

PUBLISHED: 16-JUN-2020  
2020.0 DEFENDER (LE), 501-29

SIDE PANEL SHEET METAL REPAIRS

## ROCKER PANEL SECTION - 90 (G2452612)

mcx30.com

## REMOVAL

 **NOTE:**

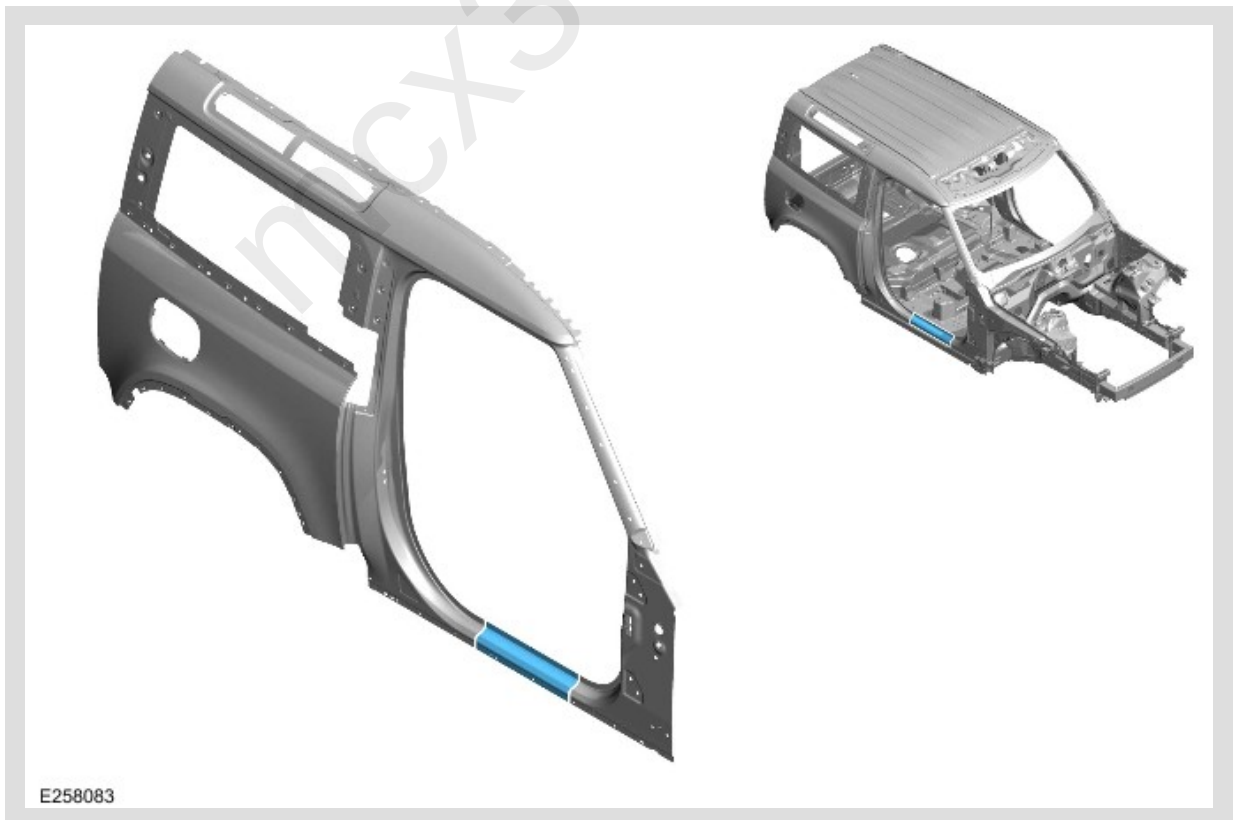
In this procedure the rocker panel section is installed in conjunction with:

- Front row seat
- A-pillar lower trim panel
- Rocker panel
- Side steps.

1.

 **NOTE:**

The rocker panel section is serviced as part of the side panel.



The side 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).

#### 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.

3. When installing the rocker panel section 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](#) (501-29 Side Panel Sheet Metal Repairs, Specifications).

5. For additional removal information  
Refer to: [Front Row Seat - Vehicles With: Power Seats](#) (501-10 Seating, Removal and Installation).  
Refer to: [Front Row Seat - Vehicles Without: Power Seats](#) (501-10 Seating, Removal and Installation).

