

**Quarter Panel****Special Tool(s) / General Equipment**

6.5 mm Drill Bit
Self-Piercing Rivet (SPR) Remover/Installer
Belt Sander
Blind Rivet Gun
Hot Air Gun
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**

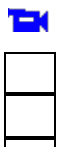
**NOTE:** Aluminum body panels are highly receptive to heat transfer. With the extensive use of structural adhesives and non-structural sealers used in vehicle construction, the potential of heat transfer could impact adhesives and sealers in non-associated panels during the repair process. Many repairs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

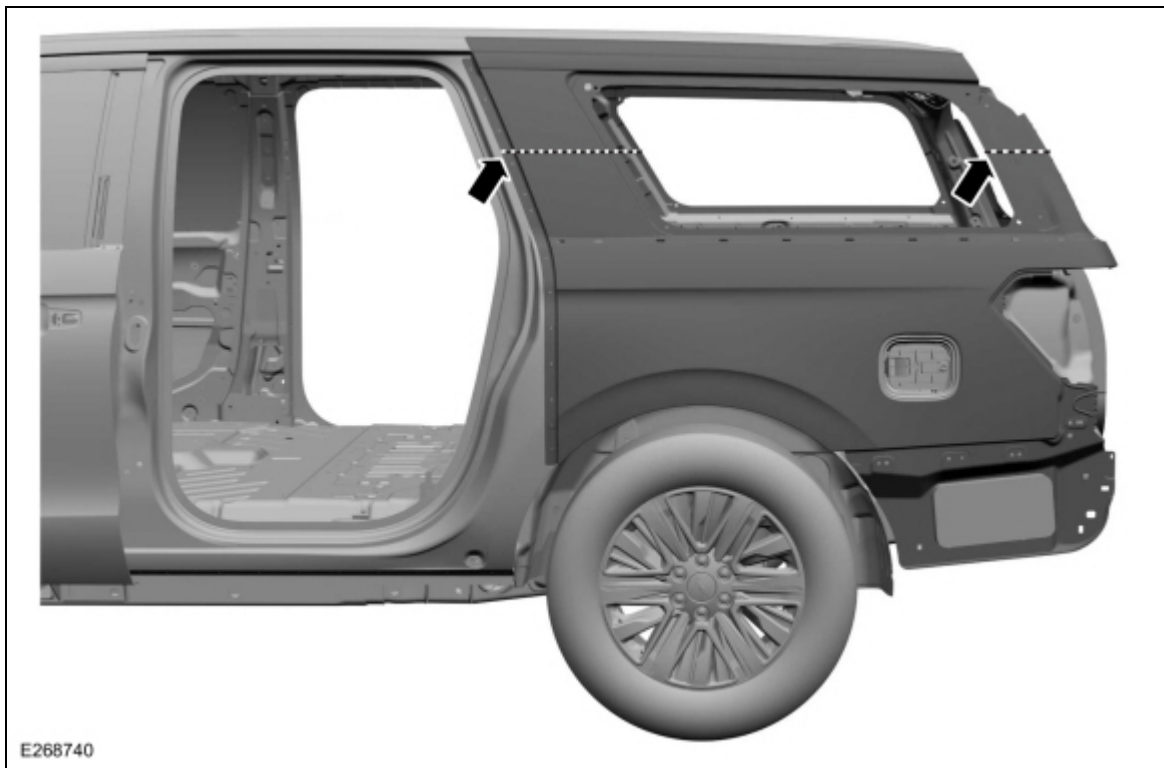
**NOTE:** Partial quarter panel replacement is possible and reasonable depending on damage. The following procedure assumes full component replacement. Removal and installation steps may be adjusted according to damage as necessary.

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

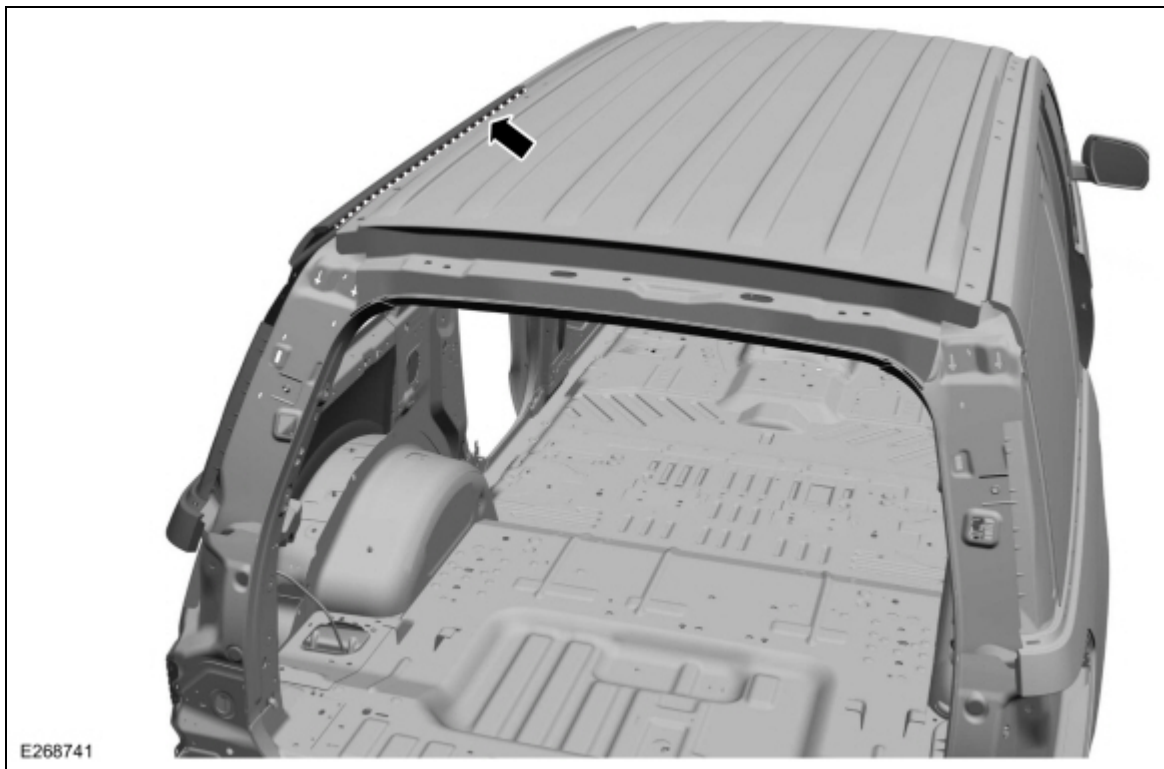
**NOTE:** Long wheelbase shown, short wheelbase similar.

1. Possible sectioning point.



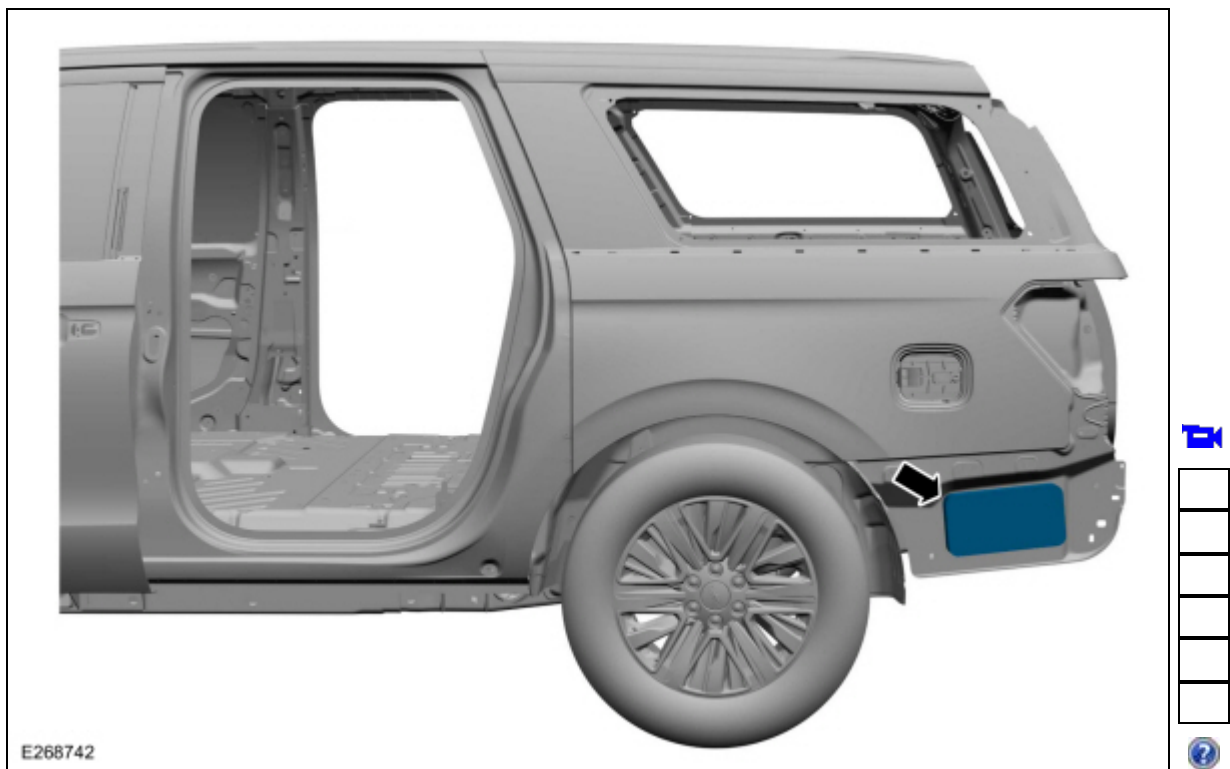


2. Possible sectioning point.



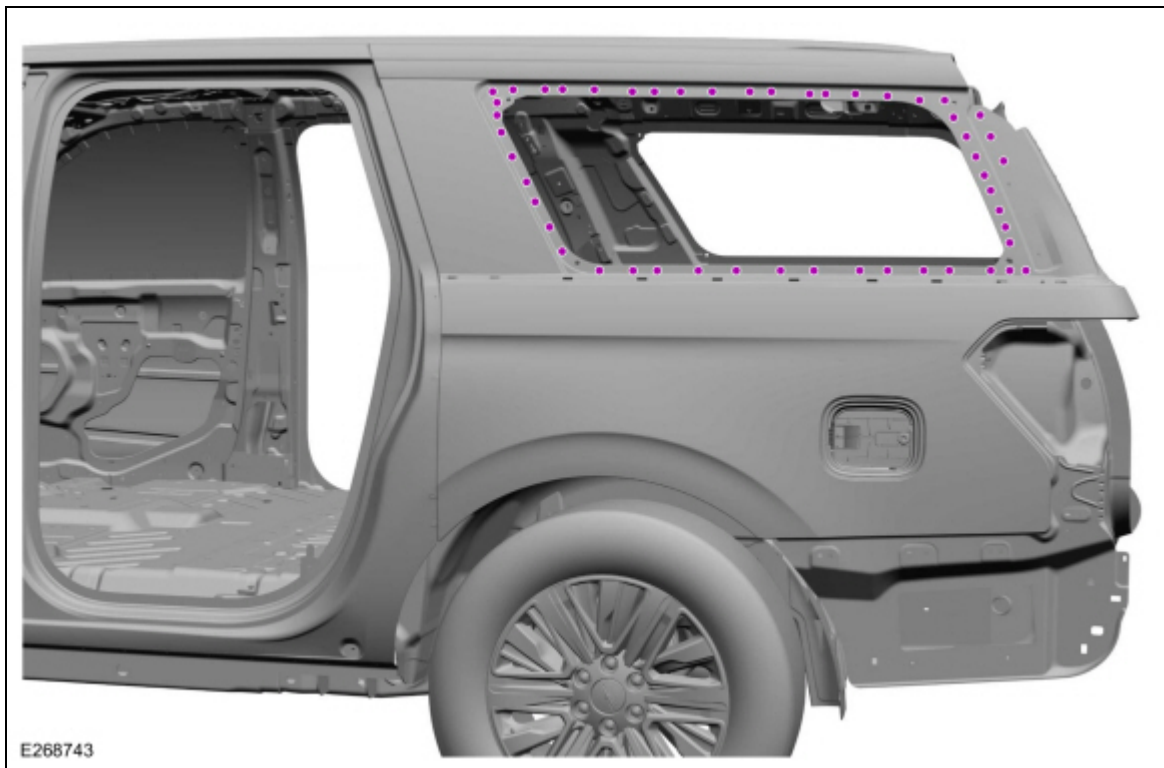
3. Depower the SRS.  
 Refer to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).

