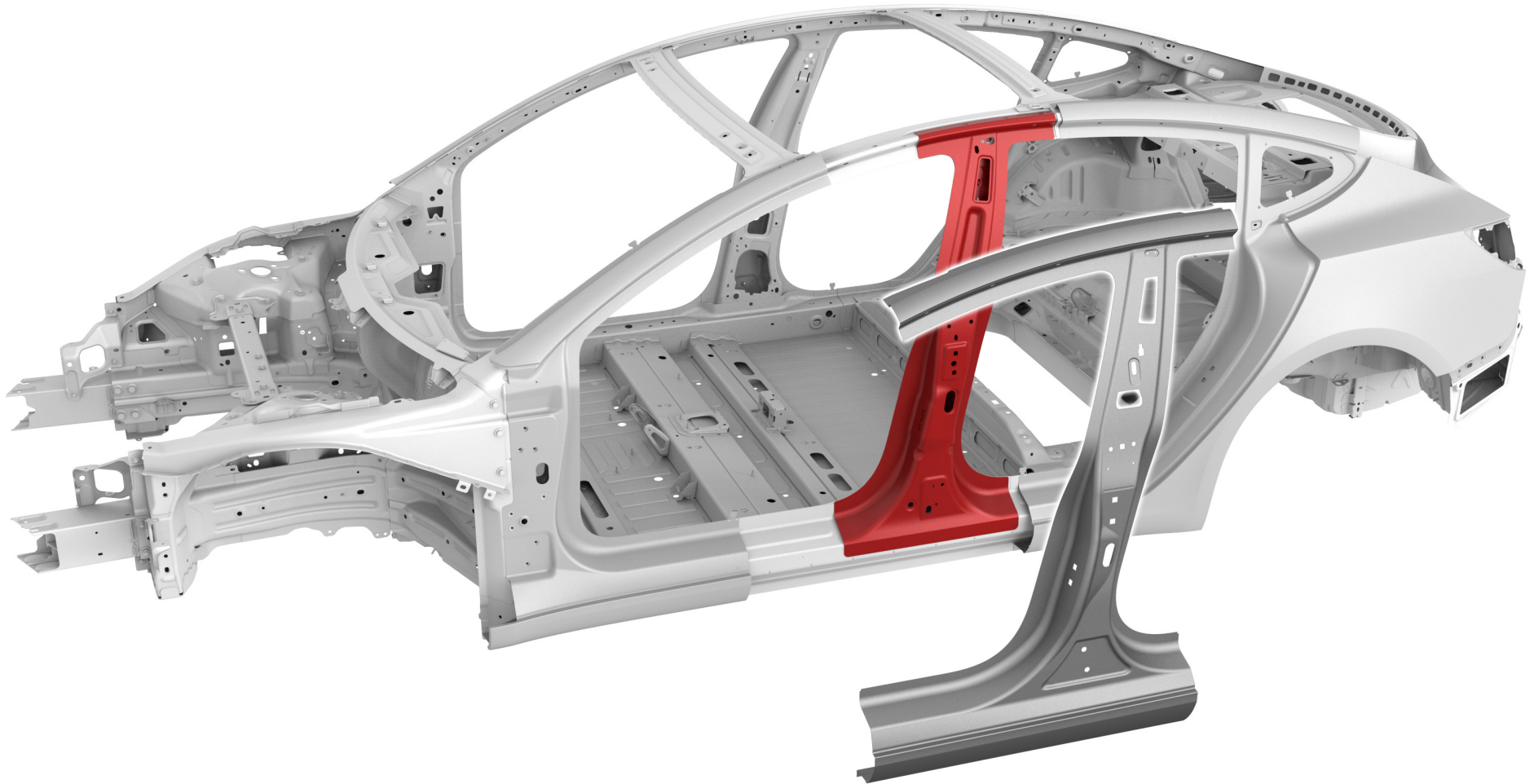






B-Pillar








Parts List

Quantity	Part Number	Description	Image / Notes
1	1080013-S0-A (LH) 1080014-S0-A (RH)	B-Pillar Inner Assembly	
1	1080019-S0-A (LH) 1080020-S0-A (RH)	B-Pillar Outer Assembly	





Parts List

Quantity	Part Number	Description	Image / Notes
1	1073681-S0-A (LH) 1073682-S0-A (RH)	B-Pillar Body Side Outer	
37 rivets needed; order 40 rivets	1454538-00-A	 High Strength Structural Rivet, 6.5 mm	All rivets come in packages of 10; order all rivets in multiples of 10.
1	—	Urethane Sealant	Refer to BR-17-92-002 , "Obtaining Adhesives, Coolant, and Other Chemicals" for information on how to obtain approved urethane sealant.
1	—	Corrosion-Resistant Epoxy Primer	Source locally; not available from Tesla.
3	—	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
<p>This procedure can be used to replace both the B-Pillar Outer Assembly and B-Pillar Inner Assembly, or it can be used to replace just the B-Pillar Outer Assembly. Adjust the procedure accordingly, depending on the repair situation.</p> <p>This procedure is for the left-hand component; the procedure is identical for the right-hand component.</p> <p>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.</p>	<p> WARNING: Wear the appropriate personal protective equipment (PPE) when performing this procedure.</p> <p> CAUTION: This procedure involves only steel components. Use the appropriate tools to avoid cross-contamination.</p>	<p>The special tools listed below are required to perform this procedure:</p> <ul style="list-style-type: none">Resistance Spot Welder <p>Use only an approved resistance spot welder. Refer to BR-16-92-007, "Approved Welders" for a list of current approved resistance spot welders.</p> <ul style="list-style-type: none">GMA welder <p>Use only an approved GMA welder. Refer to BR-16-92-007, "Approved Welders" for a list of current approved GMA welders.</p> <ul style="list-style-type: none">Frame bench <p>The vehicle must be properly mounted on an approved frame bench to replace this component. Refer to BR-16-92-006, "Approved Frame Bench Systems" for a list of current approved bench repair systems.</p>



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.

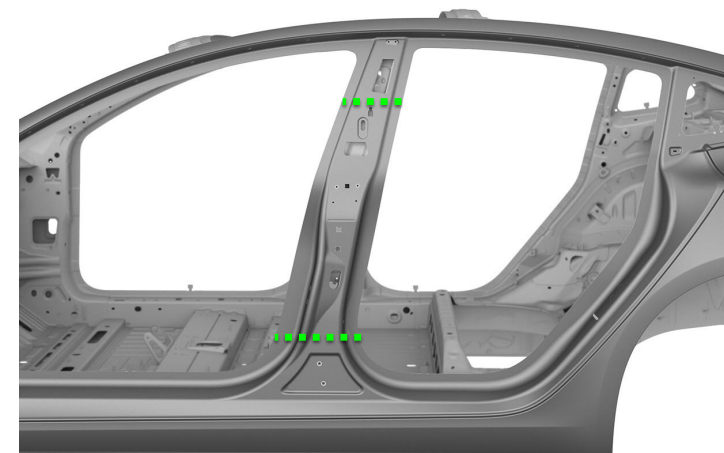


Removal

1 Remove the original B-Pillar Assemblies.

A If replacing both the B-Pillar Inner Assembly and B-Pillar Outer Assembly: Cut away the bulk of the B-Pillar.

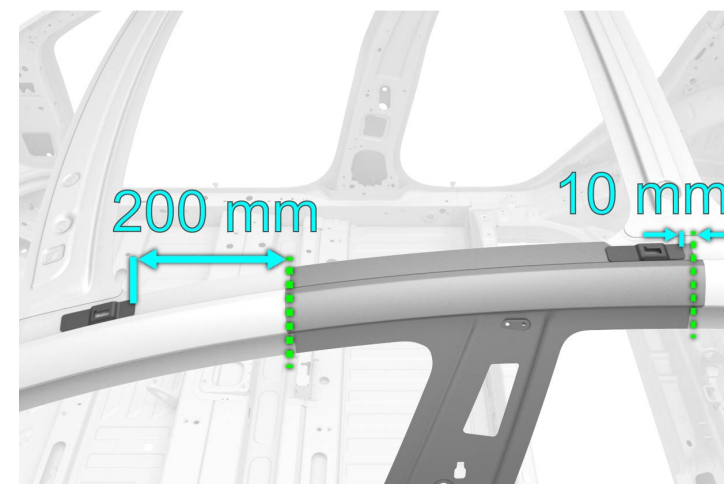
■ ■ ■ ■ ■ Cut Line



B Mark cut lines at the top of the front door opening 200 mm to the rear of the roof rack bracket shown and 10 mm to the rear of the roof rack bracket shown.

■ Reference Line/Point

■ ■ ■ ■ ■ Cut Line






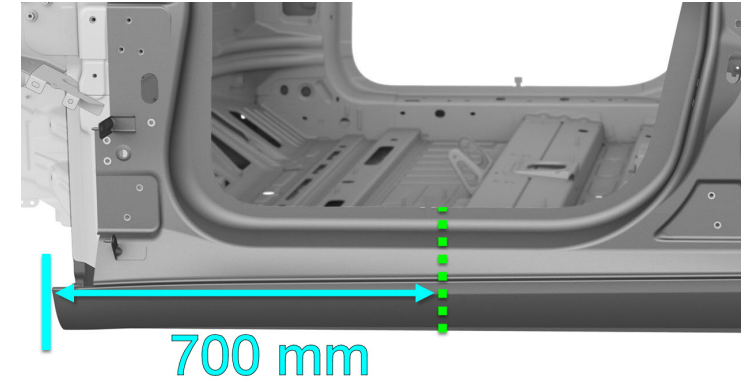
Removal

1 Remove the original B-Pillar Assemblies (continued).

C Mark a cut line at the bottom of the front door opening 700 mm (27-9/16 in) to the rear of the front lower edge of the Body Side Outer.

