

PUBLISHED: 16-SEP-2020
2020.0 DEFENDER (LE), 501-27

FRONT END SHEET METAL REPAIRS

SUSPENSION TOP MOUNT – 90 (G2452693)

mcx30.com

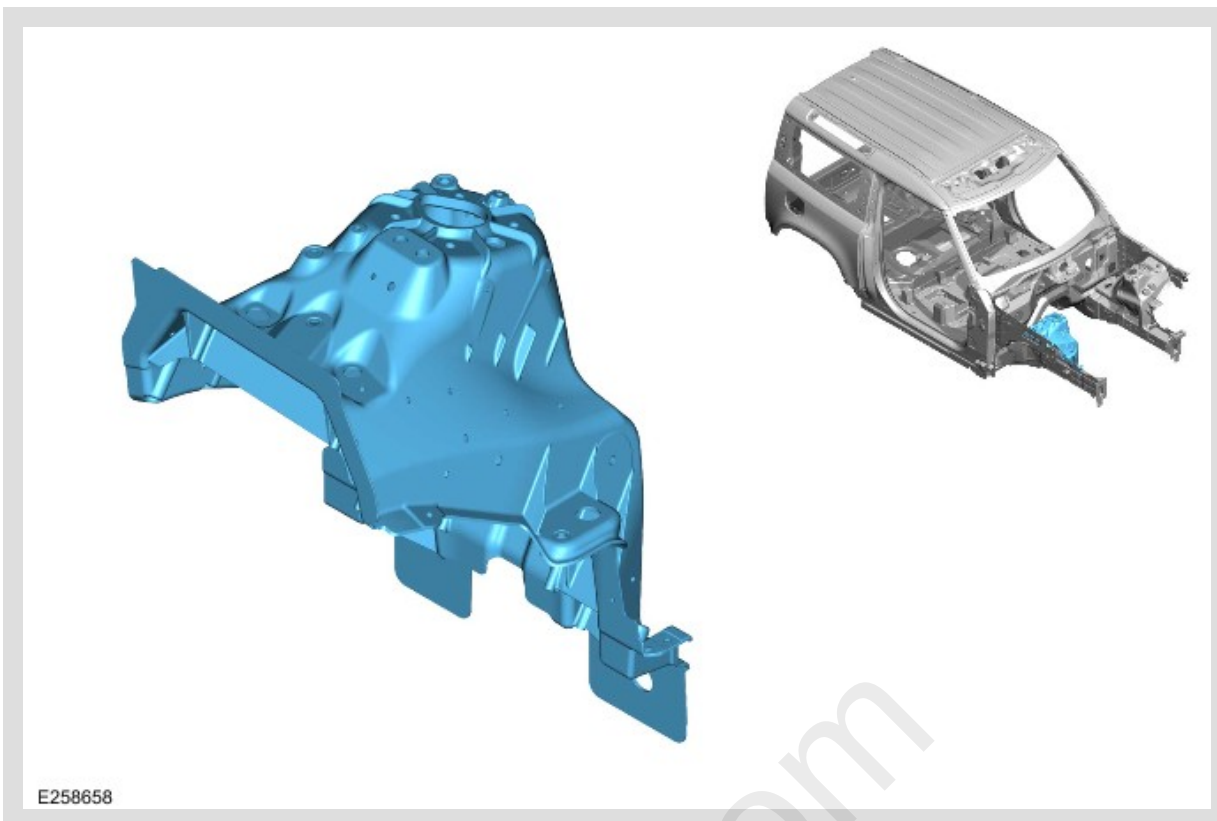
REMOVAL

 NOTE:

The suspension top mount is installed in conjunction with:

- Fender apron panel
- Charge air radiator
- Upper arm
- Engine
- Fuel Fired Booster Heater (FFBH)
- Electric coolant pump
- Cooling module
- Auxiliary radiator
- Catalytic converter
- Secondary bulkhead panels
- Engine Junction Box (EJB)
- Shock absorber
- Front subframe

1.



