

## Radiator Support Assembly

### Special Tool(s) / General Equipment

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

### 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).

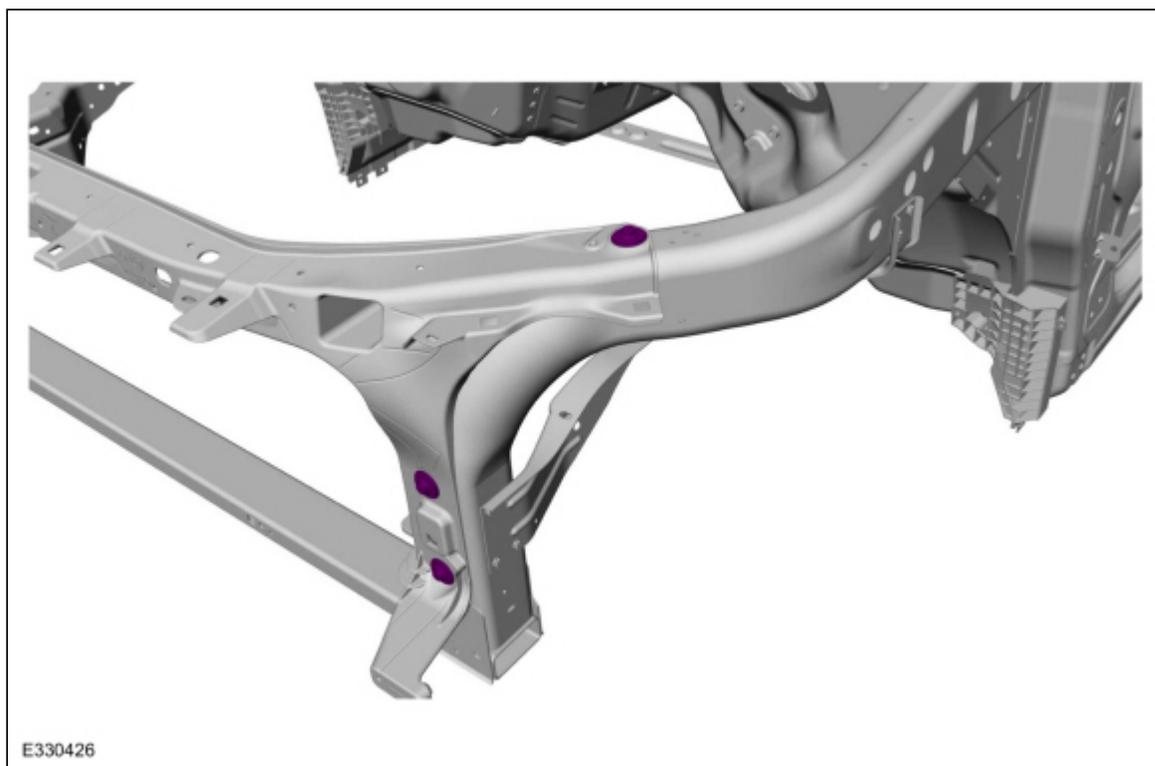
Refer to: [High Voltage System Health and Safety Precautions - Overview](#) (100-00 General Information, Description and Operation).

