

501-27 Front End Sheet Metal Repairs
Removal and Installation

2021 F-150

Procedure revision date: 09/25/2020

Dash Panel


Special Tool(s) / General Equipment

6.5 mm Drill Bit
Self-Piercing Rivet (SPR) Remover/Installer
Belt Sander
Blind Rivet Gun
Locking Pliers


Materials

Name	Specification
Metal Bonding Adhesive TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B	-
Seam Sealer TA-2-B, 3M™ 08308, LORD Fusor® 803DTM	-

Removal

 **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.

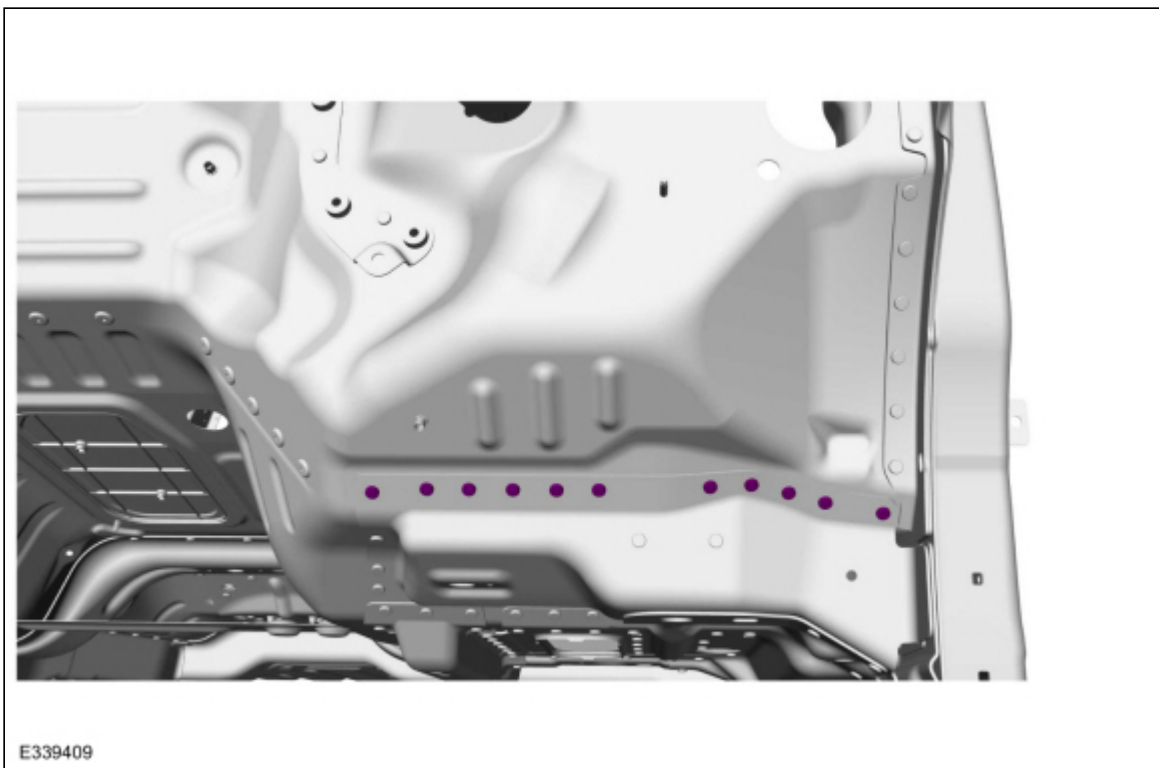
-  **WARNING:** Before beginning any service procedure in this manual, refer to health and safety warnings in section 100-00 General Information. Failure to follow this instruction may result in serious personal injury.

Refer to: [Health and Safety Precautions](#) (100-00 General Information, Description and Operation).