The suspension top mount is serviced as indicated.

2.

Before commencing this procedure make sure that you are aware of all Health and Safety requirements. Refer to: [Health and Safety Precautions](#) (100-00 General Information, Description and Operation).

3.



NOTES:

- Where Breakstem Fastener (BSF) removal is instructed remove fastener shaft with a 4 mm punch and remove the head with a 6.5 mm drill bit. Clean all the drilled holes to make sure they are free from debris.
- Where Self Piercing Rivet (SPR) removal is instructed use either the Jaguar Land Rover (JLR) approved SPR tool or 5.3 mm drill bit.
- Any joints sealed as part of vehicle manufacture must be sealed as part of the repair.
- To make sure that the vehicle is correctly aligned it must be placed on a JLR approved alignment jig.

When installing the suspension top mount make sure that you are aware of the methods, tools and fixings used in this procedure.

Refer to: [Body Repairs](#) (501-25A Body Repairs - General Information, Description and Operation).

Refer to: [Adhesives, Fixings and Consumables](#) (501-25A Body Repairs - General Information, Description and Operation).

4.

For additional information on the fixings required to complete this procedure

Refer to: [Specifications - 110](#) (501-27 Front End Sheet Metal Repairs, Specifications).

5. For additional removal information
Refer to: [Fender Apron Panel - 90](#) (501-27 Front End Sheet Metal Repairs, Removal and Installation).

6. For additional removal information
Refer to: [Charge Air Radiator](#) (303-03A Engine Cooling - INGENIUM I4 2.0L Diesel, Removal and Installation).
Refer to: [Charge Air Radiator](#) (303-03B Engine Cooling - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal and Installation).

7. For additional removal information
Refer to: [Right Upper Control Arm](#) (204-01 Front Suspension, Removal and Installation).
Refer to: [Left Upper Control Arm](#) (204-01 Front Suspension, Removal and Installation).

8. For additional removal information
Refer to: Engine Assembly Remove for Access (303-01 Engine - INGENIUM I4 2.0L Diesel, Removal).
Refer to: [Engine - INGENIUM I4 2.0L Petrol](#) (303-01B Engine - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal).
Refer to: Engine - INGENIUM I4 2.0L Petrol - PHEV (303-01 Engine - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal).
Refer to: [Engine Assembly Remove for Access](#) (303-01C Engine - INGENIUM I6 3.0L Petrol, Removal).

9. For additional removal information
Refer to: [Fuel Fired Booster Heater](#) (412-02 Auxiliary Climate Control, Removal and Installation).

10. For additional removal information
Refer to: [Electric Coolant Pump](#) (303-03C Engine Cooling - INGENIUM I6 3.0L Petrol, Removal and Installation).

11. For additional removal information
Refer to: [Cooling Module](#) (303-03A Engine Cooling - INGENIUM I4 2.0L Diesel, Removal and Installation).
Refer to: [Cooling Module](#) (303-03B Engine Cooling - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal and Installation).
Refer to: [Cooling Module](#) (303-03C Engine Cooling - INGENIUM I6 3.0L Petrol, Removal and Installation).

12. For additional removal information
Refer to: [Auxiliary Radiator](#) (303-03B Engine Cooling - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal and Installation).
Refer to: [Auxiliary Radiator](#) (303-03C Engine Cooling - INGENIUM I6 3.0L Petrol, Removal and Installation).

13. For additional removal information

Refer to: [Selective Catalyst Reduction Catalytic Converter](#) (309-00A Exhaust System - INGENIUM I4 2.0L Diesel, Removal and Installation).

Refer to: [Catalytic Converter - INGENIUM I4 2.0L Petrol](#) (309-00B Exhaust System - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal and Installation).

Refer to: [Catalytic Converter](#) (309-00C Exhaust System - INGENIUM I6 3.0L Petrol, Removal and Installation).

