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2020.0 DEFENDER (LE), 501-30

REAR END SHEET METAL REPAIRS

REAR SIDE MEMBER - 90 (G2452665)

mcx30.com

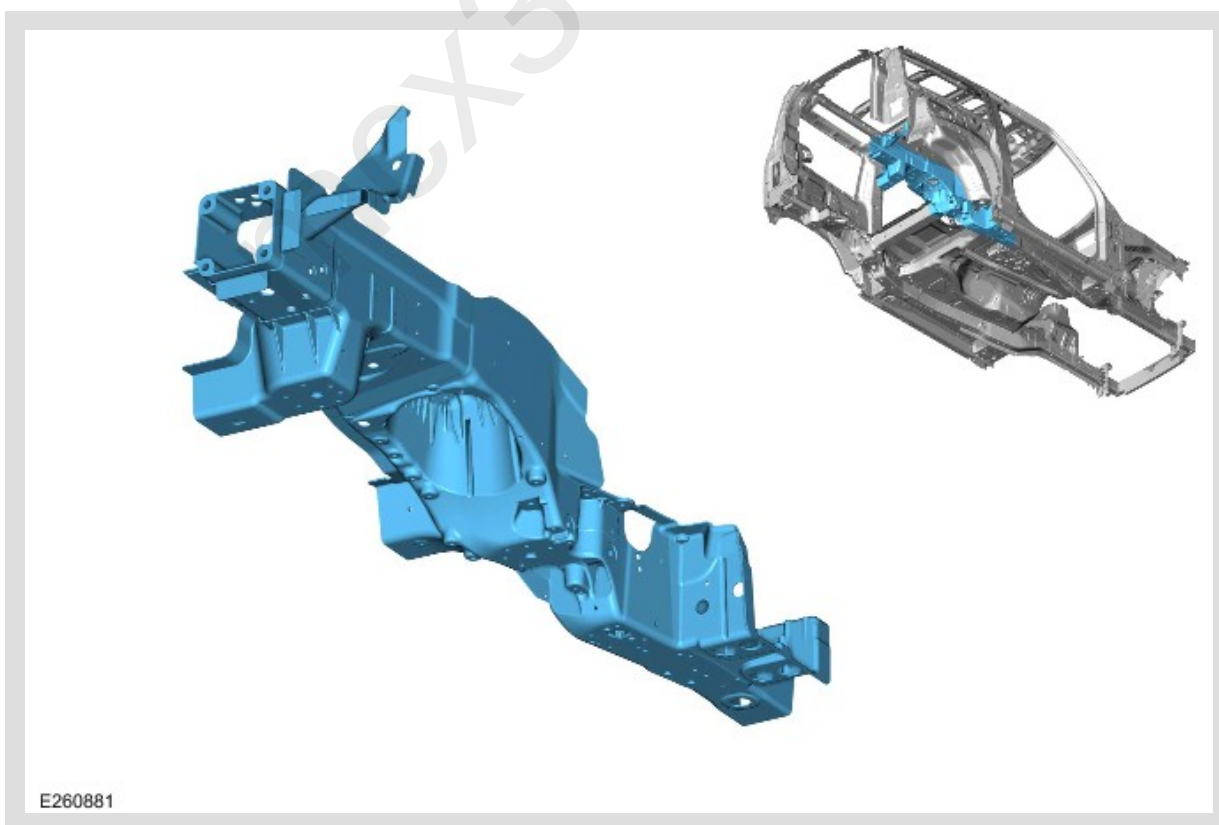
REMOVAL

 NOTE:

In this procedure the rear side member is installed in conjunction with:

- Back panel inner
- Back panel inner extensions
- Rear floor panel
- Rear floor panel rear cross member
- Rear floor panel centre cross member
- Rear side member closing panel.

1.



The rear side member is serviced as indicated.

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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).
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3. **NOTES:**

- Where Breakstem Fastener (BSF) removal is instructed remove the 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 a 5.3 mm drill bit. Clean all the drilled holes to make sure they are free from debris.
- 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 rear side member 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).

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4. For additional information on the fixings required to complete this procedure
Refer to: [Specifications - 110](#) (501-30 Rear End Sheet Metal Repairs, Specifications).
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5. For additional removal information
Refer to: [Back Panel Inner - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).
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6. For additional removal information
Refer to: [Back Panel Inner Extensions - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).
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7. For additional removal information
Refer to: [Rear Floor Panel - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).
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8. For additional removal information
Refer to: [Rear Floor Panel Rear Cross Member - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).
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9. For additional removal information
Refer to: [Rear Floor Panel Center Cross Member - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).
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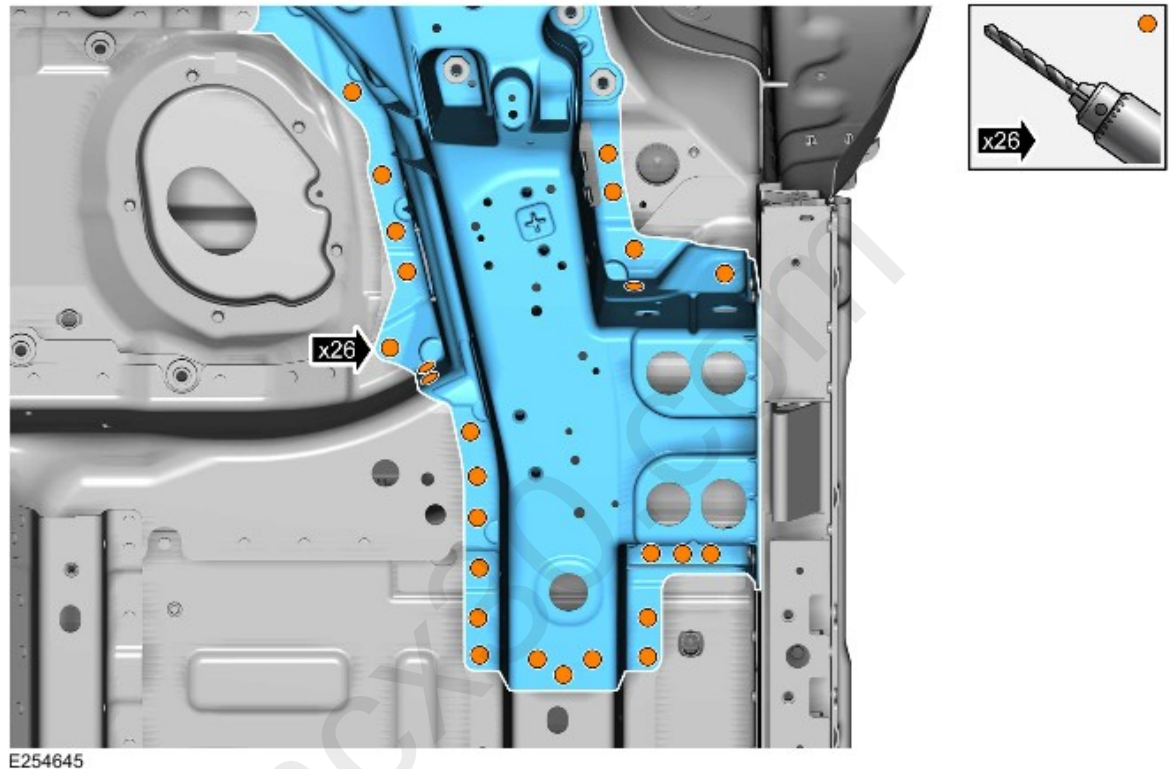
10. For additional removal information

