

Rocker Panel - Crew Cab

Special Tool(s) / General Equipment

6.5 mm Drill Bit
Scraper for Straight Edges
Spherical Cutter
Polydrive Bit Socket
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 [®] 805DTM	-
Flexible Foam Repair 3M [®] , 08463, LORD Fusor [®] 121	-

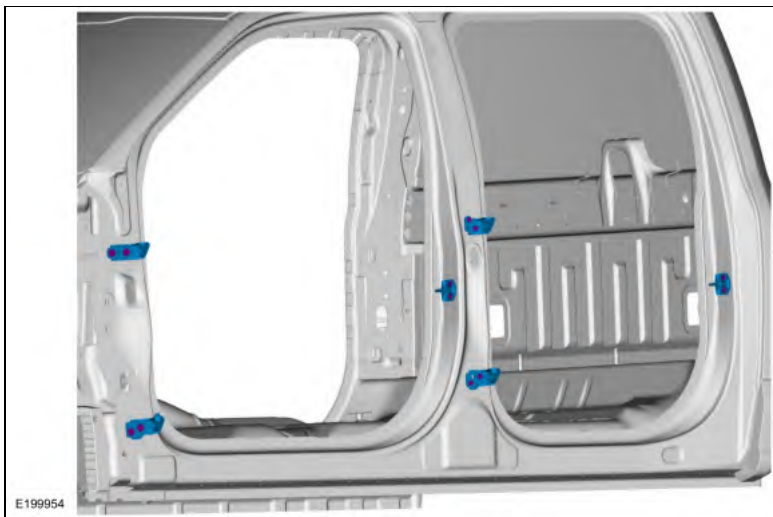
Removal

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

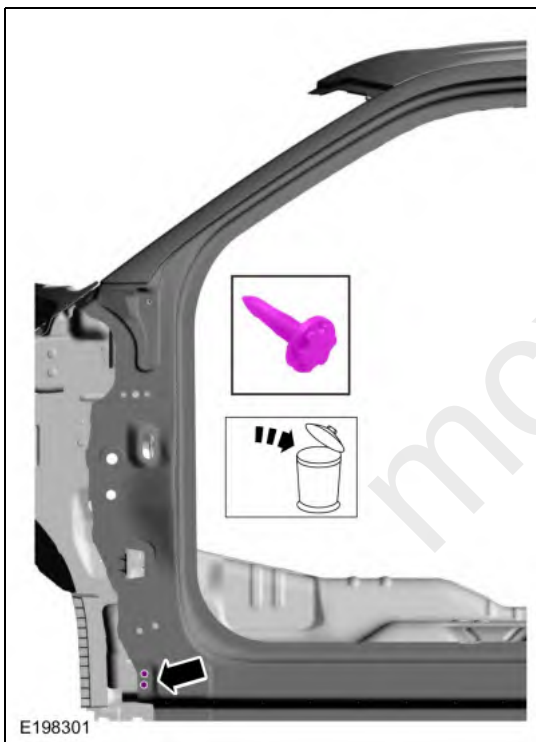
NOTE: Aluminum body panels are highly receptive to heat transfer. With the extensive use of structural adhesives and non-structural sealers used in vehicle construction, the potential of heat transfer could impact adhesives and sealers in non-associated panels during the repair process. Many repairs 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 is constructed of aluminum and may be sectioned. The following assumes complete component replacement. Sectioning may be adjusted to meet repair requirement as long as door hinge, striker and restraints requirements are met.

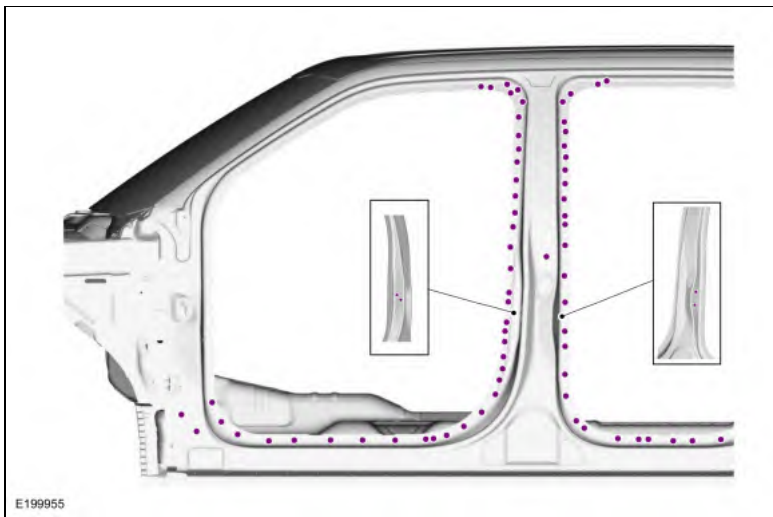
1. Depower the SRS.
Refer to: Supplemental Restraint System (SRS) Depowering (501-20B Supplemental Restraint System, General Procedures).
2. Remove the front fender.
Refer to: Fender (501-02 Front End Body Panels, Removal and Installation).
3. Remove the front and rear doors.
Refer to: Front Door - Crew Cab/Regular Cab (501-03 Body Closures, Removal and Installation).
Refer to: Front Door - SuperCab (501-03 Body Closures, Removal and Installation).
Refer to: Rear Door - SuperCab (501-03 Body Closures, Removal and Installation).
Refer to: Rear Door - Crew Cab (501-03 Body Closures, Removal and Installation).
4. Remove the front and rear door strikers and hinges.



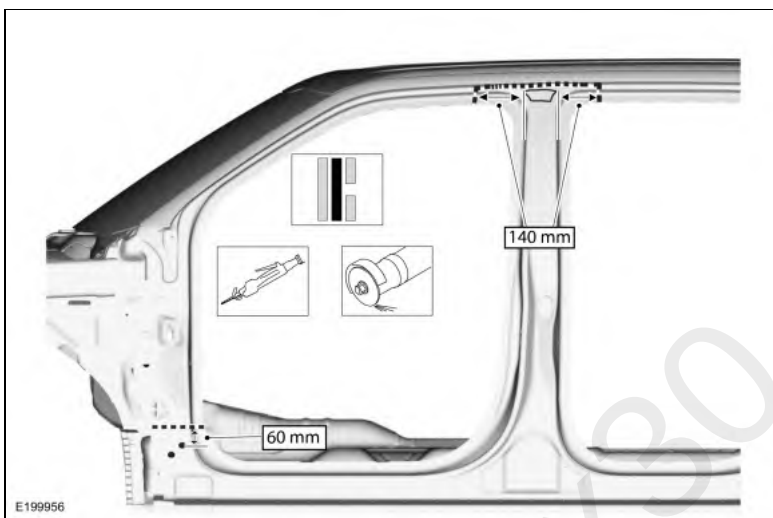
5. Make sure the vehicle is dimensionally correct.
Refer to: Body and Frame (501-26 Body Repairs - Vehicle Specific Information and Tolerance Checks, Description and Operation).
6. Remove the C-pillar reinforcement.
Refer to: C-Pillar Reinforcement (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).
7. Remove and discard the FDS fasteners.
Use the General Equipment: Polydrive Bit Socket



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



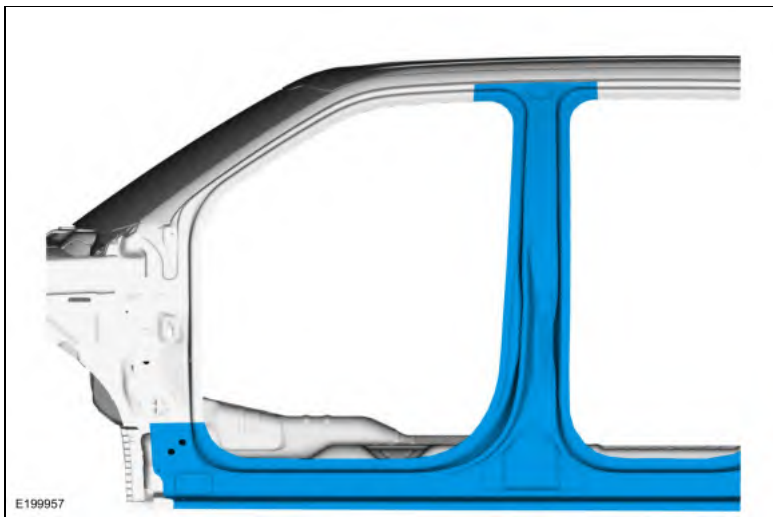
9. Measure and cut **the outer panel only** of the body side panel.
Use the General Equipment: Air Body Saw
Use the General Equipment: Spherical Cutter



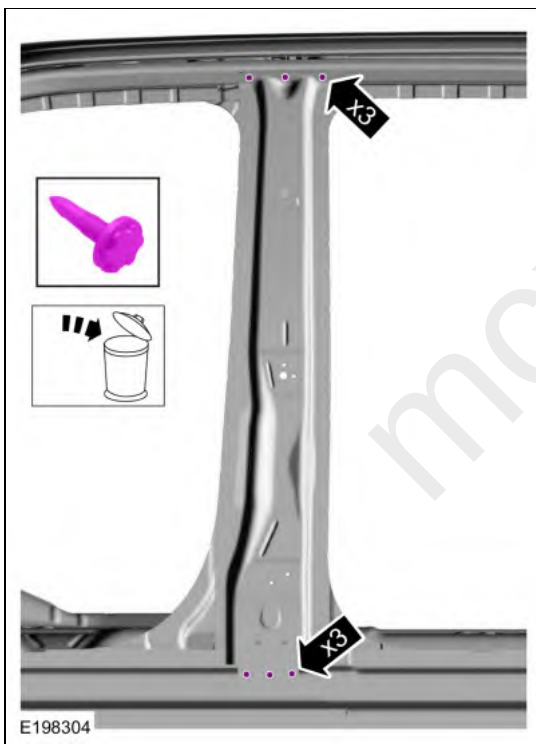
10. **NOTE:** Aluminum body panels are highly receptive to heat transfer. With the extensive use of structural adhesives and non-structural sealers used in vehicle construction, the potential of heat transfer could impact adhesives and sealers in non-associated panels during the repair process. Many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

NOTE: Pay particular attention to NVH foam and baffle locations to aid in assembly.

Break the adhesive bond and remove the outer sheet metal.