4. Remove the exterior trim and rear lamp.  
Refer to: [Rear Fender Splash Shield](#) (501-08 Exterior Trim and Ornamentation, Removal and Installation).  
Refer to: [Rear Lamp Assembly](#) (417-01 Exterior Lighting, Removal and Installation).
5. Remove the rear bumper cover.  
Refer to: [Rear Bumper Cover](#) (501-19 Bumpers, Removal and Installation).
6. Remove the interior trim.  
Refer to: [B-Pillar Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).  
Refer to: [C-Pillar Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).  
Refer to: [D-Pillar Trim Panel - Short Wheelbase](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).  
Refer to: [D-Pillar Trim Panel - Long Wheelbase](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).  
Refer to: [Loadspace Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).
7. Remove the fuel fill door.
8. Remove the air vent.

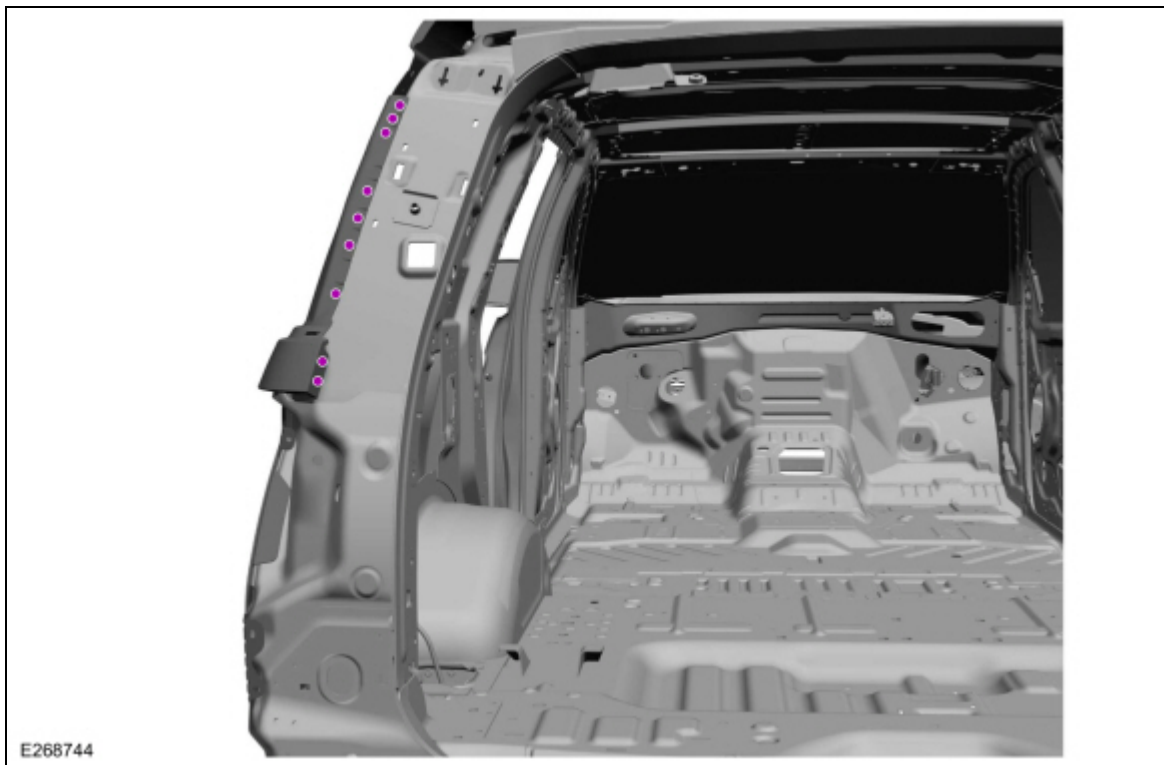


9. Remove the quarter glass.  
Refer to: [Fixed Glass](#) (501-11 Glass, Frames and Mechanisms, General Procedures).
10. Remove the roof panel.  
Refer to: [Roof Panel](#) (501-28 Roof Sheet Metal Repairs, Removal and Installation).  
Refer to: [Roof Panel - Vehicles With: Roof Opening Panel](#) (501-28 Roof Sheet Metal Repairs, Removal and Installation).
11. Remove the SPR fasteners.  
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
Use the General Equipment: Belt Sander

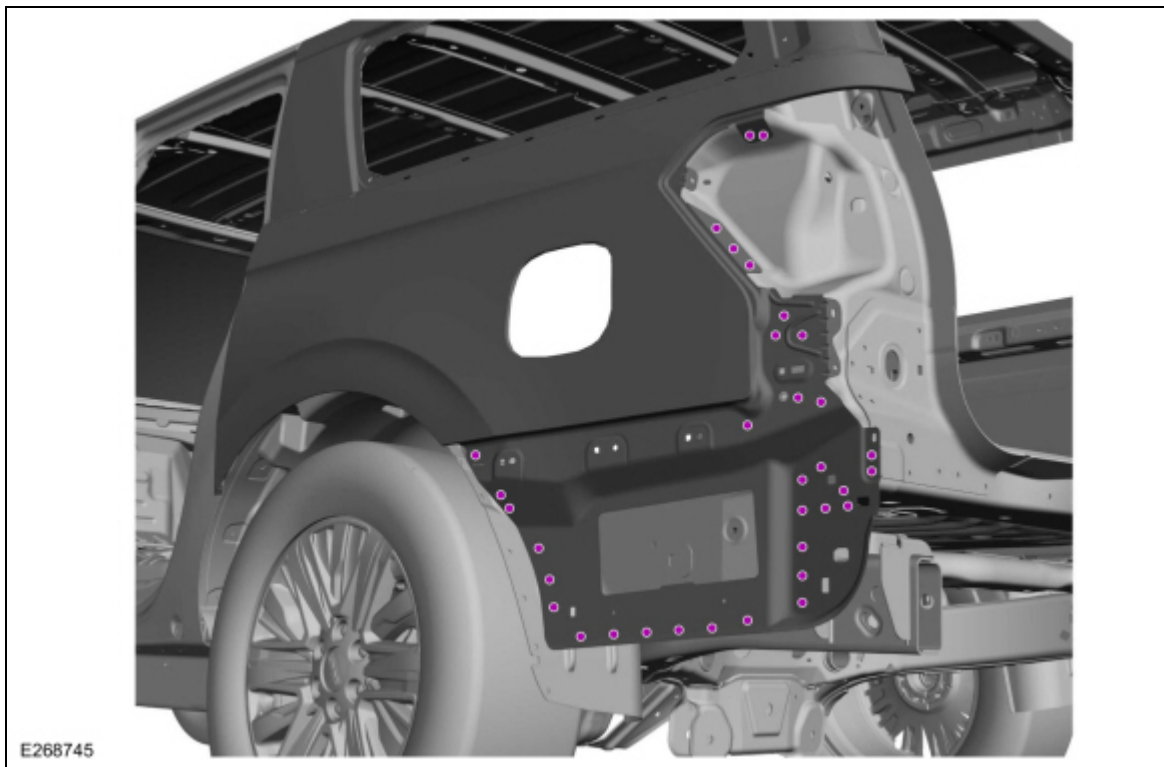




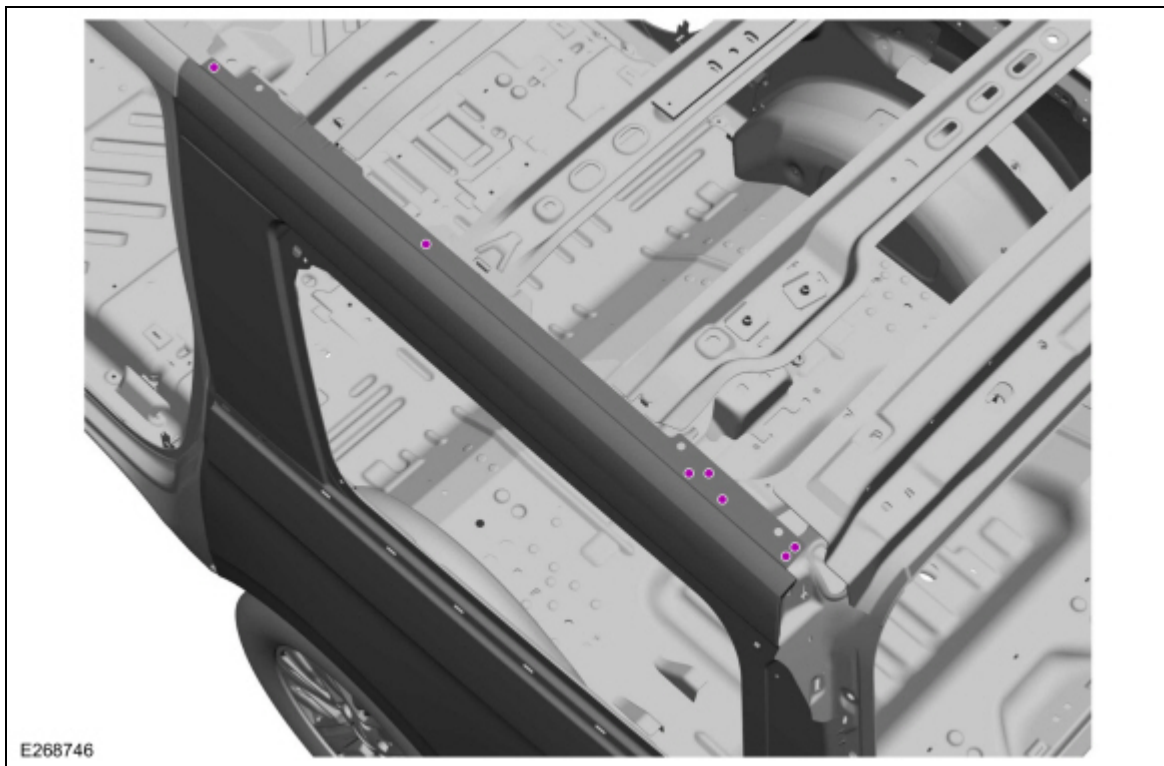
12. Remove the SPR fasteners.  
 Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
 Use the General Equipment: Belt Sander



