Front Jack Pad Bracket

Parts List

Quantity	Part Number	Description	Image / Notes
1	1088542-S0-A	Front Jack Pad Bracket	
6 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	—	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.

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 left-hand component; the procedure is identical for the right-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. **NOTE:** Refer to BR-17-10-005, “Model 3 Body Structure Materials and Allowed Operations”, for information about the material each structural component is made from and the operations that are allowed on each type of material.	The special tool listed below is required to perform this procedure: • GMA welder Use only an approved GMA welder. Refer to BR-16-92-007, "Approved Welders" for a list of current approved GMA welders.

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 a section of the Body Side Outer in the lower A-pillar area.

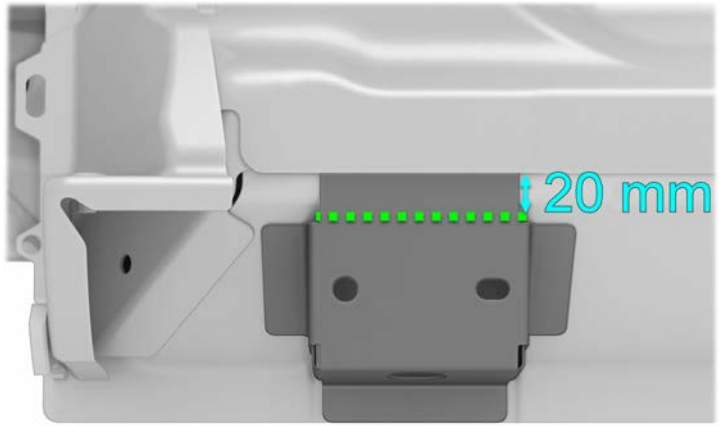
Removal

1 Remove the original component.

A Trace the outline of the original component to aid in installation in a later step.

B Cut the original component on the green dashed line shown.

Cut Line



Removal

1 Remove the original component (continued).

B Cut the original component on the green dashed line shown (continued).

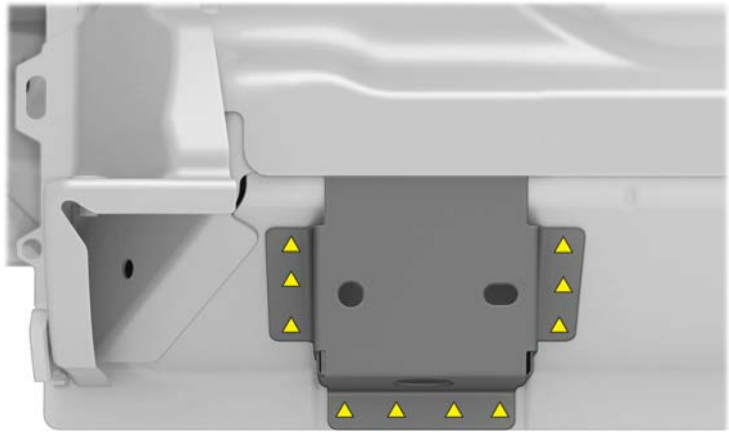
Removal

1 Remove the original component (continued).

B Cut the original component on the green dashed line shown (continued).

C Use a drill with a spot weld bit to drill out the factory spot welds.

△ Factory Spot Weld (x10)



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).

C Use a drill with a spot weld bit to drill out the factory spot welds (continued).

D Use a hammer and chisel to remove the bulk of the original component.

NOTE: The top tab of the Front Jack Pad Bracket remains on the vehicle and will be welded to the new Front Jack Pad Bracket in a later step.

Removal

1 Remove the original component (continued).

D Use a hammer and chisel to remove the bulk of the original component (continued).

Removal

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.

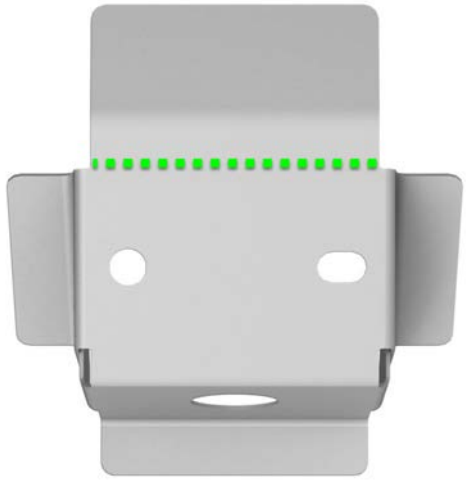
WARNING: Remove the epoxy adhesive in a well-ventilated area. Wear suitable personal protective equipment.