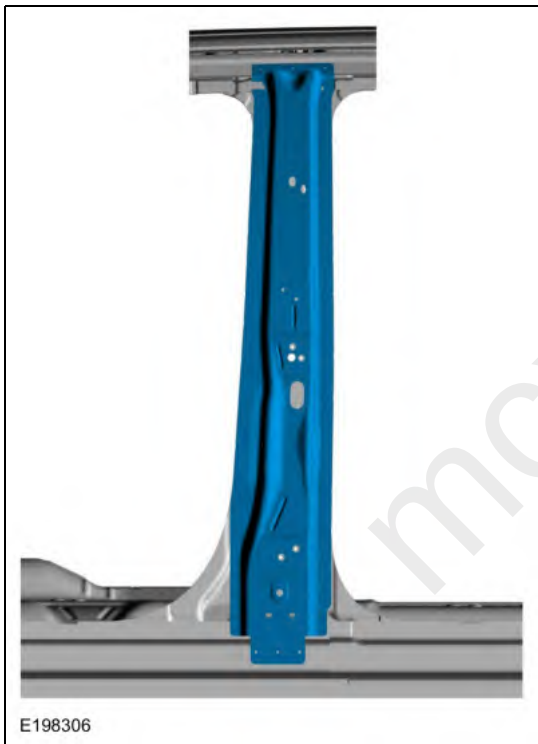
11. Remove and discard the B-pillar reinforcement FDS fasteners.
Use the General Equipment: Polydrive Bit Socket



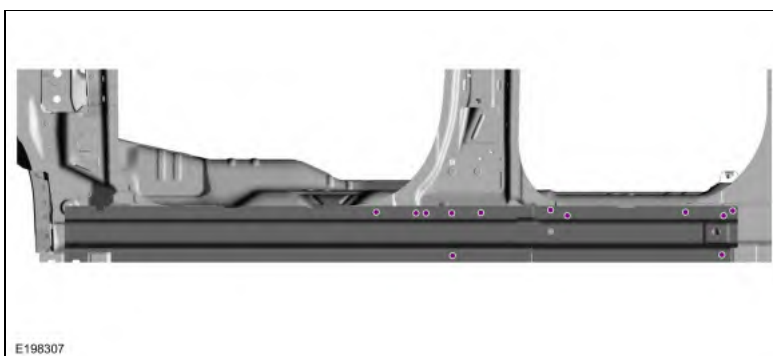
12. Remove the B-pillar reinforcement SPR fasteners.
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer
Use the General Equipment: Belt Sander



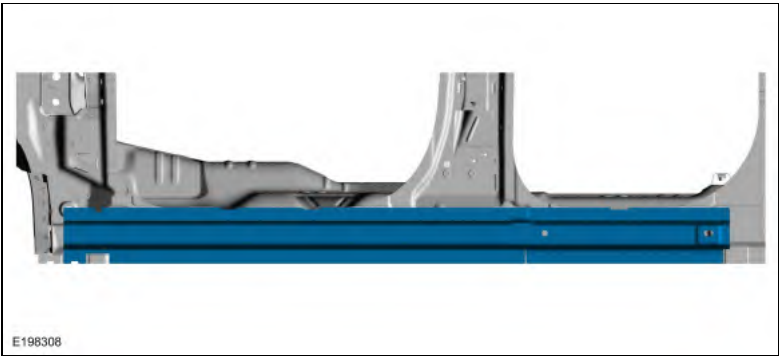
13. Remove the B-pillar reinforcement.



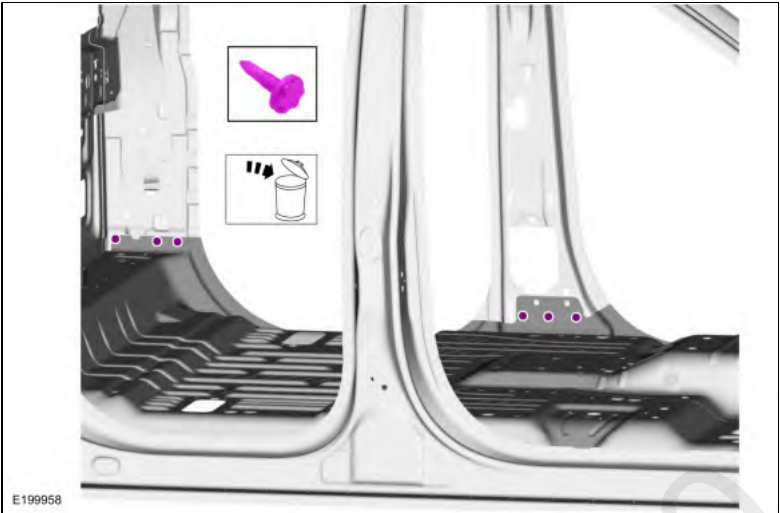
14. Remove the rocker panel inner reinforcement SPR fasteners.
 Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer
 Use the General Equipment: Belt Sander



15. Remove the rocker panel inner reinforcement.



16. Remove and discard the B and C-pillar FDS fasteners.
Use the General Equipment: Polydrive Bit Socket



17. Remove and discard the A-pillar FDS fasteners.
Use the General Equipment: Polydrive Bit Socket



18. Remove the floor pan-to-rocker panel seam sealer.
Use the General Equipment: Hot Air Gun
Use the General Equipment: Scraper for Straight Edges



- A horizontal bar chart with a vertical axis on the left and a horizontal axis at the bottom. The vertical axis has a label 'Percentage' and a scale from 0 to 100 in increments of 20. The horizontal axis has a label 'Percentage' and a scale from 0 to 100 in increments of 20. There are six horizontal bars of different colors: blue, green, brown, yellow, purple, and light blue. The bars are ordered from top to bottom as blue, green, brown, yellow, purple, and light blue. The lengths of the bars are approximately 80%, 70%, 60%, 50%, 40%, and 30% respectively. A large, faint watermark '.com' is visible in the background.

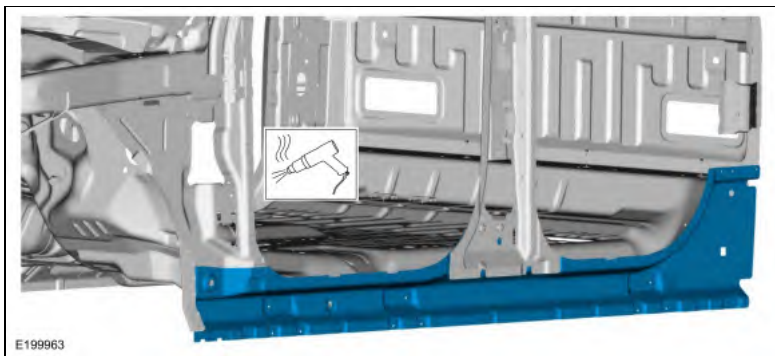
Color	Percentage
Blue	80%
Green	70%
Brown	60%
Yellow	50%
Purple	40%
Light Blue	30%



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21. Break the adhesive bond and remove the rocker panel.
Use the General Equipment: Hot Air Gun

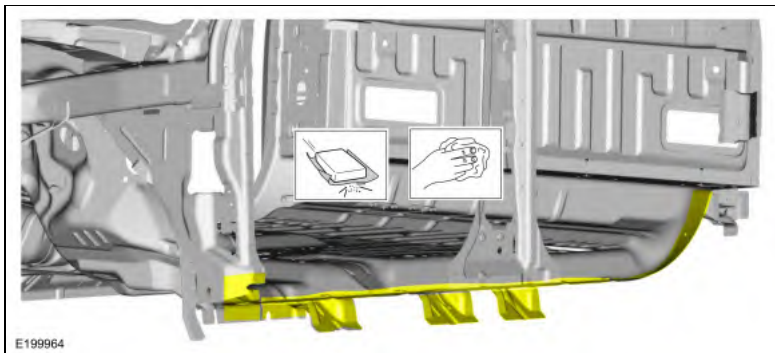


Installation

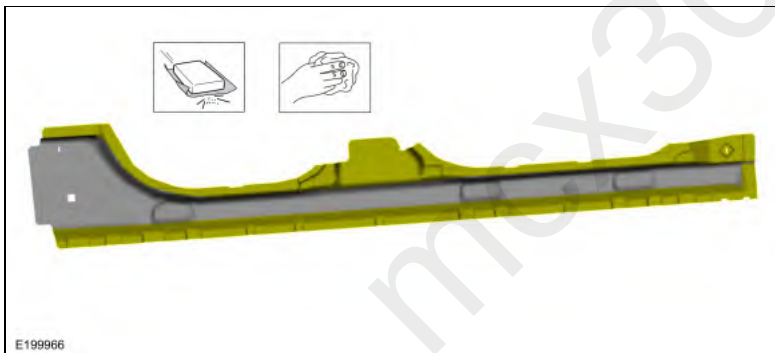
NOTICE: Body side sectioning is prohibited within 50 mm of door hinge, door striker and restraints anchoring points.

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

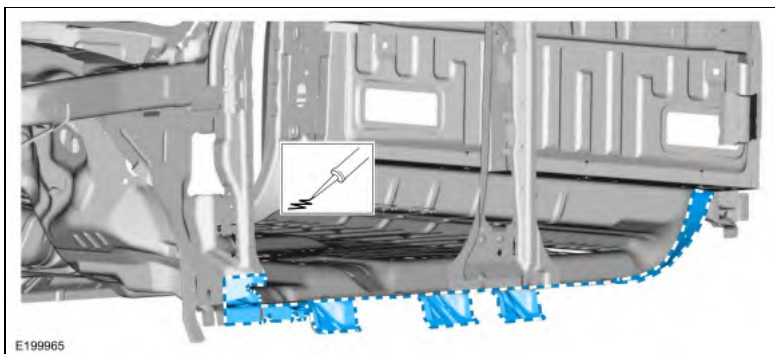
1. 80-120 grit sand paper.
Sand to remove old adhesive and e-coat and clean.