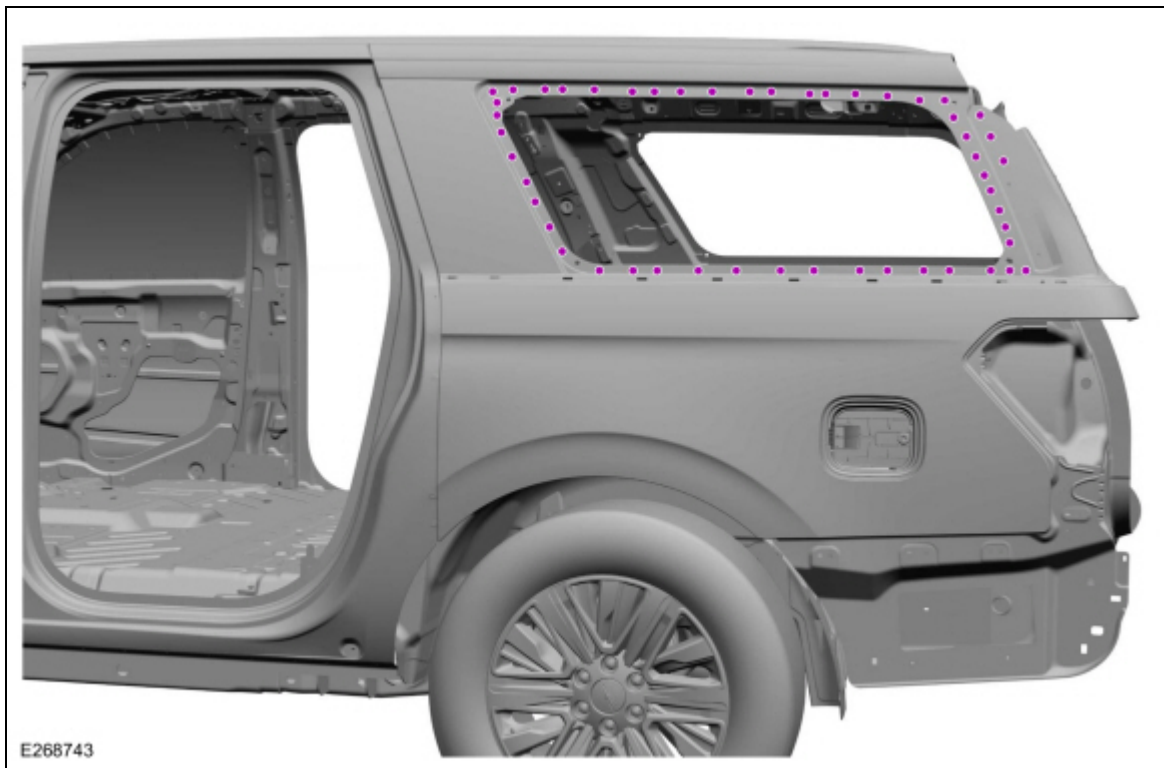
13. Remove the SPR fasteners.  
 Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
 Use the General Equipment: Belt Sander



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



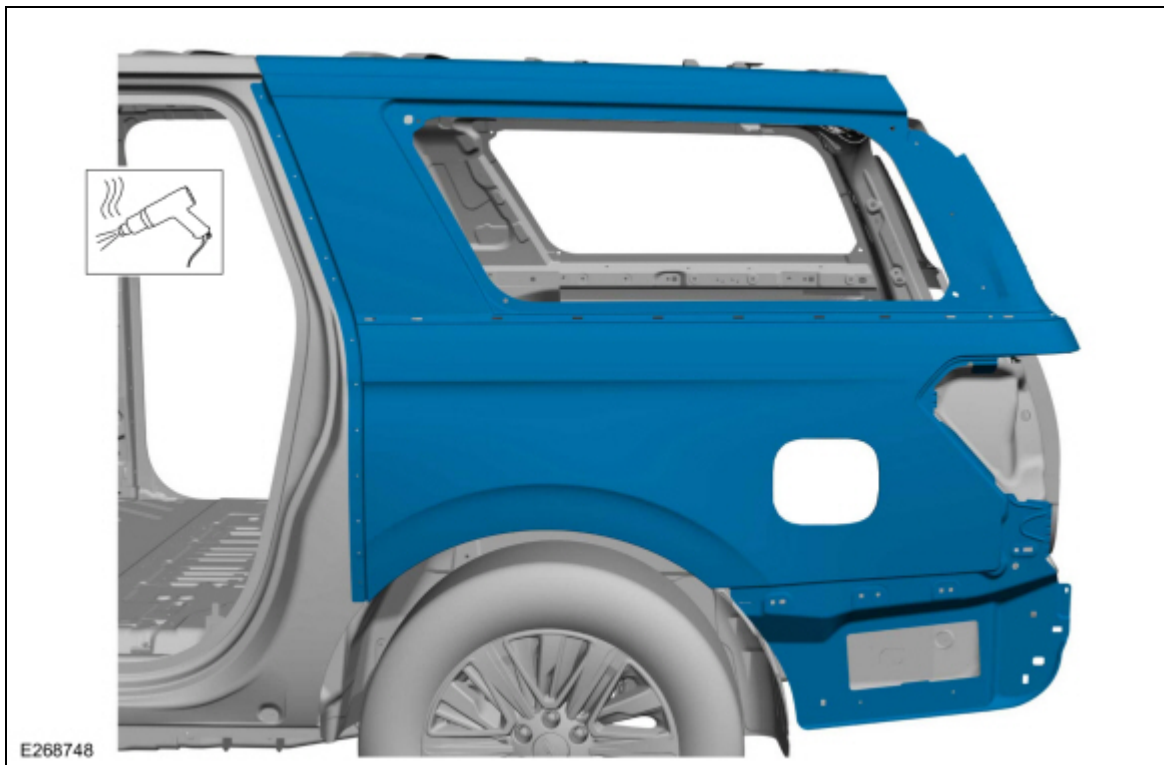
15. Remove the clinch joints.  
 Use the General Equipment: 6.5 mm Drill Bit



16. **NOTE:** *The use of heat may be required to soften adhesives and sealers.*

**NOTE:** *Pay particular attention to location of NVH sealers and adhesives to aid in installation.*

Break the adhesive bond and remove the outer quarter panel.  
Use the General Equipment: Hot Air Gun



## Installation

**NOTE:** If sectioning, trim the replacement panel to fit repair area.

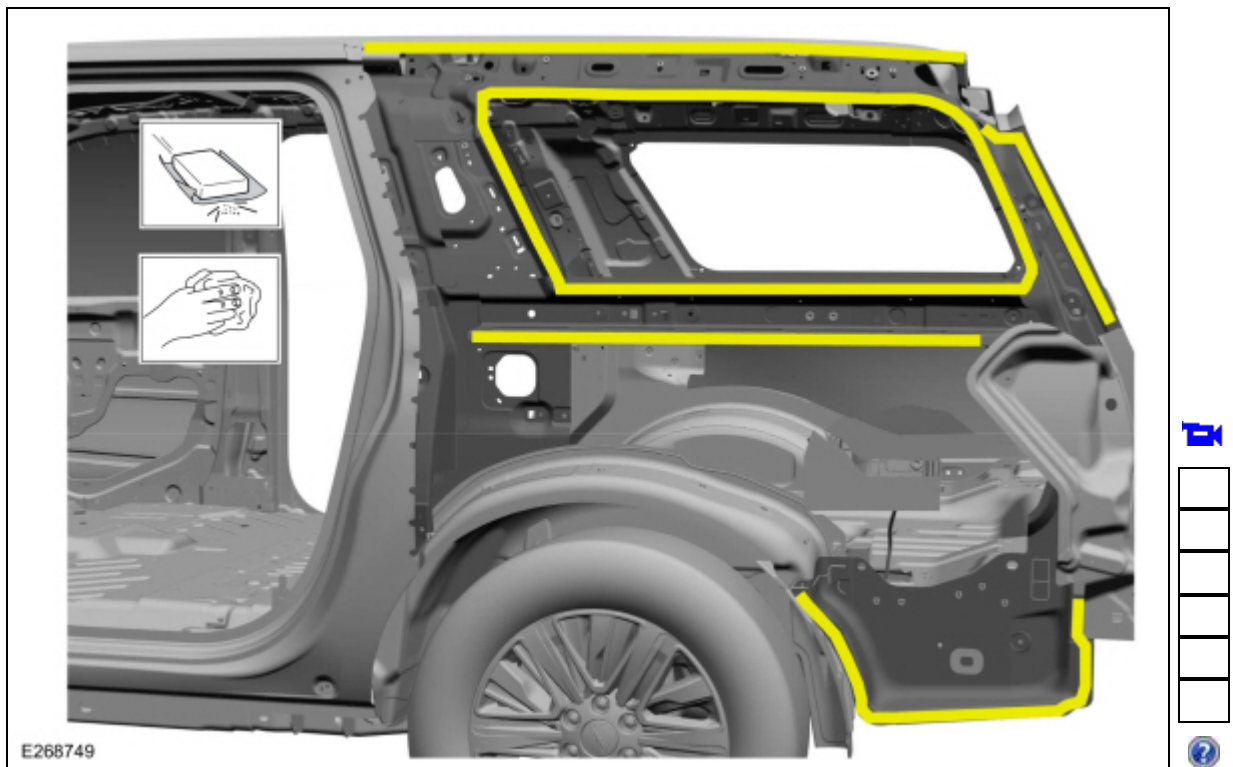
**NOTE:** Do not install SPR fasteners directly in old SPR location. SPR fasteners must be installed adjacent to the original location matching original quantity.

**NOTE:** Solid or blind rivet fasteners may be used in place of SPR fasteners after enlarging existing holes to 6.5 mm. Solid or blind rivet fasteners must equal original fasteners in both location and quantity.

