

PUBLISHED: 09-MAR-2020
2020.0 DEFENDER (LE), 501-30

REAR END SHEET METAL REPAIRS

REAR WHEELHOUSE OUTER – 90 (G2452629)

mcx30.com

REMOVAL

 NOTE:

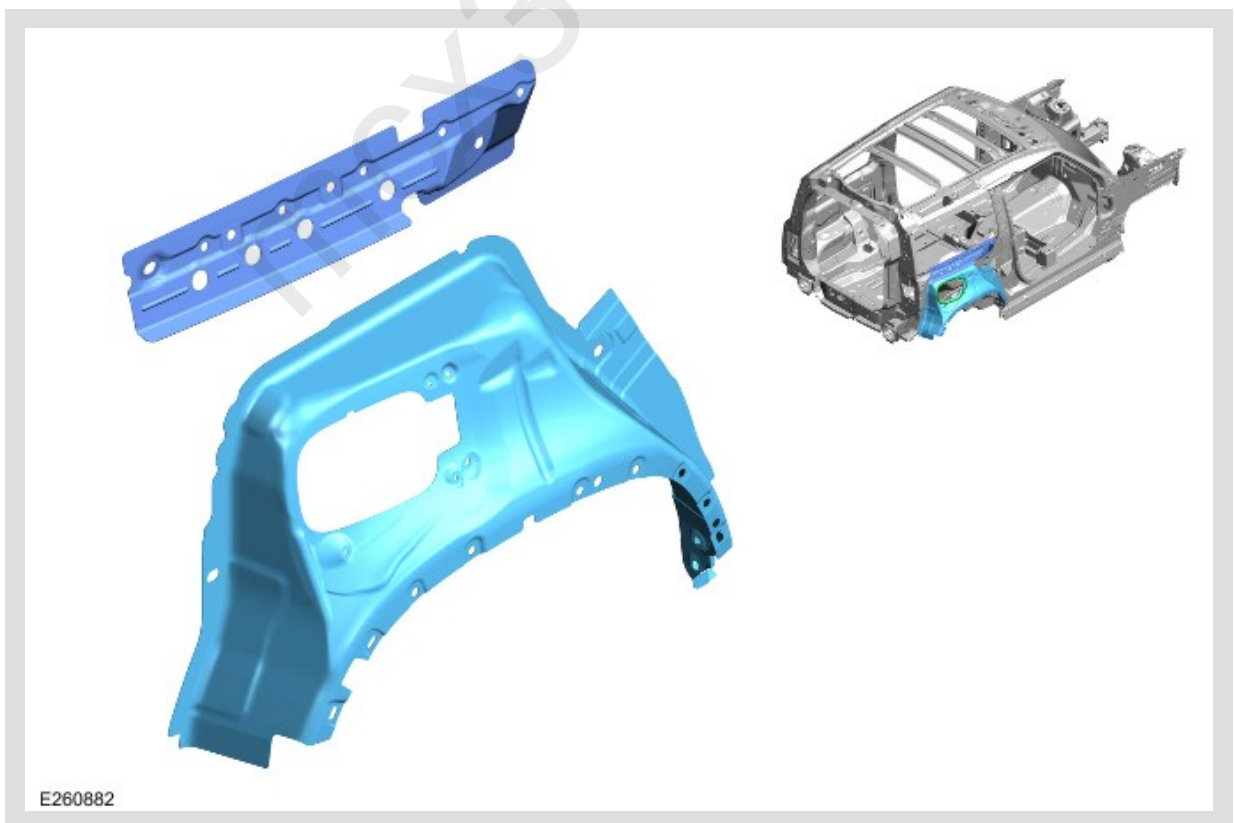
In this procedure, the rear wheelhouse outer is installed in conjunction with:

- Tailgate reinforcement
- Tailgate reinforcement section
- Rocker panel reinforcement
- B-pillar reinforcement.

1.

 NOTE:

Additional items highlighted are required to complete the repair.



The rear wheelhouse outer 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.

