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2020.0 DEFENDER (LE), 501-27

FRONT END SHEET METAL REPAIRS

FENDER APRON PANEL – 90 (G2452692)

mcx30.com

REMOVAL

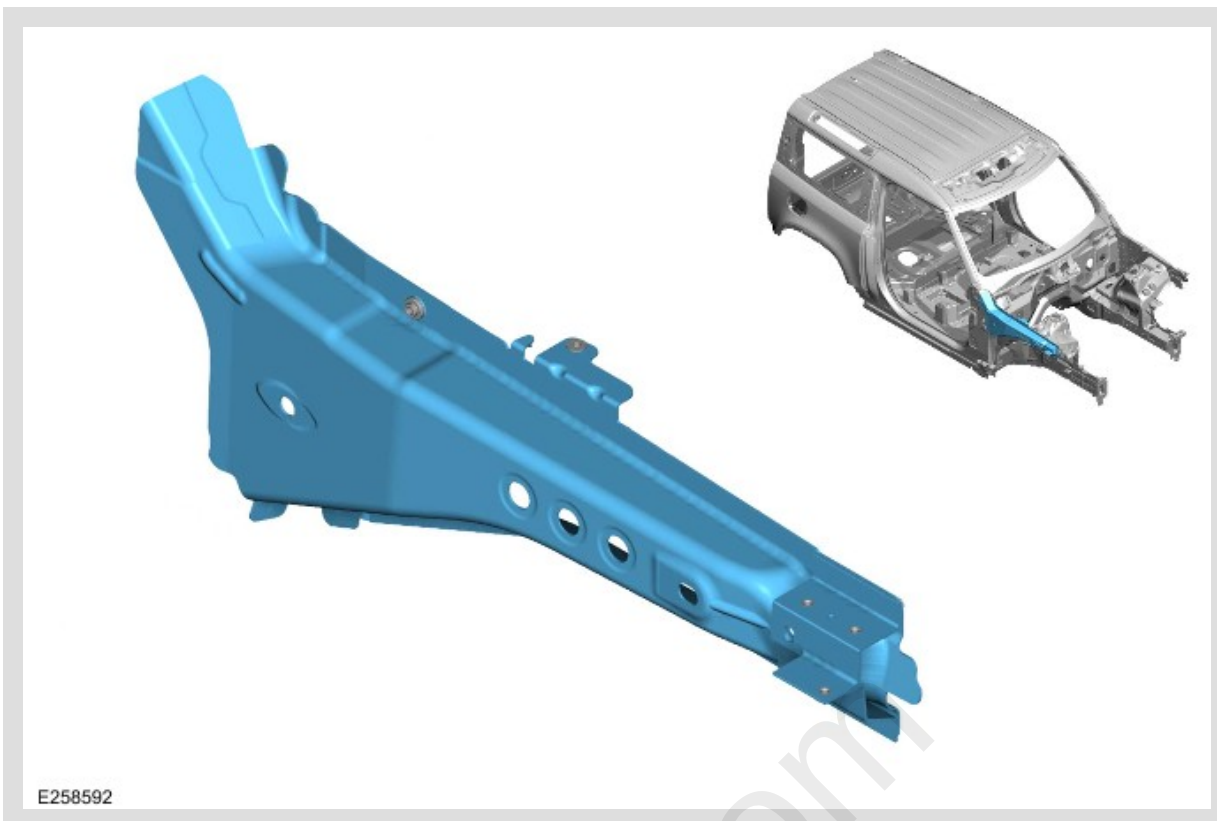


NOTE:

The fender apron panel is installed in conjunction with:

- Front fender mounting bracket upper
- Hood
- Windshield washer reservoir
- Front air reservoir valve block
- Air conditioning compressor
- Front door
- Windshield moulding.

1.



The fender apron panel 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.

When installing the fender apron panel 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).

