Rocker Panel Inner Reinforcement - Crew Cab

Special Tool(s) / General Equipment

6.5 mm Drill Bit
Spherical Cutter
Polydrive Bit Socket
Self-Piercing Rivet (SPR) Remover/Installer
Belt Sander
Blind Rivet Gun
Air Body Saw
MIG/MAG Welding Equipment
Locking Pliers

Materials

Name	Specification
Metal Bonding Adhesive TA-1, TA-1-B, 3Mâ„¢ 08115, LORD FusorÂ® 108B	-

Removal

NOTE: *The rocker panel inner reinforcement on the Crew Cab is a two-piece component consisting of a front and rear sections.* ***The front portion is an extrusion casting and may not be sectioned****. The rear portion only may be sectioned. The following procedure assumes full component replacement.*

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

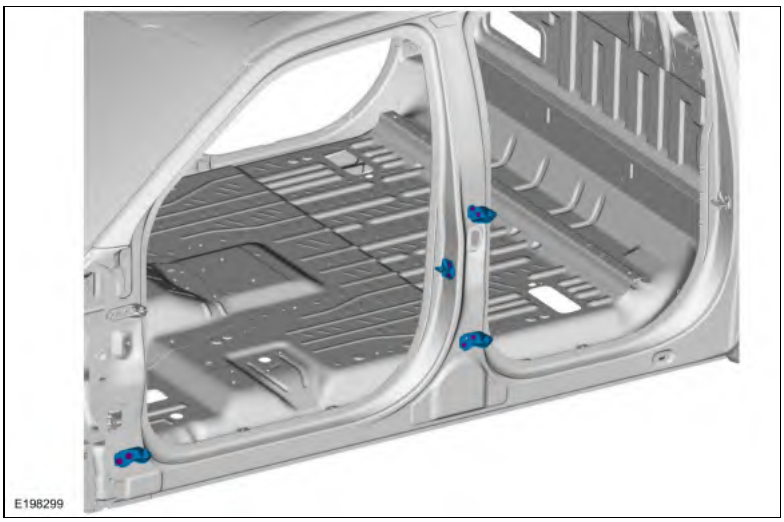
1. Depower the SRS.
   Refer to: Supplemental Restraint System (SRS) Depowering (501-20B Supplemental Restraint System, General Procedures).

2. 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).

3. Remove the front fender.
   Refer to: Fender (501-02 Front End Body Panels, Removal and Installation).

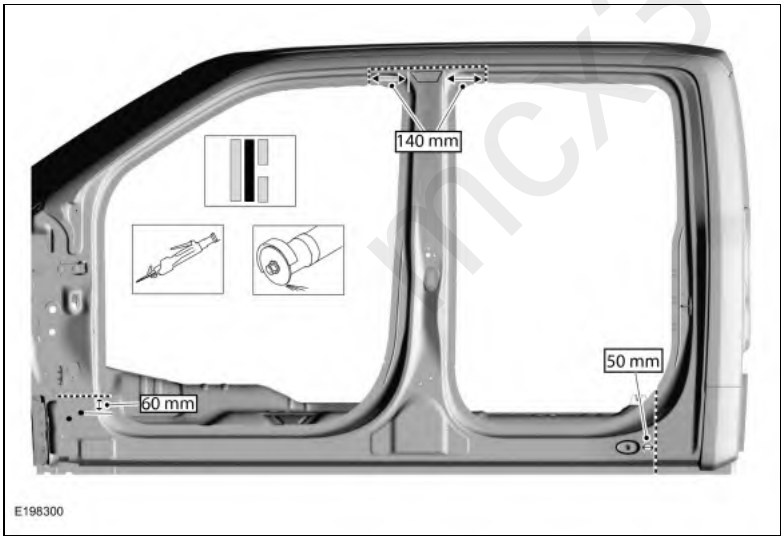
4. Remove the front and rear doors.
   Refer to: Front Door - Crew Cab/Regular Cab (501-03 Body Closures, Removal and Installation).
   Refer to: Rear Door - Crew Cab (501-03 Body Closures, Removal and Installation).

