

## Floor Panel Reinforcement

### Special Tool(s) / General Equipment

6.5 mm Drill Bit
Self-Piercing Rivet (SPR) Remover/Installer
Belt Sander
Blind Rivet Gun
Hot Air Gun
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).

**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.

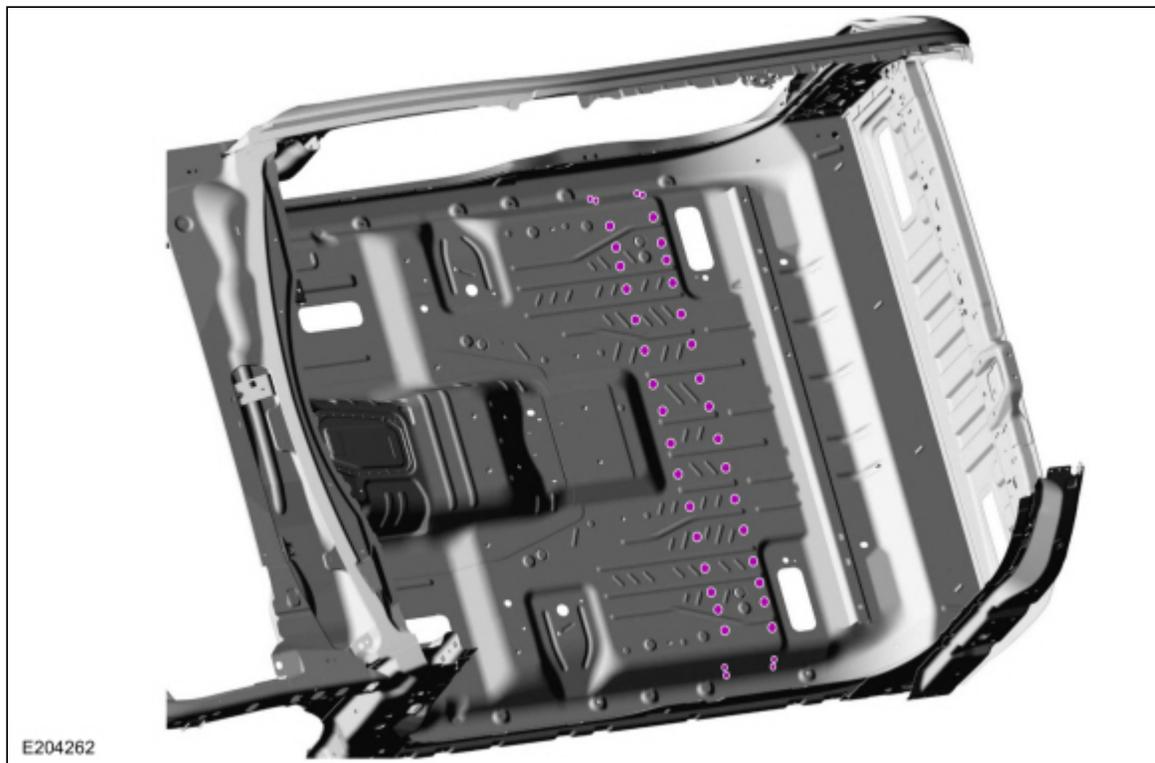
**NOTE:** SuperCab #3 floor panel reinforcement shown. All reinforcements attach similarly.

2. Remove the floor panel or section in the repair area.  
Refer to: [Floor Panel](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).  
Refer to: [Floor Panel Section](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).
3. Remove the rocker panel inner reinforcement.  
Refer to: [Rocker Panel Inner Reinforcement - Regular Cab](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).  
Refer to: [Rocker Panel Inner Reinforcement - SuperCab](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).  
Refer to: [Rocker Panel Inner Reinforcement - SuperCrew](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).
4. **NOTE:** *Floor panel reinforcements may be sectioned providing sectioning does not take place within 50 mm of weld nut or component mounting points. The following procedure assumes full component replacement.*