 Reference Line/Point

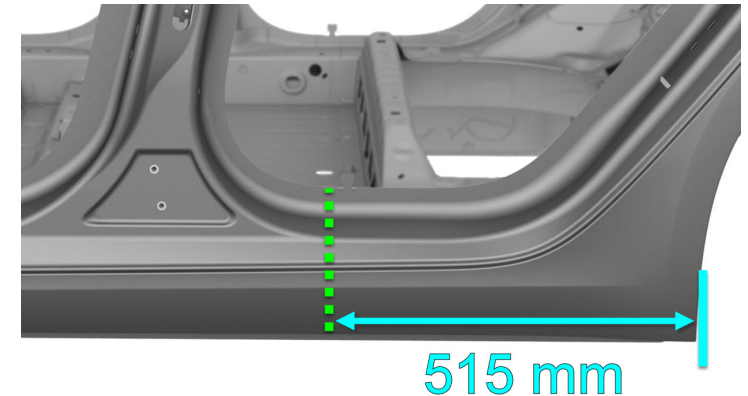
 Cut Line



D Mark a cut line at the bottom of the rear door opening 515 mm (20-1/4 in) to the front of the rear lower edge of the Body Side Outer.

 Reference Line/Point

 Cut Line





Removal

1 Remove the original B-Pillar Assemblies (continued).

E Cut the Body Side Outer on the cut lines marked in the previous substeps.



CAUTION: Do not damage the surrounding components.

F Identify the factory spot welds.

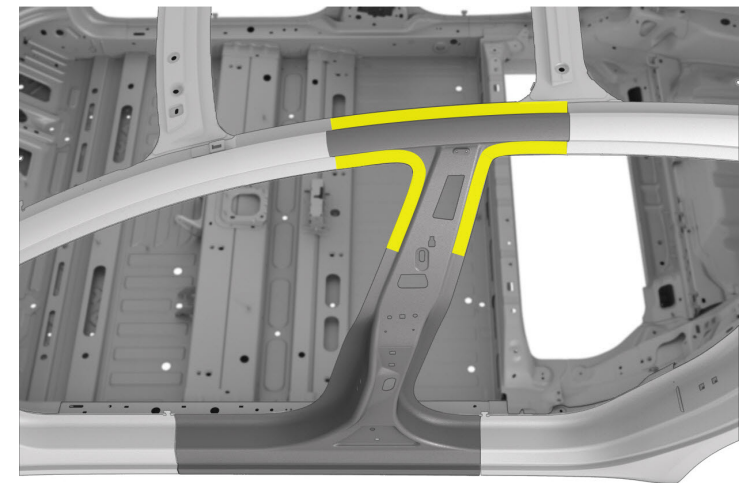
 Factory Spot Weld Areas



NOTE: Remove any seam sealer as necessary to identify the factory spot welds.



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

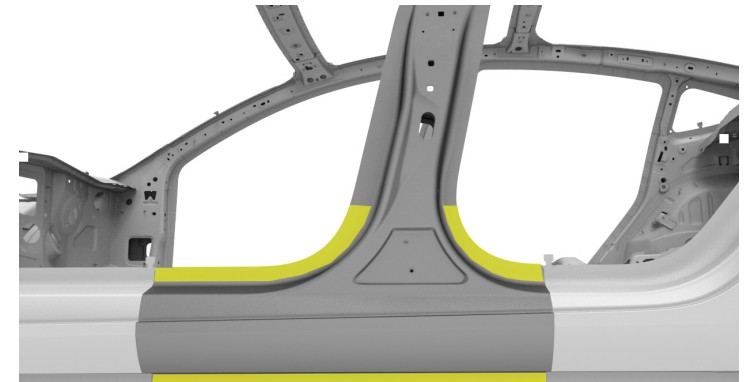




Removal

1 Remove the original B-Pillar Assemblies (continued).

F Identify the factory spot welds (continued).



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



Removal

1 Remove the original B-Pillar Assemblies (continued).

H

Use a heat gun to heat the adhesive joints, and then use a hammer and chisel to remove the remaining pieces of the Body Side Outer. Save the remaining pieces to use to create backing plates in a later step.



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.

I

Remove the foam dams from the lower portion of the B-Pillar Outer Assembly.



NOTE: Save the foam dams for installation in a [later step](#).



Removal

1 Remove the original B-Pillar Assemblies (continued).

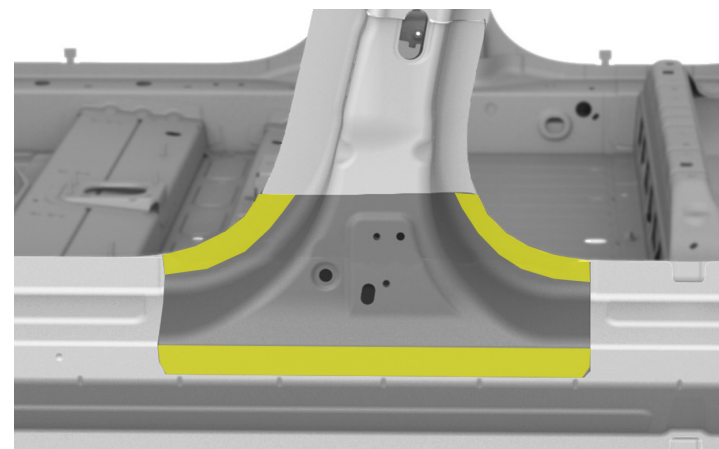
J

Use a drill with a spot weld bit to drill out the factory spot welds on the remaining pieces of the B-Pillar Outer Assembly.

 Factory Spot Weld Areas



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





Removal

1 Remove the original B-Pillar Assemblies (continued).

K Use a heat gun to heat the adhesive joints, and then use a hammer and chisel to remove the remaining pieces of the B-Pillar Outer Assembly.



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.

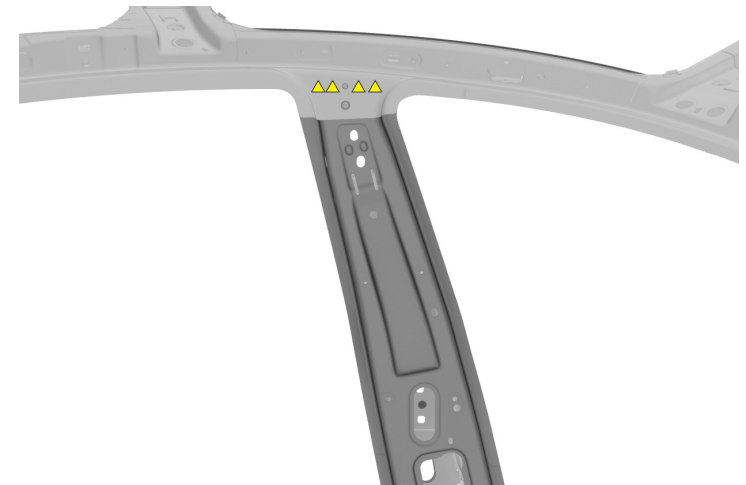
L

Use a drill with a 6.7 mm (17/64 in) bit to drill completely through the factory spot welds shown at the top of the B-Pillar Inner Assembly.

▲ Factory Spot Weld (x4)



NOTE: Make sure to drill through all layers, including the A-Pillar Outer Reinforcement, to allow for the installation of structural rivets in a [later step](#).





Removal

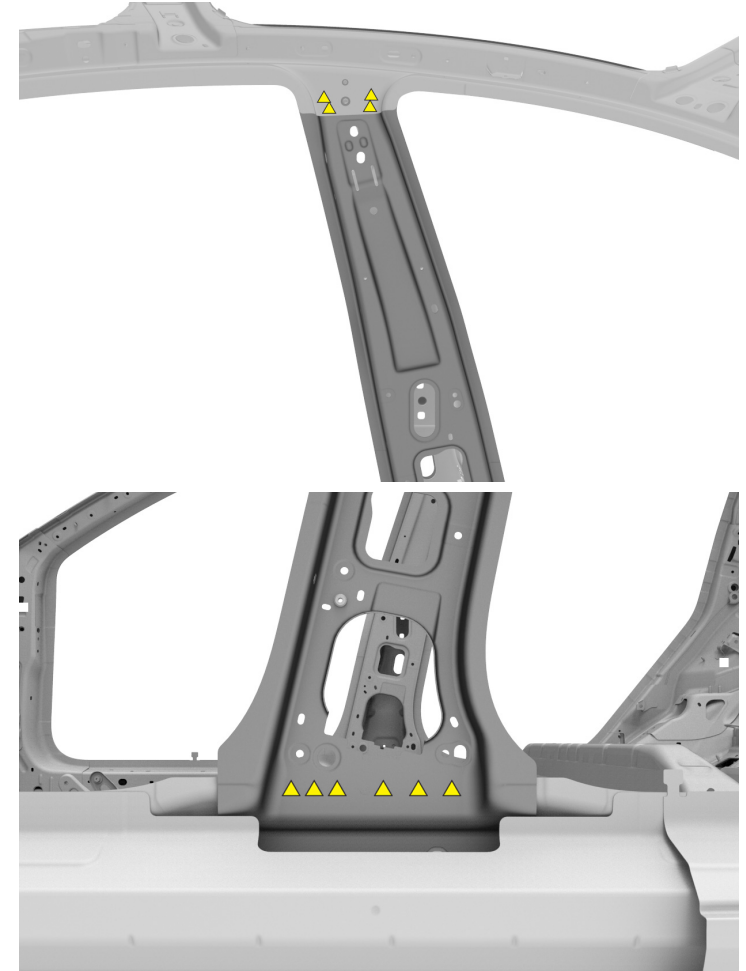
1 Remove the original B-Pillar Assemblies (continued).

M Use a drill with a spot weld bit to drill out the remaining factory spot welds on the remaining pieces of the B-Pillar Inner Assembly.

▲ 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 B-Pillar Assemblies (continued).

N Use a heat gun to heat the adhesive joints, and then use a hammer and chisel to remove the remaining pieces of the B-Pillar Inner Assembly. Save the remaining pieces to use as a template in a later step.



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.

2 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.



Removal

3

Remove the foam dams from the area between the Sill Outer and the Sill Inner, and save them for installation at a [later step](#).



