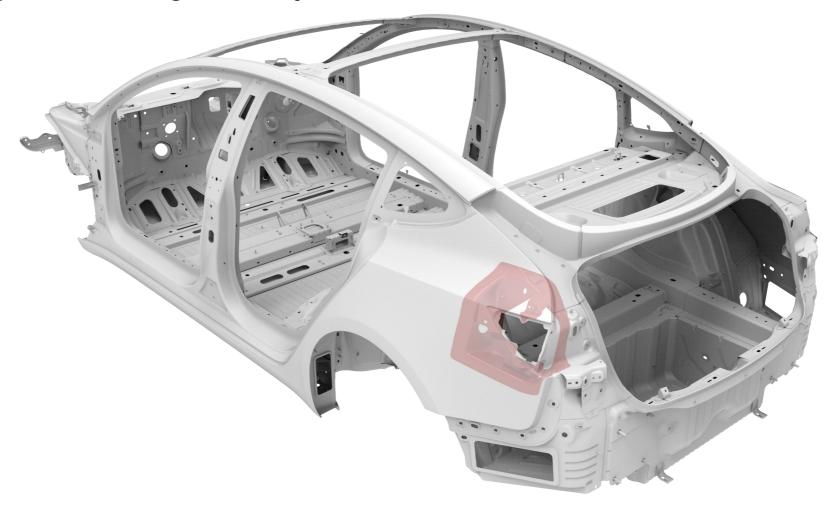


Charge Port Housing Assembly





Parts List

Quantity	Part Number	Description	Image / Notes
1	1103449-S0-G	M3S CHARGEPORT HOUSING BRACKET	
1	1102255-S0-B	M3S CHARGE PORT LOWER BRACKET	



Parts List

Quantity	Part Number	Description	Image / Notes
1	1102254-S0-B	M3S CHARGE PORT UPPER BRACKET	
3 rivets needed; order 10 rivets	1028719-00-A	Structural Rivet, 4.8 mm	All rivets come in packages of 10; order all rivets in multiples of 10.
4 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.
3	1454292-00-A	Bolt, hex-head	Bolts used to attach the chargeport to the body which must be replaced.
6		Sheet Metal Screw	Source locally; not available from Tesla.



Parts List

Quantity	Part Number	Description	Image / Notes
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	CAUTION: The sealer used in this procedure requires a cured elongation rating of greater than 150%. Refer to the technical specifications for the products available in your area.
			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
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. This procedure calls for a seam sealer with a cured elongation rating of greater than 150%. This is to prevent visible distortion of the quarter panel's exterior surface where the Charge Port Housing Bracket is bonded to the inside of the panel.	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.



Prerequisites

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.

Before working on the vehicle, make sure that high voltage current is not present (refer to the appropriate section in BR-17-17-004, "Disconnecting 12V and High Voltage Power on Model 3").



WARNING: Only technicians who have been trained in High Voltage Awareness are permitted to perform the Vehicle Electrical Isolation procedure. Proper personal protective equipment (PPE) and insulating high voltage gloves with a minimum rating of class 0 (1000V) must be worn any time a high voltage cable is handled. Refer to TN-15-92-003, "High Voltage Awareness Care Points" for additional safety information.

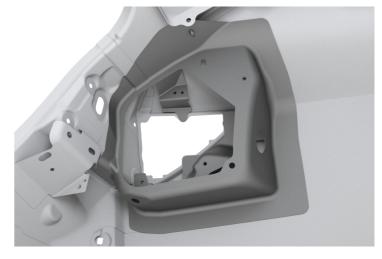


Removal

Remove the original component.



Use a marker to trace the original location of the Charge Port Housing Assembly to aid in aligning the new component in a later step.



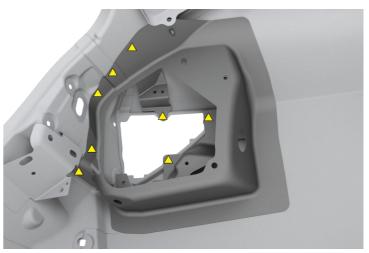
B

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.





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





Removal

Remove the original component (continued).



Use a heat gun to heat the adhesive joints, and then use a hammer and chisel to remove the original component.