Replacement

1 Prepare for installation.

A Cut the new component on the green dashed line shown.

Cut Line



Replacement

1 Prepare for installation (continued).

A Cut the new component on the green dashed line shown (continued).

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

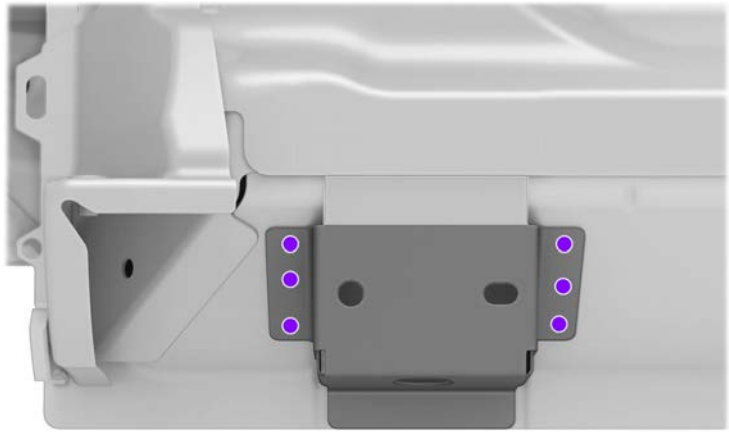
NOTE: Use the outline traced in an earlier step to aid in installation.

Replacement

1 Prepare for installation (continued).

C Mark the locations for structural bulb rivets.

- Structural Bulb Rivet, 6.5 mm (x6)



Replacement

1 Prepare for installation (continued).

D Use a drill with a 6.7 mm (17/64 in) bit to drill holes for structural bulb rivets.

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).

E Remove the new component.

Replacement

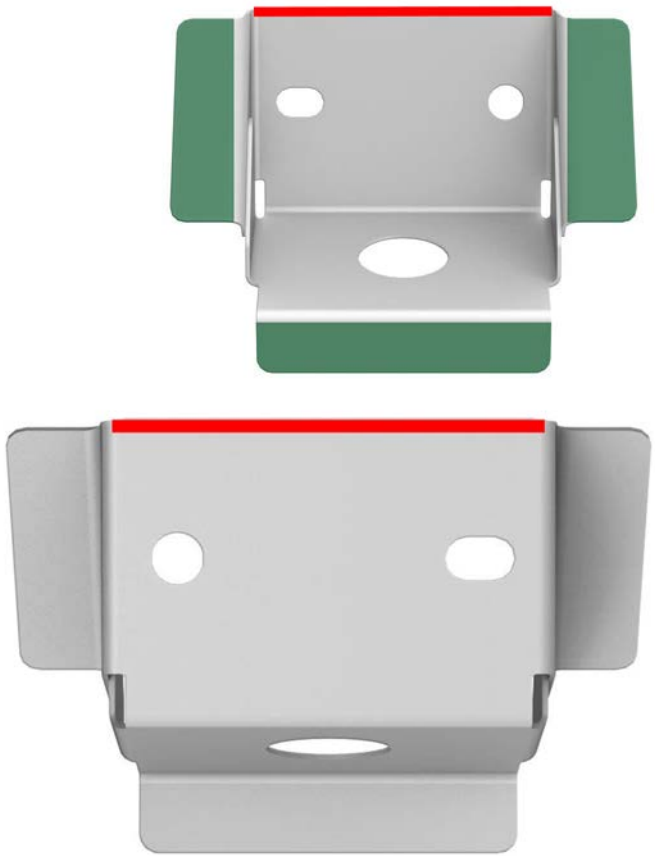
2 Prepare the surfaces.

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

GMA Weld

Steel-to-Steel Bond Path

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



Replacement

2 Prepare the surfaces (continued).

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

Replacement

2 Prepare the surfaces (continued).

B Clean all the bond paths and weld areas 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.

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.

WARNING: Do not apply structural adhesive within 25 mm (1 in) of the weld locations. Applying structural adhesive within 25 mm (1 in) of the weld locations can cause weld failure.