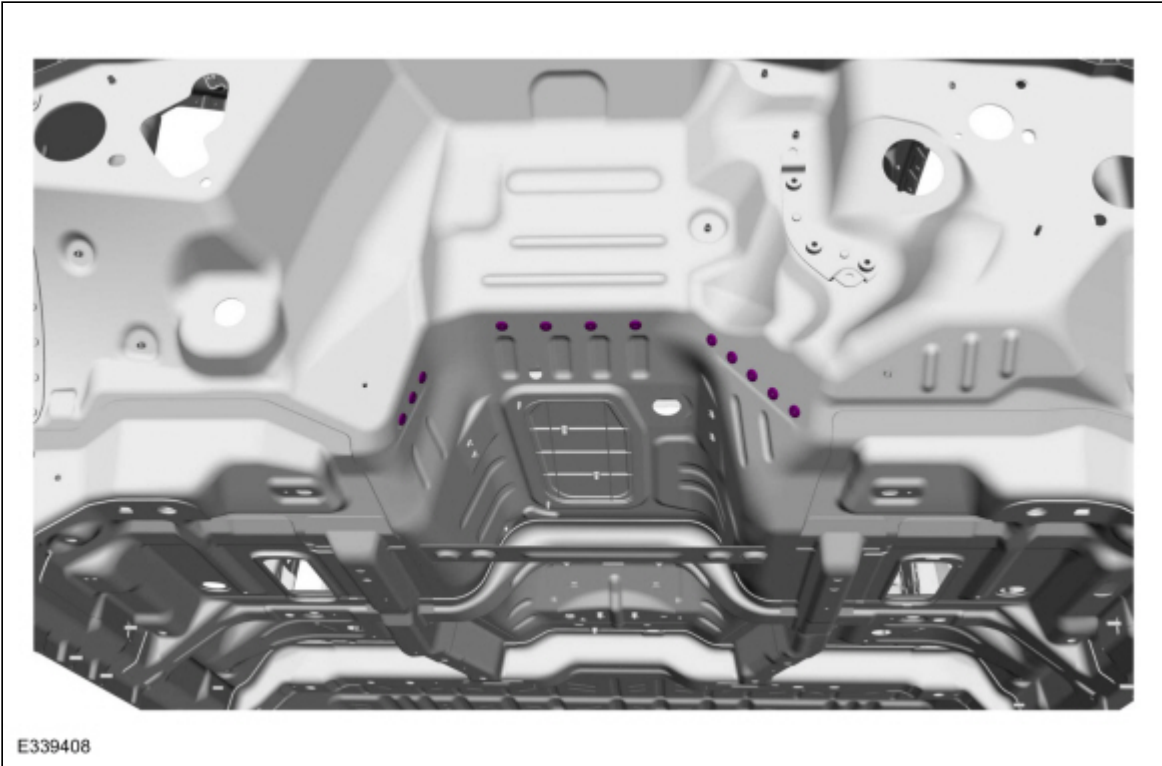
Refer to: [High Voltage System Health and Safety Precautions - Overview](#) (100-00 General Information, Description and Operation).

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.

2. Depower the **SRS**.
Refer to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
3. Remove the cowl panel.
Refer to: [Cowl Panel](#) (501-27 Front End Sheet Metal Repairs, Removal and Installation).
4. Remove the evaporator.
Refer to: [Evaporator](#) (412-00 Climate Control System - General Information, Removal and Installation).
5. Remove the floor console.
Refer to: [Floor Console](#) (501-12 Instrument Panel and Console, Removal and Installation).
6. **On Both Sides:**
Remove the fasteners.
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer
Use the General Equipment: Belt Sander



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



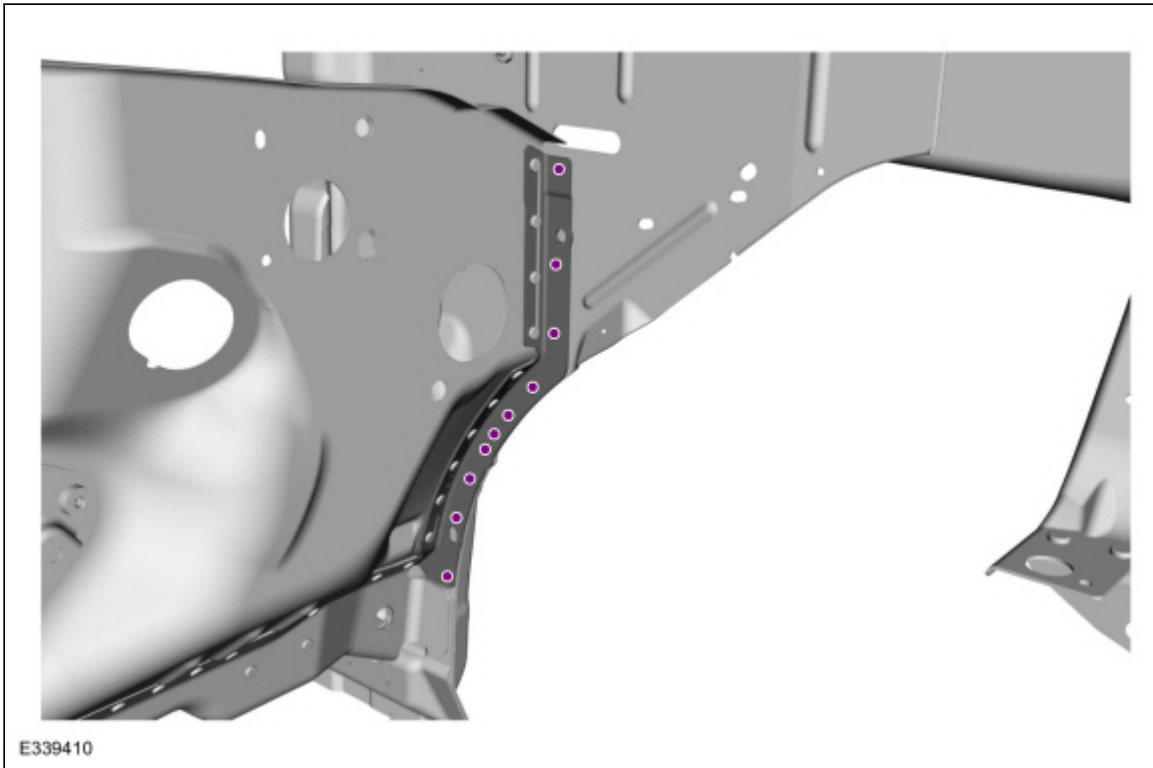
8. On Both Sides:

Remove the fasteners.

