2021 Navigator

Procedure revision date: 12/4/2019

#### 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

NOTICE: Panel sectioning is prohibited within 50 mm of door hinge, door striker, restraints and suspension anchoring points.

**NOTE:** Self-piercing rivet (SPR) fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.

**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 repair areas that utilize structural adhesives 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:** The floor panel reinforcement may be sectioned providing the sectioning guidelines are adhered to. The following procedure assumes full component replacement. Adjust to meet repair needs.

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

NOTE: Long wheelbase shown, short wheelbase similar.

1. Depower the SRS.

Refer to: <u>Supplemental Restraint System (SRS) Depowering</u> (501-20B Supplemental Restraint System, General Procedures).

2. If Necessary:

Dimensionally restore the vehicle to pre-damage condition.

Refer to: <u>Body and Frame</u> (501-26 Body Repairs - Vehicle Specific Information and Tolerance Checks, Description and Operation).

3. Remove the A, B and C-pillar trim.

Refer to: A-Pillar Trim Panel (501-05 Interior Trim and Ornamentation, Removal and Installation).

Refer to: <u>B-Pillar Trim Panel</u> (501-05 Interior Trim and Ornamentation, Removal and Installation).

Refer to: C-Pillar Trim Panel (501-05 Interior Trim and Ornamentation, Removal and Installation).

4. Remove the front and second row seats.

Refer to: Front Seat (501-10A Front Seats, Removal and Installation).

Refer to: Second Row Seat (501-10B Second Row Seats, Removal and Installation).

- 5. Position the carpet and all wiring harnesses away from the working area.
- 6. Remove the A-pillar reinforcement.

Refer to: <u>A-Pillar Outer Panel Section and Reinforcement</u> (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

7. Remove the rocker panel reinforcement.

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

8. Remove the fasteners.

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

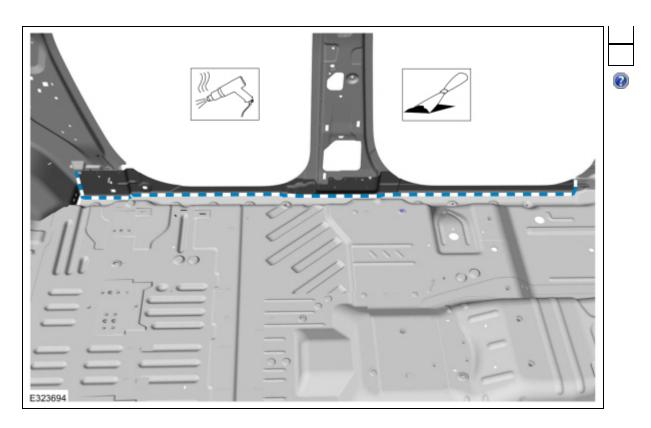
Use the General Equipment: Belt Sander



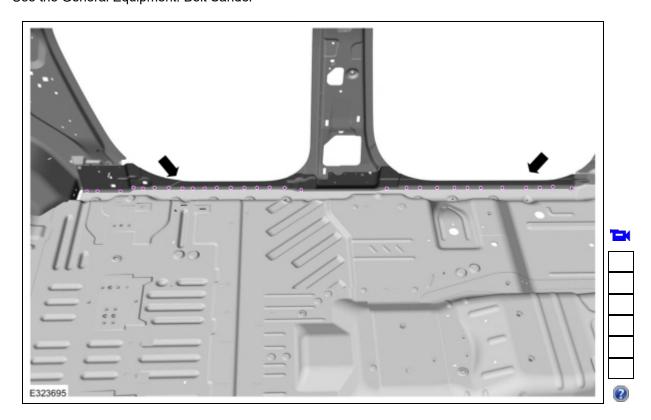
9. Remove the seam sealer.

Use the General Equipment: Hot Air Gun

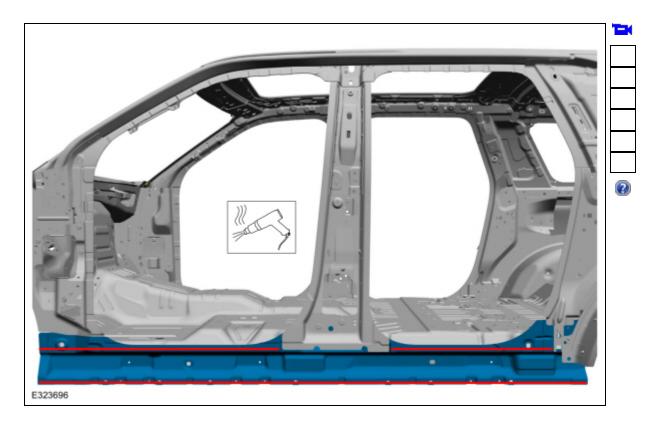
Use the General Equipment: Scraper for Straight Edges