14. For additional removal information

Refer to: [Secondary Bulkhead Left Panel](#) - INGENIUM I4 2.0L Diesel (501-02 Front End Body Panels, Removal and Installation).

Refer to: [Secondary Bulkhead Left Panel](#) - INGENIUM I4 2.0L Petrol (501-02 Front End Body Panels, Removal and Installation).

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

15. For additional removal information

Refer to: [Engine Junction Box A](#) (418-00 Module Communications Network, Removal and Installation).

Refer to: [Engine Junction Box B](#) (418-00 Module Communications Network, Removal and Installation).

16. For additional removal information

Refer to: [Shock Absorber and Spring Assembly - \[+\] Air Suspension](#) (204-01 Front Suspension, Removal and Installation).

Refer to: [Shock Absorber and Spring Assembly - \[+\] Coil Suspension](#) (204-01 Front Suspension, Removal and Installation).

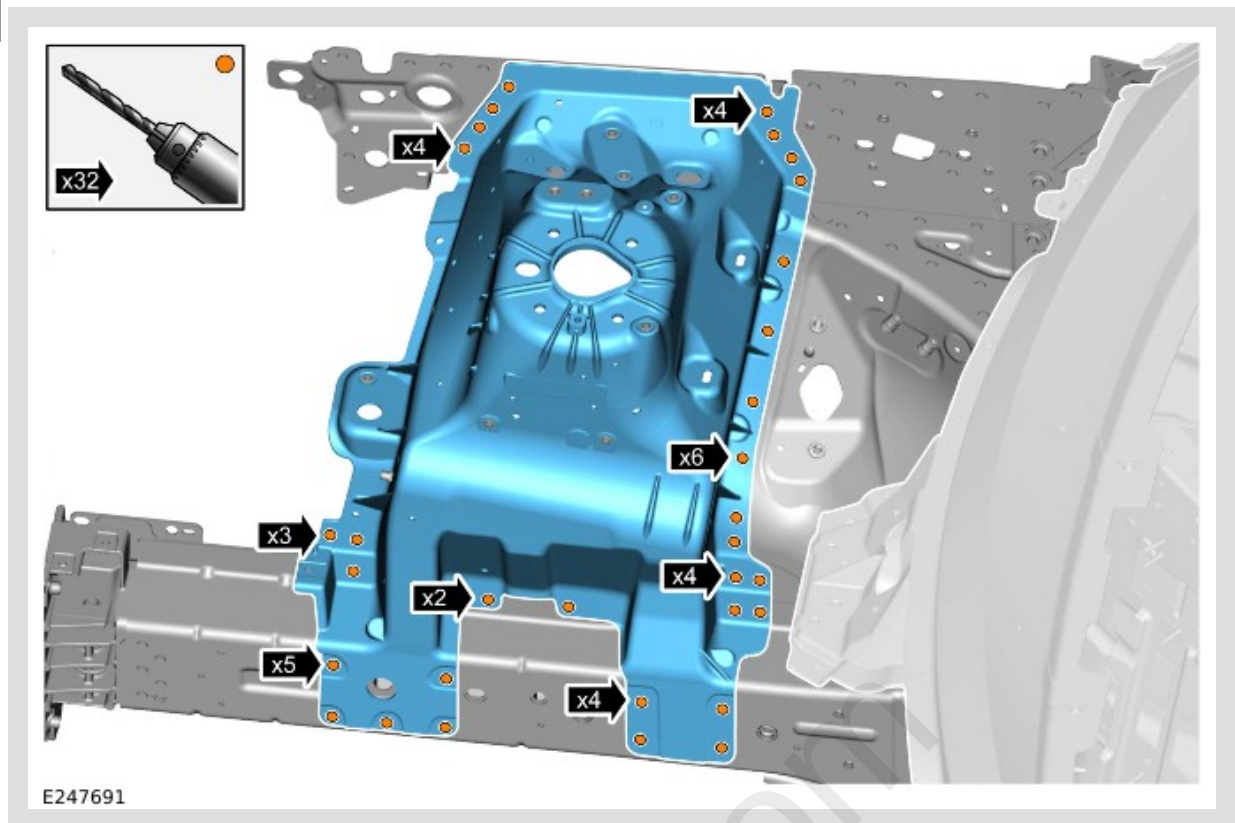
17. For additional removal information

Refer to: [Front Subframe](#) (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).