Replacement - B-Pillar Assemblies

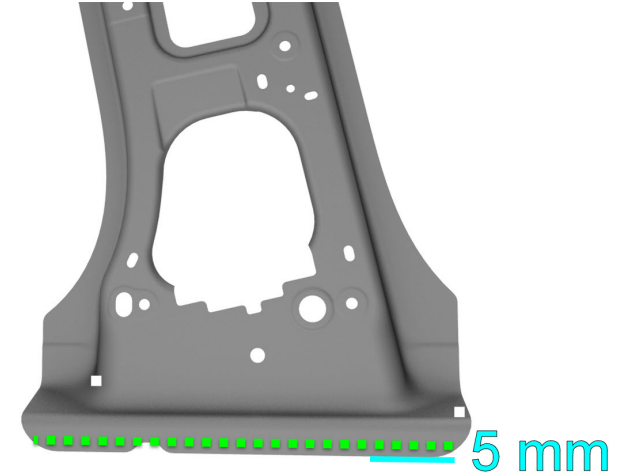
- 1 Prepare the new B-Pillar Inner Assembly and new B-Pillar Outer Assembly for installation.

A

Cut 5 mm (3/16 in) off of the bottom of the new B-Pillar Inner Assembly.

 Reference Line/Point

 Cut Line



B

Put the new B-Pillar Inner Assembly into position.



NOTE: Use the appropriate tools to press the upper portion of the new B-Pillar Inner Assembly underneath the flange of the Roof Rail.



Replacement - B-Pillar Assemblies

1 Prepare the new B-Pillar Inner Assembly and new B-Pillar Outer Assembly for installation (continued).

C Put the new B-Pillar Outer Assembly into position and align it to the frame bench jig points.




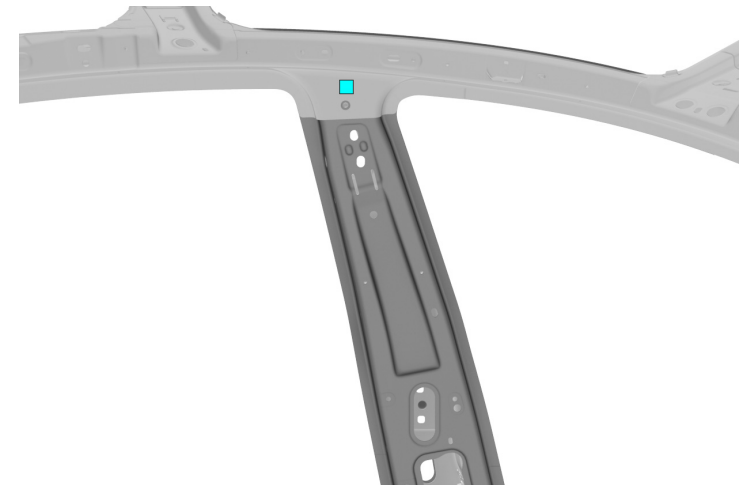
NOTE: Make sure the bolt holes for the seat belt retractor on the inside of the lower portion of the B-Pillar (circled in the second image) are aligned.



NOTE: If necessary, use a 1 mm (1/16 in) shim to account for the thickness of the Body Side Outer.

D Temporarily install the upper seat belt mounting bolt.

 Bolt, hex-head (x1)





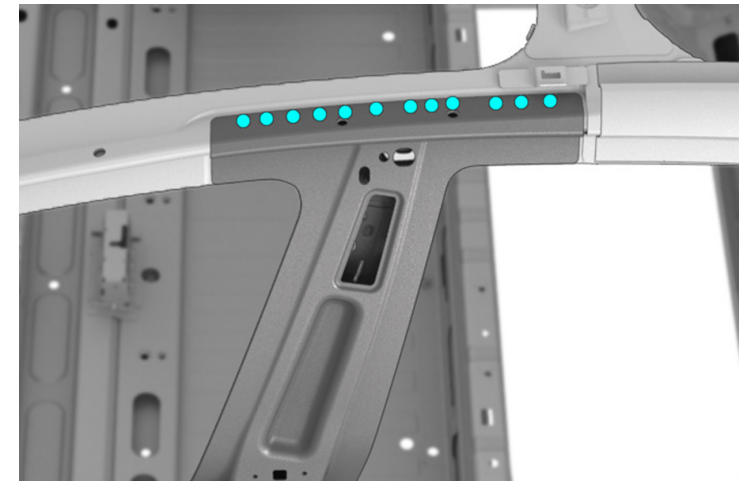
Replacement - B-Pillar Assemblies

1 Prepare the new B-Pillar Inner Assembly and new B-Pillar Outer Assembly for installation (continued).

E Align the new B-Pillar Inner Assembly to the new B-Pillar Outer Assembly, and clamp both components in place.

F Cut a section from the remaining piece of the upper portion of the original B-Pillar Outer Assembly and use it as a template to mark holes for structural rivets at the top of the new B-Pillar Outer Assembly.

● High Strength Structural Rivet, 6.5 mm (x12)





Replacement - B-Pillar Assemblies

1 Prepare the new B-Pillar Inner Assembly and new B-Pillar Outer Assembly for installation (continued).

G Mark holes for structural rivets at the bottom of the new B-Pillar Outer Assembly.

● High Strength Structural Rivet, 6.5 mm (x21)



NOTE: Mark and drill the holes for the bottom row of structural rivets in the B-Pillar Outer at least 15 mm (9/16 in) up from the bottom edge of the B-Pillar Outer. This ensures that the rivets go through the flat face of the aluminum Sill Insert.

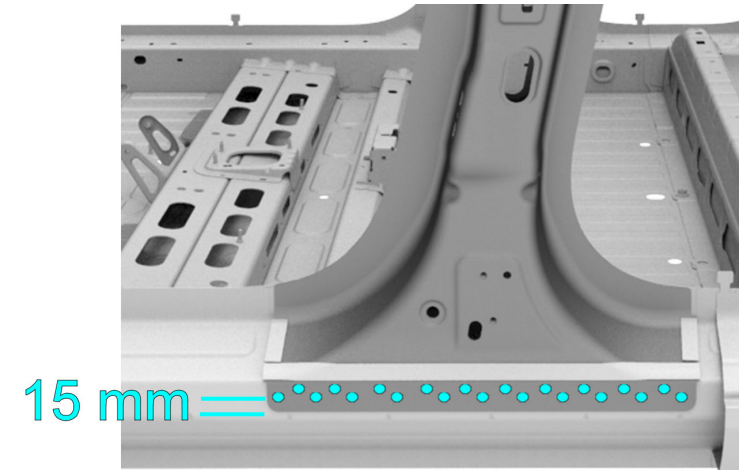


NOTE: Mark and drill the holes for the top row of structural rivets in the B-Pillar Outer so that they go through the factory spot welds that were drilled out in an [earlier step](#).

H Use a drill with a 6.7 mm (17/64 in) bit to drill holes for structural rivets in the locations marked in the previous substeps.



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






Replacement - B-Pillar Assemblies

1 Prepare the new B-Pillar Inner Assembly and new B-Pillar Outer Assembly for installation (continued).

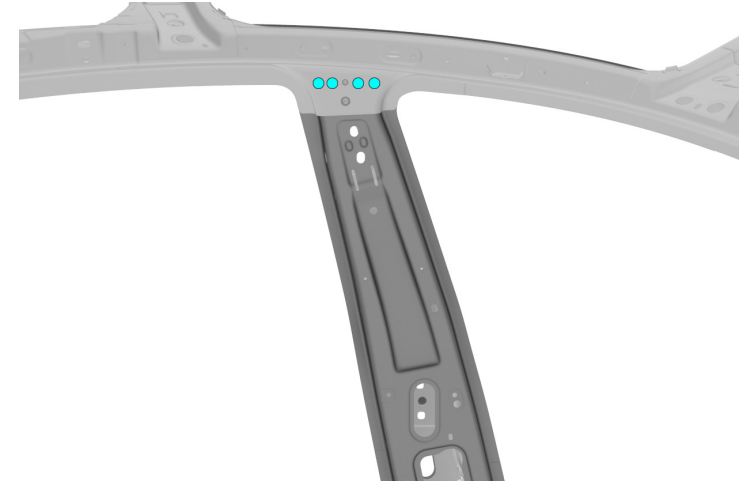
I Use a drill with a 6.7 mm (17/64 in) bit to drill holes for structural rivets in the locations where factory spot welds were drilled out in an [earlier step](#).

 High Strength Structural Rivet, 6.5 mm (x4)



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

J Mark the surface preparation boundary lines on the new B-Pillar Inner Assembly, the new B-Pillar Outer Assembly, and the vehicle.






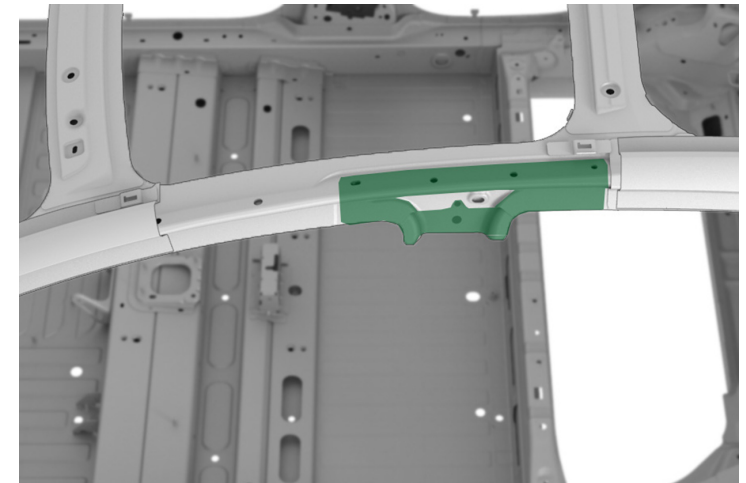
Replacement - B-Pillar Assemblies

1 Prepare the new B-Pillar Inner Assembly and new B-Pillar Outer Assembly for installation (continued).

K Remove the new B-Pillar Inner Assembly and the new B-Pillar Outer Assembly.

L Mark the bond path areas on the new B-Pillar Inner Assembly, the new B-Pillar Outer Assembly, and the vehicle.