NOTE: Use a heat gun to heat the foam dam (shown here in red) to release it from the original Charge Port Housing Assembly, but do not remove the foam dam from the vehicle.



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.



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.



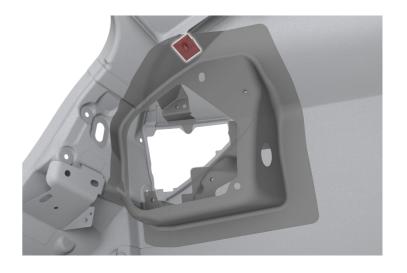
Use a disc sander with a medium-abrasive surface conditioning disc to remove any remaining materials from the mating surfaces. Use a belt sander with a medium-abrasive belt for any areas that cannot be reached with a disc sander. Vacuum any adhesive dust.



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



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.

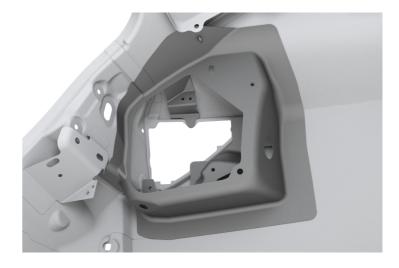




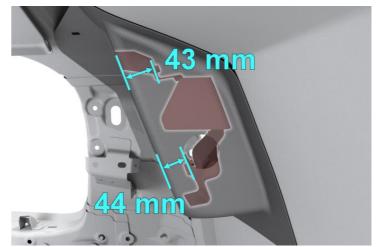
Prepare for installation.



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



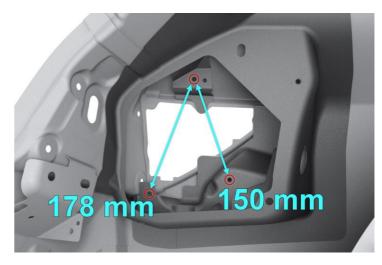
Align the Upper and Lower Charge Port Housing brackets to the measurements provided and clamp them in place.





Prepare for installation (continued).

Align the Upper and Lower Charge Port Housing brackets to the measurements provided and clamp them in place (continued).



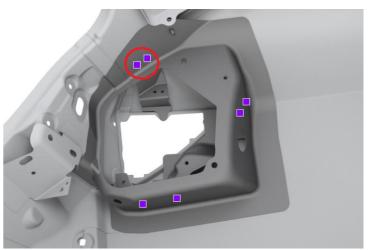
C

Temporarily install sheet metal screws to secure the Upper and Lower Charge Port Housing brackets in place.

Sheet Metal Screw (x6)



CAUTION: Make sure the sheet metal screws installed in the locations circled in red only secure the Charge Port Upper Bracket to the Charge Port Housing Bracket.





Prepare for installation (continued).

- Temporarily install the Charge Port and Charge Port Door assemblies on the vehicle to ensure that the charge port correctly aligns with the charge port opening in the door. Adjust the Upper and Lower Charge Port Housing bracket positions if necessary.
 - **NOTE:** Proper alignment of the Charge Port and Charge Port Door assemblies is critical to the smooth installation and removal of the charger connector.



E

Remove the new component.



Prepare for installation (continued).

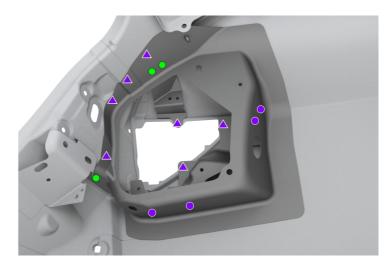


Mark the fastener locations on the new component.

- Structural Rivet, 4.8 mm (x3)
- Structural Bulb Rivet, 6.5 mm (x4)
- ▲ Installation Spot Weld (x7)



NOTE: The rivets securing the Charge Port Upper and Lower brackets to the Charge Port Housing bracket will use the locations where sheet metal screws were installed in an earlier step.





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

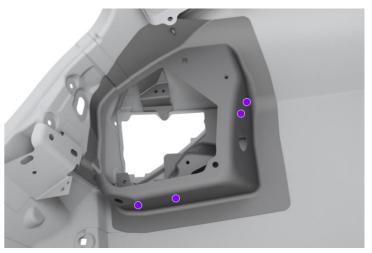
OStructural Bulb Rivet, 6.5 mm (x4)



NOTE: The sheet metal screws installed in an earlier step must first be removed before drilling holes for rivets.