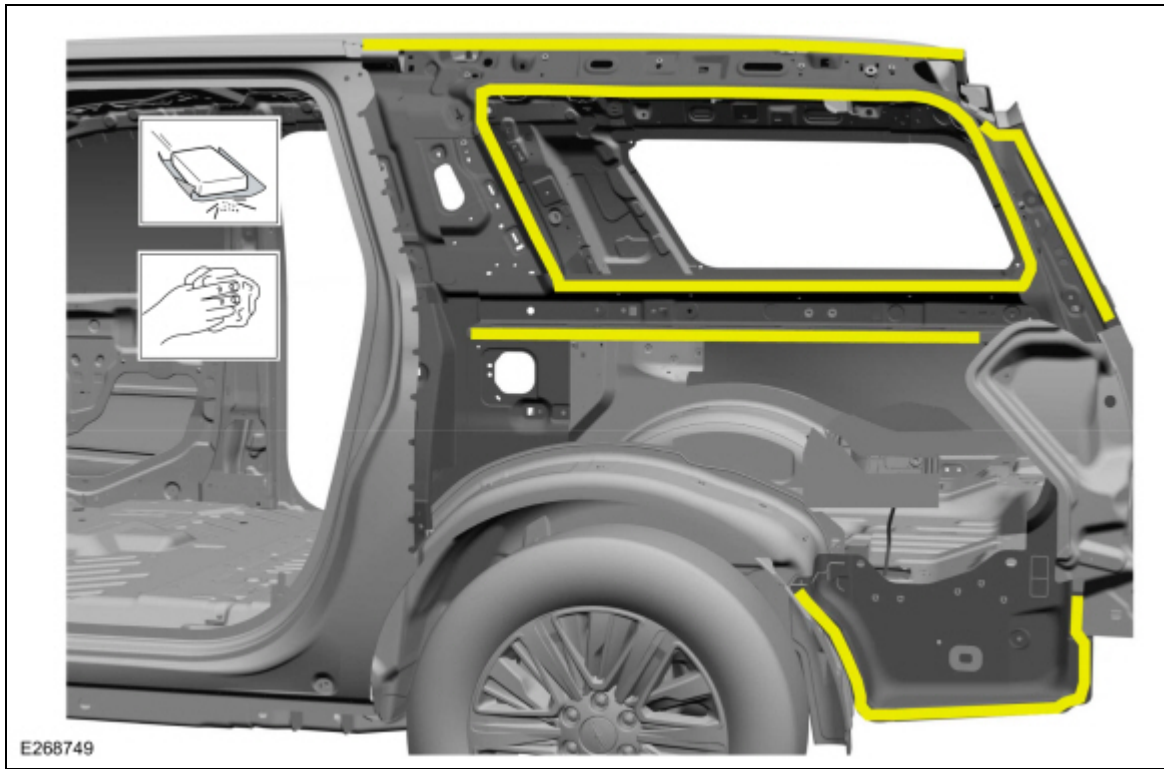
**NOTE:** LH side shown, RH side similar.

**NOTE:** Long wheelbase shown, short wheelbase similar.

1. 80-120 grit sandpaper.  
Sand to remove old adhesive and sealer and clean.



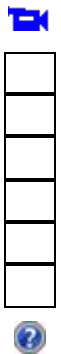
2. 80-120 grit sandpaper.  
Sand to remove e-coat at mating surfaces only and clean.



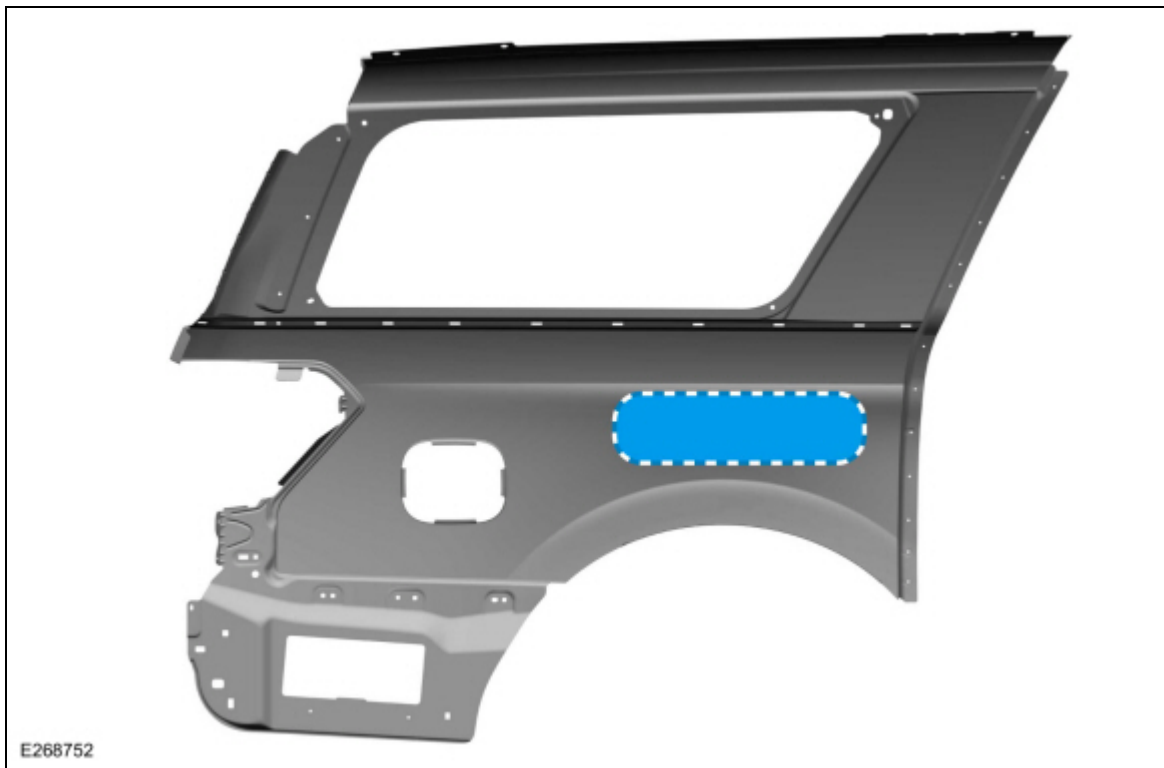
- 3. Drill plug weld holes.  
Use the General Equipment: 6.5 mm Drill Bit



- 4. Install a locally obtained butyl NVH patch.



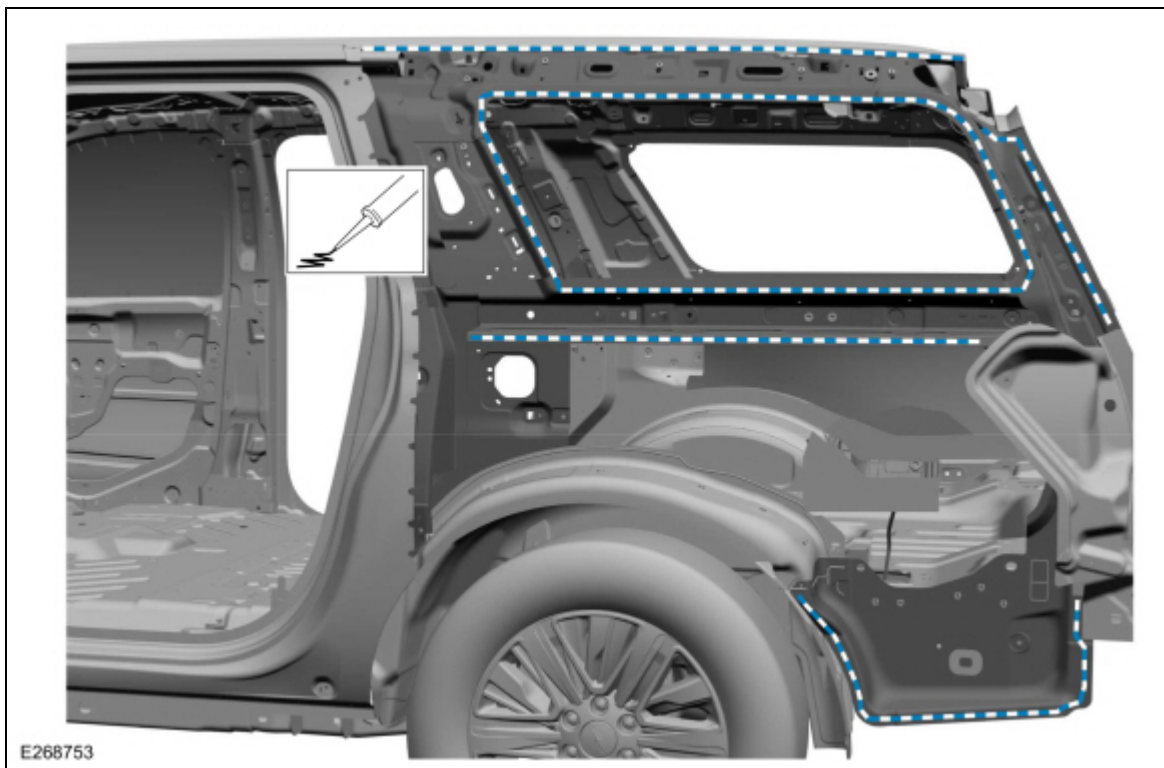




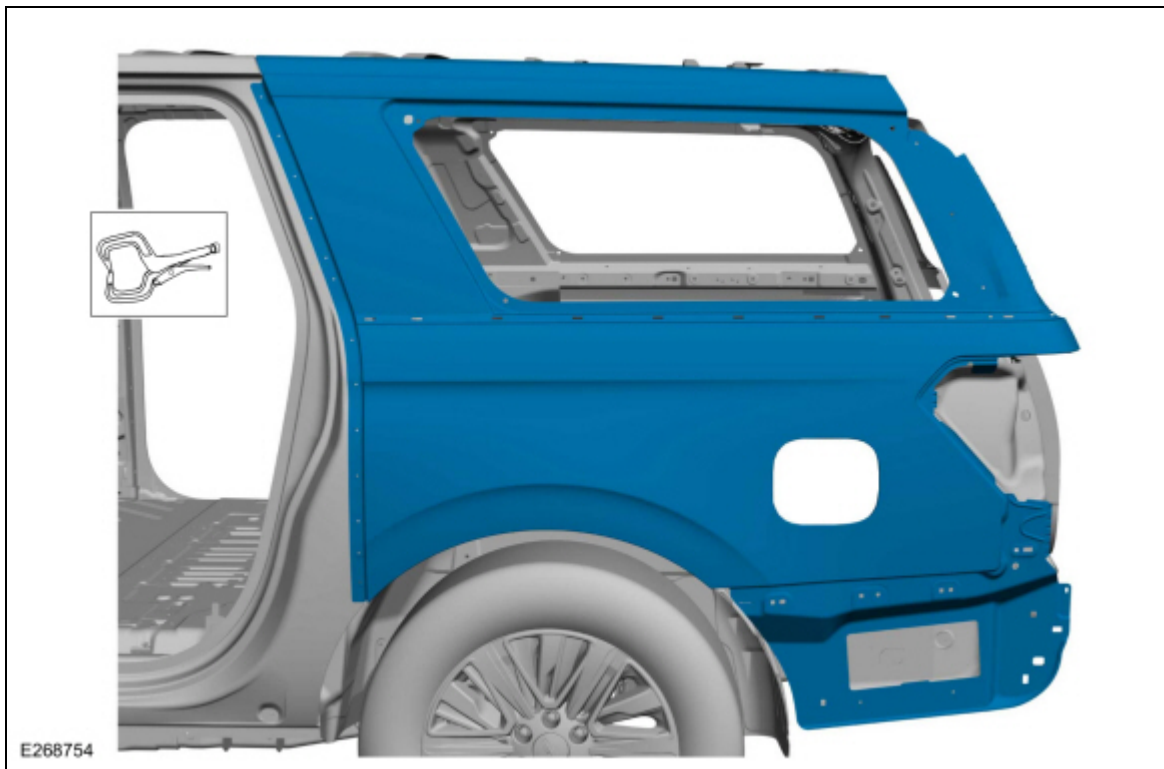
5. **NOTE:** Do not apply adhesive in areas to be welded.

