

## Side Floor Panel Reinforcement


### Special Tool(s) / General Equipment

6.5 mm Drill Bit
Scraper for Straight Edges
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	-
Seam Sealer TA-2-B, 3M™ 08308, LORD Fusor® 803DTM	-

### 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

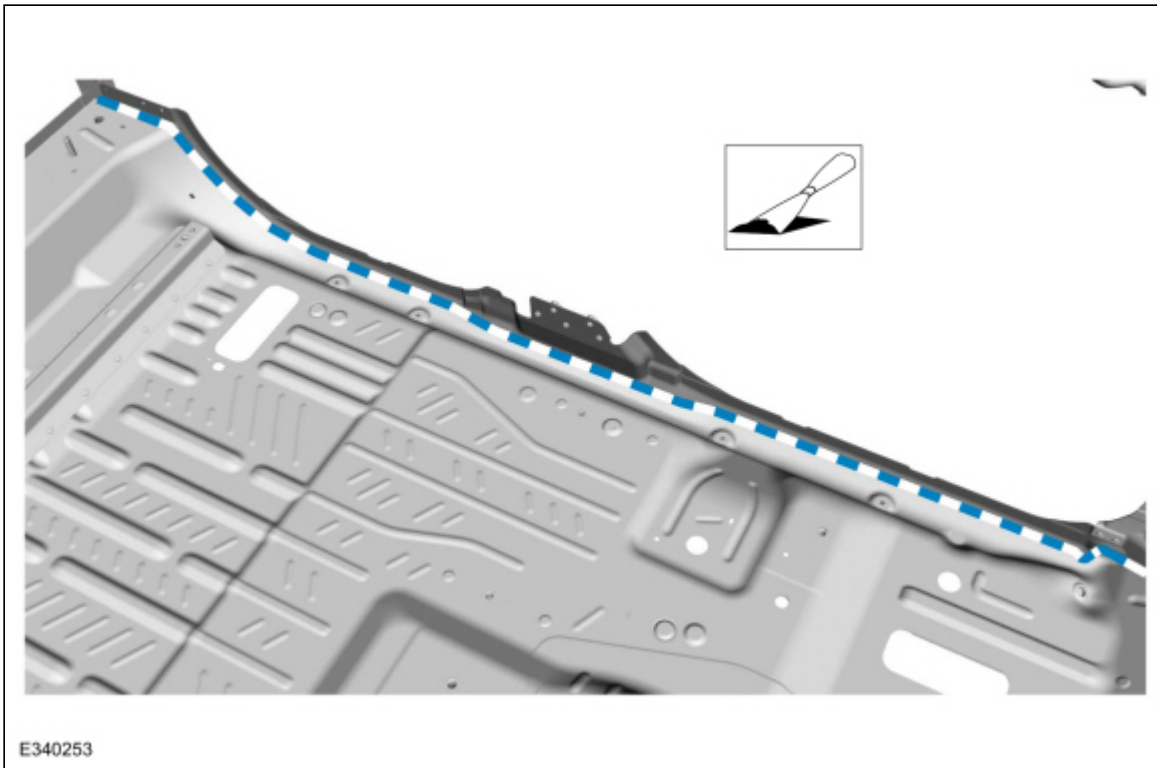
structural adhesive may be separated after fastener removal by using a panel chisel along the joint/flange. Using heat not exceeding 425° F to loosen a bonded panel should only be done when all panels in the joint will be replaced and new adhesive applied.

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

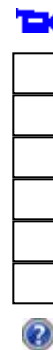
**NOTE:** SuperCrew cab shown, SuperCab and Regular cab similar.

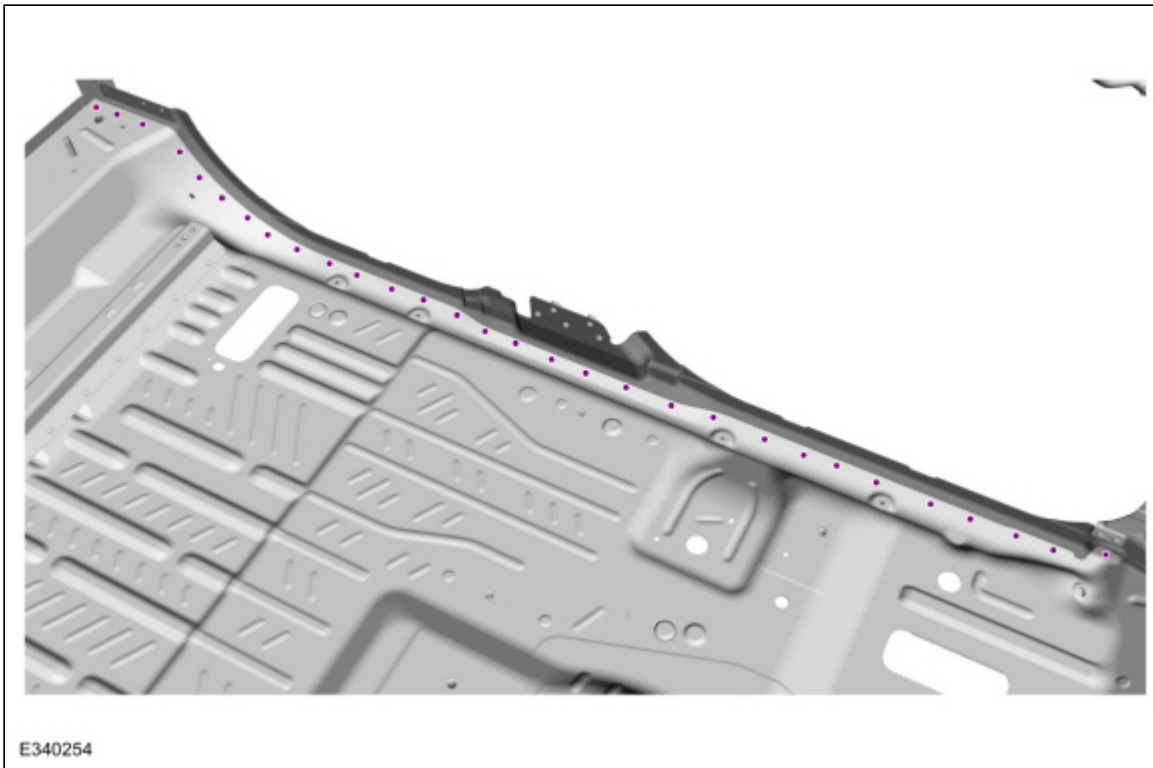
2. Verify the vehicle is dimensionally correct.  
Refer to: [Body and Frame](#) (501-26 Body Repairs - Vehicle Specific Information and Tolerance Checks, Description and Operation).
3. Remove the A-pillar reinforcement.  
Refer to: [A-Pillar Outer Panel Section and Reinforcement](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).
4. Remove the B-pillar reinforcement.  
Refer to: [B-Pillar and Reinforcement - SuperCrew](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).
5. **Regular cab and SuperCab.**  
Remove the rocker panel inner reinforcement.  
Refer to: [Rocker Panel Inner Reinforcement - SuperCab](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).  
Refer to: [Rocker Panel Inner Reinforcement - Regular Cab](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).
6. Remove the C-pillar reinforcement.  
Refer to: [C-Pillar Reinforcement](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).
7. Remove the floor pan sealer.  
Use the General Equipment: Scraper for Straight Edges