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

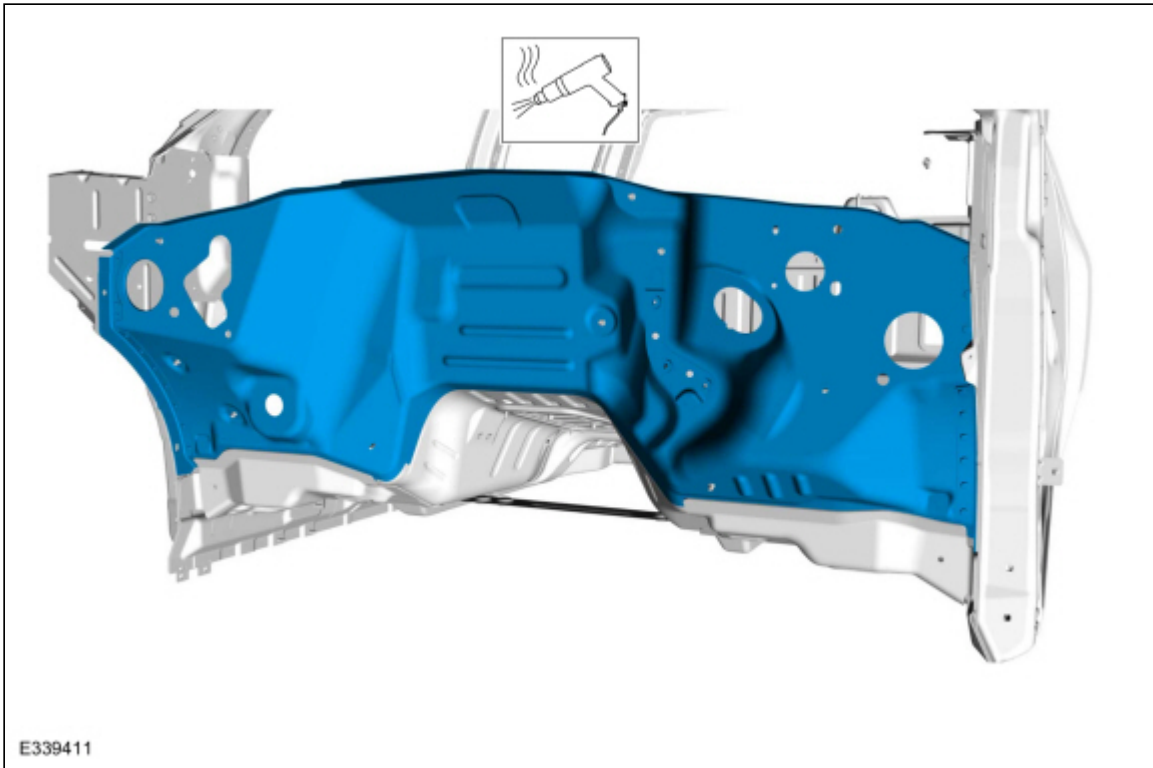
Use the General Equipment: Belt Sander





9. Break the adhesive bond and remove the dash panel.

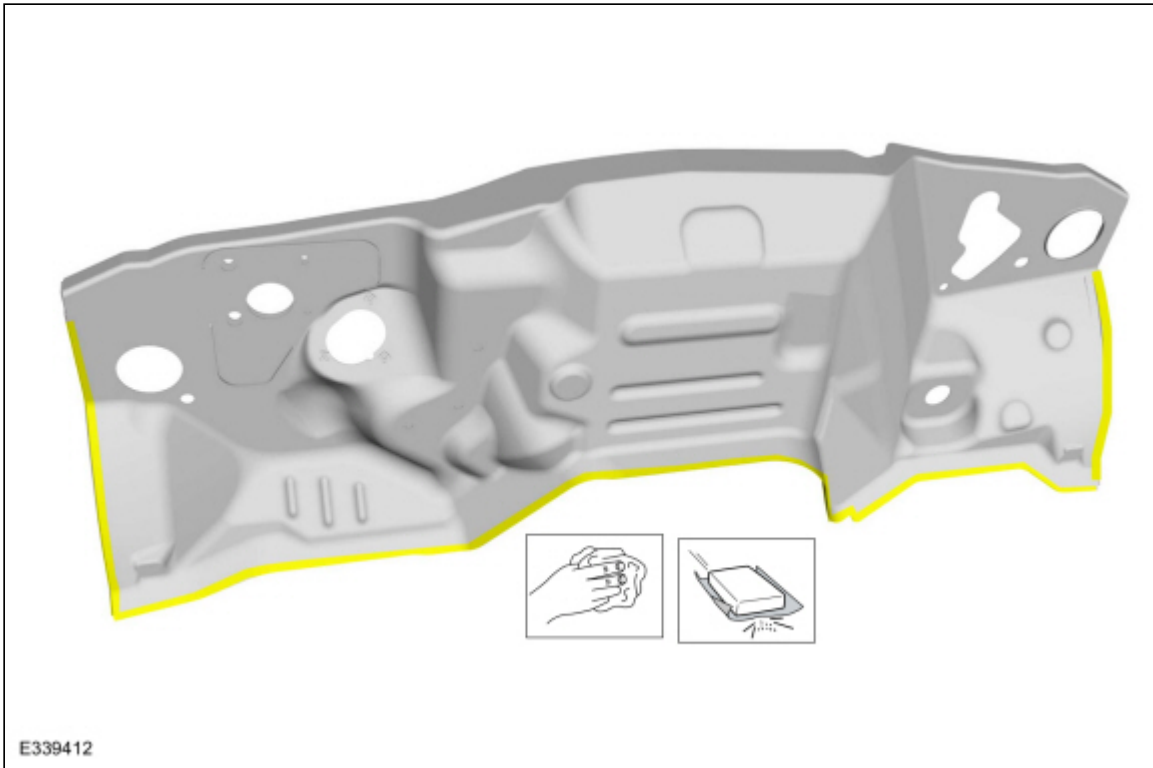