**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.

**NOTE:** The radiator support must be replaced at the factory seams. No sectioning procedure is approved or permitted.

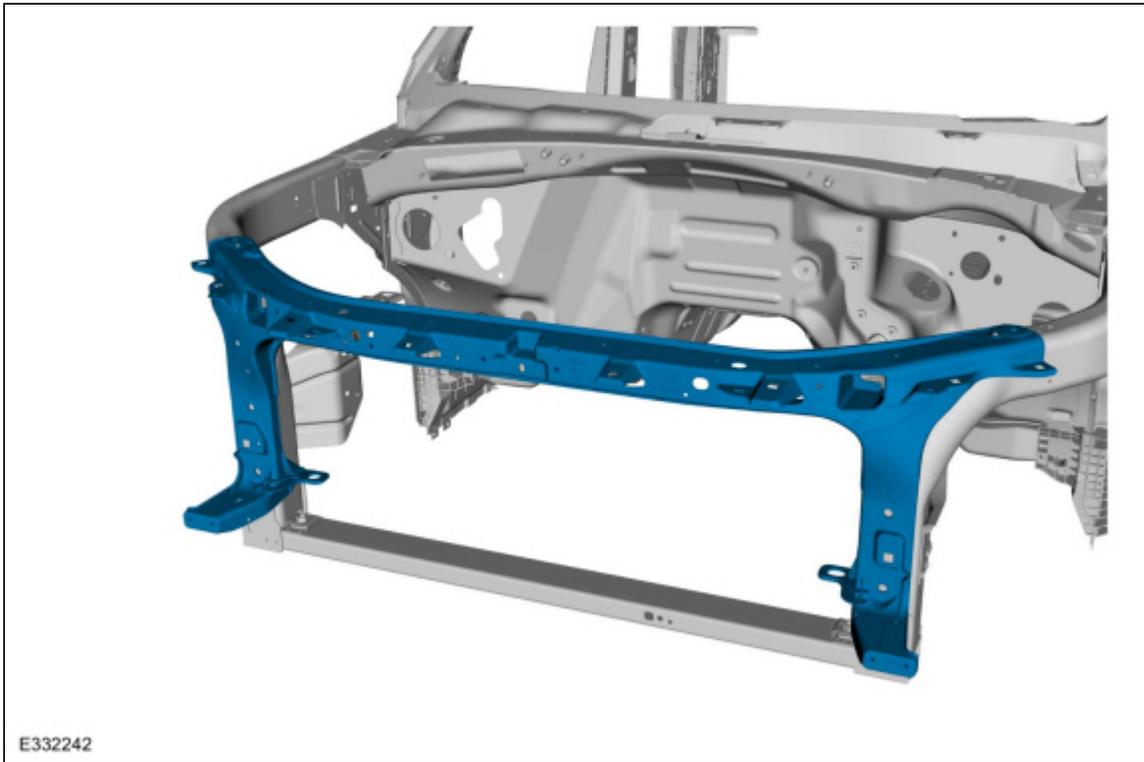
2. Depower the SRS.  
Refer to: [Supplemental Restraint System \(SRS\) Depowering](#) (501-20B Supplemental Restraint System, General Procedures).
3. Verify the vehicle is dimensionally correct.  
Refer to: [Body and Frame](#) (501-26 Body Repairs - Vehicle Specific Information and Tolerance Checks, Description and Operation).

4. Remove the fenders.  
Refer to: [Fender](#) (501-02 Front End Body Panels, Removal and Installation).
5. Remove the front bumper.  
Refer to: [Front Bumper](#) (501-19 Bumpers, Removal and Installation).
6. Remove the cooling module.  
Refer to: [Cooling Module](#) (303-03A Engine Cooling - 2.7L EcoBoost (238kW/324PS), Removal and Installation).  
Refer to: [Cooling Module](#) (303-03F Engine Cooling - 3.0L Power Stroke Diesel, Removal and Installation).  
Refer to: [Cooling Module](#) (303-03B Engine Cooling - 3.3L Duratec-V6, Removal and Installation).  
Refer to: [Cooling Module](#) (303-03C Engine Cooling - 3.5L EcoBoost (BM), Removal and Installation).
7. On Both Sides:  
Remove the radiator bolster bolts.



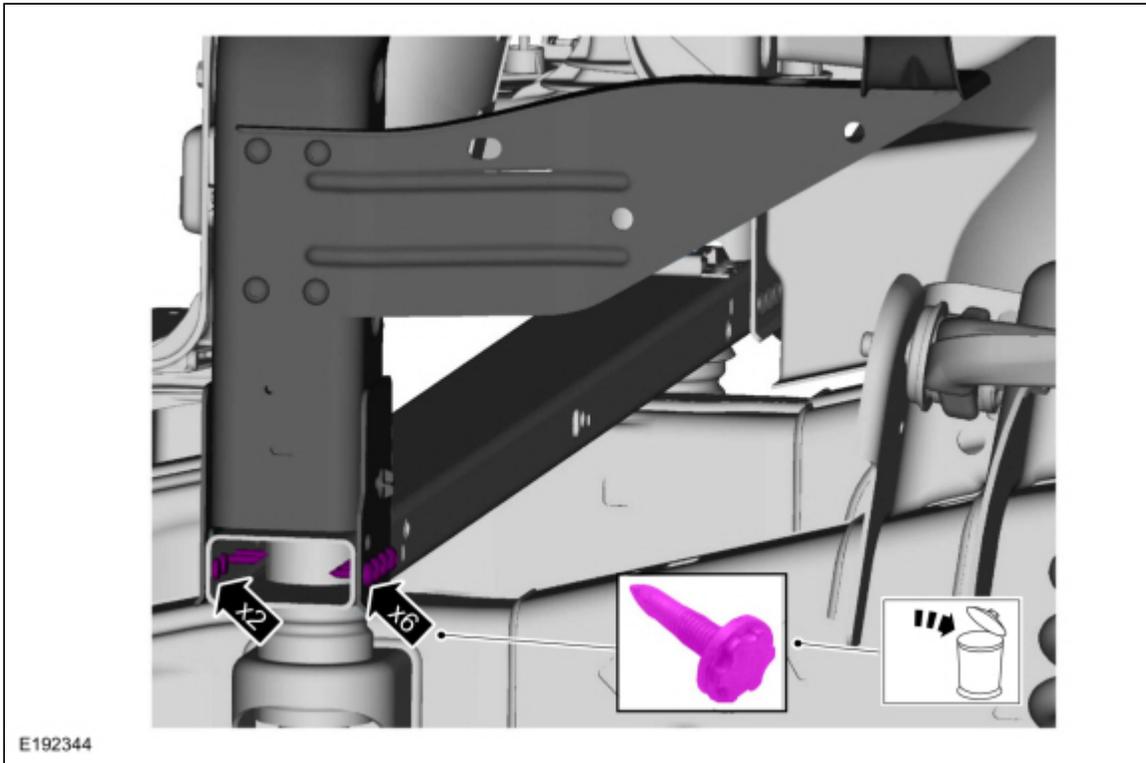
8. Remove the radiator bolster.





