


**B-Pillar Outer Panel - SuperCrew****Special Tool(s) / General Equipment**

Spherical Cutter
Self-Piercing Rivet (SPR) Remover/Installer
Belt Sander
Hot Air Gun
Air Body Saw
MIG/MAG Welding Equipment
Locking Pliers


**Materials**

Name	Specification
Metal Bonding Adhesive TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B	-

**Removal**

 **WARNING:** Electric vehicles damaged by a crash may have compromised high voltage safety systems and present a potential high voltage electrical shock hazard. Exercise caution and wear appropriate Personal Protective Equipment (PPE) safety gear, including high voltage safety gloves and boots. Remove all metallic jewelry, including watches and rings. Isolate the HV system as directed by the Ford Emergency Response Guide for the vehicle. Failure to follow these instructions may result in serious personal injury or death.

**NOTICE:** Battery electric vehicle (BEV), hybrid electric vehicle (HEV) and plug-in hybrid electric vehicle (PHEV) contain a high-voltage battery. Before cutting or welding near the high-voltage battery it must be removed to avoid damage.

-  **WARNING:** Before beginning any service procedure in this manual, refer to health and safety warnings in section 100-00 General Information. Failure to follow this instruction may result in serious personal injury.

Refer to: [Health and Safety Precautions](#) (100-00 General Information, Description and Operation).

Refer to: [High Voltage System Health and Safety Precautions - Overview](#) (100-00 General Information, Description and Operation).

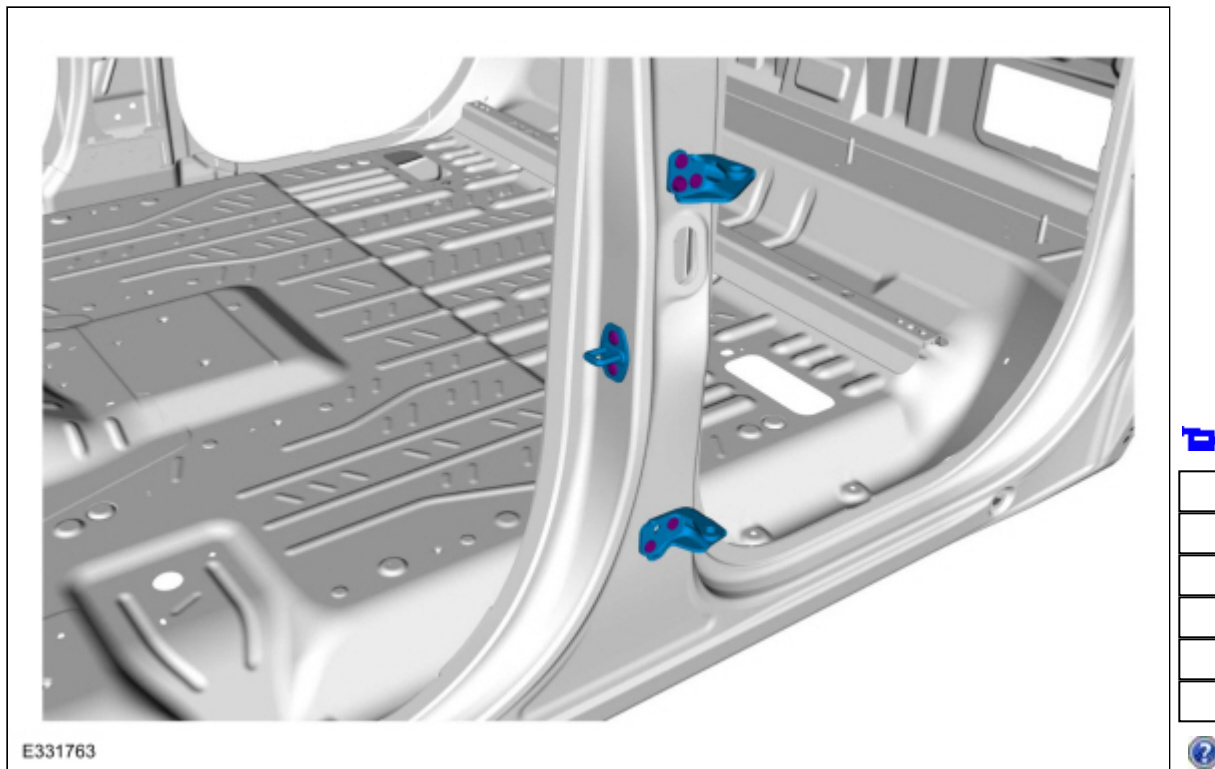
**NOTICE:** Body side sectioning is prohibited within 50mm of door hinge, door striker and restraints anchoring points.

**NOTE:** Aluminum body panels are highly receptive to heat transfer. With the extensive use of structural adhesives and non-structural sealers used in vehicle construction, the potential of heat transfer could impact adhesives and sealers in non-associated panels during the repair process. Many repairs areas that utilize

structural adhesive may be separated after fastener removal by using a panel chisel along the joint/flange. Using heat not exceeding 425° F to loosen a bonded panel should only be done when all panels in the joint will be replaced and new adhesive applied.