18. Release and position the wiring harness to one side.

19. Release and position the brake pipes to one side.

20.



Remove the self piercing rivets as indicated.

21.



⚠ CAUTION:

This step will require the aid of another technician as the panel will be heavy.

Carefully separate the joints and remove the suspension top mount.

INSTALLATION

⚠ CAUTION:

Where structural adhesive is to be applied between surfaces it is essential compression is applied to the joints during the curing period.

△ NOTE:

Breakstem Fastener (BSF) installation involves using the JLR approved BSF installation tool and requires a hole diameter of 6.5 mm.

1. Remove the rivet remnants.

2. Dress the flanges where necessary.

3.

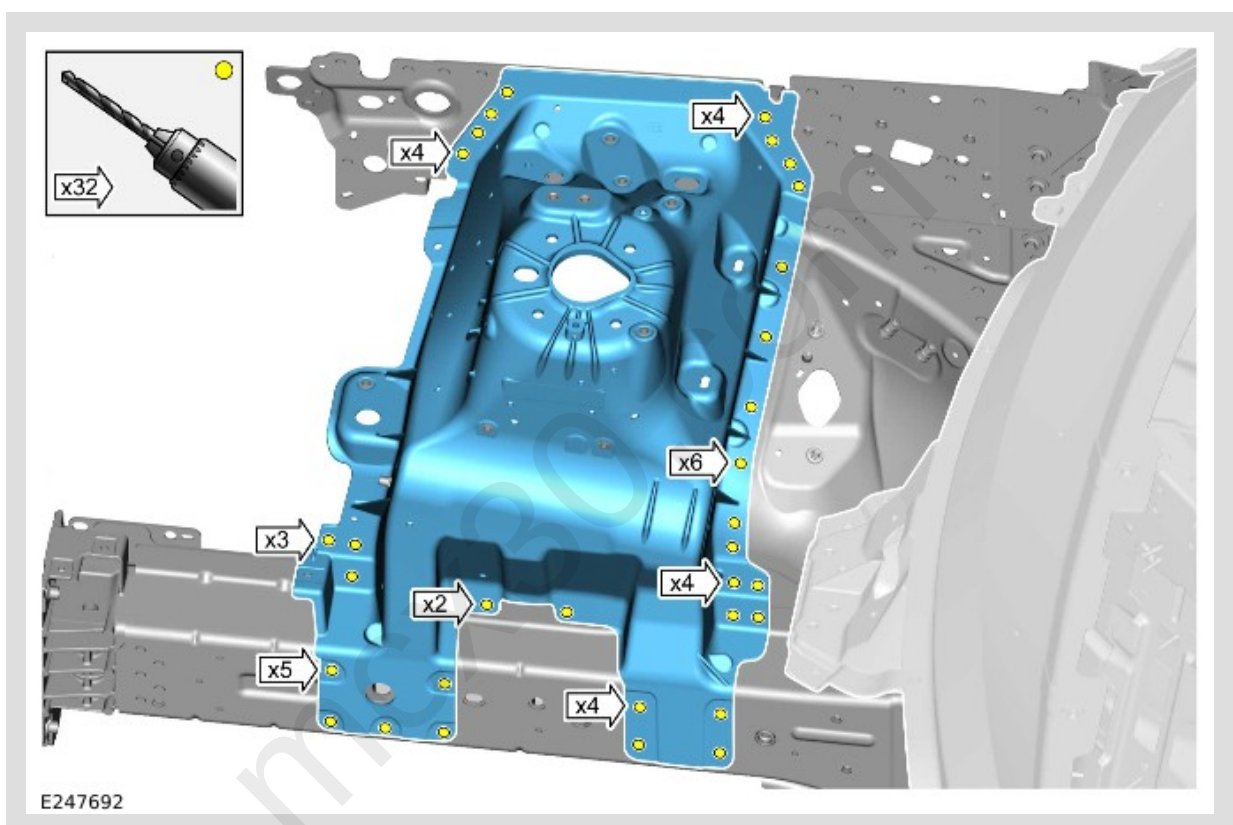


⚠ CAUTION:

This step will require the aid of another technician as the panel will be heavy.