5. Remove the front door lower hinge, front door striker and rear door hinges from the body.

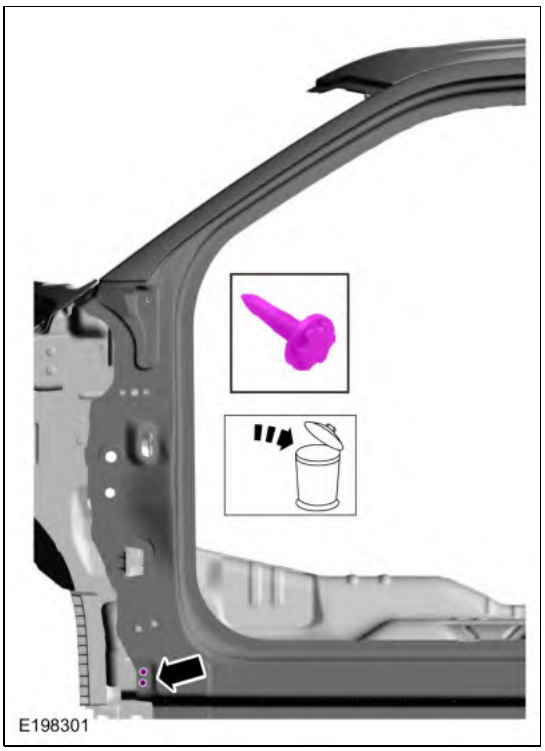


6. Remove the front and rear door scuff plates and front and rear door opening weather strips.

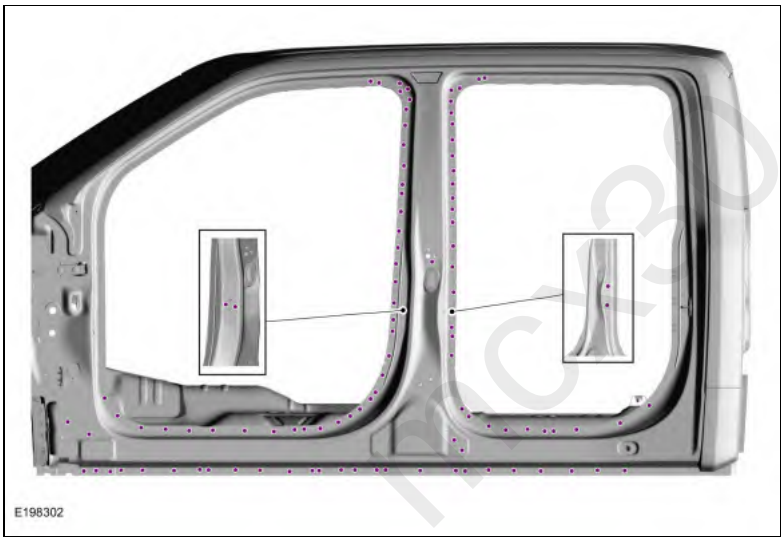
7. Measure and cut **the outer layer only** of the vehicle body side.
   Use the General Equipment: Air Body Saw
   Use the General Equipment: Spherical Cutter



8. Remove and discard the FDS fasteners.
   Use the General Equipment: Polydrive Bit Socket

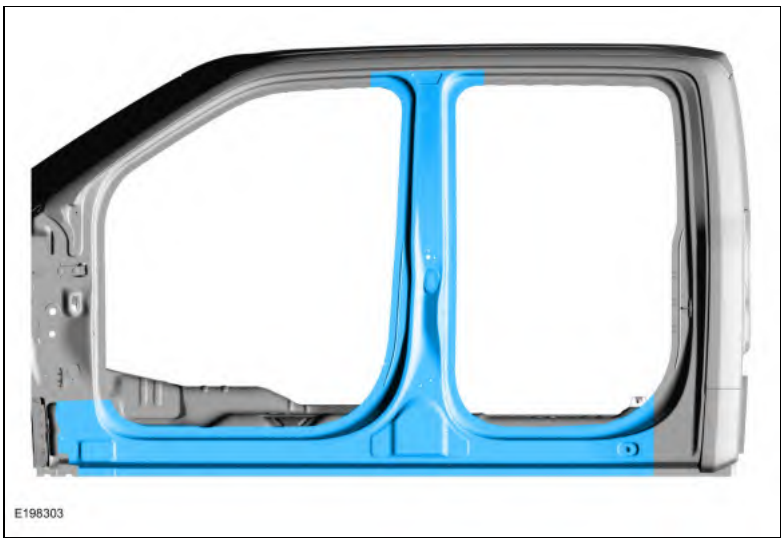


9. Remove the SPR fasteners.
   Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer
   Use the General Equipment: Belt Sander

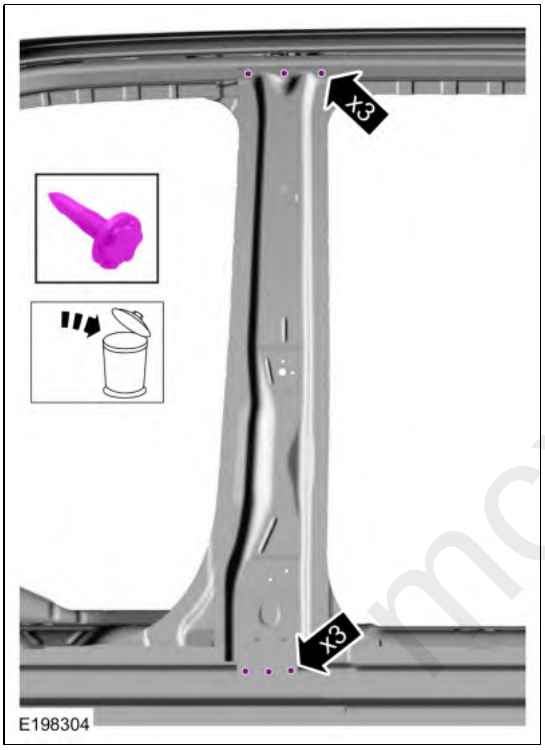


10. **NOTE:** *Aluminum body panels are highly receptive to heat transfer. With the extensive use of structural adhesives and non-structural sealers used in vehicle construction, the potential of heat transfer could impact adhesives and sealers in non-associated panels during the repair process. Many 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 425Â° 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 outer panel sheet metal.



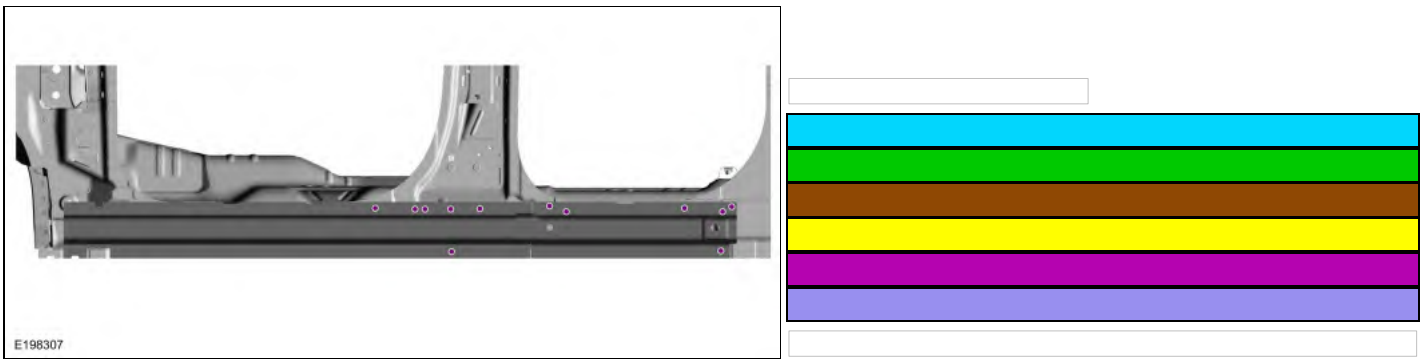
11. Remove and discard the FDS fasteners.
    Use the General Equipment: Polydrive Bit Socket