Refer to: [Rear Side Member Closing Panel - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

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

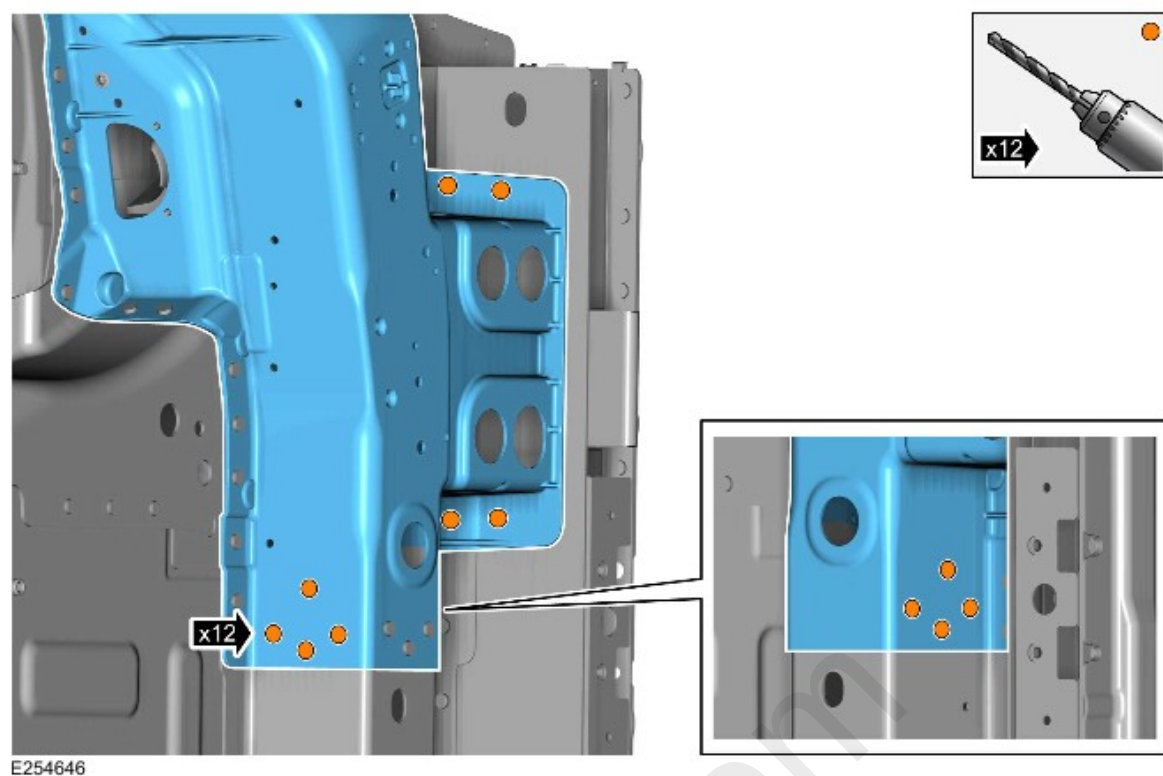
12. Release and position the brake pipes to one side.

- 13.



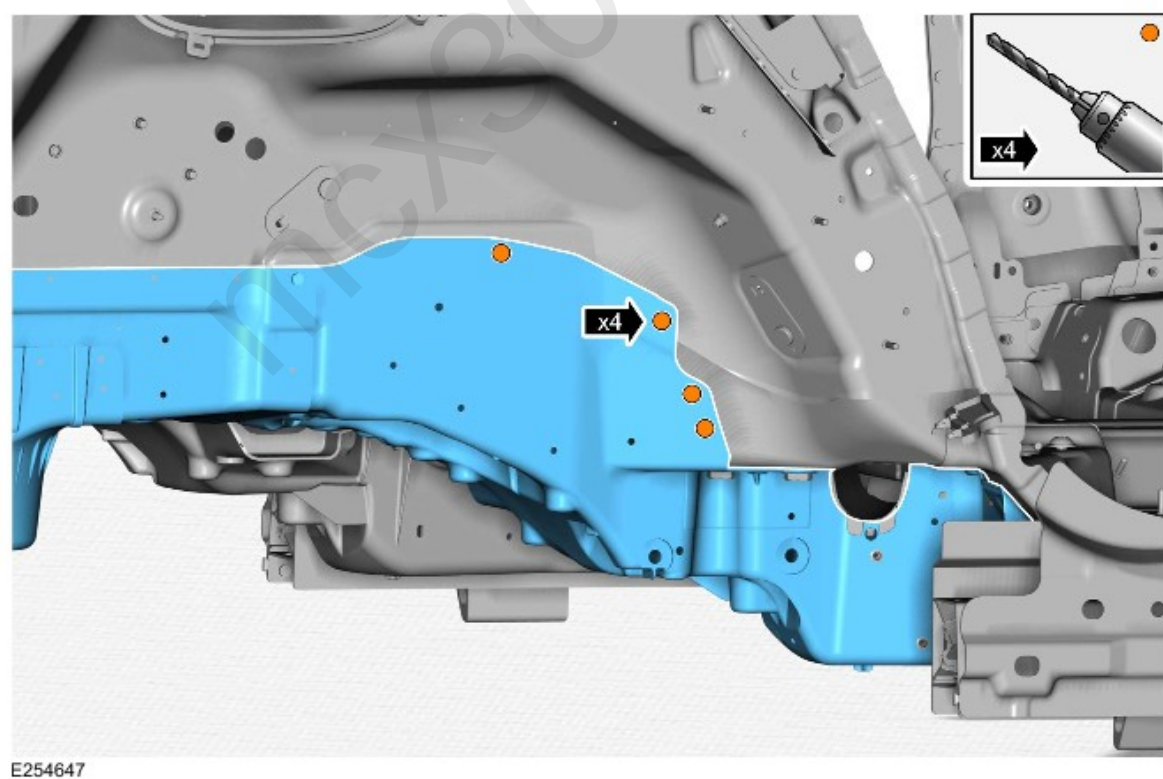
Remove the Self Piercing Rivets (SPRs) as indicated.