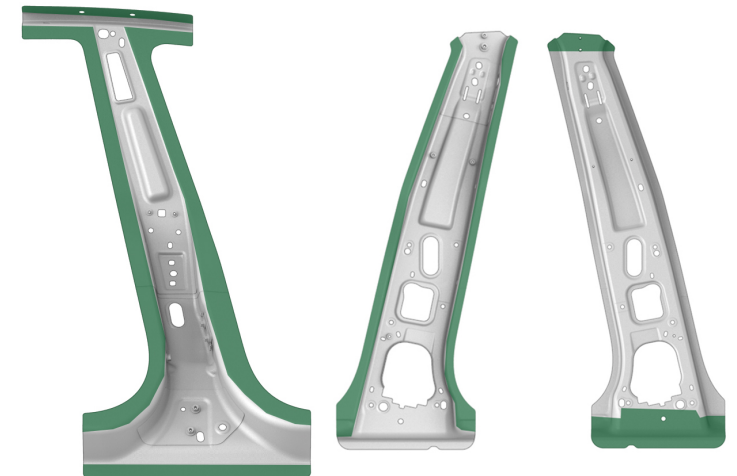
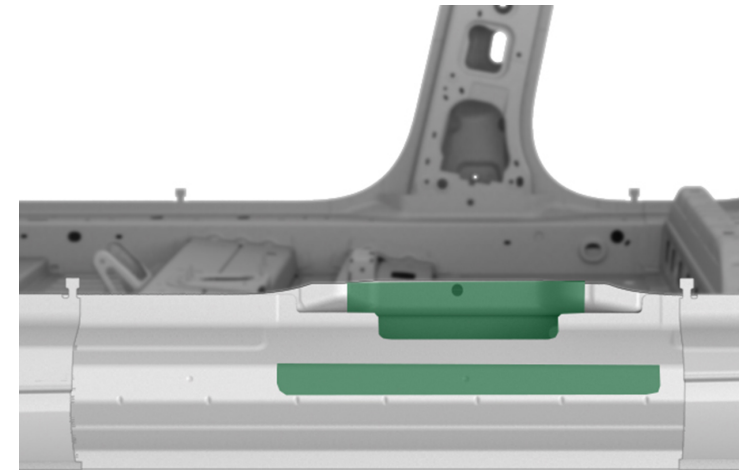
 Steel-to-Steel Mating Surface





Replacement - B-Pillar Assemblies

- 1 Prepare the new B-Pillar Inner Assembly and new B-Pillar Outer Assembly for installation (continued).
- L Mark the bond path areas on the new B-Pillar Inner Assembly, the new B-Pillar Outer Assembly, and the vehicle (continued).





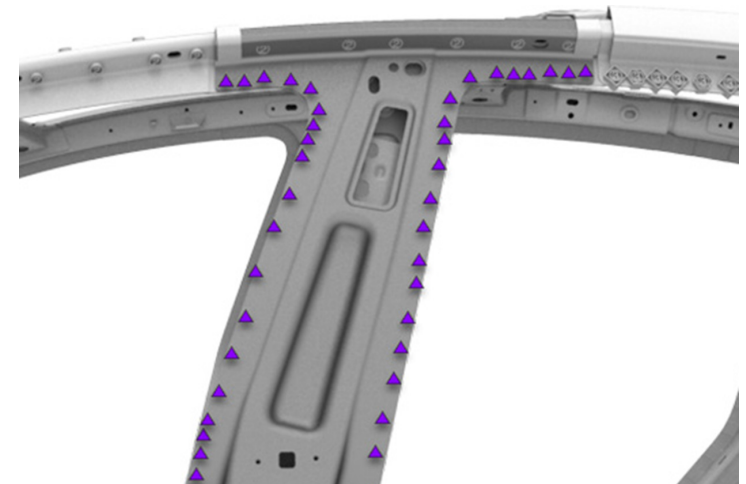
Replacement - B-Pillar Assemblies

- 2 Prepare the surfaces to install the new B-Pillar Inner Assembly and the new B-Pillar Outer Assembly.

A Use a red Scotch-Brite pad or equivalent to scuff the e-coat on the new B-Pillar Inner Assembly, the new B-Pillar Outer Assembly, and the vehicle in the bond path areas.

B Mark the installation spot weld locations.

▲ Installation Spot Weld

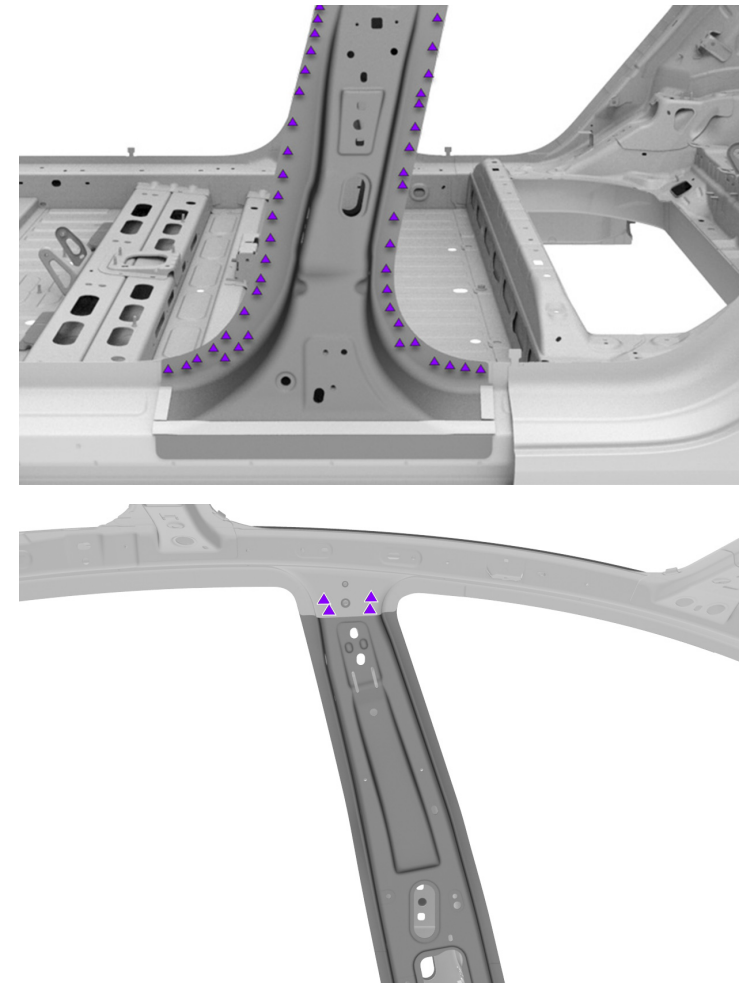




Replacement - B-Pillar Assemblies

2 Prepare the surfaces to install the new B-Pillar Inner Assembly and the new B-Pillar Outer Assembly (continued).

B Mark the installation spot weld locations (continued).

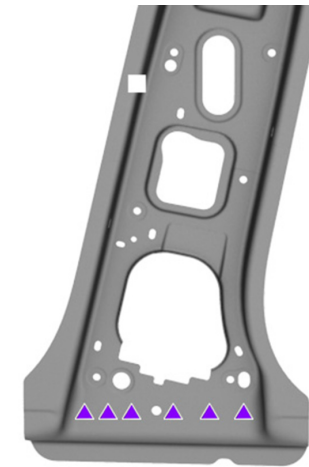




Replacement - B-Pillar Assemblies

2 Prepare the surfaces to install the new B-Pillar Inner Assembly and the new B-Pillar Outer Assembly (continued).

B Mark the installation spot weld locations (continued).



C Use a disc sander with a medium-abrasive surface conditioning disc to remove the e-coat on the new B-Pillar Inner Assembly, the new B-Pillar Outer Assembly, and 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.



Replacement - B-Pillar Assemblies

2 Prepare the surfaces to install the new B-Pillar Inner Assembly and the new B-Pillar Outer Assembly (continued).

D 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 to install the new B-Pillar Inner Assembly.

A Spread a thin coating of structural adhesive as a primer layer on the bond paths on the vehicle and the new B-Pillar Inner Assembly.



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 - B-Pillar Assemblies

3 Apply structural adhesive to install the new B-Pillar Inner Assembly (continued).

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

4 Install the new B-Pillar Inner Assembly.


A Put the new B-Pillar Inner Assembly into position.

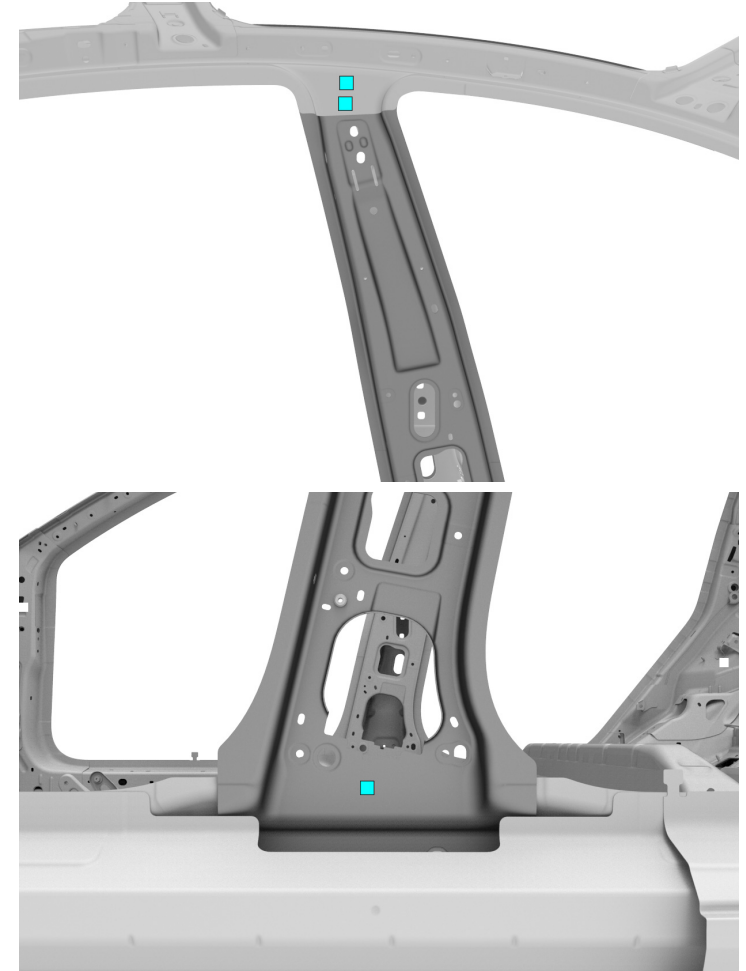


Replacement - B-Pillar Assemblies

4 Install the new B-Pillar Inner Assembly (continued).

B Temporarily install the bolts shown, but do not torque them fully at this time.