Installation

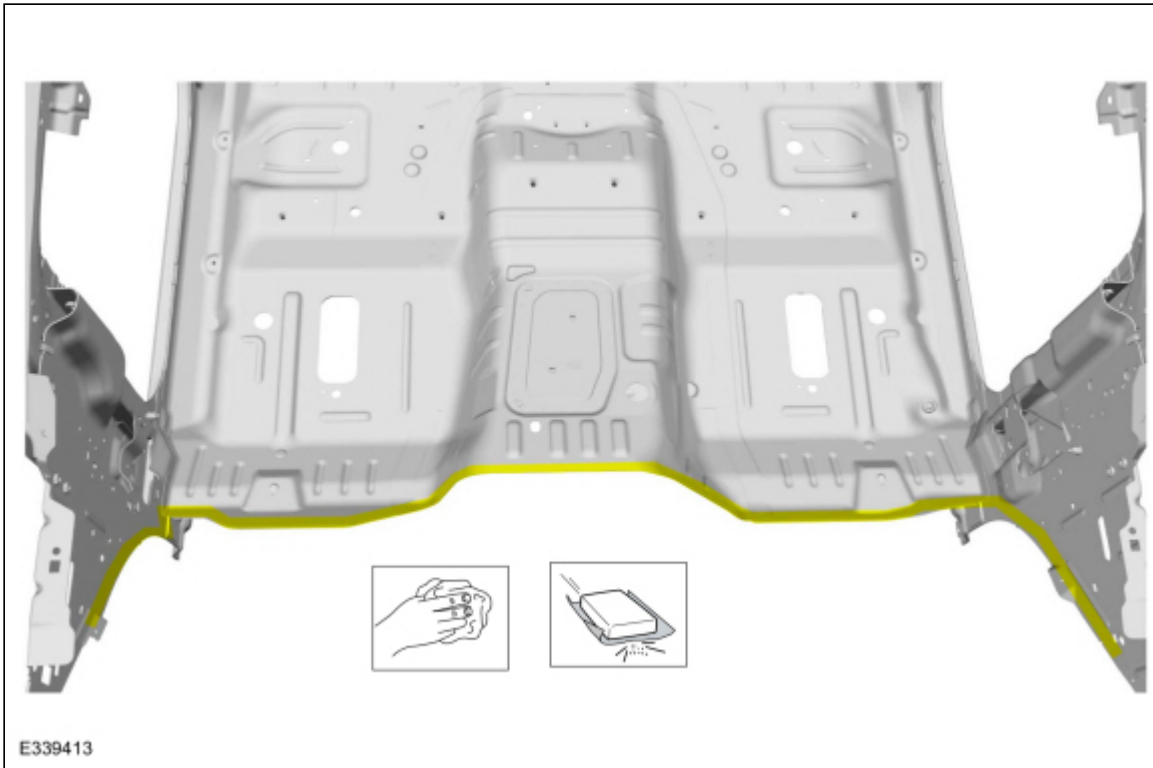
1. 80-120 grit sand paper.
Sand to remove e-coating and clean the service panel mating flange.





- 2. 80-120 grit sand paper.
Sand to remove old adhesive and clean the mating flange.