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



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



#### Installation

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

**NOTE:** Self-piercing rivet (SPR) fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.

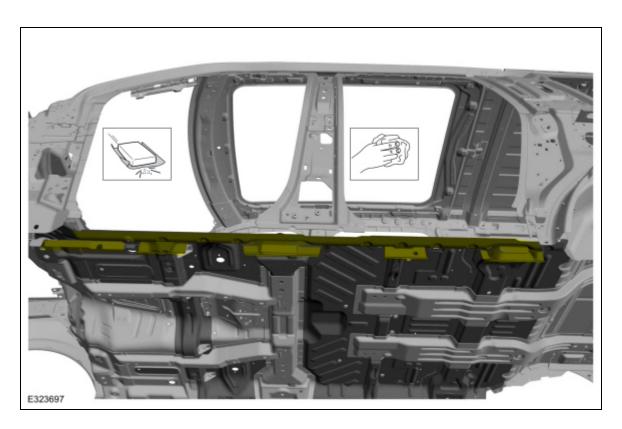
**NOTE**: Aluminum body panels are highly receptive to heat transfer. With the extensive use of structural adhesives and non-structural sealers used in vehicle construction, the potential of heat transfer could impact adhesives and sealers in non-associated panels during the repair process. Many repair areas that utilize structural adhesives 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:** Left hand (LH) side shown, right hand (RH) side similar.

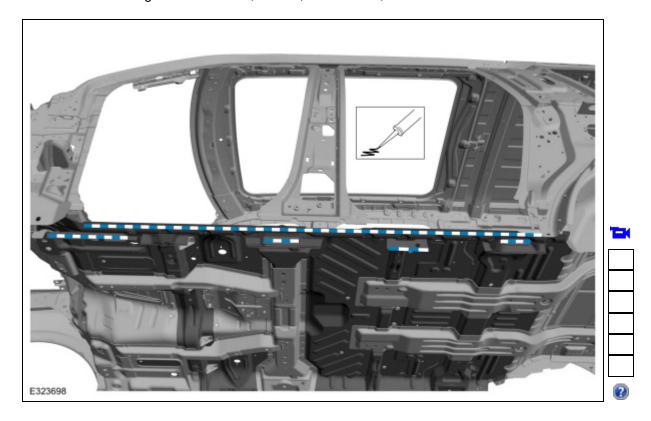
NOTE: Long wheelbase shown, short wheelbase similar.

1. Sand using 80-150 grit sand paper to remove old adhesive, e-coat and clean.

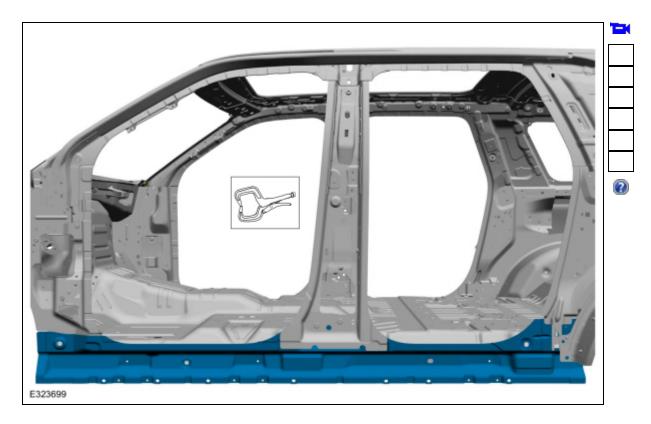




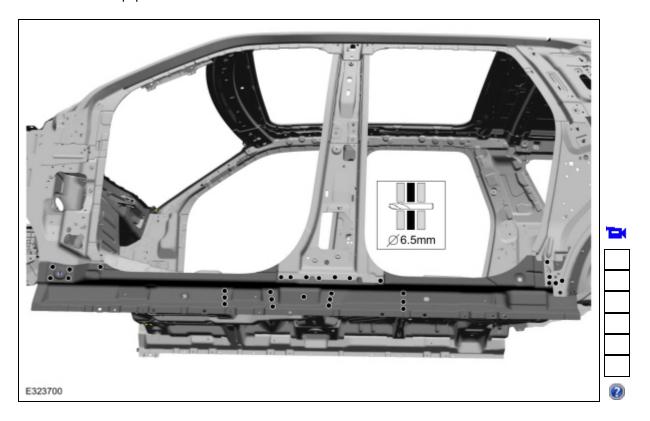
2. Apply adhesive. *Material*: Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B



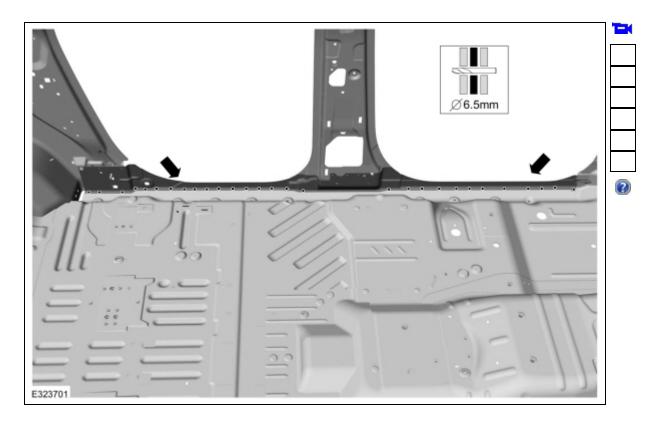
3. Install, properly position and clamp the floor panel reinforcement. Use the General Equipment: Locking Pliers