14.

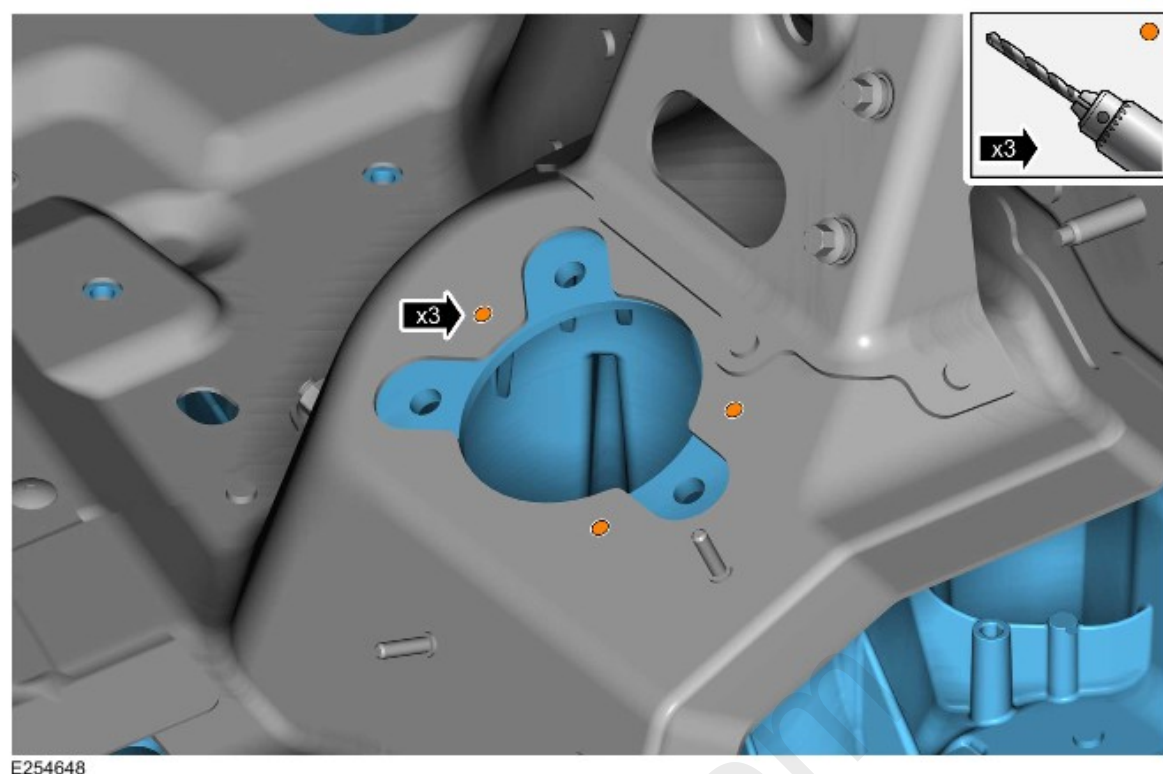


Remove the SPRs as indicated.

15.



Remove the SPRs as indicated.

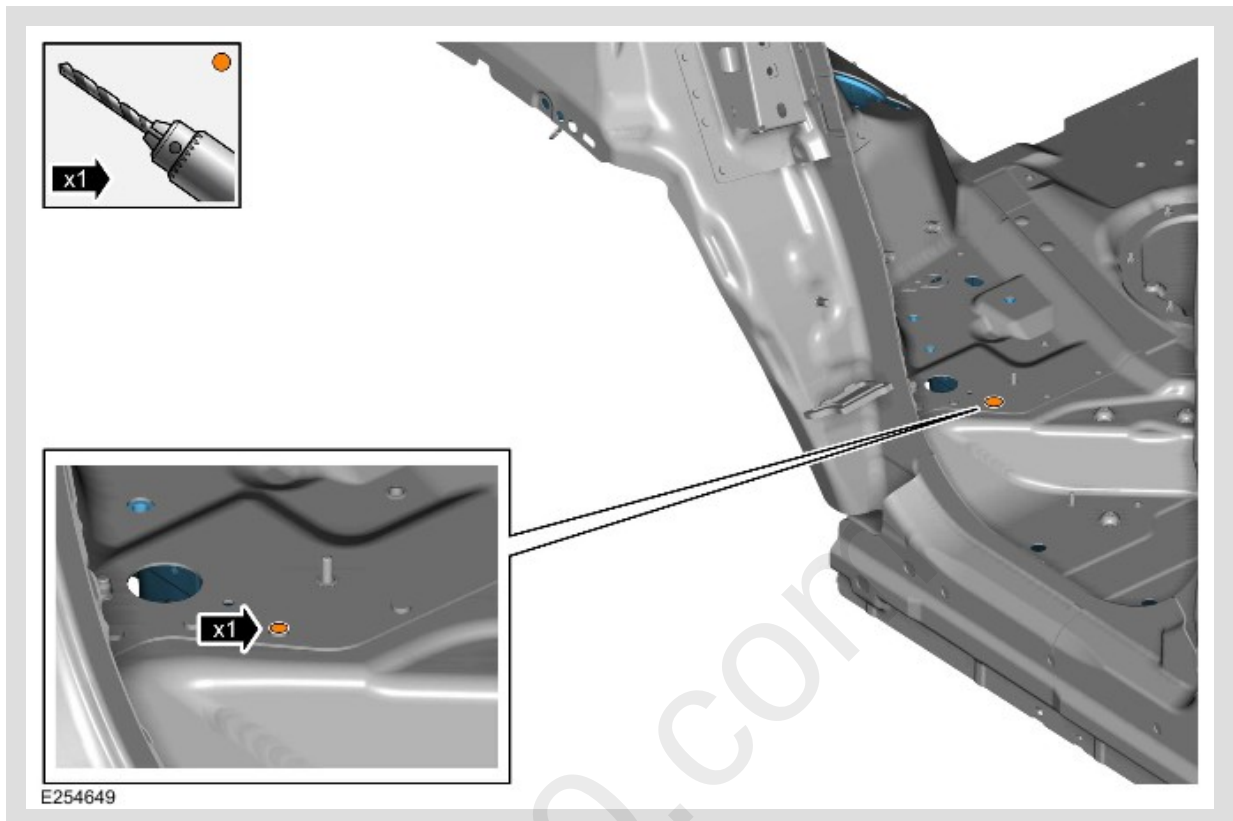


Remove the SPRs as indicated.