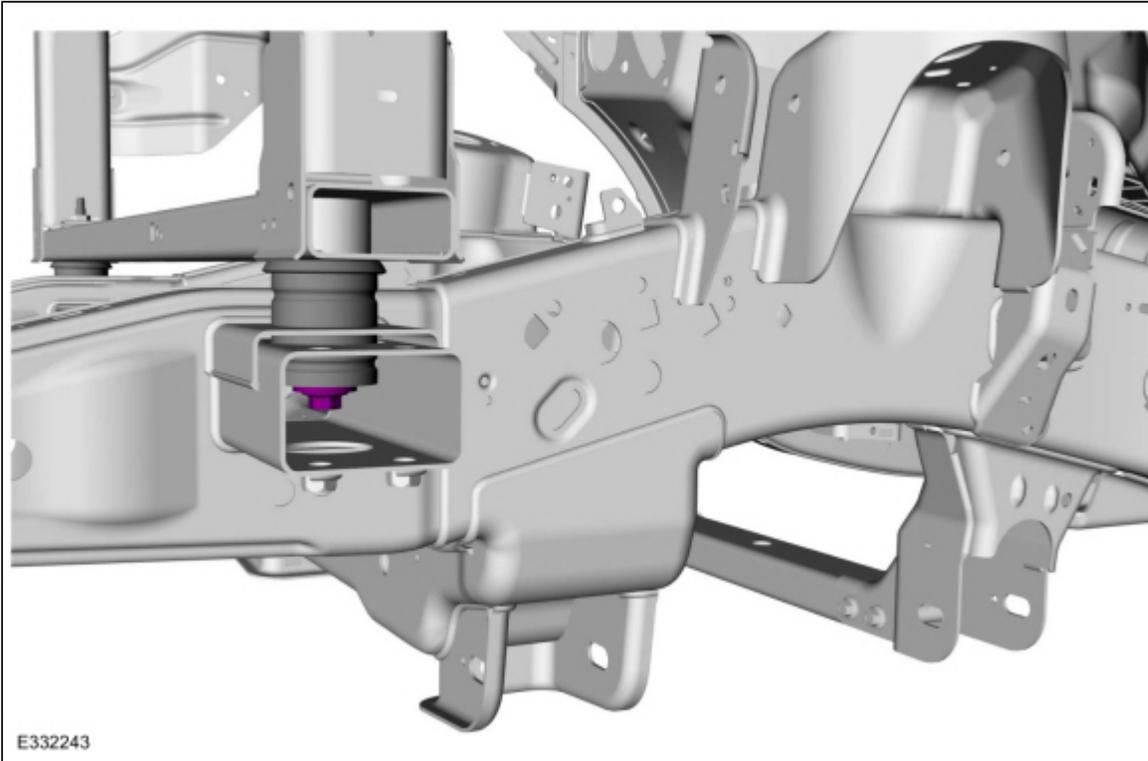
9. On Both Sides:  
Remove the FDS and SPR fasteners.  
Use the General Equipment: Polydrive Bit Socket  
Use the General Equipment: Self-Piercing Rivet (SPR) Remover/Installer  
Use the General Equipment: Belt Sander