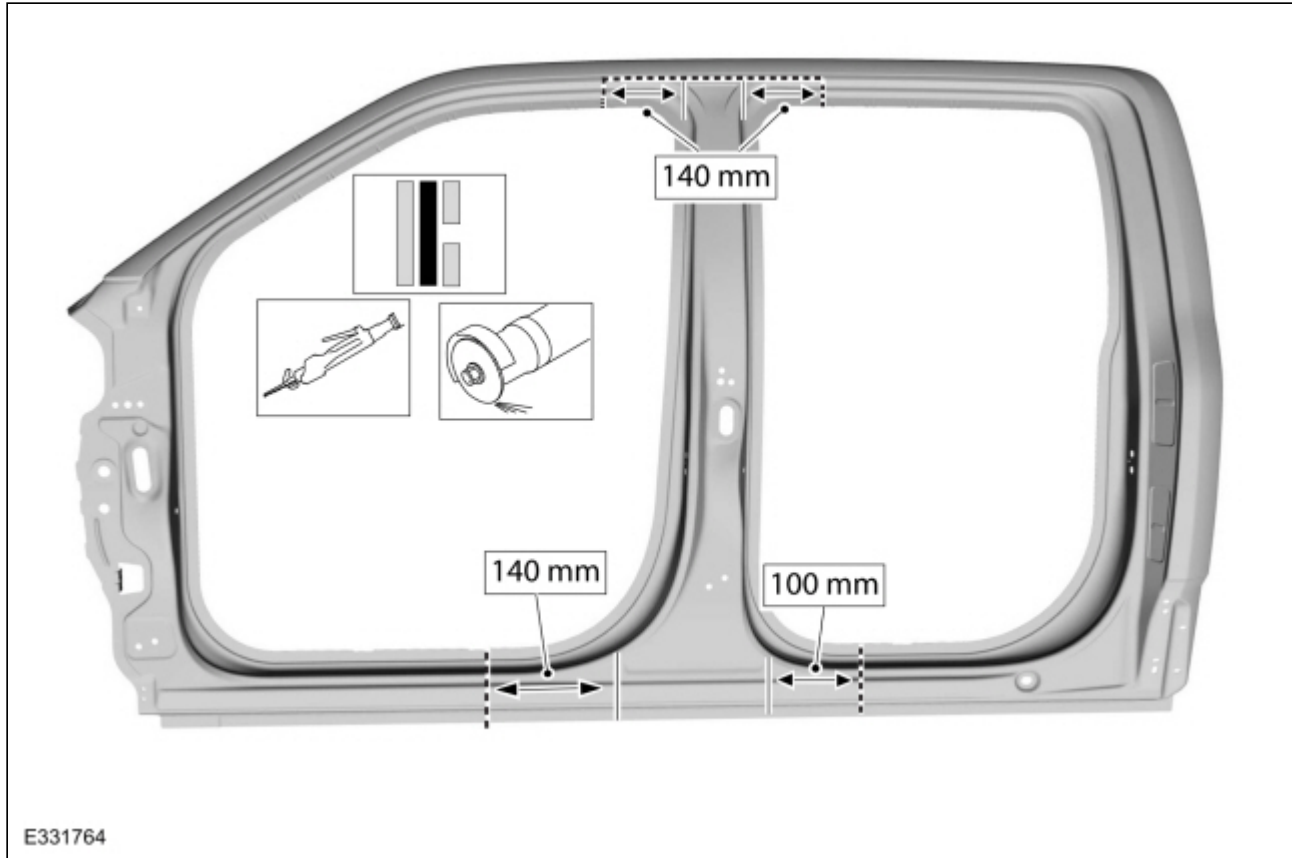
**NOTE:** LH side shown, RH side similar.

2. Depower the SRS.  
Refer to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
3. Verify the vehicle is dimensionally correct.  
Refer to: [Body and Frame](#) (501-26 Body Repairs - Vehicle Specific Information and Tolerance Checks, Description and Operation).
4. Remove the rear door.  
Refer to: [Rear Door - SuperCrew](#) (501-03 Body Closures, Removal and Installation).
5. Remove the front door striker and rear door hinges at the body.



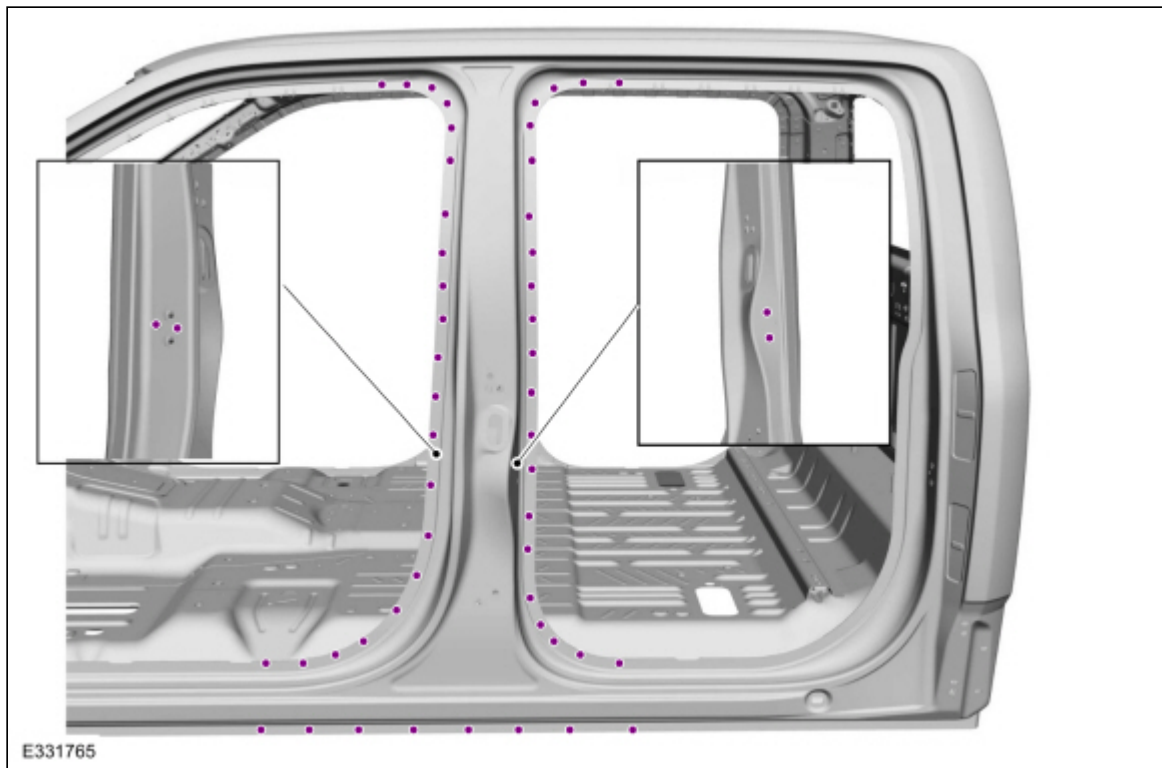
6. Remove the front and rear door tread plates and door opening weather strips.
7. Remove the side curtain air bag.  
Refer to: [Side Curtain Airbag - SuperCrew](#) (501-20B Supplemental Restraint System, Removal and Installation).
8. **Outer panel only**  
Carefully cut the outer panel only.