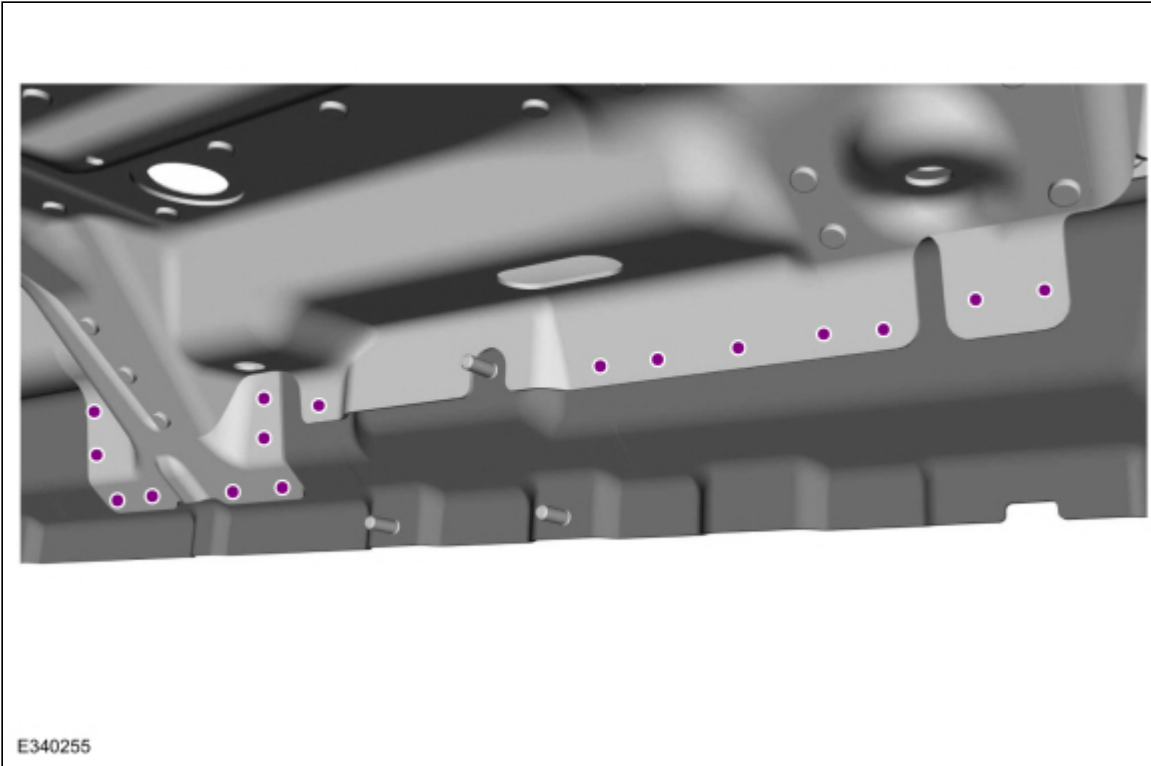
- 8. Remove the self piercing fasteners.  
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
Use the General Equipment: Belt Sander





