

SECTION 501-30 Rear End Sheet Metal Repairs

VEHICLE APPLICATION: 2011.00 Focus

CONTENTS

PAGE

SPECIFICATIONS

Specifications.....	501-30-2
Specifications.....	501-30-3

REMOVAL AND INSTALLATION

Quarter Panel LH — 3-Door.....	501-30-4
Quarter Panel LH — 5-Door.....	501-30-8
Quarter/Side Panel Rear Section LH — 3-Door/5-Door.....	501-30-11
Water Drain Panel — 3-Door/5-Door.....	501-30-13
Water Drain Panel Reinforcement.....	501-30-14
Rear Wheelhouse Outer — 3-Door.....	501-30-15
Rear Wheelhouse Outer — 5-Door.....	501-30-18
Back Panel — 3-Door/5-Door.....	501-30-21
Rear Floor Panel.....	501-30-23
Rear Floor Panel — 2.5L Duratec-ST (VI5).....	501-30-25
Rear Floor Panel Section.....	501-30-28
Rear Side Member Section.....	501-30-30
Luggage Compartment Bulkhead.....	501-30-31

SPECIFICATIONS**Lubricants, Sealers and Adhesives**

	Part number	Specification
PU glass adhesive (150 ml)	1 102 109	WSK-M11 P57-A1
Metal adhesive kit - 2-component	1 203 241	WSK-M4 G200 A/B

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REMOVAL AND INSTALLATION

Quarter Panel LH — 3-Door

1. Replacement parts

- Quarter panel

Removal

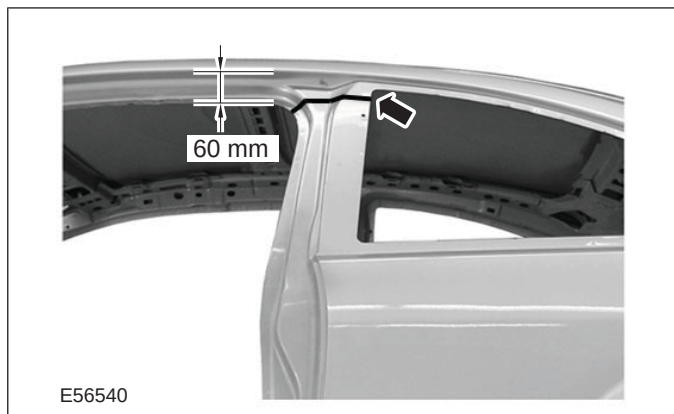
1. General notes

- Necessary removal work: door, weatherstrip, side window, rear seat, wheelhouse trim panel, rear lamp, rear bumper, quarter panel trim.
- Move the carpeting and the wiring away from the working area.
- Depending on the extent of the damage, the forced air extraction gusset should also be replaced.

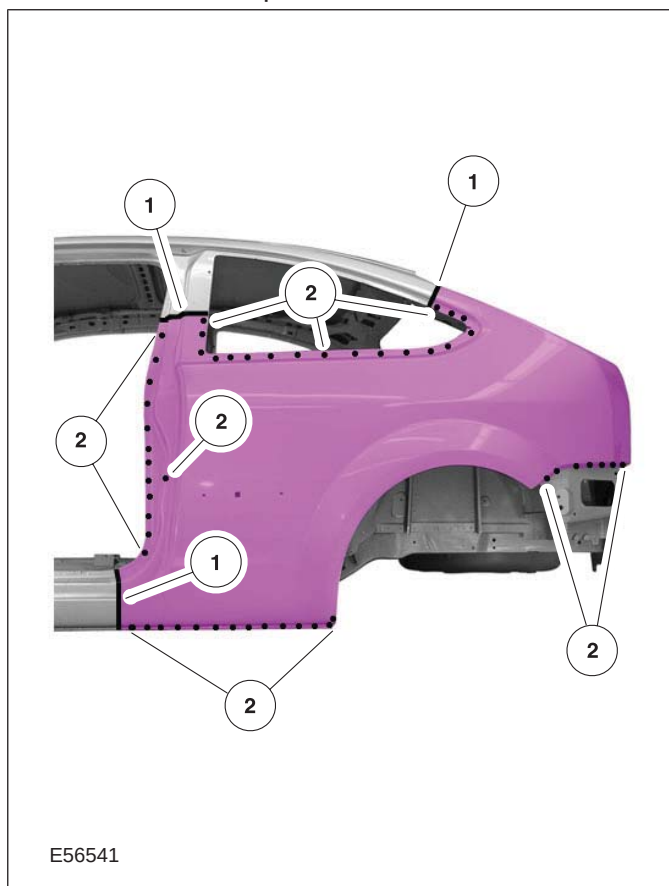
- 2. NOTE:** If the B-pillar is also being renewed, the cut in the area of the upper B-pillar must be made according to dimensions. Otherwise, this cut can be varied according to damage.

Quarter panel (B-pillar)

- Cut point.



2. Mill out the spot welds.



4. Quarter panel

1. Grind down one panel thickness at the wheel arch edge.

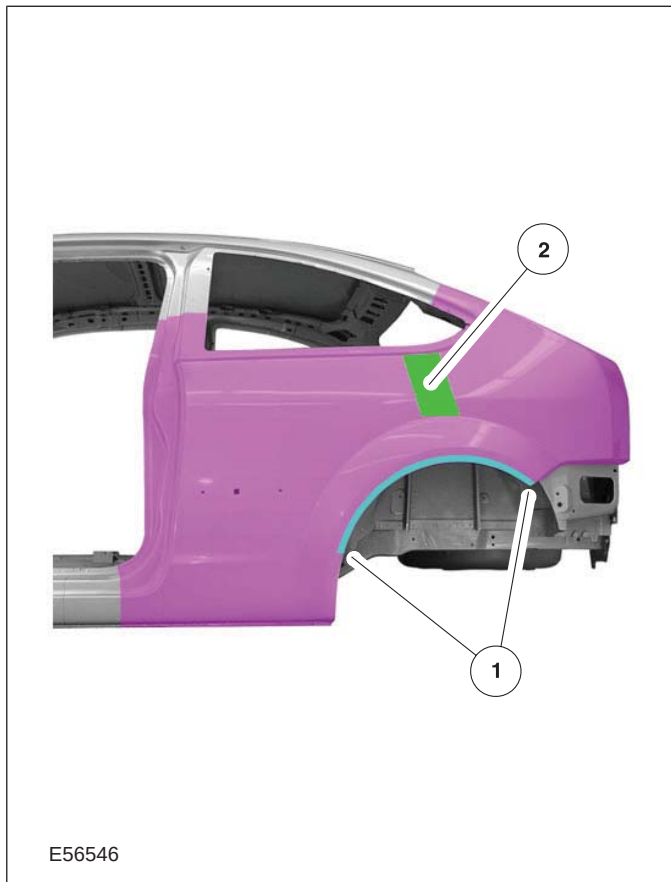
- 3. NOTE:** When making the cut on the rocker panel, bear in mind the length of the replacement part.

Quarter panel

1. Cut locations.

REMOVAL AND INSTALLATION

2. Heat the area (approx. 170°) and detach the NVH element.



5. Quarter panel

- Mill out the spot welds.

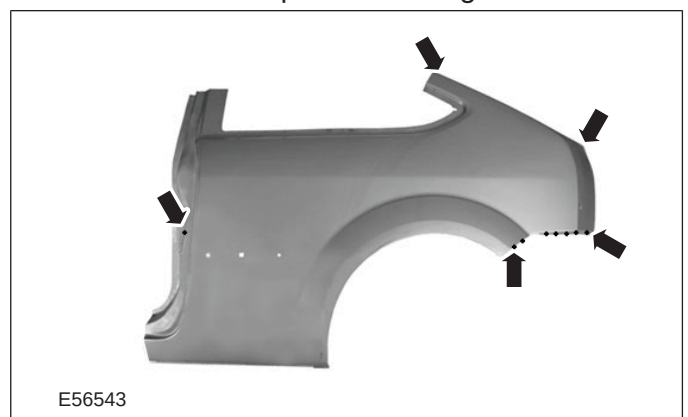


Installation

NOTE: Before resistance spot welding of body panels with a total panel thickness of 3 mm and greater, the welding equipment instructions contained in sub-section 501-25 must be followed.

1. Quarter panel

- Drill holes for puddle welding.



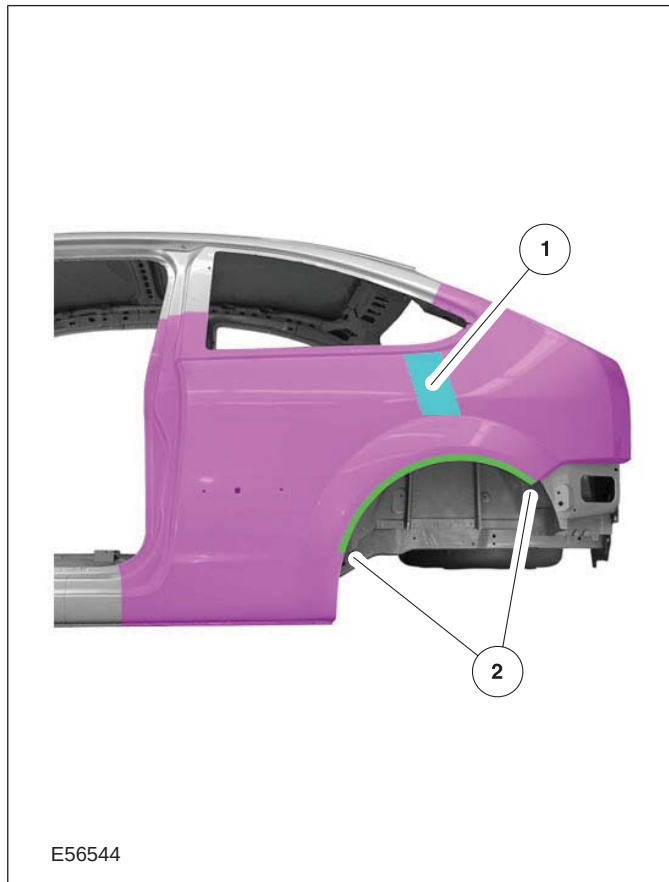
2. **NOTE:** If the forced air extraction gusset is being replaced, it must be welded onto the quarter panel before installation of the quarter panel.

REMOVAL AND INSTALLATION**Forced air extraction gusset**

- Resistance spot weld.



2. Apply two-component metal adhesive to the clinched flange and clinch the wheel arch flange.

**3. Quarter panel**

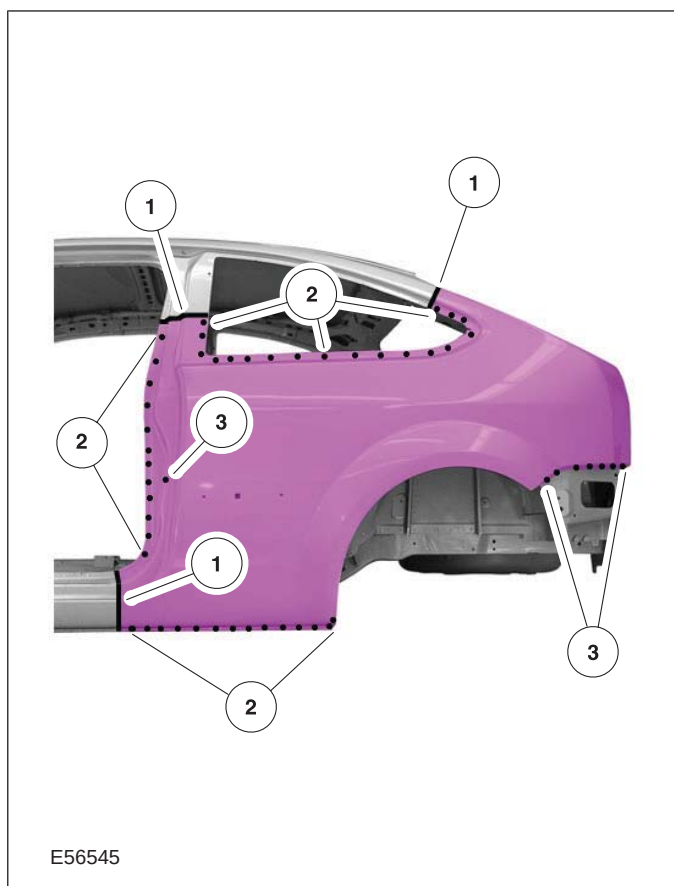
1. Apply PU glass adhesive to the NVH element.