Offer up the new suspension top mount and clamp into position. Check alignment, if correct proceed to next step, if not rectify and check the alignment again before proceeding.

4.



Drill holes where Breakstem Fasteners (BSFs) are to be installed as indicated.

5.

 NOTE:

Make sure that the JLR recommended countersink tool is used for this step.



Countersink the hole to a depth of 2 mm as indicated.

6.



 CAUTION:

This step will require the aid of another technician as the panel will be heavy.

Remove the new suspension top mount.

7.

Deburr the drilled holes.

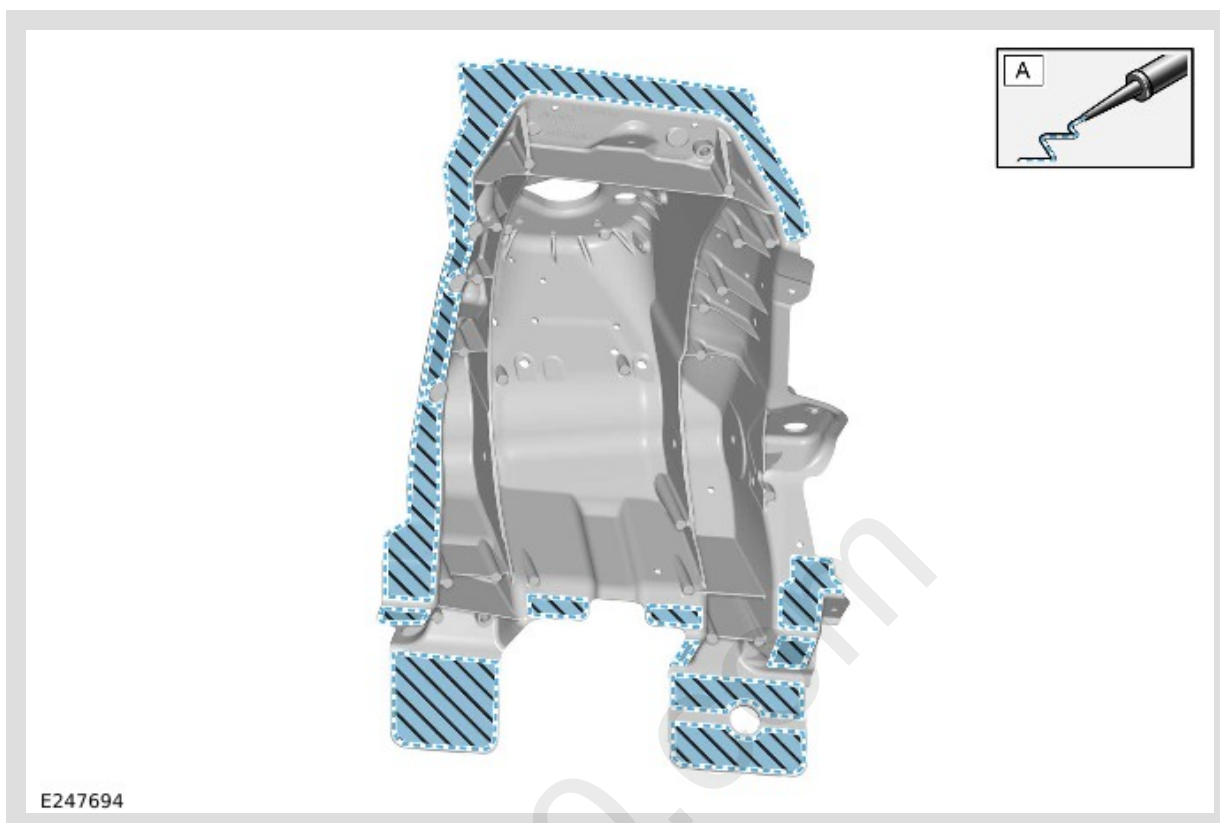
8.