Use the General Equipment: Air Body Saw  
Use the General Equipment: Spherical Cutter



- 9. Remove the SPR fasteners.  
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
Use the General Equipment: Belt Sander

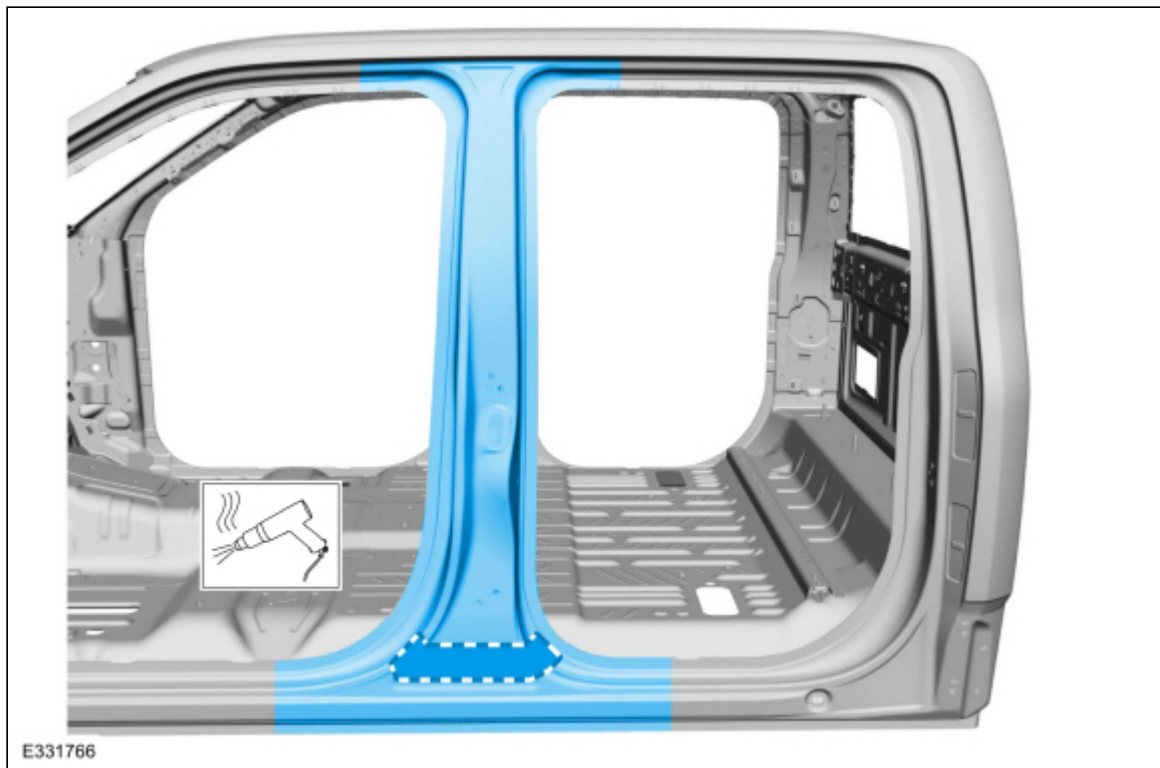




10. **NOTE:** Aluminum body panels are highly receptive to heat transfer. With the extensive use of structural adhesives and non-structural sealers used in vehicle construction, the potential of heat transfer could impact adhesives and sealers in non-associated panels during the repair process. Many repairs areas that utilize structural adhesive may be separated after fastener removal by using a panel chisel along the joint/flange. Using heat not exceeding 425° F to loosen a bonded panel should only be done when **all panels in the joint** will be replaced and new adhesive applied.