4. Quarter panel

1. Continuous MIG weld.
2. Resistance spot weld.

REMOVAL AND INSTALLATION

3. Puddle weld.



• Puddle weld.



5. Quarter panel

REMOVAL AND INSTALLATION

Quarter Panel LH — 5-Door

1. Replacement Parts

- Quarter panel

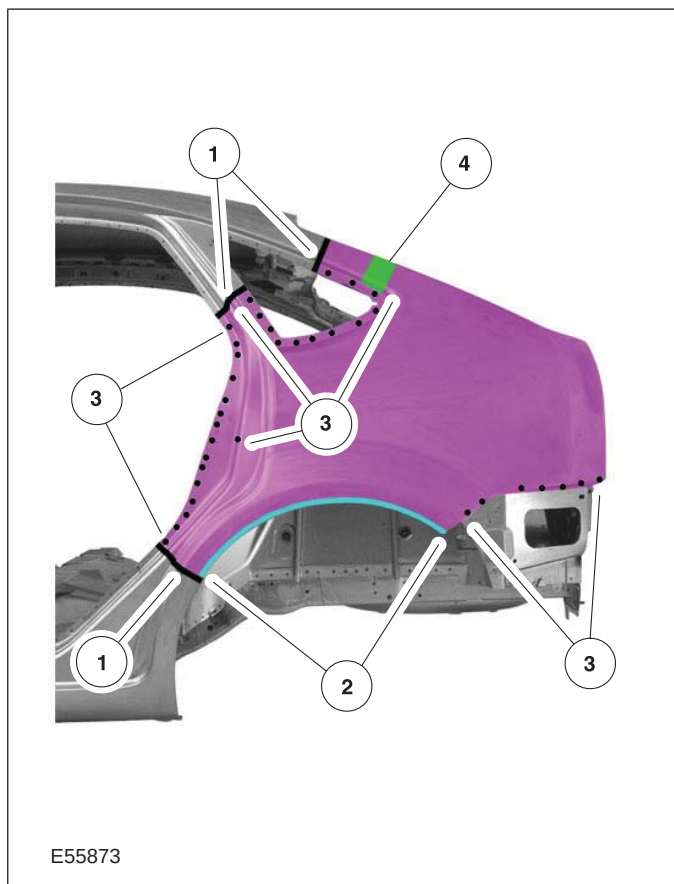
Removal

1. General notes

- Required removal operations: Rear door, weatherstrip, side window, rear seat, wheelhouse trim panel, rear lamp, rear bumper, quarter panel trim.
- Move the carpeting and the wiring away from the working area.
- Depending on the extent of the damage, the forced air extraction gusset should also be replaced.

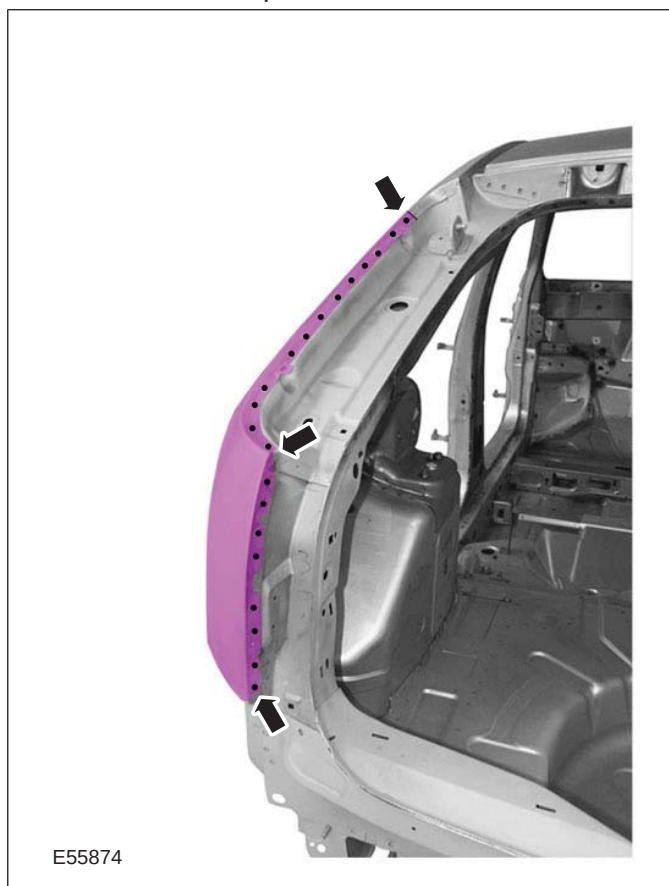
2. Quarter panel

1. Cut locations.
2. Grind down one panel thickness at the wheel arch edge.
3. Mill out the spot welds.
4. Heat the areas (approx. 170°) and detach the NVH elements.



3. Quarter panel

- Mill out the spot welds.

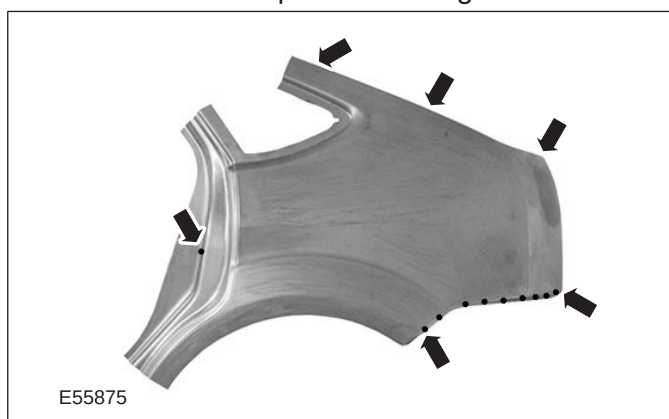


Installation

NOTE: Before resistance spot welding of body panels with a total panel thickness of 3 mm and greater, the welding equipment instructions contained in sub-section 501-25 must be followed.

1. Quarter panel

- Drill holes for puddle welding.



2. NOTE: If the forced air extraction gusset is being replaced, it must be welded onto the

REMOVAL AND INSTALLATION

quarter panel before installation of the quarter panel.

Forced air extraction gusset

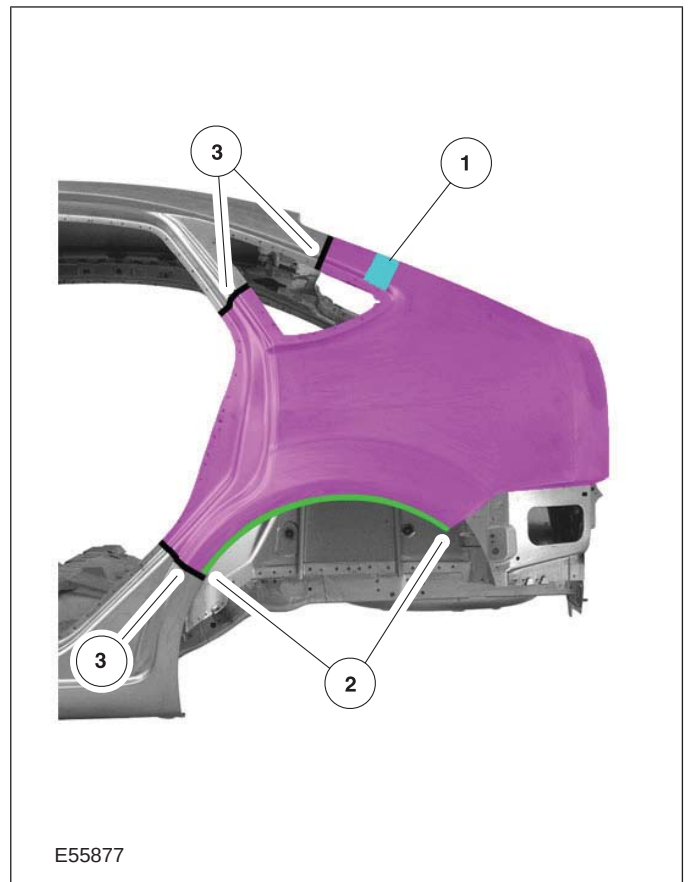
- Resistance spot weld.



3. Quarter panel

1. Apply PU glass adhesive to the NVH elements.
2. Apply two-component metal adhesive to the clinched flange and clinch the wheel arch flange.

3. Continuous MIG weld.

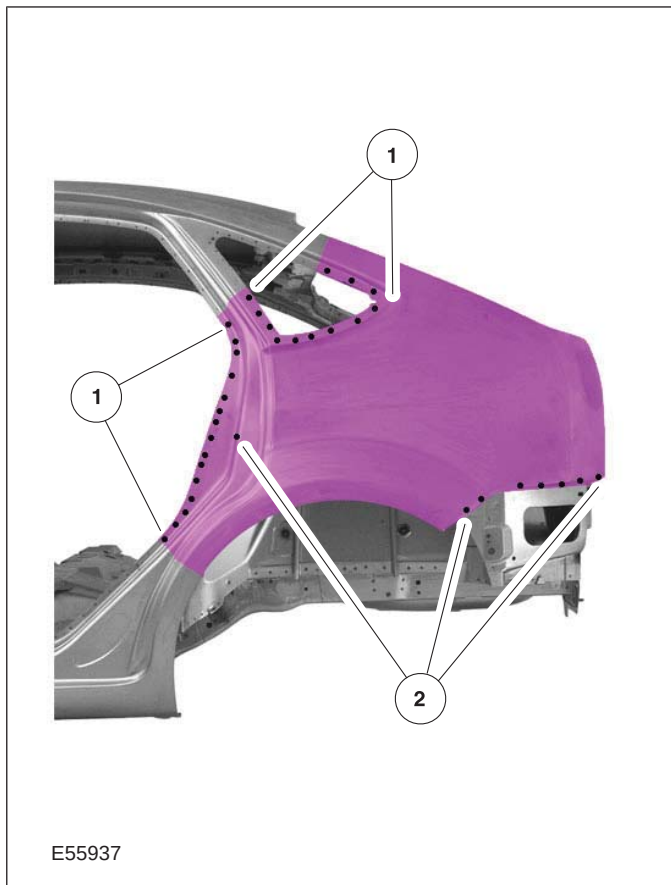


4. Quarter panel

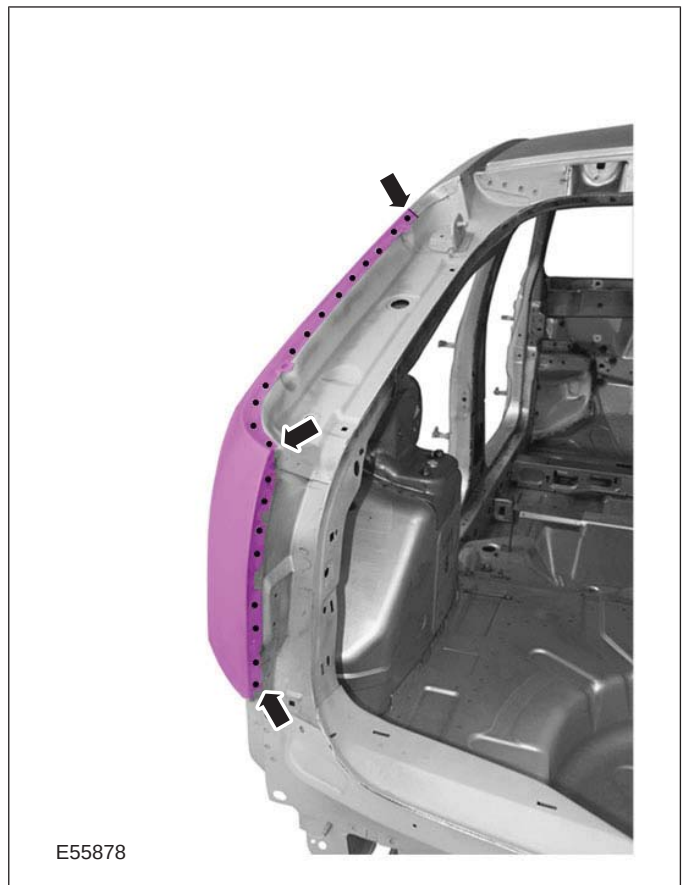
1. Resistance spot weld.