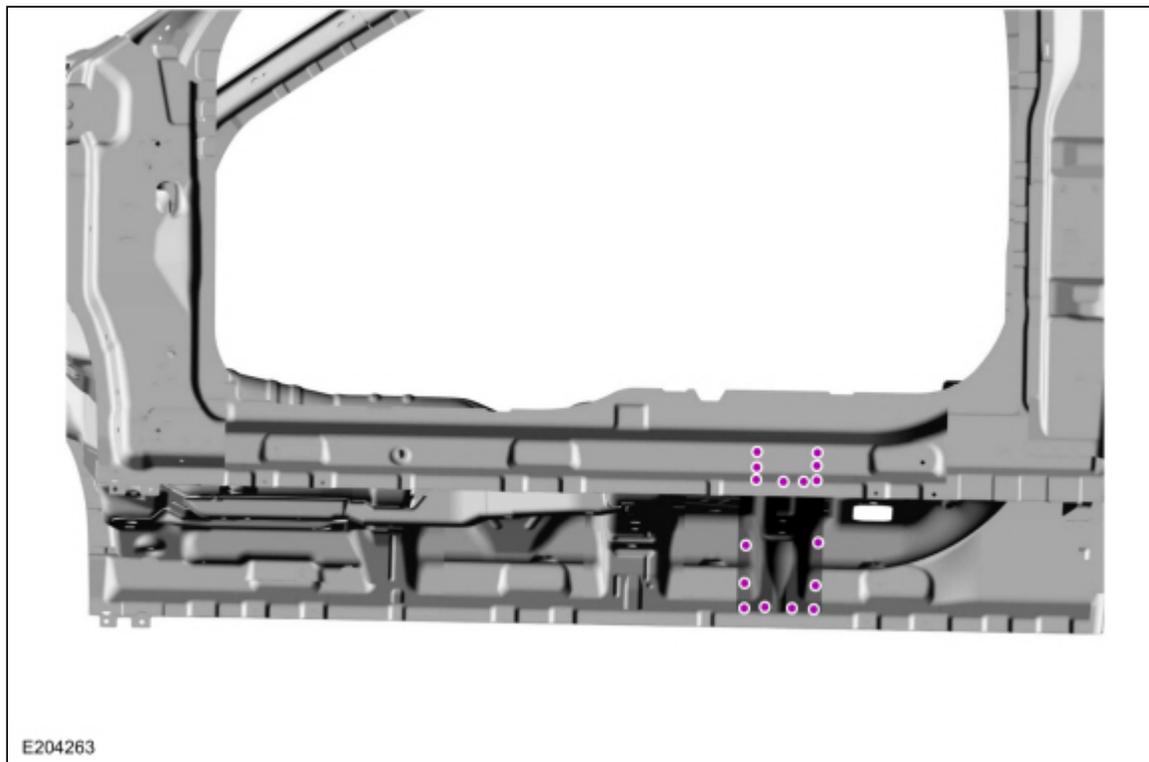
Determine if sectioning is possible and reasonable and adjust procedure accordingly.

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

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



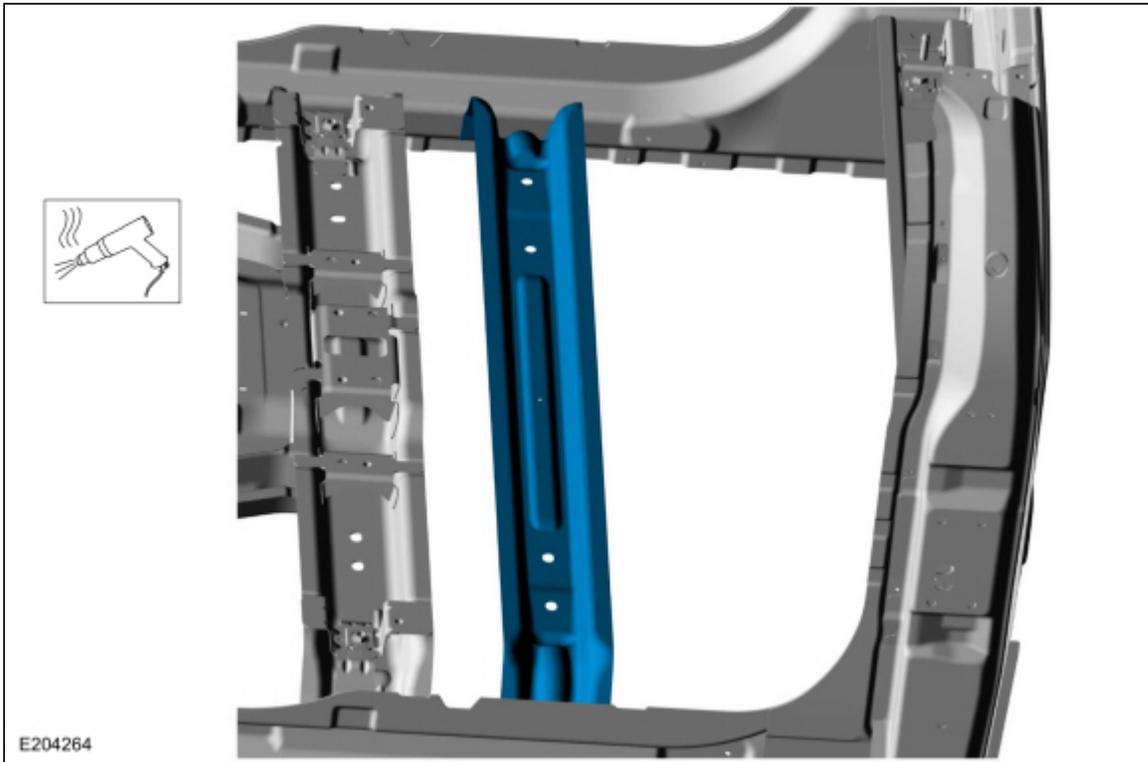
6. Remove the SPR fasteners (both sides).  
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
Use the General Equipment: Belt Sander