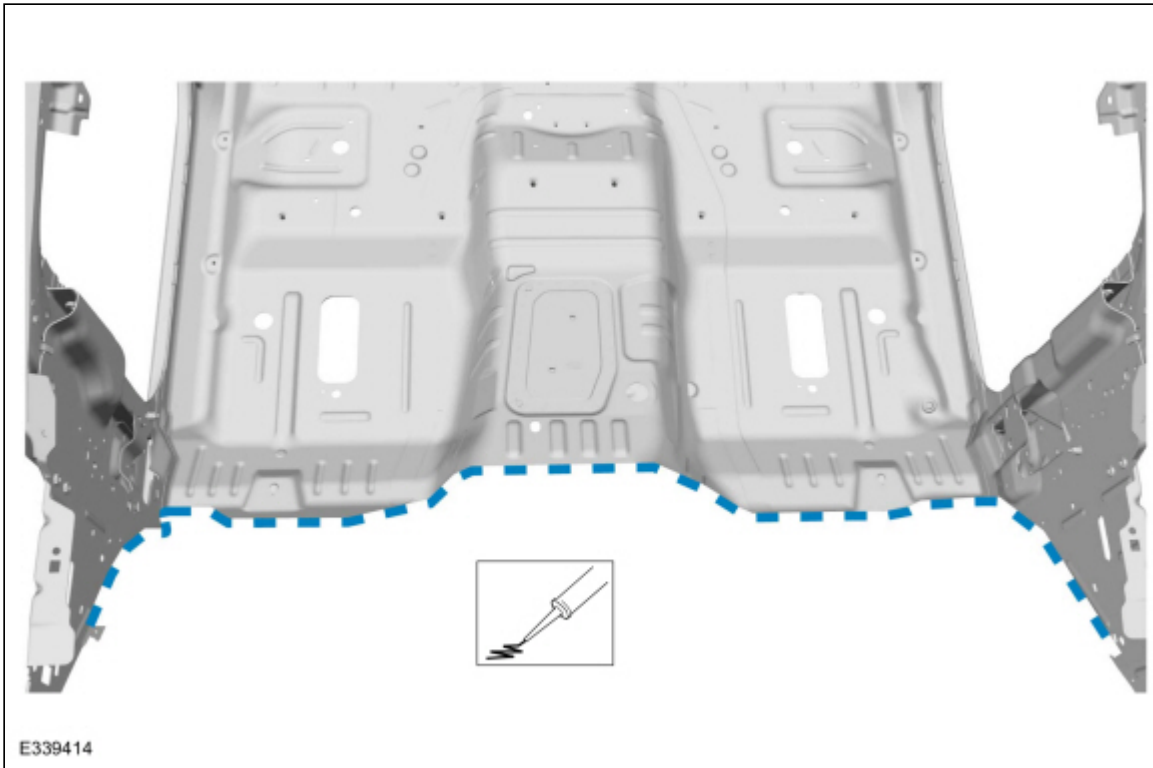




3. Apply adhesive to the mating flanges.

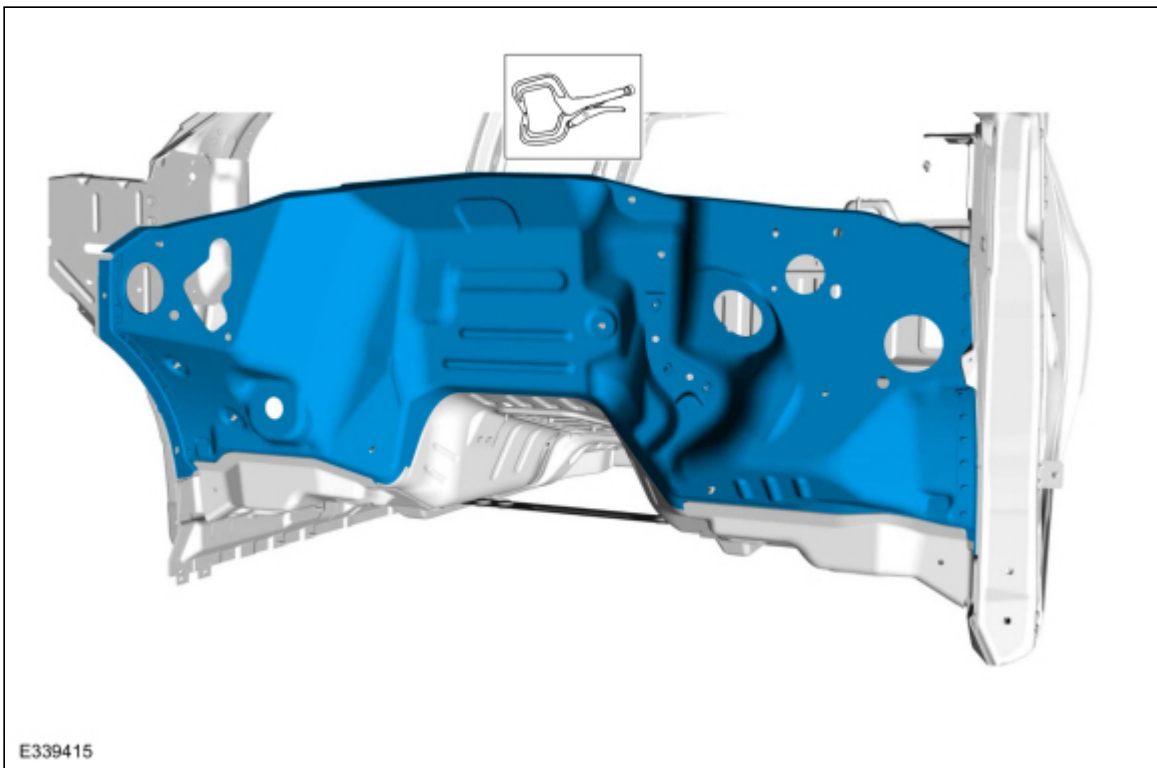
Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3M™ 08115, LORD Fusor® 108B