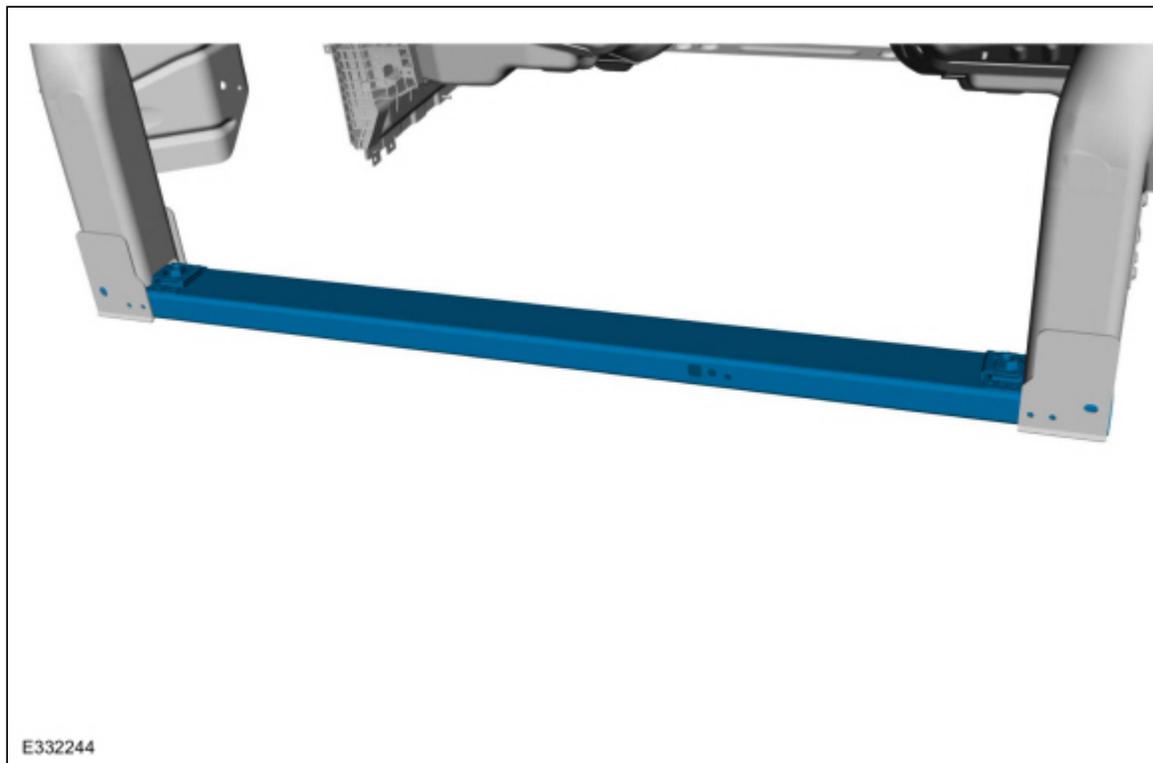
10. On Both Sides:  
Remove the body mount bolts.