7. **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 floor panel reinforcement.  
Use the General Equipment: Hot Air Gun

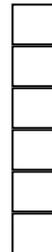


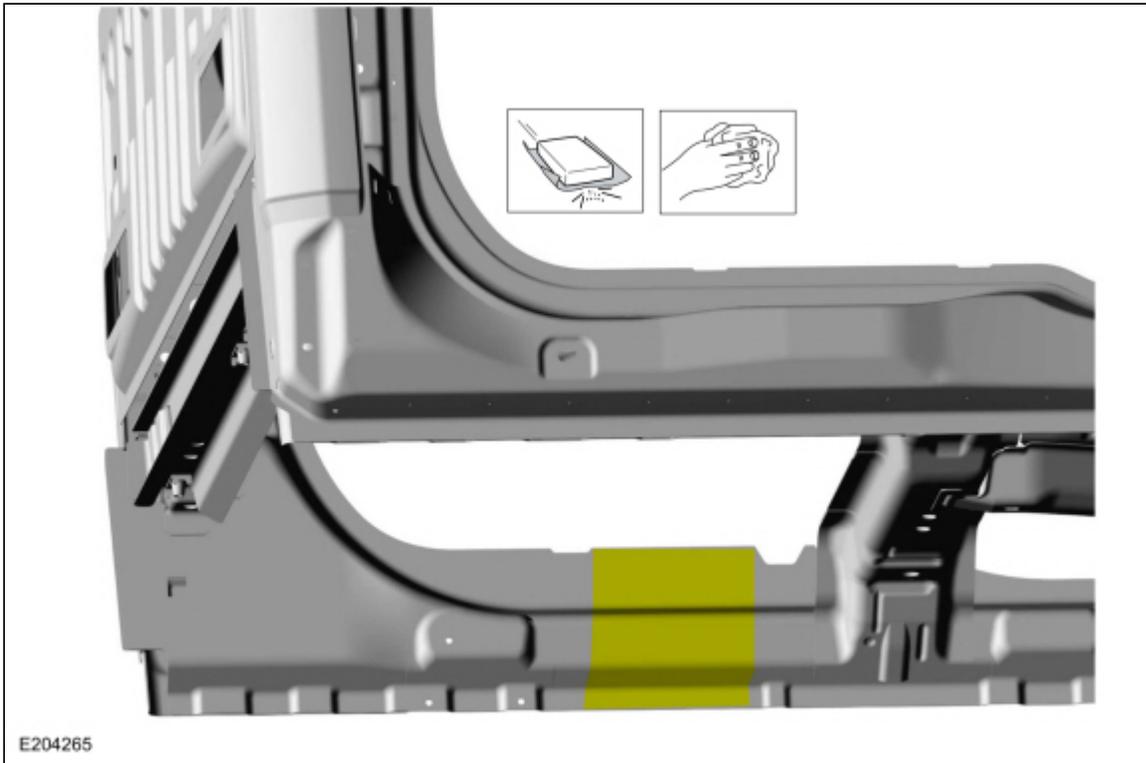


## Installation

**NOTE:** Floor panel reinforcements may be sectioned providing sectioning does not take place within 50 mm of weld nut or component mounting points. The following procedure assumes full component replacement.