When installing the rear wheelhouse outer 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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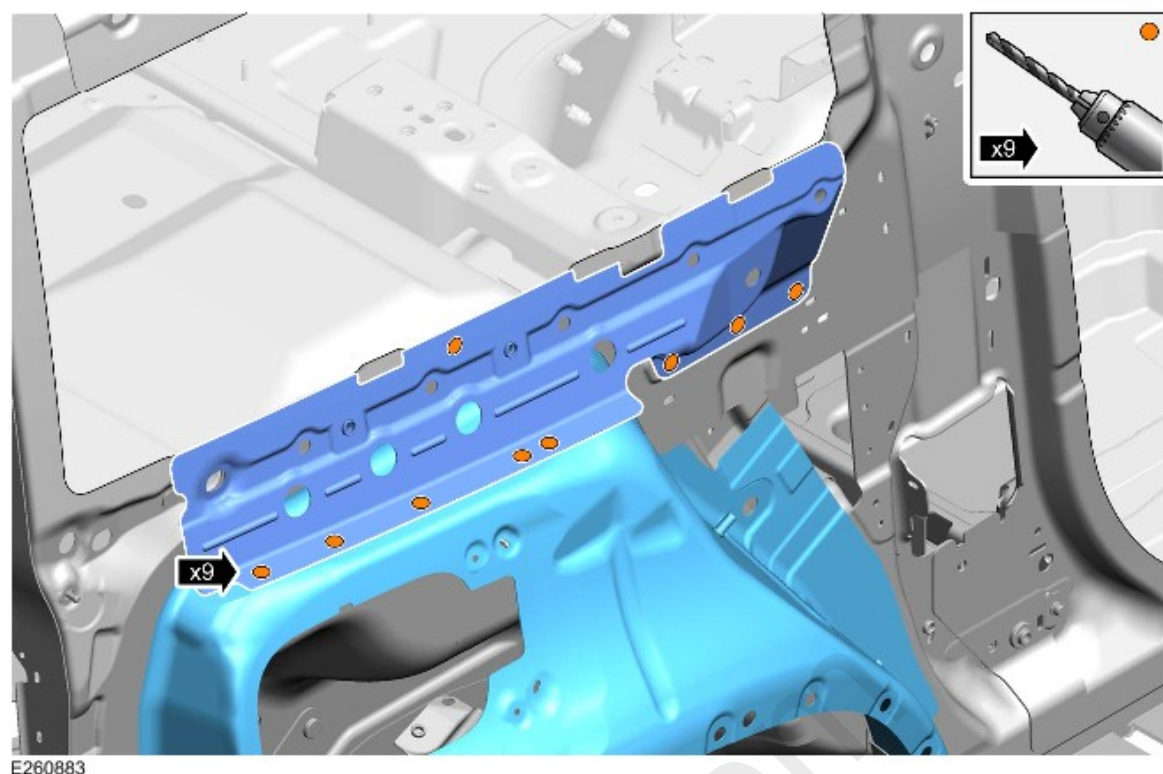
5. For additional removal information
Refer to: [Tailgate Reinforcement Right Side - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).
Refer to: [Tailgate Reinforcement Left Side - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).
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6. For additional removal information
Refer to: [Tailgate Reinforcement Section - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).
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7. For additional removal information
Refer to: [Rocker Panel Reinforcement - 90](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).
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8. For additional removal information
Refer to: [B-Pillar Reinforcement - 90](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).
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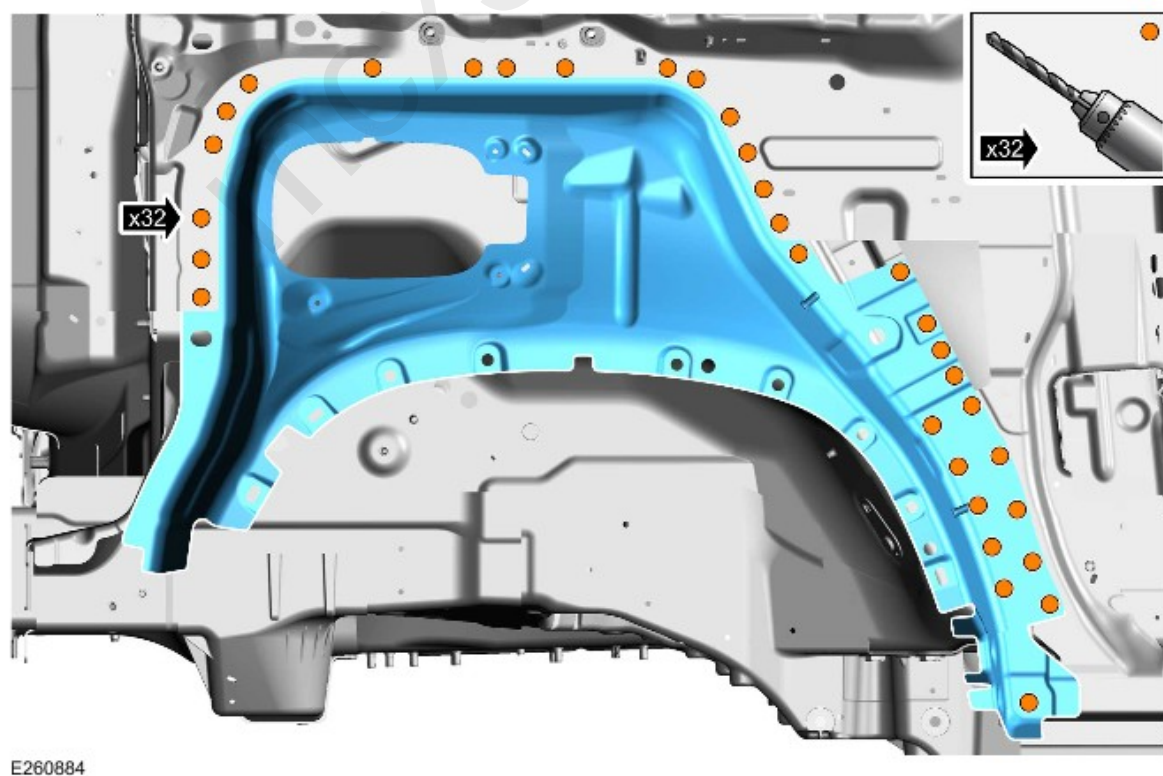
9.