6. For additional removal information  
Refer to: [A-Pillar Lower Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).

7. For additional removal information.  
Refer to: [Rocker Panel](#) (501-08 Exterior Trim and Ornamentation, Removal and Installation).

8. For additional removal information  
Refer to: [Fixed Side Steps and Side Tubes - Part number: 90: VPLEP0433, VPLEP0391, 110: VPLEP0434, VPLEP0392](#) (102-03 Exterior, Removal and Installation).  
Refer to: [Deployable Side Steps - Part number: 110: VPLEP0393, VPLEP0394, VPLEP0422](#), (102-03 Exterior, Removal and Installation).

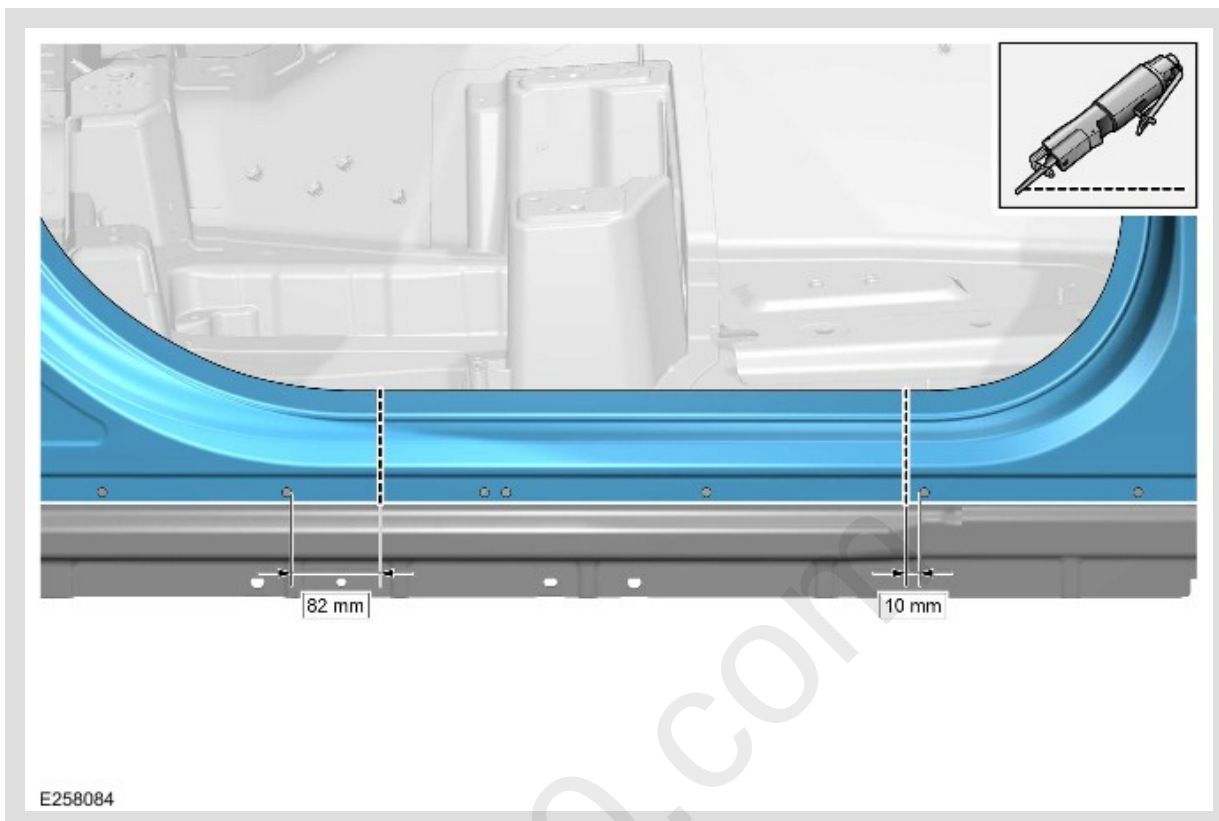
9. Release and position the floor carpet to one side.