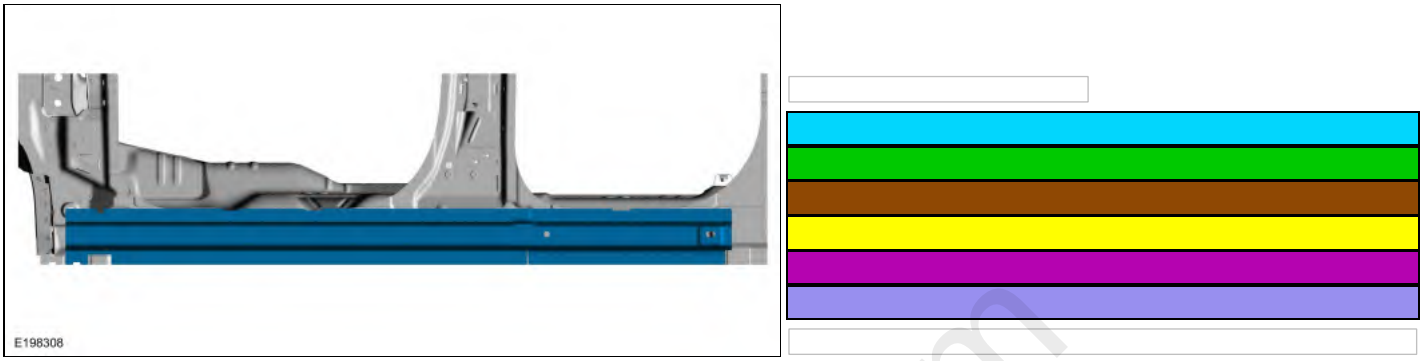
12. Remove the SPR fasteners in the B-pillar reinforcement.
    Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer
    Use the General Equipment: Belt Sander

13. Remove the B-pillar reinforcement.

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



15. Remove the rocker panel inner reinforcement.

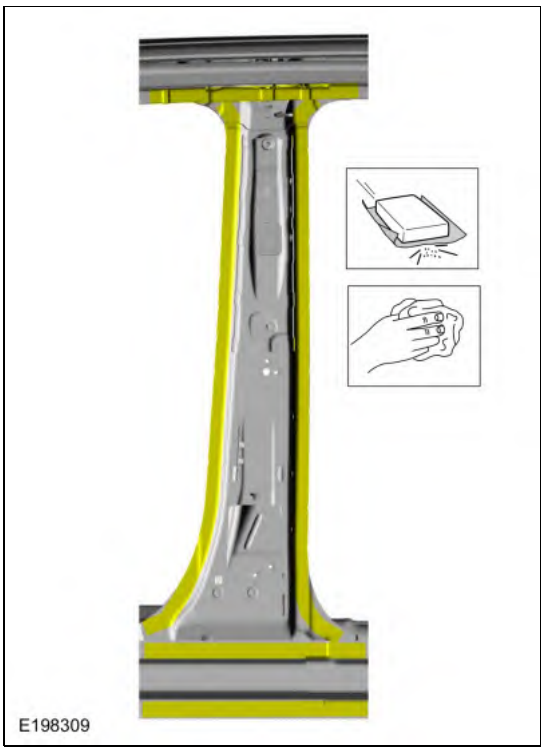


Installation

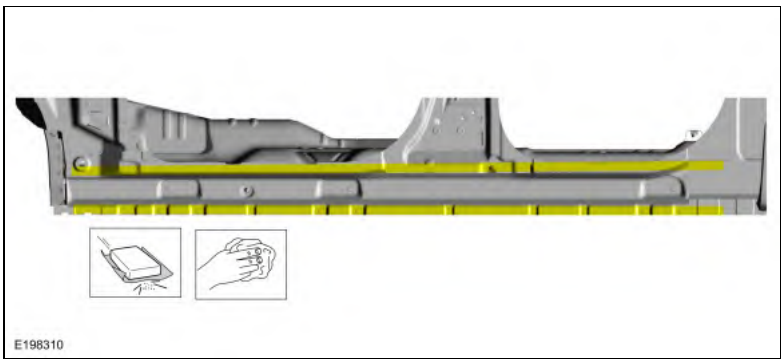
NOTICE: Body side sectioning is prohibited within 50 mm of door hinge, door striker and restraints anchoring points.

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

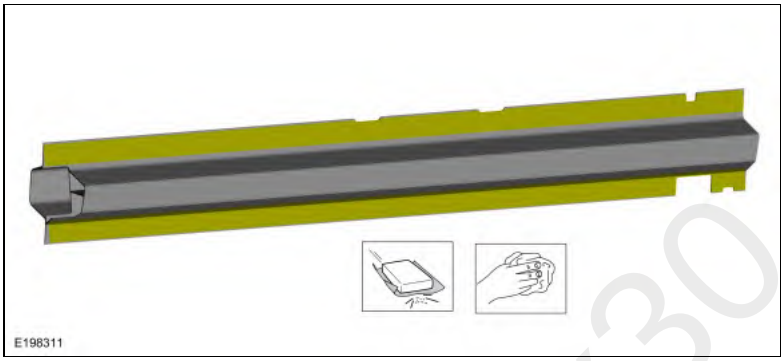
1. 80-120 grit sand paper.
   Sand to remove old adhesive and clean the B-pillar reinforcement mating surfaces.