REMOVAL AND INSTALLATION

2. Puddle weld.



• Puddle weld.

**5. Quarter panel**

REMOVAL AND INSTALLATION**Quarter/Side Panel Rear Section LH — 3-Door/5-Door****1. Replacement Parts**

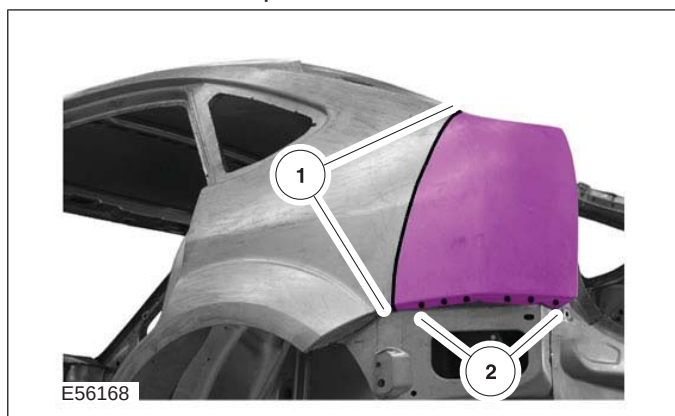
- Repair panel, rear quarter panel

Removal**1. General notes**

- Required removal operations: wheelhouse trim panel, rear lamp, rear bumper, quarter panel trim.
- Move the carpeting and the wiring away from the working area.
- Depending on the extent of the damage, the forced air extraction gusset should also be replaced.

2. Quarter panel

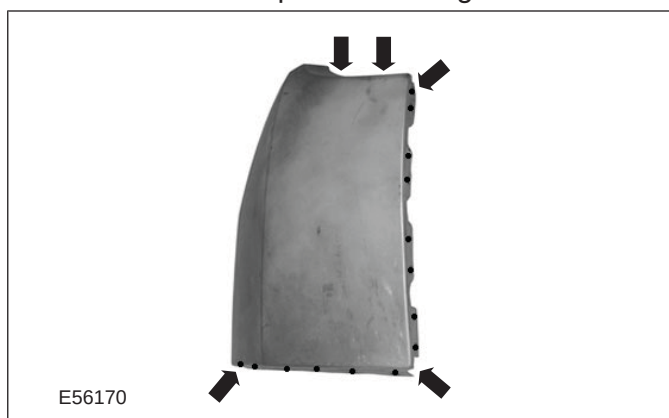
1. Cut point.
2. Mill out the spot welds.

**3. Quarter panel**

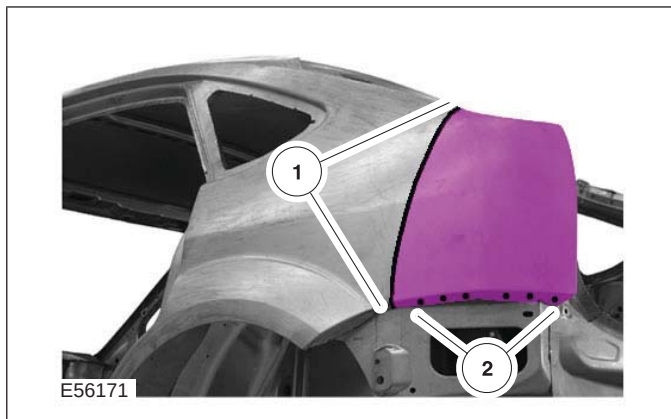
- Mill out the spot welds.

**Installation****1. Quarter panel section**

- Drill holes for puddle welding.

**2. Quarter panel**

1. Continuous MIG weld.

REMOVAL AND INSTALLATION**2. Puddle weld.****3. Quarter panel**

- Puddle weld.



REMOVAL AND INSTALLATION

Water Drain Panel — 3-Door/5-Door

1. Replacement Parts

- Water drain panel

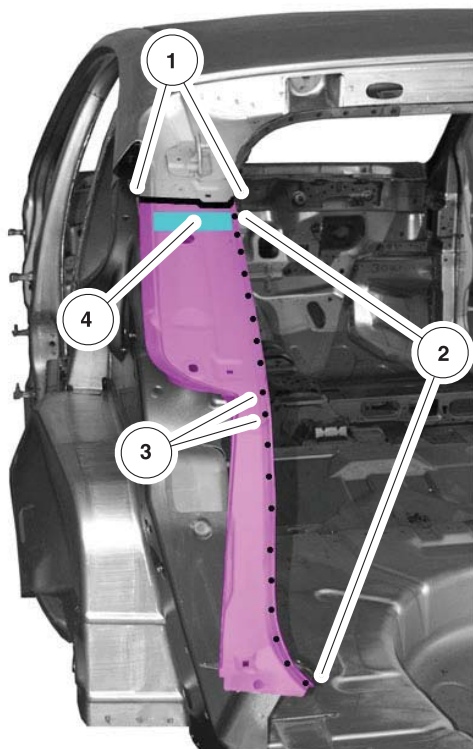
Removal

1. General Notes

- Quarter panel and back panel are already removed before commencing the repair.
- Move carpets and wiring out of the working area.

2. Water drain panel

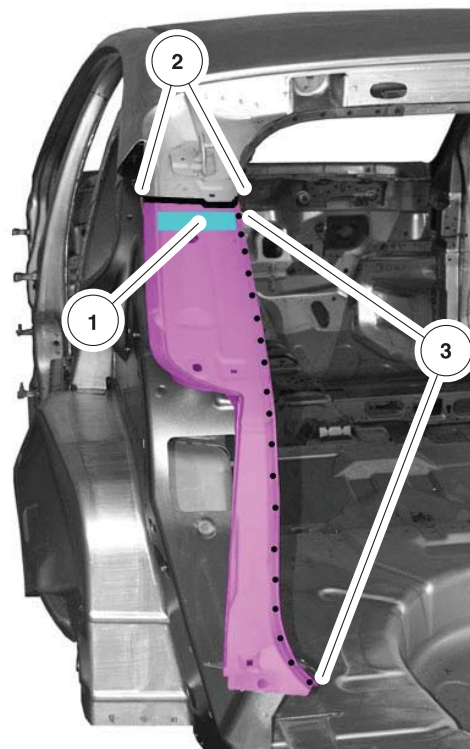
1. Cut location.
2. Grind out the spot welds.
3. Grind out the spot welds (two panel thicknesses).
4. Heat the area (approx. 170°) and detach the NVH element.



E55742

2. Continuous MIG weld.

3. Resistance spot weld.



E55743

Installation

1. Water drain panel

1. Apply PU glass adhesive to the NVH element.

REMOVAL AND INSTALLATION

Water Drain Panel Reinforcement

1. Replacement Parts

- Water drain panel reinforcement

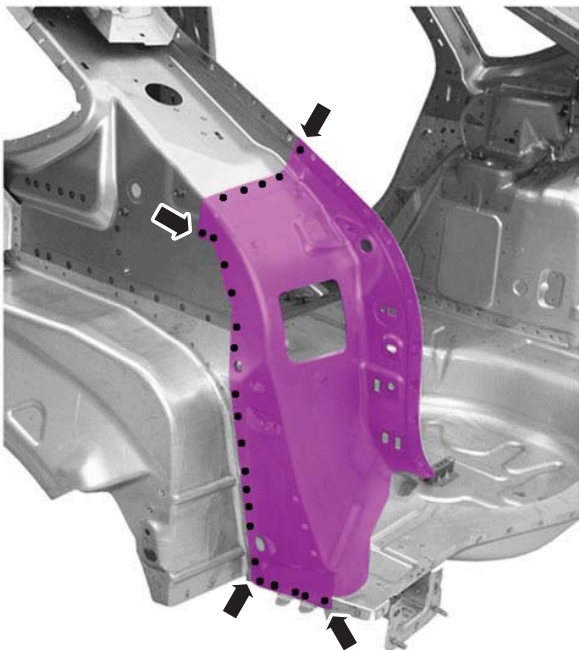
Removal

1. General Notes

- Quarter panel, back panel and water drain panel are already removed before commencing the repair.
- Move carpets and wiring out of the working area.

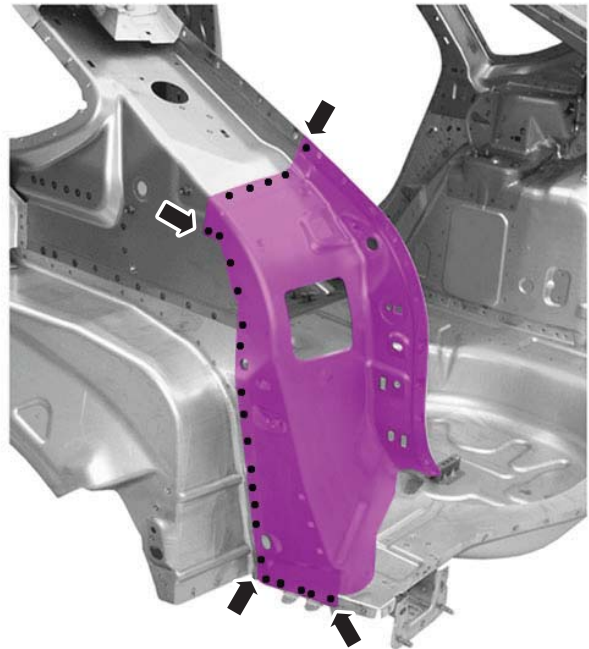
2. Water drain panel reinforcement

- Mill out the spot welds.



E55771

- Resistance spot weld.



E55772

Installation

NOTE: Before resistance spot welding of body panels with a total panel thickness of 3 mm and greater, the welding equipment instructions contained in **sub-section 501-25** must be followed.

1. Water drain panel reinforcement

REMOVAL AND INSTALLATION

Rear Wheelhouse Outer — 3-Door

General Equipment

Measurement and alignment angle system

1. Repair parts

- Outer rear wheelhouse
- C-pillar reinforcement

Removal

1. General Notes

- Back panel, quarter panel and boot water drain panel with reinforcement are already removed before commencing the repair.
- Move carpets and wiring out of the working area.