10. Release and position the floor Noise, Vibration and Harshness (NVH) material to one side.

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

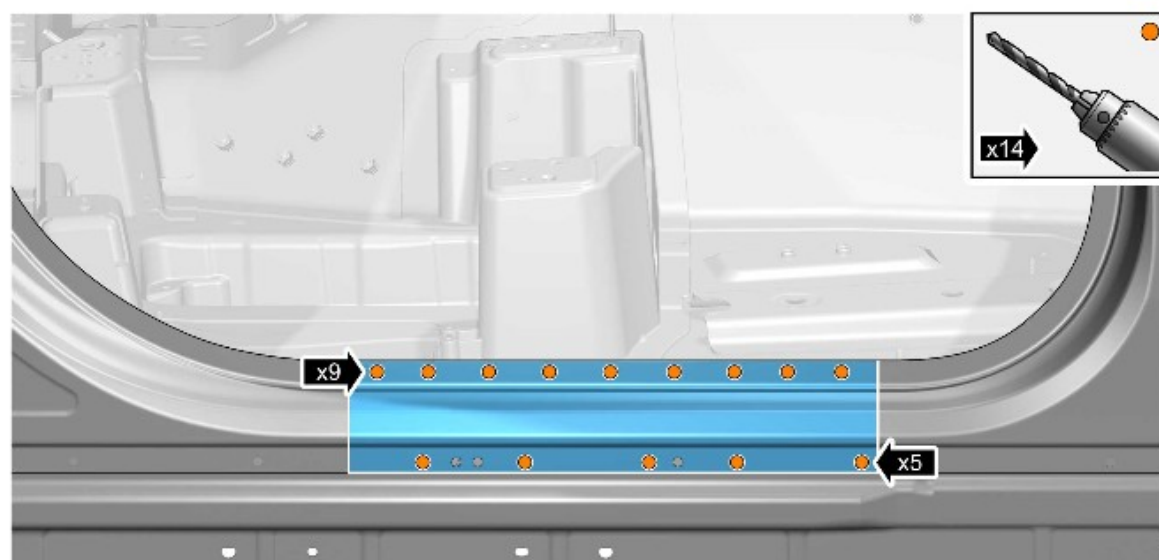
**⚠ CAUTION:**

Care should be taken not to cut through into the inner reinforcements.



Measure, mark and cut the rocker panel, where the Metal Inert Gas (MIG) welded butt joints are to be made as indicated.

13.



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Remove the self piercing rivets as indicated.

14. Carefully separate the joints and remove the rocker panel section.

## INSTALLATION

### ⚠ CAUTION:

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

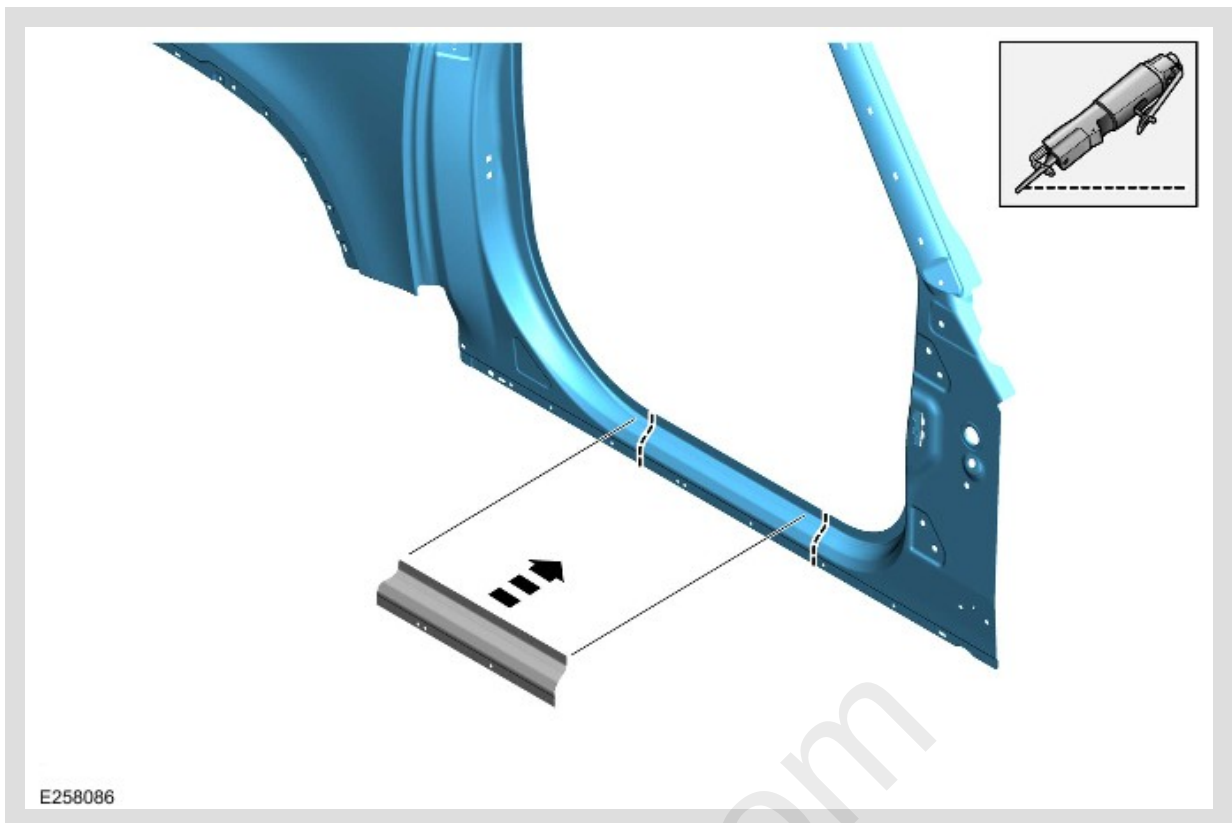
### △ NOTES:

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

1. Remove the rivet remnants.

2. Dress the flanges where necessary.

3.



Use the old rocker panel section for reference. Measure, mark and cut the new side panel, where the MIG welded butt joints are to be made as indicated.

4.

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

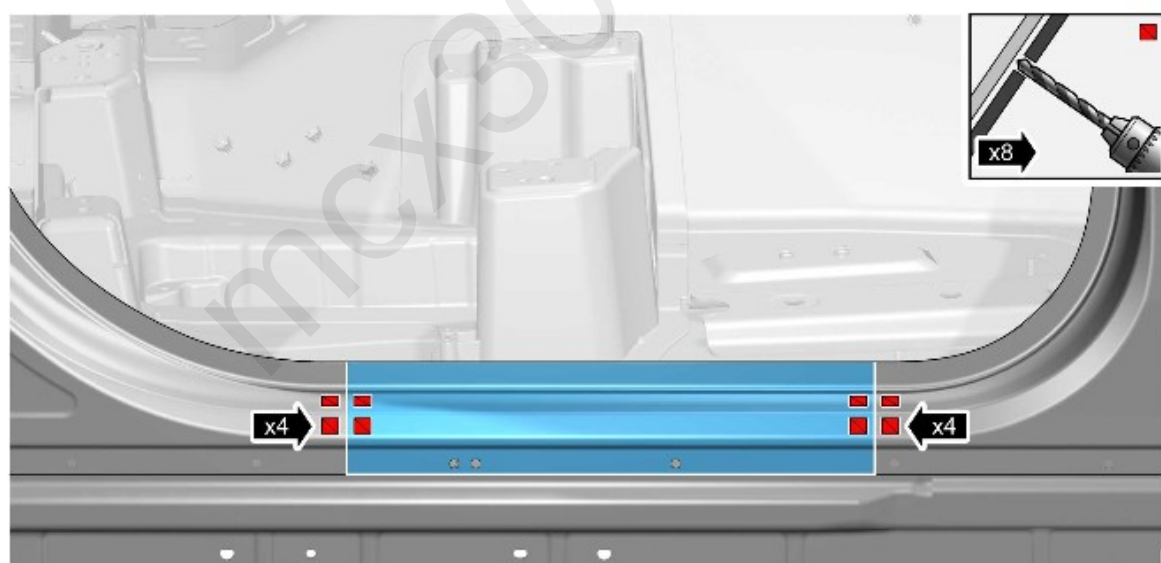
5.



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

6.



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Drill holes where the backing plates are to be installed as indicated.

7.

Remove the new rocker panel section.