1. 80-120 grit sand paper.  
Sand to remove old adhesive and clean (both sides).





- 2. 80-120 grit sand paper.  
Sand to remove e-coat and clean.

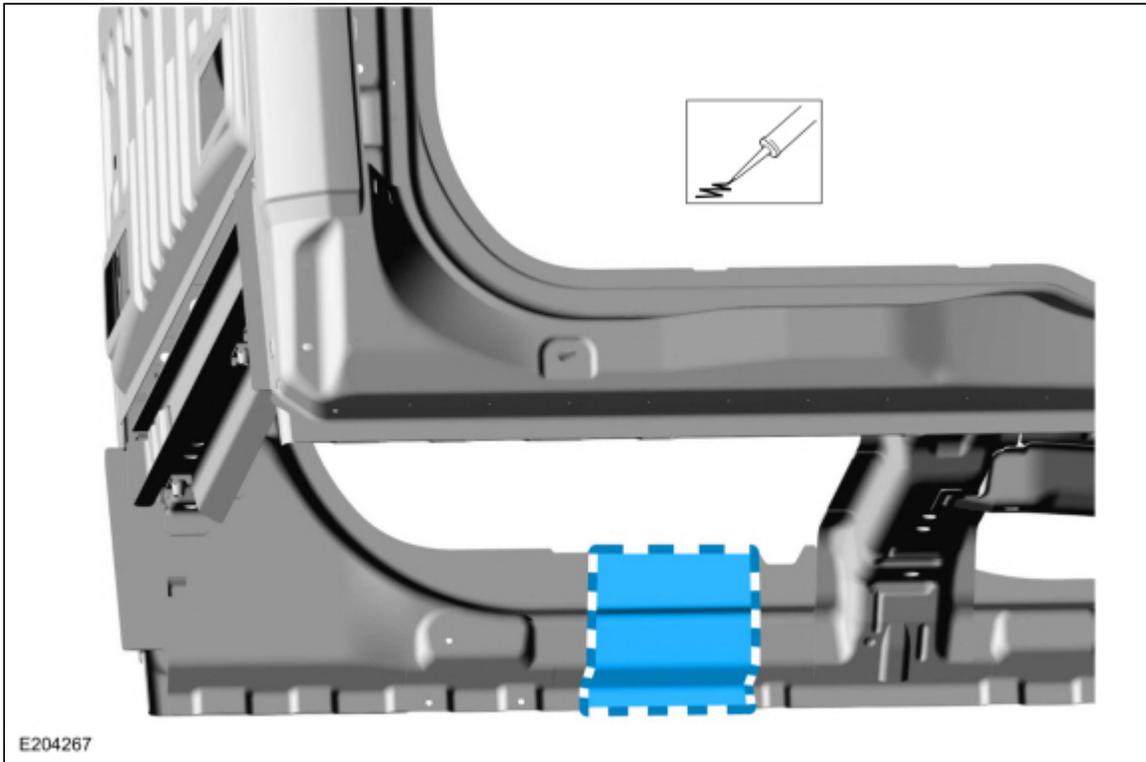






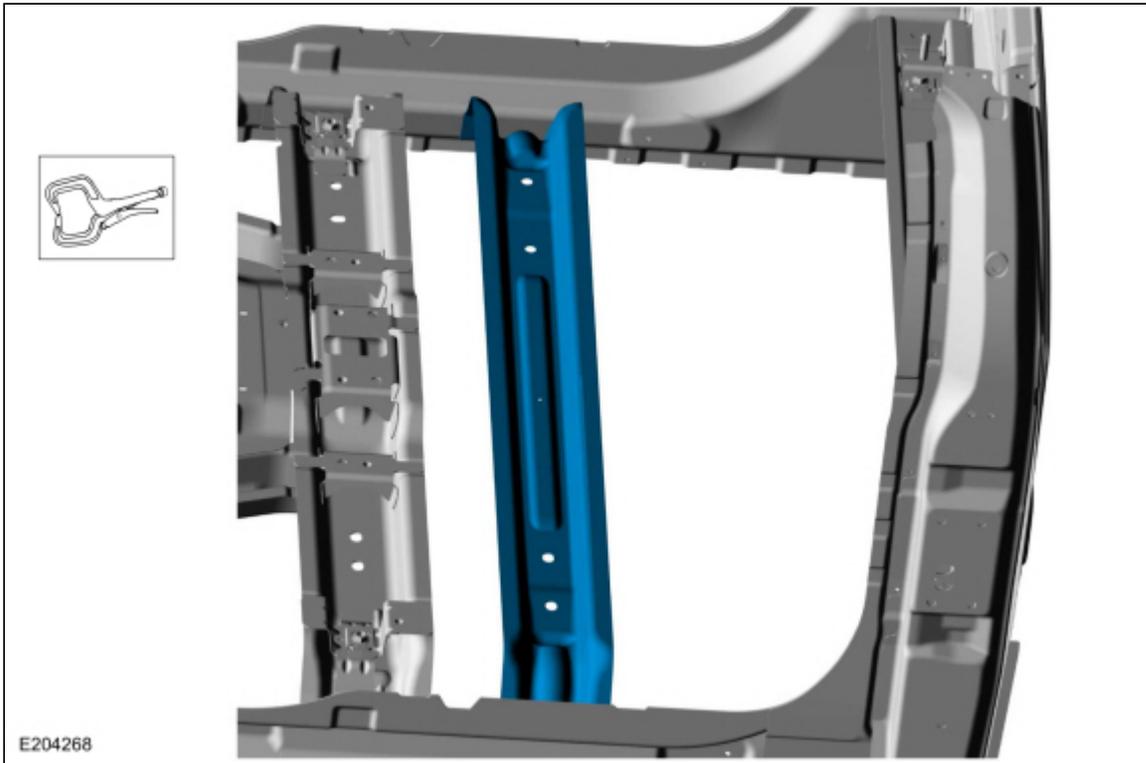

- 3. If sectioning:  
Refer to: [Joining Techniques](#) (501-25 Body Repairs - General Information, General Procedures).
- 4. Apply adhesive (both sides)  