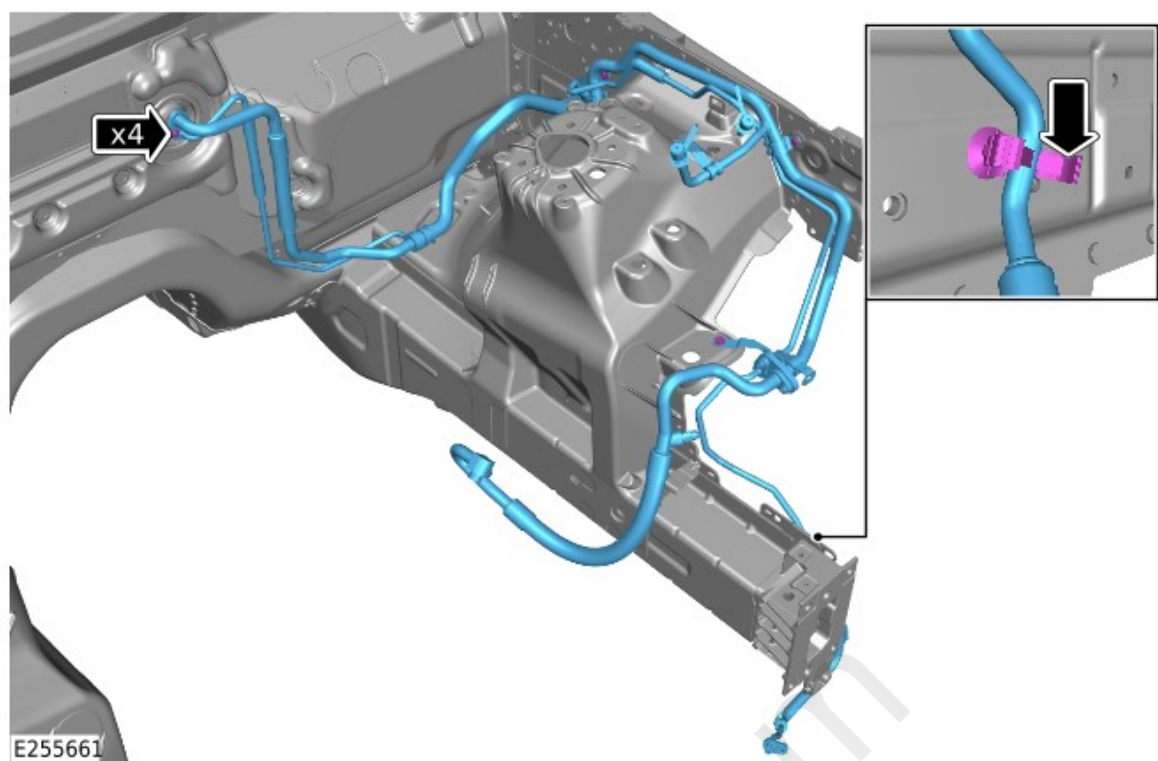
4.