2. C-pillar reinforcement

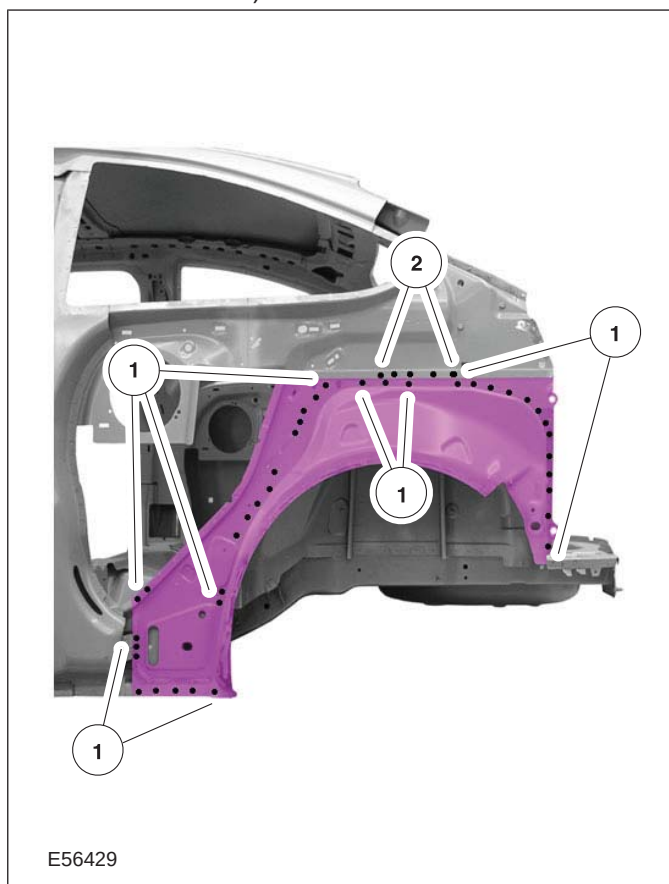
- Mill out the spot welds.



3. Outer rear wheelhouse

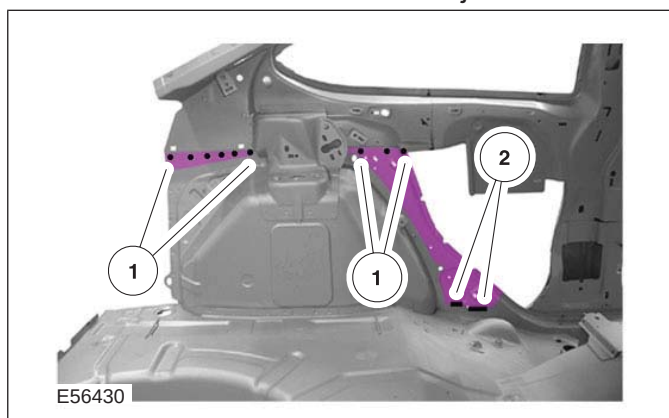
1. Mill out the spot welds.

2. Mill out the spot welds (two panel thicknesses).



4. Inner rear wheelhouse

1. Mill out the spot welds.
2. Grind out the MIG-soldered joints.



5. NOTE:

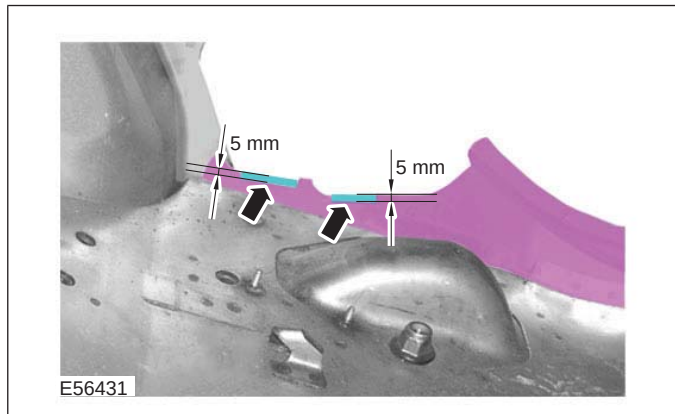
- In order to make a proper MIG welded joint, the MIG soldered areas must be ground back according to the specified dimensions (by approx. 5 mm).

REMOVAL AND INSTALLATION

- When grinding back, it must be ensured that all the residual traces of the MIG soldered joints are completely removed.

Inner rear wheelhouse (MIG-soldered areas)

- Grind back the MIG soldered areas.

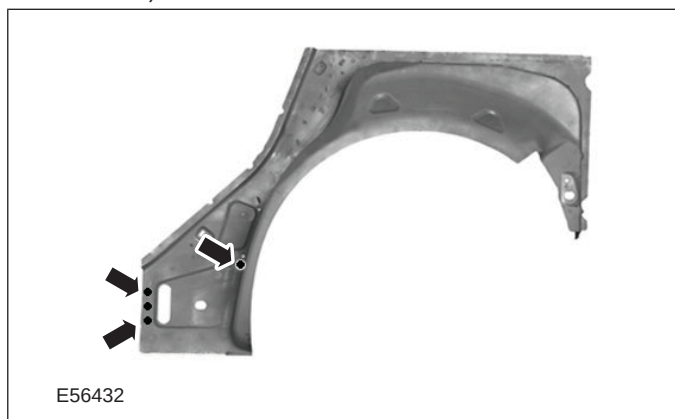


Installation

NOTE: Before resistance spot welding of body panels with a total panel thickness of 3 mm and greater, the welding equipment instructions contained in sub-section 501-25 must be followed.

1. Outer rear wheelhouse

- Drill holes for puddle welding (diameter: 10 mm).

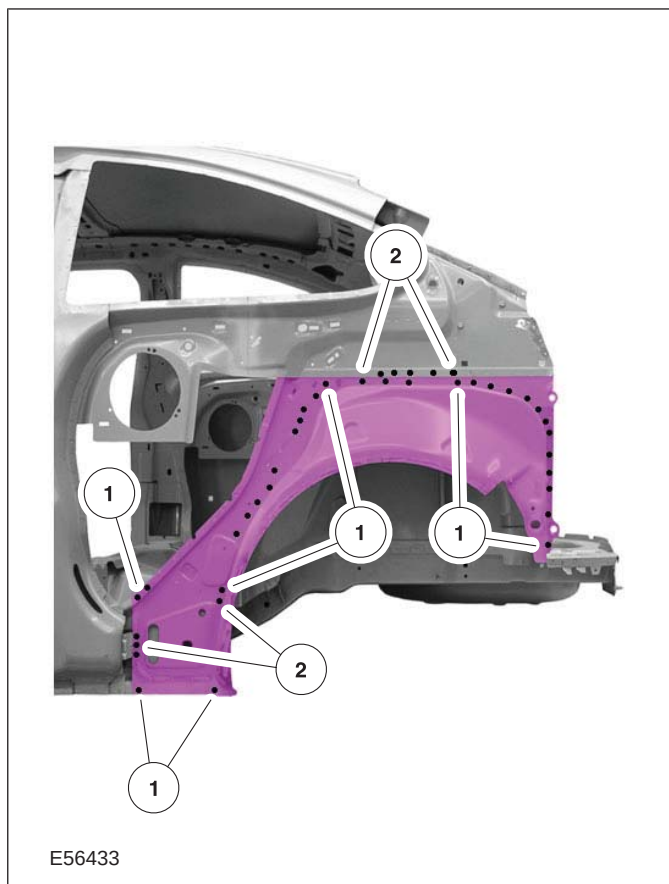


- 2. NOTE:** Drill through one panel thickness at the upper area of outer rear wheelhouse (position 2) through the existing holes in the inner quarter panel before puddle welding.

Outer rear wheelhouse

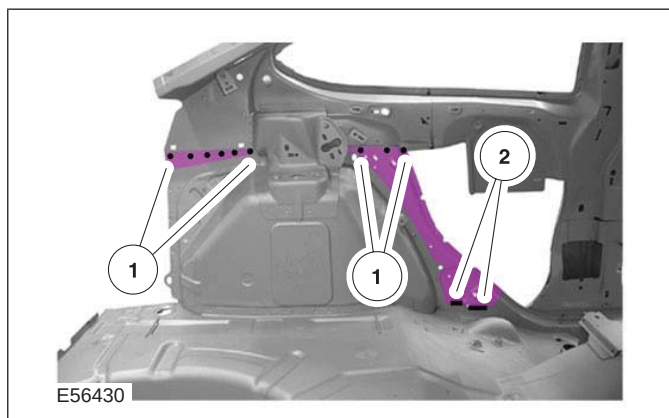
- Resistance spot weld.

2. Puddle weld.



3. Inner rear wheelhouse

- Resistance spot weld.
- Continuous MIG weld.



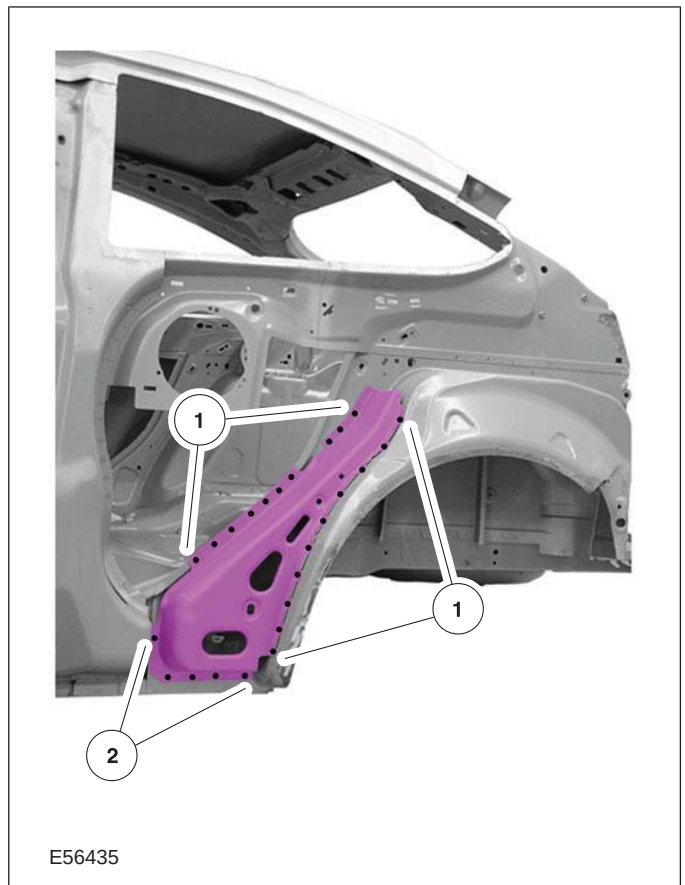
4. C-pillar reinforcement

REMOVAL AND INSTALLATION

- Drill holes for puddle welding (diameter: 10 mm).



