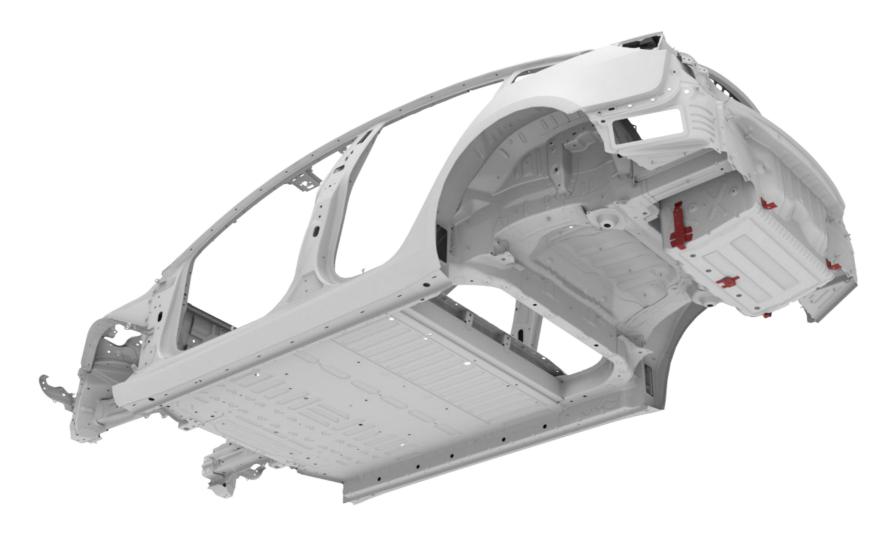


## Rear Aero Shield Brackets





## Parts List

Quantity	Part Number	Description	Image / Notes
1 or 2	1133803-S0-C	Assembly - Bracket Rear Aero Shield & Harness attachment	
1 or 2	1099231-SO-C	Assembly – Rear Aero Shield Rear Bracket	
1	1098829-SO-B	Assembly – Rear Aero Shield – Center	



### **Parts List**

Quantity	Part Number	Description	Image / Notes
3 or 23 rivets needed; order 10 or 30 rivets	1063943-00-A	Structural Bulb Rivet, 6.5 mm	The number of rivets required depends on which brackets and how many are being replaced. Review the procedure to determine the exact number of rivets needed.  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	_	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 is for the left-hand component; the procedure is identical for the right-hand component.	personal protective equipment (PPE) when performing this	No special tools are required to perform this procedure.
This procedure provides replacement information for all Rear Aero Shield Brackets. If not replacing all brackets, follow only the instructions applicable to the bracket(s) being replaced.	procedure.	



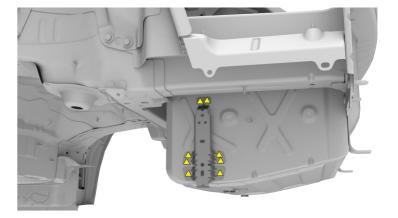
#### Removal

Remove the original components.



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 (x14)







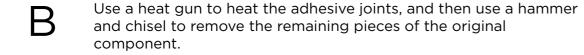
#### Removal

Remove the original components (continued).



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).







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.



#### Removal

Remove the original components (continued).



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: Use only sanding wheels and belts that are 80 grit or finer on aluminum components. Using sanding wheels or belts that are coarser than 80 grit can cause fractures in the aluminum.



Prepare for installation.



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



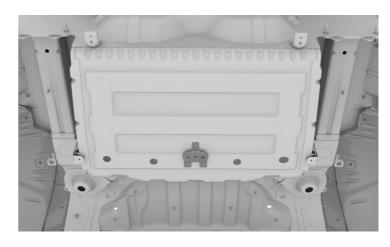




Prepare for installation (continued).



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



B

Mark the fastener locations on the new component.

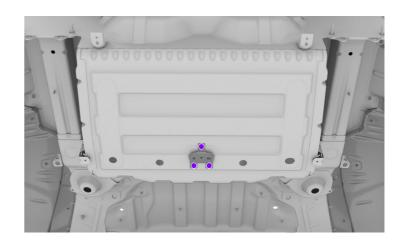
OStructural Bulb Rivet, 6.5 mm (x13)





- Prepare for installation (continued).
  - Mark the fastener locations on the new component (continued).







Prepare for installation (continued).



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.



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 components from the vehicle.

**?** Prepare the surfaces.



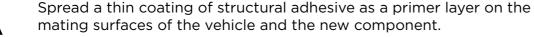
Use a red Scotch-Brite pad or equivalent to scuff the e-coat on the mating surfaces of the new component.

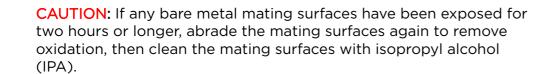


Prepare the surfaces (continued).

- 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.

Apply structural adhesive.





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).

B

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.





Install the new component (continued).

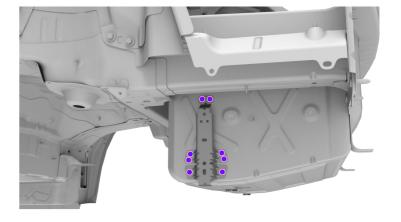


Insert the structural rivets.

Structural Bulb Rivet, 6.5 mm (x8)



**NOTE:** Insert all the Structural Rivets from inside the vehicle.





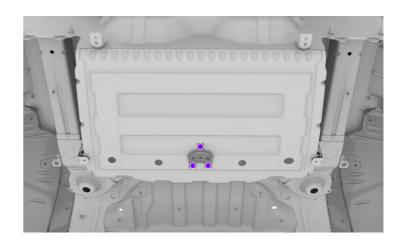


4

Install the new component (continued).

B

Insert the structural rivets (continued).



C

Install the structural rivets.





Install the new component (continued).

D

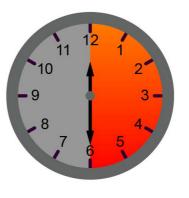
Wipe off any excess adhesive.

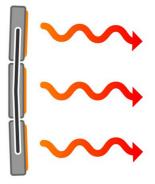


Bake the structural adhesive so that the bonded panels reach a temperature of  $60^{\circ}\text{C}-80^{\circ}\text{C}$  ( $140^{\circ}\text{F}-176^{\circ}\text{F}$ ) for at least 30 minutes to achieve full strength.



**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





Install the new component (continued).



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

Updated: 13FEB19