17.

 NOTE:

Step required for installation.



Remove the SPR as indicated.

18.



 CAUTION:

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

Carefully separate the joints and remove the rear side member.

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.

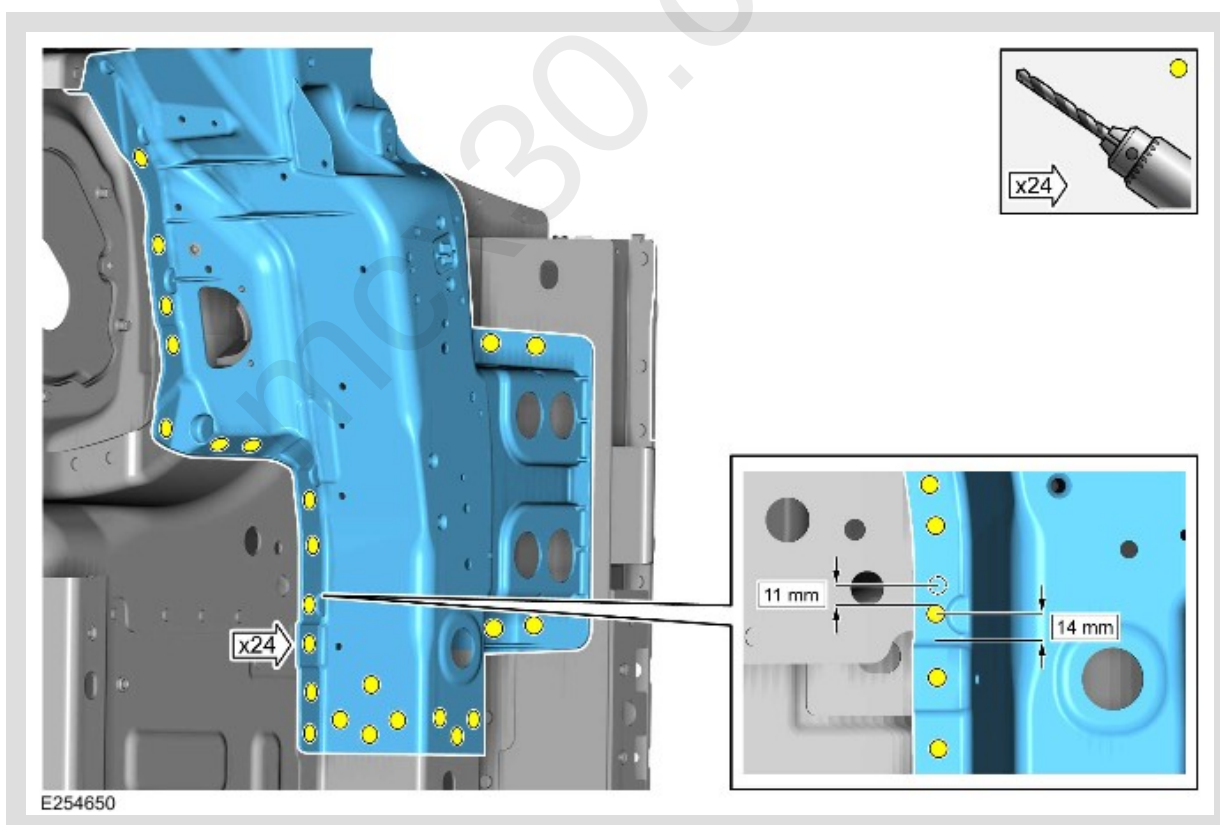


 CAUTION:

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

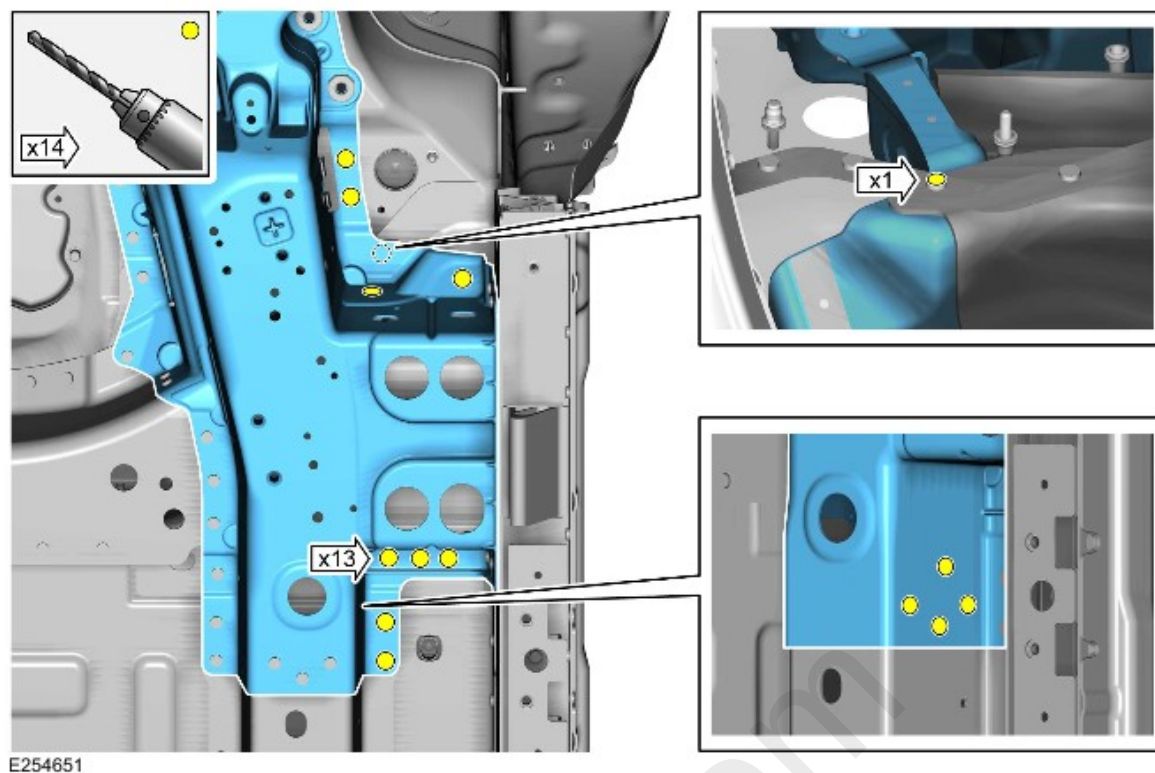
Offer up the new rear side member and clamp into position. Check alignment, if correct proceed to next step, if not rectify and check the alignment again before proceeding.