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



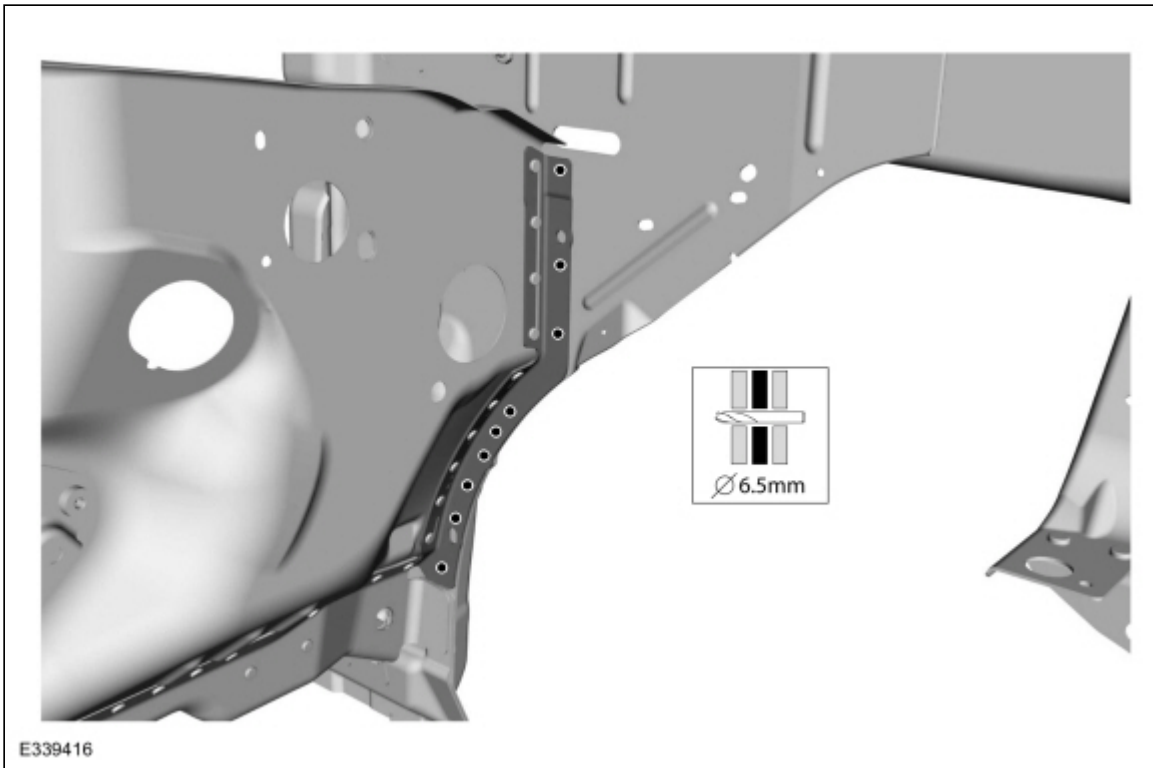


5. On Both Sides:

Drill for rivet fastener installation.