11. Remove the radiator support.





## Installation

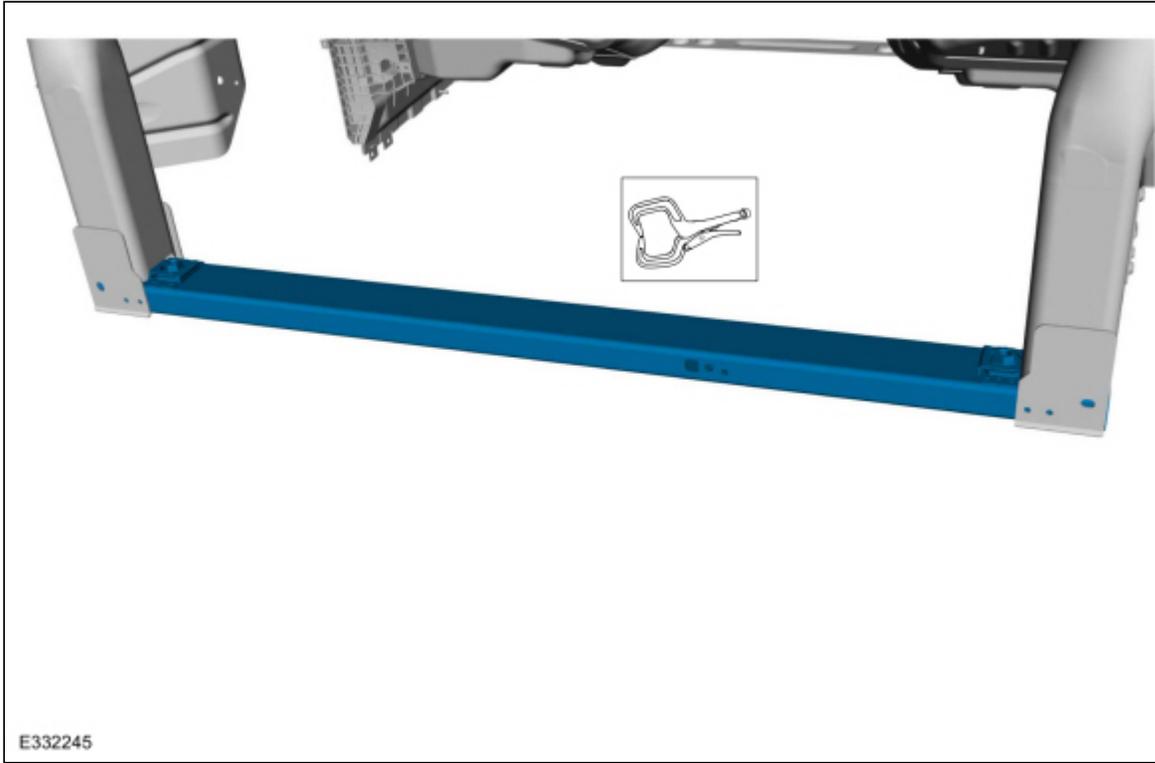
**NOTE:** The radiator support must be replaced at the factory seams. No sectioning procedure is approved or permitted.