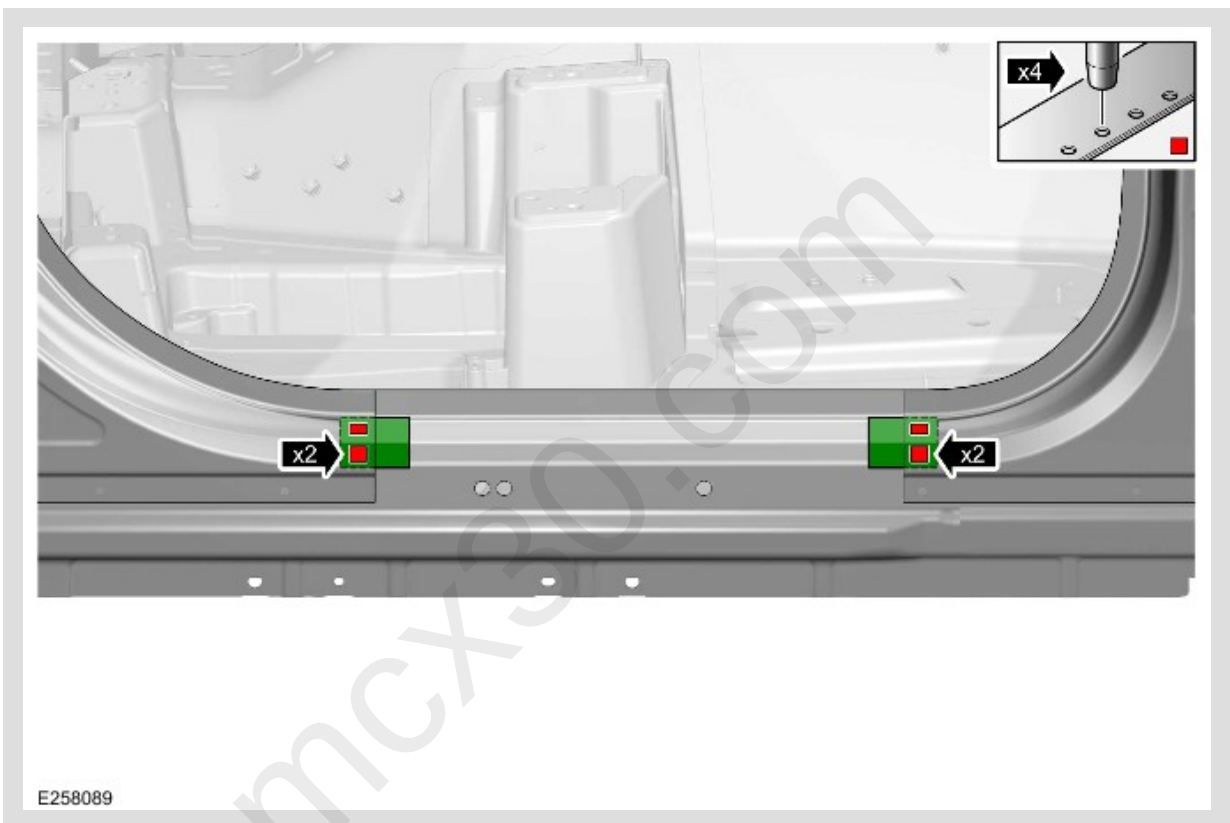
8. Deburr the drilled holes.

9. Measure and cut 2 backing plates 50 mm wide, 25 mm each side of the MIG welded butt joint from the rocker panel section remnant.

10. Cut 2 run on/run off tabs from the rocker panel section remnant.

11. Clean and prepare the panel surfaces.

12.

