### **Rocker Panel Inner Reinforcement - SuperCab**

### Special Tool(s) / General Equipment

6.5 mm Drill Bit
Spherical Cutter
Self-Piercing Rivet (SPR) Remover/Installer
Belt Sander
Blind Rivet Gun
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	-
Seam Sealer TA-2-B, 3M™ 08308, LORD Fusor® 803DTM	-
Flexible Foam Repair 3M™ 08463, LORD Fusor® 121	-

### 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.

1. A 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.

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Refer to: <u>Health and Safety Precautions</u> (100-00 General Information, Description and Operation). Refer to: <u>High Voltage System Health and Safety Precautions - Overview</u> (100-00 General Information, Description and Operation).

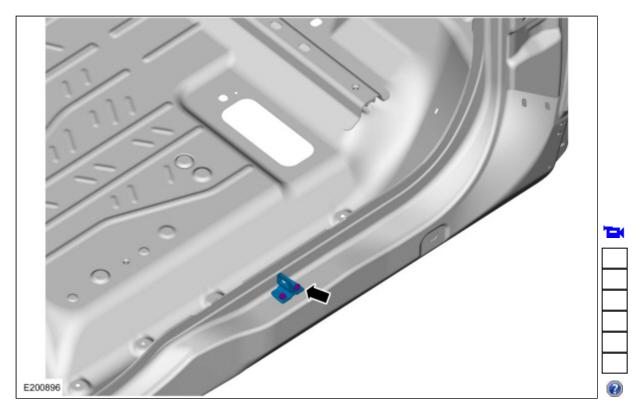
# NOTICE: Body side sectioning is prohibited within 50 mm of door hinge, door striker and restraints anchoring points.

**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:** The rocker panel reinforcement on the SuperCab is a two-piece component consisting of a front and rear section. **The front portion is an extrusion** *casting and may not be sectioned.* The rear portion only may be sectioned using a backer plate, adhesive and blind rivets. The following procedure assumes full component replacement.

NOTE: Pay particular attention to <u>NVH</u> foam locations to aid in installation.

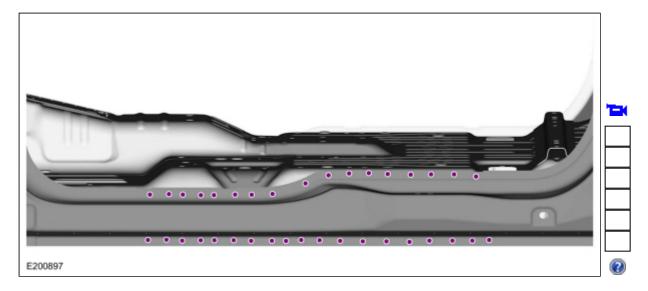
- NOTE: The following procedure assumes full component replacement.
  - 2. Remove the rear door striker.



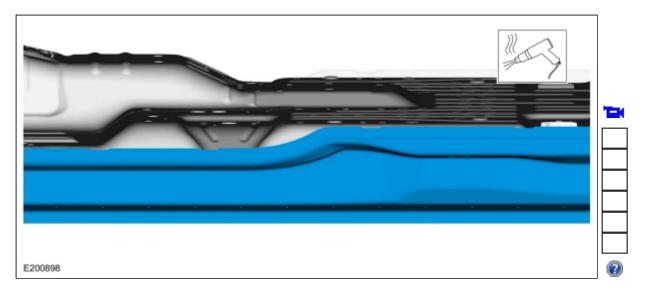
3. Remove the A-pillar reinforcement.

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

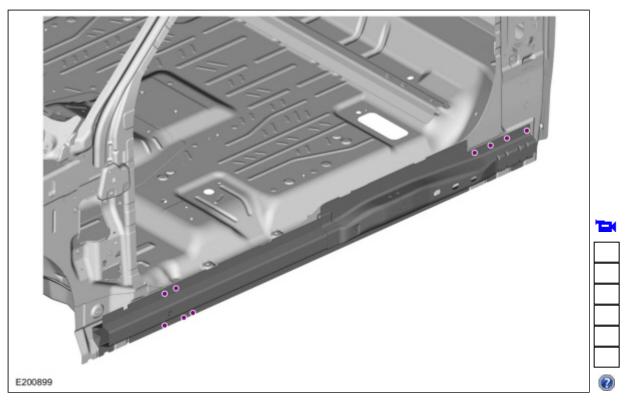
- 4. Remove the C-pillar reinforcement. Refer to: <u>C-Pillar Reinforcement</u> (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).
- Remove the <u>SPR</u> fasteners from the rocker panel outer. Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer Use the General Equipment: Belt Sander



6. Break the adhesive bond and remove the rocker outer sheet metal. Use the General Equipment: Hot Air Gun

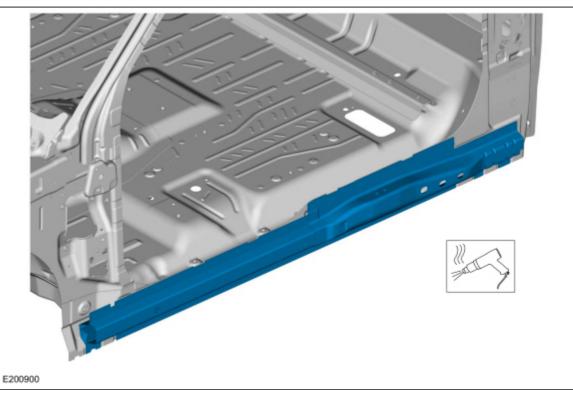


7. Remove the rocker panel reinforcement <u>SPR</u> fasteners.



8. Remove the rocker panel reinforcement assembly. Use the General Equipment: Hot Air Gun





## Installation

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

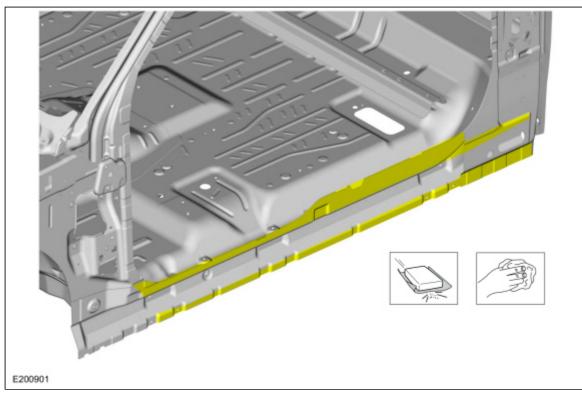
NOTE: <u>SPR</u> fasteners may not be placed directly over original <u>SPR</u> location. They must be placed adjacent to original location matching original quantity.

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

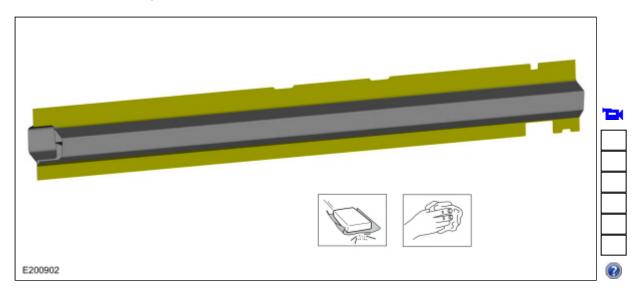
1. 80-120 grit sand paper.