2. Puddle weld.

**5. C-pillar reinforcement**

1. Resistance spot weld.

REMOVAL AND INSTALLATION

Rear Wheelhouse Outer — 5-Door

General Equipment

Measurement and alignment angle system

1. Replacement Parts

- Outer rear wheelhouse
- C-pillar reinforcement

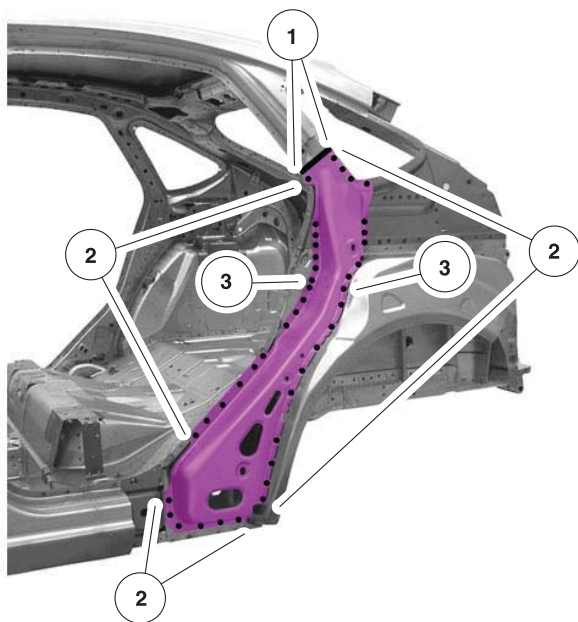
Removal

1. General Notes

- Back panel, quarter panel and water drain panel with reinforcement are already removed before commencing the repair.
- Move carpets and wiring out of the working area.

2. C-pillar reinforcement

1. Cut location.
2. Mill out the spot welds.
3. Mill out the spot welds (two panel thicknesses).

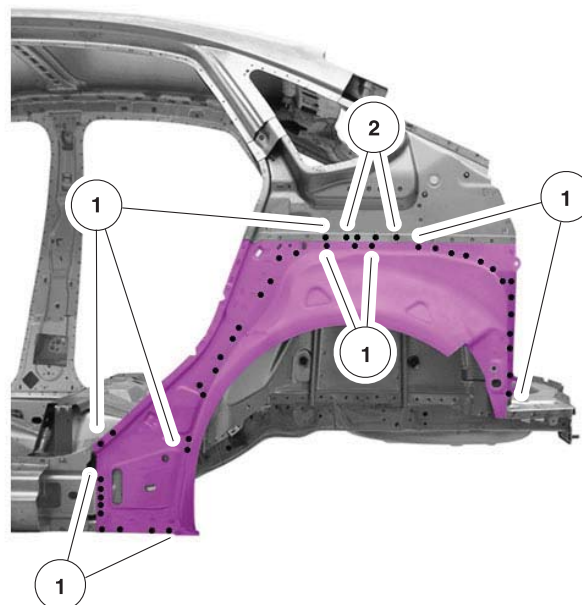


E56022

3. Outer rear wheelhouse

1. Mill out the spot welds.

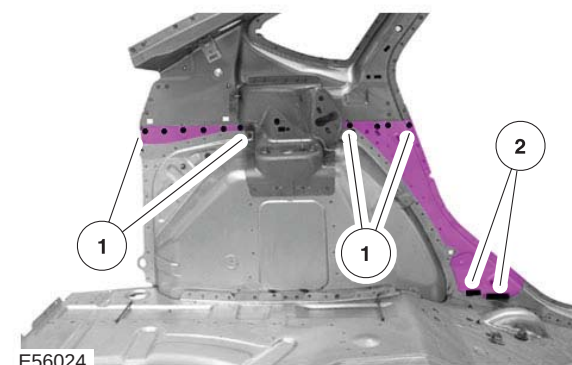
2. Mill out the spot welds (two panel thicknesses).



E56023

4. Inner rear wheelhouse

1. Mill out the spot welds.
2. Grind out the MIG-soldered joints.



E56024

5. NOTE:

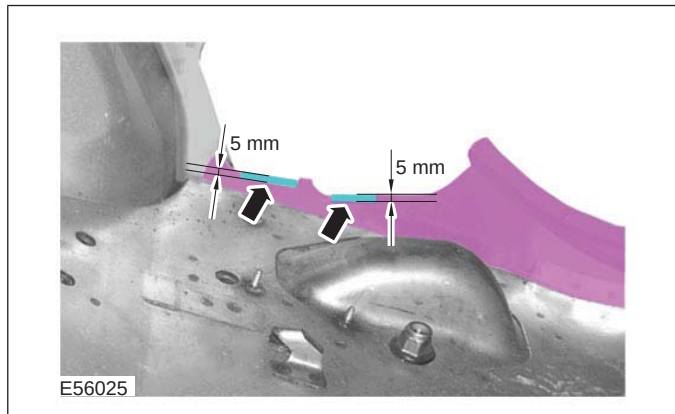
- In order to make a proper MIG welded joint, the MIG soldered areas must be ground back according to the specified dimensions (by approx. 5 mm).

REMOVAL AND INSTALLATION

- When grinding back, it must be ensured that all the residual traces of the MIG soldered joints are completely removed.

Inner rear wheelhouse (MIG-soldered areas)

- Grind back the MIG soldered areas.

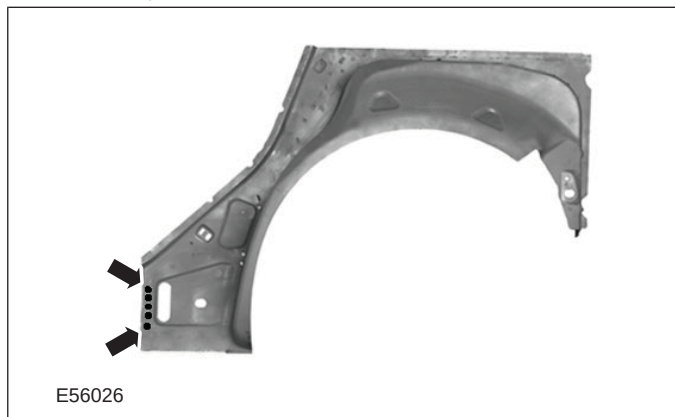


Installation

NOTE: Before resistance spot welding of body panels with a total panel thickness of 3 mm and greater, the welding equipment instructions contained in sub-section 501-25 must be followed.

1. Outer rear wheelhouse

- Drill holes for puddle welding (diameter: 10 mm).

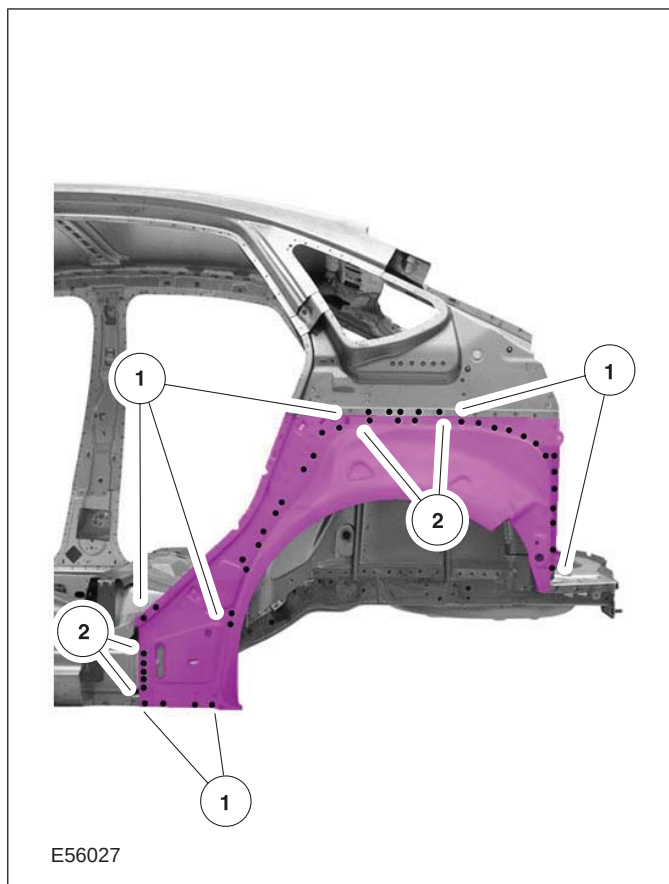


2. **NOTE:** Drill through one panel thickness at the upper area of outer rear wheelhouse (position 2) through the existing holes in the inner quarter panel before puddle welding.

Outer rear wheelhouse

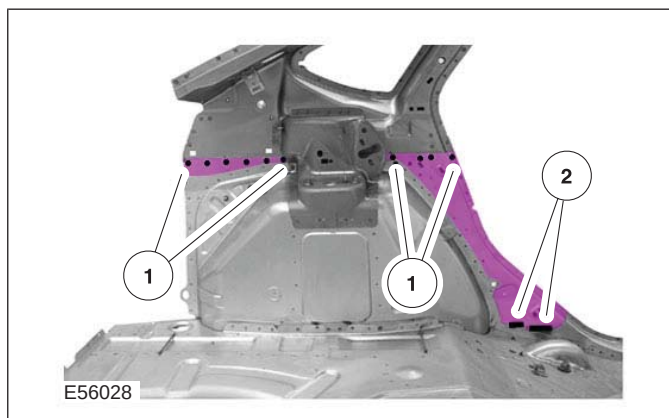
- Resistance spot weld.

2. Puddle weld.



3. Inner rear wheelhouse

- Resistance spot weld.
- Continuous MIG weld.



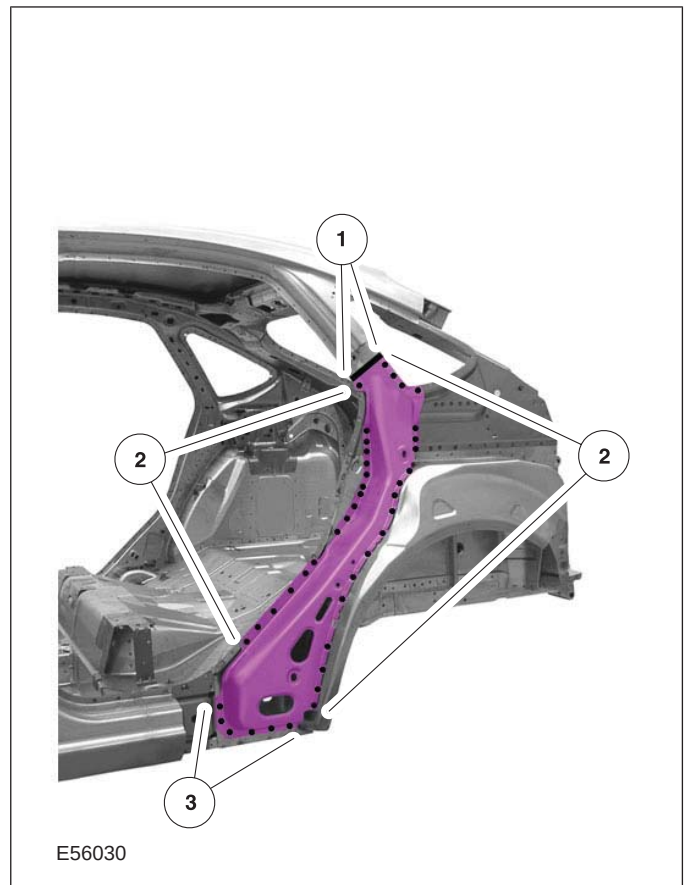
4. C-pillar reinforcement

REMOVAL AND INSTALLATION

- Drill holes for puddle welding (diameter: 10 mm).



3. Puddle weld.

**5. C-pillar reinforcement**

1. Continuous MIG weld.
2. Resistance spot weld.

REMOVAL AND INSTALLATION

Back Panel — 3-Door/5-Door

1. Replacement Parts

- Back panel
- Rear crossmember
- Rear crossmember reinforcement
- Crossmember reinforcements/rear floor panel

Removal

1. General Notes

- Required removal operations: Rear bumper, rear lamps, back panel inner trims and quarter panel trims.
- Move carpets and wiring out of the working area.