Break the adhesive bond and remove the B-pillar outer panel.  
Use the General Equipment: Hot Air Gun





## Installation

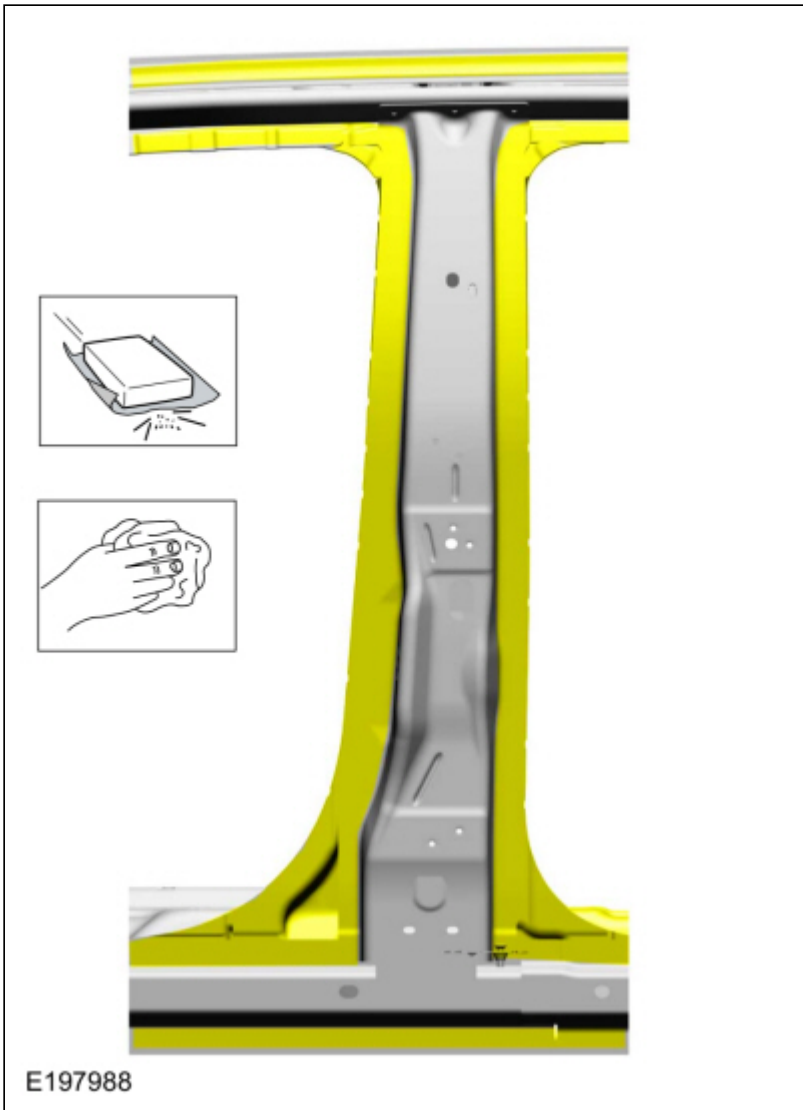
**NOTICE:** Body side sectioning is prohibited within 50mm of door hinge, door striker and restraints anchoring points.

**NOTE:** Do not install SPR fasteners directly in old SPR fastener location. SPR fasteners must be installed adjacent to the original location matching original quantity.

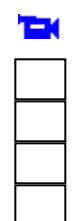
**NOTE:** Solid rivets or blind rivet fasteners may be used in place of SPR fasteners after enlarging existing holes to 6.5 mm.

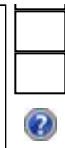
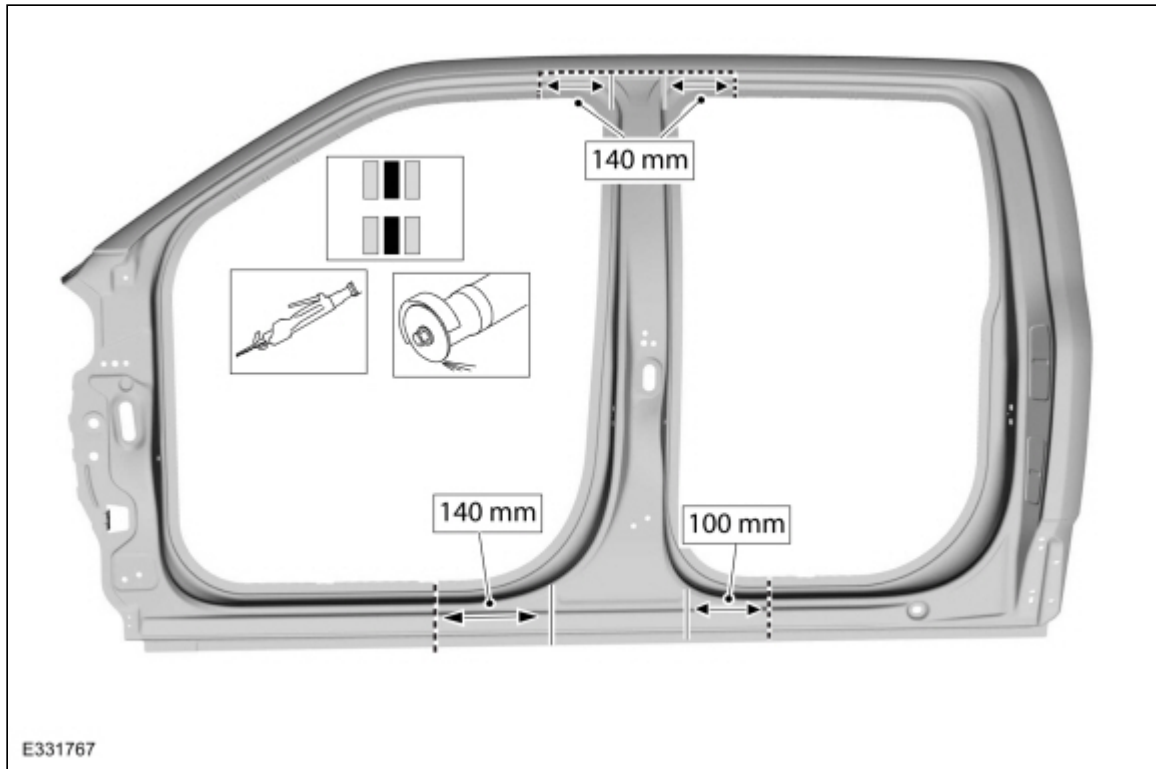
1. Sand using 80 grit sand paper to remove old adhesive and clean the B-pillar reinforcement mating surfaces.