*Material:* Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B





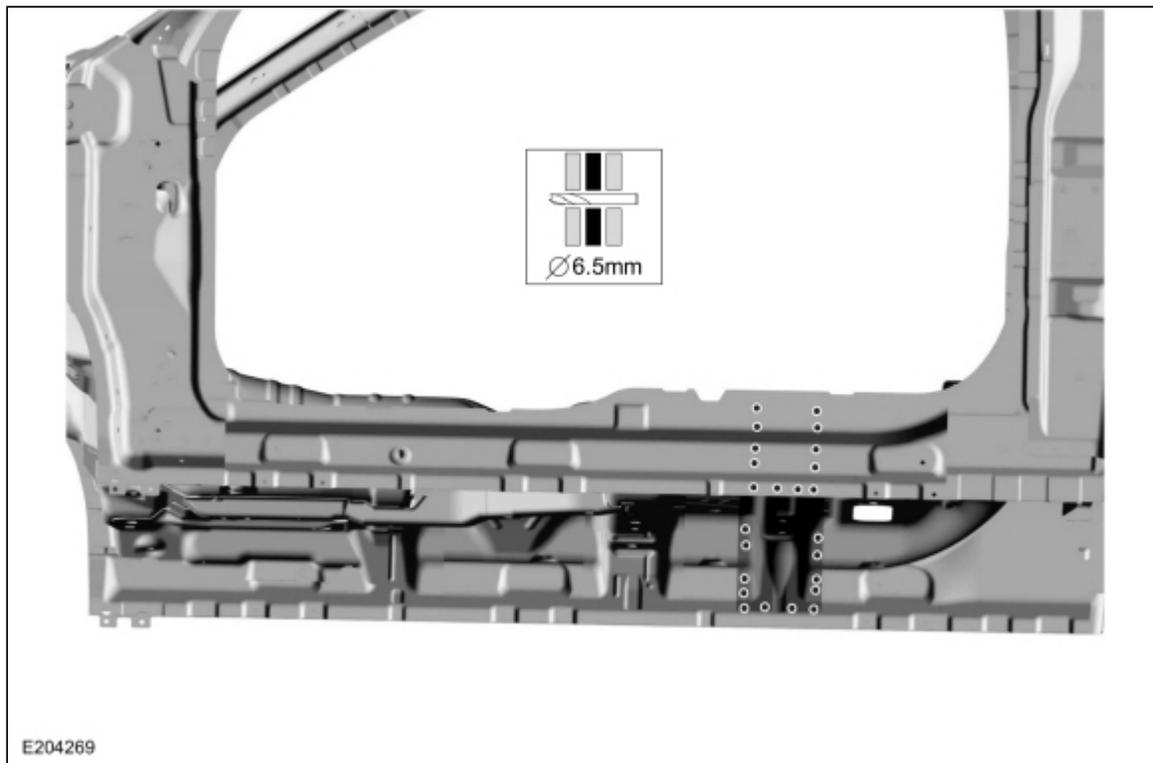
- 5. Install the reinforcement and clamp in position.  
Use the General Equipment: Locking Pliers





- 6. Drill for fasteners (both sides).  
Use the General Equipment: 6.5 mm Drill Bit





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7. **NOTE:** SPR fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.