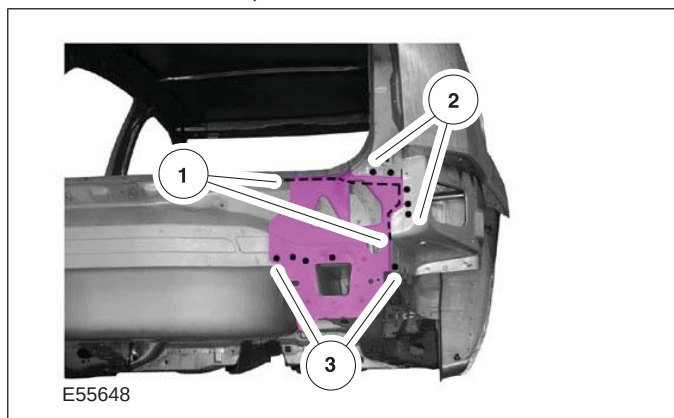
2. Back panel

- Mill out the spot welds.



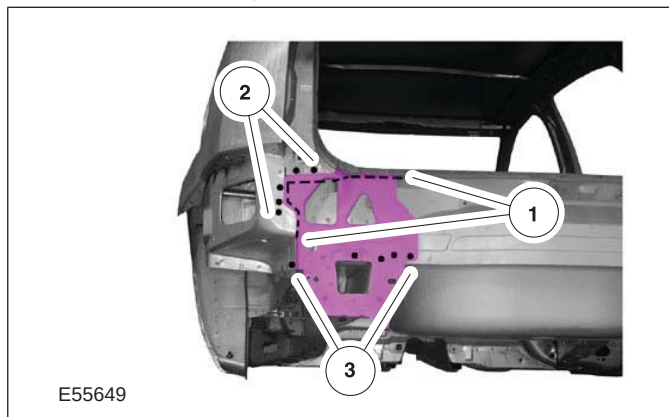
3. Crossmember reinforcement, rear right

1. Rough cut location.
2. Grind out the spot welds on the inside.
3. Mill out the spot welds (two panel thicknesses).



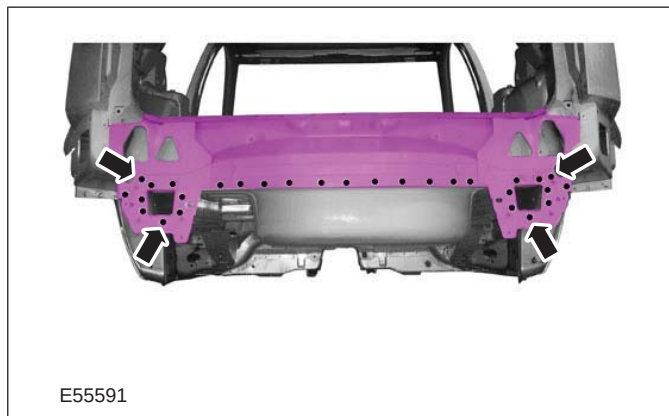
4. Crossmember reinforcement, rear left

1. Rough cut location.
2. Grind out the spot welds on the inside.
3. Mill out the spot welds (two panel thicknesses).



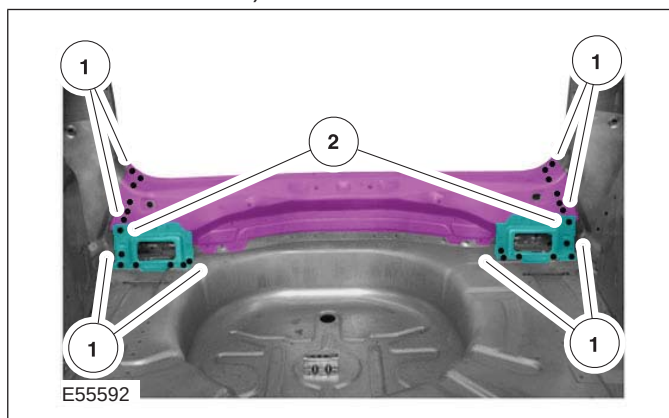
5. Rear crossmember

- Mill out the spot welds.



6. Rear crossmember

1. Grind out the spot welds.
2. Grind out the spot welds (two panel thicknesses).



REMOVAL AND INSTALLATION

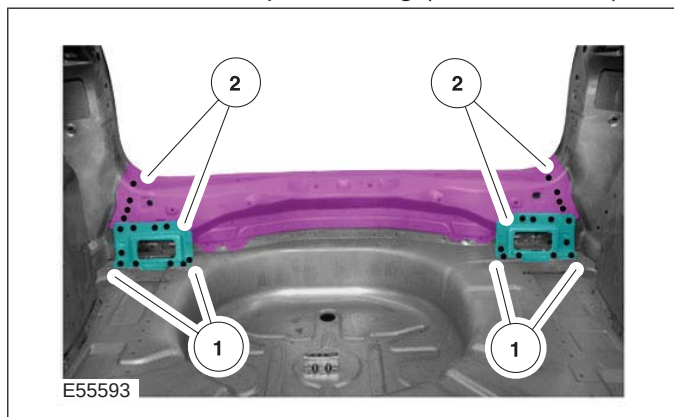
Installation

NOTE: Before resistance spot welding of body panels with a total panel thickness of 3 mm and greater, the welding equipment instructions contained in sub-section 501-25 must be followed.

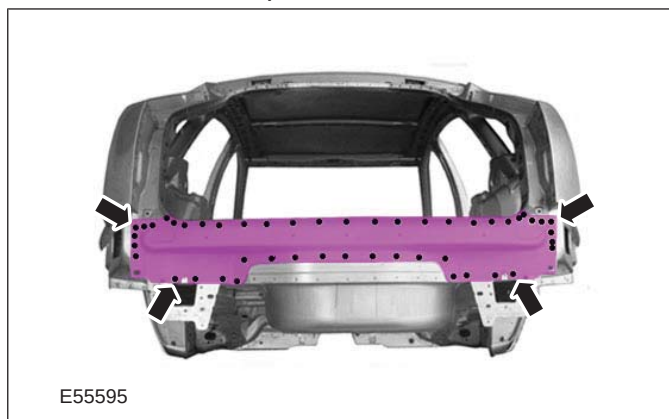
NOTE: First of all, offer up the crossmember reinforcements/rear floor panel and weld in place.

1. Rear crossmember

1. Resistance spot welding (crossmember reinforcements/rear floor panel)
2. Resistance spot welding (crossmember).



- Resistance spot weld.

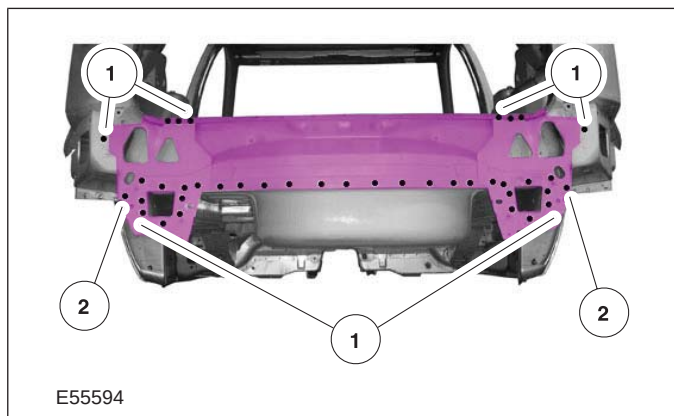


2. Rear crossmember reinforcement

1. Resistance spot weld.

NOTE: Before puddle welding, drill through one panel thickness through the existing holes.

2. Puddle weld.



3. Back panel

REMOVAL AND INSTALLATION

Rear Floor Panel

General Equipment

Measurement and alignment angle system

1. Replacement Parts

- Rear floor panel
- Spare wheel holder

Removal

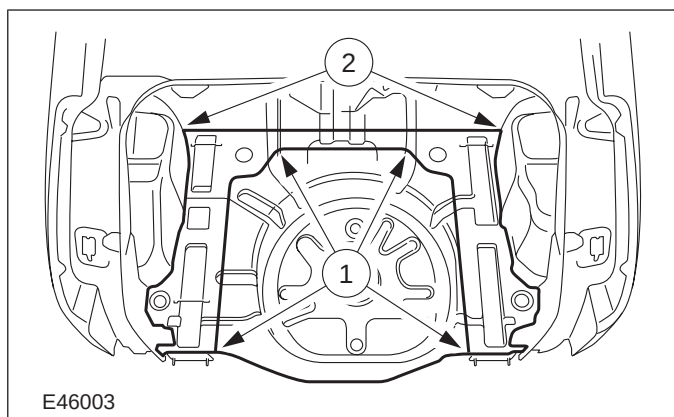
1. General Notes

- The back panel is already removed before repair work starts.
- Move carpets and wiring out of the working area.

2. NOTE: In order to facilitate access, the spare wheel well is cut out by means of a rough cut.

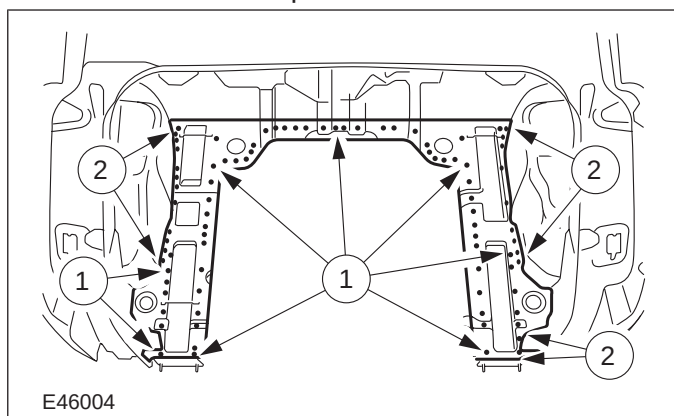
Rear floor panel

1. Rough cut location.
2. Front cut location.



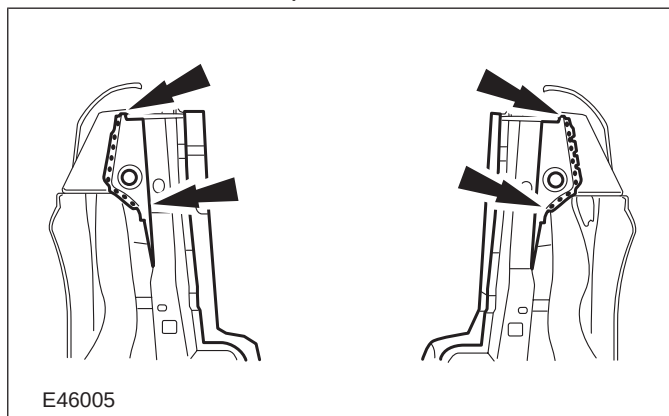
3. Rear floor panel

1. Mill out the spot welds.
2. Grind out the spot welds.



4. Rear floor panel (shown from below)

- Grind out the spot welds.

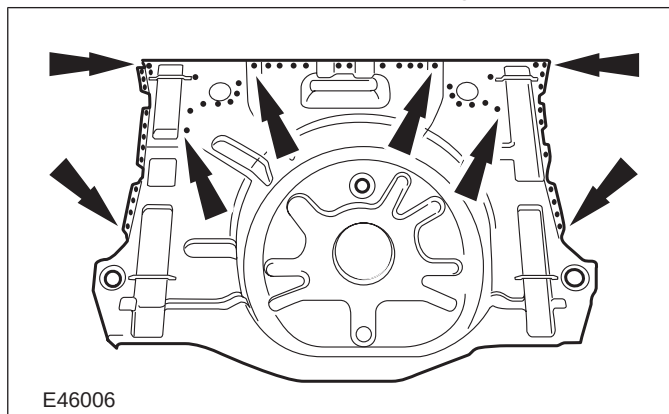


Installation

NOTE: Before resistance spot welding of body panels with a total panel thickness of 3 mm and greater, the welding equipment instructions contained in sub-section 501-25A must be followed.