Sand to remove old adhesive and e-coat and clean.

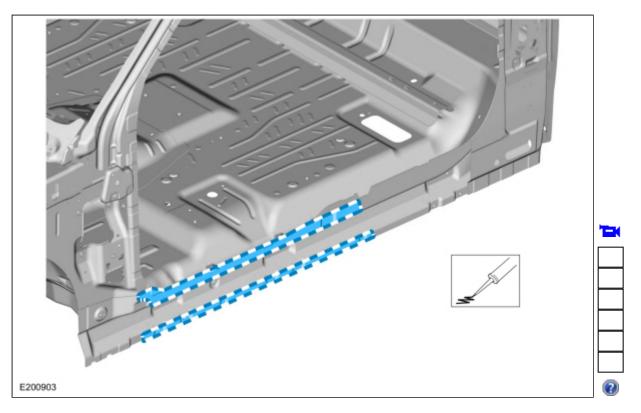




2. 80-120 grit sand paper. Sand the forward rocker panel reinforcement to remove e-coat and clean.

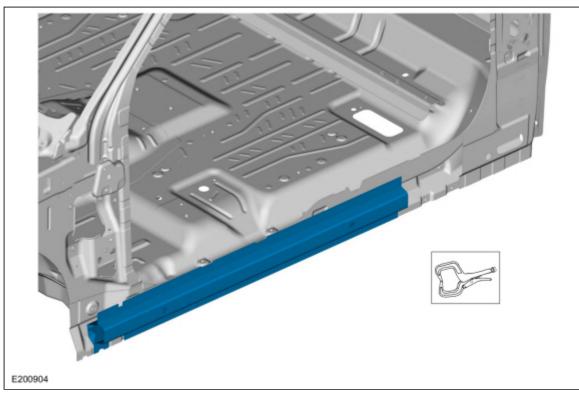


# 3. Apply adhesive for the forward rocker panel reinforcement. *Material*: Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B

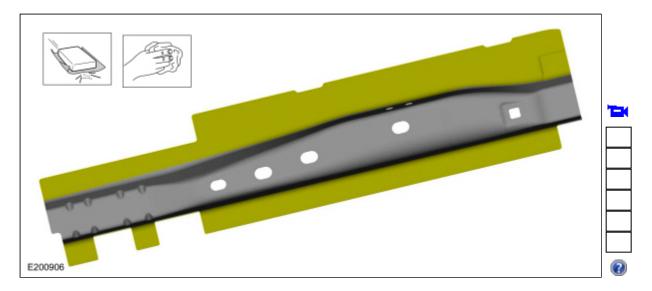


4. Install the forward rocker panel inner reinforcement and clamp in position. Use the General Equipment: Locking Pliers



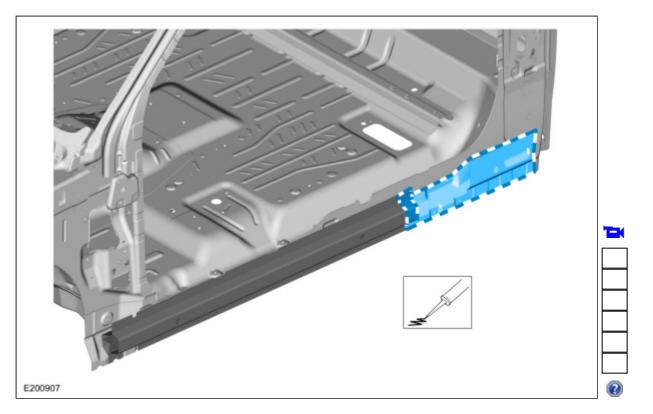


5. 80-120 grit sand paper. Sand the rear rocker panel reinforcement using 80 grit sand paper to remove e-coat and clean.



### 6. Apply adhesive.

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



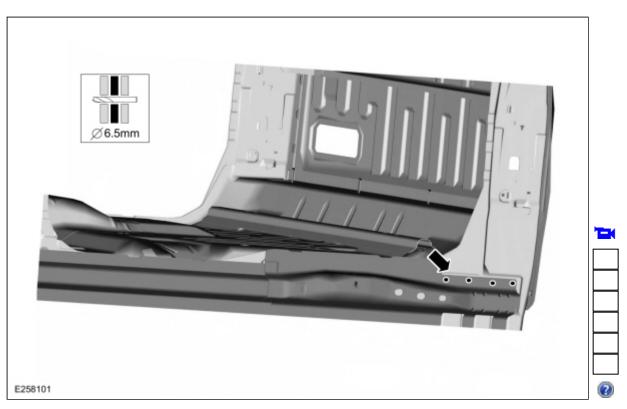
7. Install the rear reinforcement and clamp in position. Use the General Equipment: Locking Pliers





# 8. Drill for fasteners.

Use the General Equipment: 6.5 mm Drill Bit



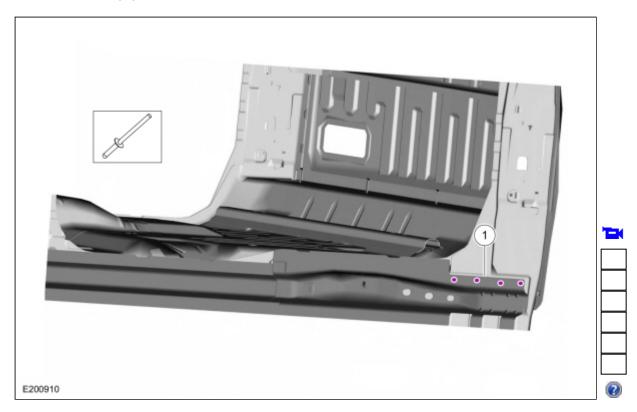
9. NOTE: <u>SPR</u> fasteners may not be placed directly over original <u>SPR</u> location. They must be placed adjacent to original location matching original quantity.

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

Install the rear reinforcement fasteners.

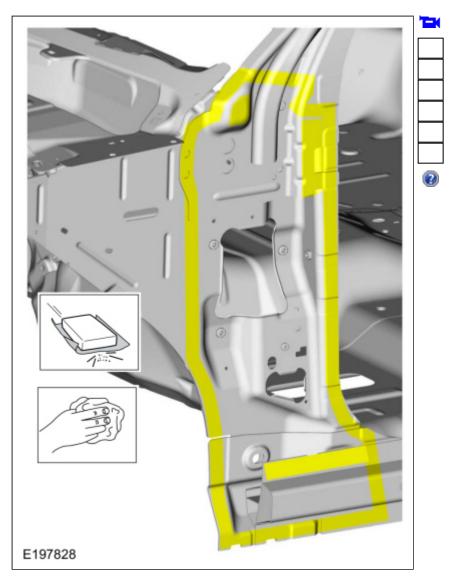
Item	<u>SPR</u> Number	<u>SPR</u> Code	Henrob® Car-O- Liner®, CMO®, Chief®, Spanesi® Wielande and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W702512- S900C	-	-

Refer to: <u>Joining Techniques</u> (501-25 Body Repairs - General Information, General Procedures). Use the General Equipment: Blind Rivet Gun

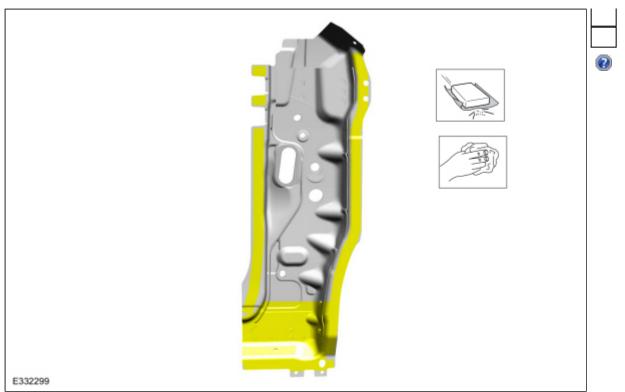


10. 80-120 grit sand paper.