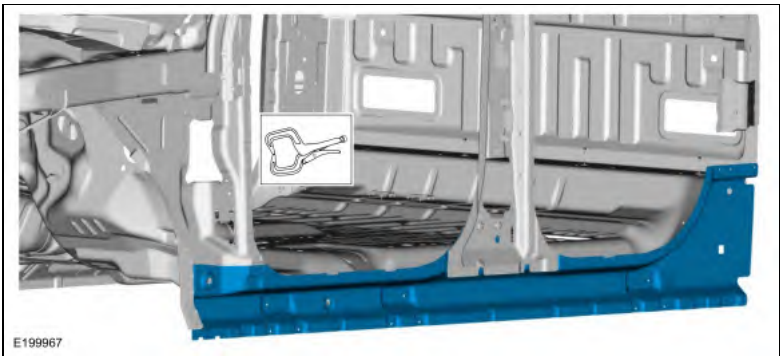
2. 80-120 grit sand paper.
Sand to remove old adhesive and e-coat and clean.



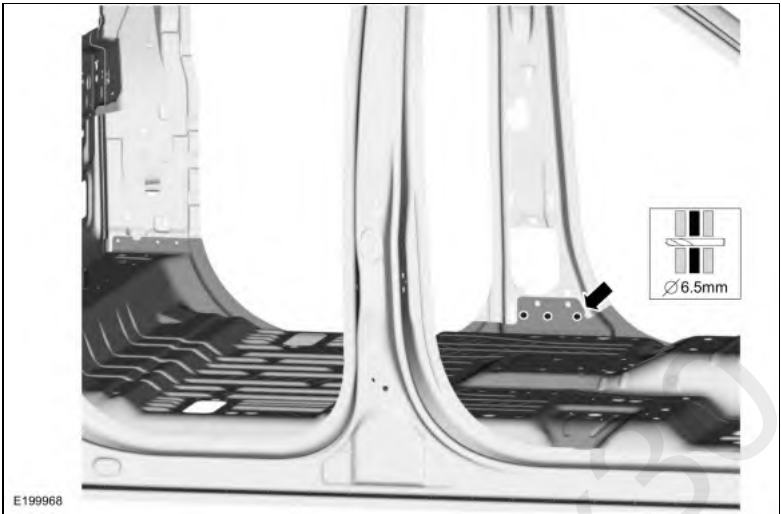
3. Apply adhesive.
Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3M[®], 08115, LORD Fusor[®] 108B



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



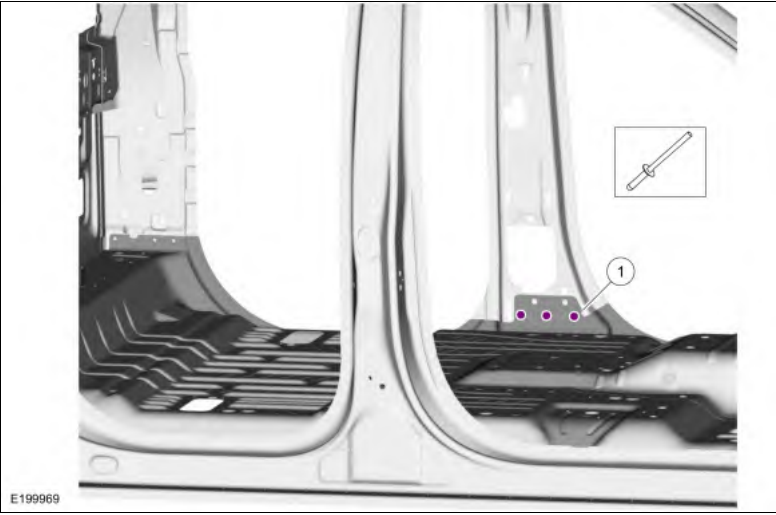
5. Drill 6.5 mm holes for fasteners.
 Use the General Equipment: 6.5 mm Drill Bit



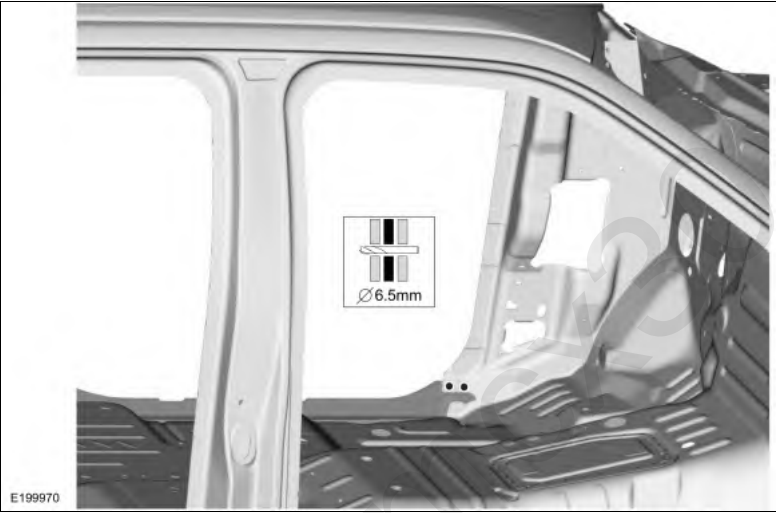
6. **NOTE:** SPR fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.
 Install fasteners.

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W708777-S900C	-	-

Use the General Equipment: Blind Rivet Gun



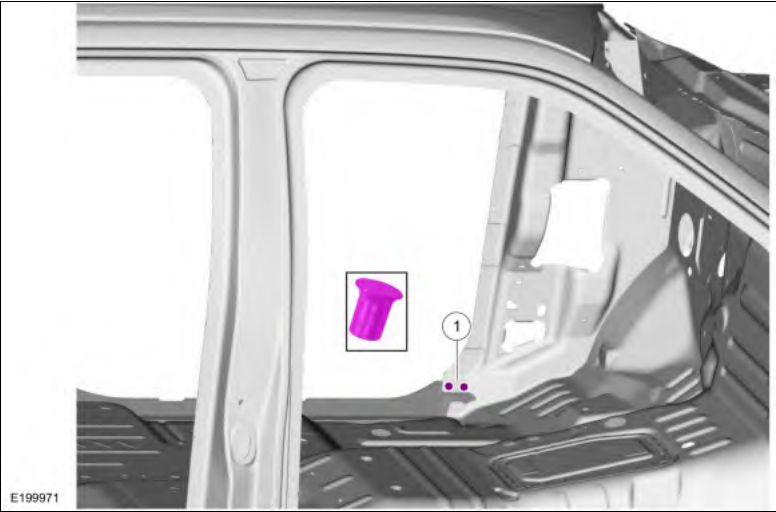
7. Drill for fasteners.
Use the General Equipment: 6.5 mm Drill Bit



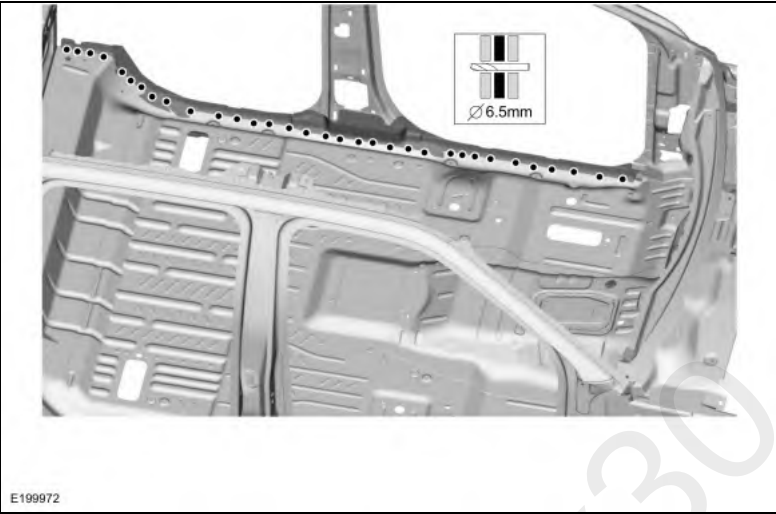
8. **NOTE:** SPR fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.
Install fasteners.

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	W717185-S900	EL	DP11-200/H	SA-0400/SA-0402	W708777-S900C	W790377-S900	-

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



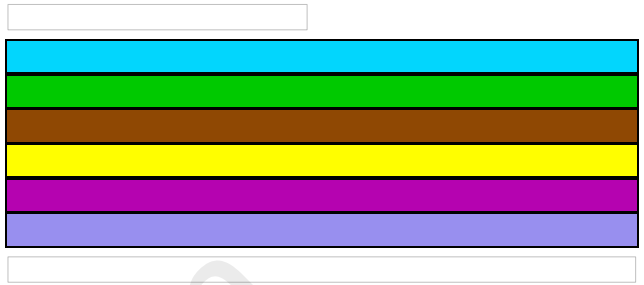
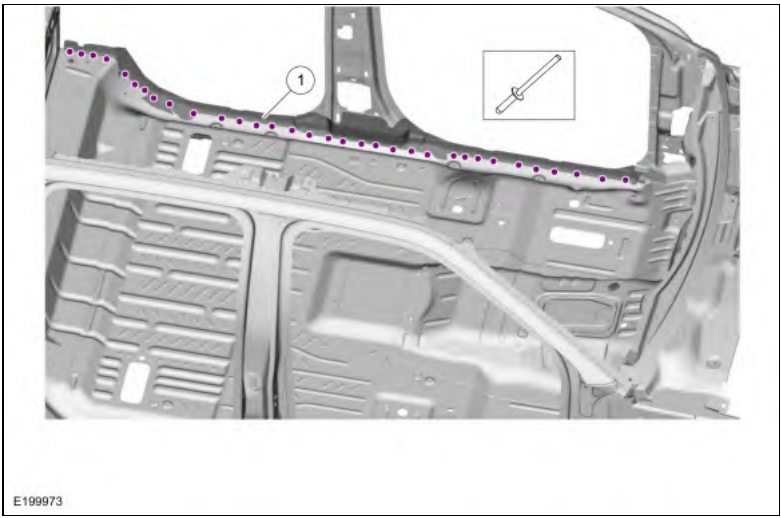
9. Drill for fasteners.
Use the General Equipment: 6.5 mm Drill Bit



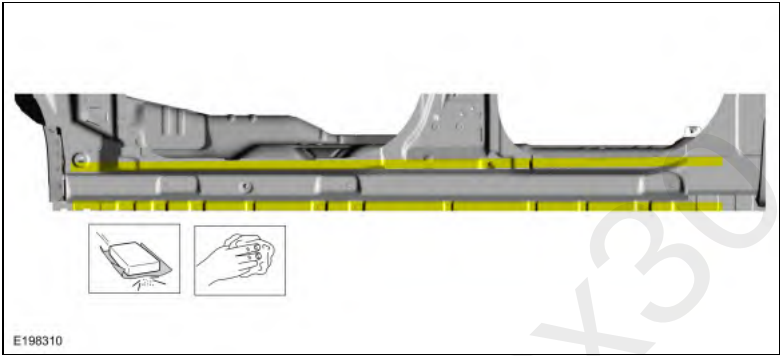
10. **NOTE:** SPR fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.
- Install fasteners.