For additional information on the fixings required to complete this procedure

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

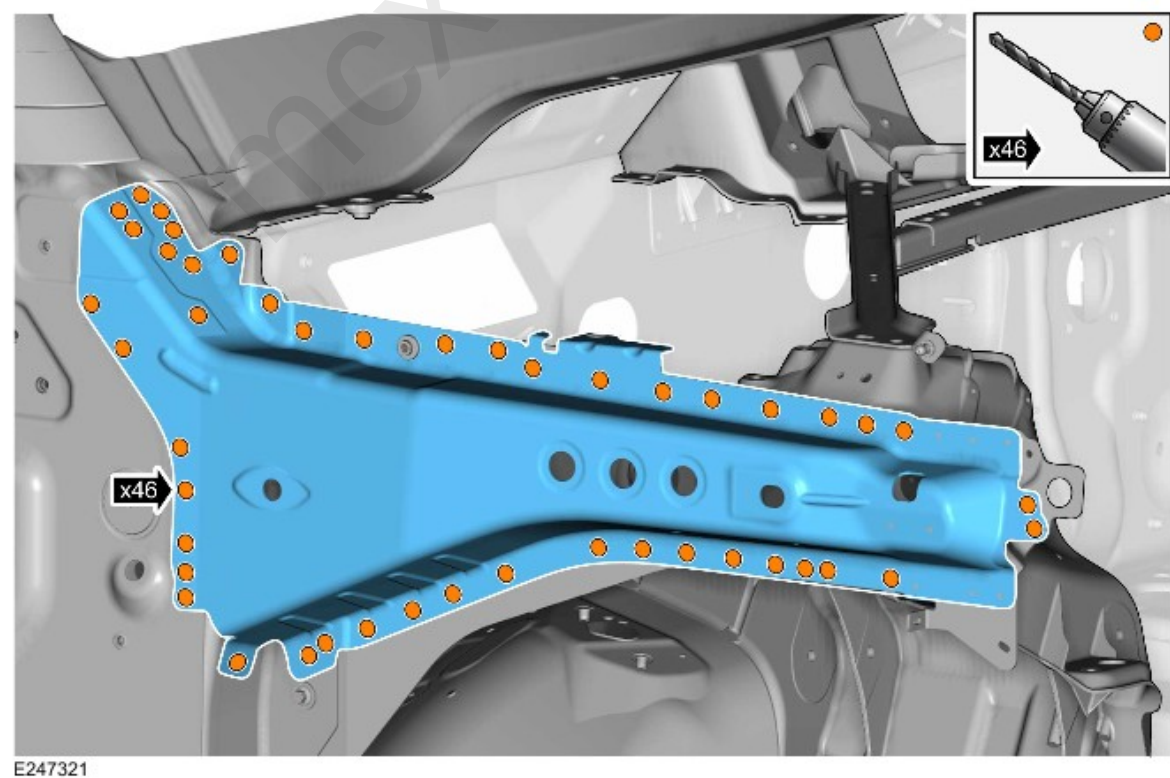
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5. For additional removal information
Refer to: [Front Fender Mounting Bracket Upper - 90](#) (501-27 Front End Sheet Metal Repairs, Removal and Installation).
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6. For additional removal information
Refer to: [Hood](#) (501-02 Front End Body Panels, Removal and Installation).
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7. For additional removal information
Refer to: [Windshield Washer Reservoir](#) (501-16 Wipers and Washers, Removal and Installation).
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8. For additional removal information
Refer to: [Front Air Reservoir Valve Block](#) (204-05 Vehicle Dynamic Suspension, Removal and Installation).
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9. For additional removal information
Refer to: [Air Conditioning Compressor - INGENIUM I4 2.0L Diesel](#) (412-01 Climate Control, Removal and Installation).
Refer to: [Air Conditioning Compressor - INGENIUM I4 2.0L Petrol](#) (412-01 Climate Control, Removal and Installation).
Refer to: [Air Conditioning Compressor - INGENIUM I6 3.0L Petrol](#) (412-01 Climate Control, Removal and Installation).
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10. For additional removal information
Refer to: [Front Door](#) (501-03 Body Closures, Removal and Installation).
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11. For additional removal information
Refer to: [Windshield Moulding](#) (501-11 Glass, Frames and Mechanisms, Removal and Installation).
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12. Release and position the wiring harness to one side.
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13. Release and position the windshield washer reservoir hoses to one side.
-

14.



- Remove the 4 bolts.
- Release the clip.
- Remove the Air Conditioning (A/C) pipes.

15.



Remove the self piercing rivets as indicated.

16. Carefully separate the joints and remove the fender apron panel.

INSTALLATION

CAUTION:

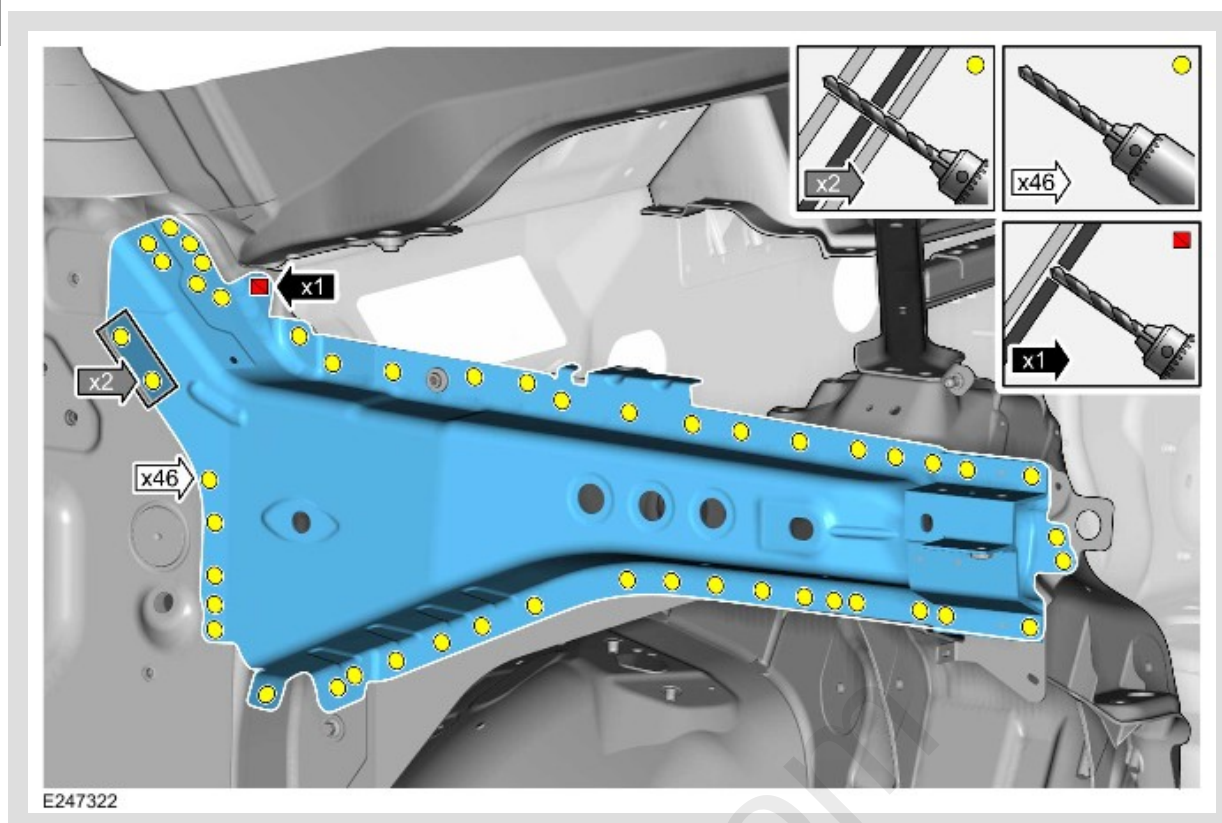
Where structural adhesive is to be applied between surfaces it is essential compression is applied to the joints during the curing period.

NOTE:

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

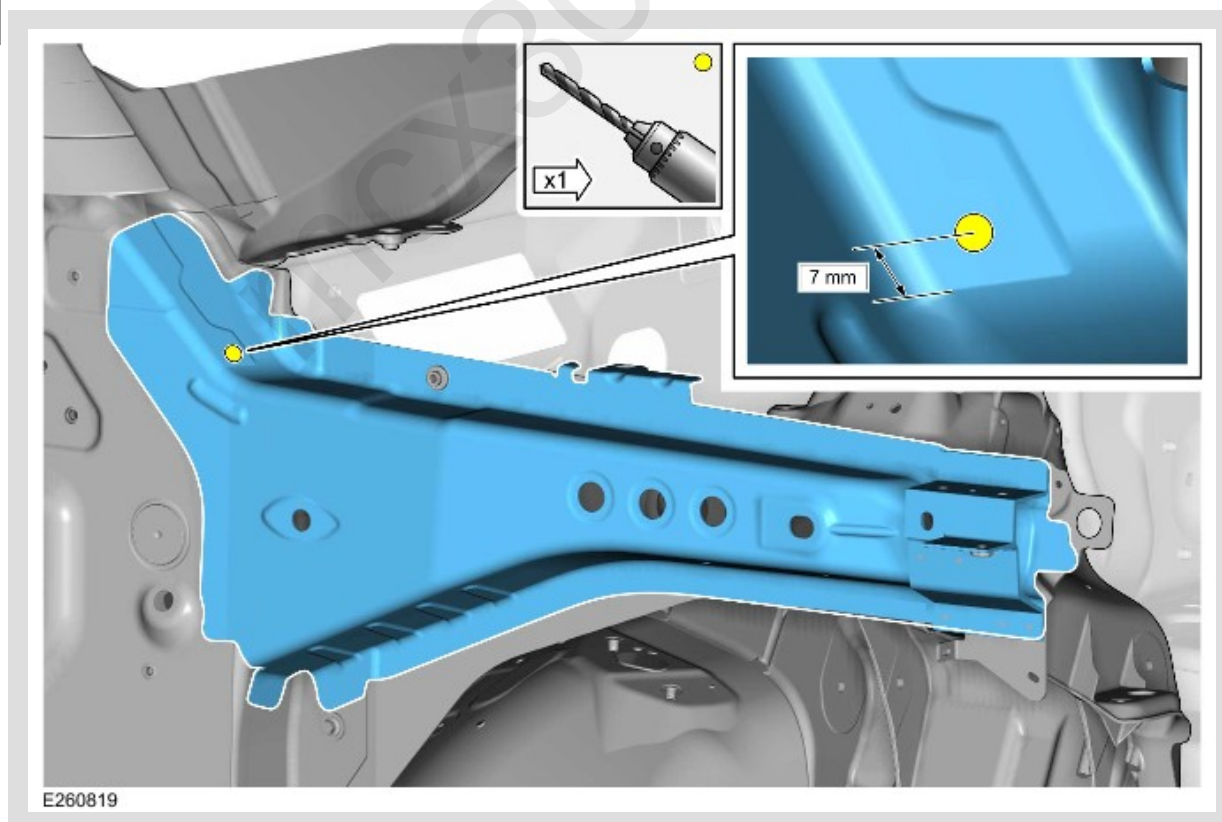
1. Remove the rivet remnants.
2. Dress the flanges where necessary.
3. Offer up the new fender apron panel and clamp into position. Check alignment, if correct proceed to next step, if not rectify and check the alignment again before proceeding.