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



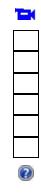
Drill for fasteners.Use the General Equipment: 6.5 mm Drill Bit

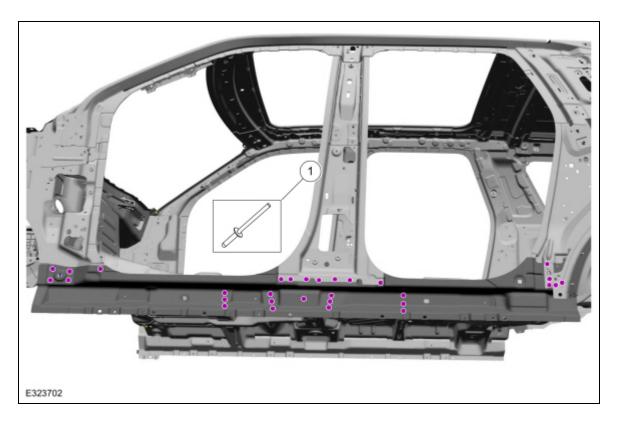


## 6. Install the fasteners.

Item	<u>SPR</u> Number	<u>SPR</u> Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Riv- Nut®
1	-	-	-	-	W708777- S900C	-	-

Use the General Equipment: Blind Rivet Gun



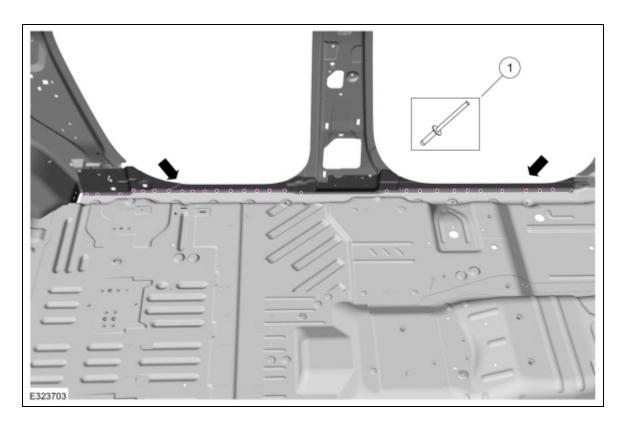


## 7. Install the fasteners.

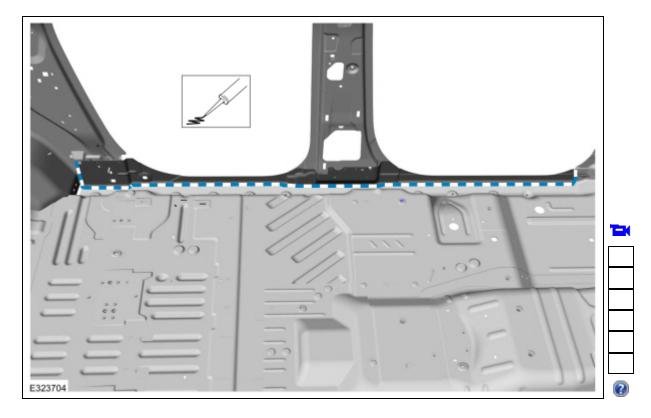
Item	<u>SPR</u> Number	<u>SPR</u> Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Riv- Nut®
1	-	-	-	-	W702512- S900C	-	-

Use the General Equipment: Blind Rivet Gun





# Seam Sealing: All seams must be sealed to production level. Material: Seam Sealer / TA-2-B, 3M™ 08308, LORD Fusor® 803DTM



Install the rocker reinforcement.
 Refer to: Rocker Panel Inner Reinforcement (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

10. Install the A-pillar reinforcement.

Refer to: <u>A-Pillar Outer Panel Section and Reinforcement</u> (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

- 11. Refinish the entire repair using a Ford approved paint system.
- 12. Restore corrosion protection.

Refer to: Corrosion Prevention (501-25 Body Repairs - General Information, General Procedures).

- 13. Position all wiring harnesses and the carpet to original location.
- 14. Install the front and second row seats.

Refer to: Second Row Seat (501-10B Second Row Seats, Removal and Installation).

Refer to: Front Seat (501-10A Front Seats, Removal and Installation).

15. Install the A, B and C-pillar trim.

Refer to: C-Pillar Trim Panel (501-05 Interior Trim and Ornamentation, Removal and Installation).

Refer to: B-Pillar Trim Panel (501-05 Interior Trim and Ornamentation, Removal and Installation).

Refer to: A-Pillar Trim Panel (501-05 Interior Trim and Ornamentation, Removal and Installation).

16. Repower the SRS.

Refer to: <u>Supplemental Restraint System (SRS) Repowering</u> (501-20B Supplemental Restraint System, General Procedures).

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