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W702512-S900C	-	-

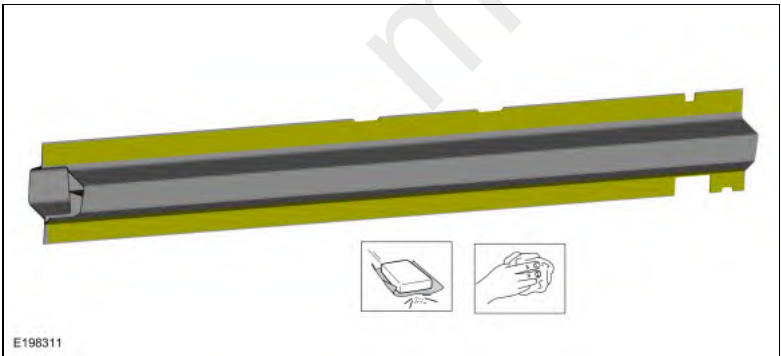
Use the General Equipment: Blind Rivet Gun



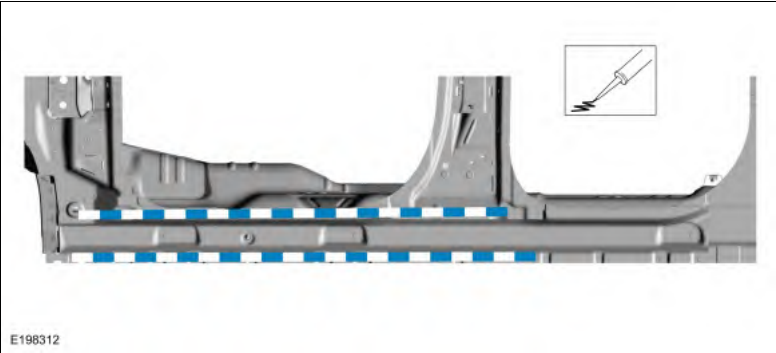
11. 80-120 grit sand paper.
Sand to remove e-coat and clean.



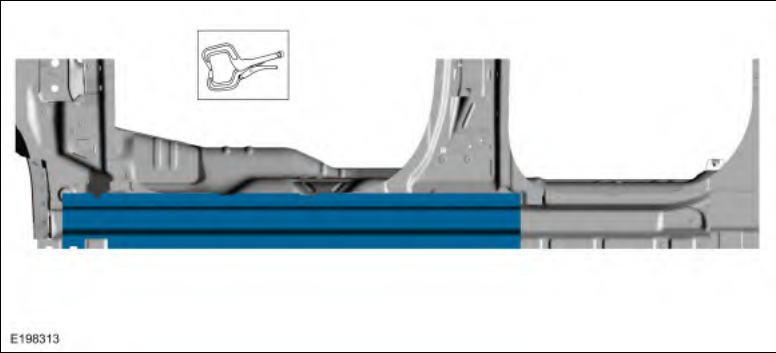
12. 80-120 grit sand paper.
Sand the forward rocker panel inner reinforcement mating surface to remove e-coat and clean.



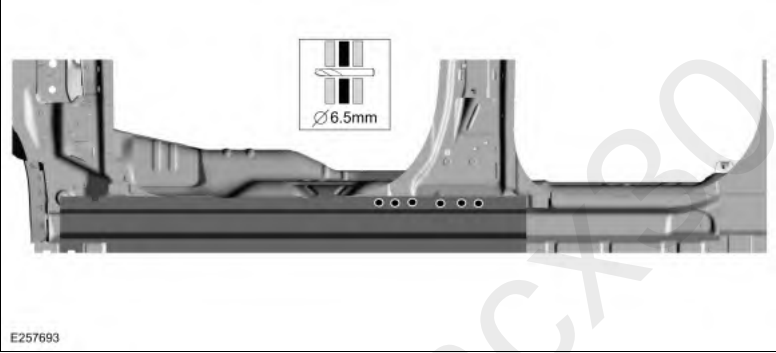
13. Apply adhesive for the forward rocker panel inner reinforcement.
Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3M[®] 08115, LORD Fusor[®] 108B



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



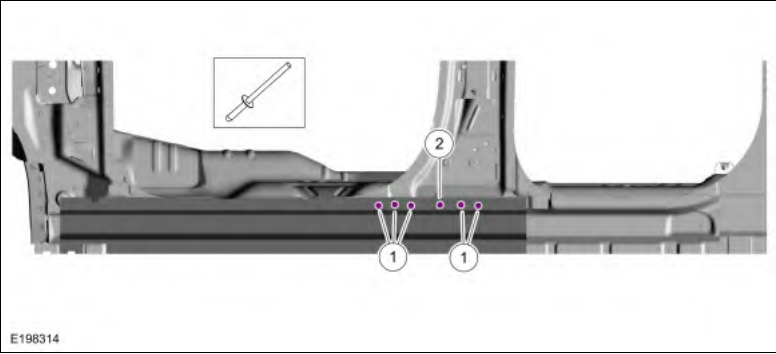
15. Drill for fasteners.
Use the General Equipment: 6.5 mm Drill Bit



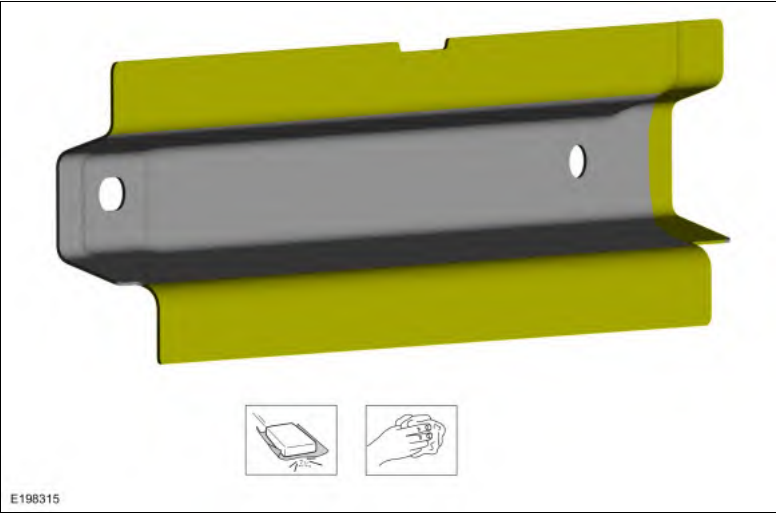
16. **NOTE:** SPR fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.
Install fasteners.

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W708777-S900C	-	-
2	-	-	-	-	W702512-S900C	-	-

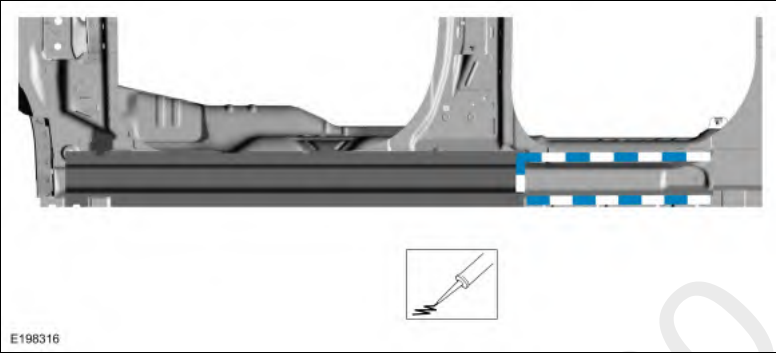
Use the General Equipment: Blind Rivet Gun



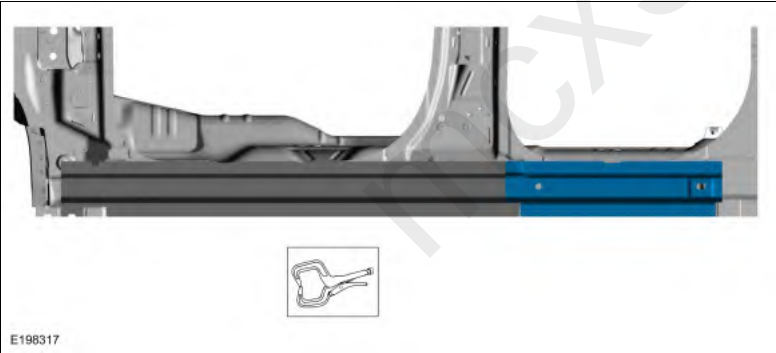
17. 80-120 grit sand paper.
Sand the rear rocker panel inner reinforcement mating surface to remove e-coat and clean.



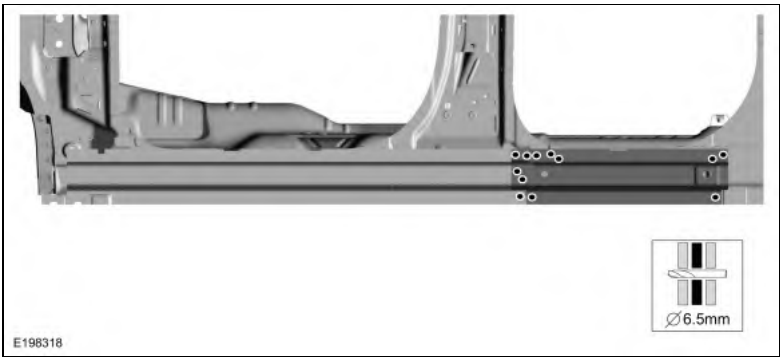
18. Apply adhesive.
Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3M, 08115, LORD Fusor® 108B



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



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

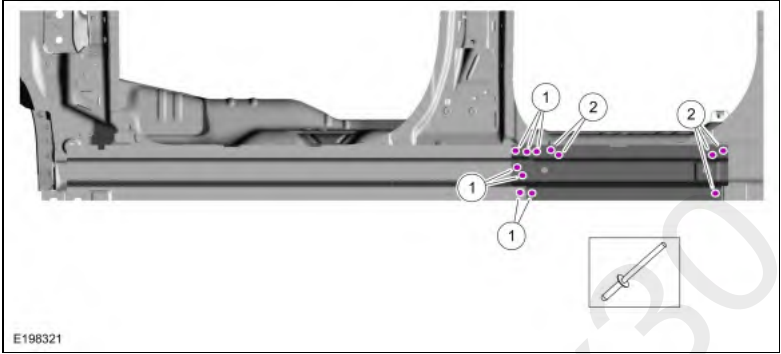


21. **NOTE:** *SPR fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.*

Install fasteners.