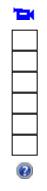
Sand to remove old adhesive and clean.



11. 80-120 grit sand paper. Sand to remove e-coat and clean.

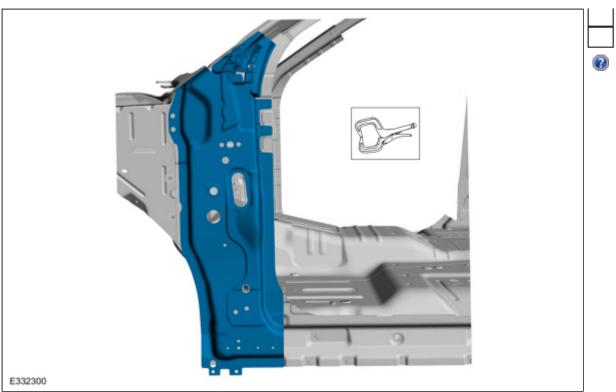


12. Apply adhesive. *Material*: Metal Bonding Adhesive / TA-1, TA-1-B, 3M<sup>™</sup> 08115, LORD Fusor® 108B



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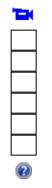
13. Install the A-pillar reinforcement and clamp in position. Use the General Equipment: Locking Pliers

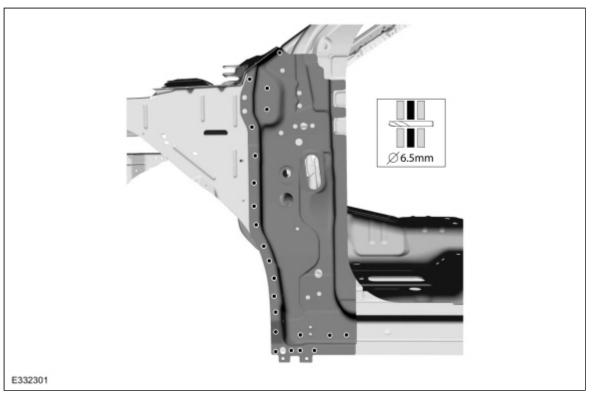


14. NOTE: Solid rivets or blind rivet fasteners may be used in place of SPR fasteners after enlarging existing holes to 6.5 mm.

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

Drill 6.5 mm holes in the reinforcement for blind rivet fasteners.





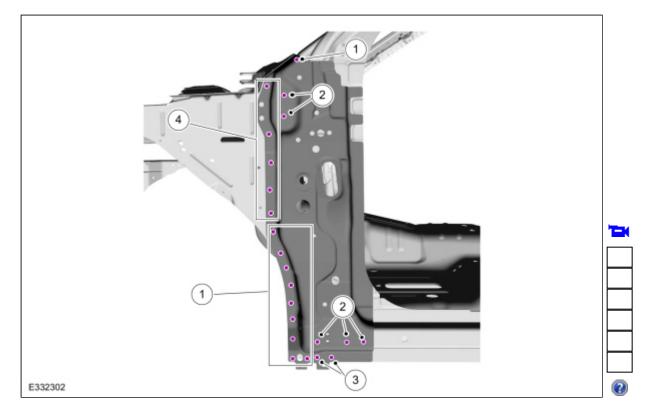
15. NOTE: <u>SPR</u> fasteners may not be placed directly over original <u>SPR</u> location. They must be placed adjacent to original location matching original quantity.

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

Install fasteners.

Item	<u>SPR</u> Number	<u>SPR</u> Code	Henrob® Car-O- Liner®, CMO®, Chief®, Spanesi® Wielande and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	W717182- S900	QC	DP10-200/H	SA-0400/SA- 0402	W708777- S900C	-	-
2	-	-	-	-	W708777- S900C	-	-
3	W717185- S900	EL	DP11-200/H	SA-0400/SA- 0402	W708777- S900C	-	-
4	-	-	-	-	W702512- S900C	-	-

Refer to: <u>Joining Techniques</u> (501-25 Body Repairs - General Information, General Procedures). Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer Use the General Equipment: Blind Rivet Gun

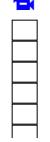


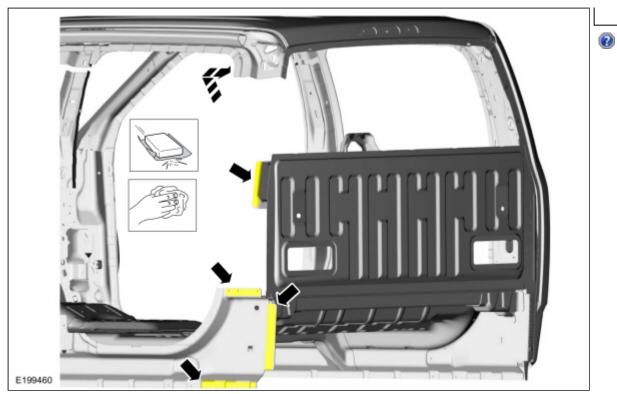
16. Install the fender apron panel.

Refer to: Fender Apron Panel Reinforcement (501-27 Front End Sheet Metal Repairs, Removal and Installation).

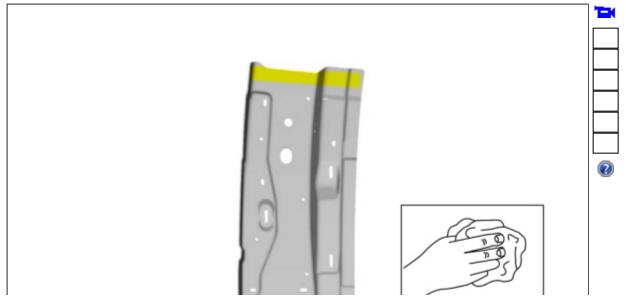
17. 80-120 grit sand paper.

Sand to remove old adhesive and clean.



