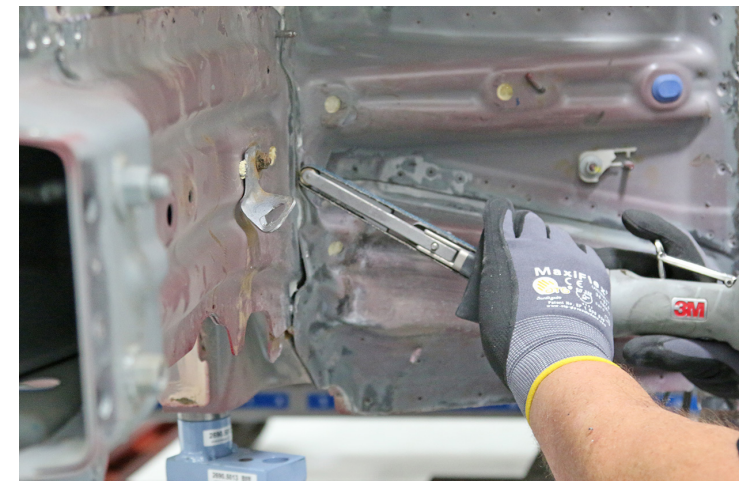




Removal

1 Remove the original component (continued).


B 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).

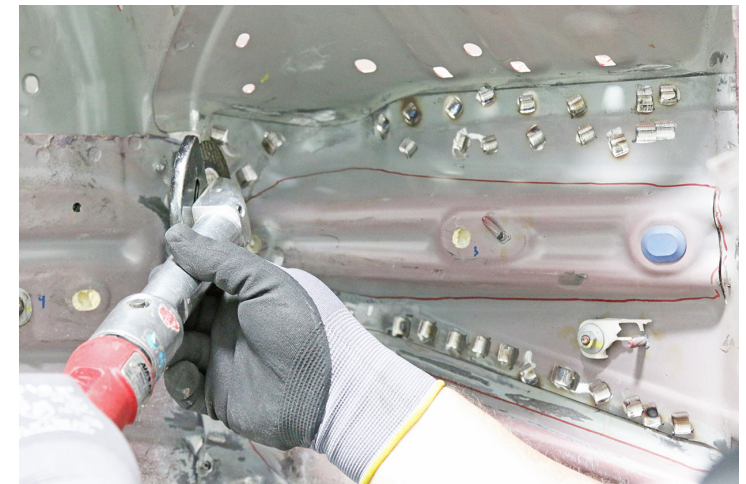
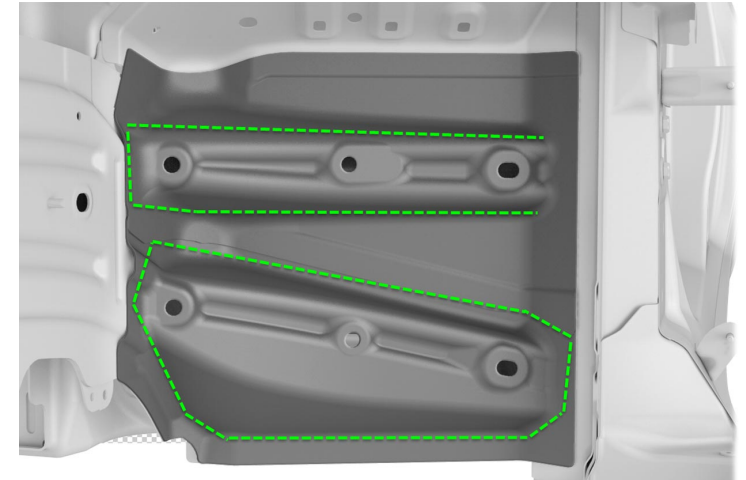




Removal

1 Remove the original component (continued).

C Cut the component on the green dashed lines shown.
 Cut Line





Removal

1 Remove the original component (continued).

D Use a hammer and chisel to remove the bulk of the original Front Torque Box Cover Assembly.





Removal

- 1 Remove the original component (continued).
 - E Use a hammer and chisel to remove the remaining pieces of the original Front Torque Box Cover Assembly.