Remove the Self Piercing Rivets (SPRs) as indicated.

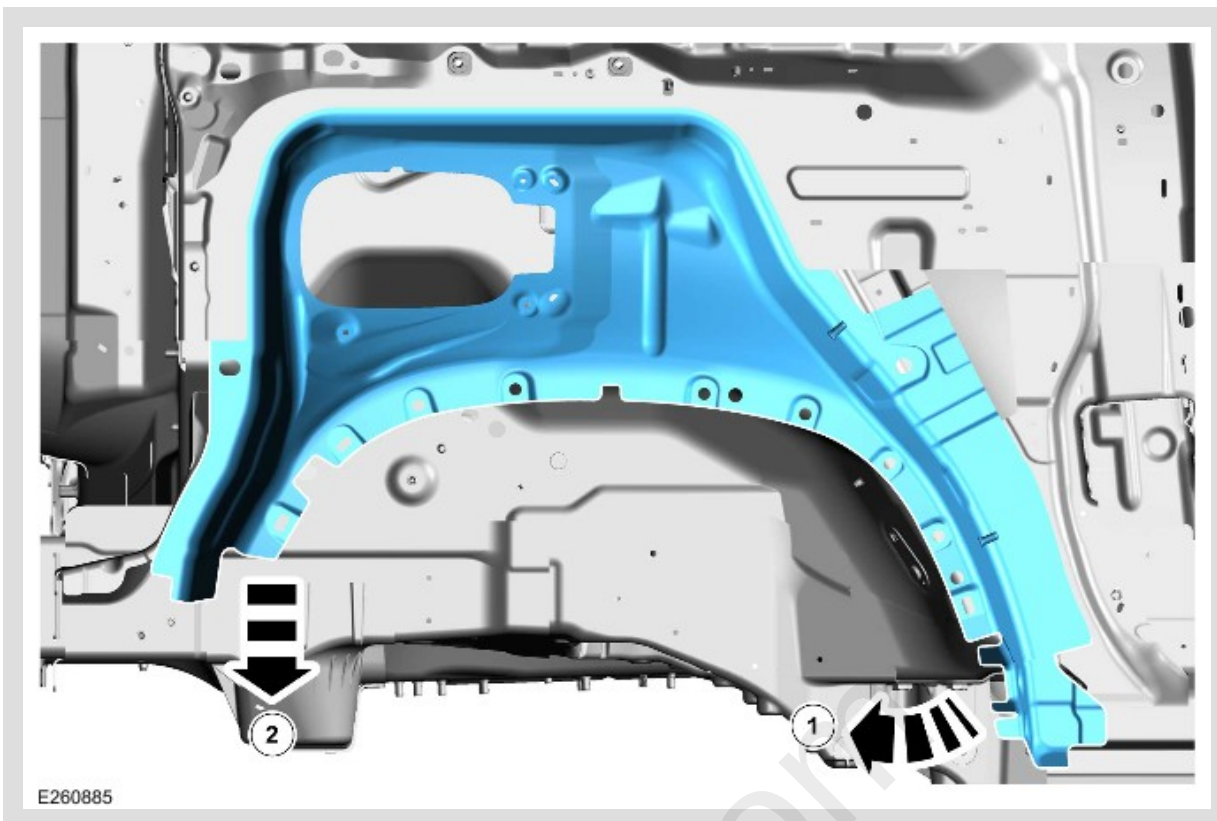
10. Carefully separate the joints and remove the quarter panel reinforcement.

11.



Remove the SPRs as indicated.

12.



Carefully separate the joints and remove the rear wheelhouse outer as indicated.