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

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

1. Install, properly position and clamp the lower radiator support.  
Use the General Equipment: Locking Pliers

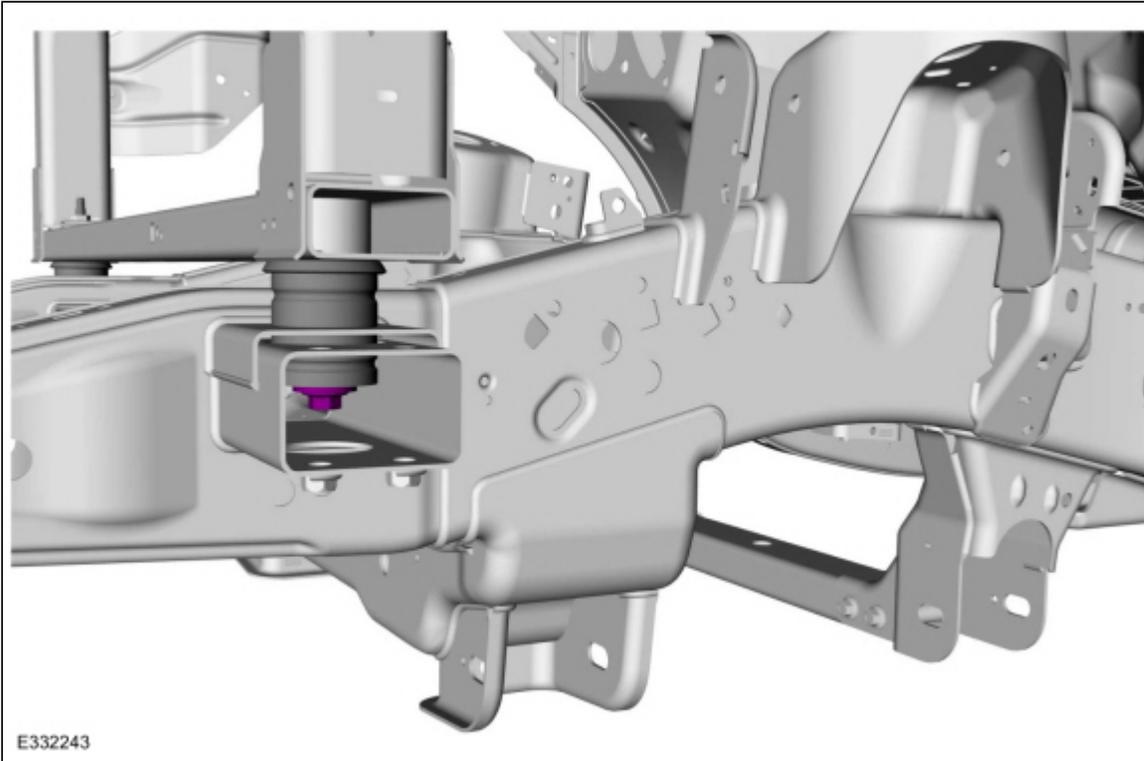




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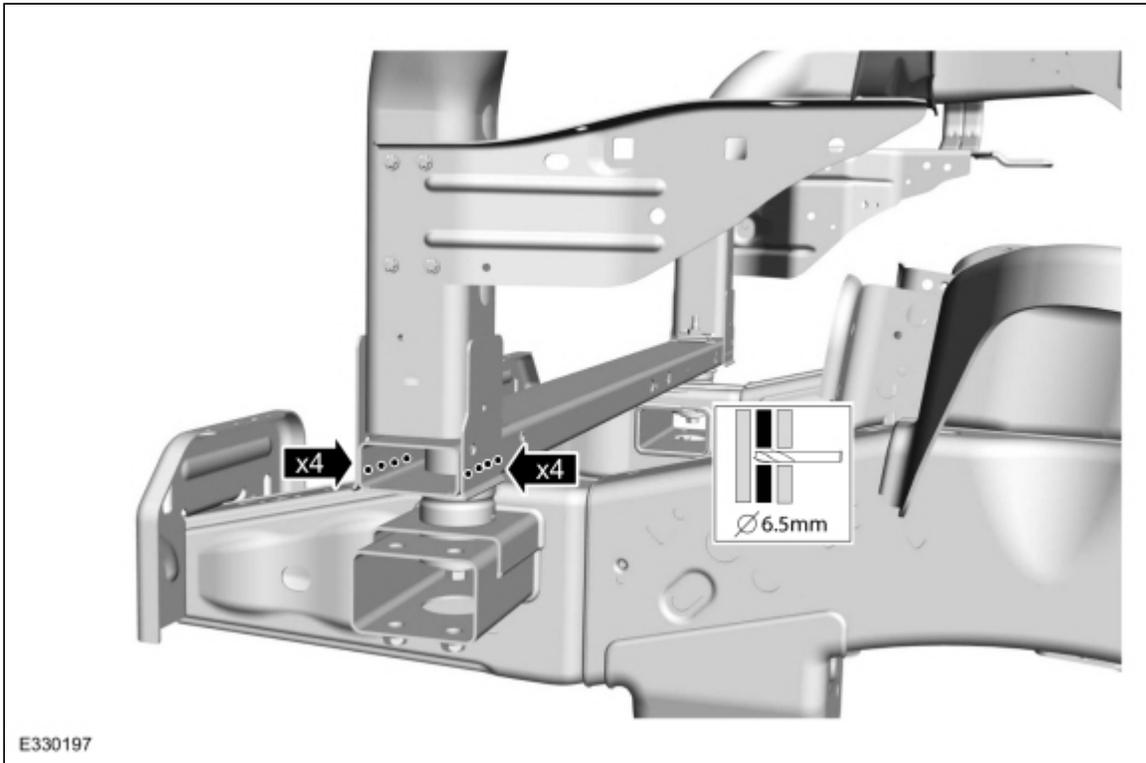
- 2. On Both Sides:  
Install the body mount bolts.  
*Torque: 59 lb.ft (80 Nm)*





- 3. On Both Sides:  
Drill rivet holes as indicated.  
Use the General Equipment: 6.5 mm Drill Bit