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

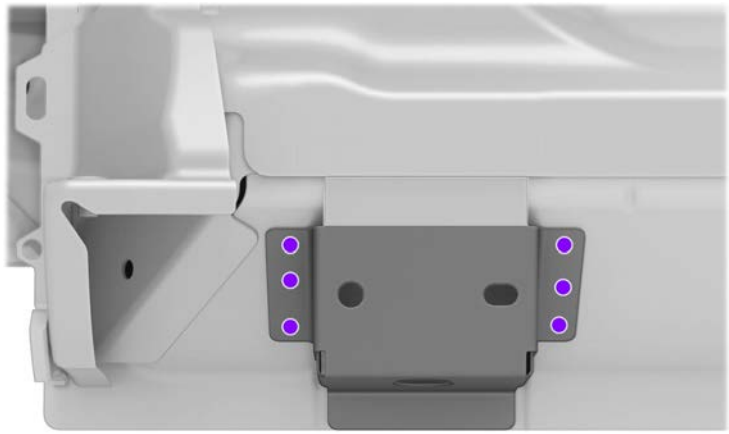
3 Apply structural adhesive (continued).

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

4 Install the new component.

A Put the new component into position and insert the structural bulb rivets to align the new component.

- Structural Bulb Rivet, 6.5 mm (x6)



Replacement

4 Install the new component (continued).

A Put the new component into position and insert the structural bulb rivets to align the new component (continued).

B Clamp the areas that do not have fasteners.

Replacement

4 Install the new component (continued).

C Install the structural bulb rivets.

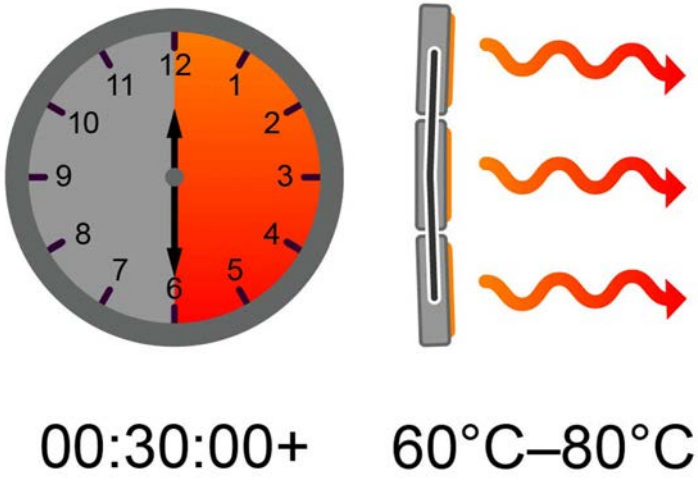
D Wipe off any excess adhesive.

Replacement

4 Install the new component (continued).

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.

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.



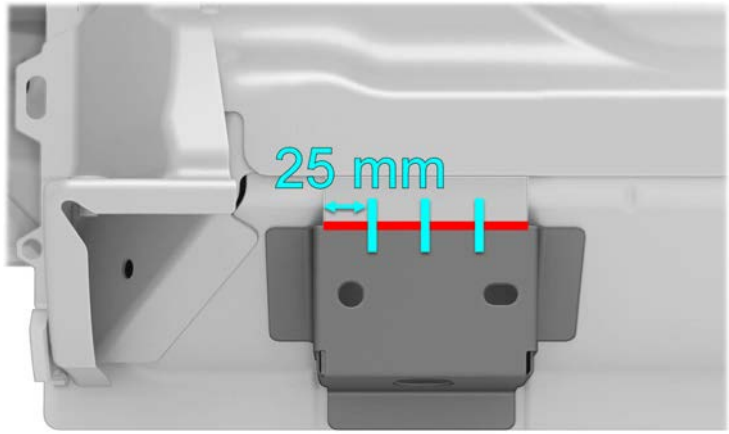
Replacement

5 Perform GMA welding.

A GMA weld the butt joint in approximately 25 mm (1 in) increments, allowing the weld area to cool before welding the subsequent section.

GMA Weld

Reference Line/Point



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.

WARNING: Before GMA welding, make sure that the structural adhesive is dry to the touch. If the structural adhesive is not dry to the touch before GMA welding, the strength of the adhesive bond might be compromised.

WARNING: To maintain vehicle crash integrity, use only Bohler Union X96 welding wire and an approved GMA welder to perform steel GMA welding on high-strength steel and ultra high-strength steel components.

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.

NOTE: Before GMA welding, a test weld using material of the same gauge and type should be performed to make sure that the welding equipment settings produce a satisfactory joint.

Replacement

5 Perform GMA welding (continued).

A GMA weld the butt joint in approximately 25 mm (1 in) increments, allowing the weld area to cool before welding the subsequent section (continued).

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

Replacement

5 Perform GMA welding (continued).

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

6 Install a new section of Body Side Outer in the lower A-pillar area.