INSTALLATION

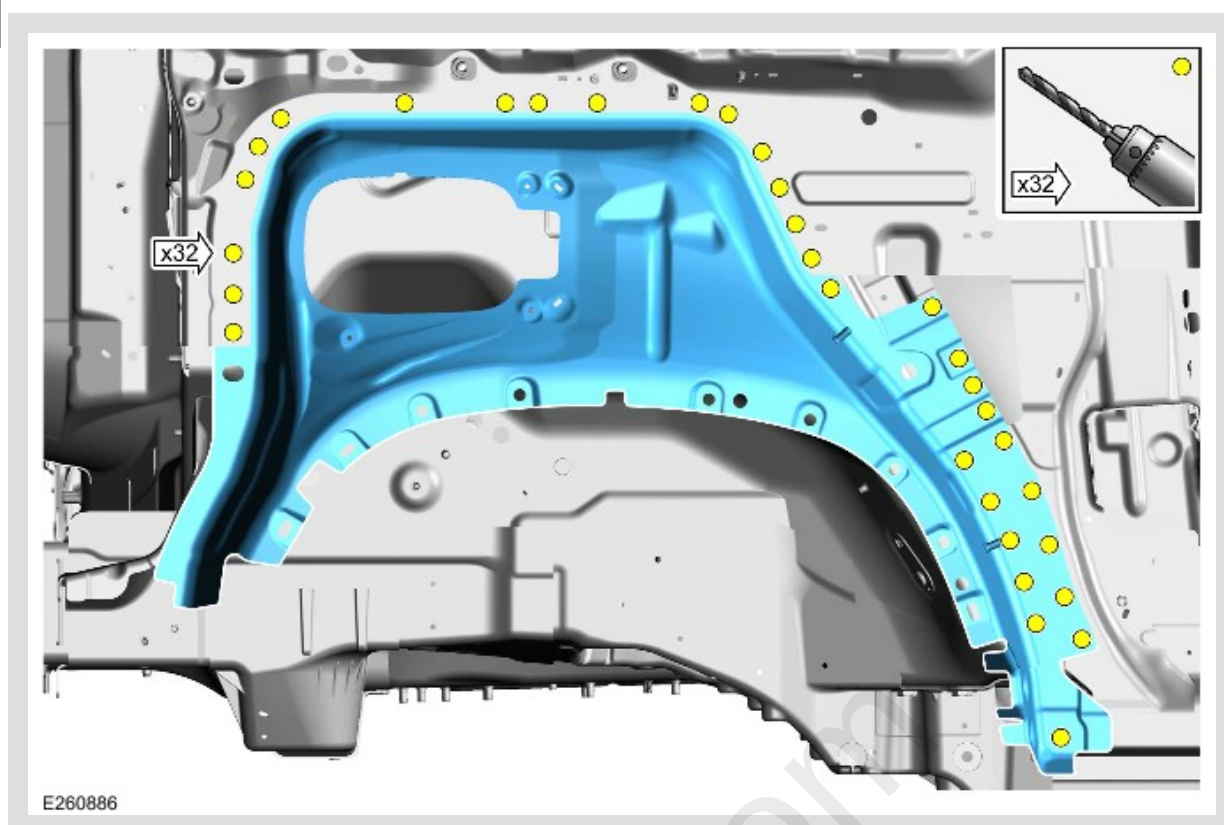
⚠ CAUTION:

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 rear wheelhouse outer and clamp into position. Check alignment, if correct proceed to next step, if not rectify and check the alignment again before proceeding.

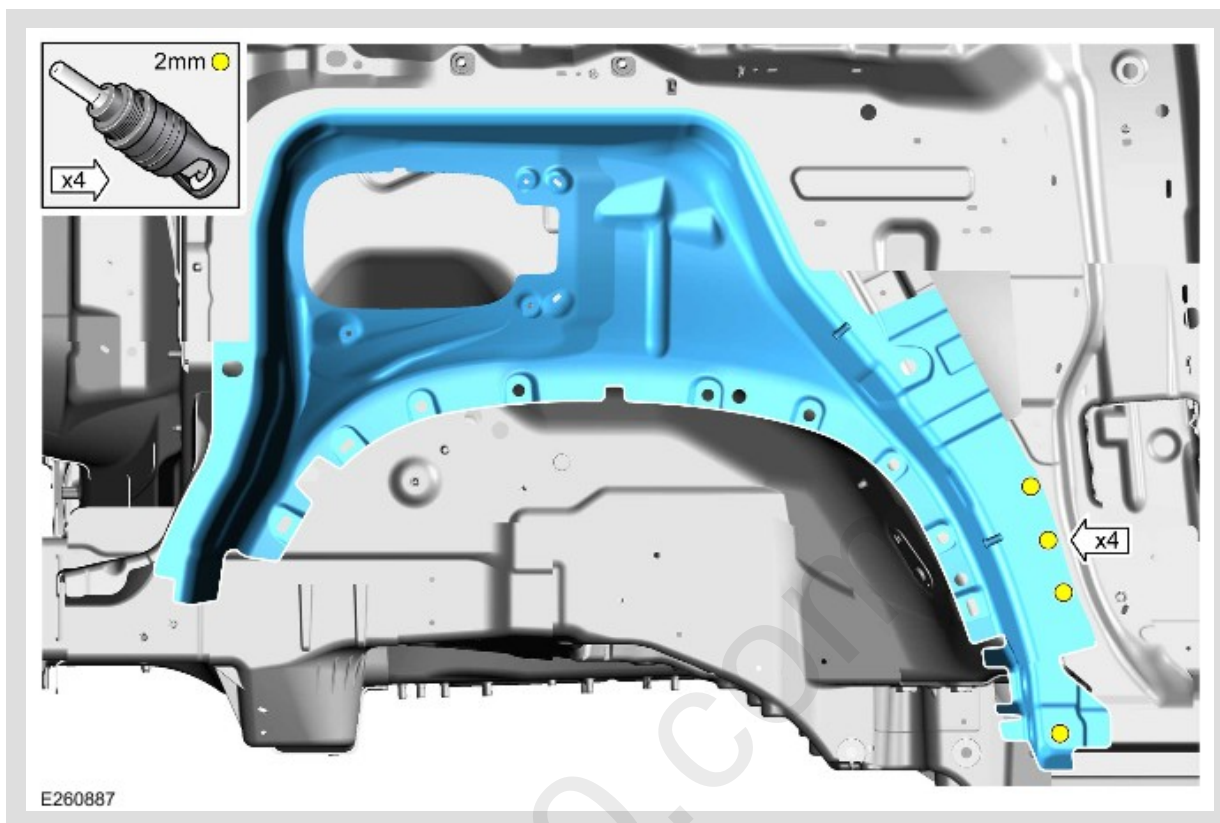


Drill holes where the Breakstem Fasteners (BSFs) are to be installed as indicated.