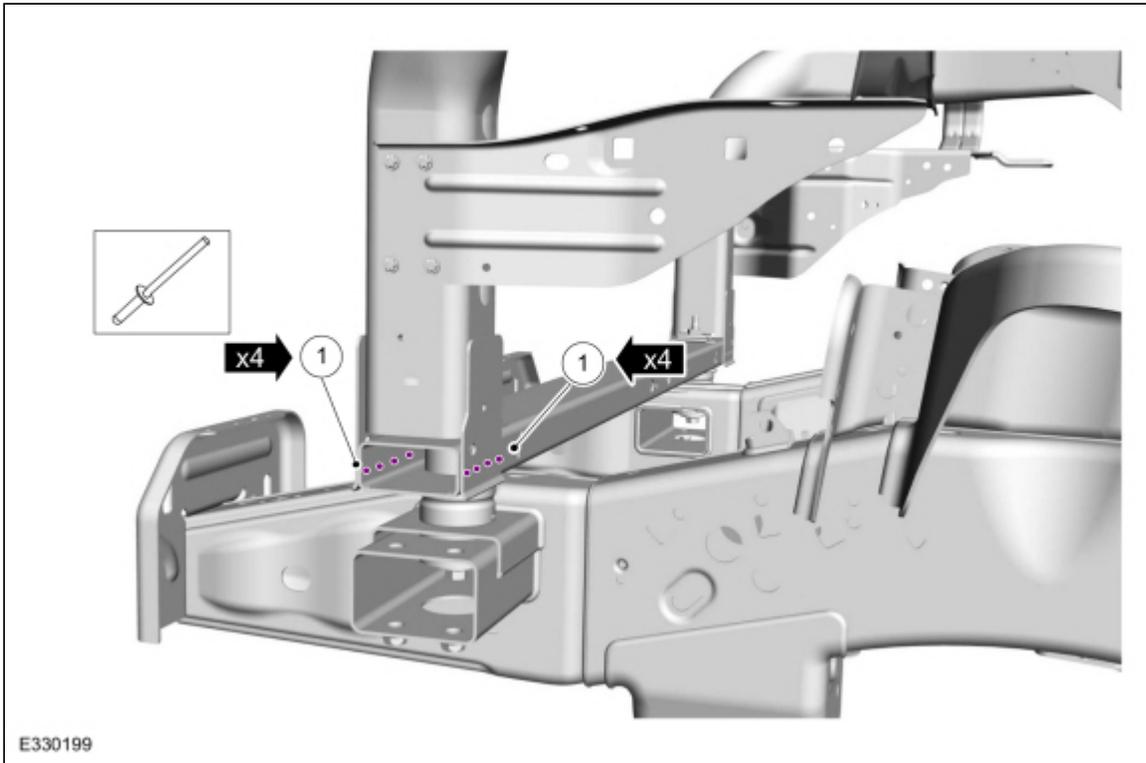


4. Install blind rivet fasteners.

Item	SPR Number	SPR Code	Henrob®, Car-OLiner®, CMO®, Chief®, Spanesi®, Wielander and Schill® Mandrel	Pro-Spot® Mandrel	Blind Rivet	Solid Rivet	Rivnut®
1	-	-	-	-	W708777-S900C	-	-

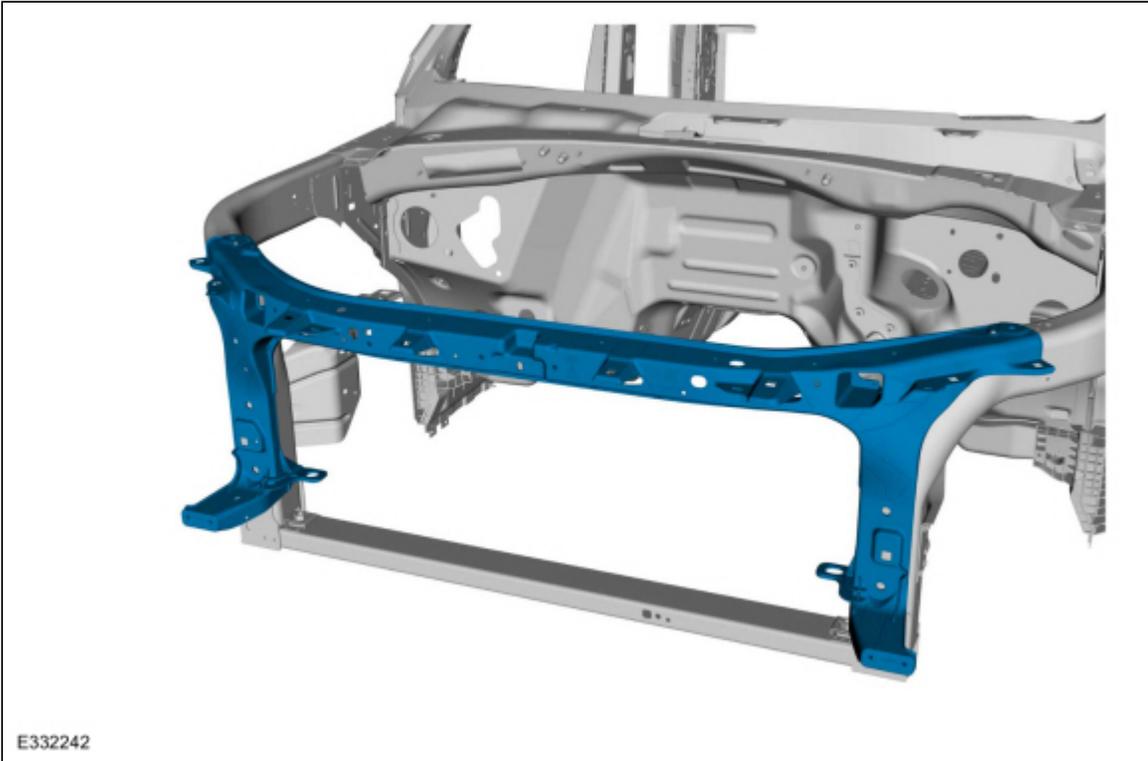
Use the General Equipment: Blind Rivet Gun