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W702512-S900C	-	-
2	W710246-S900	BN	DP10-200H	SA-0400/SA-0402	W702512-S900C	-	-

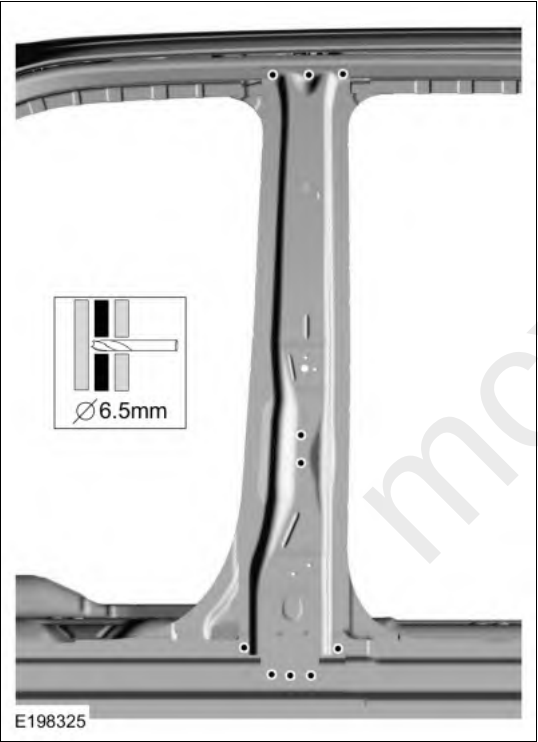
Use the General Equipment: Blind Rivet Gun
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer



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



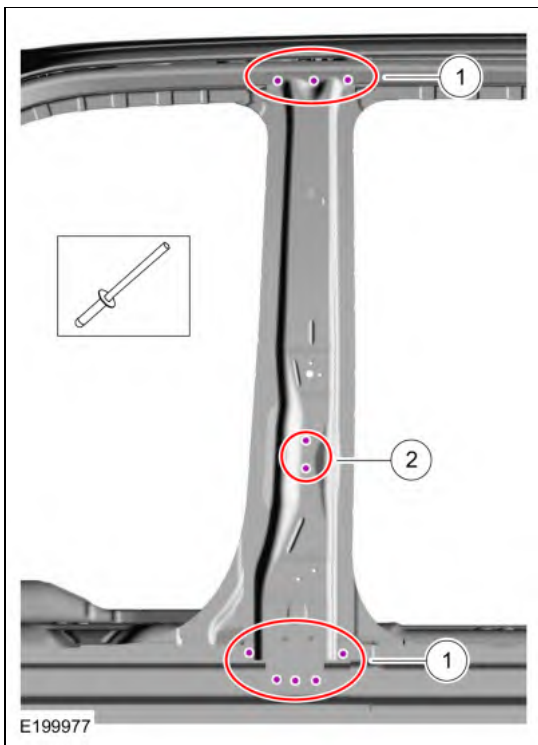
23. Drill for fasteners.
Use the General Equipment: 6.5 mm Drill Bit



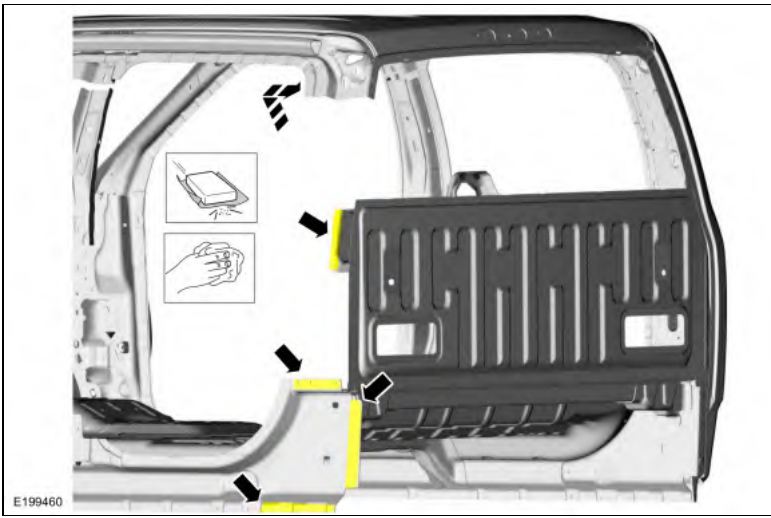
24. **NOTE:** *SPR fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.*
Install fasteners.

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W708777-S900C	-	-
2	-	-	-	-	W702512-S900C	-	-

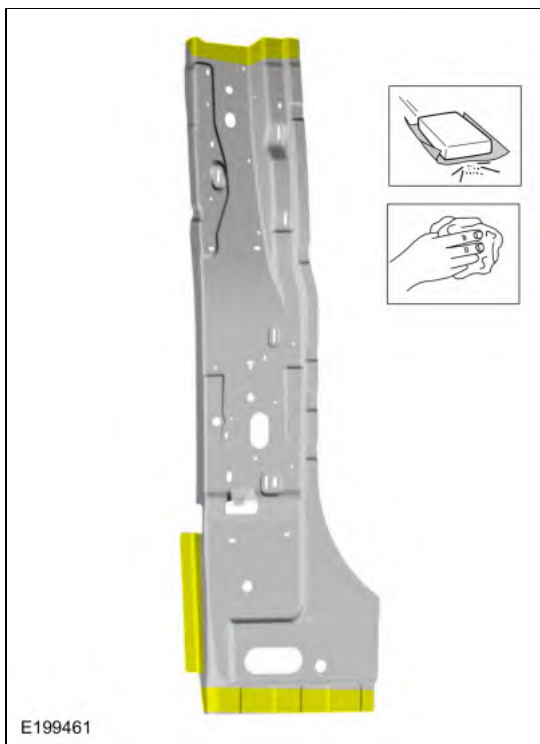
Use the General Equipment: Blind Rivet Gun



25. 80-120 grit sand paper.
Sand to remove old adhesive and e-coat and clean.

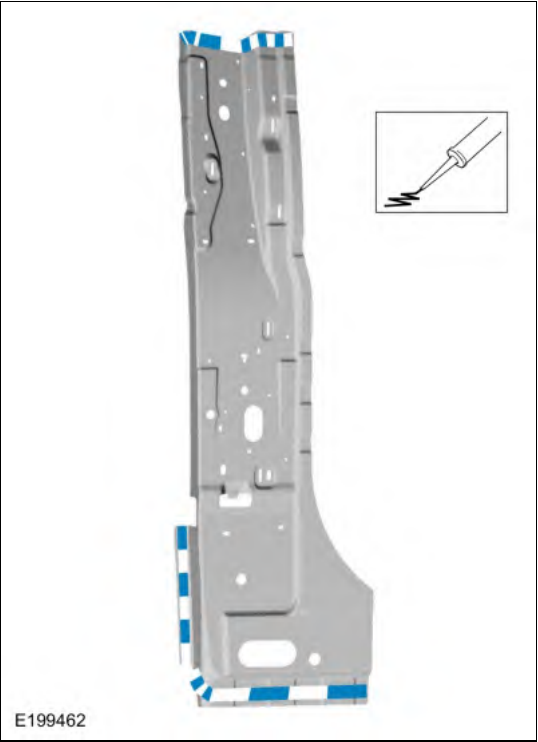


26. 80-120 grit sand paper.
Sand to remove old adhesive and e-coat and clean.

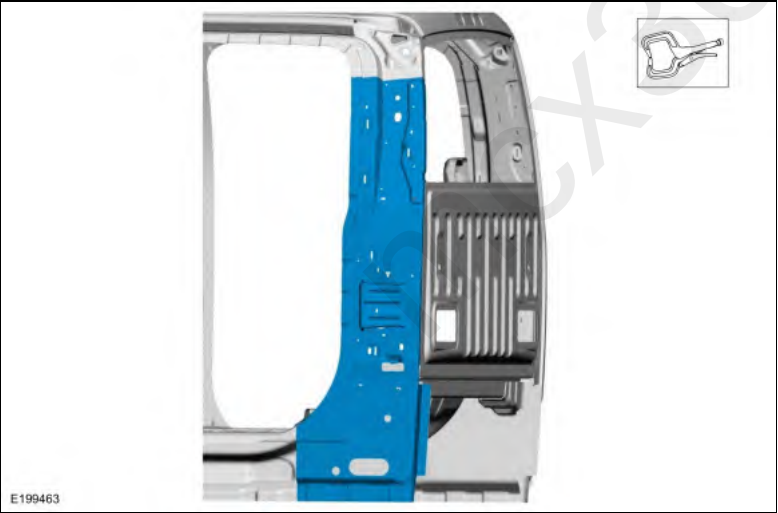


27. Apply adhesive.

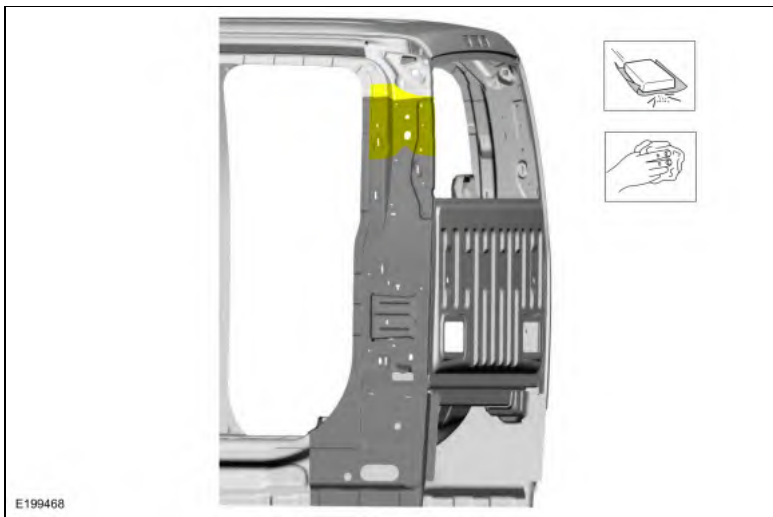
Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3M[®], 08115, LORD Fusor[®] 108B