4.



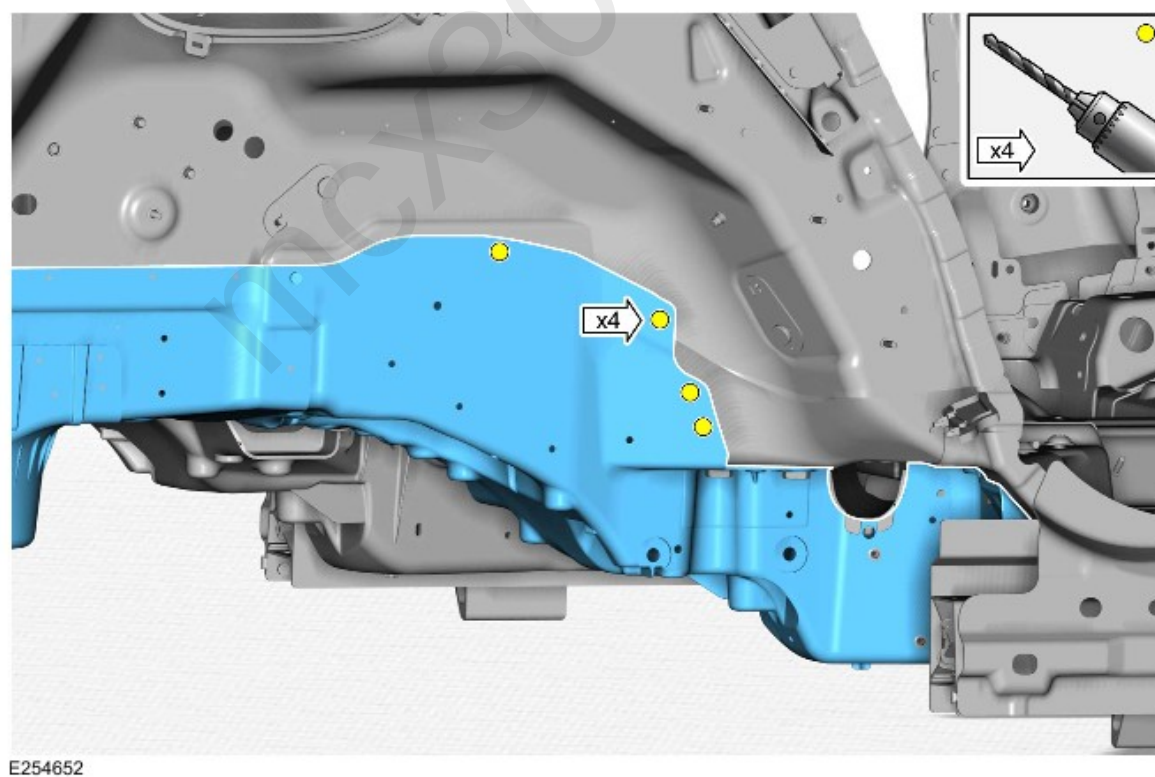
Drill holes where the Breakstem Fasteners (BSFs) are to be installed as indicated.

5.



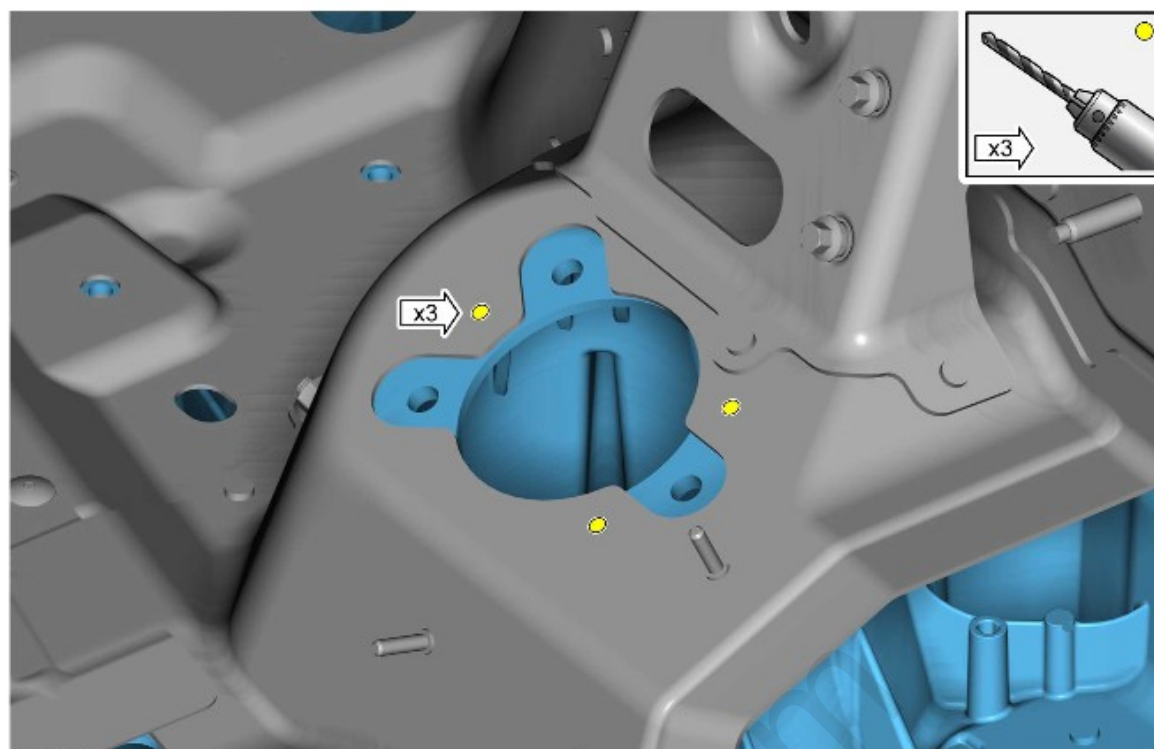
Drill holes where the BSFs are to be installed as indicated.