 Bolt, hex-head (x3)



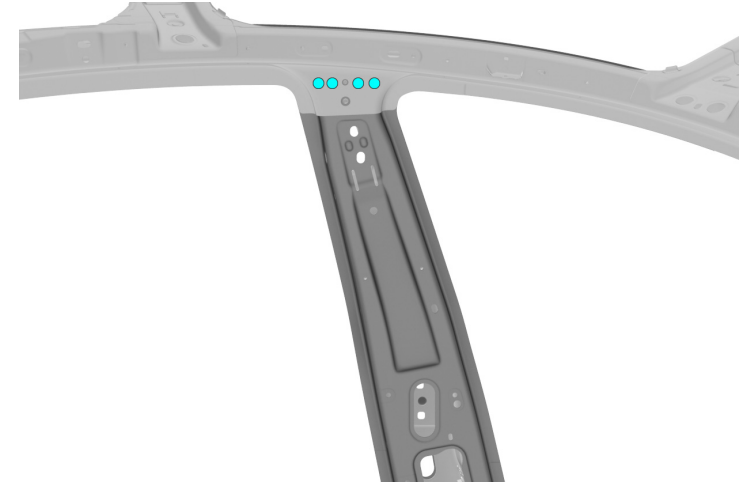


Replacement - B-Pillar Assemblies

4 Install the new B-Pillar Inner Assembly (continued).

C Insert the structural rivets.
● High Strength Structural Rivet, 6.5 mm (x4)

D Install the structural rivets.





Replacement - B-Pillar Assemblies

4 Install the new B-Pillar Inner Assembly (continued).

E Perform resistance spot welding.
▲ Installation Spot Weld (x10)



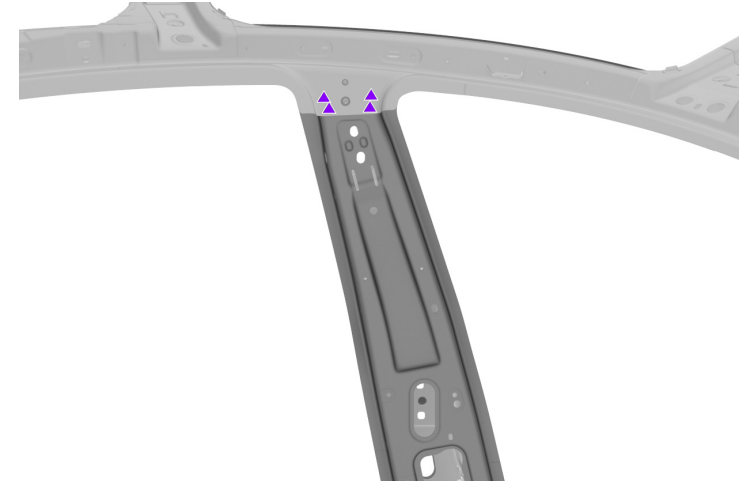
WARNING: Failure to follow all welding safety precautions, including the use of personal protective equipment, could result in serious injury or property damage. Only technicians who have successfully met Tesla's requirements for welding training are authorized to weld structural components on Tesla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



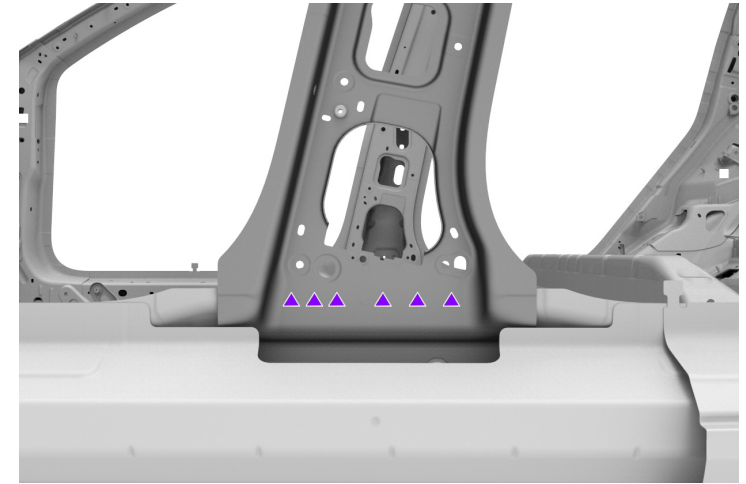
CAUTION: Use only insulated clamps within 200 mm (8 in) of resistance spot weld locations. Do not perform resistance spot welding when there is an uninsulated clamp within 200 mm (8 in) of the spot weld location.





Replacement - B-Pillar Assemblies

- 4 Install the new B-Pillar Inner Assembly (continued).
- E Perform resistance spot welding (continued).



- F Remove any discoloration from the weld areas.



Replacement - B-Pillar Assemblies

4 Install the new B-Pillar Inner Assembly (continued).

G Apply urethane adhesive to the foam dams that were removed from the sill cavity in an [earlier step](#), and install them in the original locations.

5 Apply structural adhesive to install the new B-Pillar Outer Assembly.

A Spread a thin coating of structural adhesive as a primer layer on the bond paths on the vehicle, the new B-Pillar Inner Assembly, and the new B-Pillar Outer Assembly.



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 - B-Pillar Assemblies

- 5 Apply structural adhesive to install the new B-Pillar Outer Assembly (continued).
 - B While the primer layer is still wet, apply a bead of structural adhesive on top of the primer layer on the vehicle and the new B-Pillar Inner Assembly.

- 6 Install the new B-Pillar Outer Assembly.
 - A Put the new B-Pillar Outer Assembly into position.

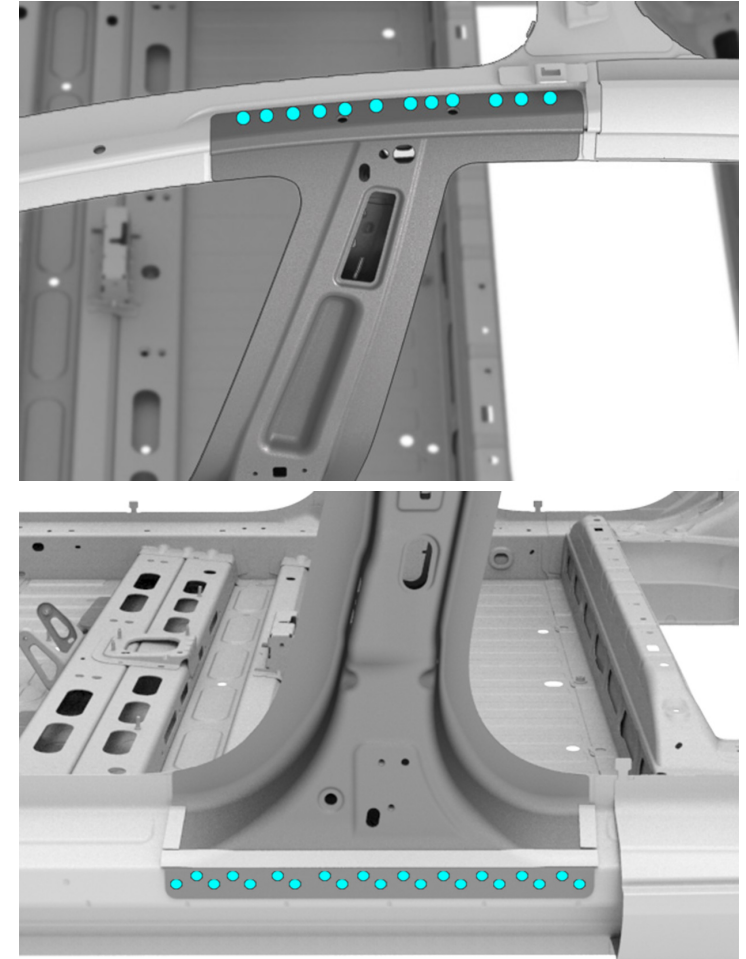


Replacement - B-Pillar Assemblies

6 Install the new B-Pillar Outer Assembly (continued).

B Insert the structural rivets.

● High Strength Structural Rivet, 6.5 mm (x33)





Replacement - B-Pillar Assemblies

6 Install the new B-Pillar Outer Assembly (continued).

C

Align the new B-Pillar Outer Assembly to the frame bench jig points.



NOTE: If necessary, use a 1 mm (1/16 in) shim to account for the thickness of the Body Side Outer.

D

Install the structural rivets.



Replacement - B-Pillar Assemblies

6 Install the new B-Pillar Outer Assembly (continued).

E Perform resistance spot welding.
▲ Installation Spot Weld



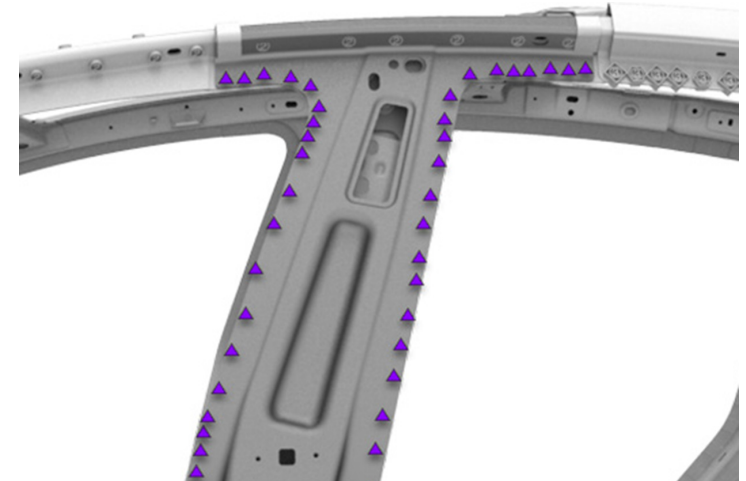
WARNING: Failure to follow all welding safety precautions, including the use of personal protective equipment, could result in serious injury or property damage. Only technicians who have successfully met Tesla's requirements for welding training are authorized to weld structural components on Tesla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



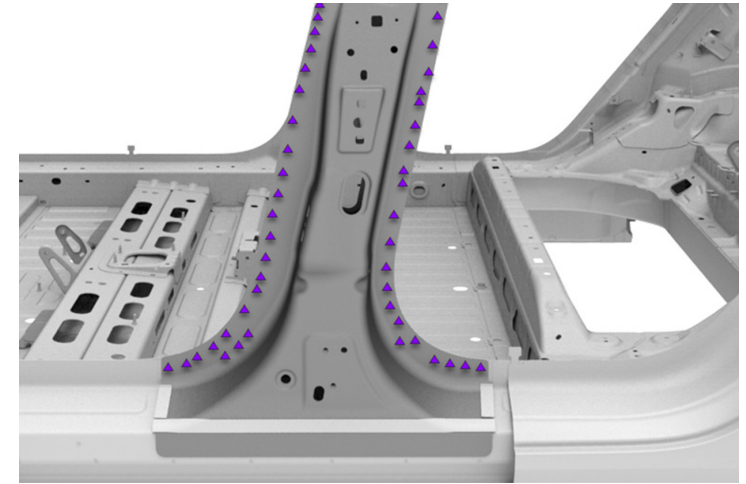
CAUTION: Use only insulated clamps within 200 mm (8 in) of resistance spot weld locations. Do not perform resistance spot welding when there is an uninsulated clamp within 200 mm (8 in) of the spot weld location.