Clean and prepare the panel surfaces.

9.

NOTE:

Make sure a continuous bead of adhesive surrounds the fixing holes.



Apply a 5 mm zig zag bead of the JLR recommended bonding material as indicated.

10.

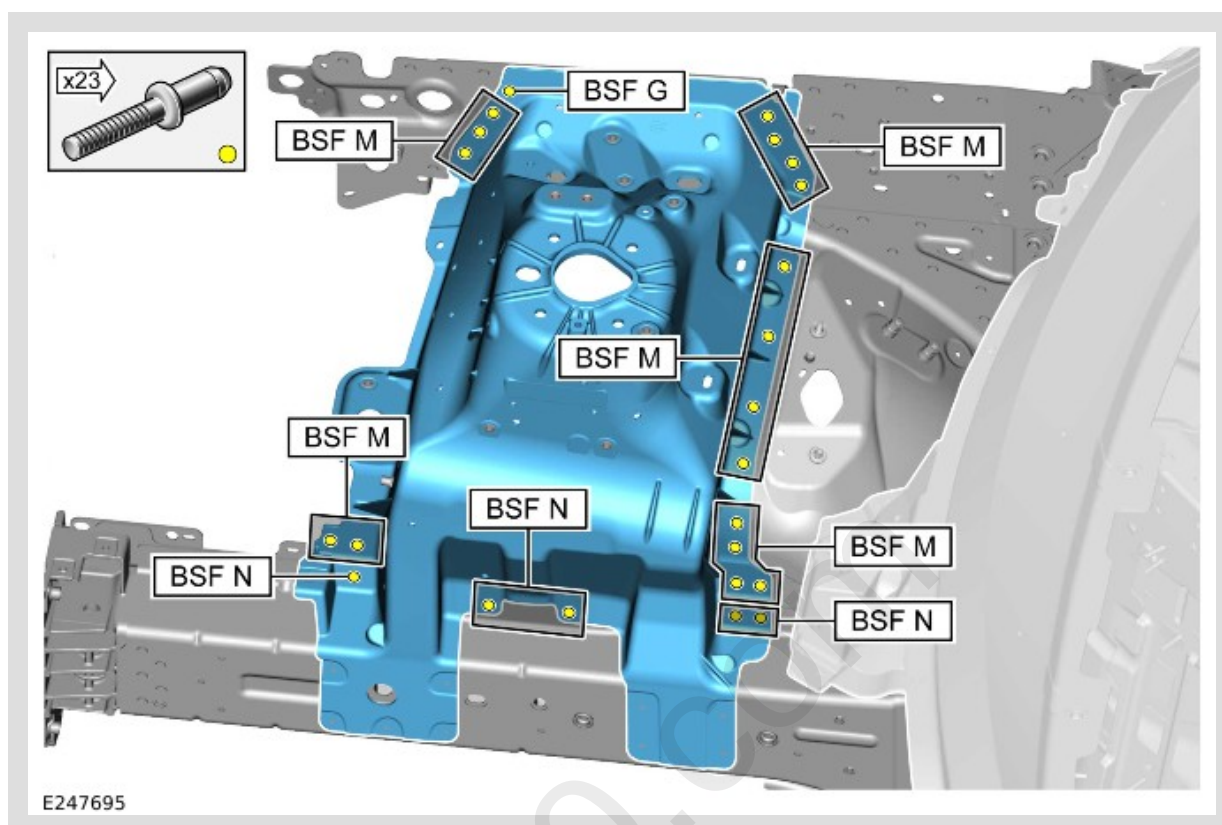
**CAUTION:**

This step will require the aid of another technician as the panel will be heavy.

