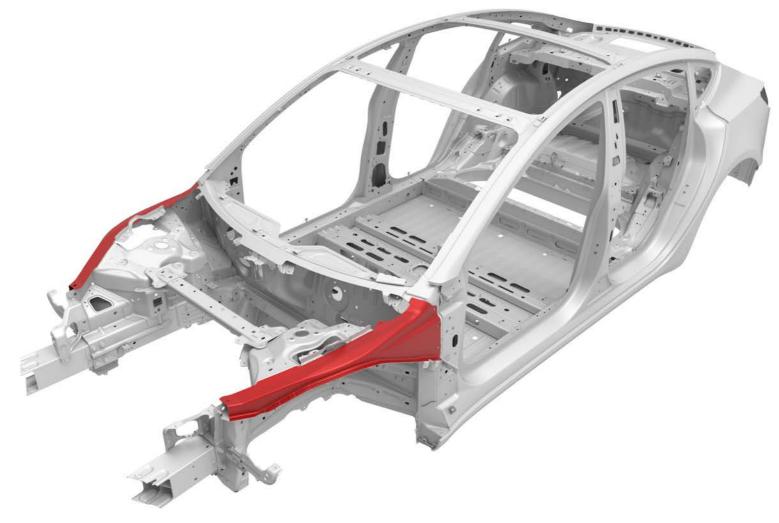


Shotgun Outer



Parts List

Quantity	Part Number	Description	Image / Notes
1	1073755-SO-A (LH) 1073756-SO-A (RH)	Shotgun Outer	
3 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	_	Weld-Through Primer	CAUTION: Only use zinc weld-through primers. Other primers might cause corrosion and compromise the integrity of the repair. Source locally; not available from Tesla.
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 shows the left-hand component being removed and the right-hand component being installed.	 ★ 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 crosscontamination. 	The special tools listed below are 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

Shotgun Outer

1

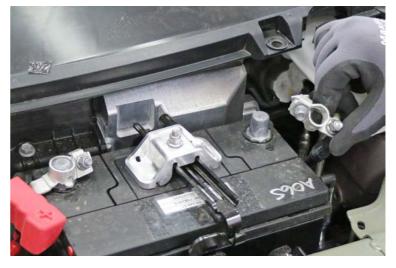
Disconnect 12V and high voltage power.



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 the items listed below. Refer to the applicable Service Manual procedure.

Front Door

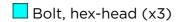




Remove the original component.

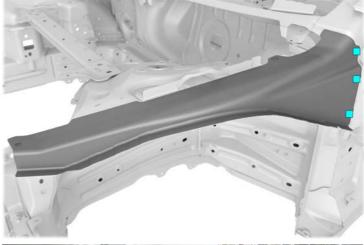


Remove the bolts, but do not discard them.





NOTE: These bolts are installed in a later substep.





Shotgun Outer

Remove the original component (continued).

B

Identify the factory spot welds.

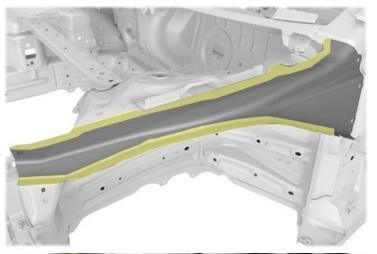
Factory Spot Weld Areas



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



NOTE: The areas highlighted in yellow indicate multiple factory spot welds.





Shotgun Outer

Remove the original component (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.





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



Shotgun Outer

1 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 (continued).



Remove the original component.





Shotgun Outer

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.



Shotgun Outer

Prepare for installation.



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



Insert the 3 bolts that were removed in an earlier substep, but do not torque them fully at this time.



Prepare for installation (continued).

Shotgun Outer



Use a tram gauge to measure the distance between the two Shotgun Outers. Measure from the manufacturing location holes.



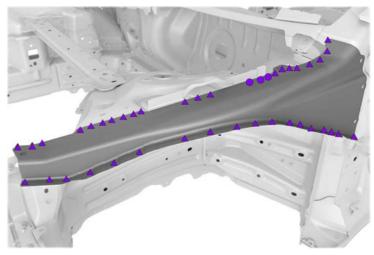
NOTE: The factory distance between the two Shotgun Outers is 1090 mm (43 in).



D

Mark the fastener locations on the new component.

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



Shotgun Outer

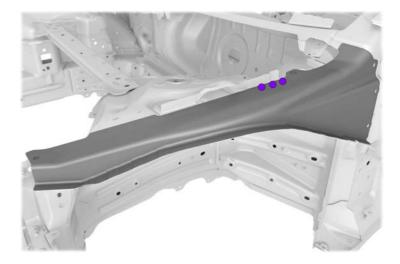
Replacement

Prepare for installation (continued).



Use a drill with a 6.8 mm (17/64 in) bit to drill holes for structural bulb rivets.

Ostructural Bulb Rivet, 6.5 mm (x3)

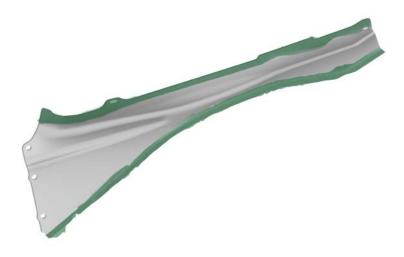




Mark the new component in the areas that need to have e-coat removed.



