




Rear Header Reinforcement Connector





Parts List

Quantity	Part Number	Description	Image / Notes
1	1077121-S0-D (LH) 1077122-S0-E (RH)	M3 PNL, Rear Header Connector (Rear Header Reinforcement Connector)	
8 rivets 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. 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>Installation fasteners that replace factory spot welds in steel-to-steel panel interfaces are specified in this procedure where an approved squeeze-type resistance spot welder with the base welding accessories might not be able to reach. If your approved welder can access a factory spot weld location where this procedure specifies a fastener, an installation spot weld is recommended in place of the specified fastener.</p>	<p>⚠ WARNING: Wear the appropriate personal protective equipment (PPE) when performing this procedure.</p>	<p>The special tools listed below are required to perform this procedure:</p> <ul style="list-style-type: none">Resistance Spot Welder <p>Use only an approved resistance spot welder. Refer to BR-16-92-007, "Approved Welders" for a list of current approved resistance spot welders.</p>



Removal

Remove the original component.

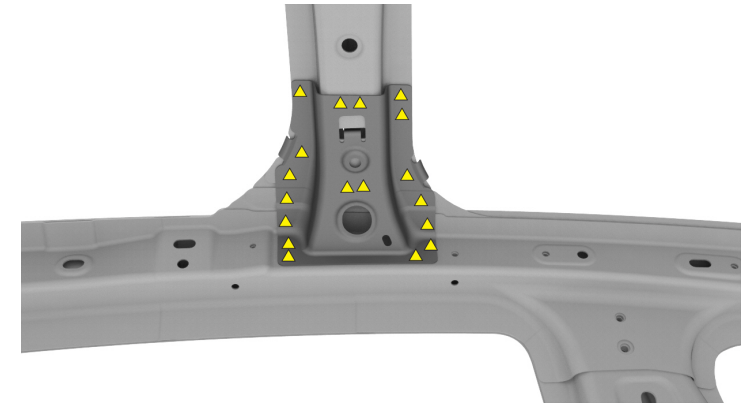
A

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 (x18)



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



B

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



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.



Removal

Remove the original component (continued).

C

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

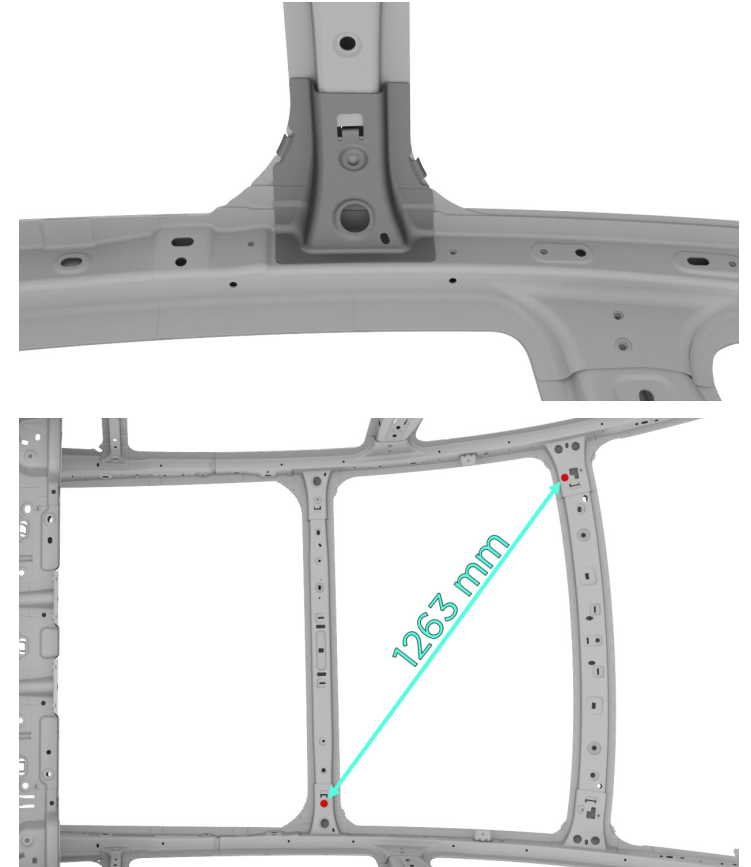
1 Prepare for installation.

A

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



NOTE: Position the new component using the trim holes on the underside of each Header Reinforcement and clamp in place.