Offer up the new suspension top mount and clamp into position. Check alignment, if correct proceed to next step, if not rectify and check the alignment again before proceeding.

NOTE:

Make sure that the Breakstem Fasteners (BSFs) are installed from the outside.

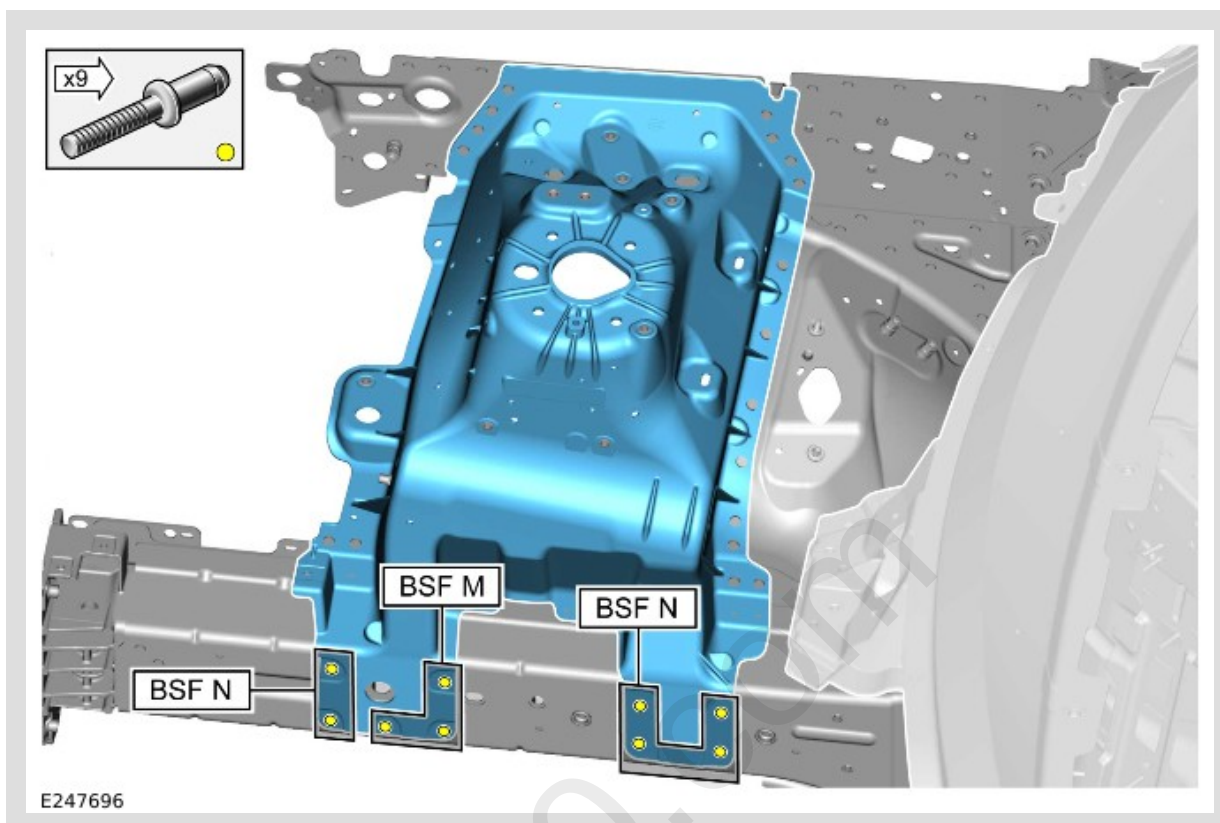


Install the BSFs as indicated.

12.

 NOTE:

Make sure that the Breakstem Fasteners (BSFs) are installed from the inside.



Install the BSFs as indicated.