**NOTE:** Blind rivet or solid rivet fasteners may be used in place of SPR fasteners after enlarging holes to 6.5 mm.

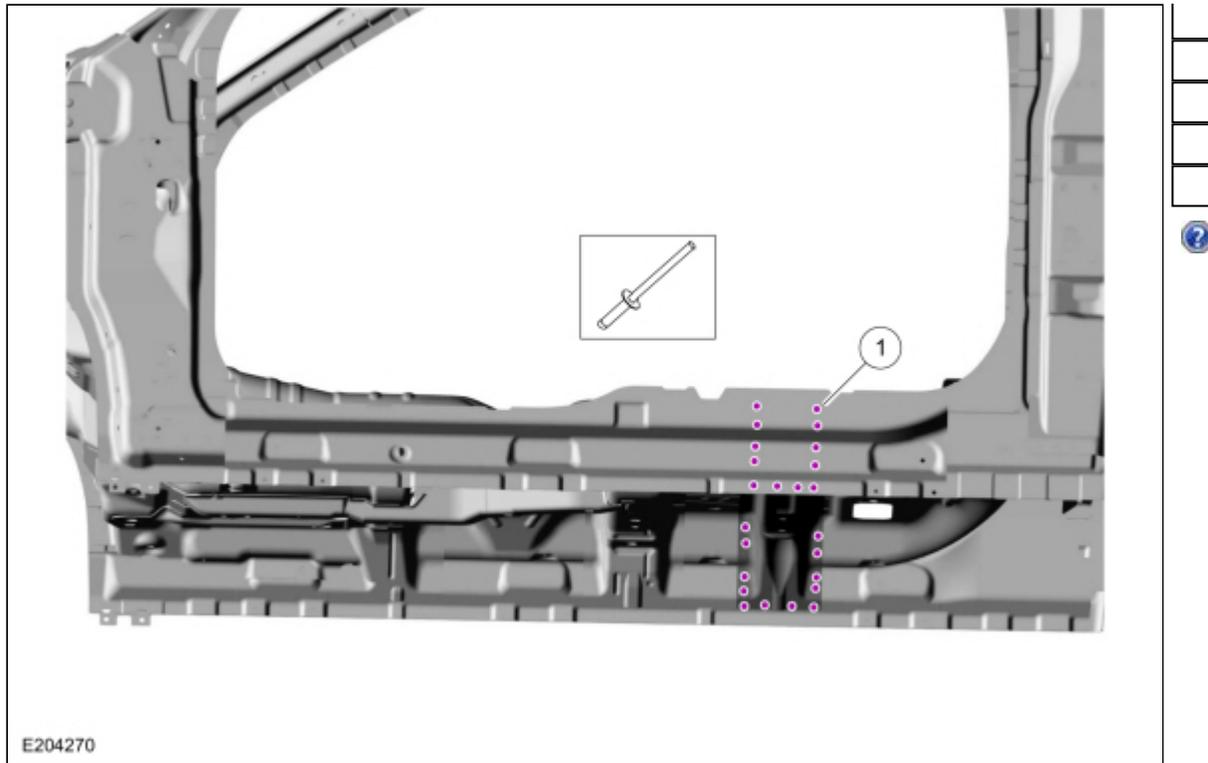
Install fasteners (both sides).

Item	SPR Number	SPR Code	Henrob®, Car-OLiner®, CMO®, Chief®, Spanesi®, Wielander and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W708777-S900C	-	-

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

Use the General Equipment: Blind Rivet Gun





8. Install the rocker panel inner reinforcement.

Refer to: [Rocker Panel Inner Reinforcement - Regular Cab](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

Refer to: [Rocker Panel Inner Reinforcement - SuperCab](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

Refer to: [Rocker Panel Inner Reinforcement - SuperCrew](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

9. Install the floor panel or section.

Refer to: [Floor Panel](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

Refer to: [Floor Panel Section](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

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