Replacement

1 Prepare for installation (continued).

B Mark the fastener locations on the new component.

▲ Installation Spot Weld (x10)

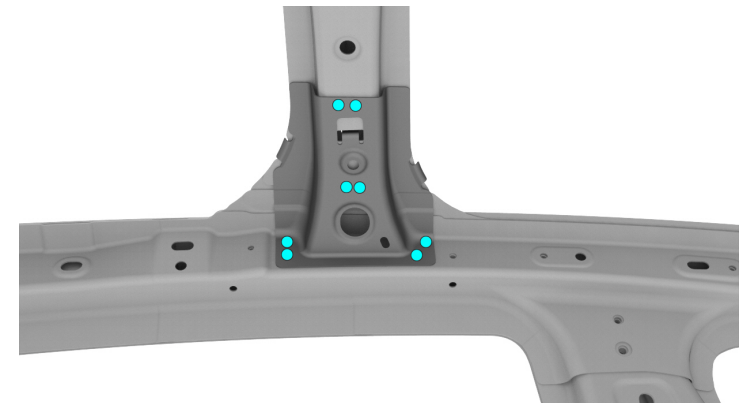
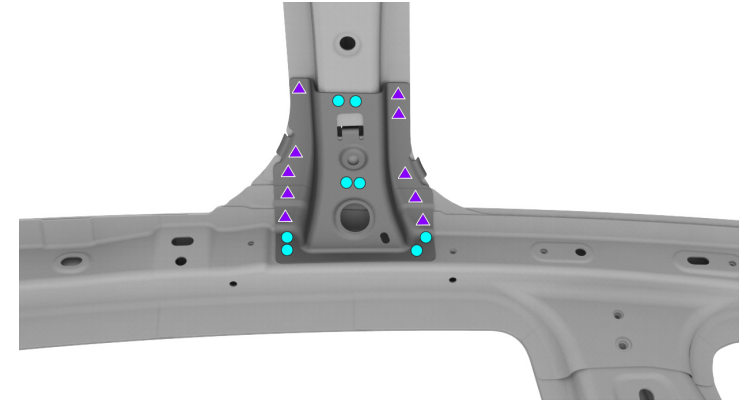
● High Strength Structural Rivet, 6.5 mm (x8)

C Drill 6.7 mm holes for structural rivets.

● High Strength Structural Rivet, 6.5 mm (x8)



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).
 - D Mark boundary lines along all mating surfaces between the new component and the vehicle for surface preparation.
 - E Remove the new component.



Replacement

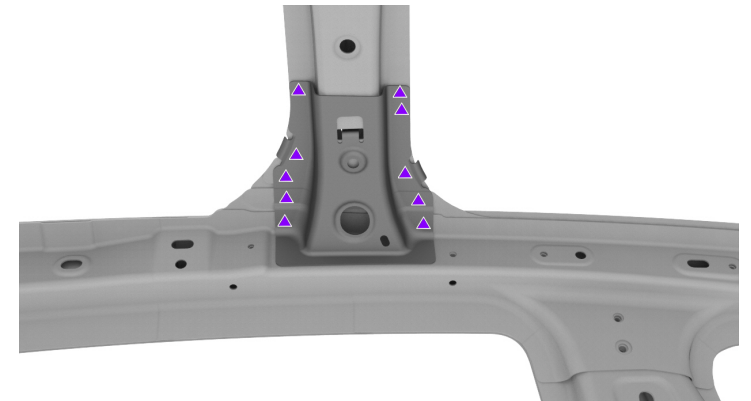
2 Prepare the surfaces.

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 Use a disc sander with a medium-abrasive surface conditioning disc to remove the e-coat from the weld areas of the new component and the vehicle. 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.





Replacement

2 Prepare the surfaces (continued).

C 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 and the new component.