4.



Drill holes where the Metal Inert Gas (MIG) plug weld and Breakstem Fasteners (BSFs) are to be installed as indicated.

5.



Drill a hole where the BSF is to be installed as indicated.

6. Remove the new fender apron panel.

7. Deburr the drilled holes.

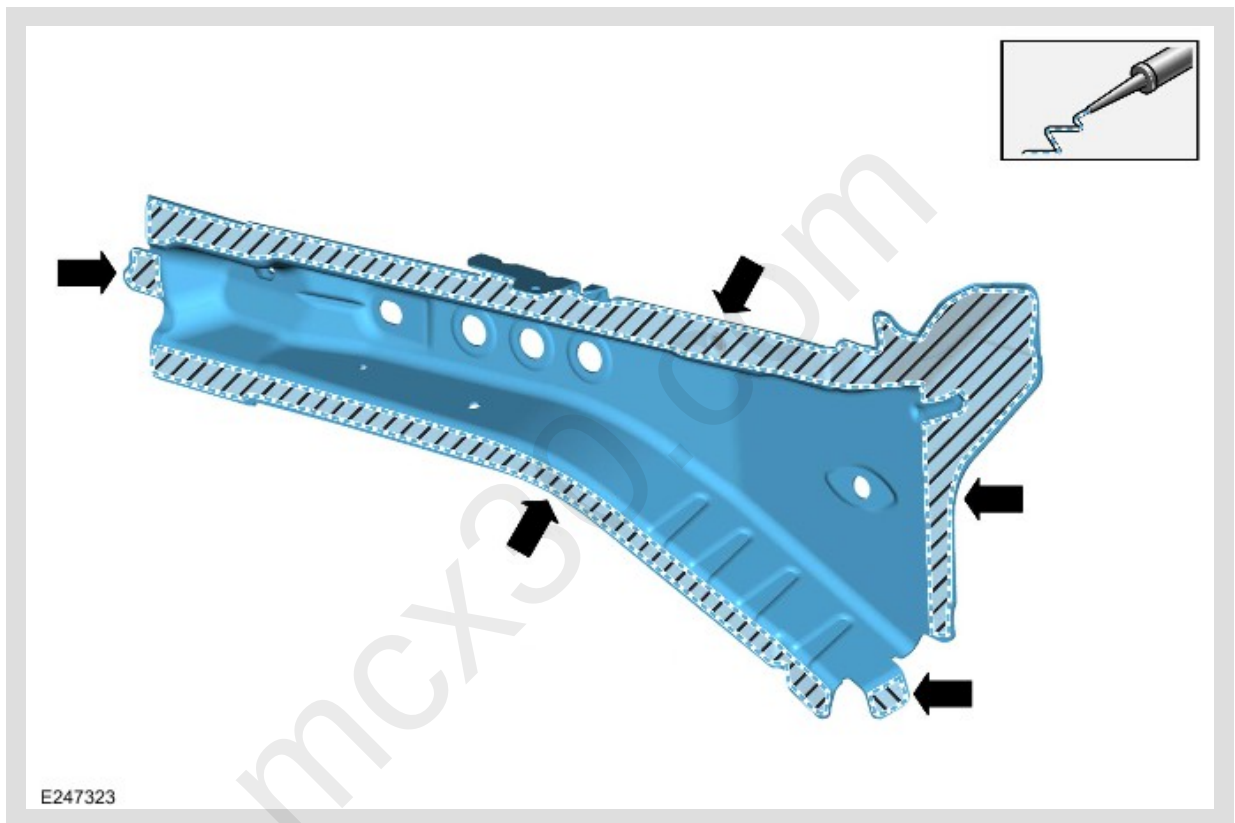
8. Clean and prepare the panel surfaces.