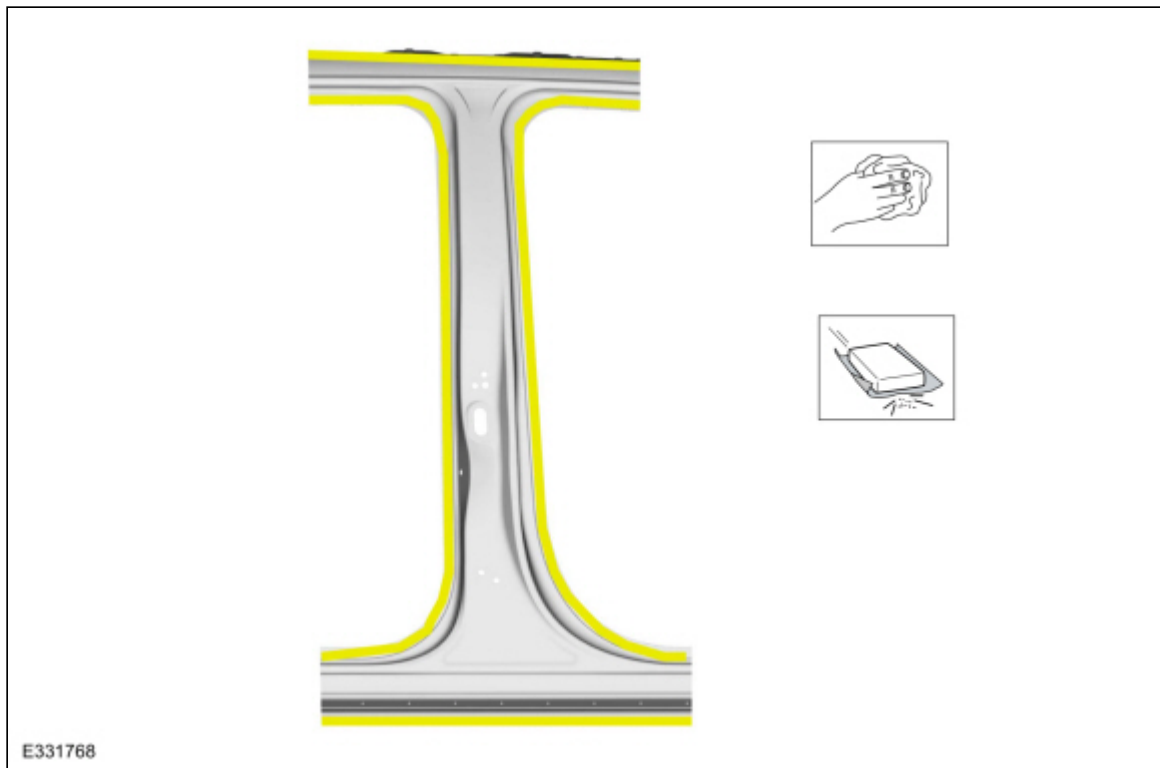
- 2. Cut the service panel to fit repair.  
Use the General Equipment: Air Body Saw  
Use the General Equipment: Spherical Cutter





- 3. Sand using 80 grit sand paper to remove e-coat and clean the B-pillar service panel mating surfaces.  
*Material:* Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B





4. **NOTE:** *The use of a backer plate when creating butt weld joints will produce a stronger and more uniform repair.*

**In butt-weld areas:** create a backer plate from an unused portion of the old body panel or service replacement panel and install on the vehicle at each sectioning joint.

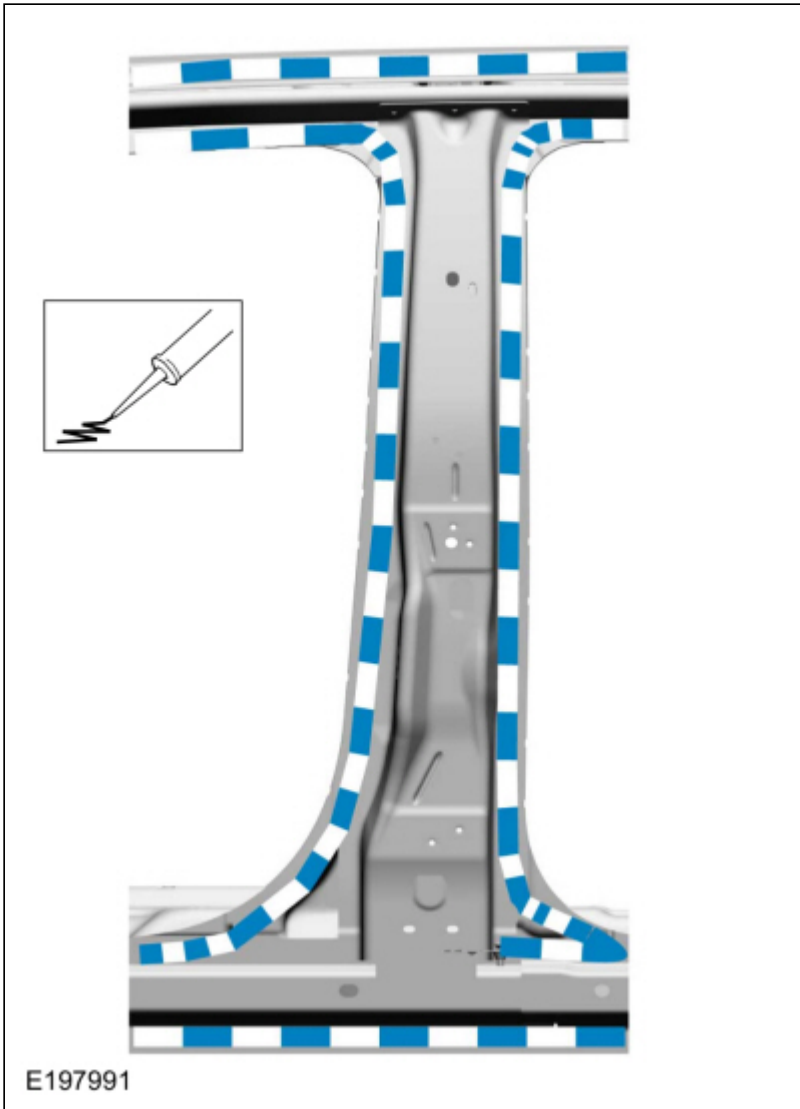
Refer to: [Joining Techniques](#) (501-25 Body Repairs - General Information, General Procedures).