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

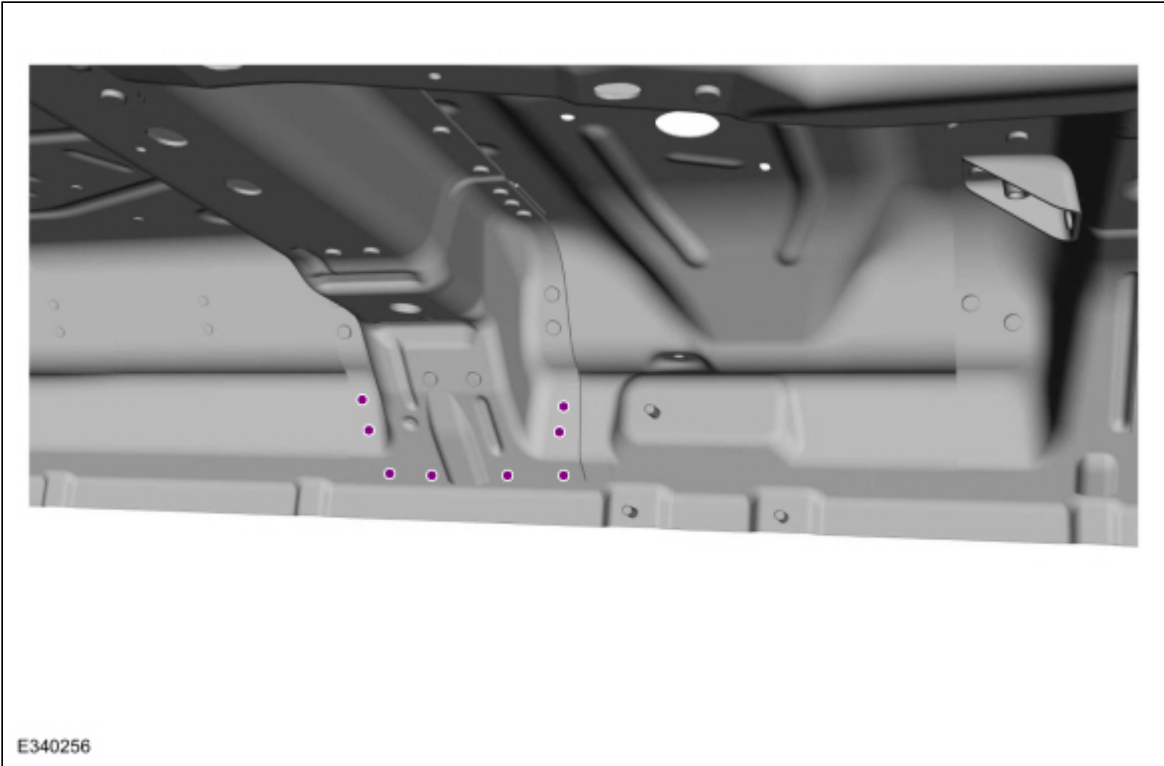




10. **NOTE:** *Number two crossmember shown, crossmember three is identical, if equipped.*

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

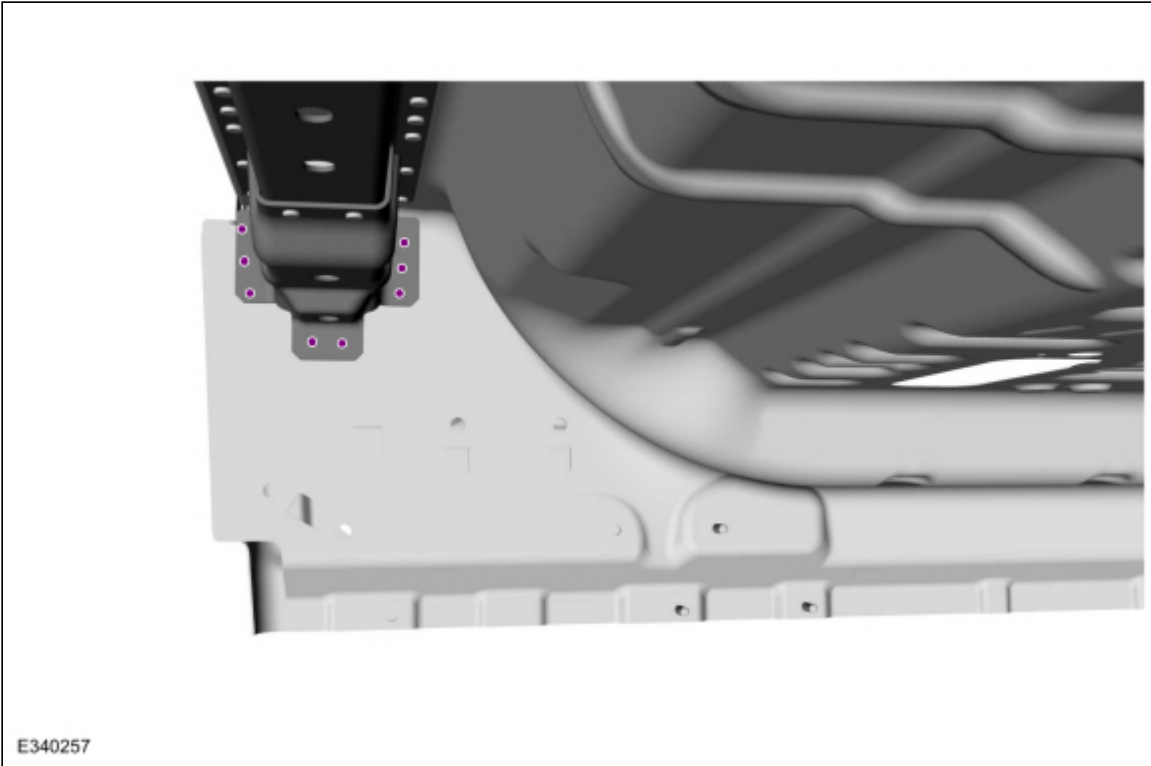




- 11. Remove the self-piercing fasteners.  
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
Use the General Equipment: Belt Sander