6.



Drill holes where the BSFs are to be installed as indicated.

7.



Drill holes where the BSFs are to be installed as indicated.

8.



⚠ CAUTION:

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

Remove the new rear side member.

9.

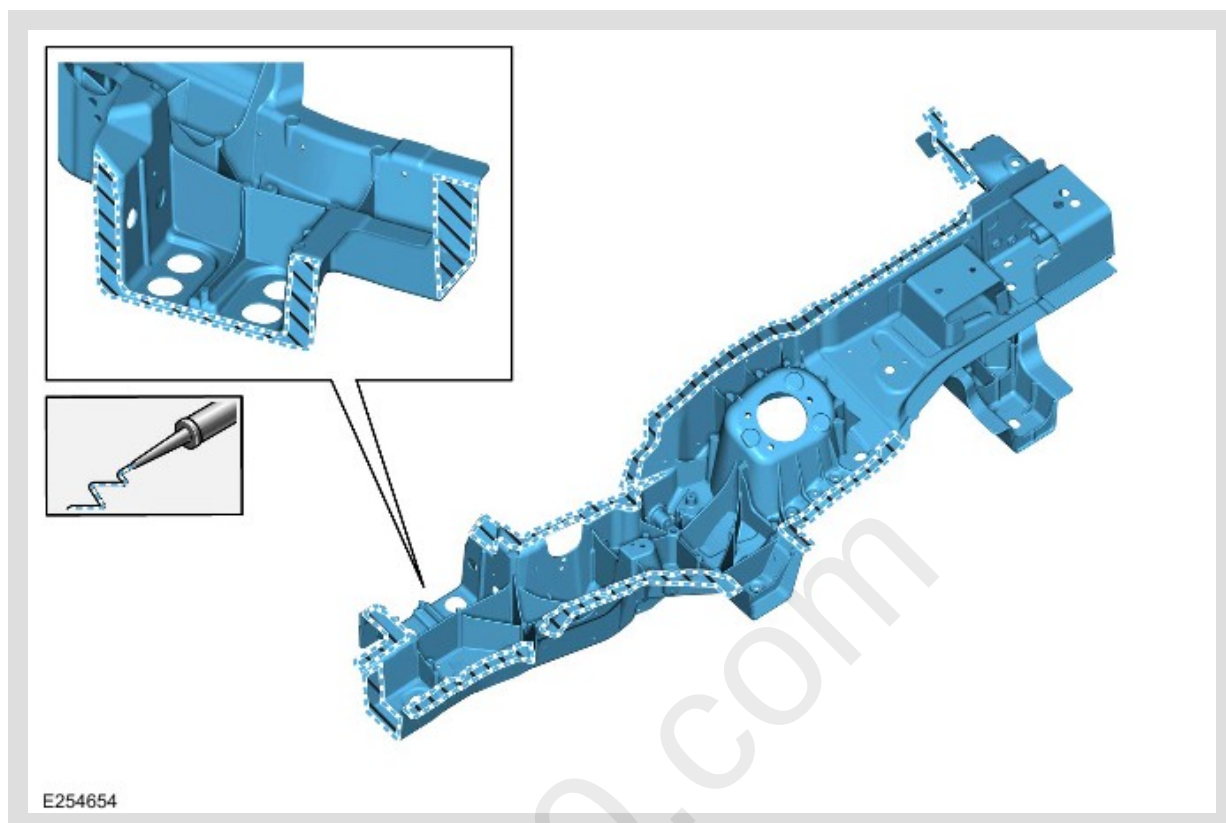
Deburr the drilled holes.

10.

Clean and prepare the panel surfaces.

 NOTE:

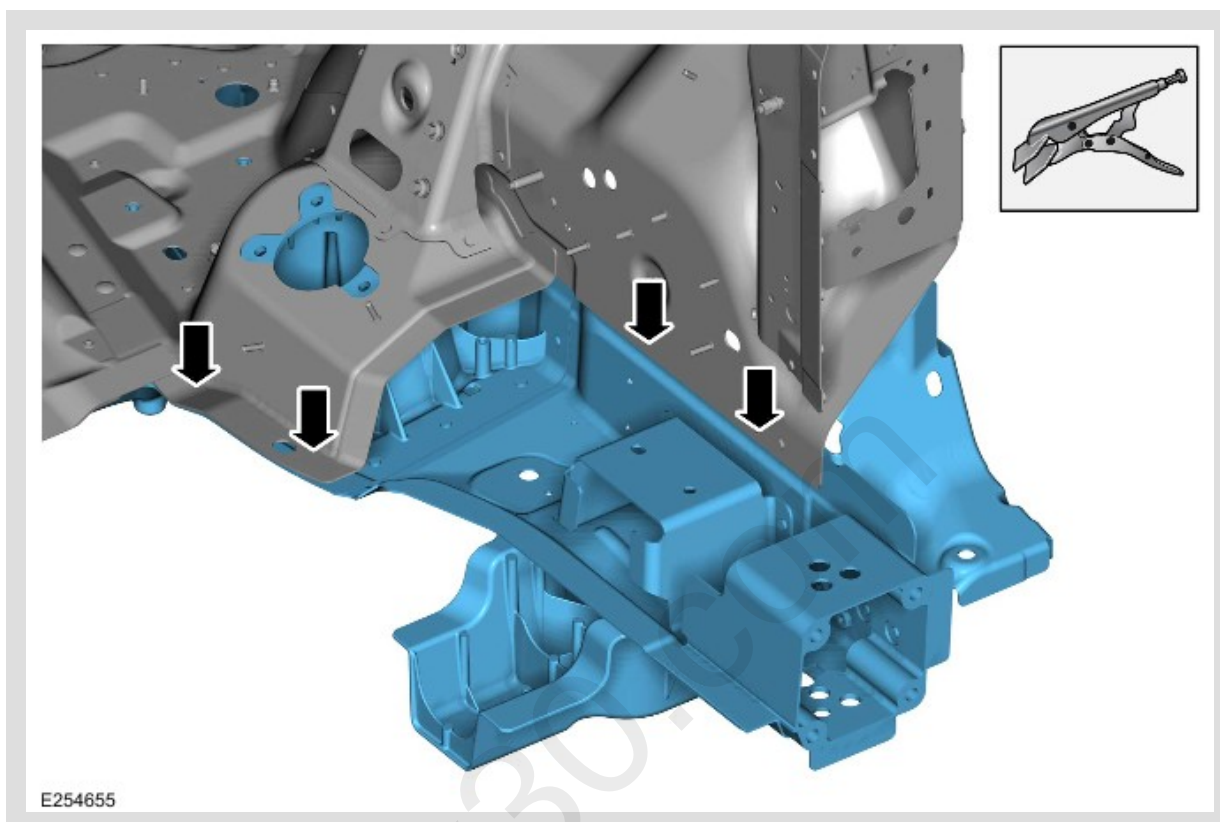
Make sure a continuous bead of adhesive surrounds the fixing holes.



