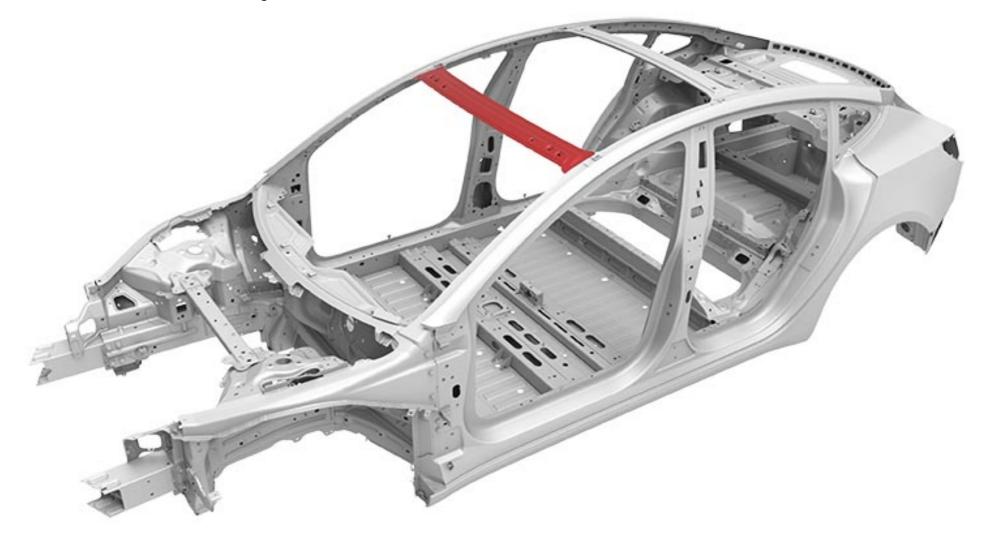


Front Header Assembly





Parts List

Quantity	Part Number	Description	Image / Notes
1	1073671-S0-B	Front Header Upper	3 3 3
1	1110192-SO-A	Front Header Lower	
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	_	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 can be used to replace both the Front Header Upper and the Front Header Lower, or it can be used to replace just the Front Header Upper. Adjust the procedure accordingly, depending on the repair situation.	WARNING: Wear the appropriate personal protective equipment (PPE) when performing this procedure.	The special tool listed below is 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.

Front Header Assembly

Remove the original component.

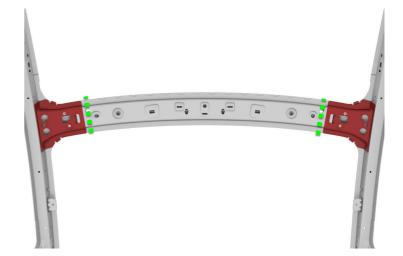


Cut away the bulk of the original component.

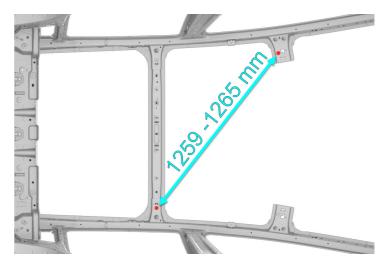




NOTE: Do not damage the header connectors (highlighted in red).



B Use a tram gauge to measure the distance between the center of the trim hole on the underside of each Rear Header Connector and the center of the trim hole on the underside of the opposite Front Header Connector (trim holes highlighted in red).





Remove the original component (continued).



Evaluate and compare the two measurements.

- If either measurement is less than 1259 mm or greater than 1265 mm, discontinue this procedure and check the vehicle for additional damage.
- If the measurements vary from each other by more than 3 mm, discontinue this procedure and check the vehicle for additional damage.



Use a drill with a spot weld bit or a belt sander to remove the factory spot welds that attach the original Front Header Upper to the original Front Header Lower.



△ Factory Spot Weld



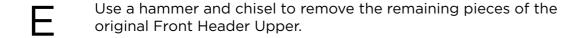
NOTE: Factory spot weld locations shown are approximate. Exact spot weld locations and number vary from vehicle to vehicle.



NOTE: Right-hand side shown, left-hand side is similar.

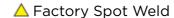


1 Remove the original component (continued).





Use a drill with a spot weld bit or a belt sander to remove the factory spot welds that attach the remaining pieces of the original Front Header Lower.