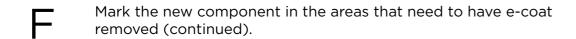
Steel-to-Steel Bond Path

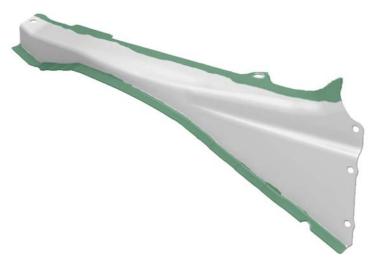


Shotgun Outer

Replacement

Prepare for installation (continued).





Remove the new component.





Shotgun Outer

Prepare the surfaces.



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.



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



CAUTION: Within two hours of removing the e-coat or paint, cover the abraded areas in the bond path with a thin primer layer of structural adhesive. If the abraded areas are not primed within two hours, they must be abraded again to remove any oxidation.



Clean any bare metal on the new component 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.



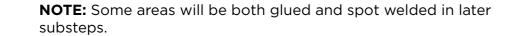


7 Prepare the surfaces (continued).

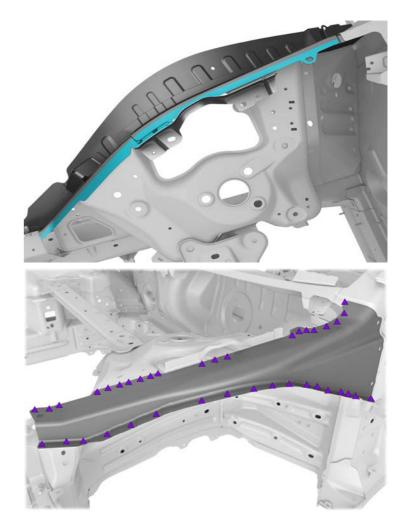
Shotgun Outer

ldentify the adhesive bond path and spot weld areas.

▲ Installation Spot Weld



Structural Adhesive



7 Prepare the surfaces (continued).

Shotgun Outer

Use tape to mask off the structural adhesive bond path areas on the new component and on the vehicle.





Apply weld-through primer to the appropriate installation spot weld areas of the new component and the vehicle.



CAUTION: Only use zinc weld-through primers. Other primers might cause corrosion and compromise the integrity of the repair.





7 Prepare the surfaces (continued).



Remove the tape.



Clean the areas that were taped in the previous substeps with isopropyl alcohol (IPA).

Shotgun Outer

3

Apply structural adhesive.



Spread a thin coating of structural adhesive as a primer layer on the abraded steel bond paths on the vehicle and the new Shotgun Outer.





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.



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







Apply structural adhesive (continued).

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



Install the new component.

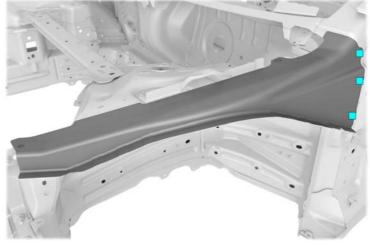


Put the new component into position.

 $\mathbf{4}$ Install the new component (continued).

Shotgun Outer

Bolt, hex-head (x3)





 $\mathbf{4}$ Install the new component (continued).

Shotgun Outer



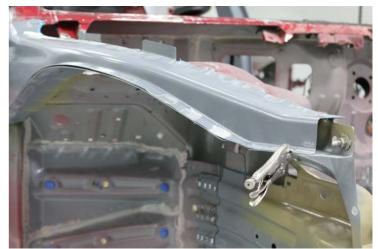
Use a tram gauge to measure the distance between the two Shotgun Outers. Measure from the manufacturing location holes.



NOTE: The factory distance between the two Shotgun Outers is 1090 mm (43 in).



Clamp the new component into place.





Install the new component (continued).

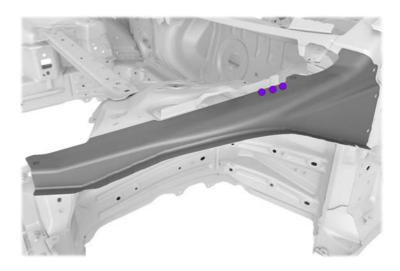


Install the structural bulb rivets.

Structural Bulb Rivet, 6.5 mm (x3)



Wipe off any excess adhesive.



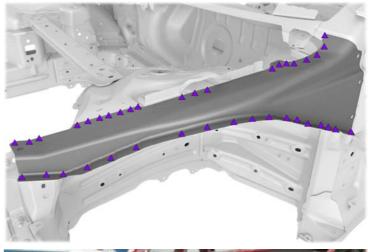




Install the new component (continued).

Perform resistance spot welding.

▲ Installation Spot Weld

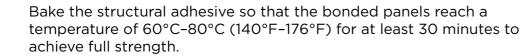


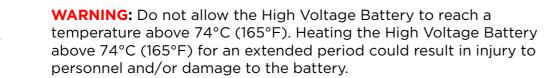


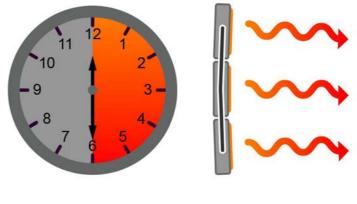
Shotgun Outer

Replacement

Install the new component (continued).







00:30:00+ 60°C-80°C



Remove any discoloration from the weld areas.

Shotgun Outer

4

Install the new component (continued).

J

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



After refinishing, use a wand of suitable length to apply corrosion-proofing material on the inside of the enclosed area to prevent corrosion.