Replacement - B-Pillar Assemblies

- 6 Install the new B-Pillar Outer Assembly (continued).
- E Perform resistance spot welding (continued).



- F Wipe off any excess adhesive.



Replacement - B-Pillar Assemblies

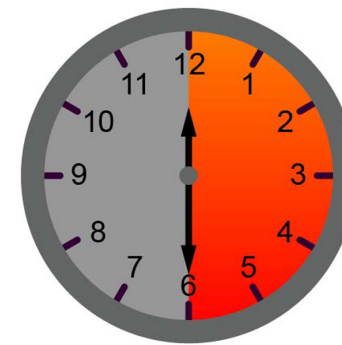
6 Install the new B-Pillar Outer Assembly (continued).

G Clamp all areas that do not have fasteners.

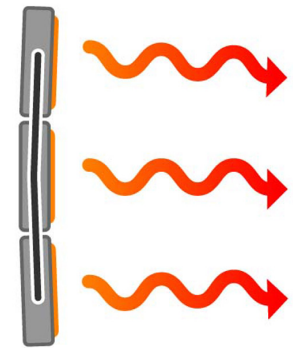
H Bake the structural adhesive so that the bonded panels reach a temperature of 60°C–80°C (140°F–176°F) for at least 30 minutes to achieve full strength.



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



B-Pillar

Replacement - Body Side Outer

1 Prepare for the installation of the new B-Pillar Body Side Outer.

A Put the new B-Pillar Body Side Outer into position and clamp it in place.

B Trim the new B-Pillar Body Side Outer to fit.



Replacement - Body Side Outer

1 Prepare for the installation of the new B-Pillar Body Side Outer (continued).

C Remove the new B-Pillar Body Side Outer.

2 Create and install backing plates for the Body Side Outer butt joints.

A Cut 40 mm (1-9/16 in) sections from the remaining pieces of the original Body Side Outer to create backing plates for the 4 butt joints.



NOTE: These pieces were removed in an [earlier step](#).



Replacement - Body Side Outer

2 Create and install backing plates for the Body Side Outer butt joints (continued).

B Use a disc sander with a medium-abrasive surface conditioning disc to remove the e-coat or paint from the outside surface of the backing plates and the weld areas on the vehicle.



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



NOTE: Wipe the sill area with isopropyl alcohol (IPA) to remove any cavity wax.

C Trim the flanges from the backing plates as necessary to allow the backing plates to fit inside the butt joints.



NOTE: The backing plates should take up all available space between the Body Side Outer Panel and the underlying panels.



Replacement - Body Side Outer

2 Create and install backing plates for the Body Side Outer butt joints (continued).

D Use a drill with an 8 mm (5/16 in) bit to drill holes for plug welds.

E Apply a suitable corrosion-resistant epoxy primer to any bare metal on the backsides of the backing plates (the sides of the backing plates that will be facing the inside of the vehicle when installed).



Replacement - Body Side Outer

2 Create and install backing plates for the Body Side Outer butt joints (continued).

F Put the backing plates into position and clamp them into place. If necessary, trim them to fit.

G Plug weld the backing plates.



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.



Replacement - Body Side Outer

2

Create and install backing plates for the Body Side Outer butt joints (continued).

H

Use a grinding tool to grind down the plug welds until they are flush with the panel.

3

Prepare for the installation of the new B-Pillar Body Side Outer.

A

Put the new B-Pillar Body Side Outer into position and clamp it into place.

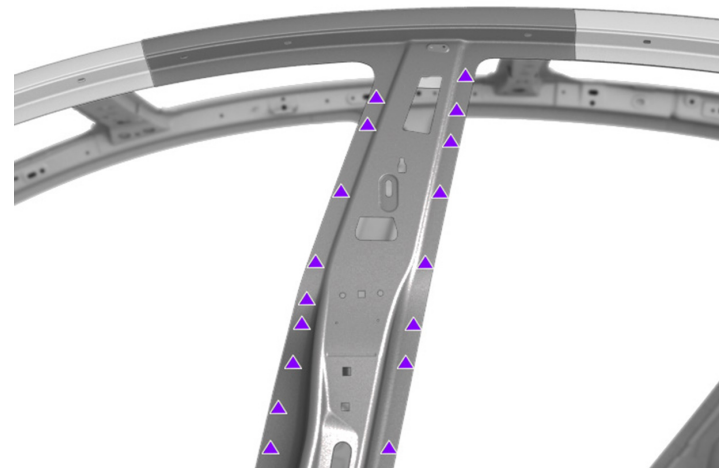
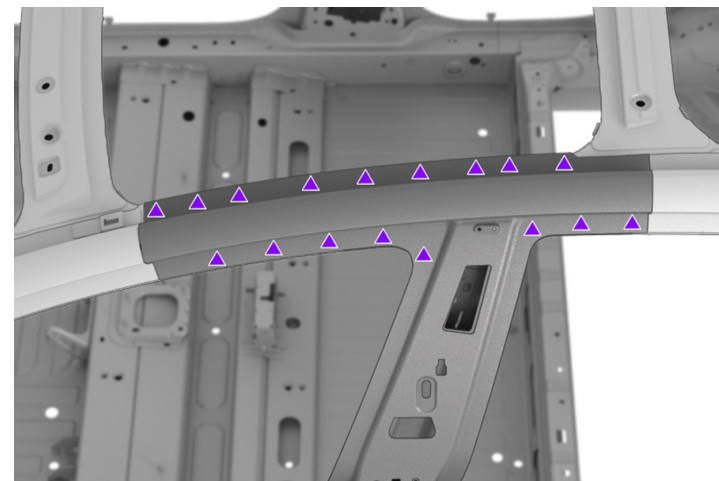


Replacement - Body Side Outer

3 Prepare for the installation of the new B-Pillar Body Side Outer (continued).

B Mark the installation spot weld locations on the new B-Pillar Body Side Outer.

▲ Installation Spot Weld

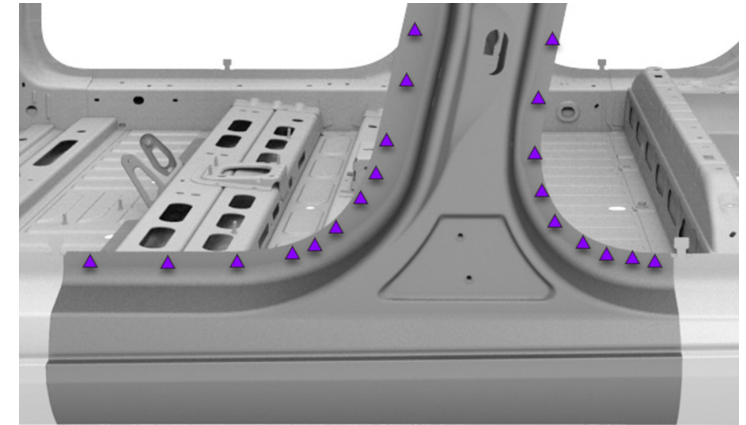




Replacement - Body Side Outer

3 Prepare for the installation of the new B-Pillar Body Side Outer (continued).

B Mark the installation spot weld locations on the new B-Pillar Body Side Outer (continued).





C Mark the surface preparation boundary lines on the new B-Pillar Body Side Outer and the vehicle.

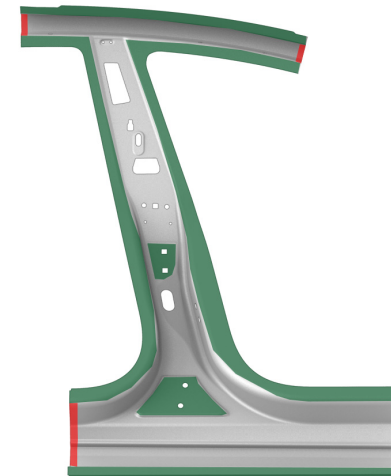


Replacement - Body Side Outer

- 3 Prepare for the installation of the new B-Pillar Body Side Outer (continued).
- D Remove the new B-Pillar Body Side Outer.

- E Mark the bond path and GMA weld areas on the new B-Pillar Body Side Outer and on the vehicle.