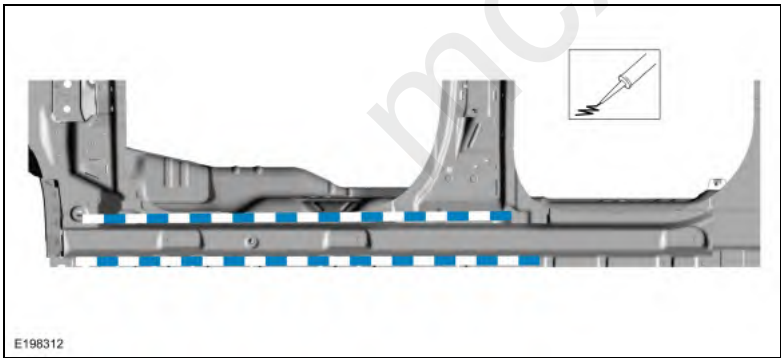
2. 80-120 grit sand paper.
   Sand to remove old adhesive and clean the inner rocker panel reinforcement mating surfaces.



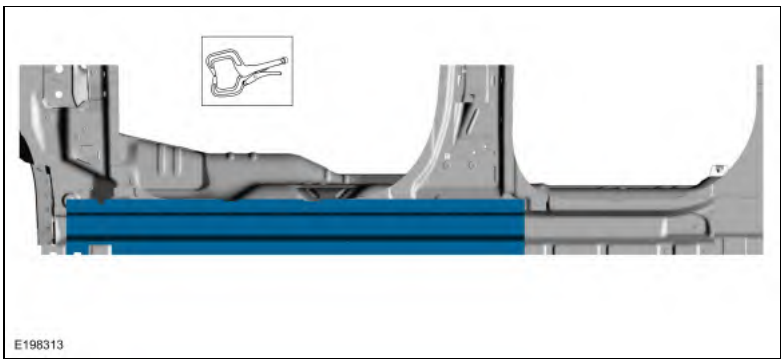
3. 80-120 grit sand paper.
   Sand to remove e-coat from the front rocker panel reinforcement.



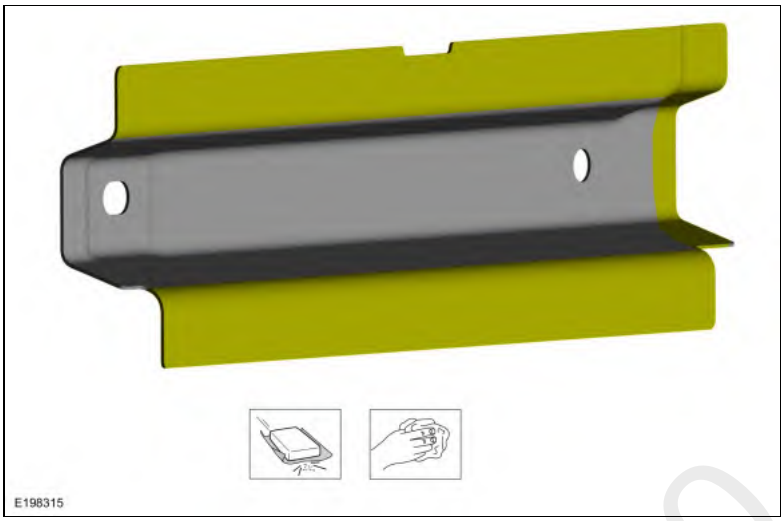
4. Apply adhesive to the front rocker panel inner reinforcement mating surface.
   Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3Mâ„¢ 08115, LORD FusorÂ® 108B



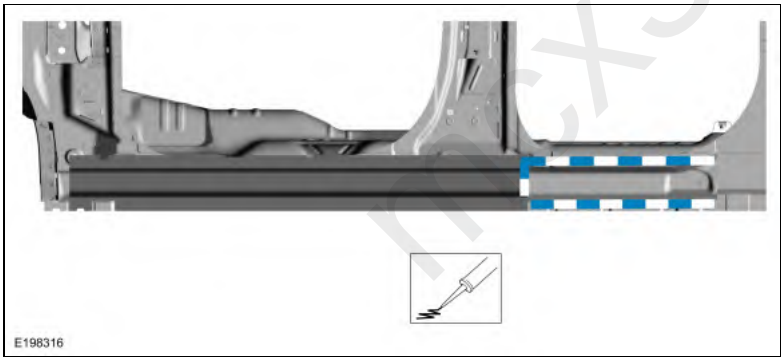
5. Install and clamp the front rocker panel inner reinforcement.
   Use the General Equipment: Locking Pliers



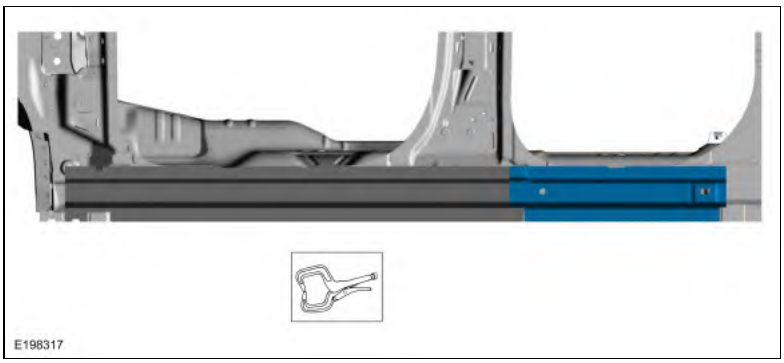
6. 80-120 grit sand paper.
   Sand to remove e-coat from the rear rocker panel reinforcement.