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.

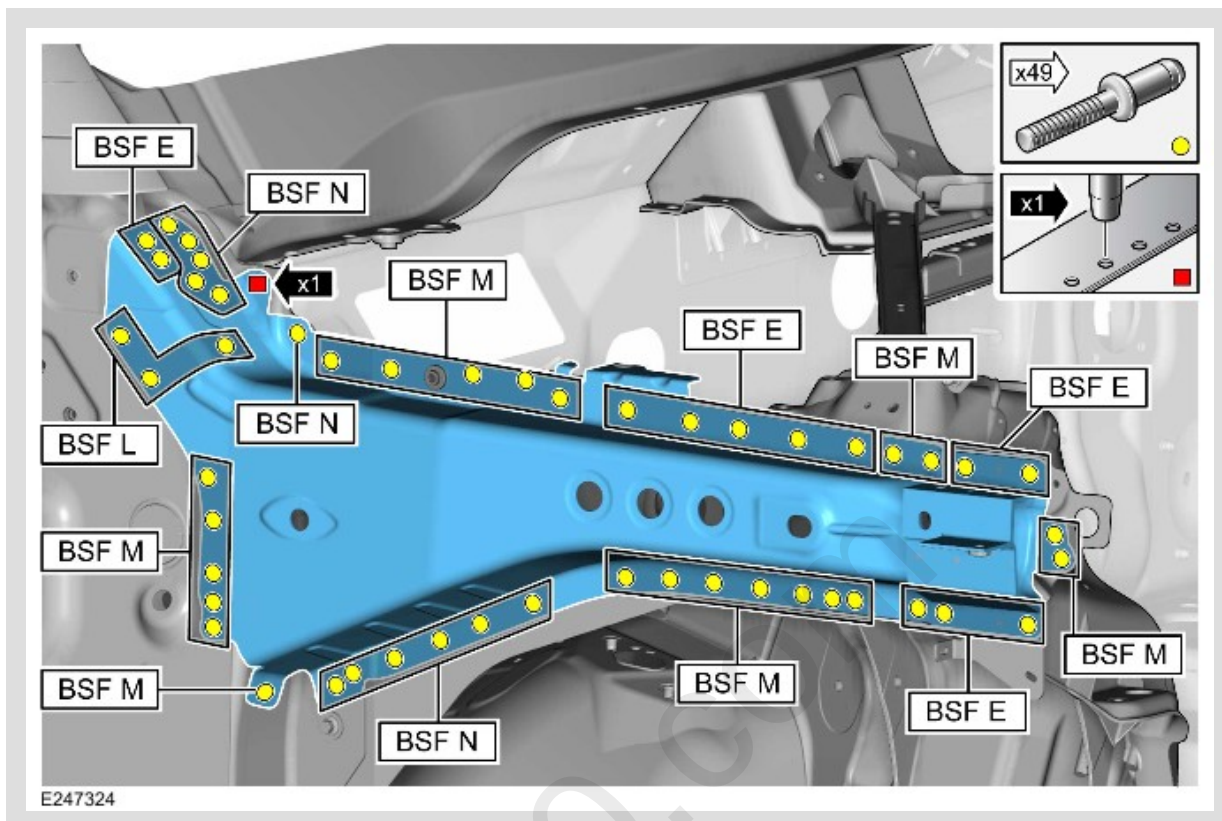
10. Offer up the new fender apron panel and clamp into position. Check alignment, if correct proceed to next step, if not rectify and check the alignment again before proceeding.