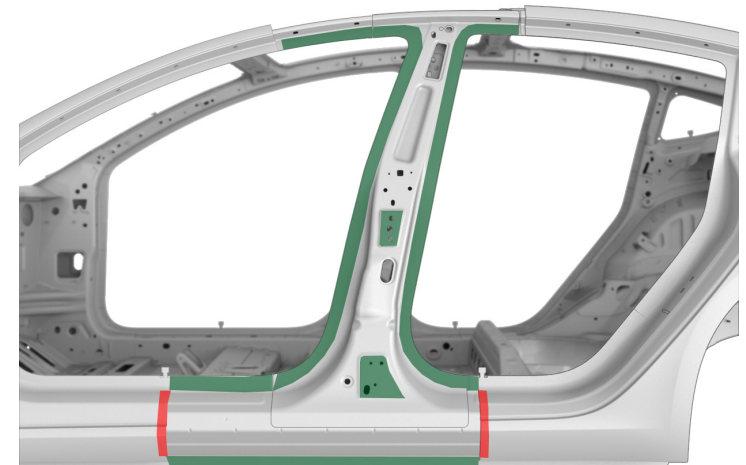
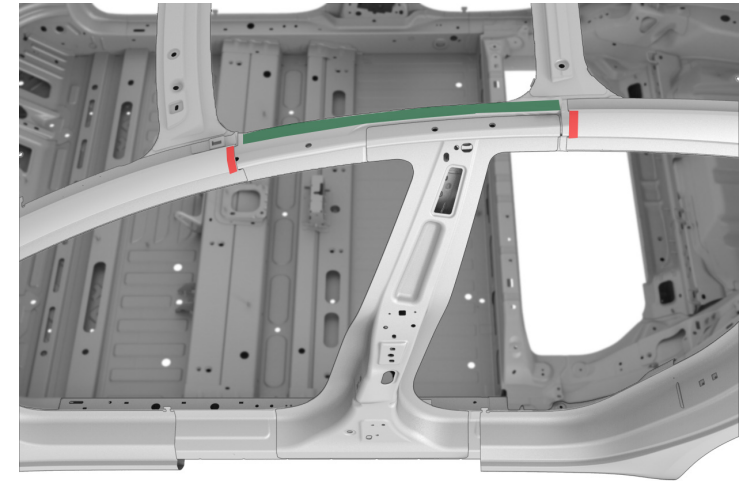
-  Steel-to-Steel Mating Surface
-  GMA Weld





Replacement - Body Side Outer

- 3 Prepare for the installation of the new B-Pillar Body Side Outer (continued).
- E Mark the bond path and GMA weld areas on the new B-Pillar Body Side Outer and on the vehicle (continued).





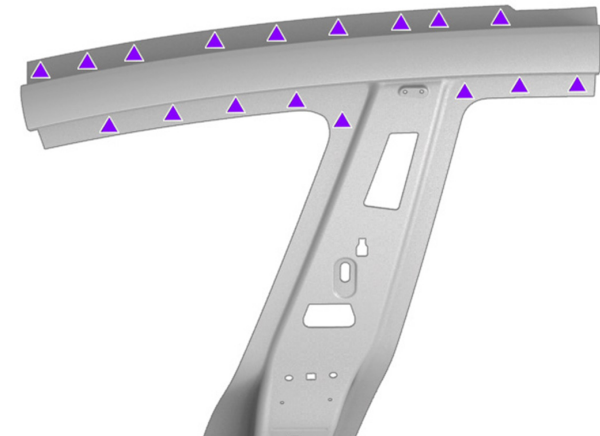
Replacement - Body Side Outer

4 Prepare the surfaces to install the new B-Pillar Body Side Outer.

A Use a red Scotch-Brite pad or equivalent to scuff the e-coat on the new B-Pillar Body Side Outer and on the vehicle in the bond path areas.

B Mark the installation spot weld locations.

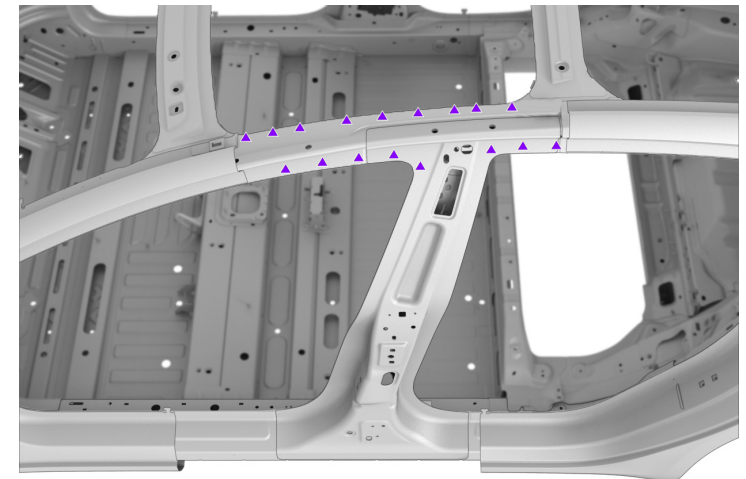
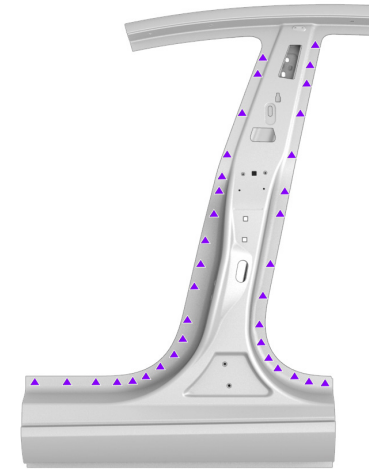
▲ Installation Spot Weld





Replacement - Body Side Outer

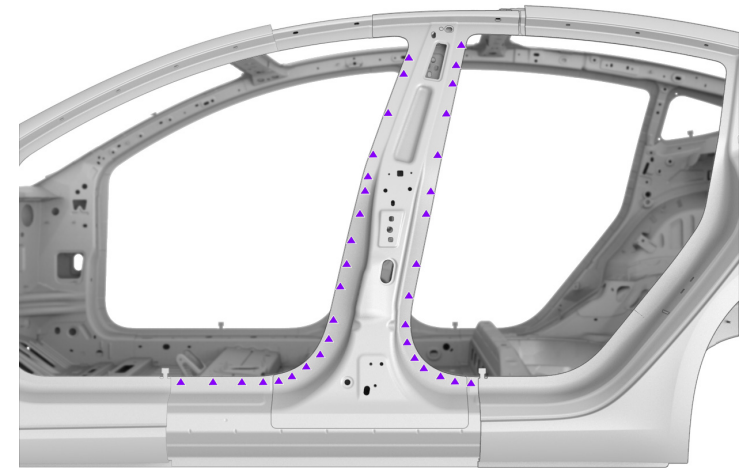
- 4 Prepare the surfaces to install the new B-Pillar Body Side Outer (continued).
- B Mark the installation spot weld locations (continued).





Replacement - Body Side Outer

- 4 Prepare the surfaces to install the new B-Pillar Body Side Outer (continued).
- B Mark the installation spot weld locations (continued).



- C Use a disc sander with a medium-abrasive surface conditioning disc to remove the e-coat on the new B-Pillar Body Side Outer and on the vehicle in the GMA weld and installation spot 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.



Replacement - Body Side Outer

4 Prepare the surfaces to install the new B-Pillar Body Side Outer (continued).

D Clean all the 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.

5 Apply structural adhesive to install the new B-Pillar Body Side Outer.

A Spread a thin coating of structural adhesive as a primer layer on the bond paths on the vehicle and the new B-Pillar Body Side Outer.



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



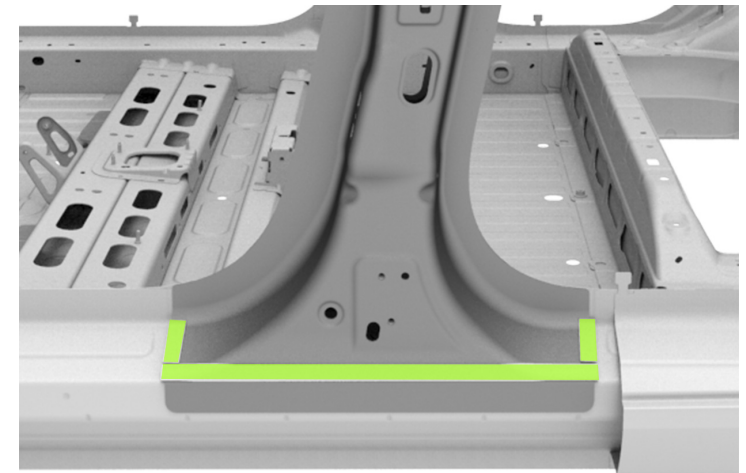
Replacement - Body Side Outer

5 Apply structural adhesive to install the new B-Pillar Body Side Outer (continued).

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

6 Install the new B-Pillar Body Side Outer.

A Apply a bead of urethane sealant to the foam dams that were removed from the original B-Pillar Outer in an [earlier step](#), and then install them in the original locations (highlighted). Apply a bead of urethane sealant to the foam dam edges.





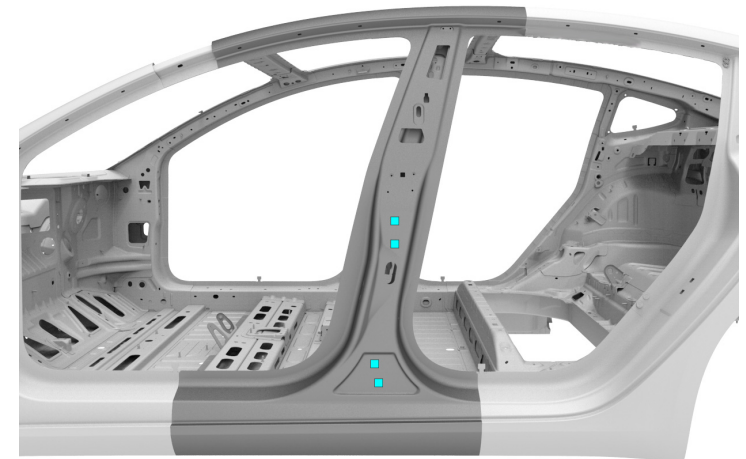
Replacement - Body Side Outer

6 Install the new B-Pillar Body Side Outer (continued).

B Put the new B-Pillar Body Side Outer into position and clamp it into place.

C Temporarily install the door hinge bolts.

 Bolt, hex-head (x4)





B-Pillar

MODEL 3

Replacement - Body Side Outer

6 Install the new B-Pillar Body Side Outer (continued).

D Wipe off any excess adhesive.