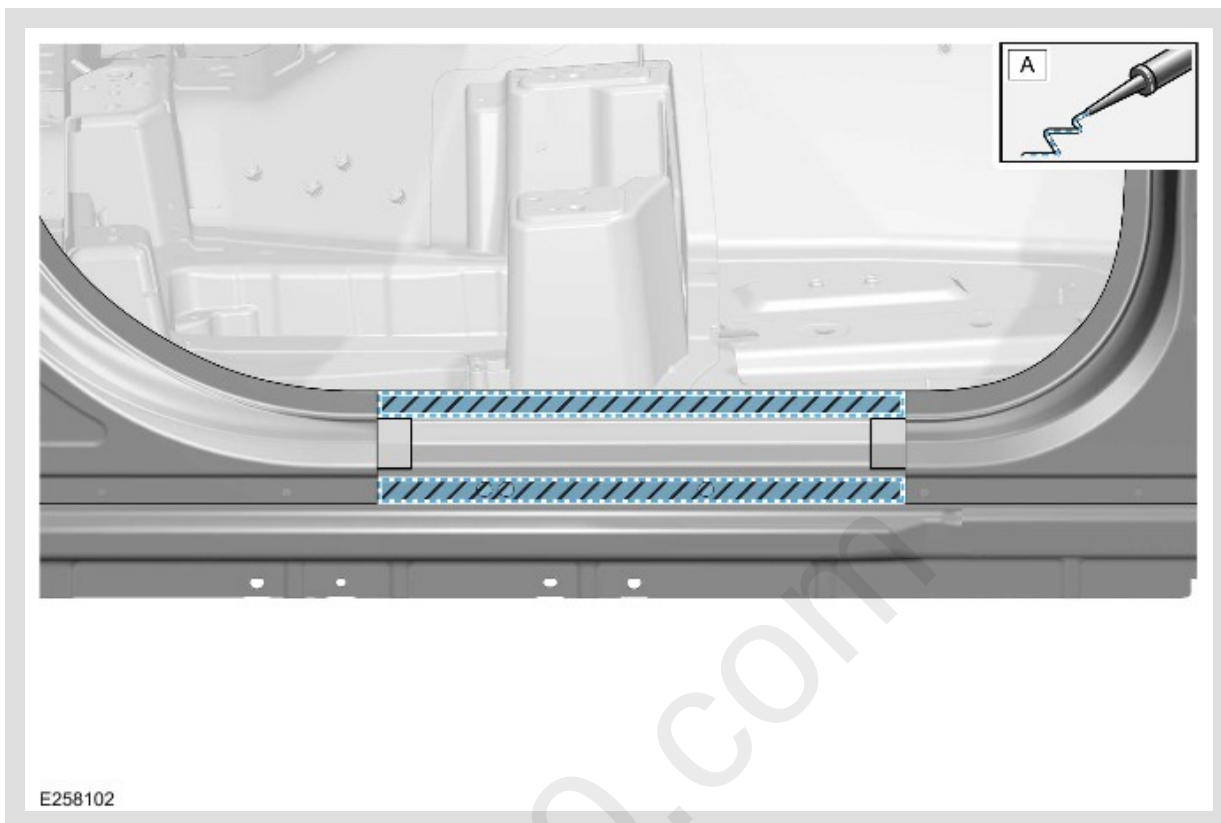


Install and MIG plug weld the backing plates as indicated.

13.

 **NOTE:**

Make sure a continuous bead of adhesive surrounds fixing holes.

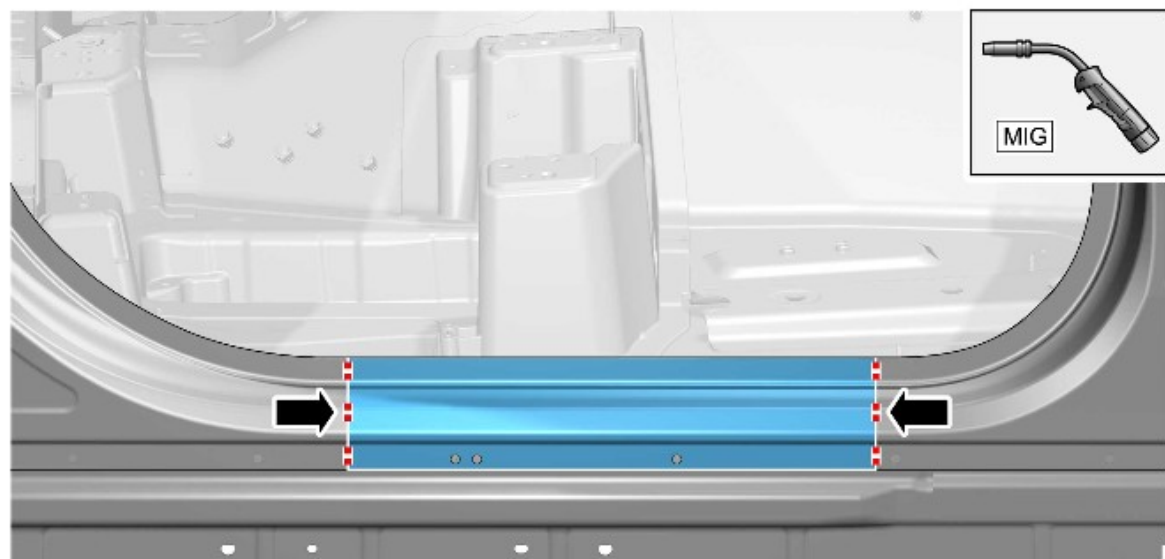


Apply a 5 mm zig zag bead of the JLR recommended bonding material as indicated.