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



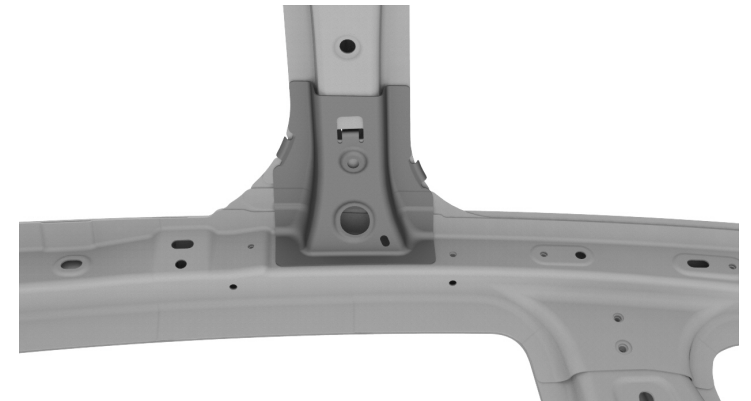
NOTE: Assembly must be performed while the primer layer is still wet. The drying time of the adhesive varies depending on temperature and humidity.



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 secure it in place.

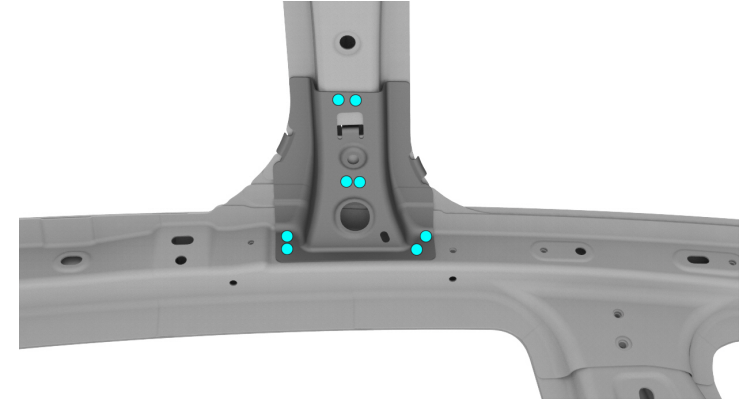




Replacement

- 4 Install the new component (continued).
 - B Insert the structural rivets.
 - High Strength Structural Rivet, 6.5 mm (x8)

 - C Install the structural rivets.





Replacement

4 Install the new component (continued).

D Perform resistance spot welding.
▲ Installation Spot Weld

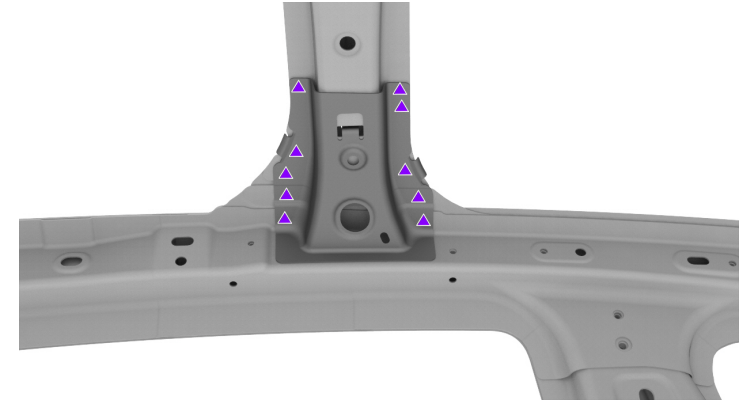


WARNING: Failure to follow all welding safety precautions, including the use of personal protective equipment, could result in serious injury or property damage. Only technicians who have successfully met Tesla's requirements for welding training are authorized to weld structural components on Tesla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

E Wipe off any excess adhesive.





Replacement

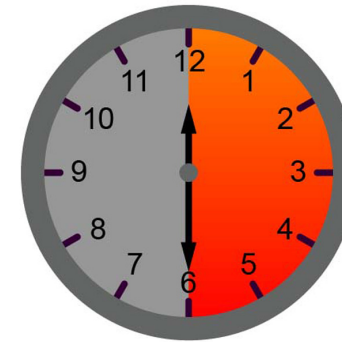
4 Install the new component (continued).

F

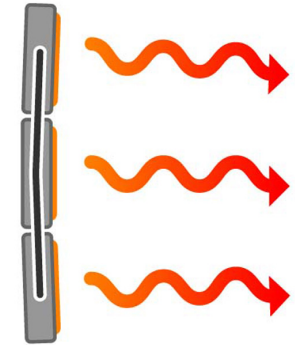
Bake the structural adhesive so that the bonded panels reach a temperature of 60°C–80°C (140°F–176°F) for at least 30 minutes to achieve full strength.



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.



00:30:00+



60°C–80°C