FX

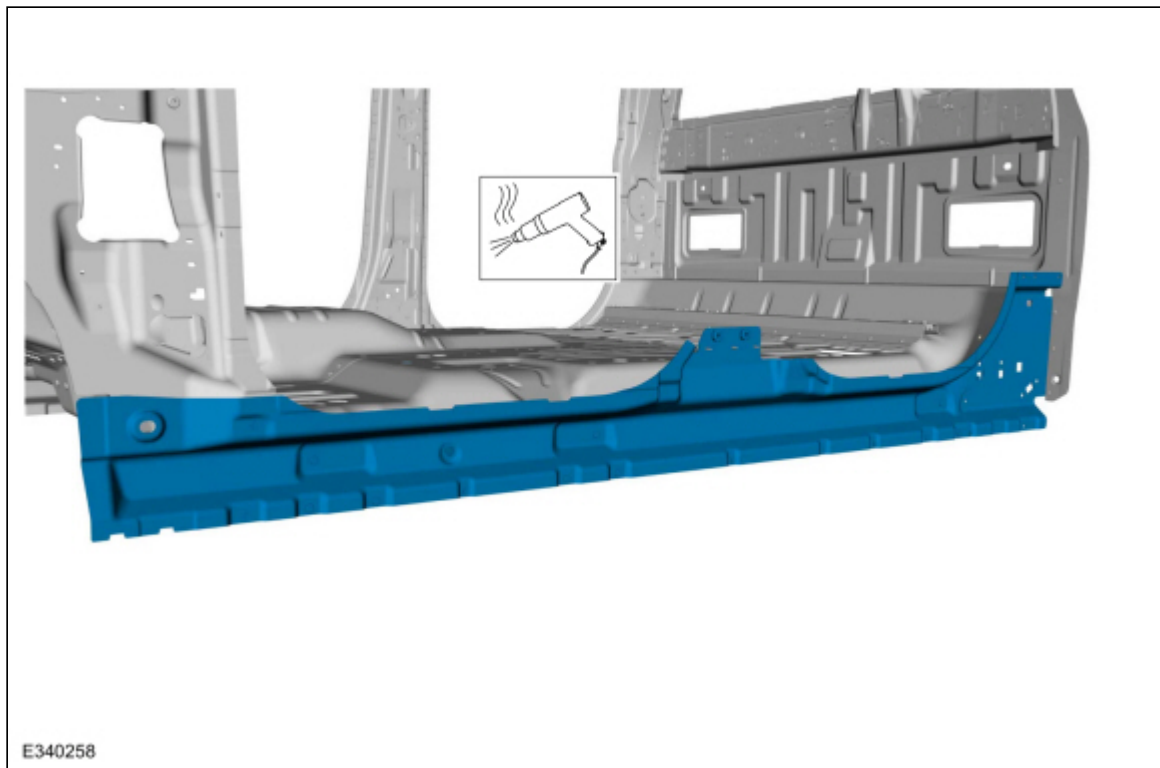

?



- 12. Break the adhesive bond and remove the floor side member reinforcement.  
Use the General Equipment: Hot Air Gun





## Installation

**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.

**NOTE:** SuperCrew cab shown, SuperCab and Regular cab similar.

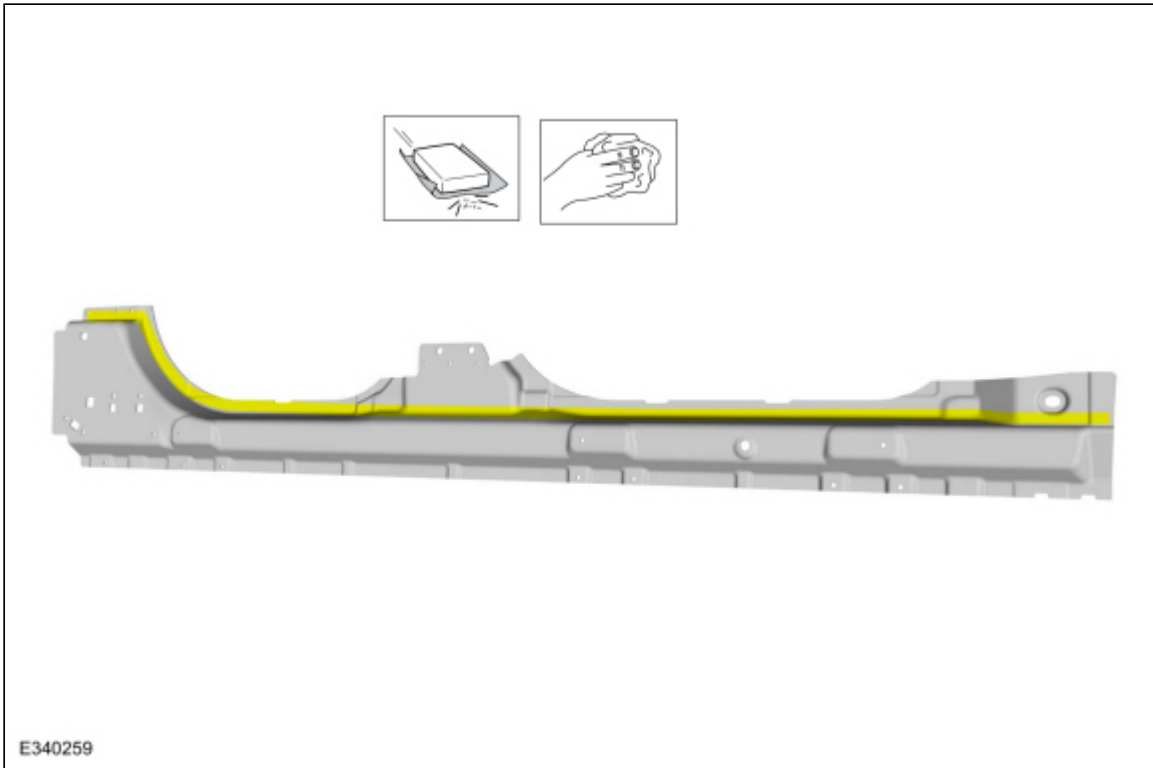
**NOTE:** Do not install SPR fasteners directly in old SPR fastener location. SPR fasteners must be installed adjacent to the original location matching original quantity.