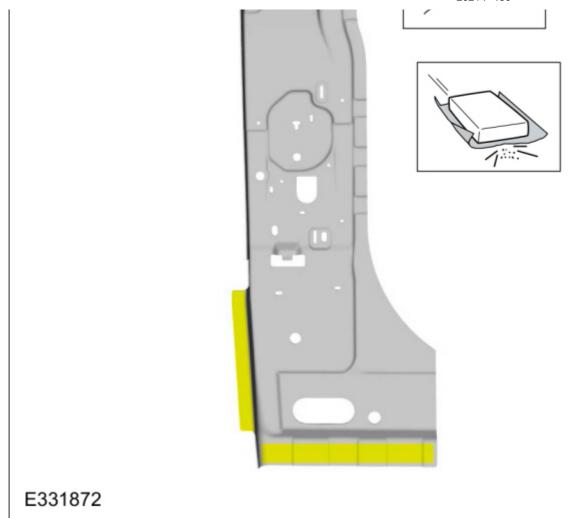


18. 80-120 grit sand paper. Sand to remove e-coat and clean.

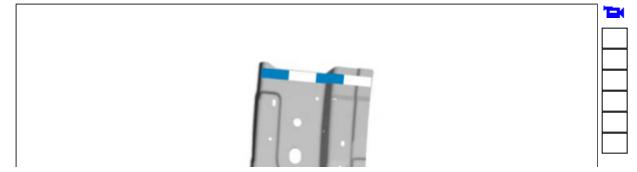




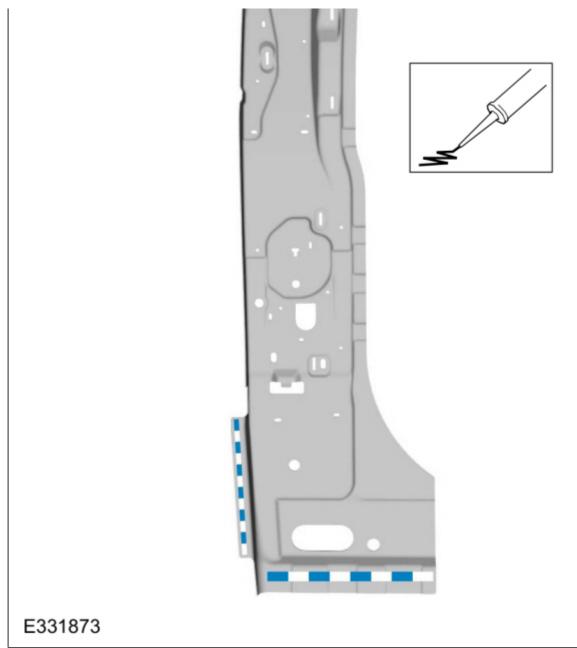
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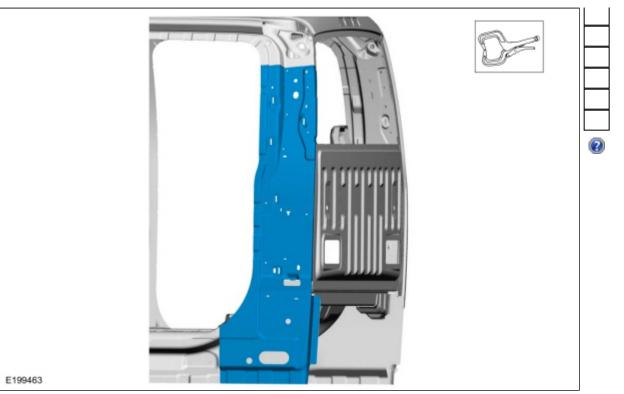
19. Apply adhesive. *Material*: Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B



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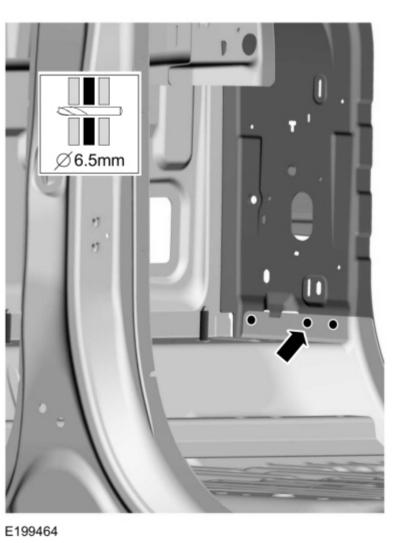


20. Install the C-pillar reinforcement and clamp in position. Use the General Equipment: Locking Pliers



21. Drill 6.5 mm holes for fastener installation. Use the General Equipment: 6.5 mm Drill Bit





22. NOTE: <u>SPR</u> fasteners may not be placed directly over original <u>SPR</u> 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 <u>SPR</u> fasteners after enlarging holes to 6.5 mm.

Install fasteners.

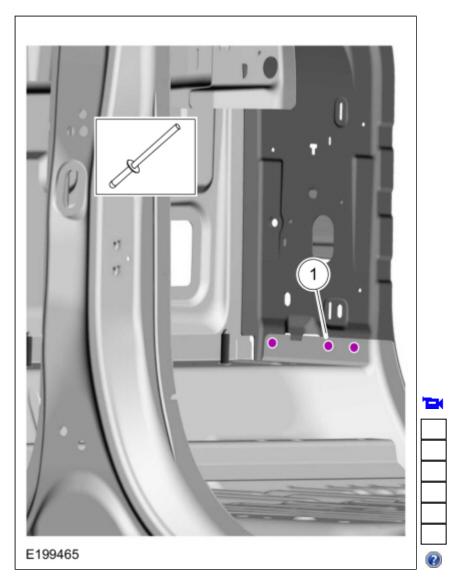
Item	<u>SPR</u> Number	<u>SPR</u> Code	Henrob® Car-O- Liner®, CMO®, Chief®, Spanesi® Wielande and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®

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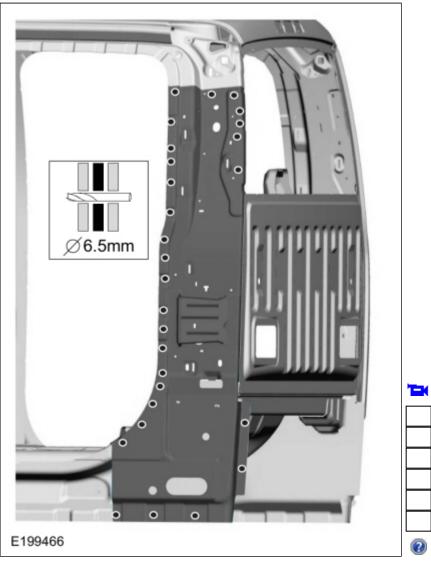
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1	-	- W705 S900
··		1 2

705512- -900C

Refer to: <u>Joining Techniques</u> (501-25 Body Repairs - General Information, General Procedures). Use the General Equipment: Blind Rivet Gun



23. Drill 6.5 mm holes for fastener installation. Use the General Equipment: 6.5 mm Drill Bit



24. NOTE: <u>SPR</u> fasteners may not be placed directly over original <u>SPR</u> location. They must be placed adjacent to original location matching original quantity.