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

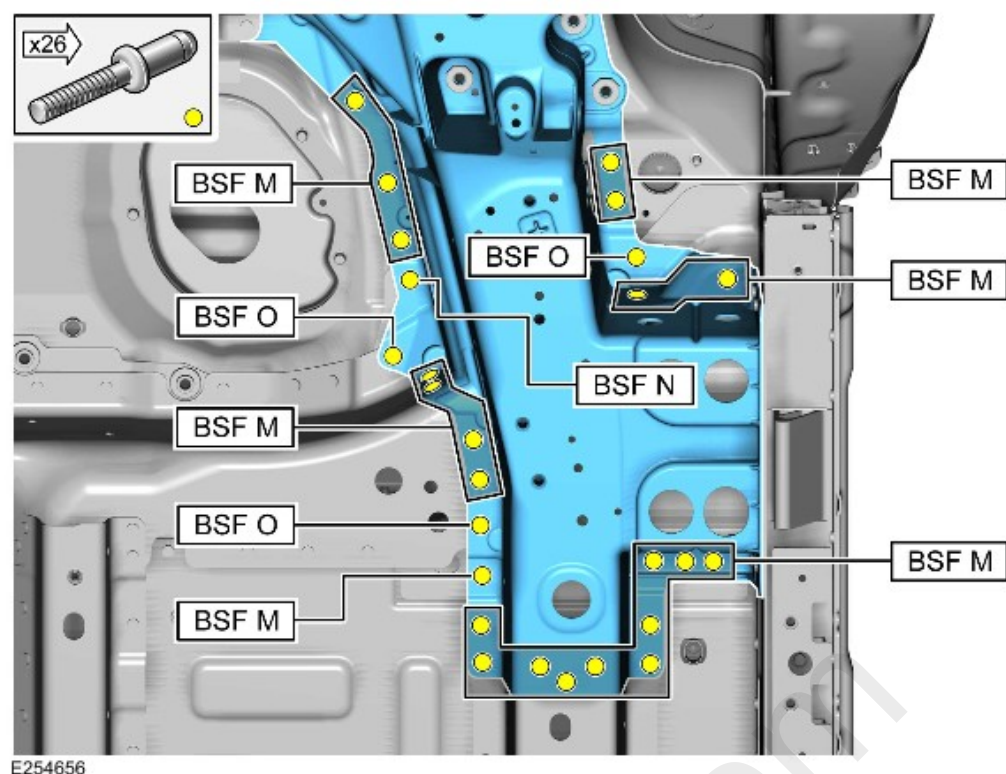
**⚠ CAUTION:**

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



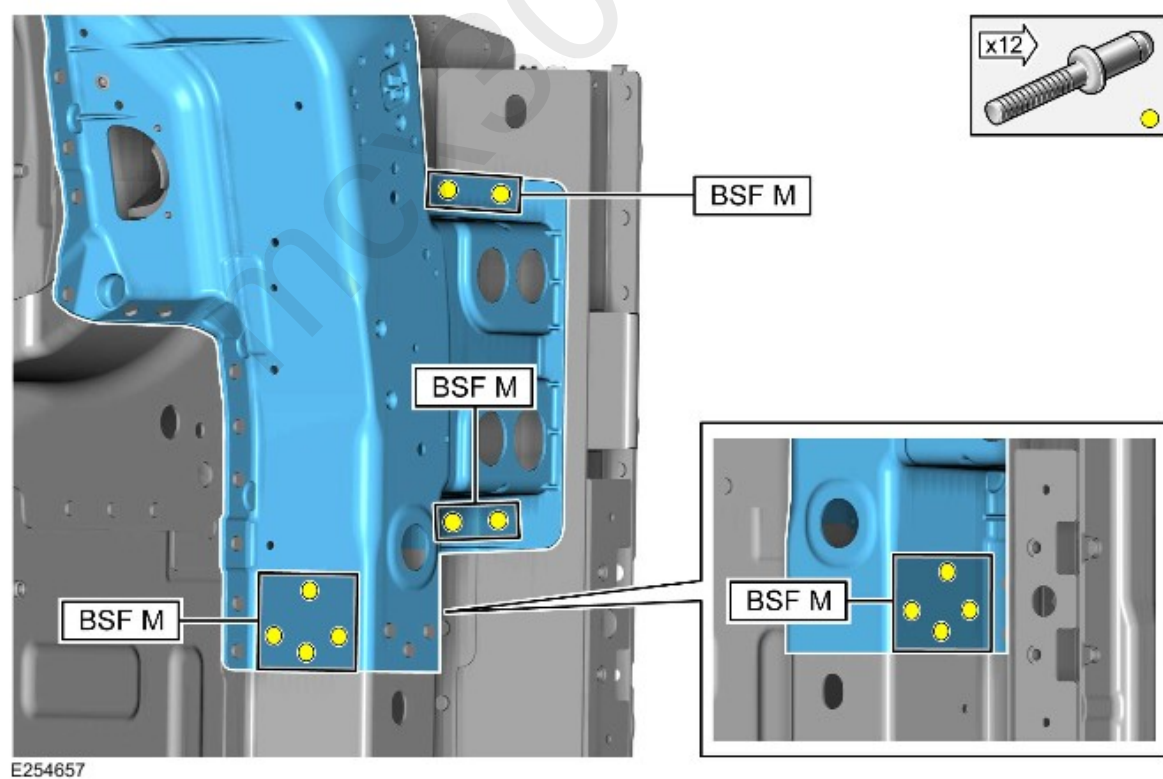
Offer up the new rear side member and clamp into position. Check alignment, if correct proceed to next step, if not rectify and check the alignment again before proceeding.

13.