11.



NOTE:

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

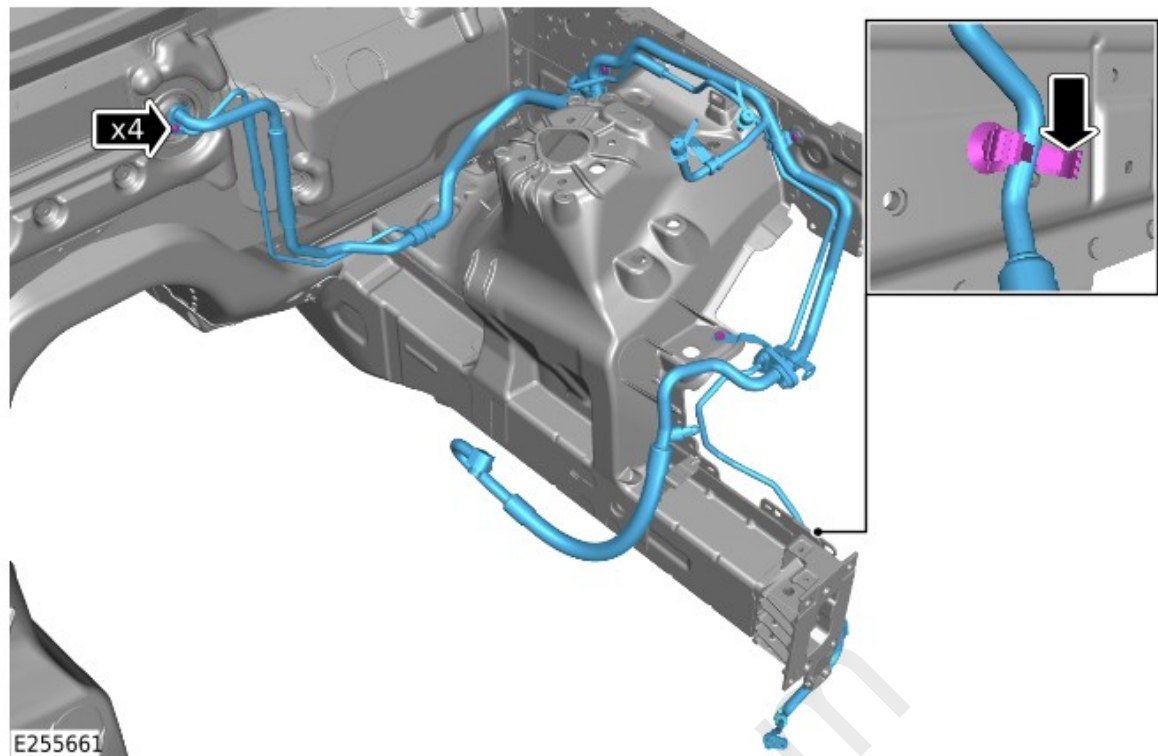


Install the MIG plug weld and BSFs as indicated.

12. Dress all welds.

13. Remove any excess adhesive.

14.



- Install the A/C pipes.
- Install the clip.
- Tighten the bolts.

Torque: 10Nm

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

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

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

**NOTE:**

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

18. For additional installation information

Refer to: [Windshield Moulding](#) (501-11 Glass, Frames and Mechanisms, Removal and Installation).

19. For additional installation information

Refer to: [Front Door](#) (501-03 Body Closures, Removal and Installation).

20. For additional installation information

Refer to: [Air Conditioning Compressor - INGENIUM I4 2.0L Diesel](#) (412-01 Climate Control, Removal and Installation).

Refer to: [Air Conditioning Compressor - INGENIUM I4 2.0L Petrol](#) (412-01 Climate Control, Removal and Installation).

Refer to: [Air Conditioning Compressor - INGENIUM I6 3.0L Petrol](#) (412-01 Climate Control, Removal and Installation).

21. For additional installation information

Refer to: [Front Air Reservoir Valve Block](#) (204-05 Vehicle Dynamic Suspension, Removal and Installation).

22. For additional installation information

Refer to: [Windshield Washer Reservoir](#) (501-16 Wipers and Washers, Removal and Installation).

23. For additional installation information

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

24. For additional installation information

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