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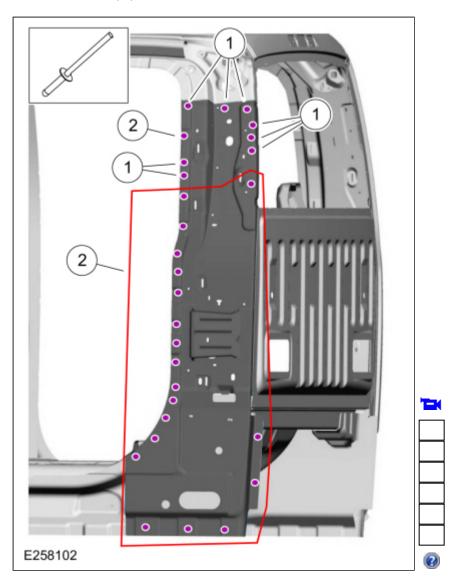
**NOTE:** Blind rivet or solid rivet fasteners may be used in place of <u>SPR</u> fasteners after enlarging holes to 6.5 mm.

Install fasteners.

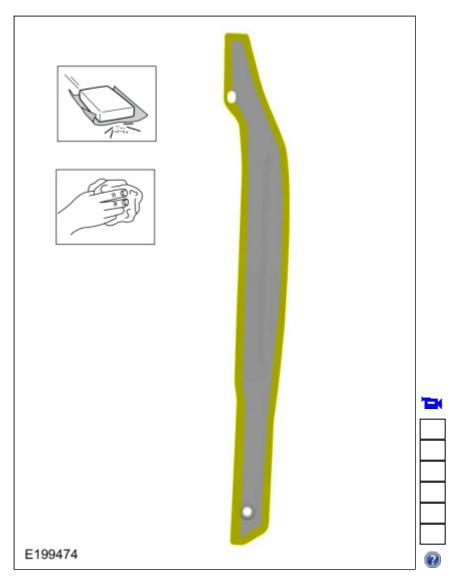
ľ	tem	<u>SPR</u> Number	Henrob® Car-O- Liner®, CMO®, Chief®, Spanesi® Wielande and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®

1	-	-	-		W708777- S900C	-	-
2	-	-	-	-	W702512- S900C	-	-

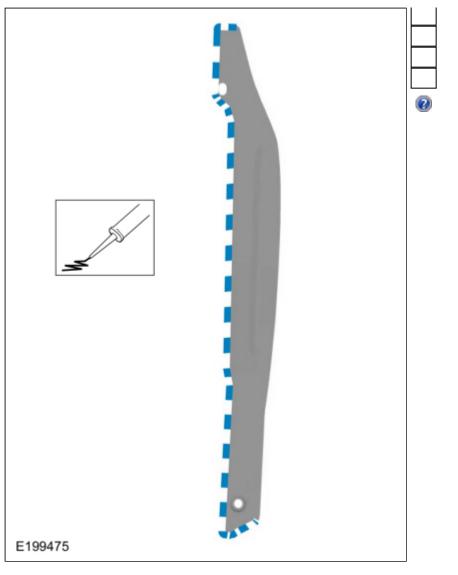
# Refer to: <u>Joining Techniques</u> (501-25 Body Repairs - General Information, General Procedures). Use the General Equipment: Blind Rivet Gun



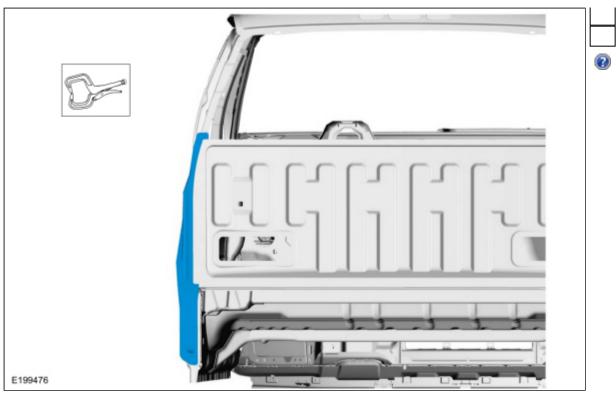
25. 80-120 grit sand paper. Sand the cab back filler panel to remove e-coat and clean.



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



27. Install the cab back filler panel and clamp in position. Use the General Equipment: Locking Pliers



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



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Ø6.5mm	
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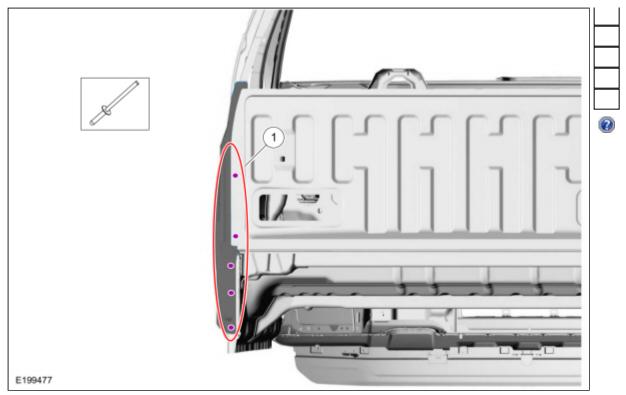
29. NOTE: <u>SPR</u> fasteners may not be placed directly over original <u>SPR</u> location. They must be placed adjacent to original location matching original quantity.

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

Install fasteners.

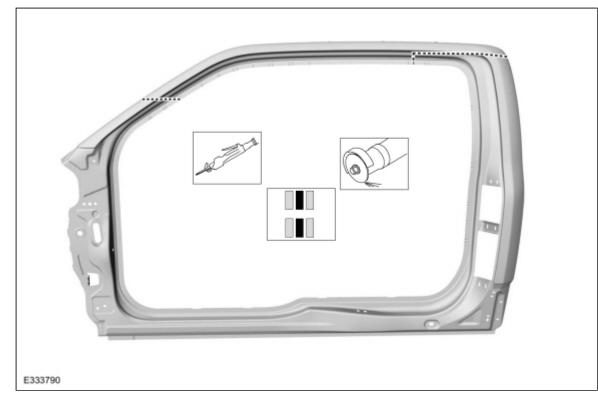
Item	<u>SPR</u> Number	<u>SPR</u> Code	Henrob® Car-O- Liner®, CMO®, Chief®, Spanesi® Wielande and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W707638- S900C	-	-

Refer to: <u>Joining Techniques</u> (501-25 Body Repairs - General Information, General Procedures). Use the General Equipment: Blind Rivet Gun



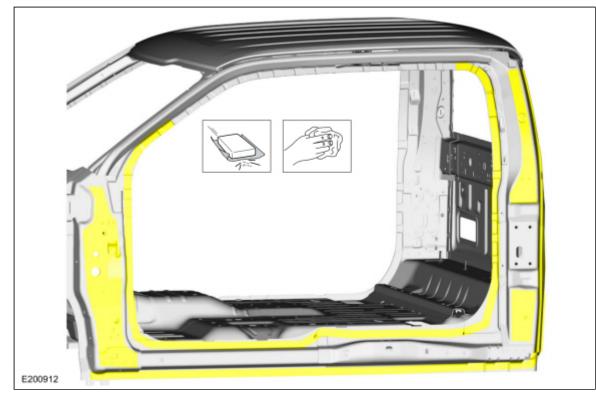
30. Cut the body side service panel to fit the repair area. Use the General Equipment: Air Body Saw Use the General Equipment: Spherical Cutter





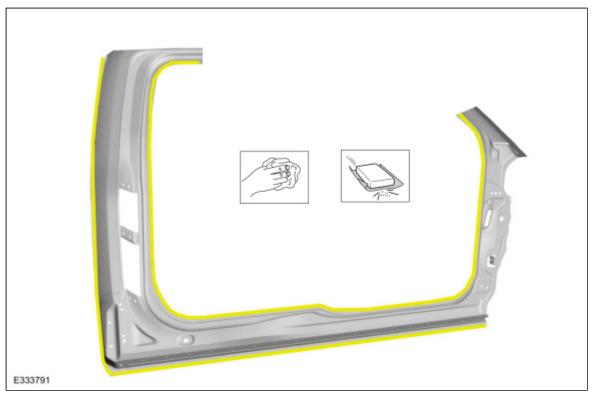
31. 80-120 grit sand paper. Sand to remove old adhesive and e-coat and clean.