1. Rear floor panel

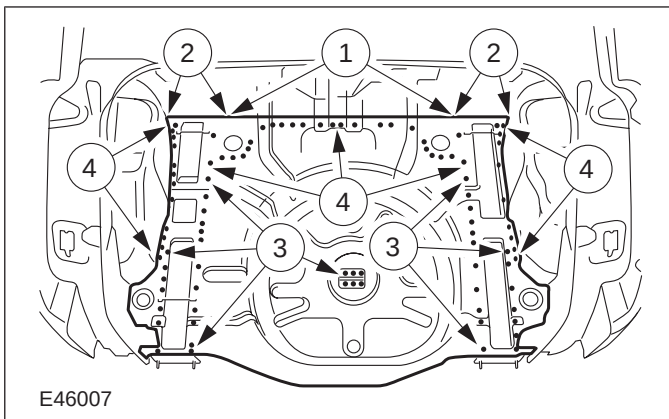
- Drill holes for puddle welding.



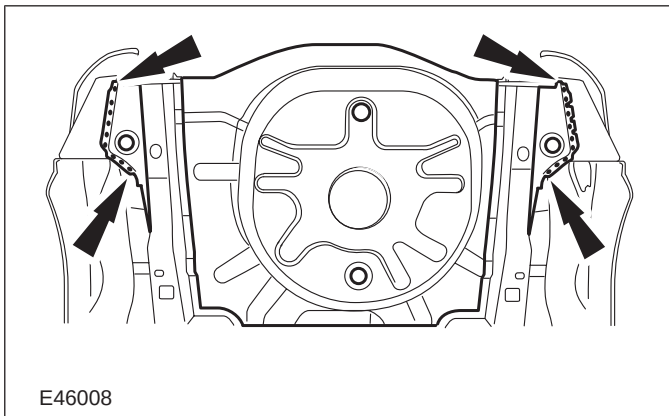
NOTE: The new part must overlap by approx. 10 mm at the front joint area. The new part is butted up at the flange areas (side member and belt reinforcement).

2. Rear floor panel

1. Intermittent MIG weld.
2. Continuous MIG weld (butt weld).
3. Resistance spot weld.

REMOVAL AND INSTALLATION**4. Puddle weld.****3. Rear floor panel (shown from below)**

- Resistance spot weld.



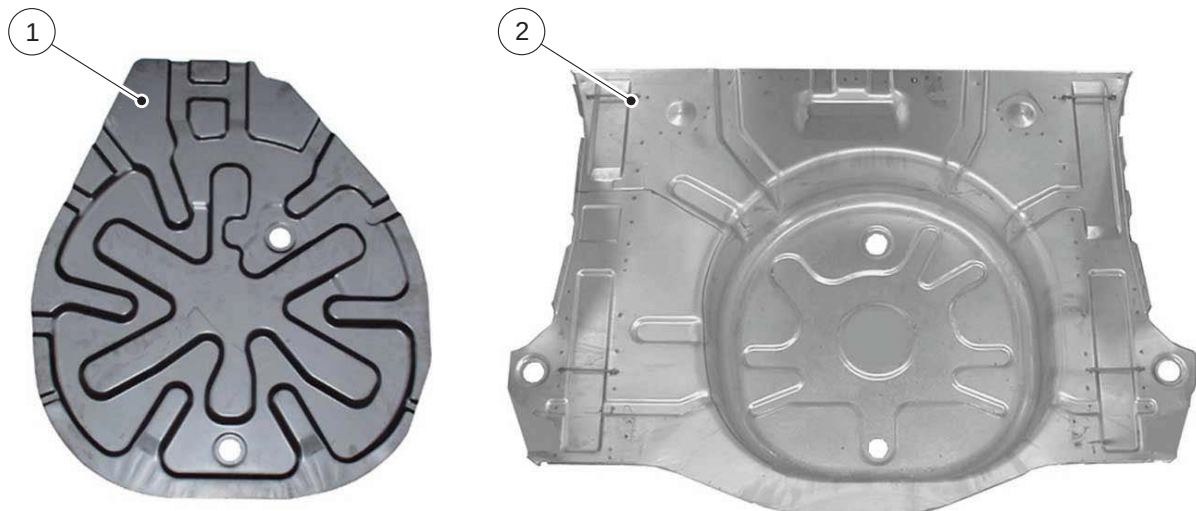
REMOVAL AND INSTALLATION**Rear Floor Panel — 2.5L Duratec-ST (VI5)****Removal**

- The Focus 2004.75 (07/2004-) rear floor panel is equipped with a spare wheel well. Due to a different exhaust pipe routing this well has to be replaced by a gusset plate for the Focus 2.5L Duratec-ST.
- Replace the gusset plate before the rear floor panel will be installed into the vehicle.
- Remove and install of the rear floor panel is similar to Focus 2004.75 (07/2004-).

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

1. • Replacement parts:

- **1)** Gusset Plate 2.5L Duratec-ST
- **2)** Rear Floor Panel (Repair Panel)



E97536

REMOVAL AND INSTALLATION

2. • **Necessary removal and installation work:**

- Back Panel

Refer to: **Back Panel - 3-Door/5-Door** (501-30 Rear End Sheet Metal Repairs, Removal and Installation).

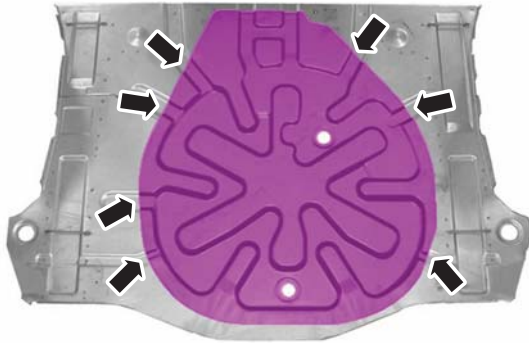
- Rear Floor Panel

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

- Reposition the carpeting and the wiring harness away from the working area.

3. • **Gusset Plate**

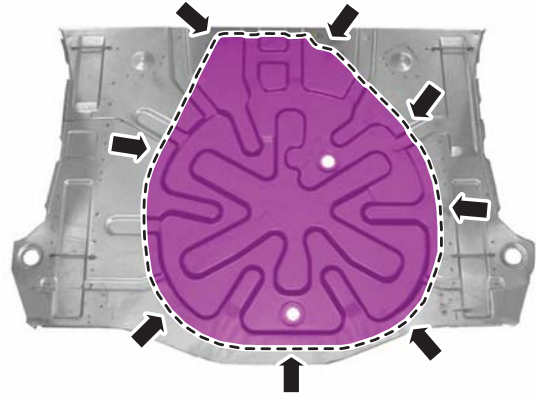
- Insert the gusset plate into the slots (arrows) of the rear floor panel with a positive locking.



E97537

4. • **Gusset Plate**

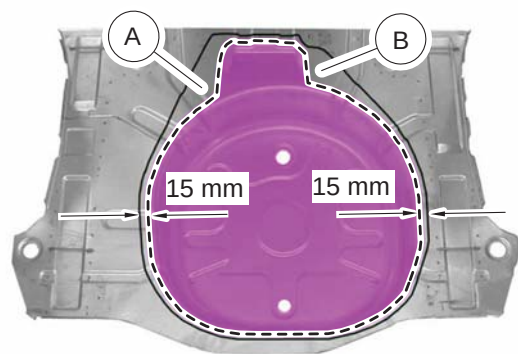
- Mark the outline of the gusset plate to the rear floor panel.
- Take off the gusset plate.



E97538

5. • **Mark Cutline**

- **NOTE:** The cutline has to be marked with a displacement of 15 mm to the center. In areas A and B mark cutline along the recess with a greater displacement.
- Mark the cutline.

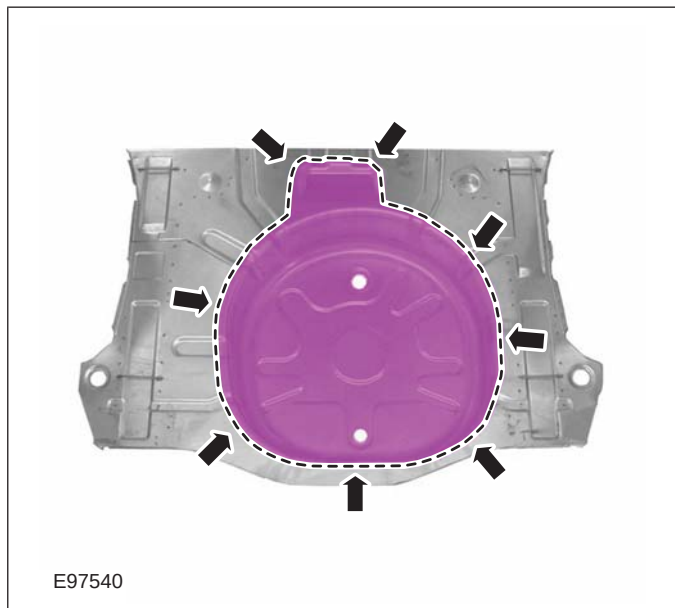


E97539

REMOVAL AND INSTALLATION

6. • **Cut Rear Floor Panel**

- Cut out the spare wheel well along the cutline.



Installation

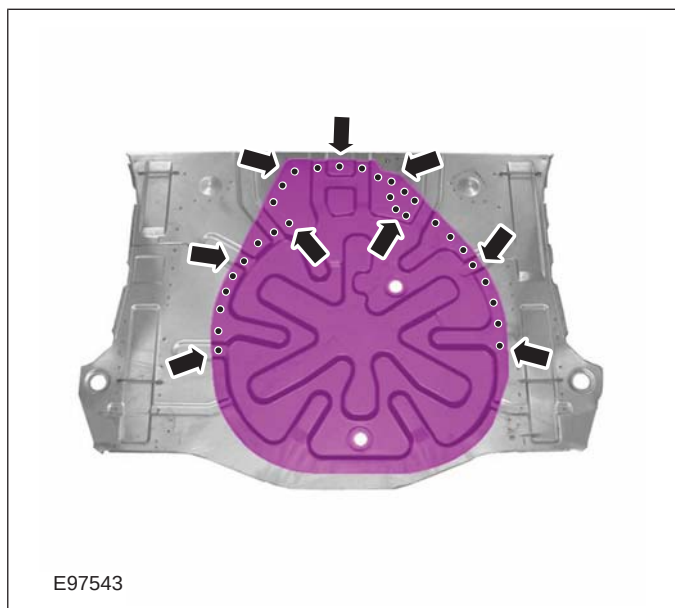
NOTE: Corrosion protection must be carefully maintained during this repair work.

Refer to: **Corrosion Prevention** (501-25 Body Repairs - General Information, Description and Operation).