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





Prepare for installation (continued).



Use a drill with a 4.8 mm bit to drill holes for 4.8 mm structural rivets.

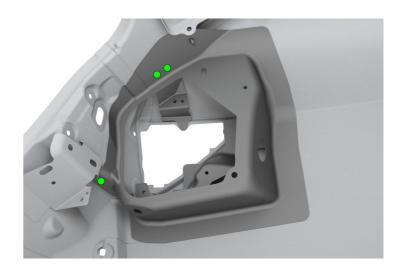
Structural Rivet, 4.8 mm (x3)



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



NOTE: The sheet metal screws installed in an earlier step must first be removed before drilling holes for rivets.



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



1 Prepare for installation (continued).

Remove the new component.

? Prepare the surfaces.



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



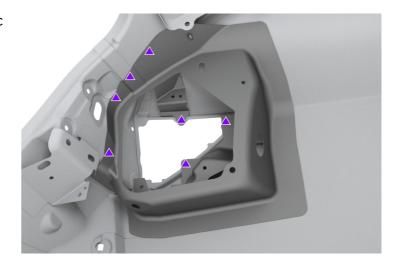
? Prepare the surfaces (continued).

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

▲ Installation Spot Weld (x7)



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



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.



Apply seam sealer in the area where the Charge Port Housing Bracket makes direct contact to the Quarter Panel skin and the factory foam baffle (shown here in orange).



CAUTION: This procedure calls for a seam sealer with a cured elongation rating of greater than 150%. This is to prevent visible distortion of the quarter panel's exterior surface where the Charge Port Housing Bracket is bonded to the inside of the panel.



CAUTION: If using a seam sealer not designed for application over bare metal surfaces, the mating surface on the inside of the quarter panel will require refinishing prior to installing the Charge Port Housing Assembly. Refer to the technical data sheet for the seam sealing product being used.



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.





3

Apply structural adhesive (continued).

C

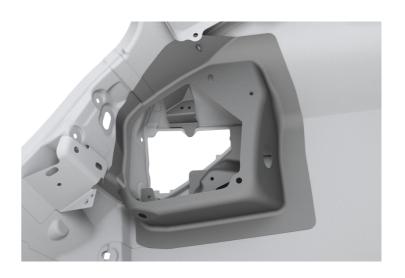
While the primer layer is still wet, apply a bead of structural adhesive on top of the primer layer on the new component.



Install the new component.



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





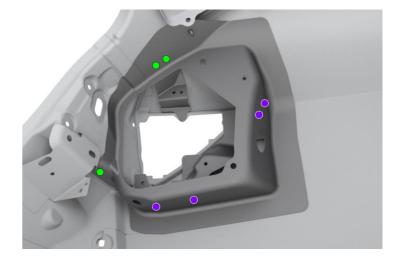
4

Install the new component (continued).

B

Insert the structural rivet.

- Structural Rivet, 4.8 mm (x3)
- Structural Bulb Rivet, 6.5 mm (x4)



Install the structural rivet.





Install the new component (continued).



Perform resistance spot welding.

▲ Installation Spot Weld (x7)



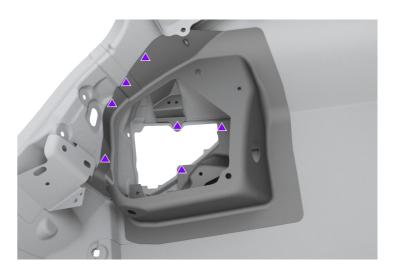
WARNING: Failure to follow all welding safety precautions, including the use of personal protective equipment, could result in serious injury or property damage. Only technicians who have successfully met Tesla's requirements for welding training are authorized to weld structural components on Tesla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



Wipe off any excess adhesive.







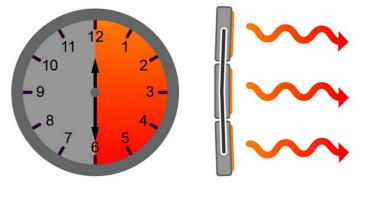
Install the new component (continued).



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.