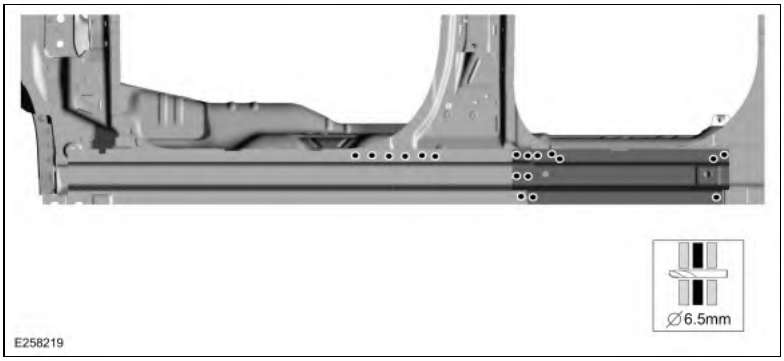
7. Apply adhesive for the rear rocker panel reinforcement.
   Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3Mâ„¢ 08115, LORD FusorÂ® 108B



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



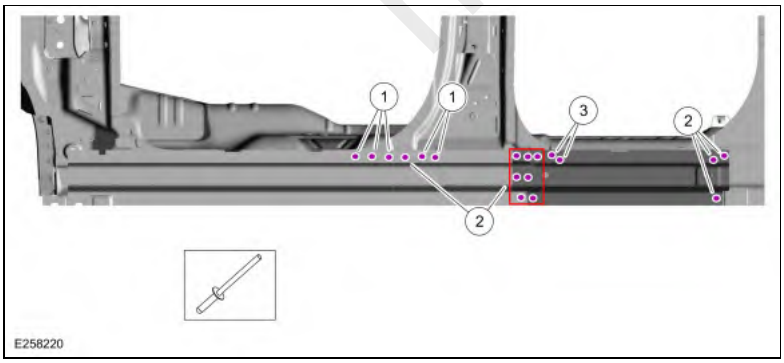
9. Drill for fastener installation.
   Use the General Equipment: 6.5 mm Drill Bit



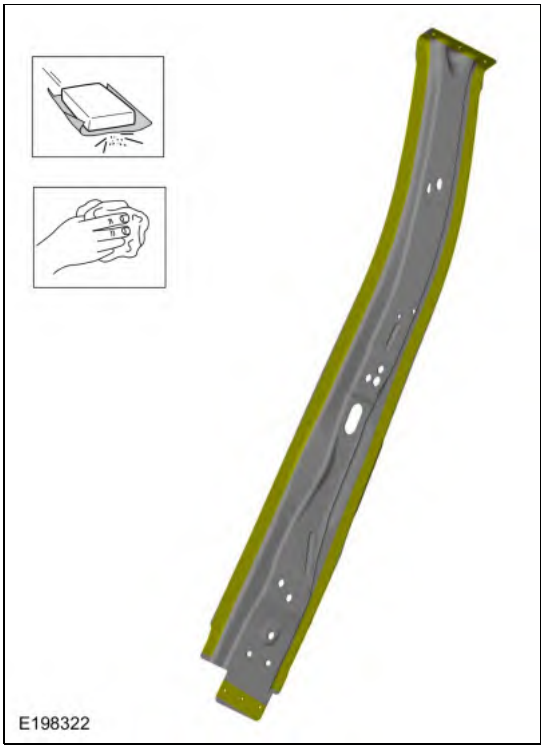
10. Install fasteners.

Item	SPR Number	SPR Code	HenrobÂ® Mandrel	Pro-SpotÂ® Mandrel	Blind Rivet	Solid Rivet	RivnutÂ®
1	-	-	-	-	W708777-S900C	-	-
2	-	-	-	-	W702512-S900C	-	-
3	-	-	-	-	W702512-S900C	-	-

Use the General Equipment: Blind Rivet Gun



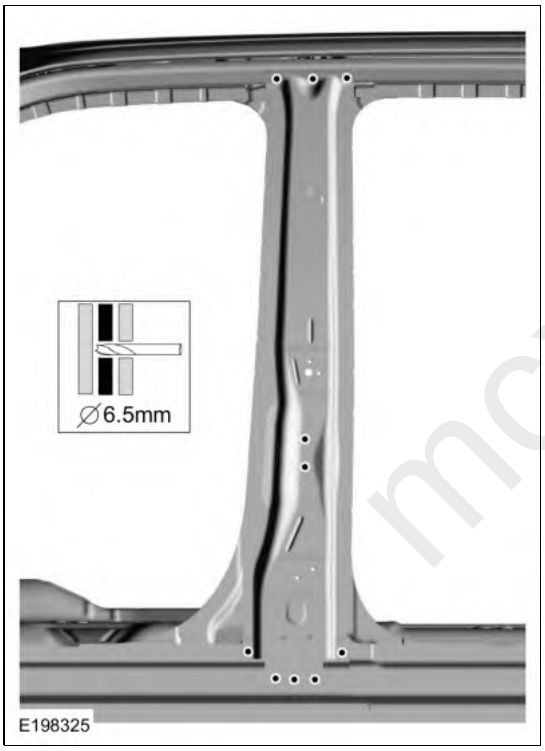
11. 80-120 grit sand paper.
    Sand to remove e-coat from the B-pillar reinforcement mating surfaces.