5. Apply adhesive to the body side.

*Material:* Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B

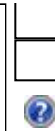
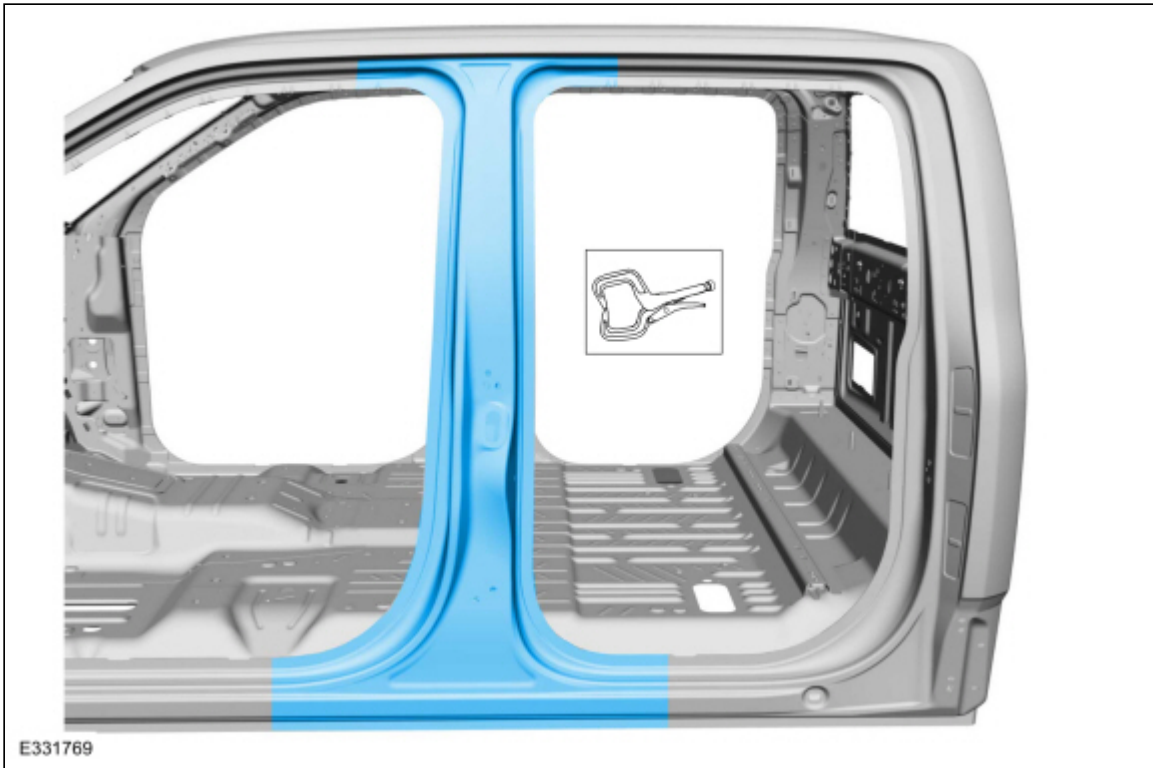