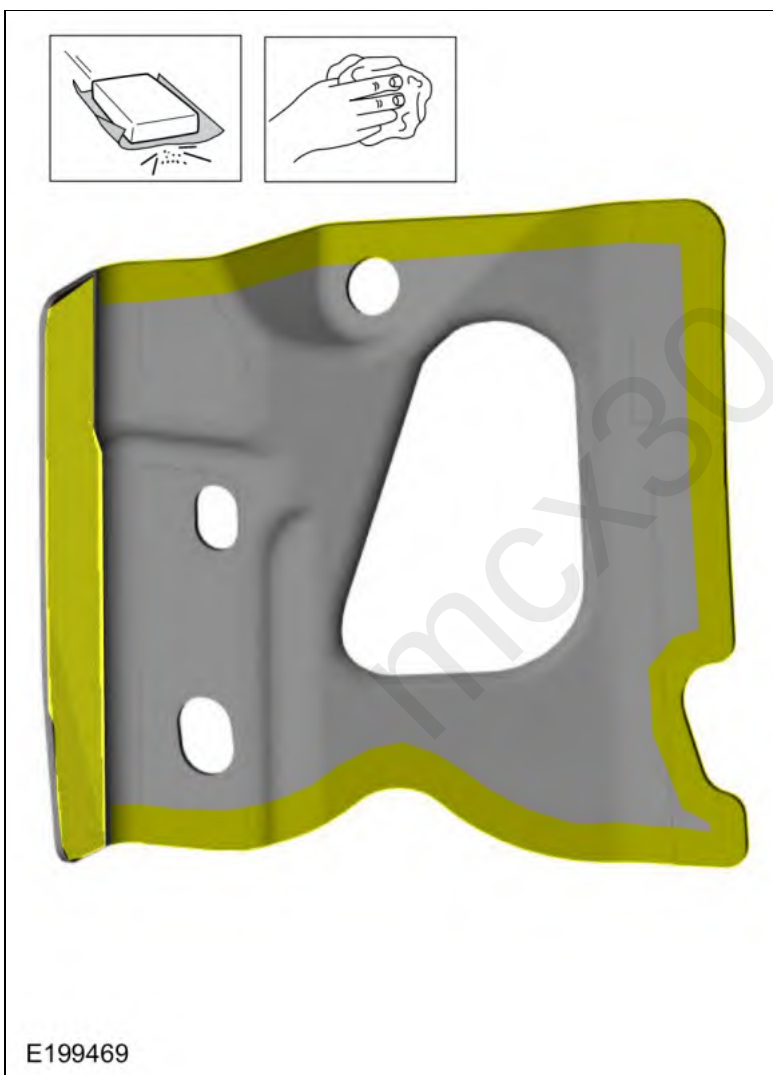
28. Install the C-pillar reinforcement and clamp in position.
Use the General Equipment: Locking Pliers



29. 80-120 grit sand paper.
Sand to remove old adhesive and e-coat and clean.

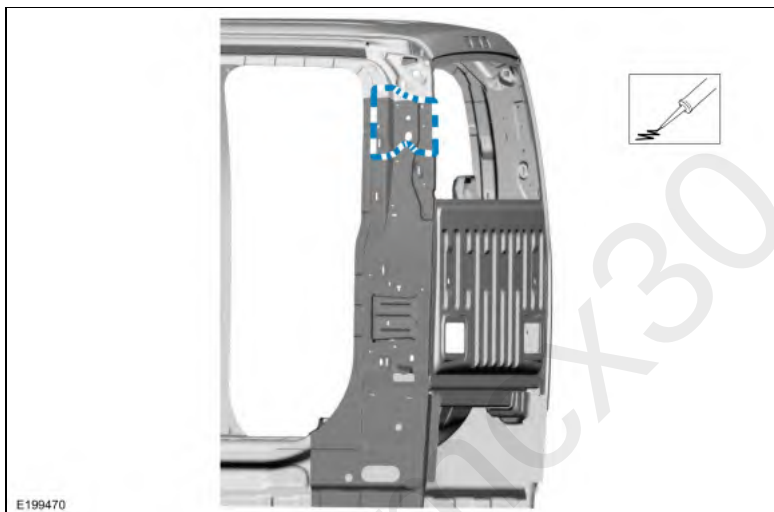


30. 80-120 grit sand paper.
Sand to remove old adhesive and e-coat and clean.

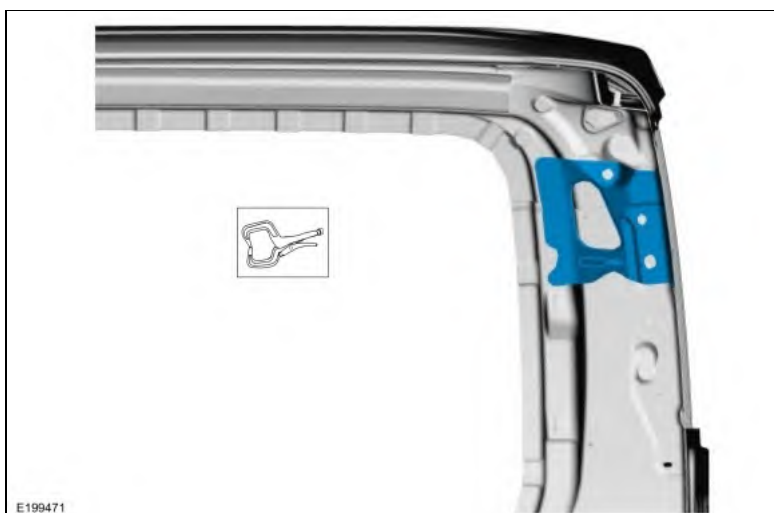




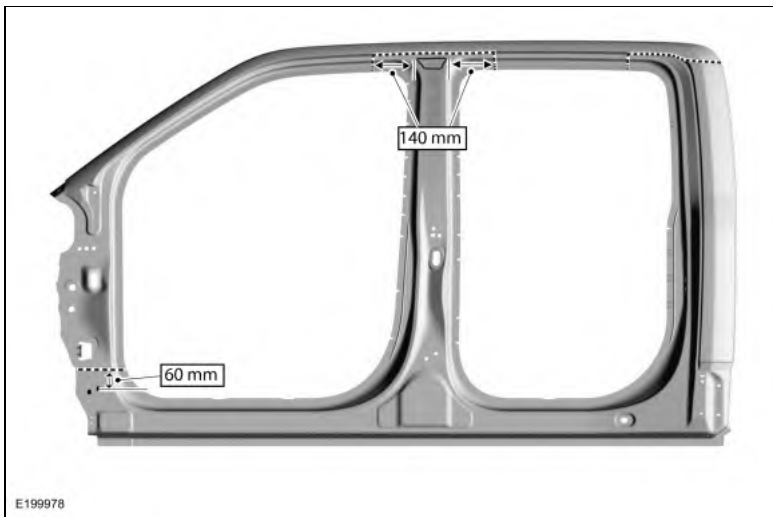
31. Apply adhesive.
Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3Mâ„¢ 08115, LORD FusorÂ® 108B



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



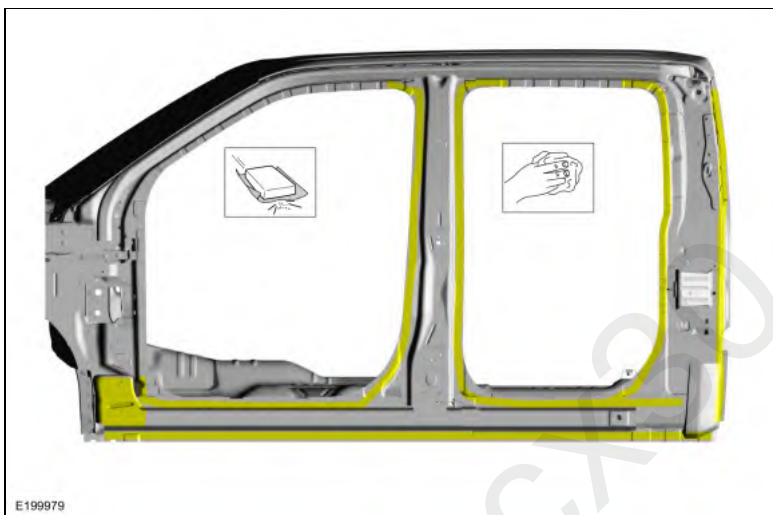
33. Cut the service panel to fit repair.
Use the General Equipment: Air Body Saw
Use the General Equipment: Spherical Cutter



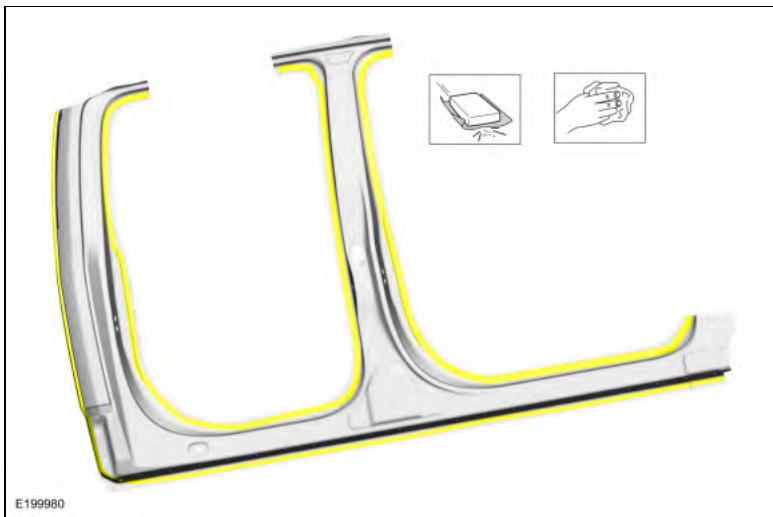
34. **NOTE:** The use of a backer plate when creating butt weld joints will produce a stronger and more uniform repair.

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).