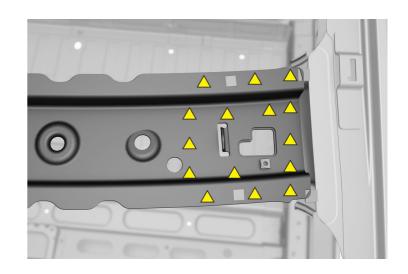




NOTE: Factory spot weld locations shown are approximate. Exact spot weld locations and number vary from vehicle to vehicle.



NOTE: Right-hand side shown, left-hand side is similar.





Remove the original component (continued).

G Use a hammer and chisel to remove the remaining pieces of the original Front Header Lower.

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.



1

Prepare for installation.



Put the new components into position and secure them in place.



Mark the surface preparation boundary lines on the new components and the vehicle.



1 Prepare for installation (continued).

Remove the new components.

? Prepare the surfaces.



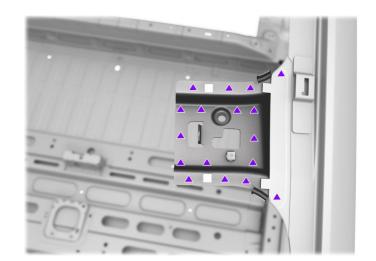
Use a red Scotch-Brite pad or equivalent to scuff the e-coat on the mating surfaces of the new component and the vehicle.

Front Header Assembly

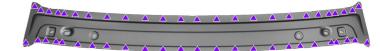
Prepare the surfaces (continued).

Mark the installation spot weld locations.

▲ Installation Spot Weld









Prepare the surfaces (continued).



Use a disc sander with a medium-abrasive surface conditioning disc to remove the e-coat on the new components and on the vehicle in the weld areas.



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



NOTE: Use a belt sander with a medium-abrasive belt for any areas that cannot be reached with a disc sander.



Clean all the mating surfaces and weld areas 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.



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.



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





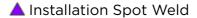
Install the new Front Header Lower.



Put the new Front Header Lower into position.



Perform resistance spot welding.

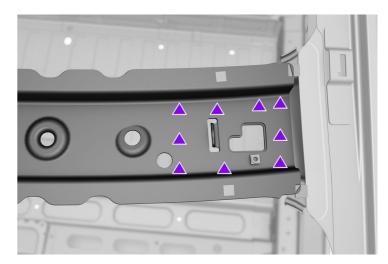




WARNING: Failure to follow all welding safety precautions, including the use of personal protective equipment, could result in serious injury or property damage. Only technicians who have successfully met Tesla's requirements for welding training are authorized to weld structural components on Tesla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







Install the new Front Header Upper.



Put the new Front Header Upper into position.



Clamp the new Front Header Upper into place



5

Install the new Front Header Upper (continued).

C

Wipe off any excess adhesive.



Perform resistance spot welding.

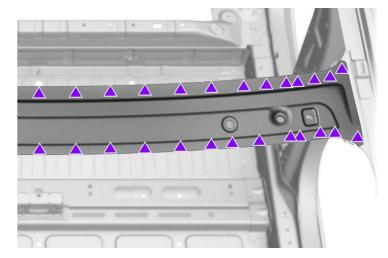




WARNING: Failure to follow all welding safety precautions, including the use of personal protective equipment, could result in serious injury or property damage. Only technicians who have successfully met Tesla's requirements for welding training are authorized to weld structural components on Tesla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



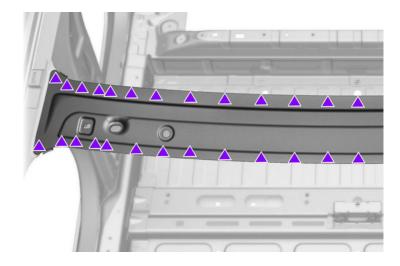


5

Install the new Front Header Upper (continued).

D

Perform resistance spot welding (continued).

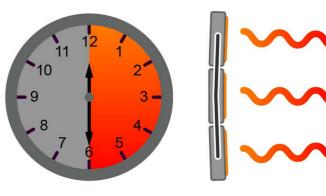




Bake the structural adhesive so that the bonded panels reach a temperature of 60°C-80°C (140°F-176°F) for at least 30 minutes to achieve full strength.



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



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