12. Apply adhesive to the B-pillar mating surfaces.
    Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3Mâ„¢ 08115, LORD FusorÂ® 108B

13. Install and clamp the B-pillar reinforcement.
    Use the General Equipment: Locking Pliers

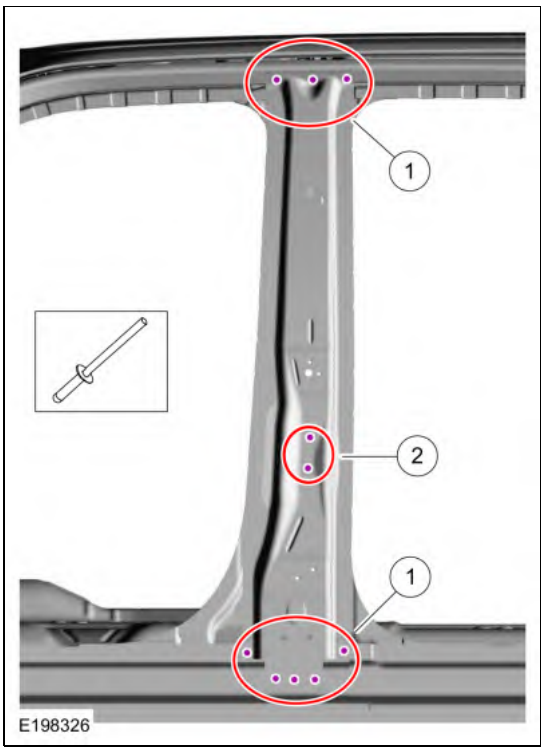
14. Drill holes for blind rivet installation.
    Use the General Equipment: 6.5 mm Drill Bit



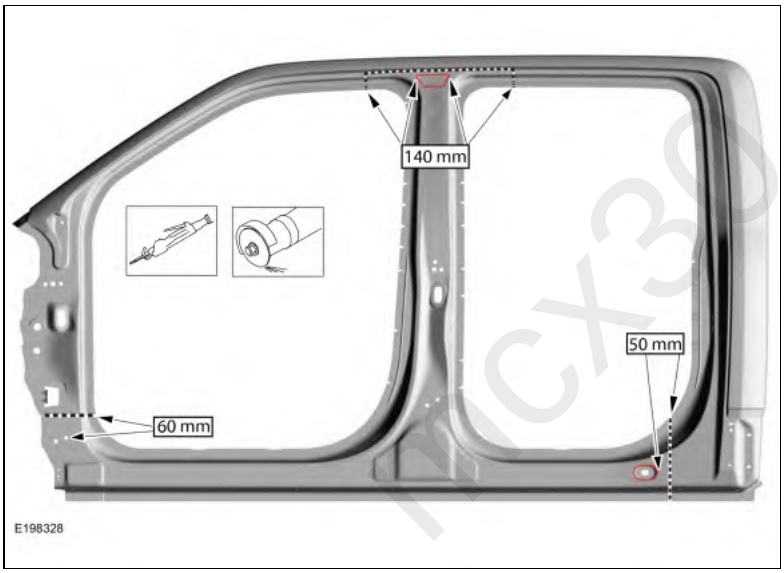
15. Install fasteners in B-pillar reinforcement.

Item	SPR Number	SPR Code	HenrobÂ® Mandrel	Pro-SpotÂ® Mandrel	Blind Rivet	Solid Rivet	RivnutÂ®
1	-	-	-	-	W708777-S900C	-	-
2	-	-	-	-	W702512-S900C	-	-

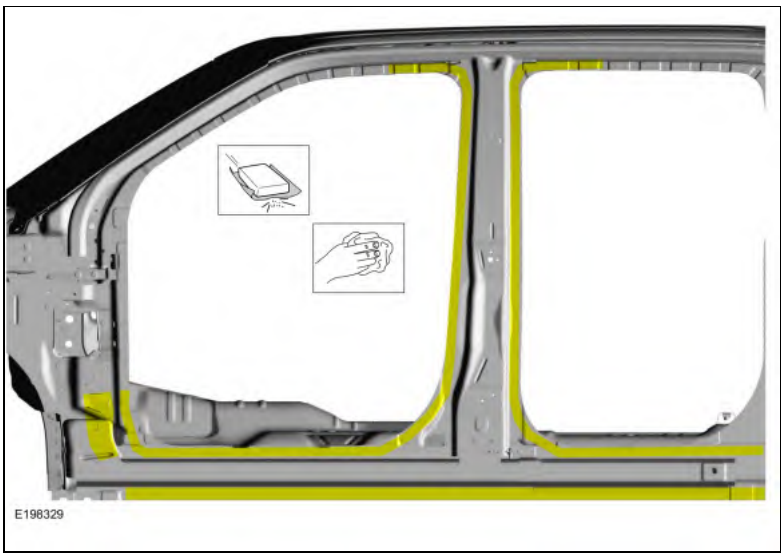
Use the General Equipment: Blind Rivet Gun



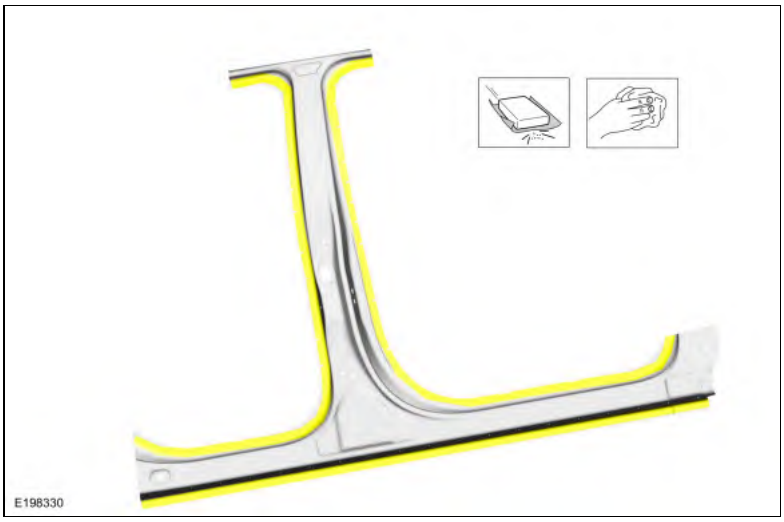
16. Cut the replacement service panel to fit repair.
    Use the General Equipment: Air Body Saw
    Use the General Equipment: Spherical Cutter



17. 80-120 grit sand paper.
    Sand to remove old adhesive and e-coat in the body side mating panel surfaces and clean.