5.

 NOTE:

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



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

6. Remove the new rear wheelhouse outer.

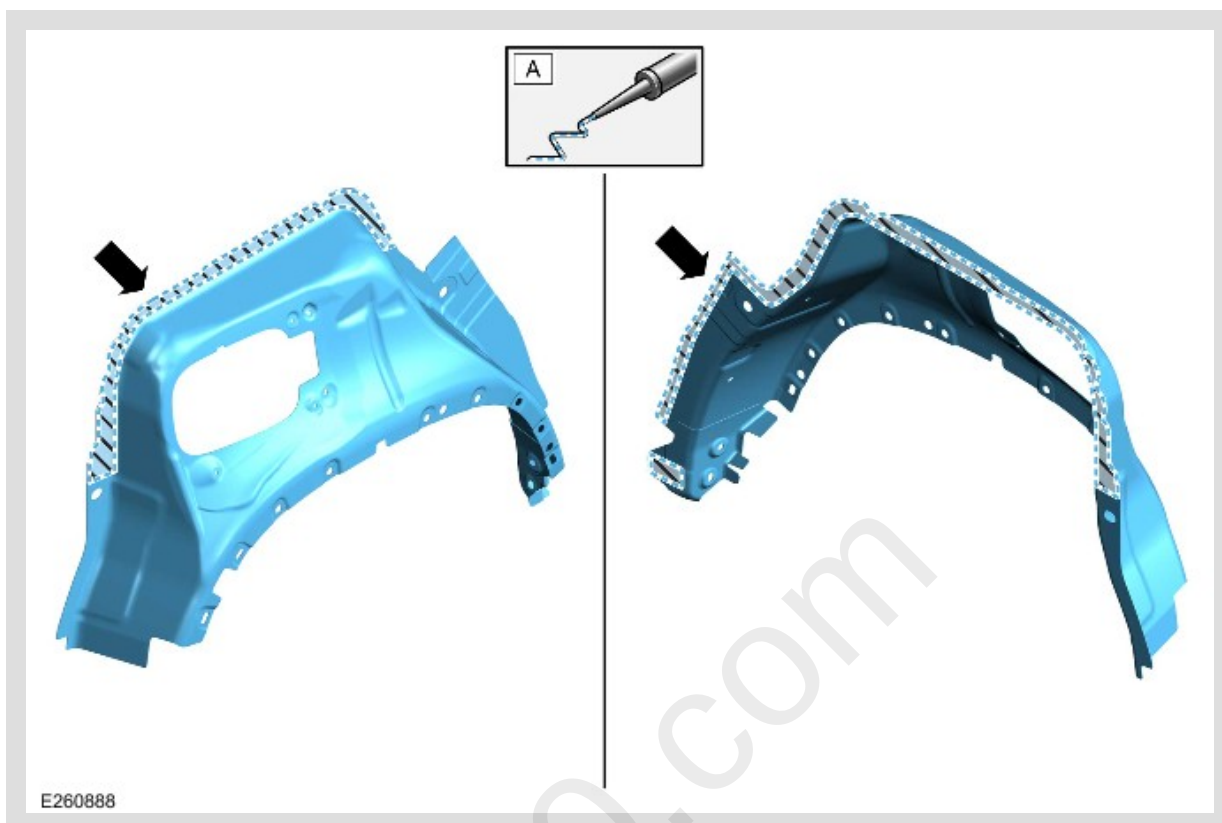
7. Deburr the drilled holes.

8. Clean and prepare the panel surfaces.

9.

NOTE:

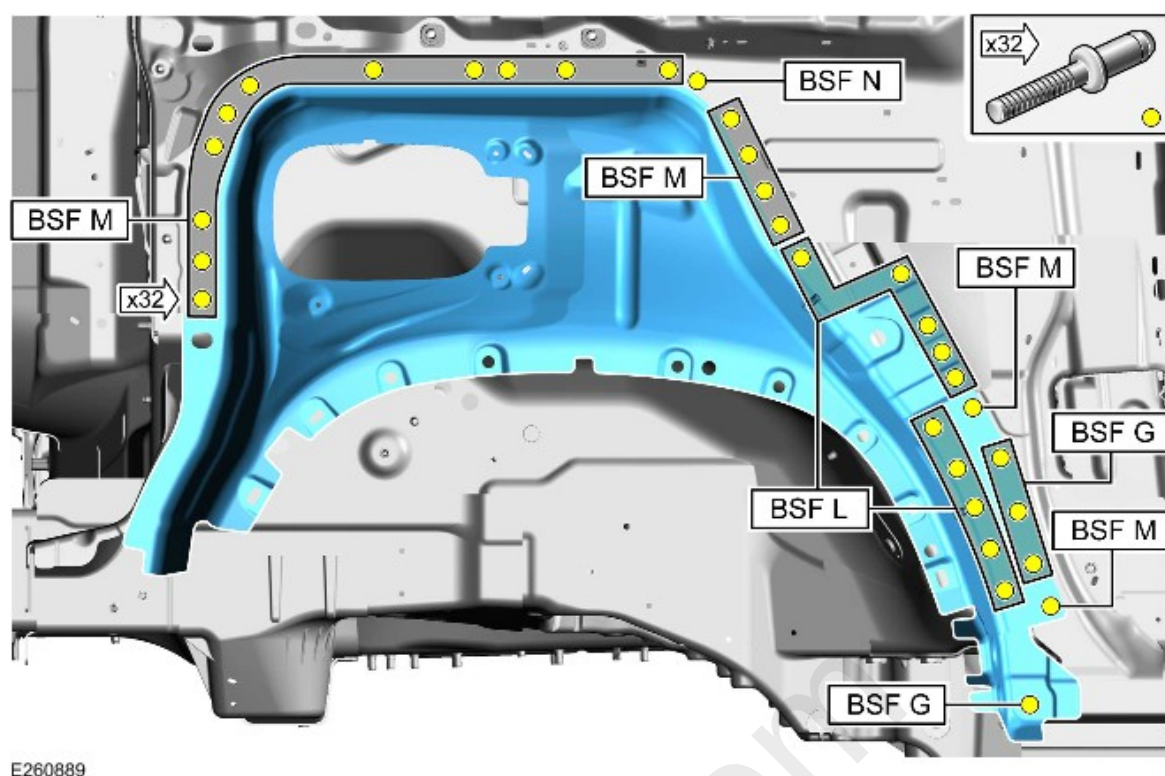
Make sure a continuous bead of adhesive surrounds the fixing holes.



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

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

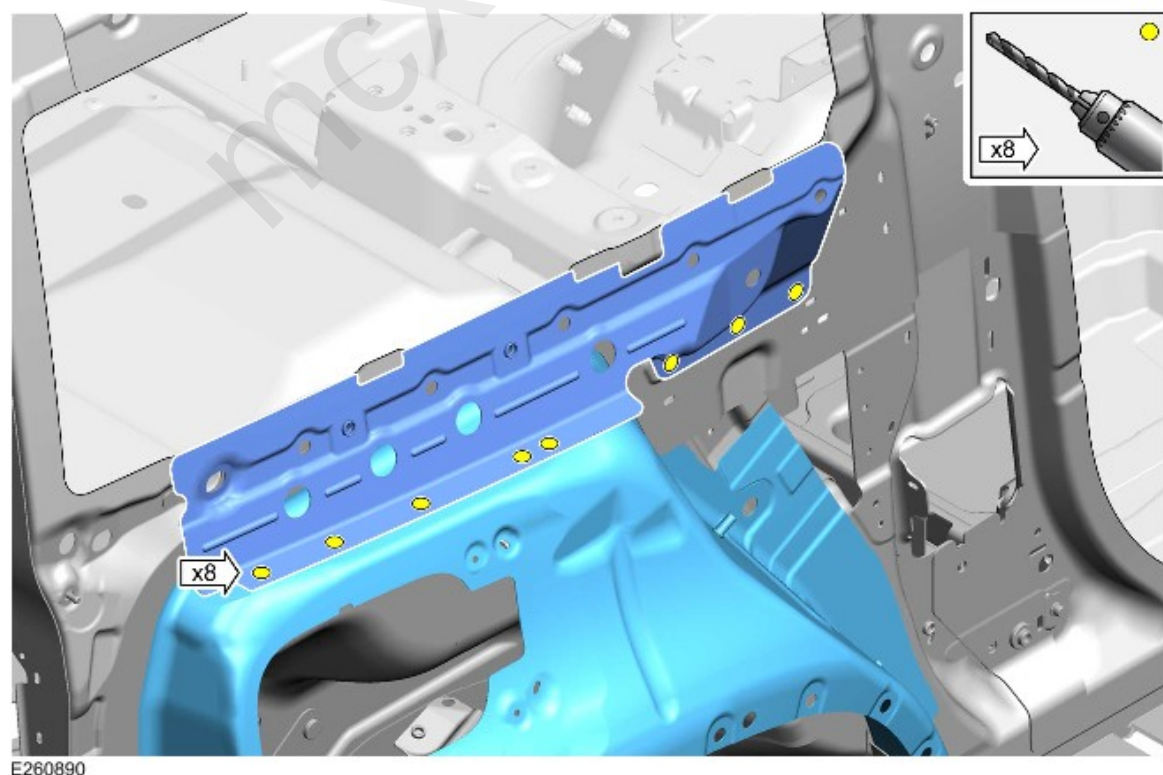
11.



Install the BSFs as indicated.

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

13.