Apply adhesive.

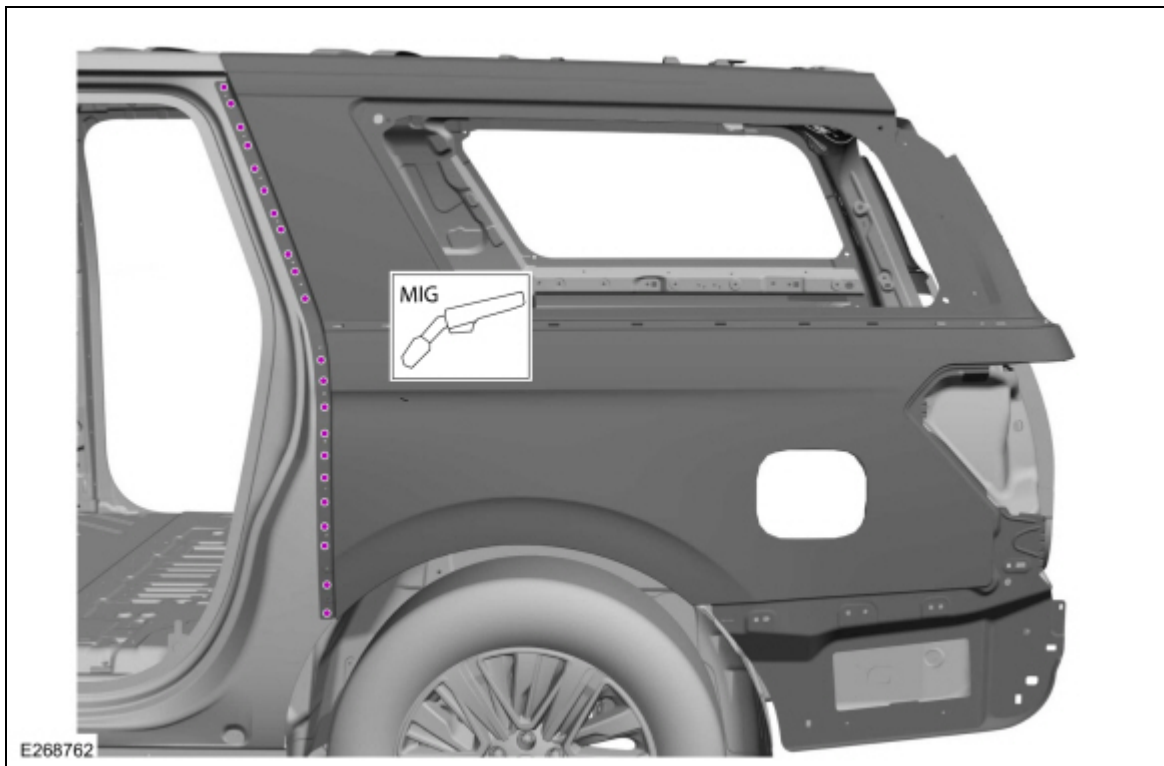
*Material:* Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B



6. Install, properly position and clamp the outer quarter panel.  
Use the General Equipment: Locking Pliers



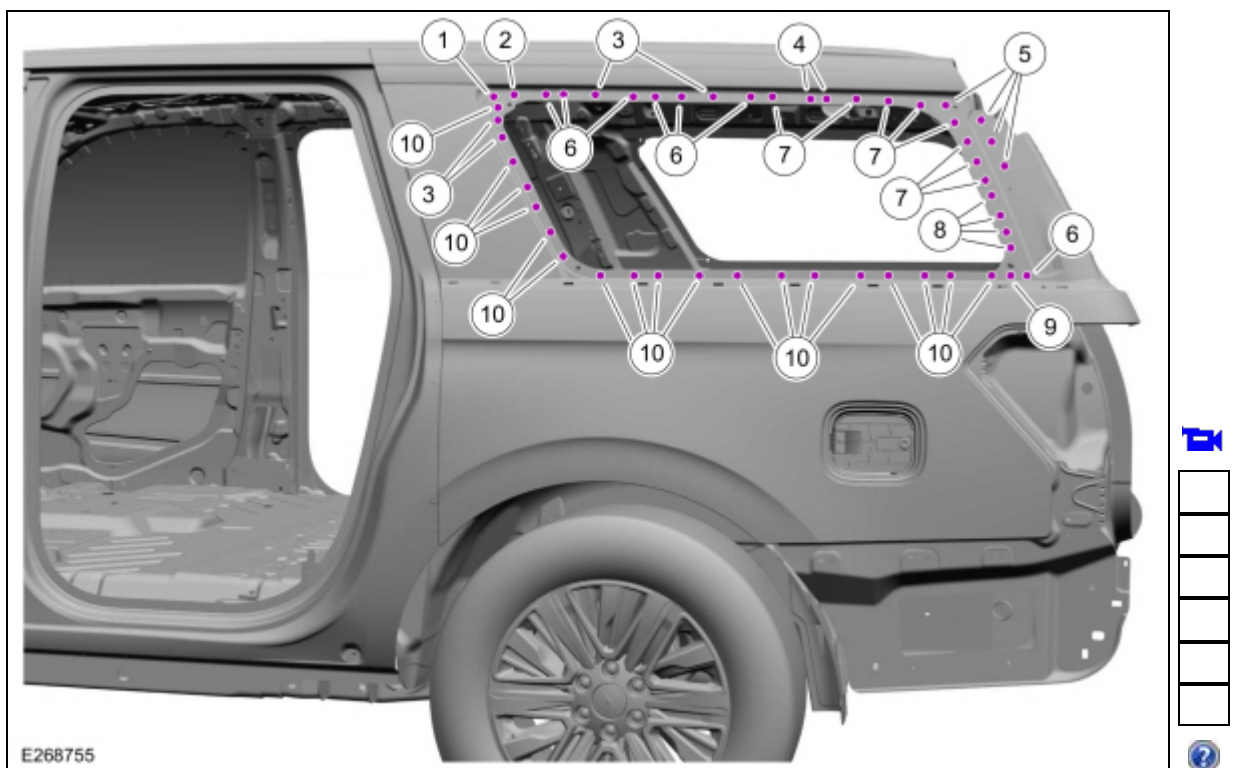
7. Install aluminum MIG plug welds.  
 Refer to: [Welding Precautions](#) (501-25 Body Repairs - General Information, General Procedures).  
 Use the General Equipment: MIG/MAG Welding Equipment



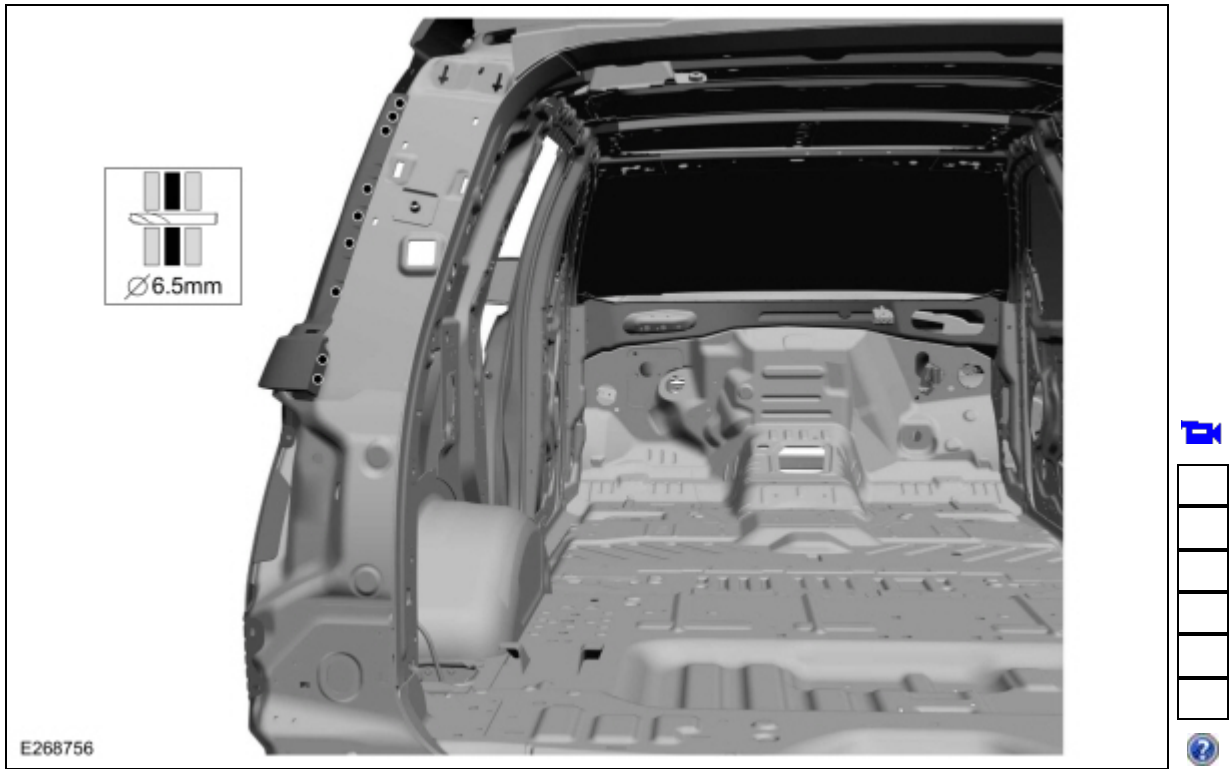
8. Install fasteners.

Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	W717188-S900	PW	DG10-200/H	SA-0400/SA-0402	W708777-S900C	W790377-S900	-
2	W718958-S900	SP	DP10-200/H	SA-0400/SA-0402	W702554-S900C	W790377-S900	-
3	W712218-S900	DB	DZ09-025/H	SA-0400/SA-0401	W702512-S900C	W790376-S900	-
4	W717529-S900	QZ	DG10-200/H	SA-0400/SA-0402	W708777-S900C	W790377-S900	-
5	W713404-S900	FC	DZ09-025/H	SA-0400/SA-0401	W702512-S900C	W790376-S900	-
6	W717752-S900	RB	DP10-200/H	SA-0400/SA-0402	W708777-S900C	W790377-S900	-
7	W717184-S900	QA	DP10-200/H	SA-0400/SA-0402	W708777-S900C	W790377-S900	-
8	W708713-S900	AS	DZ09-025/H	SA-0400/SA-0401	W702512-S900C	W790376-S900	-
9	W708717-S900	AW	DP11-200/H	SA-0400/SA-0402	W707638-S900C	W790377-S900	-
10	W718595-S900	SU	DP07-140/H	SA-0400/SA-0401	W702512-S900C	W790376-S900	-

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



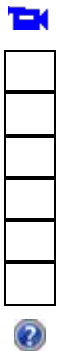
9. Drill for fasteners.  
Use the General Equipment: 6.5 mm Drill Bit

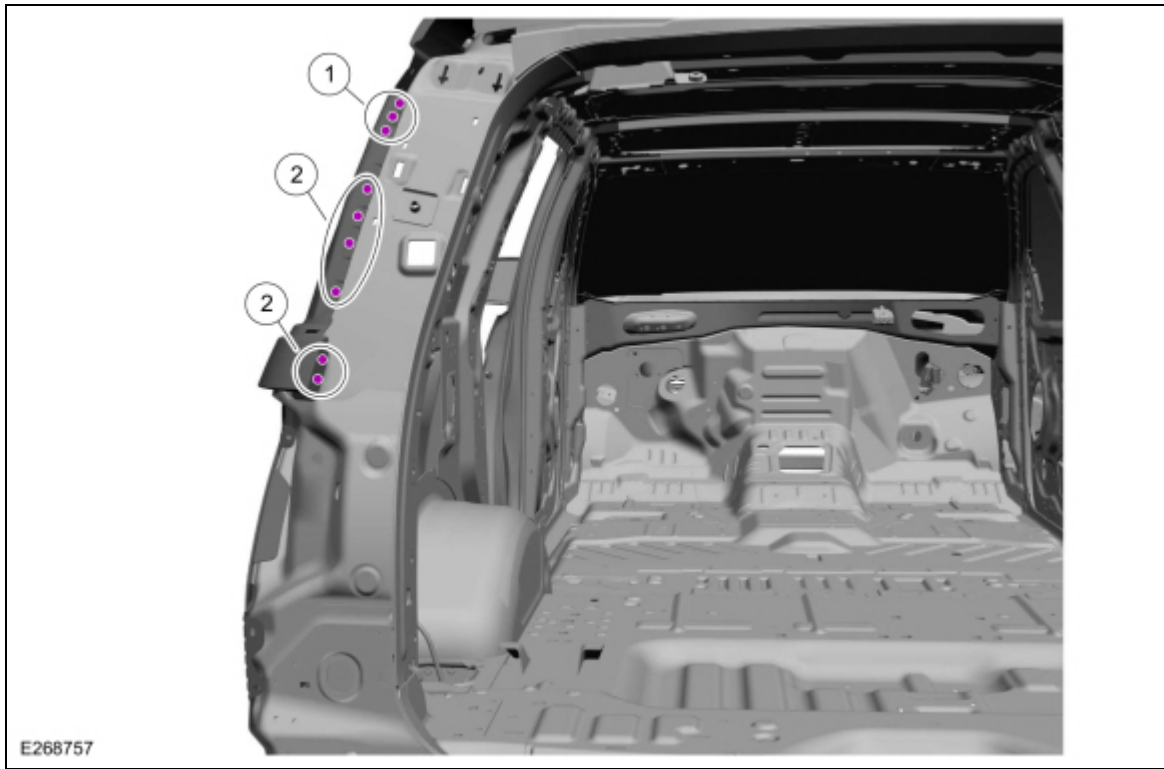


10. Install fasteners.

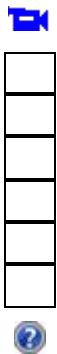
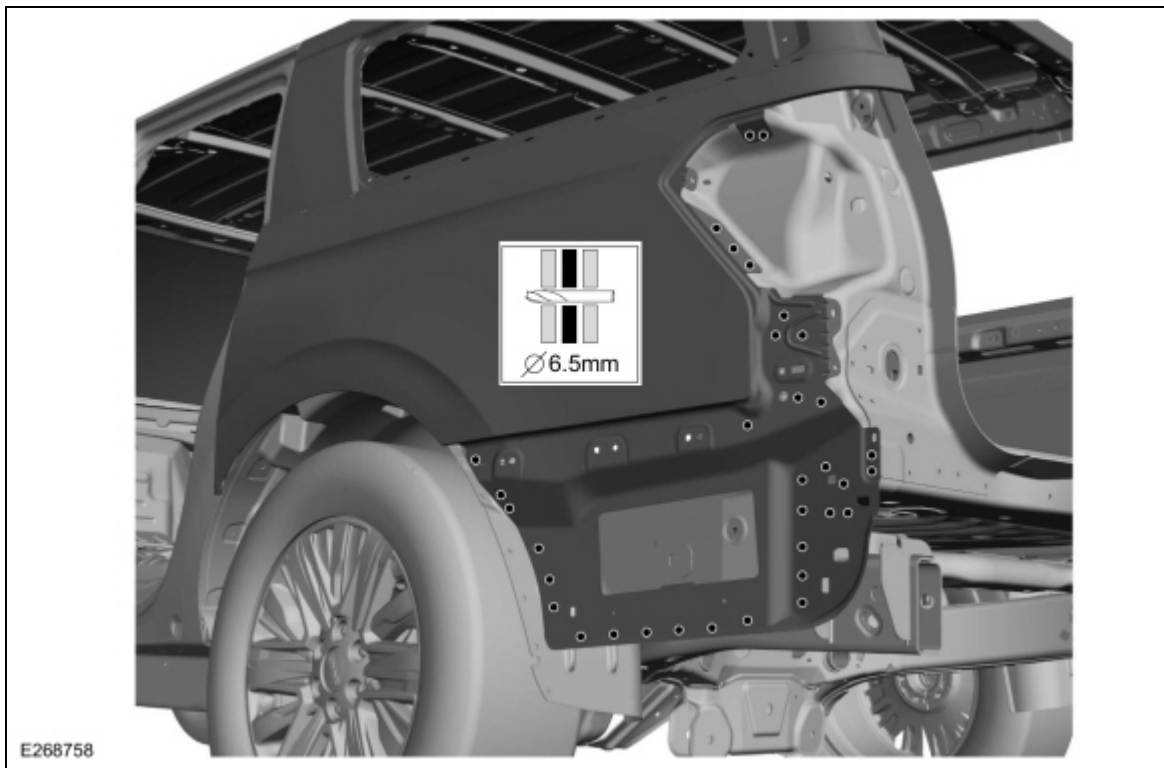
Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W702554-S900C	-	-
2	-	-	-	-	W702512-S900C	-	-

Use the General Equipment: Blind Rivet Gun





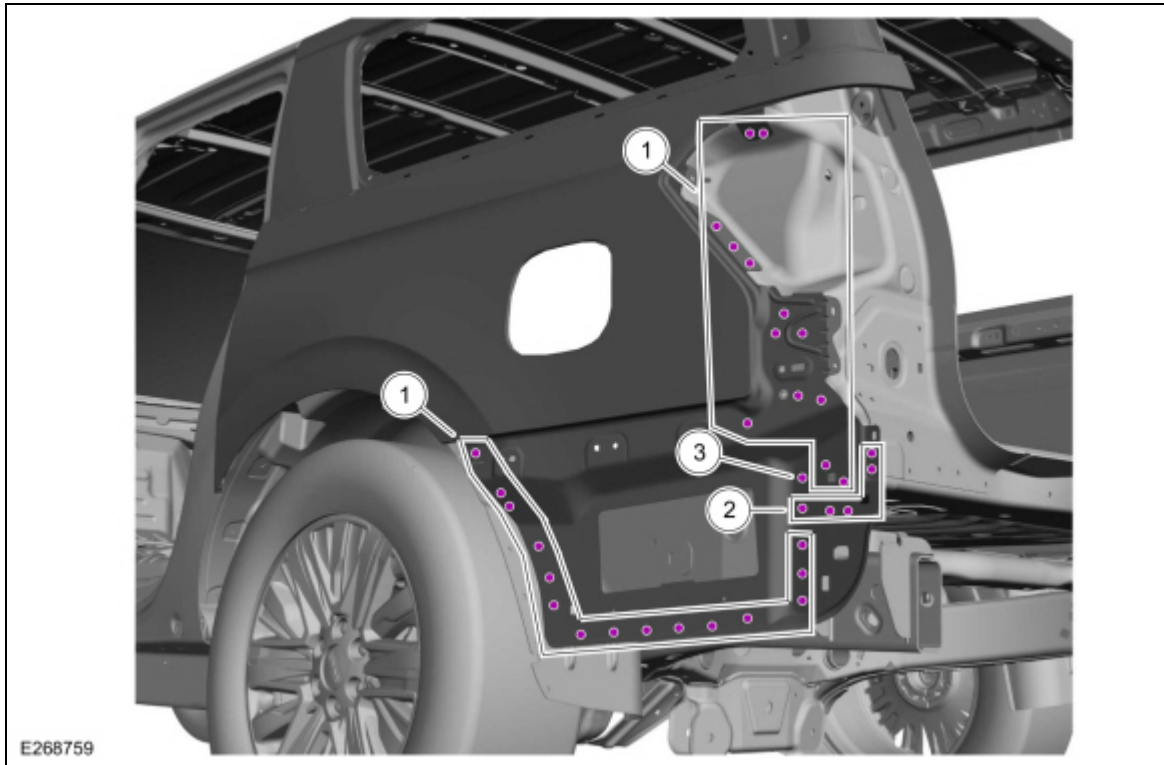
- 11. Drill for fasteners.  
Use the General Equipment: 6.5 mm Drill Bit



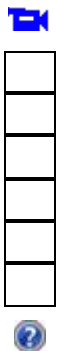
- 12. Install fasteners.