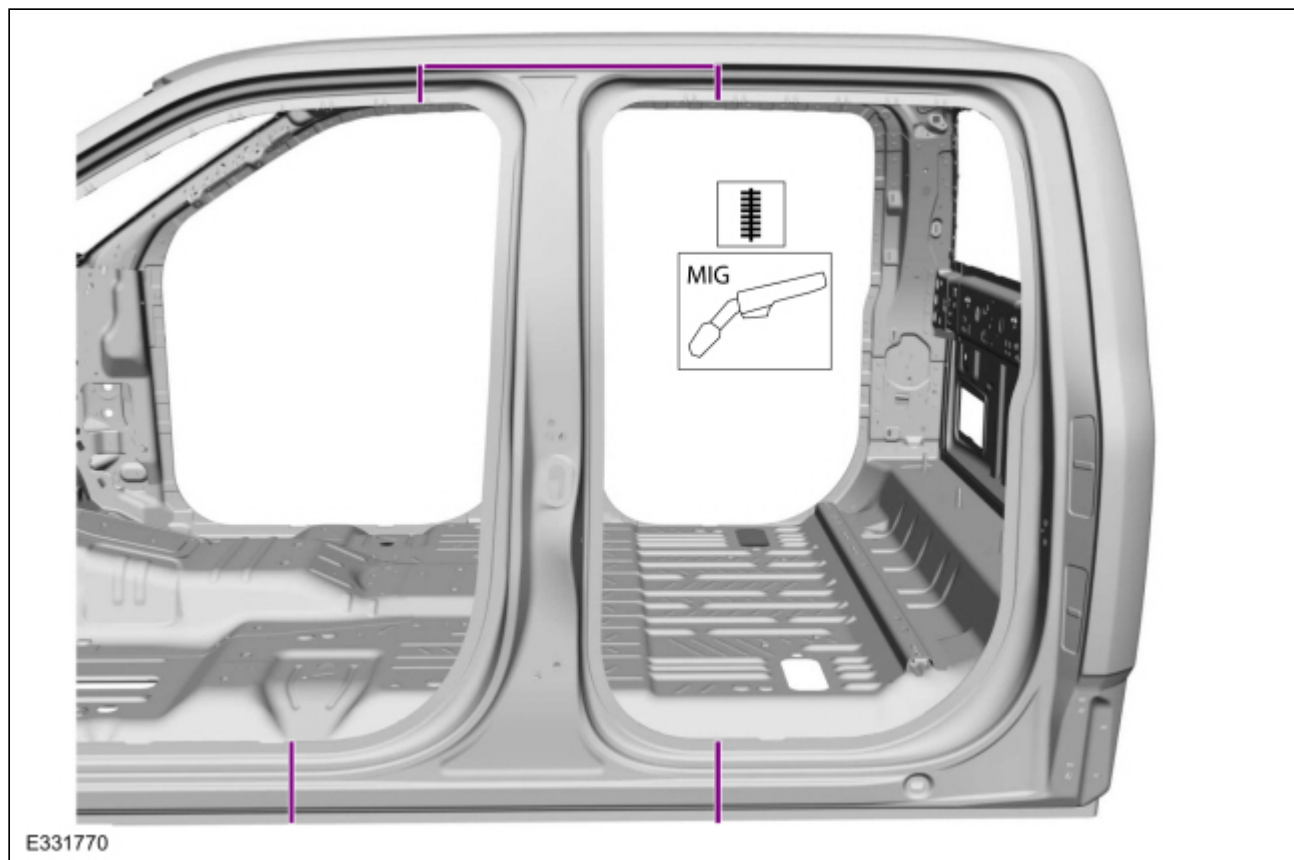
- 6. Install the service panel and clamp in position.  
Use the General Equipment: Locking Pliers





- 7. Complete joining of service panel to backer plate and weld the sectioning seams using a MIG welder set up for aluminum. Refer to: [Joining Techniques](#) (501-25 Body Repairs - General Information, General Procedures). Use the General Equipment: MIG/MAG Welding Equipment





8. **NOTE:** Do not install SPR fasteners directly in old SPR fastener location. SPR fasteners must be installed adjacent to the original location matching original quantity.

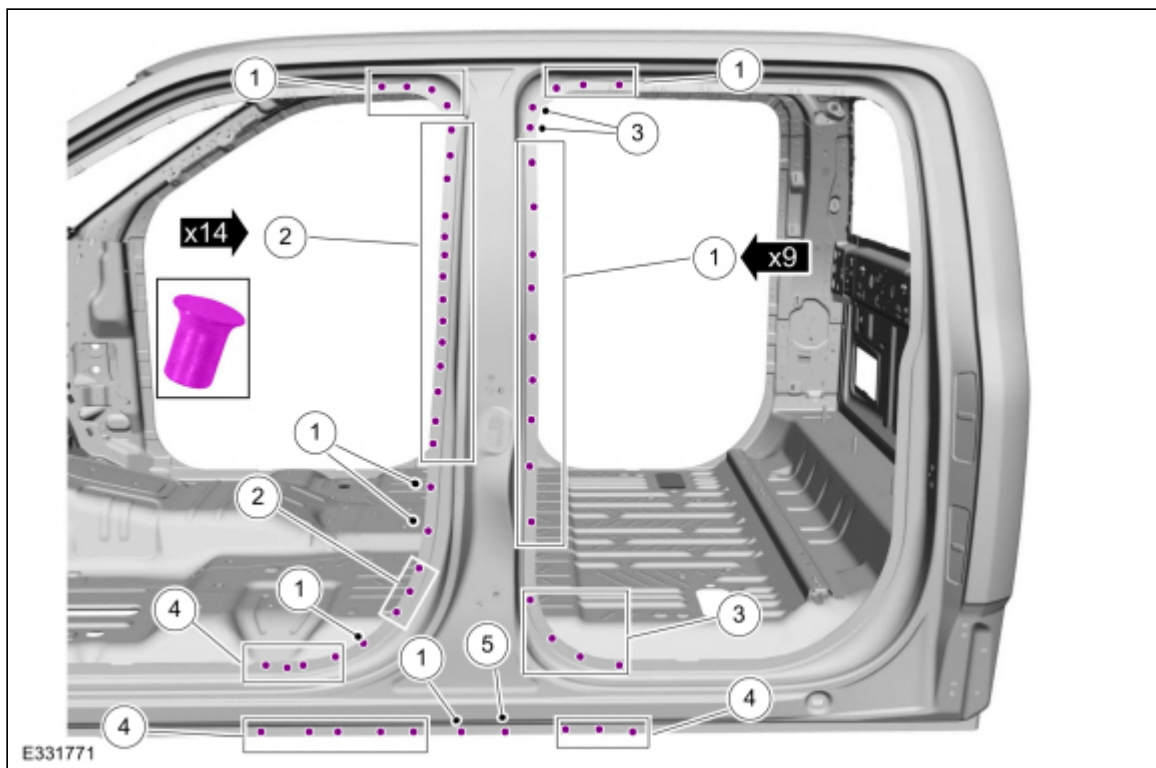
**NOTE:** Solid rivets or blind rivet fasteners may be used in place of SPR fasteners after enlarging existing holes to 6.5 mm.