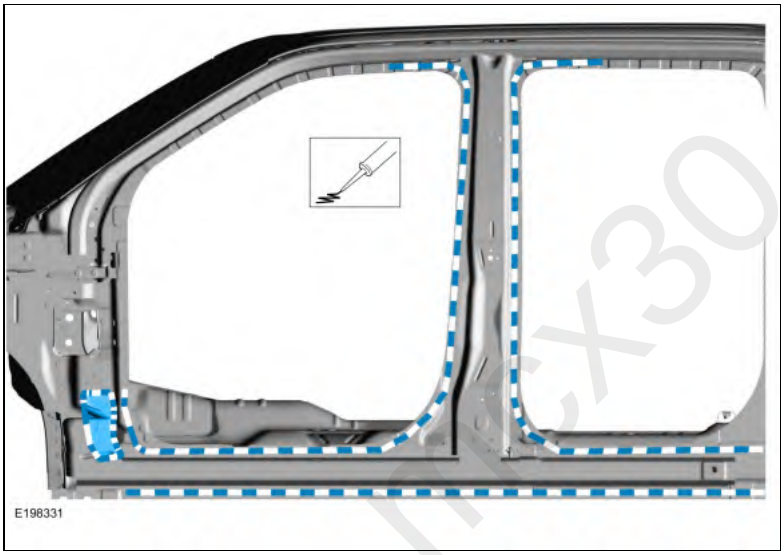
18. 80-120 grit sand paper.
    Sand to remove e-coat in the replacement body side mating panel surfaces and clean.



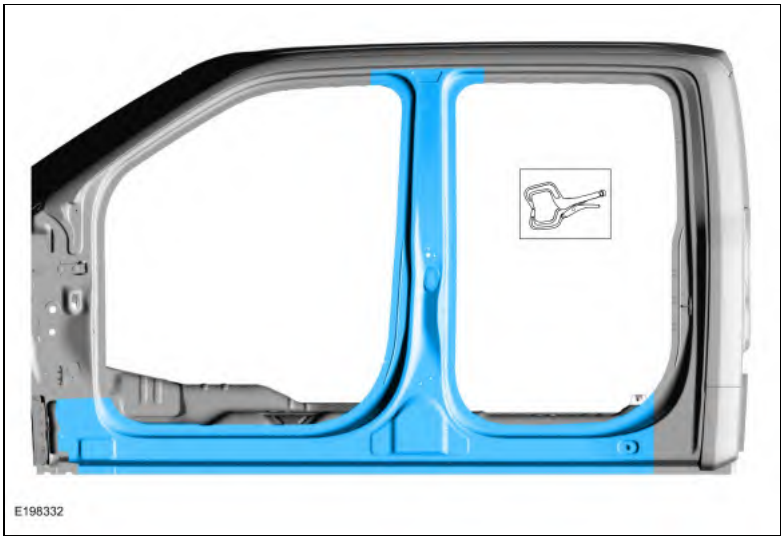
19. **NOTE:** *The use of a backer plate when creating butt weld joints will produce a stronger and more uniform repair.*

    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).

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



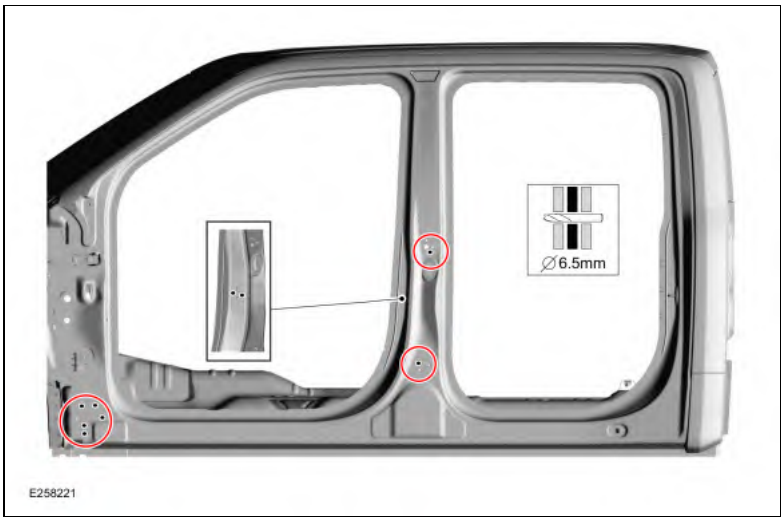
21. Install the service panel section and clamp in position.
    Use the General Equipment: Locking Pliers



22. Complete the backer plate attachment at all sectioning joints.
    Refer to: Joining Techniques (501-25 Body Repairs - General Information, General Procedures).

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

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



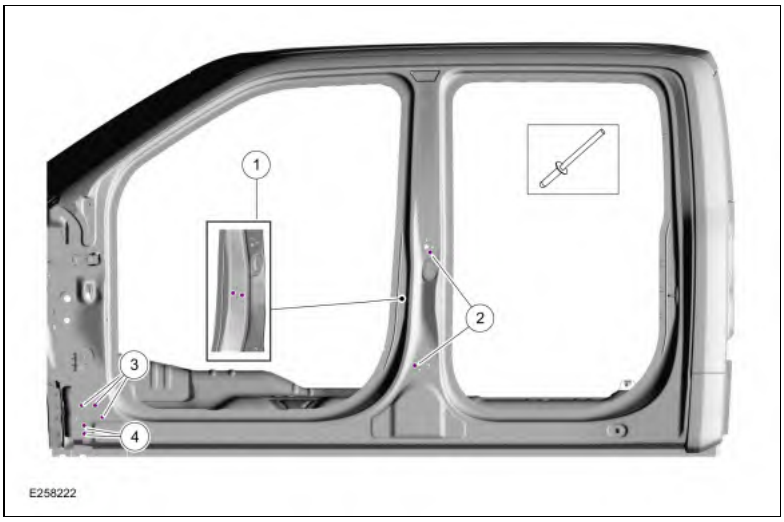
25. **NOTE:** *SPR fasteners may be replaced with blind or solid rivet fasteners after enlarging hole to 6.5 mm.*

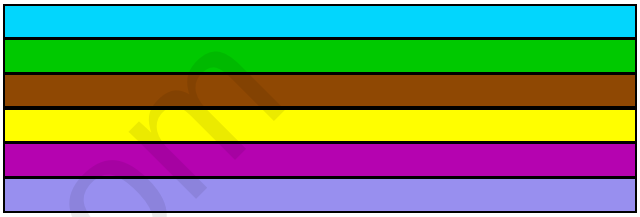
    NOTE: *SPR fasteners may not be placed directly over original location. They must equal original quantity and be placed adjacent to original location.*

Install fasteners.