35. 80-120 grit sand paper.
Sand the body side mating surface to remove old adhesive and e-coat and clean.



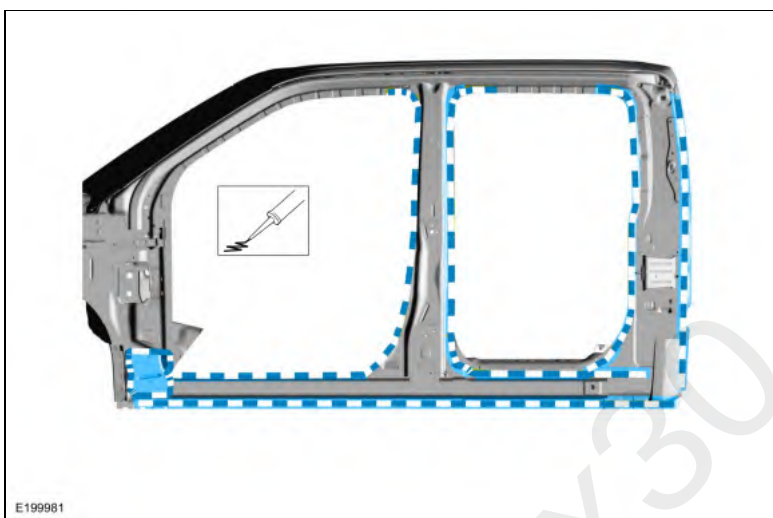
36. 80-120 grit sand paper.
Sand the service panel side mating surface to remove and e-coat and clean.



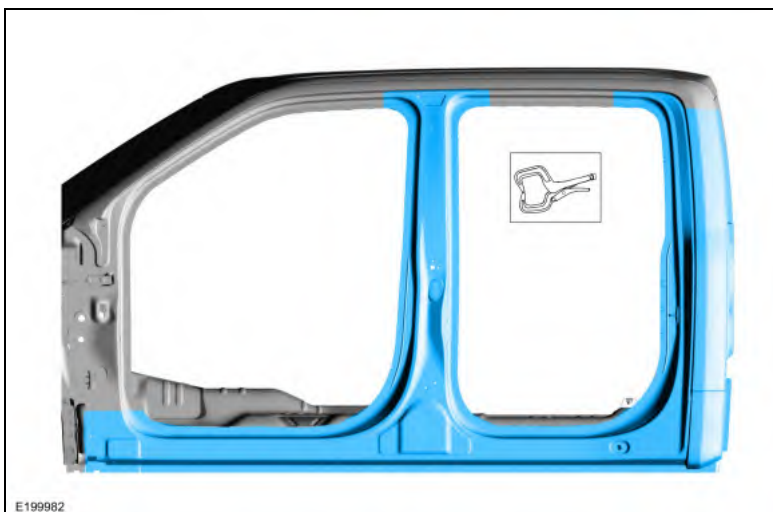
37. Install any NVH baffles noted during removal.

38. Apply adhesive.

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



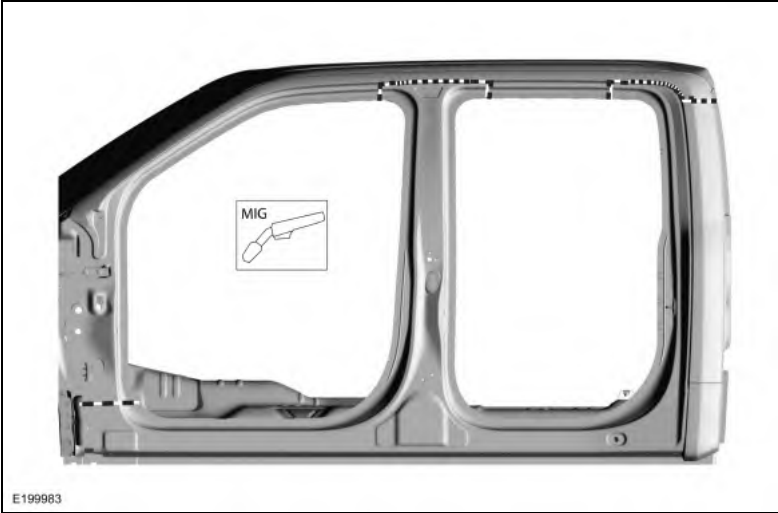
39. Install the body side section and clamp in position.
Use the General Equipment: Locking Pliers



40. Complete joining of body side section to backing plates.

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

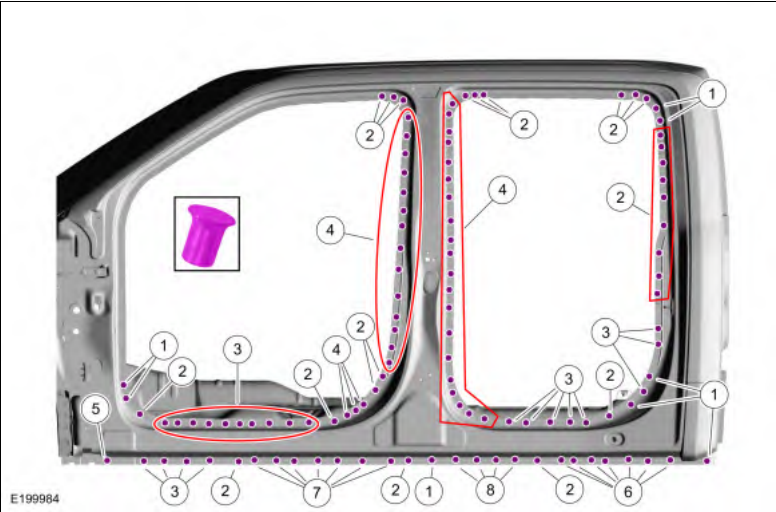
41. Seam weld all sectioning joints using a MIG welder set up for aluminum repair.
Use the General Equipment: MIG/MAG Welding Equipment



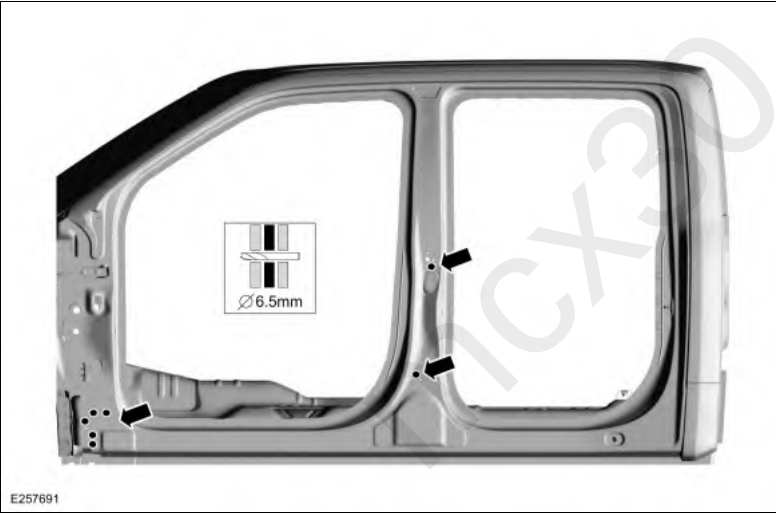
42. **NOTE:** *SPR fasteners may not be placed directly over original SPR location. They must be placed adjacent to original location matching original quantity.*
Install fasteners.

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	W708717-S900	AW	DP11-200/H	SA-0400/SA-0402	-	W790377-S900	-
2	W708713-S900	AS	DZ09-025/H	SA-0400/SA-0402	-	W790377-S900	-
3	W717186-S900	EN	DP11-200/H	SA-0400/SA-0402	-	W790377-S900	-
4	W717184-S900	QA	DP10-200/H	SA-0400/SA-0402	-	W790377-S900	-
5	W710246-S900	BN	DP10-200/H	SA-0400/SA-0402	-	W790377-S900	-
6	W717186-S900	EN	DP11-200/H	SA-0400/SA-0401	-	W790376-S900	-
7	W717186-S900	EN	DP11-200/H	SA-0400/SA-0402	-	W790377-S900	-
8	W717186-S900	EN	DP11-200/H	SA-0400/SA-0402	-	W790377-S900	-

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



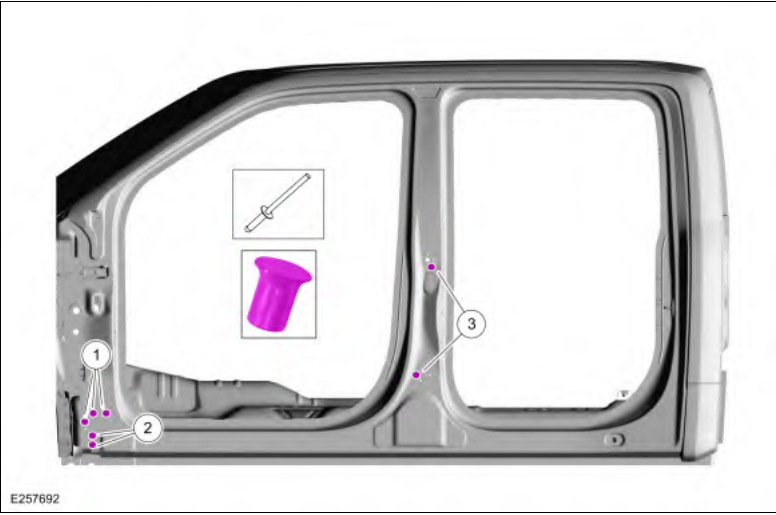
43. Drill for fasteners.
Use the General Equipment: 6.5 mm Drill Bit



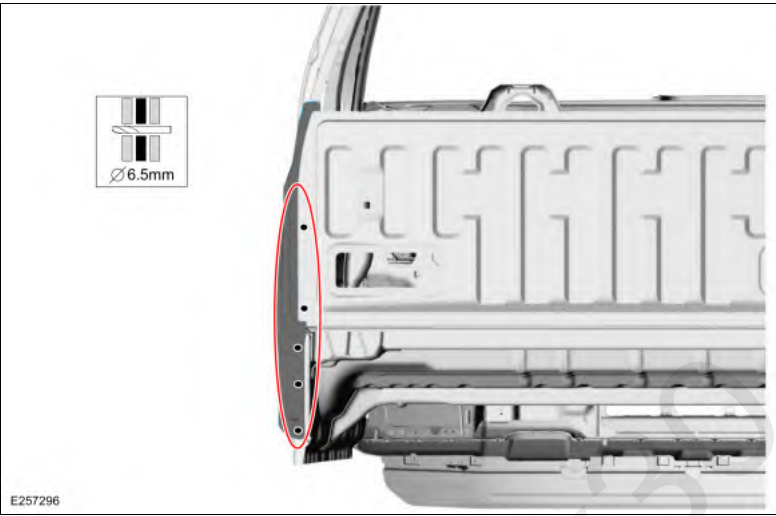
44. Install fasteners.