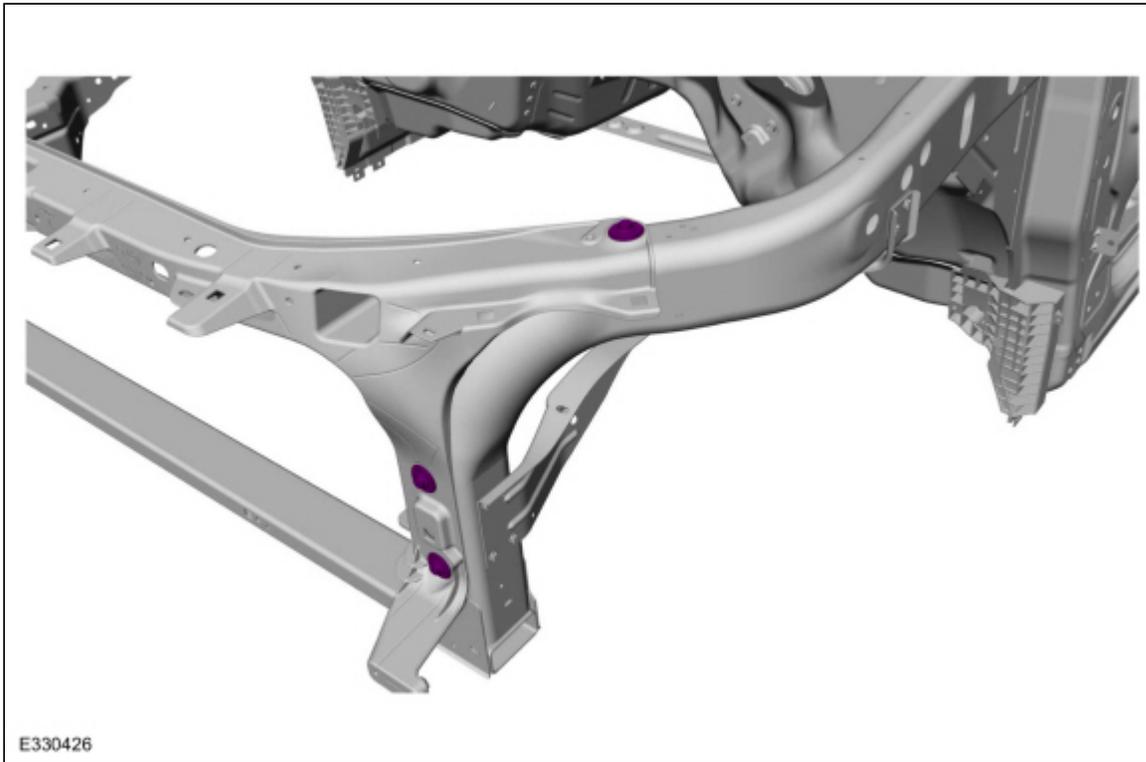
5. Install the radiator bolster.





- 6. On Both Sides:  
Install the bolts.  
*Torque: 22 lb.ft (30 Nm)*





7. Install the cooling module.

Refer to: [Cooling Module](#) (303-03A Engine Cooling - 2.7L EcoBoost (238kW/324PS), Removal and Installation).

Refer to: [Cooling Module](#) (303-03F Engine Cooling - 3.0L Power Stroke Diesel, Removal and Installation).

Refer to: [Cooling Module](#) (303-03B Engine Cooling - 3.3L Duratec-V6, Removal and Installation).

Refer to: [Cooling Module](#) (303-03C Engine Cooling - 3.5L EcoBoost (BM), Removal and Installation).

8. Install the fenders.

Refer to: [Fender](#) (501-02 Front End Body Panels, Removal and Installation).

9. Install the front bumper.

Refer to: [Front Bumper](#) (501-19 Bumpers, Removal and Installation).

10. Repower the SRS.

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

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