**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 with 80 grit sand paper to remove e-coating and clean.

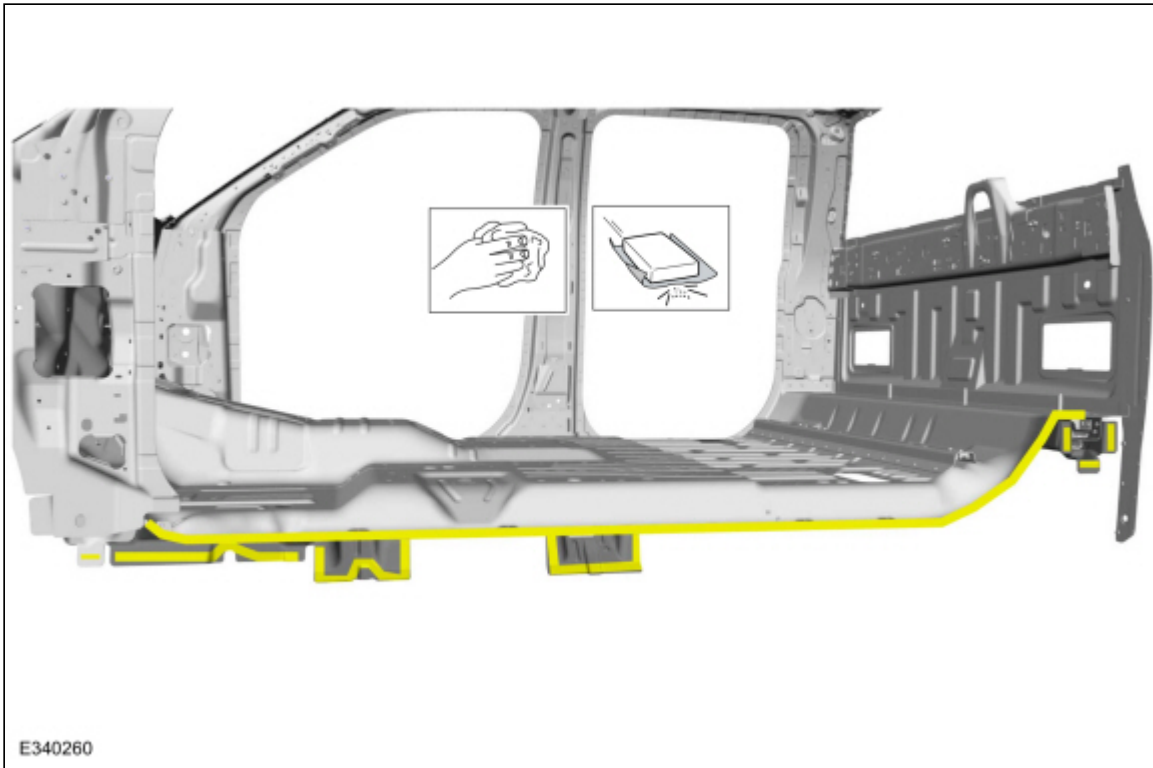






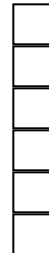
2. Sand with 80 grit sand paper to remove old adhesive and clean.