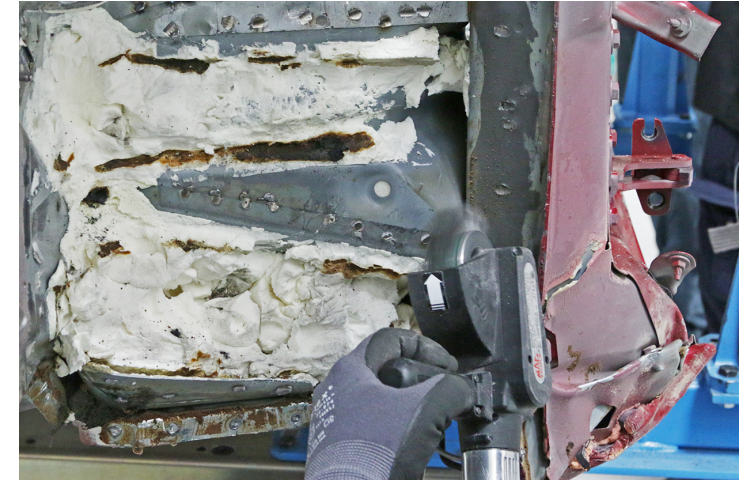




Removal

1 Remove the original component (continued).

F Use a wire wheel to remove the foam in the Front Torque Box Cover area.





Removal

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.



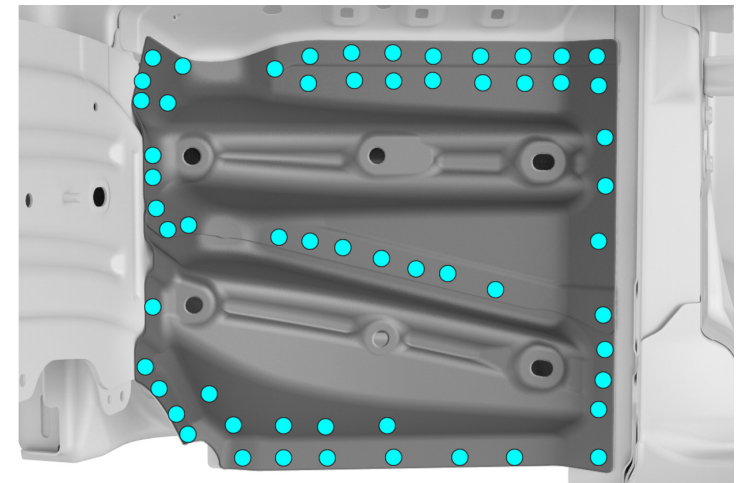
CAUTION: Within two hours of removing the e-coat or paint, cover the abraded aluminum areas in the mating surface with a thin primer layer of structural adhesive. If the abraded aluminum areas are not primed within two hours, they must be abraded again to remove any oxidation.



Replacement

- 1 Prepare for installation.
 - A Put the new component into position and clamp it into place.

- B Mark the fastener locations on the new component.
 - High Strength Structural Rivet, 6.5 mm (x58)





Replacement

1 Prepare for installation (continued).

C

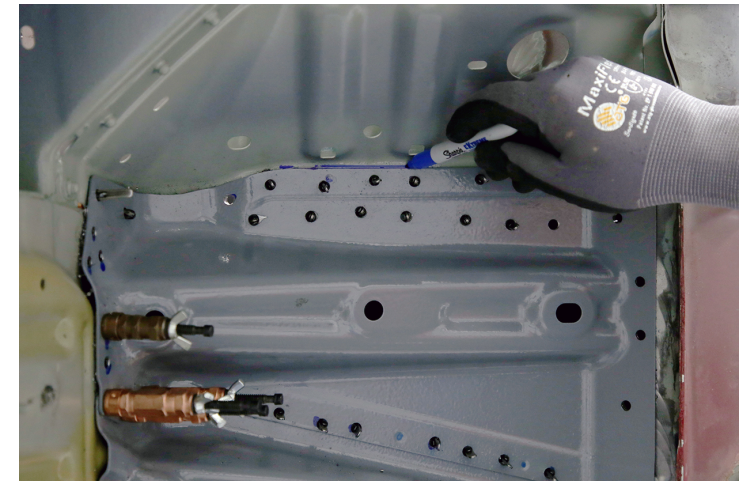
Drill 6.7 mm holes for structural rivets.



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

D

Mark the surface preparation boundary lines on the vehicle.