14.

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

15.



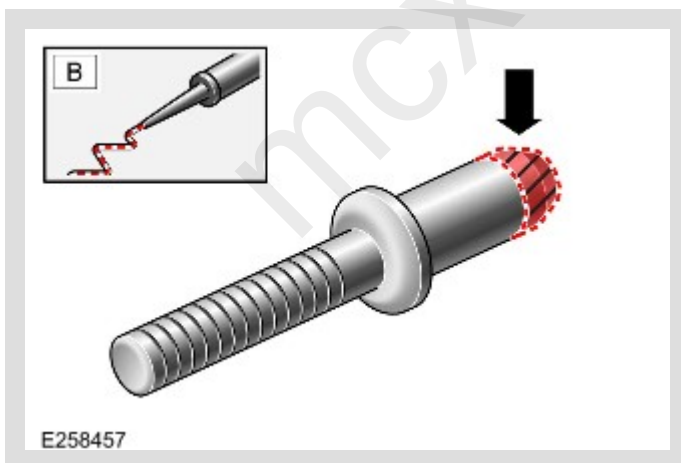
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Tack MIG weld the butt joints as indicated.

16.

**NOTE:**

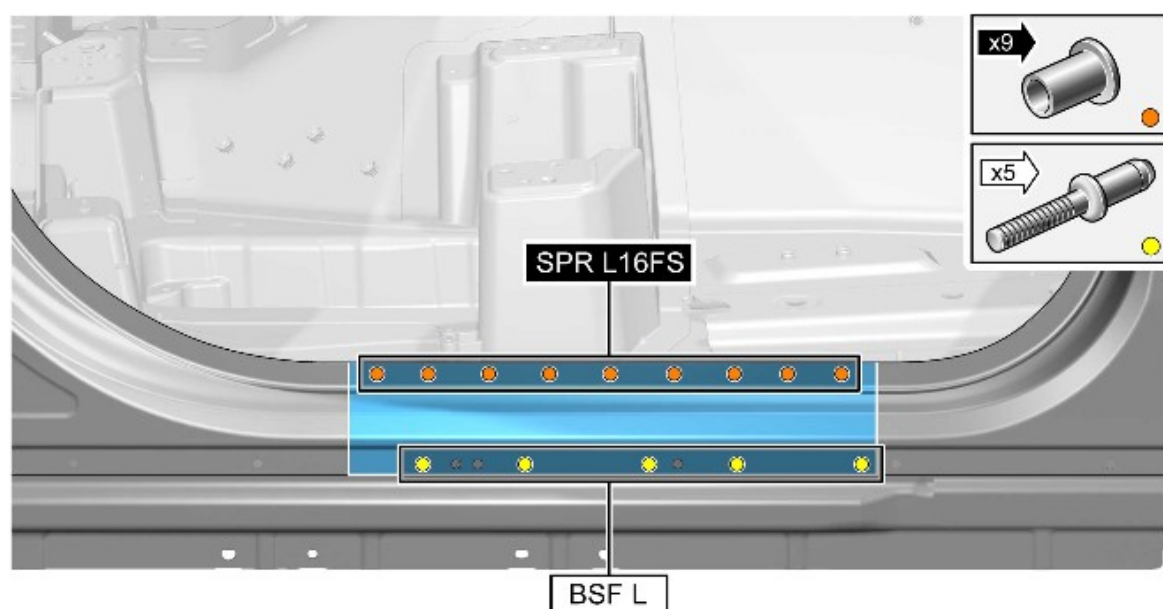
When installing Breakstem Fasteners (BSFs) into the rocker panel.



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Apply a small amount of JLR recommended flexible sealant to the BSFs before installation as indicated.

17.



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Install the Self Piercing Rivets (SPRs) and BSFs as indicated.