Item	SPR Number	SPR Code	HenrobÂ® Mandrel	Pro-SpotÂ® Mandrel	Blind Rivet	Solid Rivet	RivnutÂ®
1	-	-	-	-	W707638-S900C	-	-
2	-	-	-	-	W702512-S900C	-	-
3	-	-	-	-	W708777-S900C	-	-
4	-	-	-	-	W702554-S900C	-	-

Use the General Equipment: Blind Rivet Gun

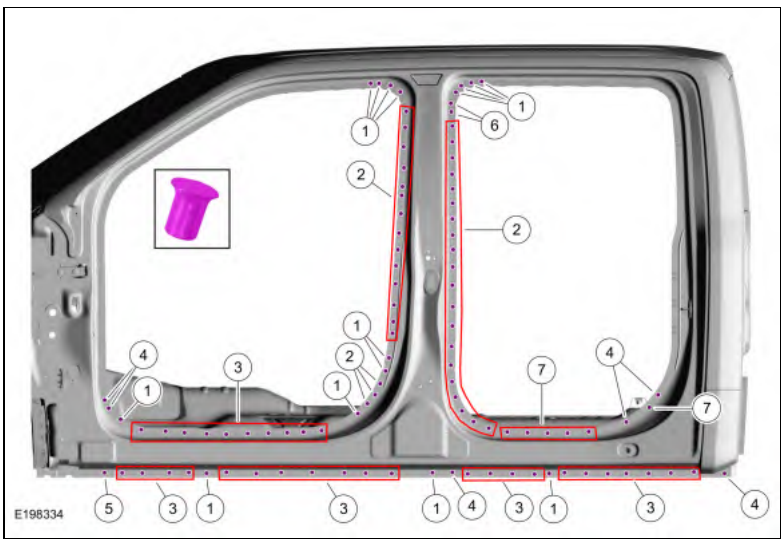




26. Install body side fasteners.

Item	SPR Number	SPR Code	HenrobÂ® Mandrel	Pro-SpotÂ® Mandrel	Blind Rivet	Solid Rivet	RivnutÂ®
1	W708713-S900	AS	DZ09-025/H	SA-0400/SA-0401	-	W709376-S900	-
2	W717184-S900	QA	DP10-200/H	SA-0400/SA-0402	-	W790377-S900	-
3	W717186-S900	EN	DP11-200/H	SA-0400/SA-0402	-	W790377-S900	-
4	W708717-S900	AW	DP11-200/H	SA-0400/SA-0402	-	W790377-S900	-
5	W710246-S900	BN	DP10-200/H	SA-0400/SA-0402	-	W790377-S900	-
6	W708717-S900	AW	DG10-220/H	SA-0400/SA-0402	-	W790377-S900	-
7	W717186-S900	EN	DG11-220/H	SA-0400/SA-0402	-	W790377-S900	-

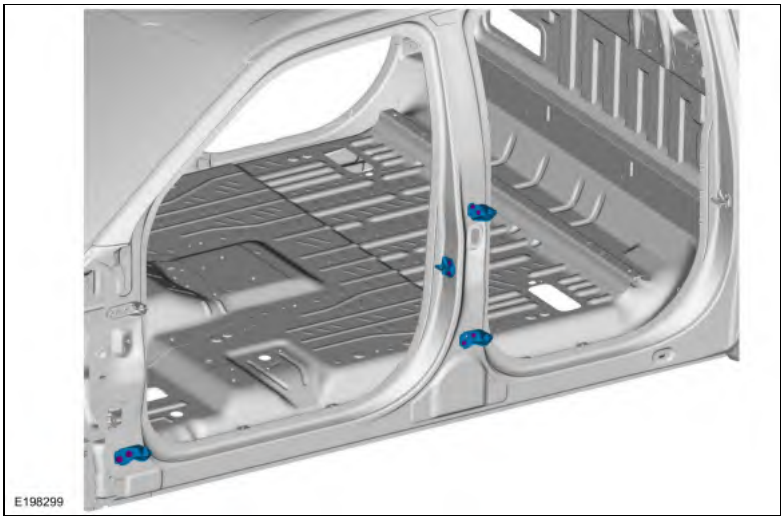
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer



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

28. Refinish the repair area using a Ford approved paint system and typical refinishing techniques.

29. Install the front door lower door hinge, front door striker and the rear door hinges on the body.
    - Front door lower hinge.
      Torque: 20 lb.ft (27 Nm)
    - Front door striker.
      Torque: 18 lb.ft (25 Nm)
    - Rear door hinges.
      Torque: 22 lb.ft (30 Nm)



30. Install the front and rear door opening weather strips and scuff plates.

31. 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).

32. Install the front fender.
    Refer to: Fender (501-02 Front End Body Panels, Removal and Installation).

33. Align the front and rear doors.
    Refer to: Front Door Alignment - Crew Cab/Regular Cab (501-03 Body Closures, General Procedures).
    Refer to: Rear Door Alignment - Crew Cab (501-03 Body Closures, General Procedures).

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