Replacement

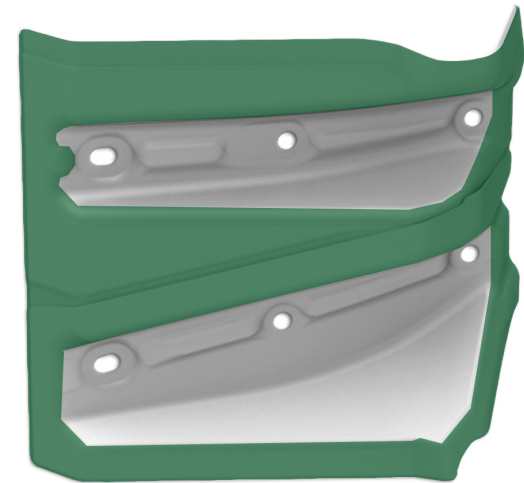
1 Prepare for installation (continued).

E Remove the new component.



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

 Steel-to-Steel Mating Surface





Replacement

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.

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.





Replacement

3 Apply structural adhesive.

A

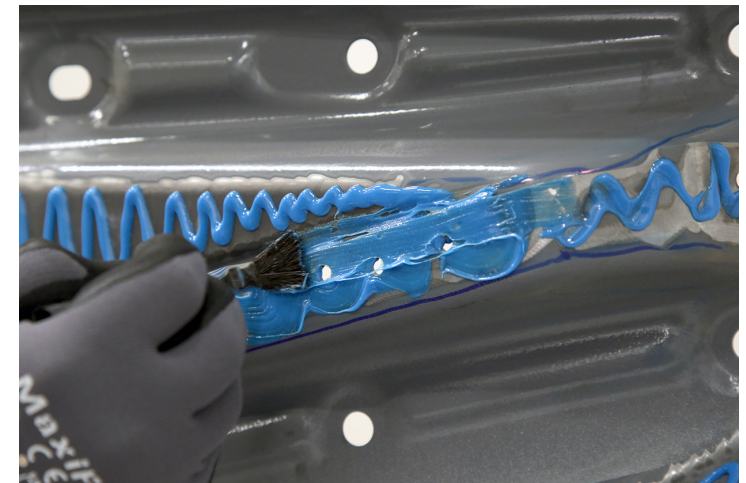
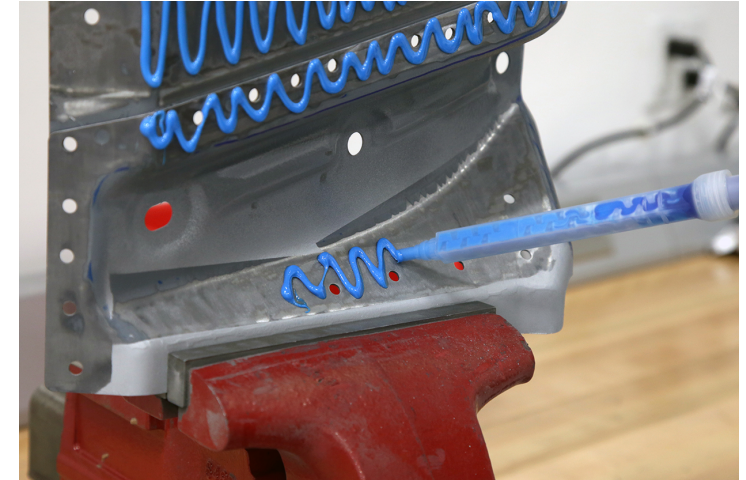
Spread a thin coating of structural adhesive as a primer layer on the mating surfaces of the vehicle and the new component.



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.



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).