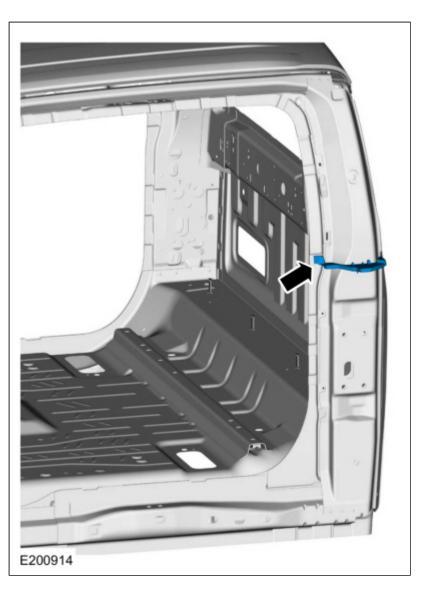
32. 80-120 grit sand paper. Sand to remove e-coat and clean.





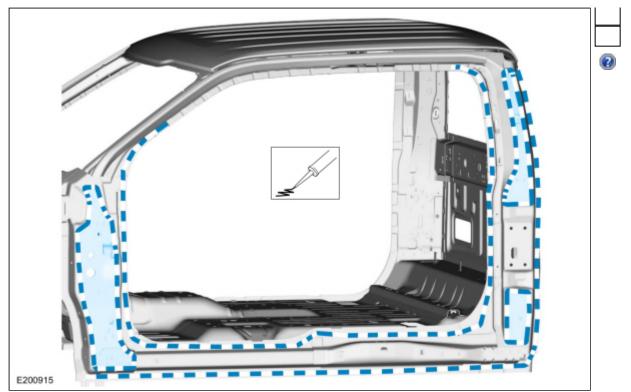
- 33. Create backing plates for butt weld joint for and unused portion of the body side service panel or old body side sheet metal and install on vehicle. Refer to: <u>Joining Techniques</u> (501-25 Body Repairs - General Information, General Procedures).
- 34. Install the C-pillar <u>NVH</u> baffle.





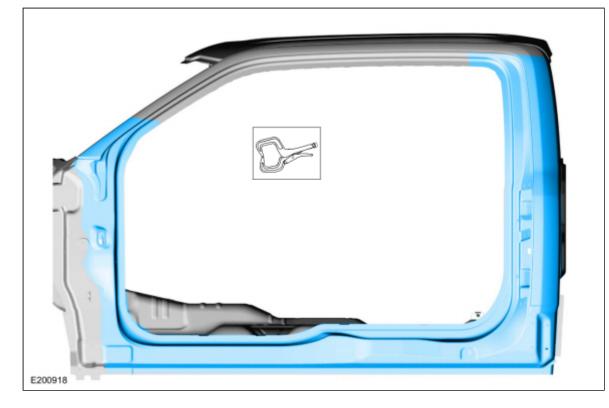
35. Apply adhesive. *Material*: Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B

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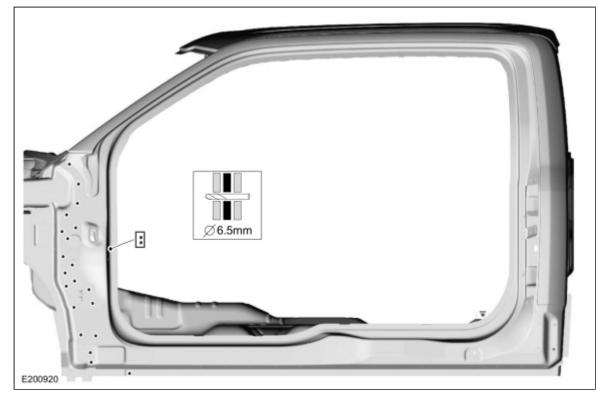


36. Install the body side service panel and clamp in position. Use the General Equipment: Locking Pliers





- 37. Complete attachment of backer plates to body side service panel. Refer to: <u>Joining Techniques</u> (501-25 Body Repairs - General Information, General Procedures).
- 38. Drill for fastener installation.Use the General Equipment: 6.5 mm Drill Bit

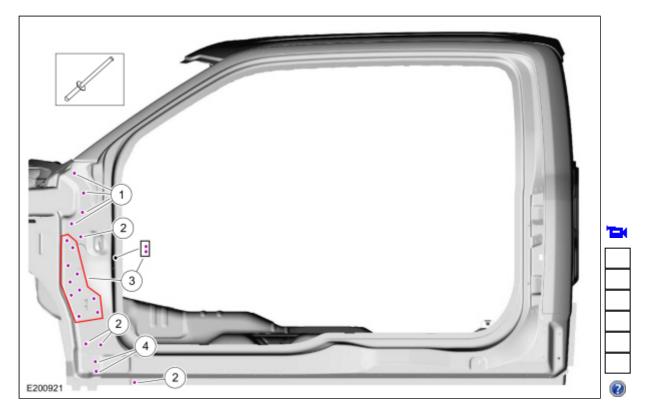


39. NOTE: <u>SPR</u> fasteners may not be placed directly over original <u>SPR</u> location. They must be placed adjacent to original location matching original quantity.

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

Install fasteners.

	<u>SPR</u> Number	<u>SPR</u> Code	Henrob® Car-O- Liner®, CMO®, Chief®, Spanesi® Wielande and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W707638- S900C	-	-
2	-	-	-	-	W708777- S900C	-	-
3	-	-	-	-	W702512- S900C	-	-
4	-	-	-	-	W702554- S900C	-	-



Refer to: <u>Joining Techniques</u> (501-25 Body Repairs - General Information, General Procedures). Use the General Equipment: Blind Rivet Gun

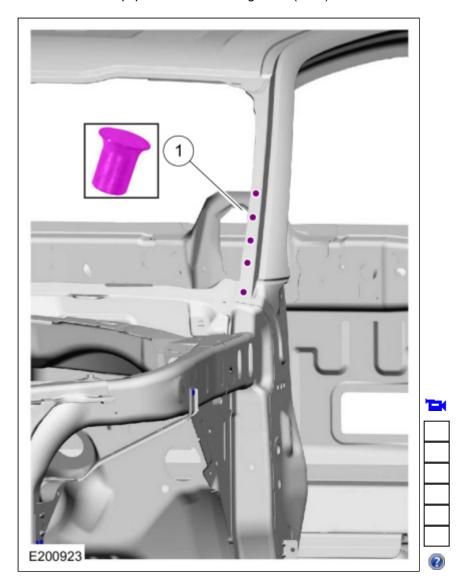
40. NOTE: <u>SPR</u> fasteners may not be placed directly over original <u>SPR</u> location. They must be placed adjacent to original location matching original quantity.