Install fasteners.

Item	SPR Number	SPR Code	Henrob® Car-O- Liner®, CMO®, Chief®, Spanesi® Wielande and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	W708713-S900	AS	DZ09-025/H	SA-0400/SA-0401	-	-	-
2	W717184-S900	QA	DP10-200/H	SA-0400/SA-0402	-	-	-
3	W708717-S900	AW	DG10-220/H	SA-0400/SA-0402	-	-	-

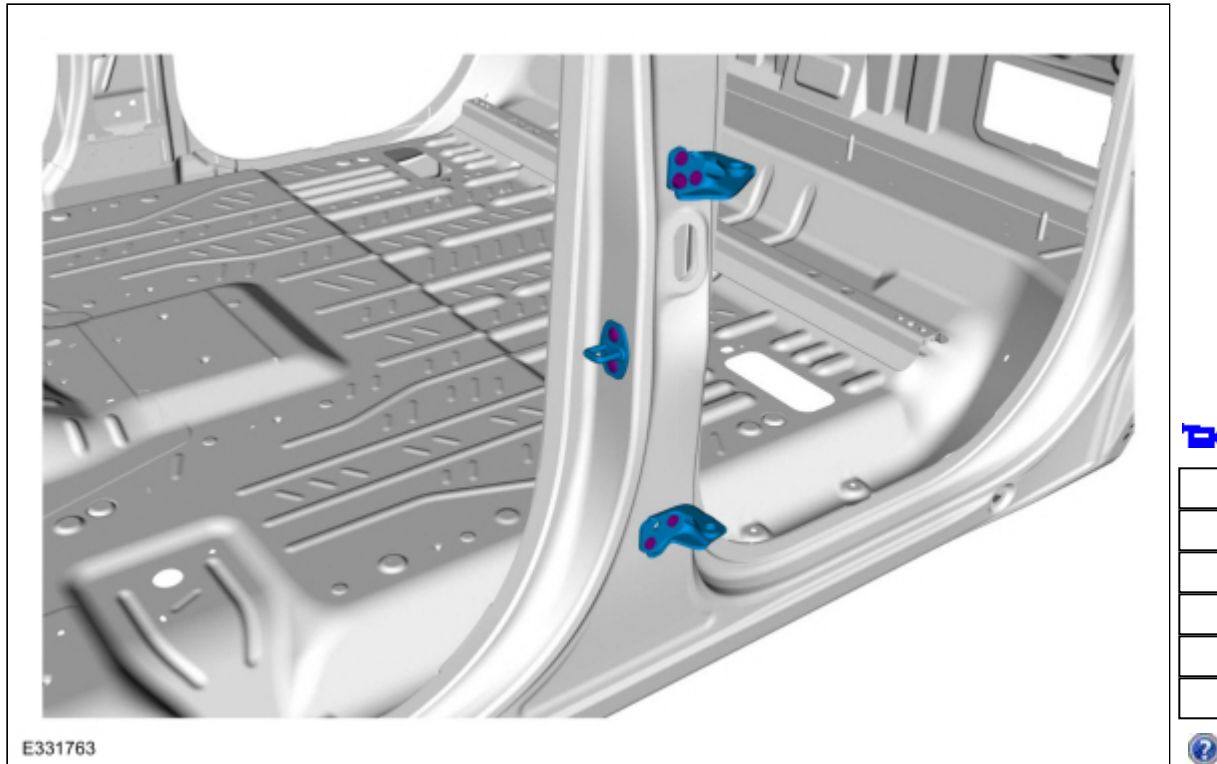
4	W717186-S900	EN	DP11-200/H	SA-0400/SA-0402	-	-	-
5	W708717-S900	AW	DP11-200/H	SA-0400/SA-0402	-	-	-

Refer to: [Joining Techniques](#) (501-25 Body Repairs - General Information, General Procedures).  
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer



9. Metal finish using typical aluminum metal finishing techniques and a fiber-based body filler.  
Refer to: [Special Repair Considerations for Aluminum Repairs](#) (501-25 Body Repairs - General Information, Description and Operation).
10. Refinish the repair using a Ford approved paint system.
11. Install the side curtain air bag.  
Refer to: [Side Curtain Airbag - SuperCrew](#) (501-20B Supplemental Restraint System, Removal and Installation).
12. Install the front and rear door weather strips and scuff plates.
13. Install the front door striker and rear door hinges.

- Front door striker.  
*Torque:* 18 lb.ft (25 Nm)
- Rear door hinges.  
*Torque:* 22 lb.ft (30 Nm)



14. Install and align the rear door.

Refer to: [Rear Door - SuperCrew](#) (501-03 Body Closures, Removal and Installation).

Refer to: [Rear Door Alignment - SuperCrew](#) (501-03 Body Closures, General Procedures).

15. Repower the **SRS**.

Refer to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).

© Copyright 2021, Ford Motor Company.