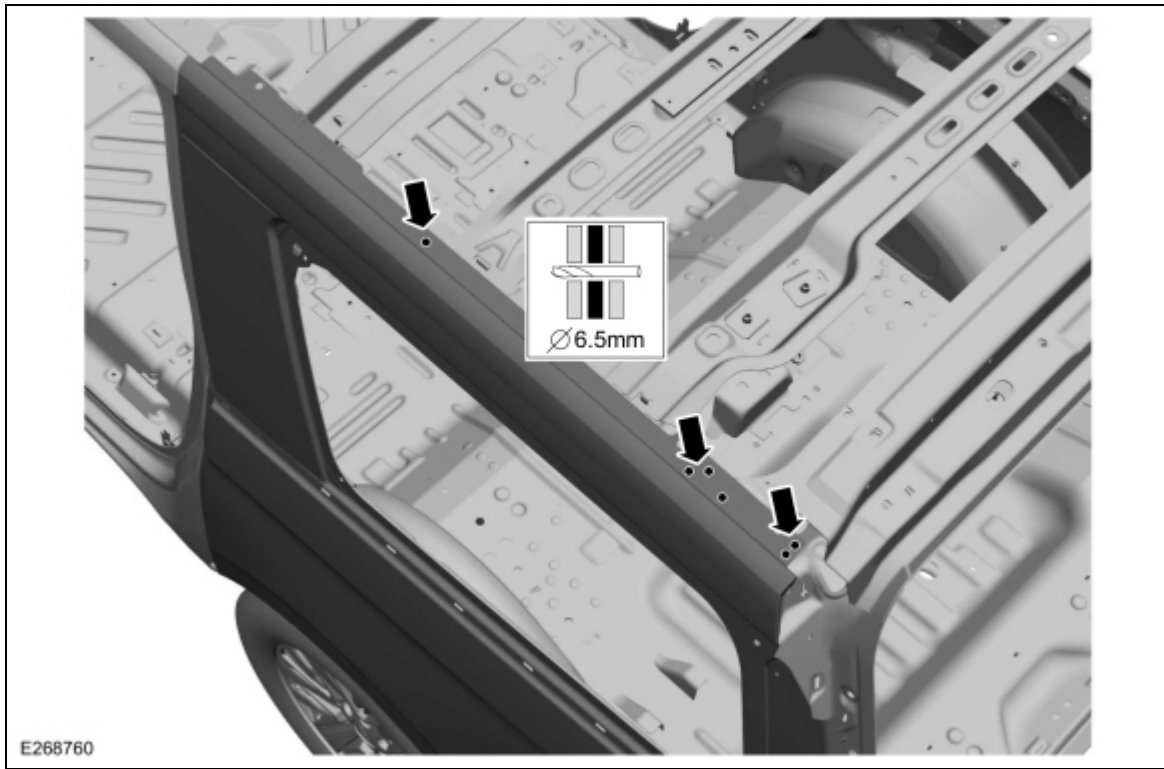
Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W707638-S900C	-	-
2	-	-	-	-	W708777-S900C	-	-
3	-	-	-	-	W702512-S900C	-	-

Use the General Equipment: Blind Rivet Gun



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

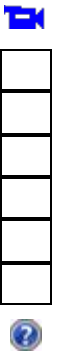




14. Install fasteners.

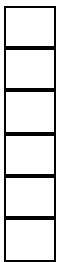
Item	SPR Number	SPR Code	Henrob® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W702512-S900C	-	-

Use the General Equipment: Blind Rivet Gun

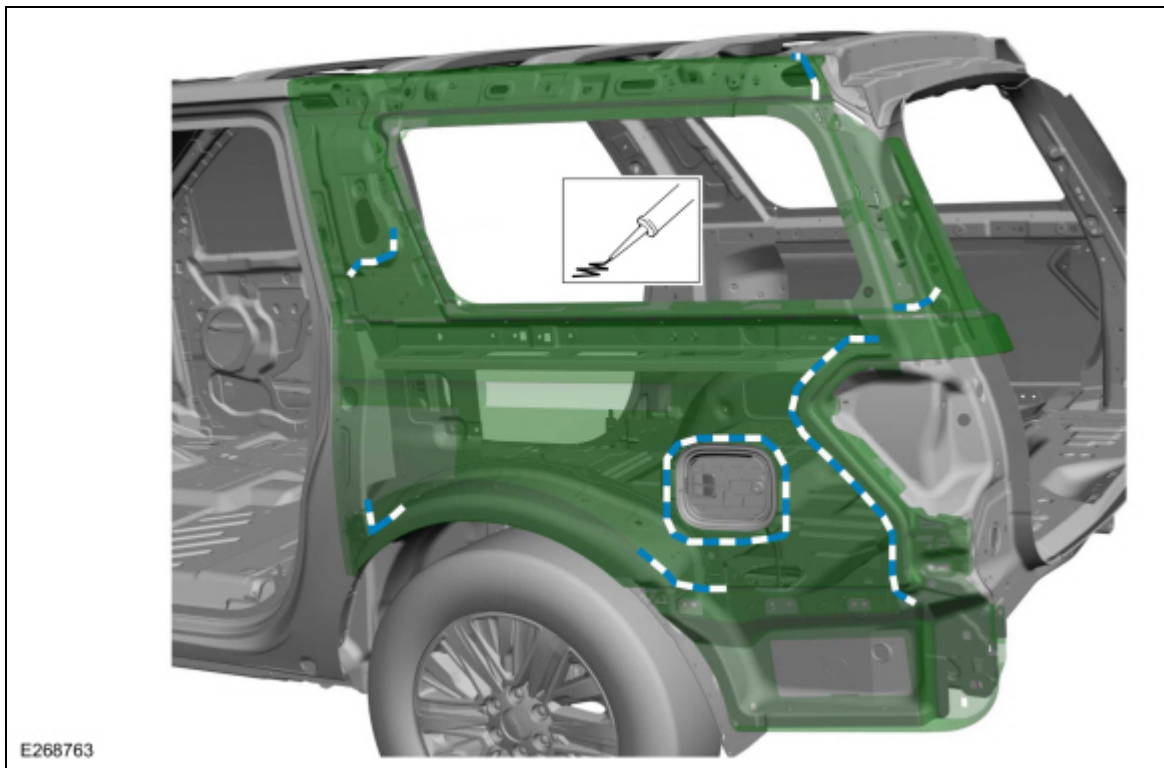




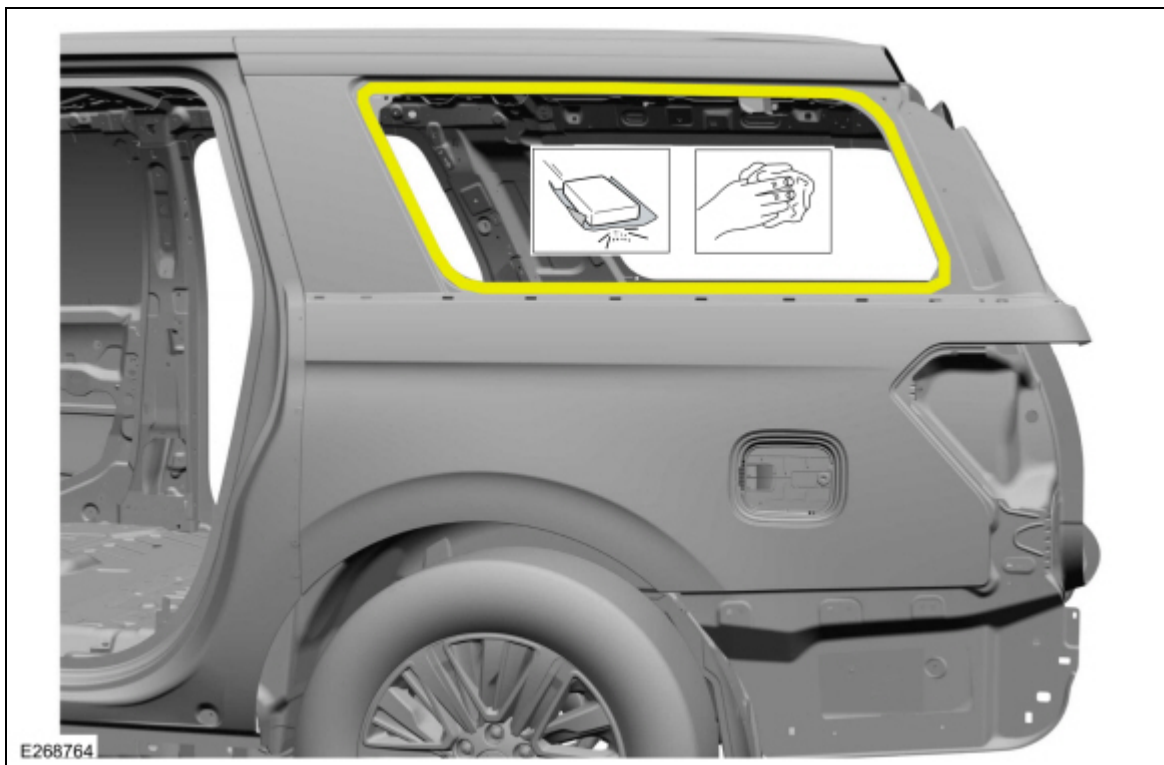
15. Install the roof panel.  
Refer to: [Roof Panel](#) (501-28 Roof Sheet Metal Repairs, Removal and Installation).  
Refer to: [Roof Panel - Vehicles With: Roof Opening Panel](#) (501-28 Roof Sheet Metal Repairs, Removal and Installation).
16. If sectioning:  
Completely seam weld all sectioning joints using a MIG welder set up for aluminum welding.  
Refer to: [Welding Precautions](#) (501-25 Body Repairs - General Information, General Procedures).  
Use the General Equipment: MIG/MAG Welding Equipment
17. If sectioning:  
Metal finish all welds as required and complete with typical metal finishing techniques and materials.  
Refer to: [Special Repair Considerations for Aluminum Repairs](#) (501-25 Body Repairs - General Information, Description and Operation).
18. Apply NVH sealer in areas noted during removal.  
*Material:* Flexible Foam Repair / 3M™ 08463, LORD Fusor® 121