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

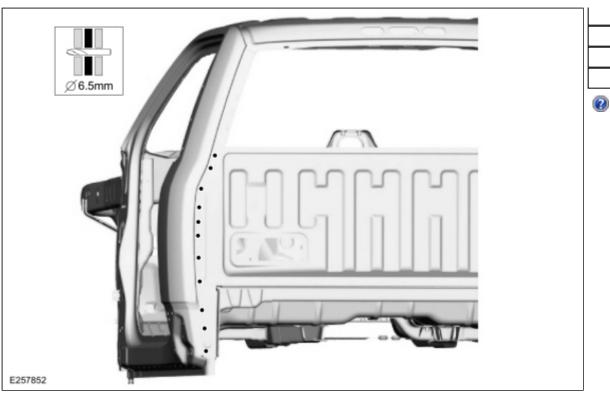
Install fasteners.

Item	<u>SPR</u> Number		Henrob® Car-O- Liner®, CMO®, Chief®, Spanesi® Wielande and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	W708713- S900	AS		SA-0400/SA- 0401	-	W790376- S900	

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



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



42. NOTE: <u>SPR</u> fasteners may not be placed directly over original <u>SPR</u> 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 <u>SPR</u> fasteners after enlarging holes to 6.5 mm.

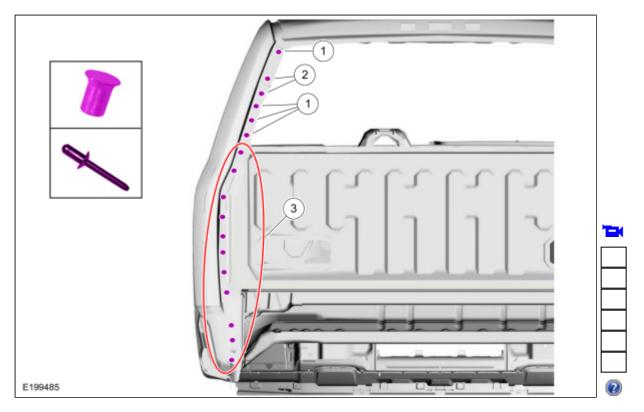
Install fasteners.

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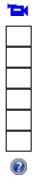
Item	<u>SPR</u> Number	<u>SPR</u> Code	Henrob® Car-O- Liner®, CMO®, Chief®, Spanesi® Wielande and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	W717337- S900	PX	DG11-220/H	SA-0400/SA- 0402	-	W790377- S900	-
2	W708713- S900	AS	DZ09-025/H	SA-0400/SA- 0402	-	W790337- S900	-
3	-	-	-	-	W708777- S900C	-	-

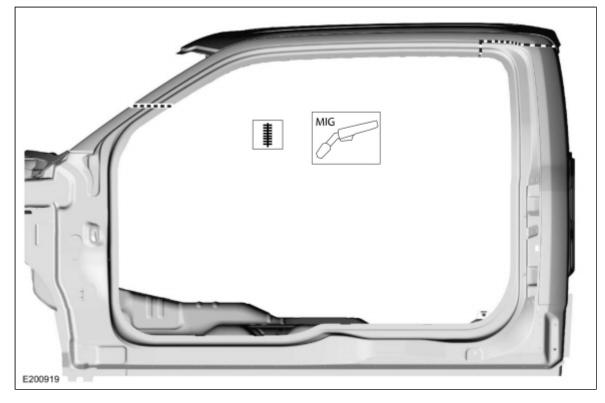
Refer to: Joining Techniques (501-25 Body Repairs - General Information, General Procedures).

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



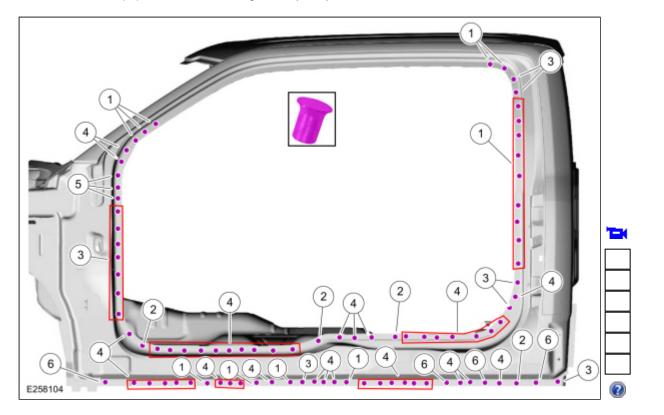
43. Seam weld all sectioning joints using a <u>MIG</u> welder set up for aluminum repair. Use the General Equipment: MIG/MAG Welding Equipment





# 44. Install fasteners.

Item	<u>SPR</u> Number	<u>SPR</u> 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	-	W790376- S900	-
2	W708713- S900	AS	DZ09-025/H	SA-0400/SA- 0402	-	W790377- S900	-
3	W708717- S900	AW	DG10-220/H	SA-0400/SA- 0402	-	W790377- S900	-
4	W717186- S900	EN	DP11-200/H	SA-0400/SA- 0402	-	W790377- S900	-
5	W717185- S900	EL	DG11-220/H	SA-0400/SA- 0402	-	W790377- S900	-
6	W710246- S900	BN	DP10-200/H	SA-0400/SA- 0402	-	W790377- S900	-



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

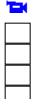
- 45. Apply <u>NVH</u> foam sealant in areas noted during removal. *Material*: Flexible Foam Repair / 3M™ 08463, LORD Fusor® 121
- 46. Metal finish all sectioning joints using typical aluminum metal finishing techniques and a fiber-based body filler. Refer to: <u>Special Repair Considerations for Aluminum Repairs</u> (501-25 Body Repairs - General Information, Description and Operation).

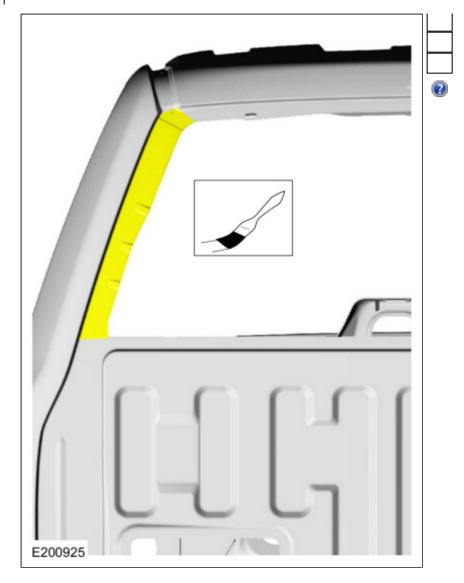
## 47. Install the fender apron panel.

Refer to: Fender Apron Panel Reinforcement (501-27 Front End Sheet Metal Repairs, Removal and Installation).