Use the General Equipment: 6.5 mm Drill Bit

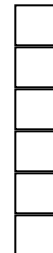


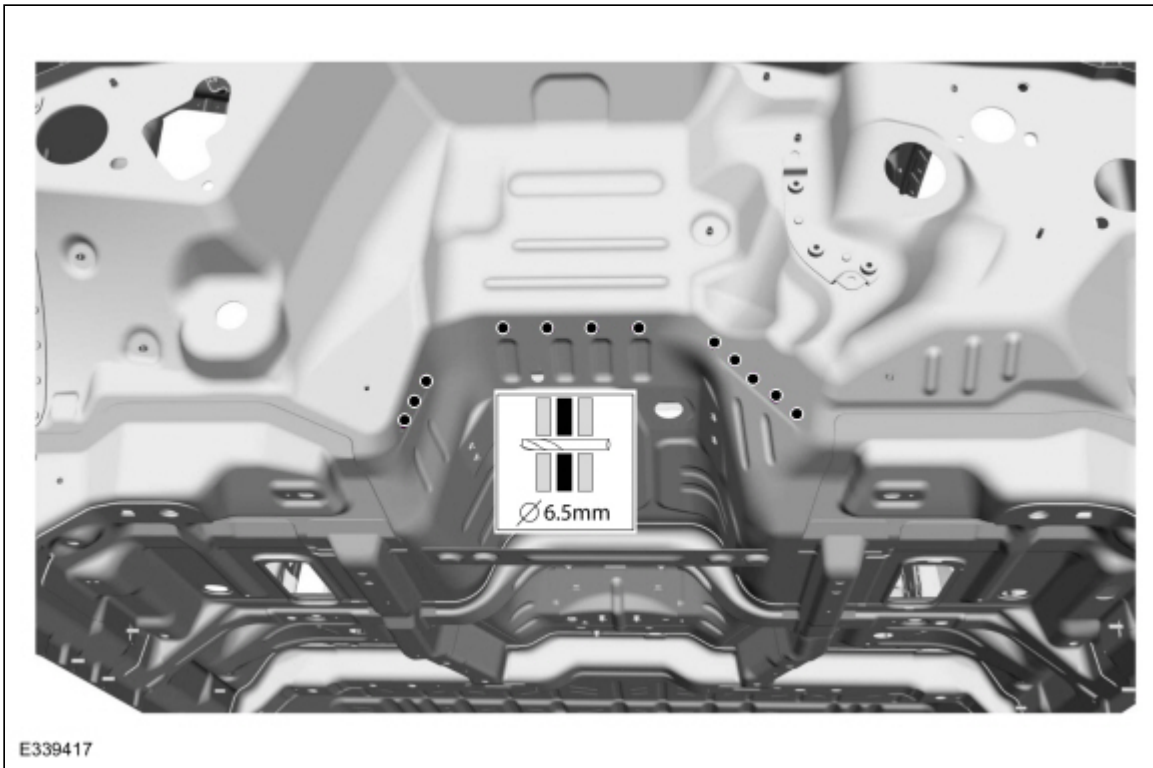


6. On Both Sides:

Drill for rivet fastener installation.

Use the General Equipment: 6.5 mm Drill Bit





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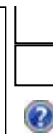
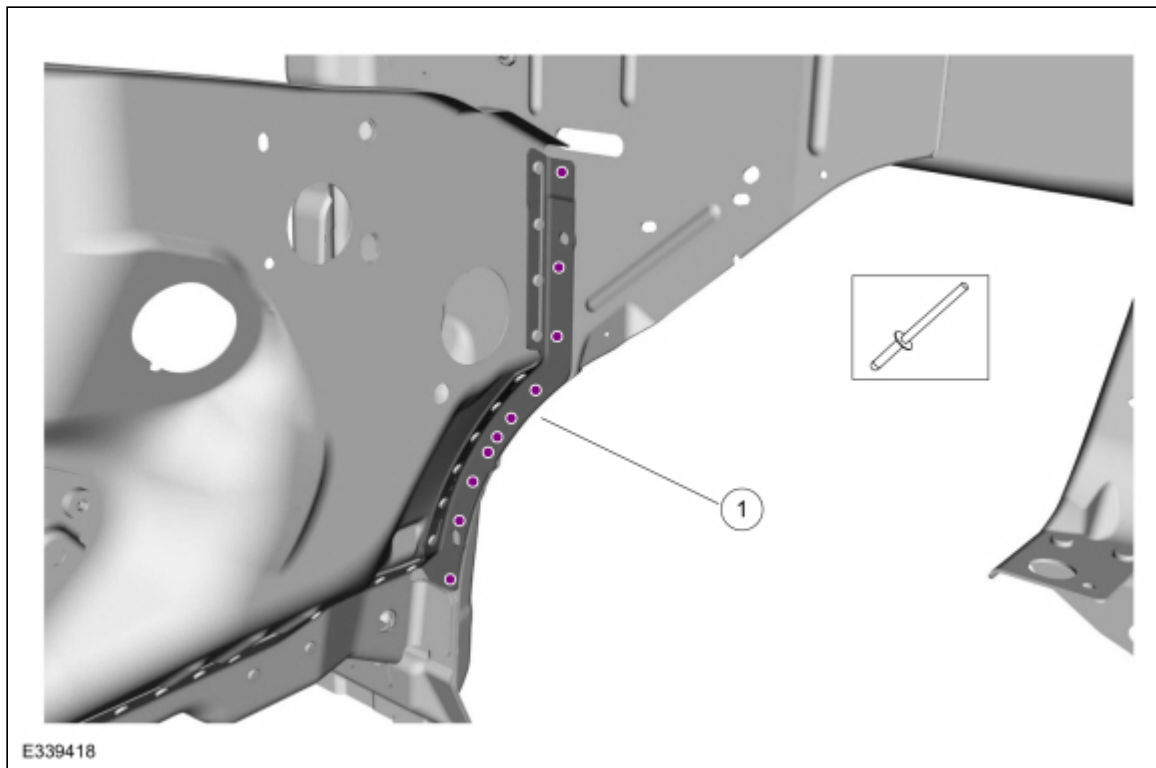
7. **NOTE:** Blind rivets, solid rivet fasteners or aluminum MIG plug welds may be used in place of SPR fasteners after enlarging holes to 6.5 mm.