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

14. Remove the new quarter panel reinforcement.

15. Deburr the drilled holes.

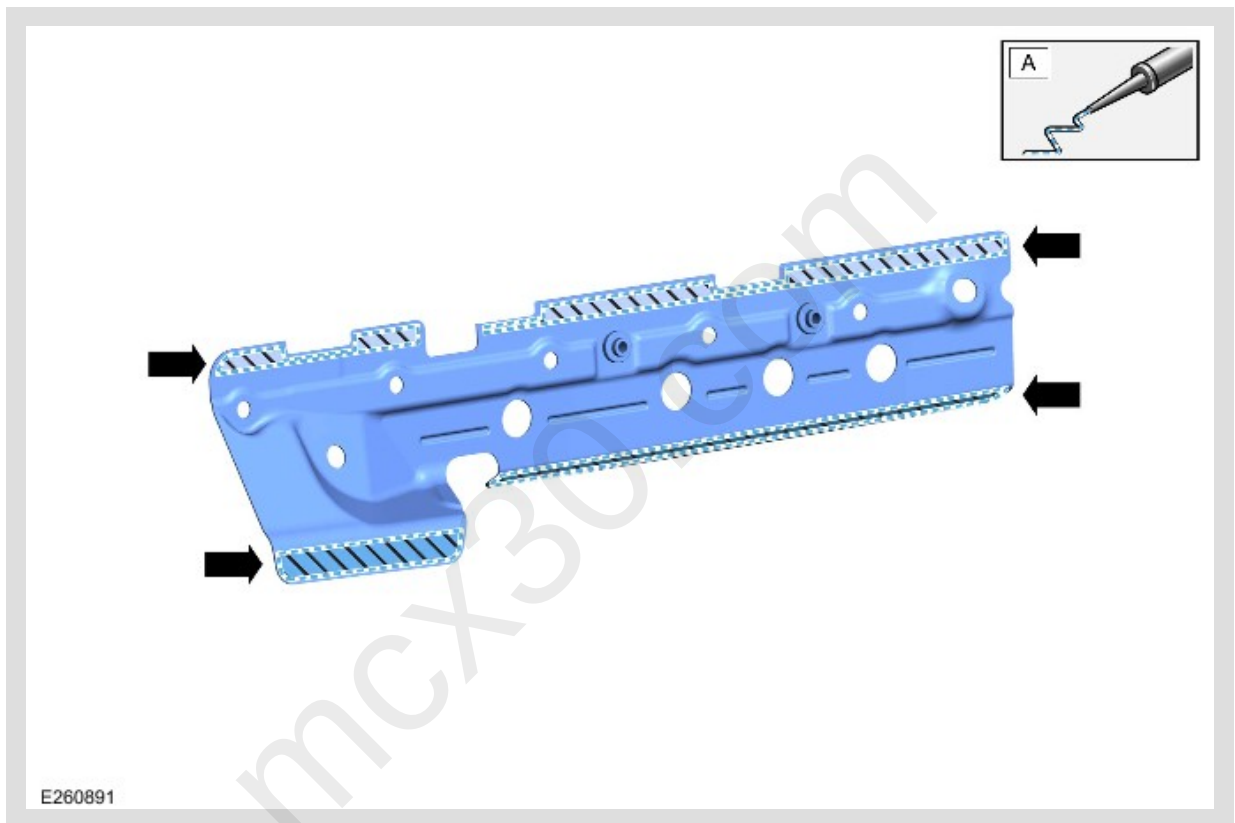
16. Clean and prepare the panel surfaces.

17.



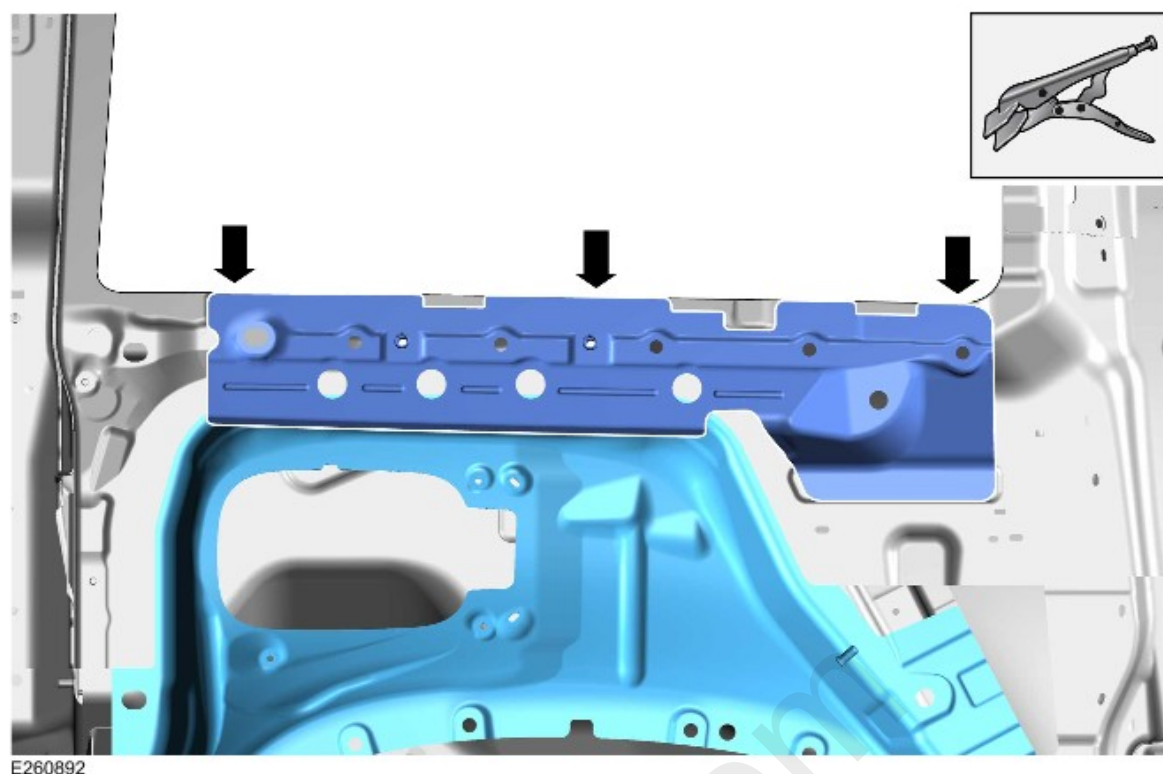
NOTE:

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



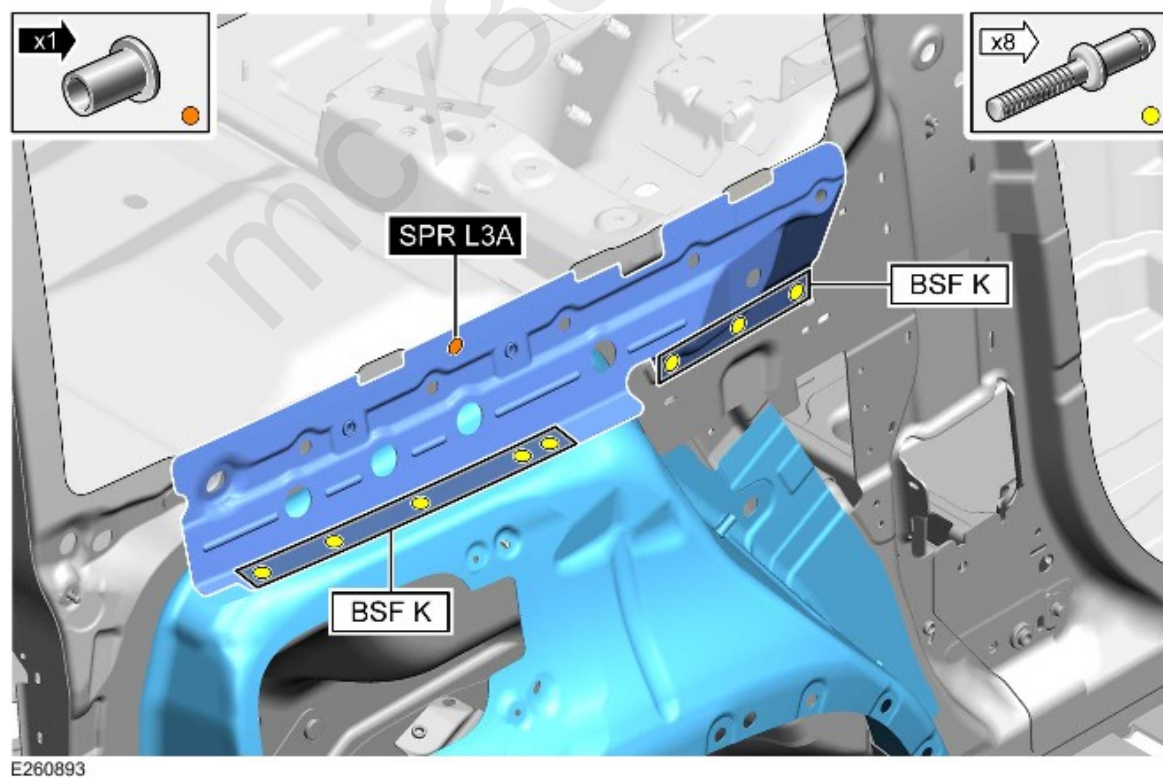
Apply a 5 mm zig zag bead of the JLR recommended bonding material as indicated.

18.



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

19.



Install the Self Piercing Rivet (SPR) and BSFs as indicated.

20. Remove any excess adhesive.

21. Make sure that all SPRs and BSFs are sealed using a JLR recommended sealer.

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

23. 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.

24. For additional installation information

Refer to: [B-Pillar Reinforcement - 90](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

25. For additional installation information

Refer to: [Rocker Panel Reinforcement - 90](#) (501-29 Side Panel Sheet Metal Repairs, Removal and Installation).

26. For additional installation information

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

27. For additional installation information

Refer to: [Tailgate Reinforcement Right Side - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

Refer to: [Tailgate Reinforcement Left Side - 90](#) (501-30 Rear End Sheet Metal Repairs, Removal and Installation).