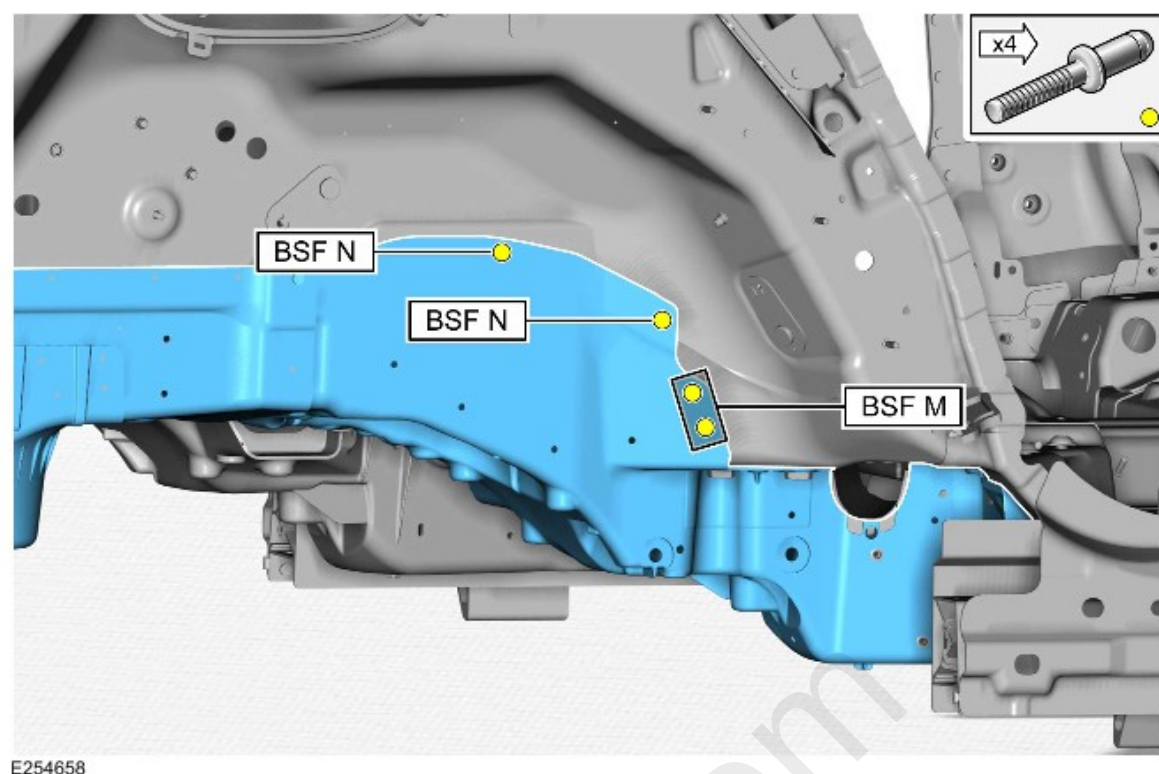
Install the BSFs as indicated.

14.



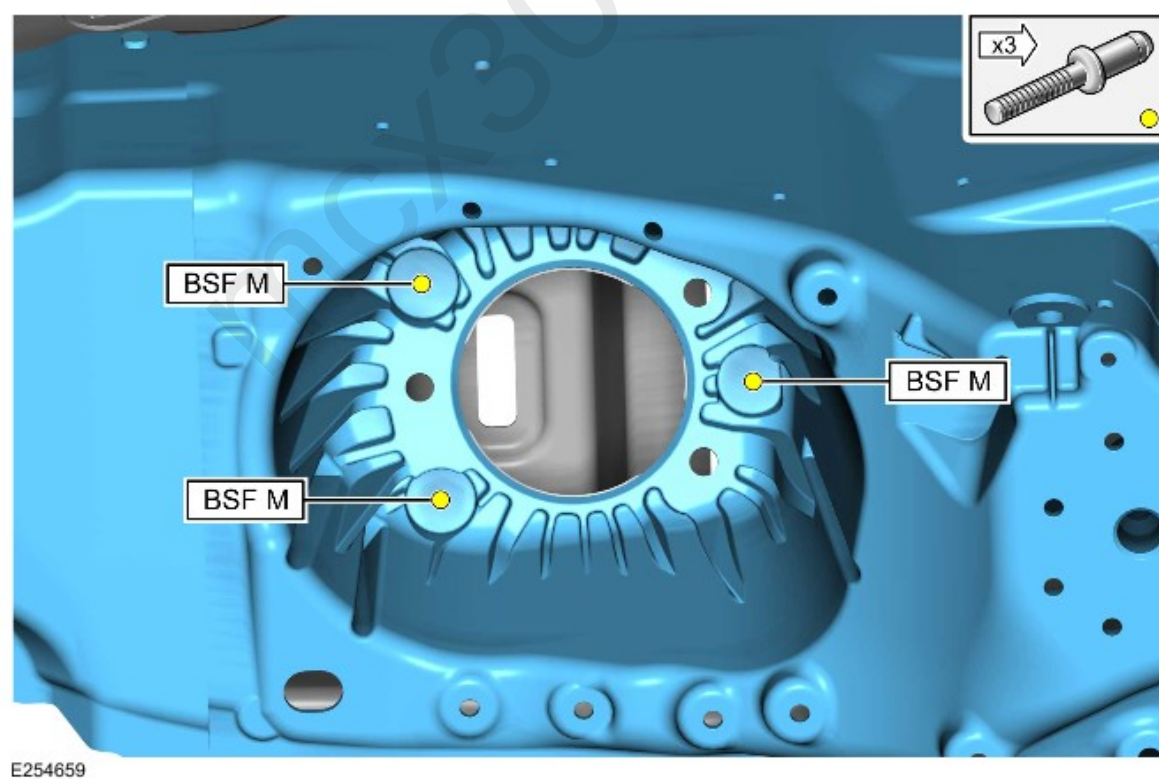
Install the BSFs as indicated.

15.



Install the BSFs as indicated.

16.



Install the BSFs as indicated.

17. Remove any excess adhesive.

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

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

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



NOTE:

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

21. For additional installation information

Refer to: [Rear Side Member Closing Panel - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

22. For additional installation information

Refer to: [Rear Floor Panel Center Cross Member - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

23. For additional installation information

Refer to: [Rear Floor Panel Rear Cross Member - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

24. For additional installation information

Refer to: [Rear Floor Panel - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

25. For additional installation information

Refer to: [Back Panel Inner Extensions - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

26. For additional installation information

Refer to: [Back Panel Inner - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).