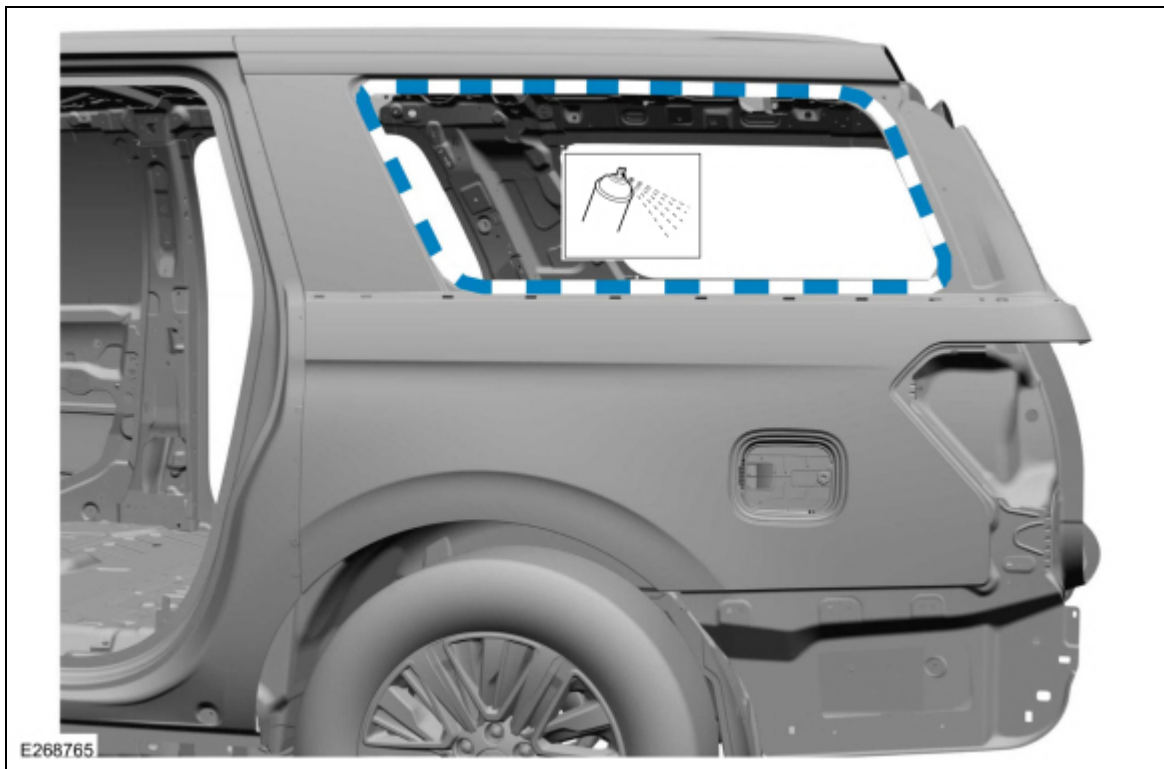




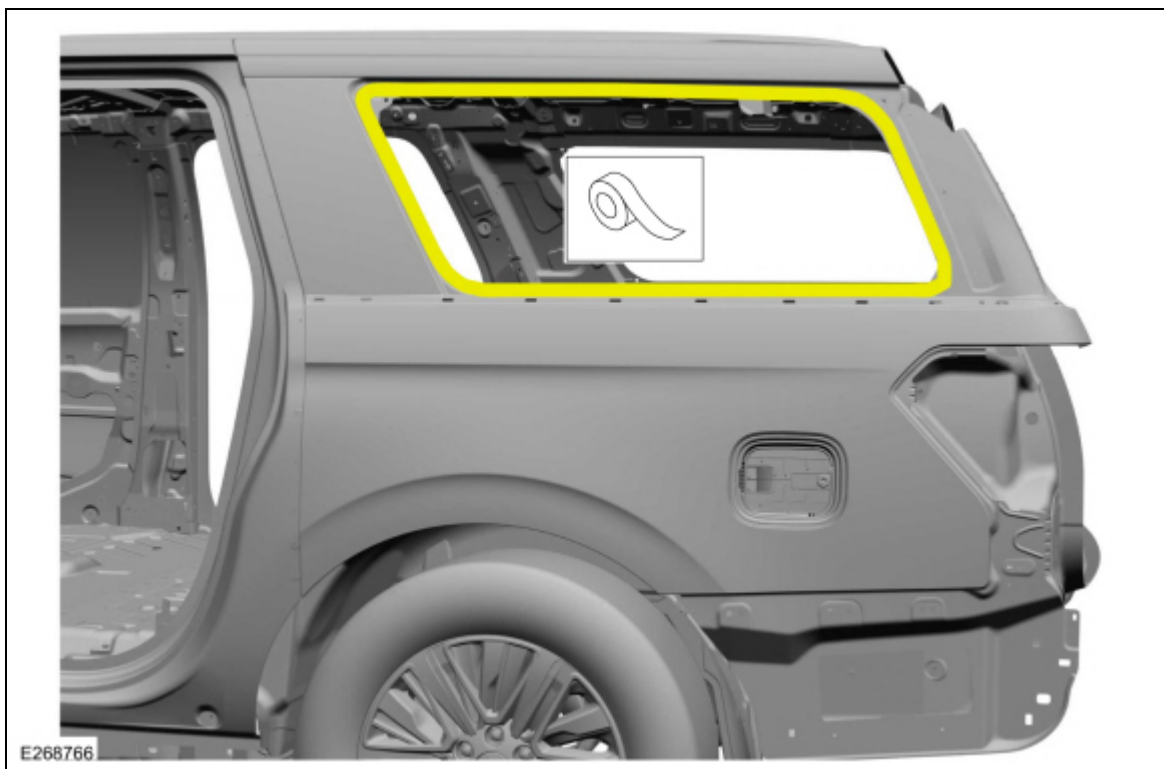
19. Seam sealing:  
 All seams must be sealed to production level.  
*Material:* Seam Sealer / TA-2-B, 3M™ 08308, LORD Fusor® 803DTM
20. Sand to remove e-coat and clean.



21. Apply a Ford approved, epoxy-based primer and allow to dry.

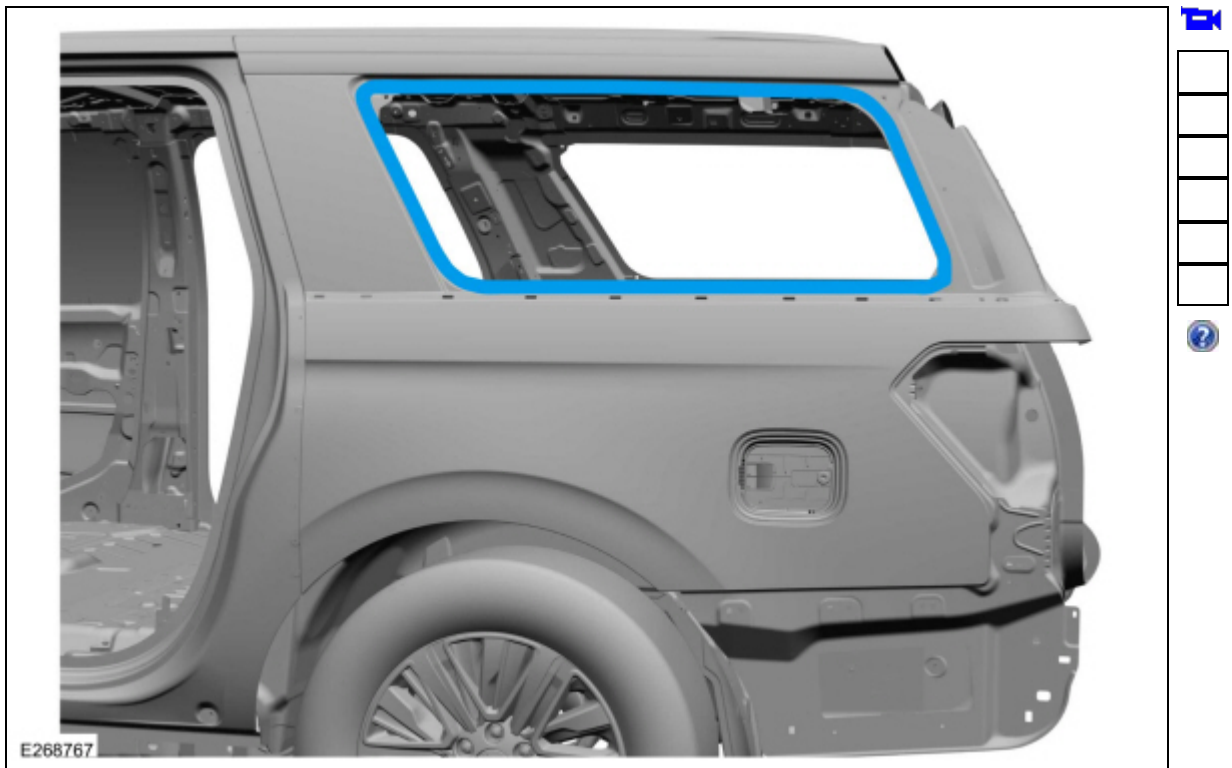


22. Mask off the glass opening channel.

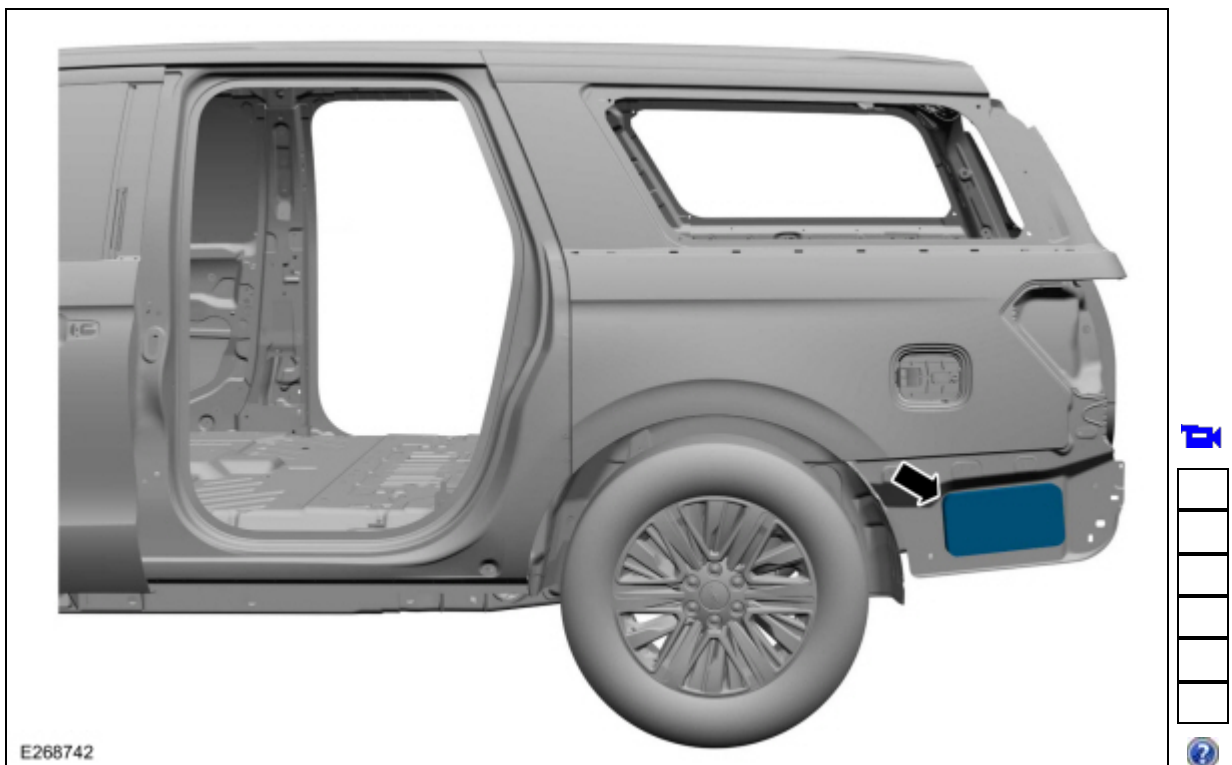


23. Refinish the entire repair using a Ford approved paint system and typical refinishing techniques.

24. Remove the masking tape from the glass opening channel.



25. Install the quarter glass.  
Refer to: [Fixed Glass](#) (501-11 Glass, Frames and Mechanisms, General Procedures).
26. Install the fuel fill door.
27. Install the air vent.



28. Install the rear fender splash shield and rear lamp.  
Refer to: [Rear Fender Splash Shield](#) (501-08 Exterior Trim and Ornamentation, Removal and Installation).  
Refer to: [Rear Lamp Assembly](#) (417-01 Exterior Lighting, Removal and Installation).
29. Install the rear bumper cover.  
Refer to: [Rear Bumper Cover](#) (501-19 Bumpers, Removal and Installation).
30. Install the interior trim.  
Refer to: [B-Pillar Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).  
Refer to: [C-Pillar Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).  
Refer to: [D-Pillar Trim Panel - Short Wheelbase](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).  
Refer to: [D-Pillar Trim Panel - Long Wheelbase](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).  
Refer to: [Loadspace Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).
31. Repower the SRS.  
Refer to: [Supplemental Restraint System \(SRS\) Repowering](#) (501-20B Supplemental Restraint System, General Procedures).

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