13. Remove any excess adhesive.

14. Make sure that any open or exposed panel joints are correctly sealed.

15. Make sure corrosion protection is applied to all areas affected by repair.

16. Make sure that all installed BSFs are sealed using a JLR recommended sealer.

 NOTE:

The installation of associated panels and components is the reversal of removal procedure.

17. For additional installation information

Refer to: [Front Subframe](#) (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).

18. For additional installation information

Refer to: [Shock Absorber and Spring Assembly - \[+\] Air Suspension](#) (204-01 Front Suspension, Removal and Installation).

Refer to: [Shock Absorber and Spring Assembly - \[+\] Coil Suspension](#) (204-01 Front Suspension, Removal and Installation).

19. For additional installation information

Refer to: [Engine Junction Box A](#) (418-00 Module Communications Network, Removal and Installation).

Refer to: [Engine Junction Box B](#) (418-00 Module Communications Network, Removal and Installation).

20. For additional installation information

Refer to: [Secondary Bulkhead Left Panel - INGENIUM I4 2.0L Diesel](#) (501-02 Front End Body Panels, Removal and Installation).

Refer to: [Secondary Bulkhead Left Panel - INGENIUM I4 2.0L Petrol](#) (501-02 Front End Body Panels, Removal and Installation).

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

21. For additional installation information

Refer to: [Selective Catalyst Reduction Catalytic Converter](#) (309-00A Exhaust System - INGENIUM I4 2.0L Diesel, Removal and Installation).

Refer to: [Catalytic Converter - INGENIUM I4 2.0L Petrol](#) (309-00B Exhaust System - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal and Installation).

Refer to: [Catalytic Converter](#) (309-00C Exhaust System - INGENIUM I6 3.0L Petrol, Removal and Installation).

22. For additional installation information

Refer to: [Auxiliary Radiator](#) (303-03B Engine Cooling - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal and Installation).

Refer to: [Auxiliary Radiator](#) (303-03C Engine Cooling - INGENIUM I6 3.0L Petrol, Removal and Installation).

23. For additional installation information

Refer to: [Cooling Module](#) (303-03A Engine Cooling - INGENIUM I4 2.0L Diesel, Removal and Installation).

Refer to: [Cooling Module](#) (303-03B Engine Cooling - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal and Installation).

Refer to: [Cooling Module](#) (303-03C Engine Cooling - INGENIUM I6 3.0L Petrol, Removal and Installation).

24. For additional installation information

Refer to: [Electric Coolant Pump](#) (303-03C Engine Cooling - INGENIUM I6 3.0L Petrol, Removal and Installation).

25. For additional installation information

Refer to: [Fuel Fired Booster Heater](#) (412-02 Auxiliary Climate Control, Removal and Installation).

26. For additional installation information

Refer to: Engine Assembly Remove for Access (303-01 Engine - INGENIUM I4 2.0L Diesel, Installation).

Refer to: [Engine - INGENIUM I4 2.0L Petrol](#) (303-01B Engine - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Installation).

Refer to: Engine - INGENIUM I4 2.0L Petrol - PHEV (303-01 Engine - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Installation).

Refer to: [Engine Assembly Remove for Access](#) (303-01C Engine - INGENIUM I6 3.0L Petrol, Installation).

27. For additional installation information

Refer to: [Right Upper Control Arm](#) (204-01 Front Suspension, Removal and Installation).

Refer to: [Left Upper Control Arm](#) (204-01 Front Suspension, Removal and Installation).

28. For additional installation information

Refer to: [Charge Air Radiator](#) (303-03A Engine Cooling - INGENIUM I4 2.0L Diesel, Removal and Installation).

Refer to: [Charge Air Radiator](#) (303-03B Engine Cooling - INGENIUM I4 2.0L Petrol/INGENIUM I4 2.0L Petrol - PHEV, Removal and Installation).

29. For additional installation information

Refer to: [Fender Apron Panel - 90](#) (501-27 Front End Sheet Metal Repairs, Removal and Installation).