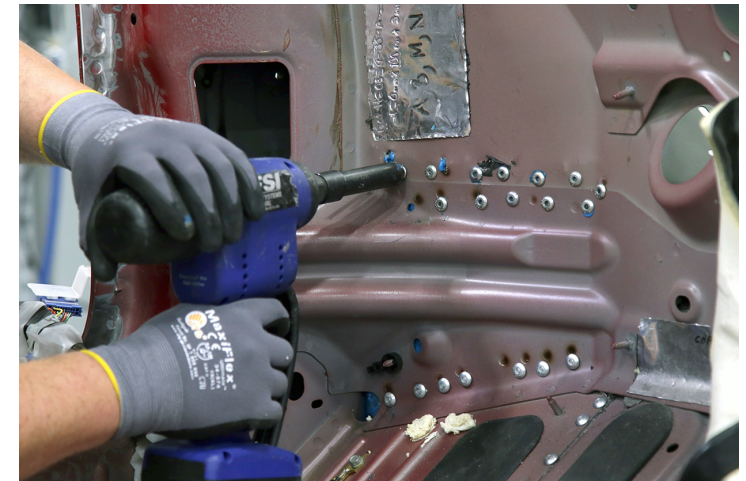
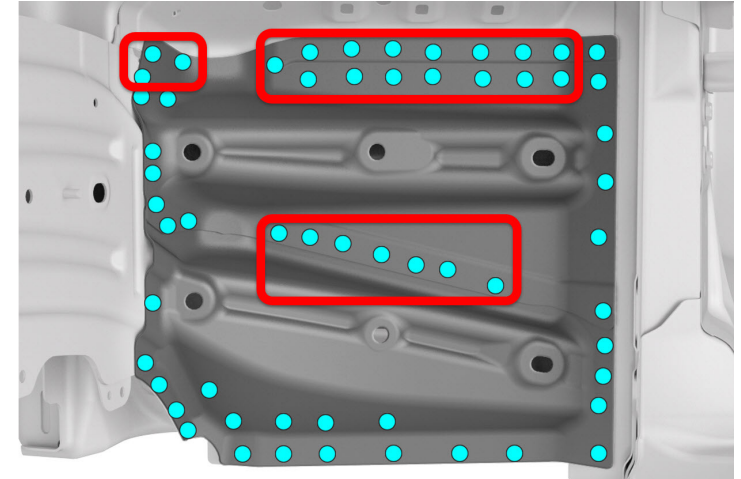
B Insert the structural rivets.

● High Strength Structural Rivet, 6.5 mm (x58)



NOTE: Install the rivets circled in red from inside of the vehicle.

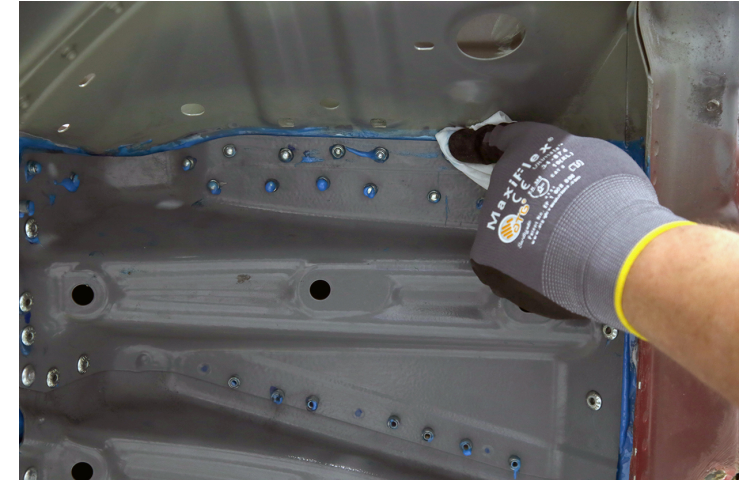
C Install the structural rivets.



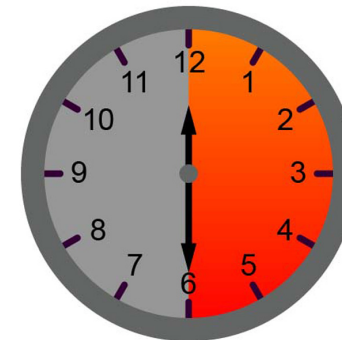


Replacement

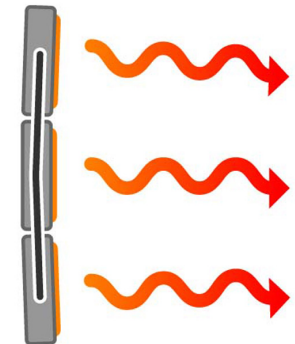
- 4 Install the new component (continued).
- D Wipe off any excess adhesive.



- E 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.



00:30:00+



60°C-80°C



Replacement

5

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



6

After refinishing, use a 360-degree spray wand of suitable length to apply corrosion-proofing material on the inside of the enclosed area to prevent corrosion.





Replacement

7

Reinstall any expanding foam that was removed during the repair.