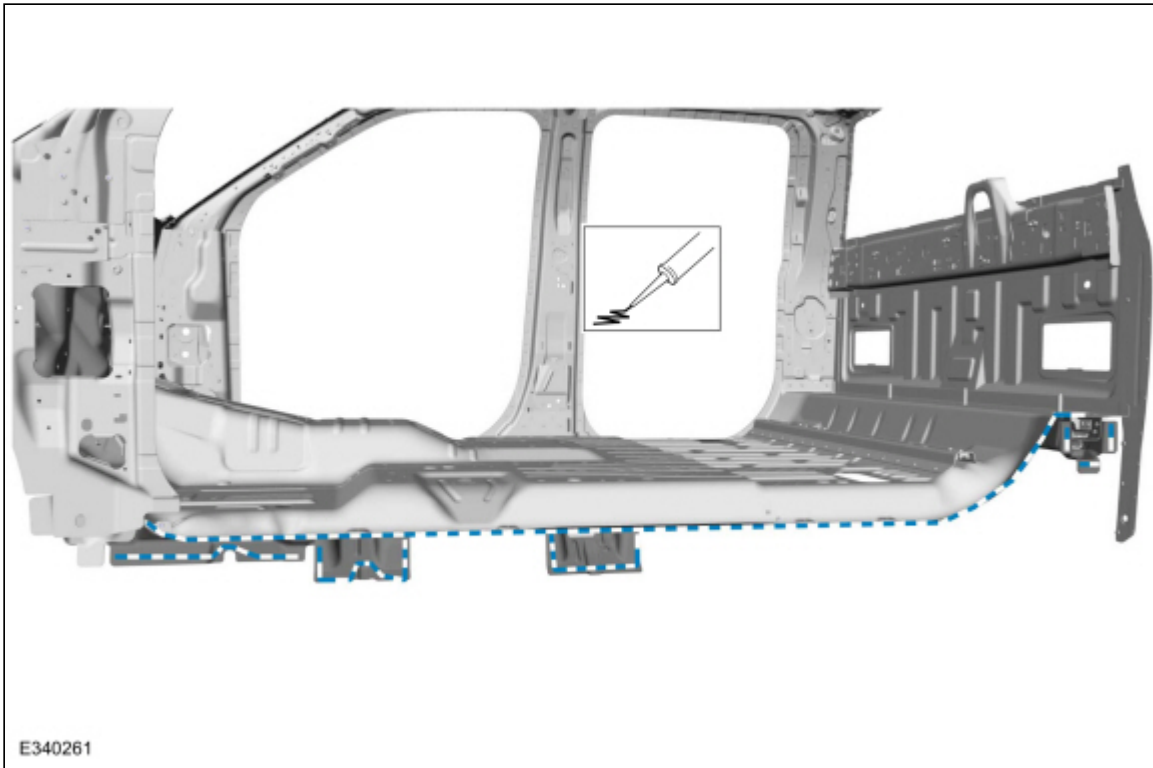




3. Apply adhesive to the mating flanges.

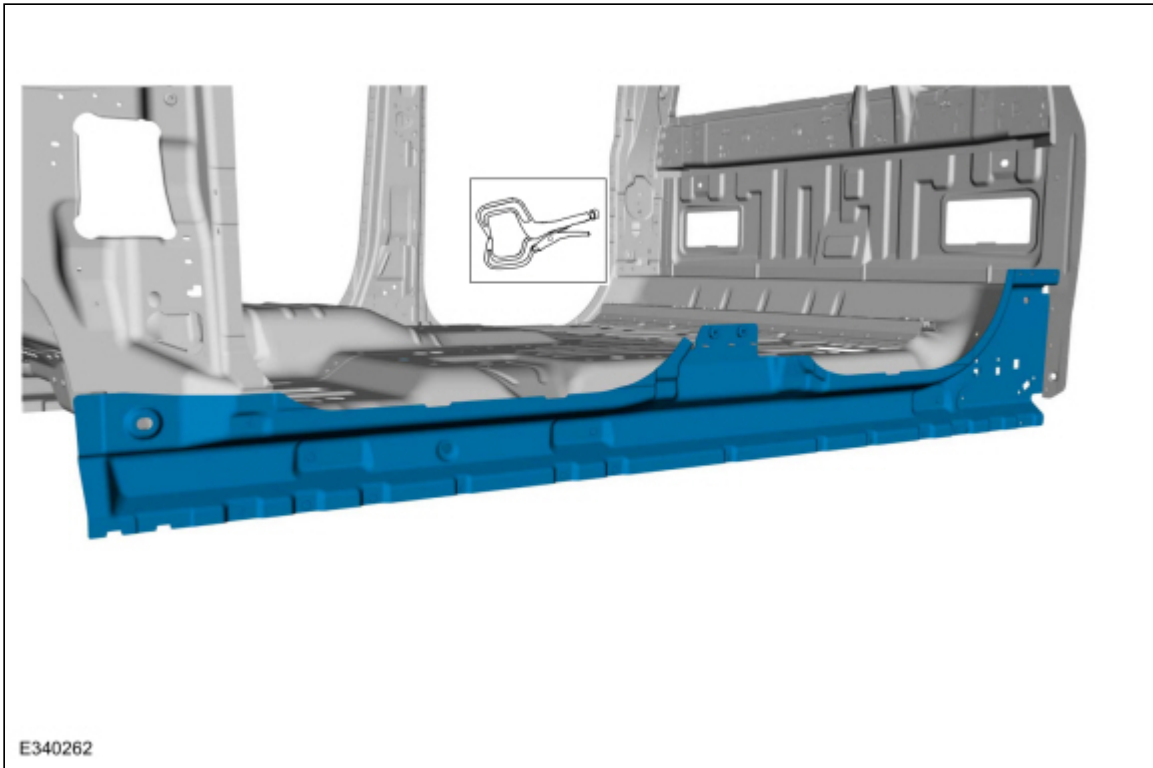
*Material:* Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B





4. Install, properly position and clamp the replacement panel.  
Use the General Equipment: Locking Pliers

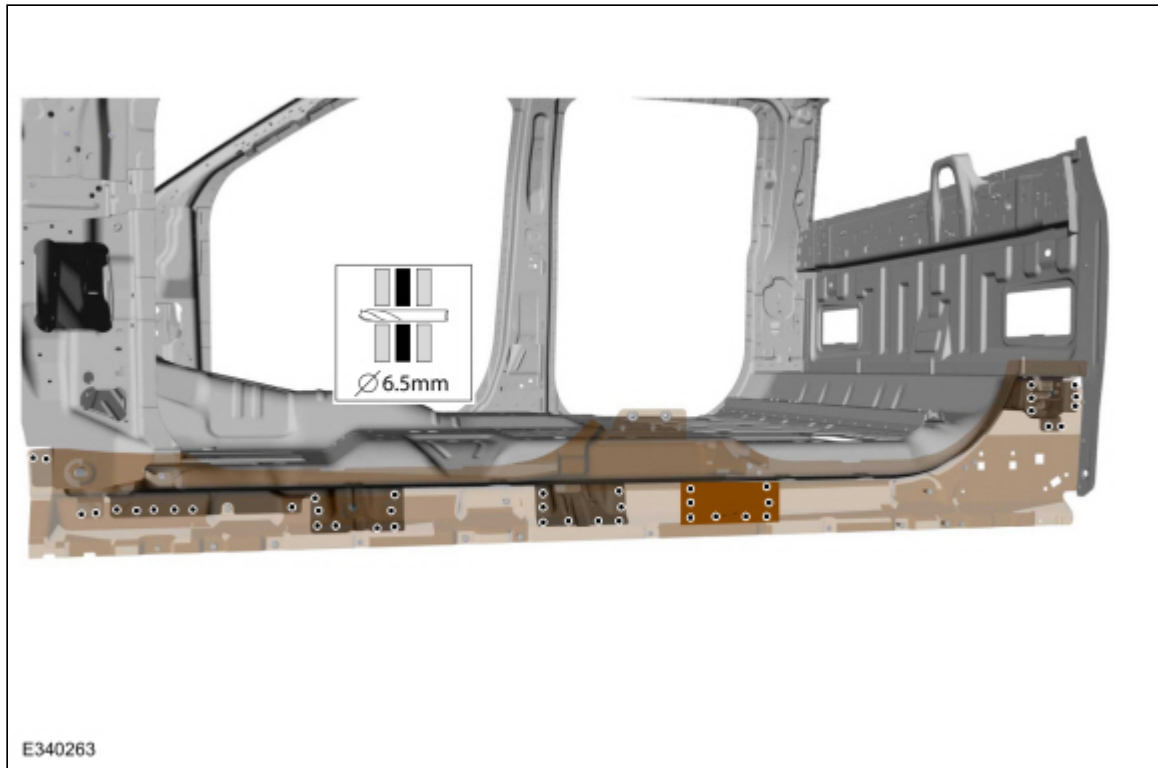




5. **NOTE:** Solid rivets or blind rivet fasteners may be used in place of SPR fasteners after enlarging existing holes to 6.5 mm.