Install fasteners.

Item	SPR Number	SPR Code	Henrob®, Car-OLiner®, CMO®, Chief®, Spanesi®, Wielander and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W707638-S900C	-	-

Use the General Equipment: Blind Rivet Gun





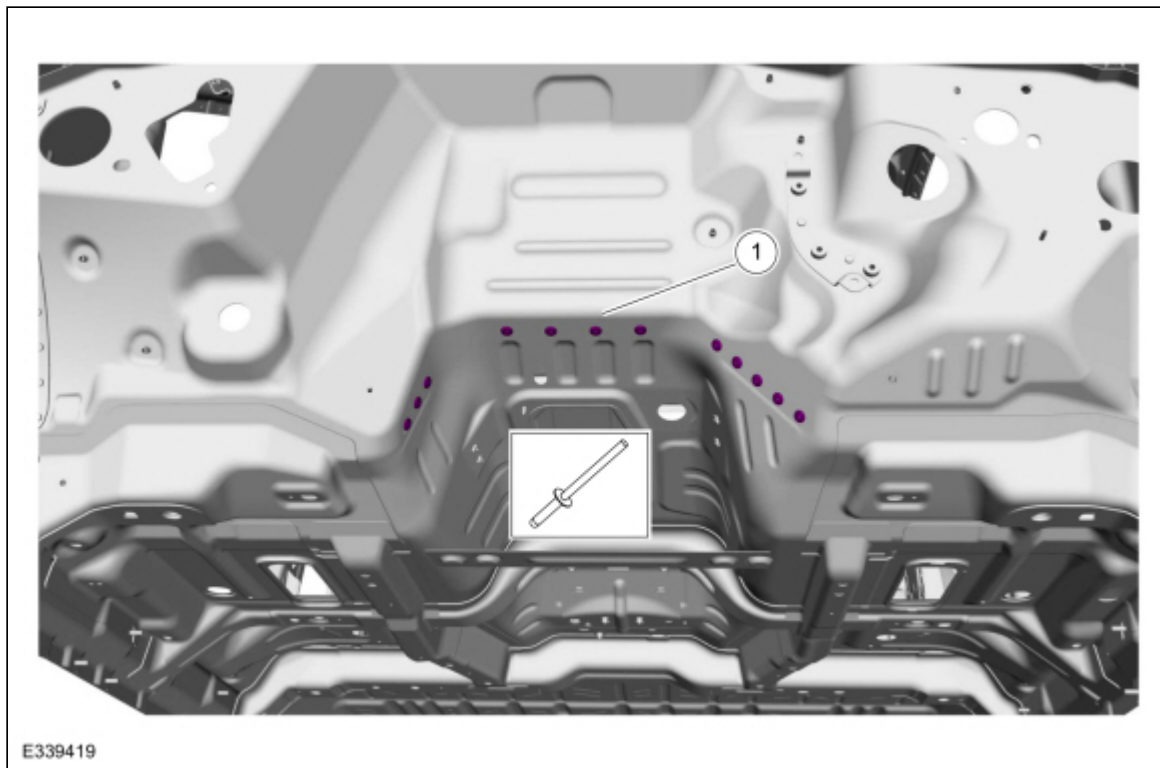
8. **NOTE:** Blind rivets, solid rivet fasteners or aluminum MIG plug welds may be used in place of SPR fasteners after enlarging holes to 6.5 mm.

Install fasteners.

Item	SPR Number	SPR Code	Henrob®, Car-OLiner®, CMO®, Chief®, Spanesi®, Wielander and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W707638-S900C	-	-

Use the General Equipment: Blind Rivet Gun





9. Metal Finishing:

Metal finish as necessary using typical techniques and materials.

Refer to: [Special Repair Considerations for Aluminum Repairs](#) (501-25 Body Repairs - General Information, Description and Operation).

10. Seam Sealing:

All seams must be sealed to production level.

Material: Seam Sealer / TA-2-B, 3M™ 08308, LORD Fusor® 803DTM

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

12. Install the cowl panel.

Refer to: [Cowl Panel](#) (501-27 Front End Sheet Metal Repairs, Removal and Installation).

13. Install the floor console.

Refer to: [Floor Console](#) (501-12 Instrument Panel and Console, Removal and Installation).

14. Repower the SRS.

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

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