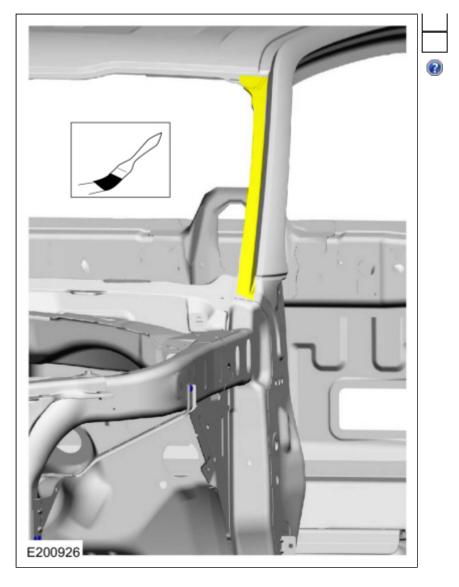
### 48. Epoxy prime.

Apply a Ford approved epoxy-based primer to the rear window opening channel.





49. Epoxy prime. Apply a Ford approved epoxy-based primer to the windshield opening channel.



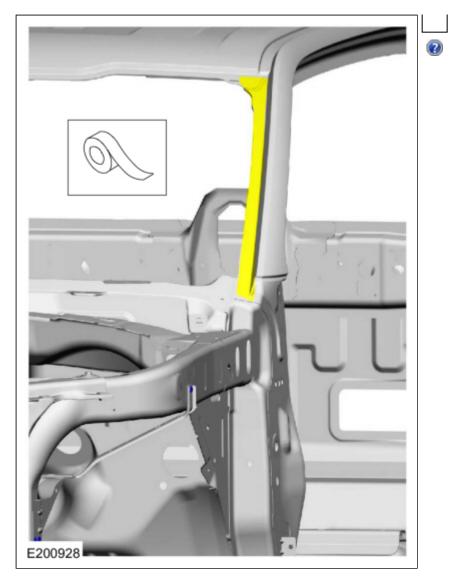
50. Mask the rear window opening channel.



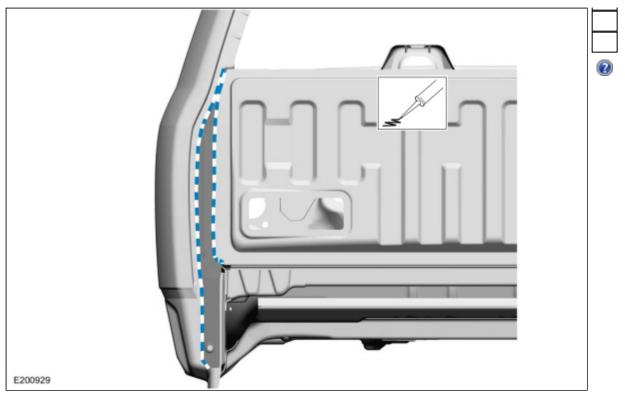
51. Mask the windshield opening channel.



10

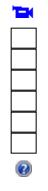


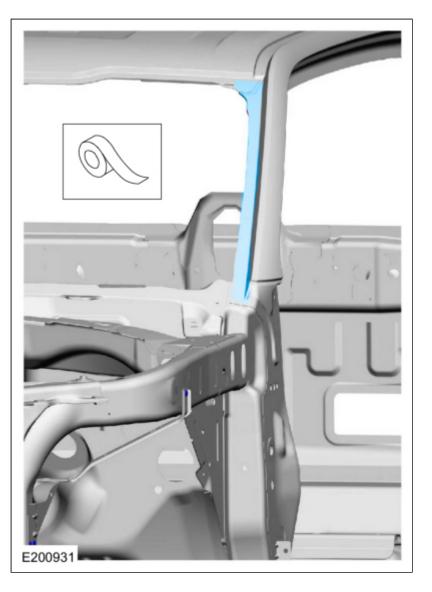
52. Seam Sealing: All seams must be sealed to production level. *Material*: Seam Sealer / TA-2-B, 3M™ 08308, LORD Fusor® 803DTM



53. Refinish the entire repair using a Ford approved paint system and typical refinishing techniques.

54. Unmask the windshield opening channel.





55. Unmask the rear window opening channel.

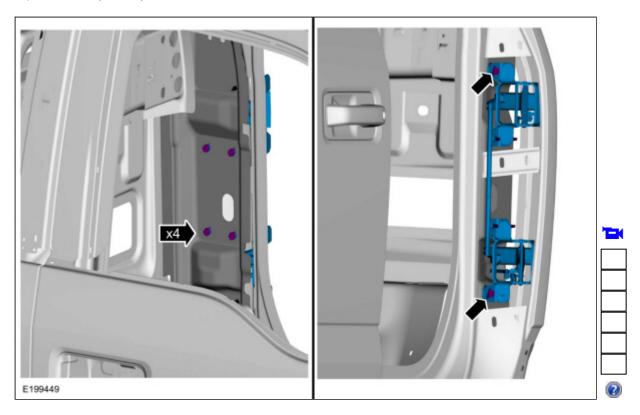


56. Install the side curtain air bag.

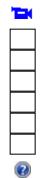
Refer to: Side Curtain Airbag - SuperCab (501-20B Supplemental Restraint System, Removal and Installation).

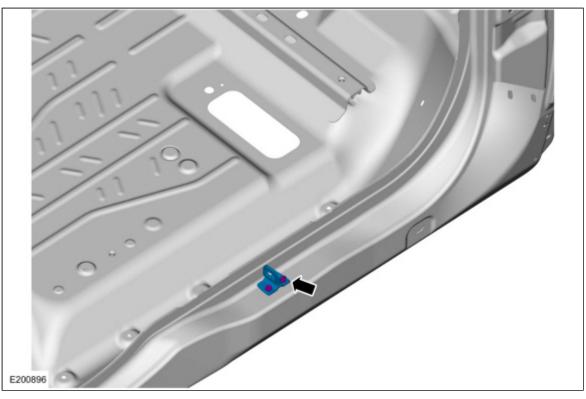
- 57. Install the windshield and rear window glass. Refer to: Fixed Glass (501-11 Glass, Frames and Mechanisms, General Procedures).
- 58. Install the roof and cab trim.

Refer to: Roof Moulding (501-08 Exterior Trim and Ornamentation, Removal and Installation). Refer to: Bodyside Moulding (501-08 Exterior Trim and Ornamentation, Removal and Installation). 59. Install the rear door hinge. *Torque*: 21 lb.ft (28 Nm)



60. Install the rear door striker. *Torque*: 18 lb.ft (25 Nm)





61. Install the front and rear doors.

Refer to: <u>Front Door - SuperCab</u> (501-03 Body Closures, Removal and Installation). Refer to: <u>Rear Door - SuperCab</u> (501-03 Body Closures, Removal and Installation).

- 62. Install the front fender. Refer to: <u>Fender</u> (501-02 Front End Body Panels, Removal and Installation).
- 63. Align the front and rear doors.

Refer to: <u>Front Door Alignment - SuperCab</u> (501-03 Body Closures, General Procedures). Refer to: <u>Rear Door Alignment - SuperCab</u> (501-03 Body Closures, General Procedures).

64. Repower the SRS.

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

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