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W708777-S900C	-	-
2	-	-	-	-	W702554-S900C	-	-
3	-	-	-	-	W702512-S900C	-	-

Use the General Equipment: Blind Rivet Gun



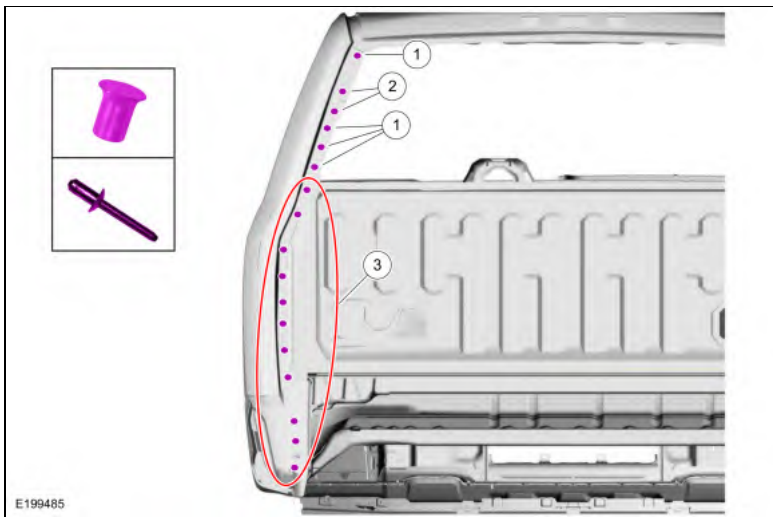
45. Drill for fasteners.
Use the General Equipment: 6.5 mm Drill Bit



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

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	W708713-S900	AS	DZ09-025/H	SA-0400/SA-0402	-	W790377-S900	-
2	W710246-S900	BN	DP10-200/H	SA-0400/SA-0402	-	W790377-S900	-
3	-	-	-	-	W708777-S900C	-	-

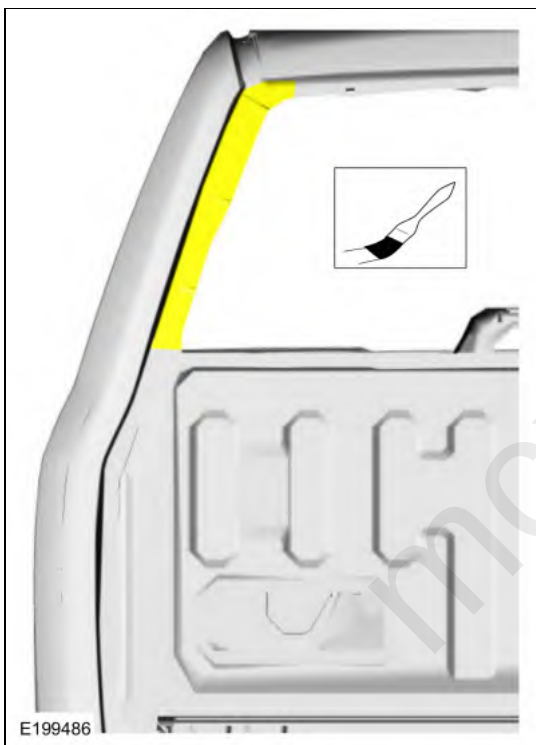
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer
Use the General Equipment: Blind Rivet Gun



47. Apply additional NVH foam to baffles to assure complete sealing.
Material: Flexible Foam Repair / 3M[®] 08463, LORD Fusor[®] 121

48. Metal finish using typical aluminum repair techniques and a fiber-based body filler.
 Refer to: Special Repair Considerations for Aluminum Repairs (501-25 Body Repairs - General Information, Description and Operation).

49. Sand and prime the rear window glass opening channel using a Ford approved epoxy based primer and allow to dry.



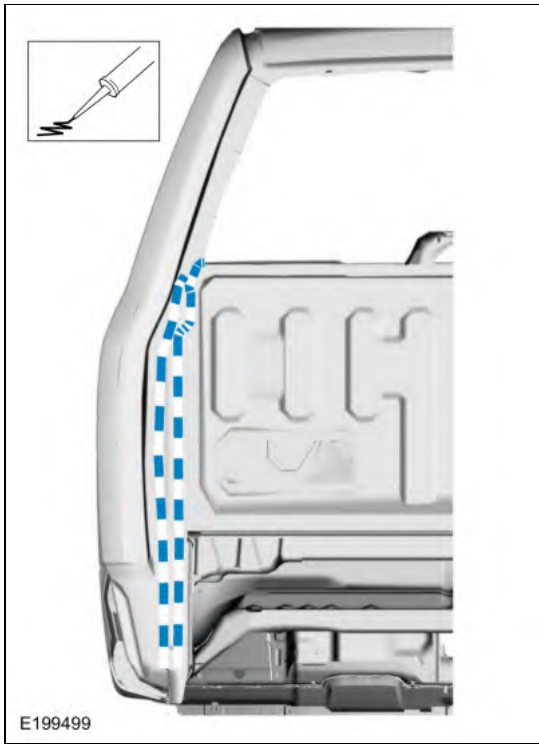
50. Mask the rear window glass opening channel.



51. Seam Sealing:

All seams must be sealed to production level.

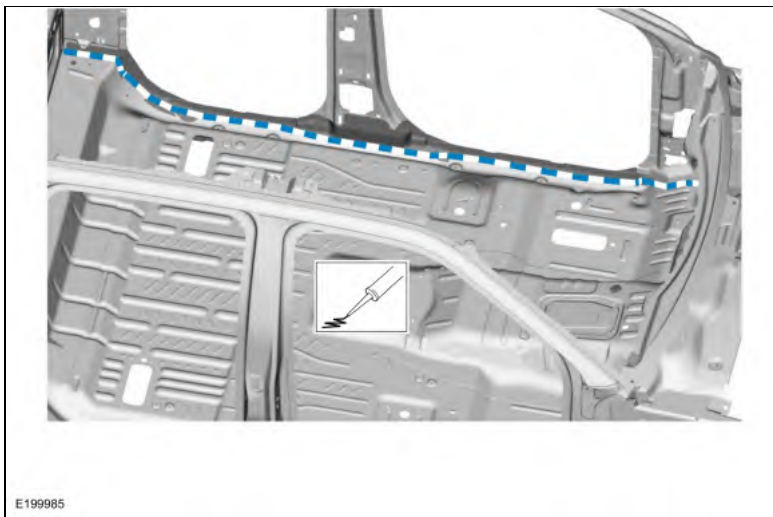
Material: Seam Sealer / TA-2-B, 3M, 08308, LORD Fusor® 805DTM



52. Seam Sealing:

All seams must be sealed to production level.

Material: Seam Sealer / TA-2-B, 3M, 08308, LORD Fusor® 805DTM



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

54. Unmask the rear window glass opening channel.

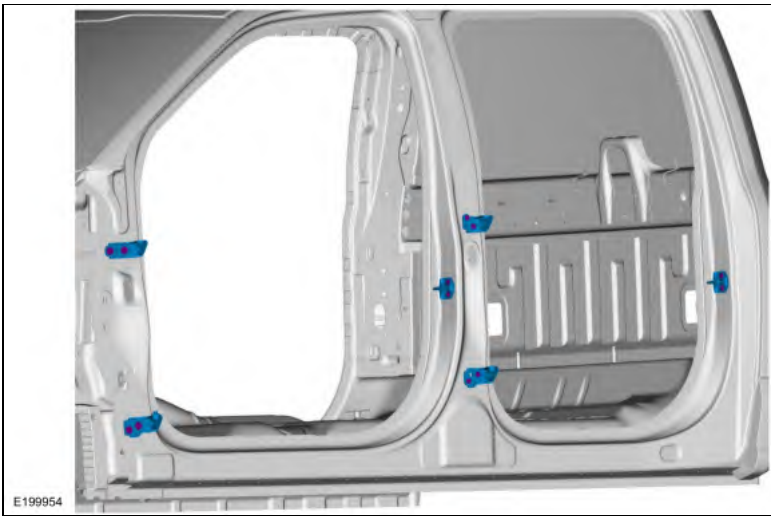


55. Install the rear window glass.
Refer to: Fixed Glass (501-11 Glass, Frames and Mechanisms, General Procedures).

56. Install the side curtain air bag.
Refer to: Side Curtain Airbag - Crew Cab (501-20B Supplemental Restraint System, Removal and Installation).

57. Install the front and rear door hinges and strikers.

- Front door hinges.
Torque: 21 lb.ft (28 Nm)
- Rear door hinges.
Torque: 22 lb.ft (30 Nm)
- Door strikers.
Torque: 18 lb.ft (25 Nm)



58. Install the roof and body side trim.
Refer to: Bodyside Moulding (501-08 Exterior Trim and Ornamentation, Removal and Installation).
Refer to: Roof Moulding (501-08 Exterior Trim and Ornamentation, Removal and Installation).
59. Install the front and rear doors.
Refer to: Front Door - Crew Cab/Regular Cab (501-03 Body Closures, Removal and Installation).
Refer to: Rear Door - Crew Cab (501-03 Body Closures, Removal and Installation).
60. Install the front fender.
Refer to: Fender (501-02 Front End Body Panels, Removal and Installation).
61. Align the front and rear doors.
Refer to: Front Door Alignment - SuperCab (501-03 Body Closures, General Procedures).
Refer to: Front Door Alignment - Crew Cab/Regular Cab (501-03 Body Closures, General Procedures).
Refer to: Rear Door Alignment - SuperCab (501-03 Body Closures, General Procedures).
Refer to: Rear Door Alignment - Crew Cab (501-03 Body Closures, General Procedures).
62. Repower the SRS.
Refer to: Supplemental Restraint System (SRS) Repowering (501-20B Supplemental Restraint System, General Procedures).