Drill for rivet fasteners.  
Use the General Equipment: 6.5 mm Drill Bit

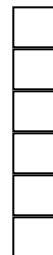


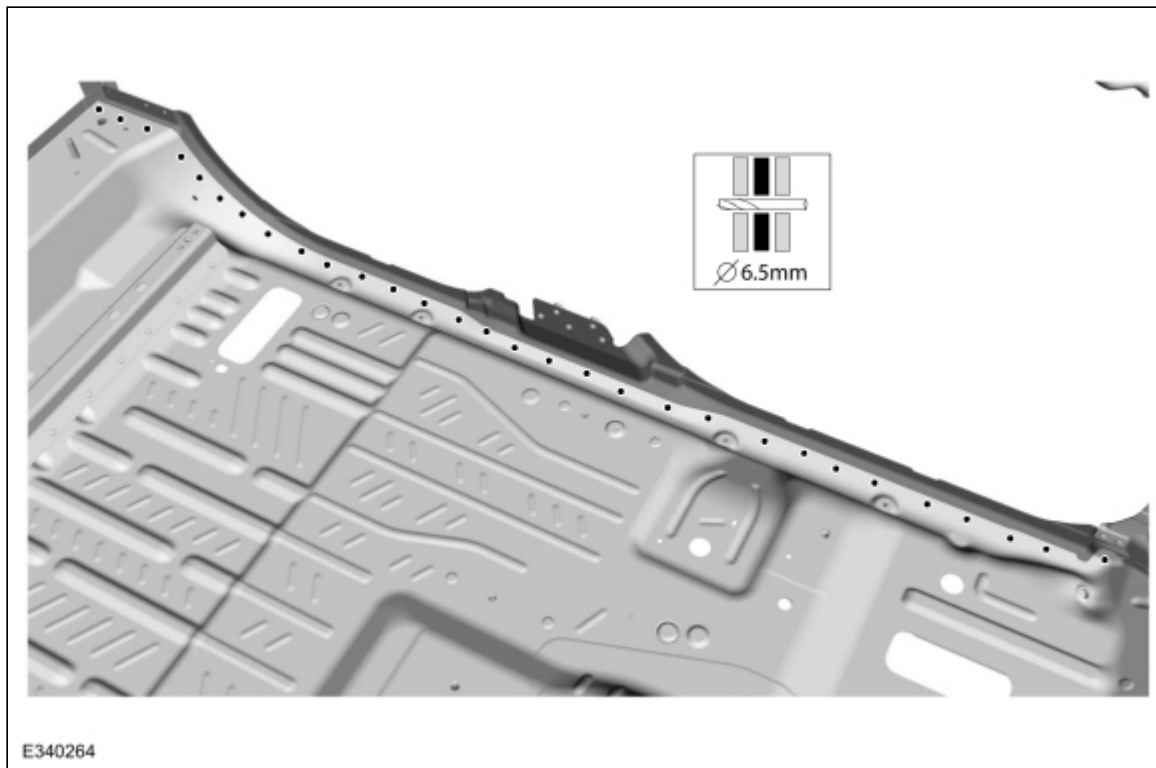


6. **NOTE:** Solid rivets or blind rivet fasteners may be used in place of SPR fasteners after enlarging existing holes to 6.5 mm.

Drill for rivet fasteners.

Use the General Equipment: 6.5 mm Drill Bit



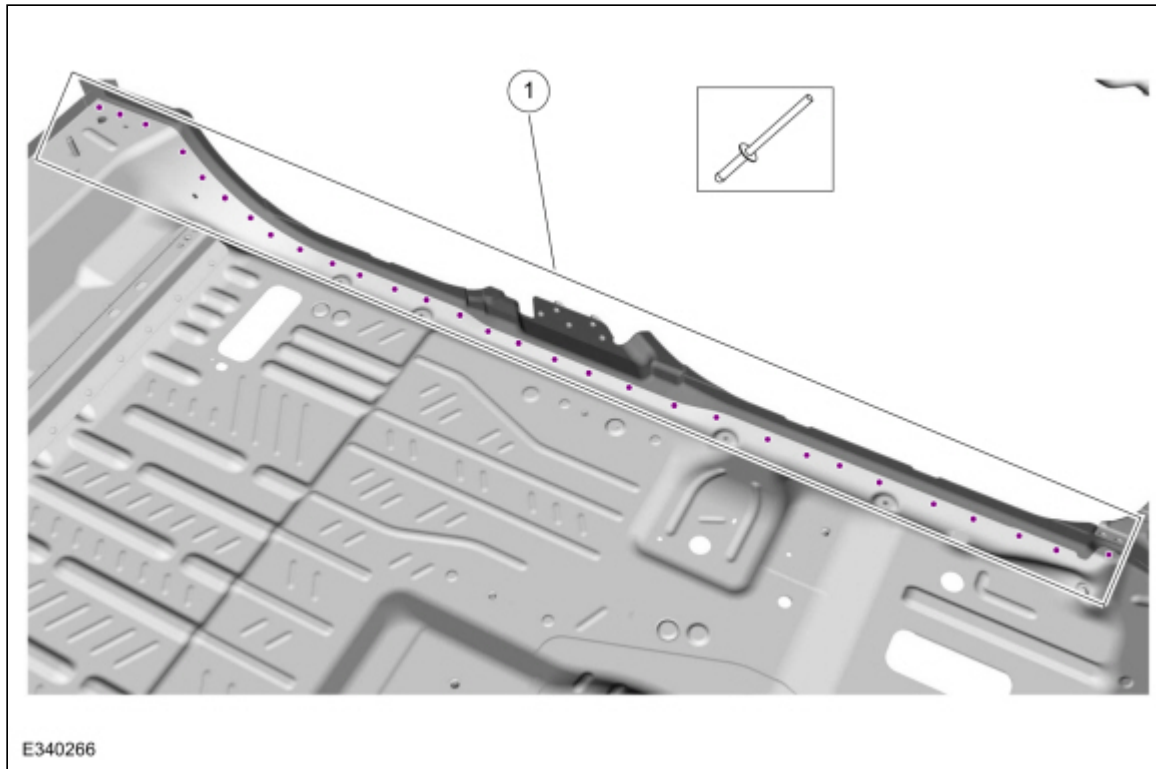


7. Install rivet fasteners.

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	W713404-S900	FC	DZ07-000/H	SA-0400/SA-0401	W702512-S900C	-	-

Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
 Use the General Equipment: Blind Rivet Gun