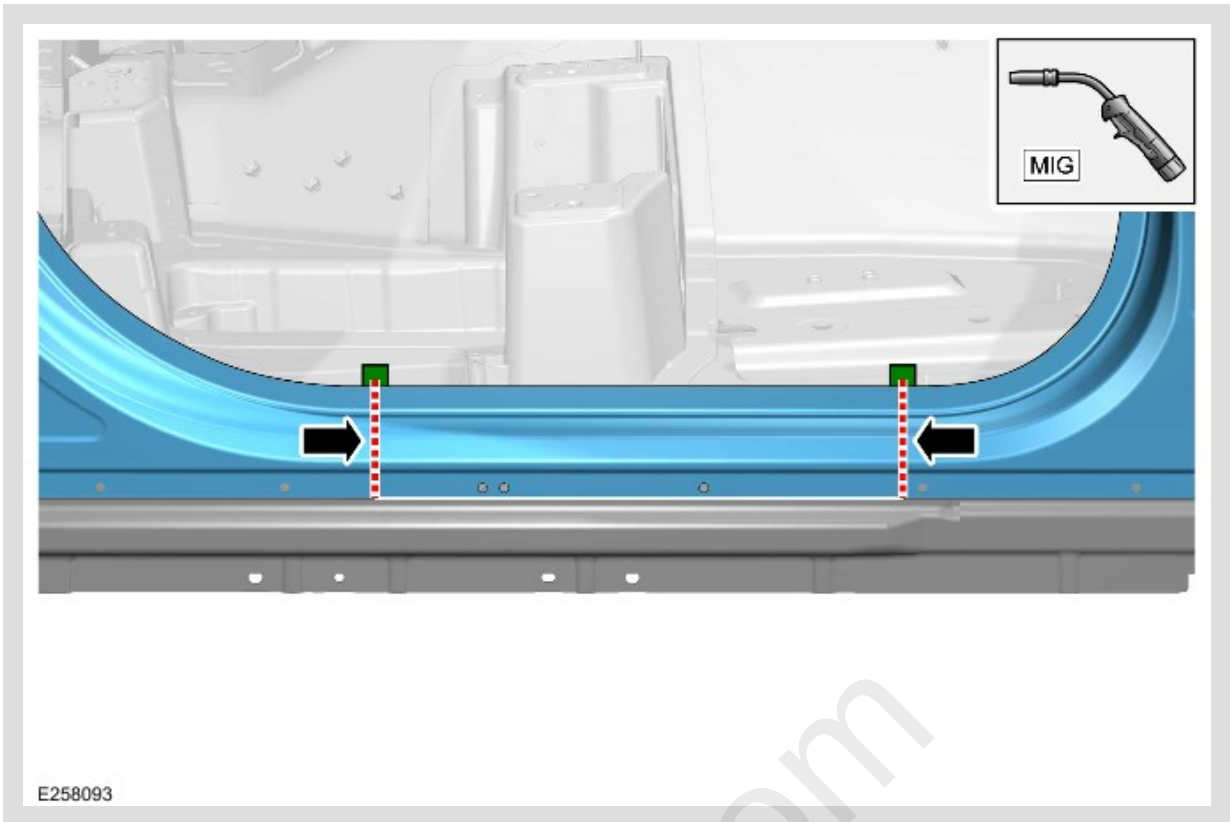
18.



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MIG plug weld the backing plates as indicated.

19.



Install the run on/run off tabs and MIG weld the butt joints as indicated.

20. Dress all welds.

21. Remove any excess adhesive.

22. Remove the run on/run off tabs.

23. Complete a non-destructive crack inspection on the MIG welded butt joints. If correct proceed to next step, if not, rectify and check again before proceeding.

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

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

26. 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.

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27. For additional installation information

Refer to: [Fixed Side Steps and Side Tubes - Part number: 90: VPLEP0433, VPLEP0391, 110: VPLEP0434, VPLEP0392](#) (102-03 Exterior, Removal and Installation).

Refer to: [Deployable Side Steps - Part number: 110: VPLEP0393, VPLEP0394, VPLEP0422](#), (102-03 Exterior, Removal and Installation).

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28. For additional installation information

Refer to: [Rocker Panel](#) (501-08 Exterior Trim and Ornamentation, Removal and Installation).

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29. For additional installation information

Refer to: [A-Pillar Lower Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).

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30. For additional installation information

Refer to: [Front Row Seat - Vehicles With: Power Seats](#) (501-10 Seating, Removal and Installation).

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