Replacement - Body Side Outer

6 Install the new B-Pillar Body Side Outer (continued).

E Perform resistance spot welding.
▲ Installation Spot Weld



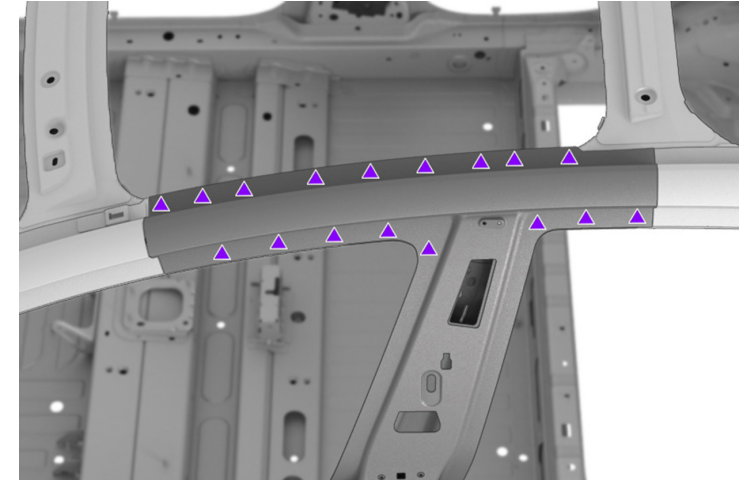
WARNING: Failure to follow all welding safety precautions, including the use of personal protective equipment, could result in serious injury or property damage. Only technicians who have successfully met Tesla's requirements for welding training are authorized to weld structural components on Tesla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



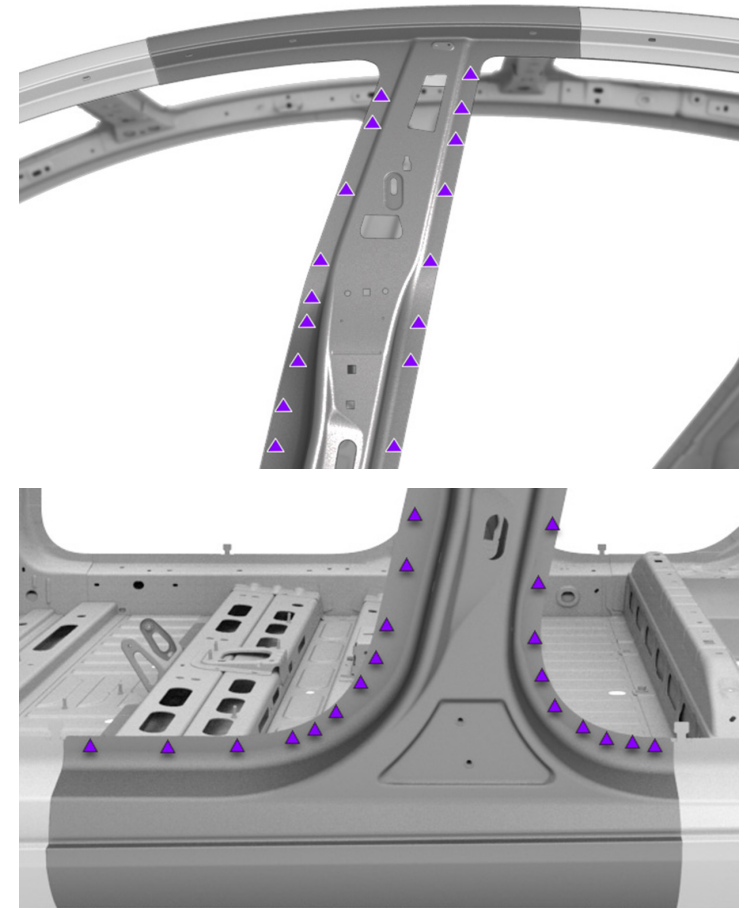
CAUTION: Use only insulated clamps within 200 mm (8 in) of resistance spot weld locations. Do not perform resistance spot welding when there is an uninsulated clamp within 200 mm (8 in) of the spot weld location.





Replacement - Body Side Outer

- 6 Install the new B-Pillar Body Side Outer (continued).
- E Perform resistance spot welding (continued).





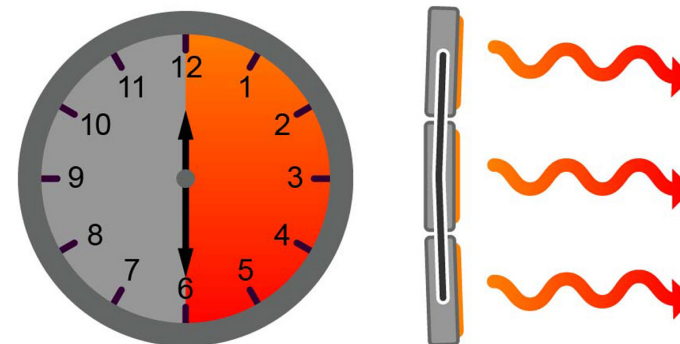
Replacement - Body Side Outer

6 Install the new B-Pillar Body Side Outer (continued).

F 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.

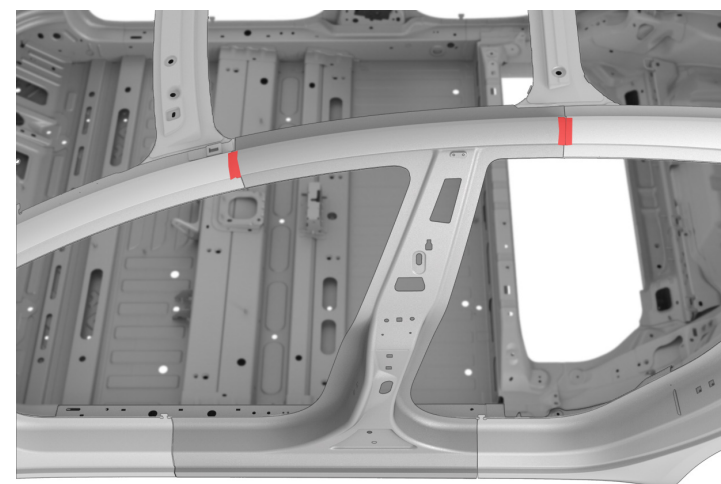


00:30:00+

60°C–80°C

7 GMA weld the Body Side Outer butt joints.

A Perform GMA welding in the butt joint areas directly above the backing plates.





Replacement - Body Side Outer

7 GMA weld the Body Side Outer butt joints (continued).

A Perform GMA welding in the butt joint areas directly above the backing plates (continued).

 GMA Weld



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: To maintain vehicle crash integrity, use only ER 4145 welding wire (available from Tesla) and an approved GMA welder to perform aluminum GMA welding 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.



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.

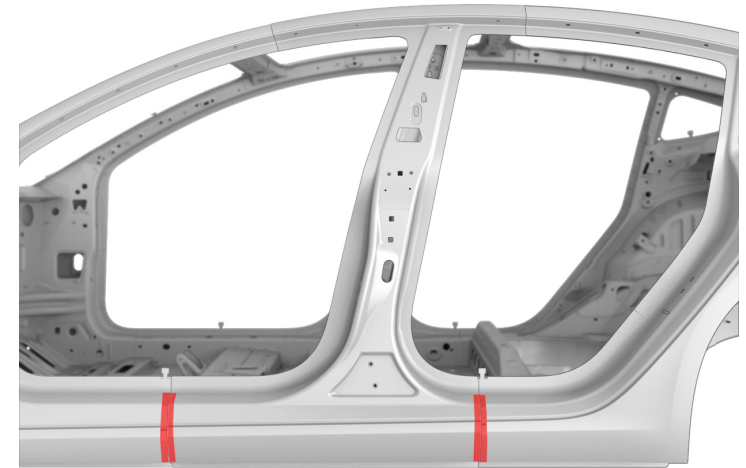


Replacement - Body Side Outer

7 GMA weld the Body Side Outer butt joints (continued).

A Perform GMA welding in the butt joint areas directly above the backing plates (continued).

B Use a grinding tool to grind down the welds.






Replacement - Body Side Outer

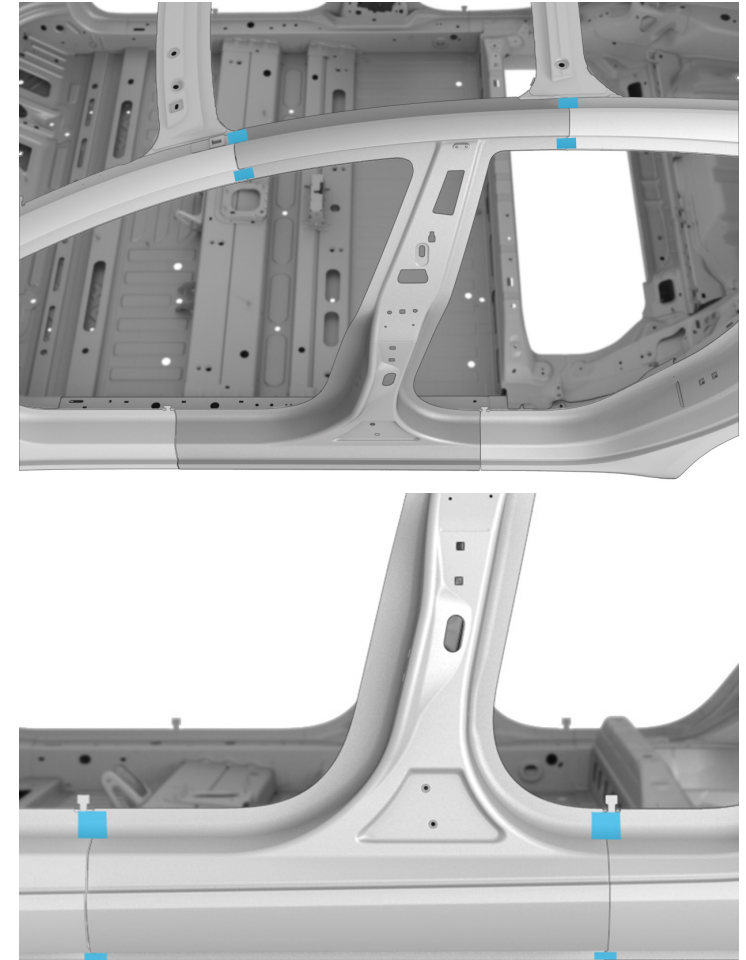
8

Secure the Body Side Outer butt joint flanges.

A

Pry up the flanges of the original Body Side Outer on both sides of each butt joint weld in preparation to apply structural adhesive.

 Structural Adhesive





Replacement - Body Side Outer

8

Secure the Body Side Outer butt joint flanges (continued).

B

Apply structural adhesive underneath the flanges that were pried up in the previous substep.

C

Clamp the flanges back into position.



Replacement - Body Side Outer

9

If required, apply a suitable body filler to the joint and finish for paint.

10

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



Replacement - Body Side Outer

11

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