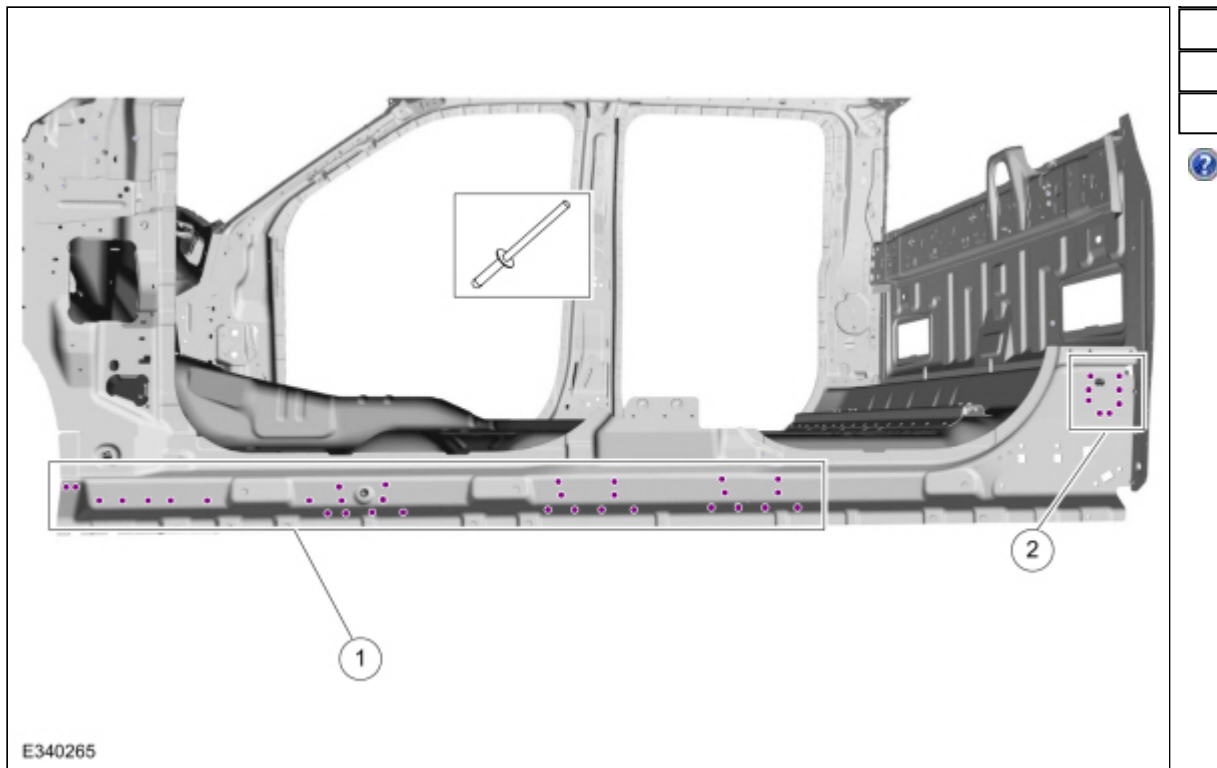


8. Install rivet fasteners.

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	-	-	-	-	W708777-S900C	-	-
2	-	-	-	-	W702554-S900C	-	-

Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
 Use the General Equipment: Blind Rivet Gun





9. Refinish using a Ford approved paint system and typical refinishing techniques.

10. **Regular cab and SuperCab.**

Install the rocker panel inner reinforcement.

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

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

11. Install the A-pillar reinforcement.

Refer to: [A-Pillar Outer Panel Section and Reinforcement](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

12. Install the B-pillar reinforcement.

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

13. Install the C-pillar reinforcement.

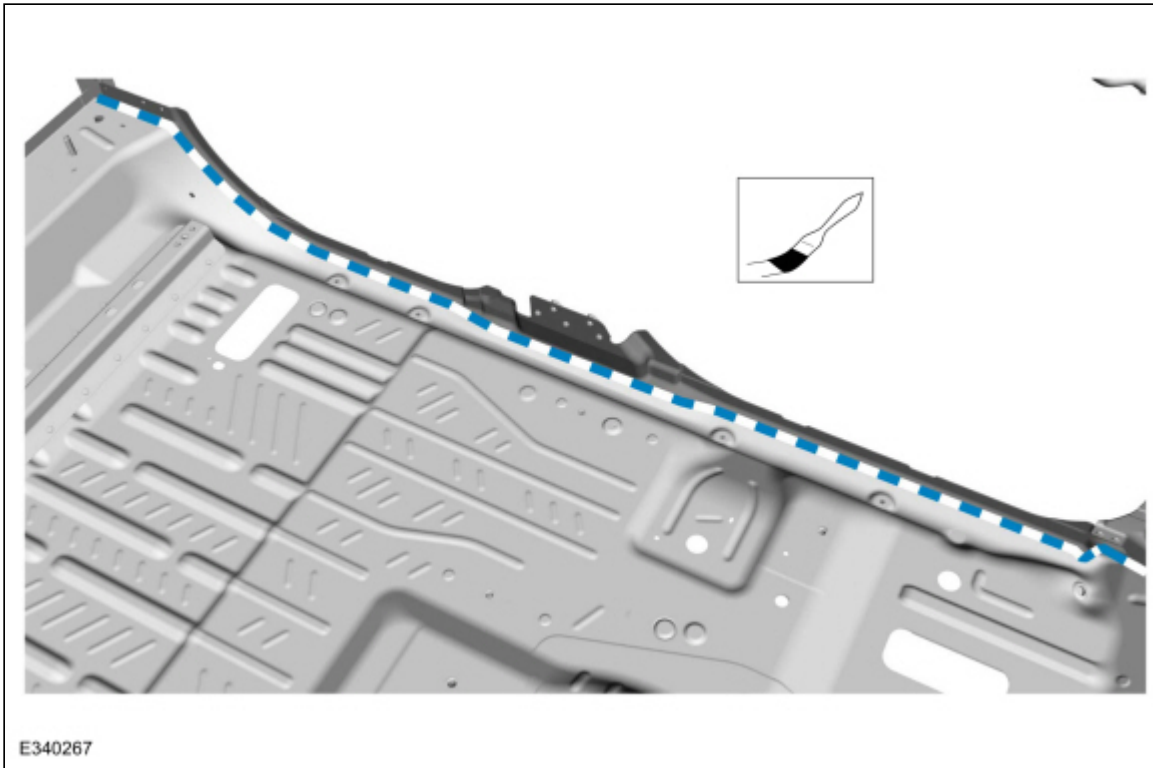
Refer to: [C-Pillar Reinforcement](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

14. Apply seam sealer.

*Material:* Seam Sealer / TA-2-B, 3M™ 08308, LORD Fusor® 803DTM







E340267

© Copyright 2021, Ford Motor Company.