1. • **Weld Rear Floor Panel**

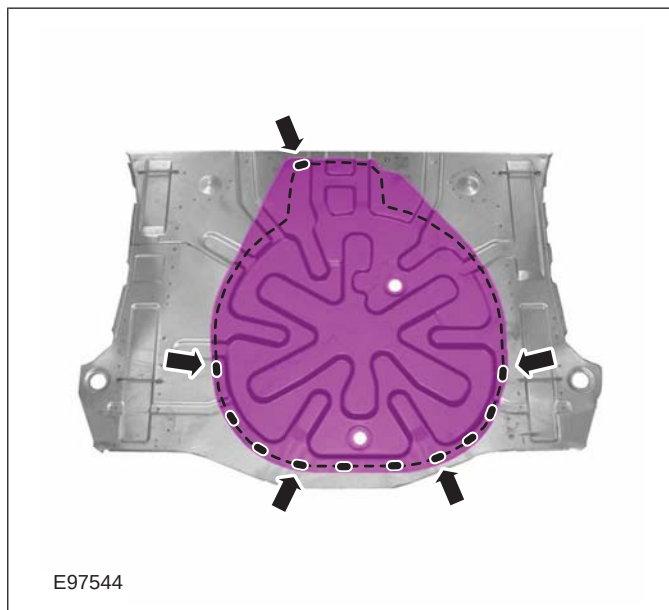
- **NOTE:** Insert the gusset plate into the rear floor panel with a positive locking and locate with clamps.

Resistance spot weld.

2. • **Weld Rear Floor Panel**

- **NOTE:** MIG weld from underneath!

Intermittant MIG weld seam (single seam length ca. 20mm)

3. • **Finishing and corrosion prevention**

- Seal weld flanges on both sides with body sealing compound.

REMOVAL AND INSTALLATION

Rear Floor Panel Section

General Equipment

Measurement or alignment angle system

1. Replacement Parts

- Rear floor panel

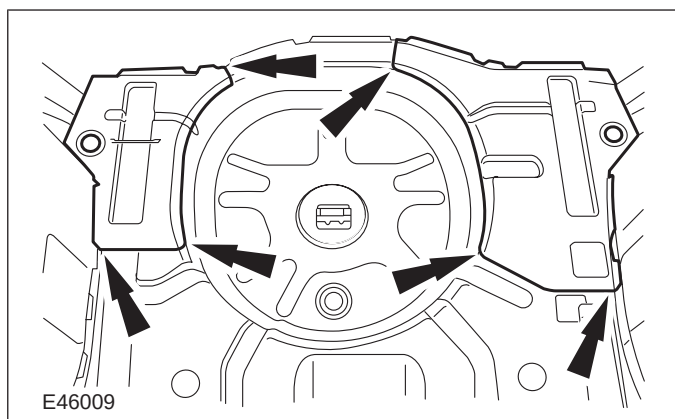
Removal

1. General Notes

- Back panel, quarter panel and water drain panel with reinforcement are already removed before commencing the repair.
- Move carpets and wiring out of the working area.

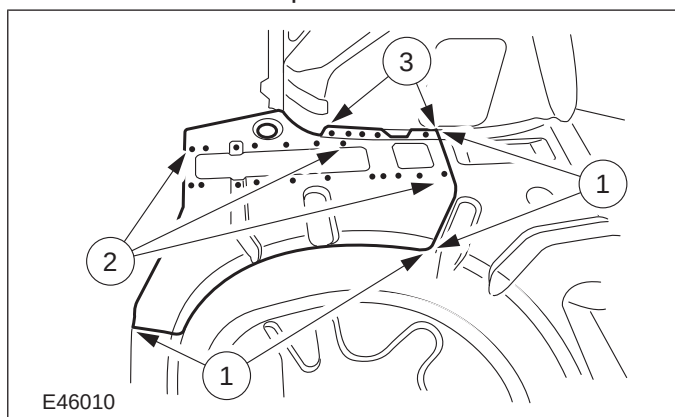
2. NOTE: Several sectional repairs may be necessary depending upon the extent of damage.

Overview of cut locations



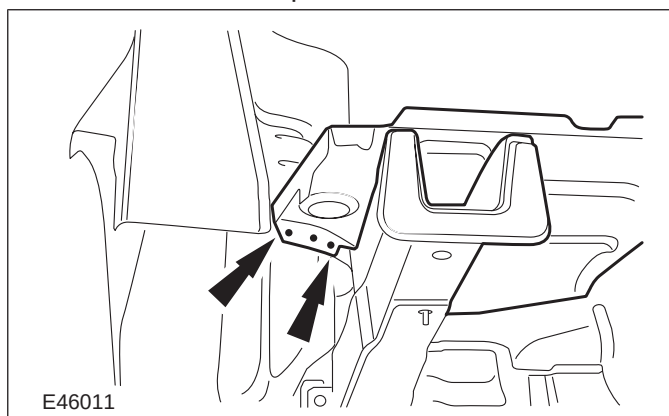
3. Rear floor panel

1. Cut location.
2. Mill out the spot welds.
3. Grind out the spot welds.



4. Rear floor panel

- Grind out the spot welds.

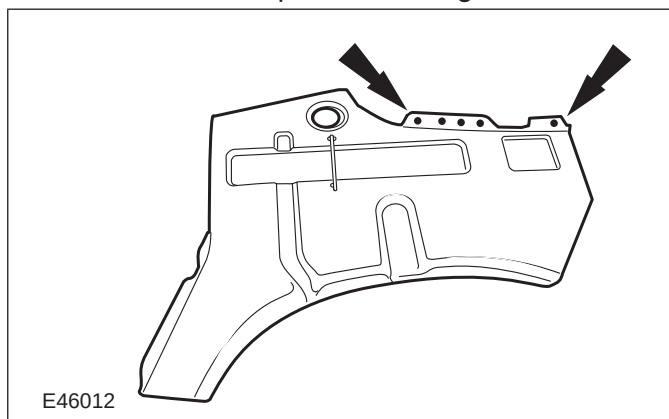


Installation

NOTE: Before resistance spot welding of body panels with a total panel thickness of 3 mm and greater, the welding equipment instructions contained in sub-section 501-25A must be followed.

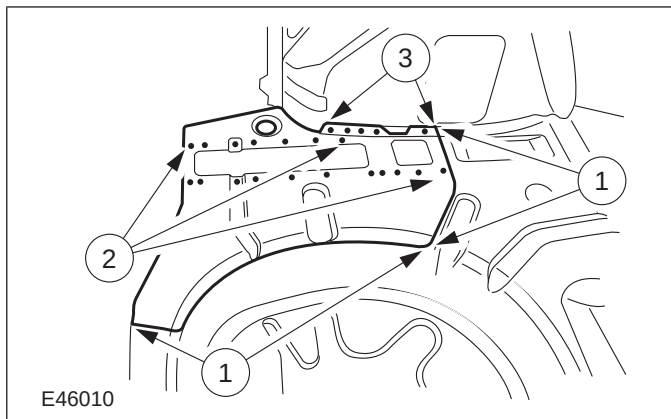
1. Rear floor panel

- Drill holes for puddle welding.

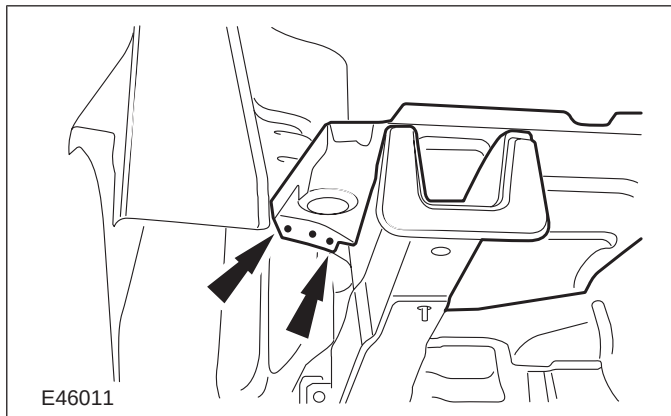


2. Rear floor panel

1. Continuous MIG weld.
2. Resistance spot weld.

REMOVAL AND INSTALLATION**3. Puddle weld.****3. Rear floor panel**

- Resistance spot weld.



REMOVAL AND INSTALLATION

Rear Side Member Section

General Equipment

Measurement or alignment angle system

1. Replacement Parts

- Side member sectional part
- Crossmember retaining flange

Removal

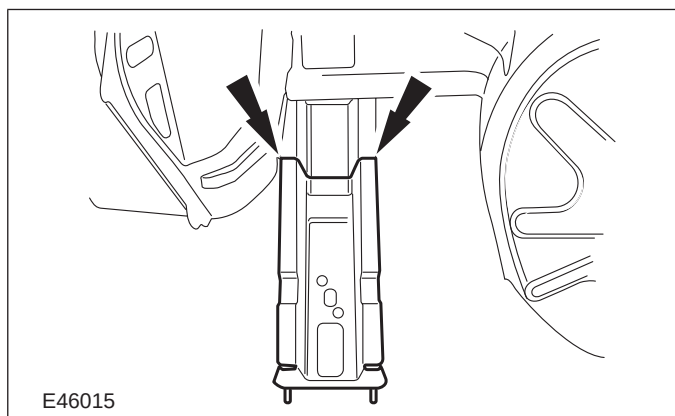
1. General Notes

- Rear floor panel, back panel and quarter panel are already removed before commencing the repair.

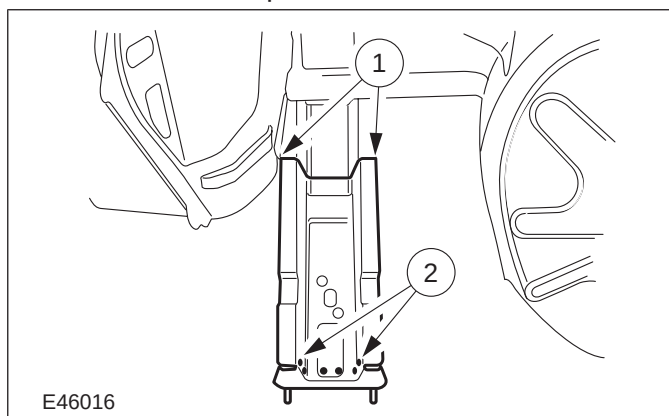
2. NOTE: The cut location may vary depending upon the extent of the damage.

Rear side member

- Cut location.



2. Resistance spot weld.



Installation

NOTE: Fit crossmember retaining flange using the alignment angle and fix in place. Insert and fit the side member.

1. Rear side member

1. Continuous MIG weld.

REMOVAL AND INSTALLATION

Luggage Compartment Bulkhead

General Equipment

Measurement and alignment angle system

1. Replacement parts

- Luggage compartment bulkhead
- Left luggage compartment bulkhead connecting piece
- Right luggage compartment bulkhead connecting piece

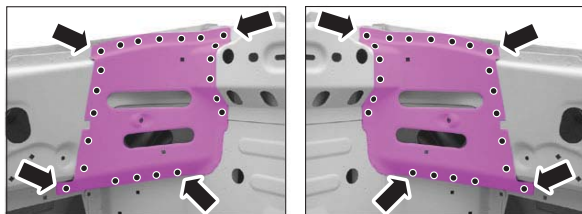
Removal

1. General:

- Necessary removal work: Cover, both roll protection units, doors, luggage compartment lid, B pillar trim, rear seat and back, driver and passenger seats.
- Reposition the carpeting and the wiring harness away from the working area.

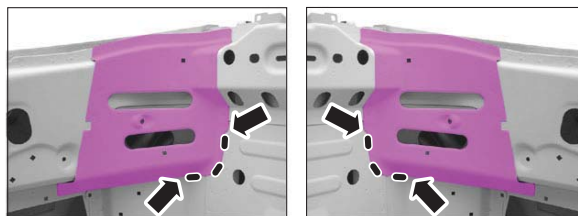
2. Luggage compartment bulkhead connecting pieces

- Mill out the spot welds.



3. Luggage compartment bulkhead connecting pieces

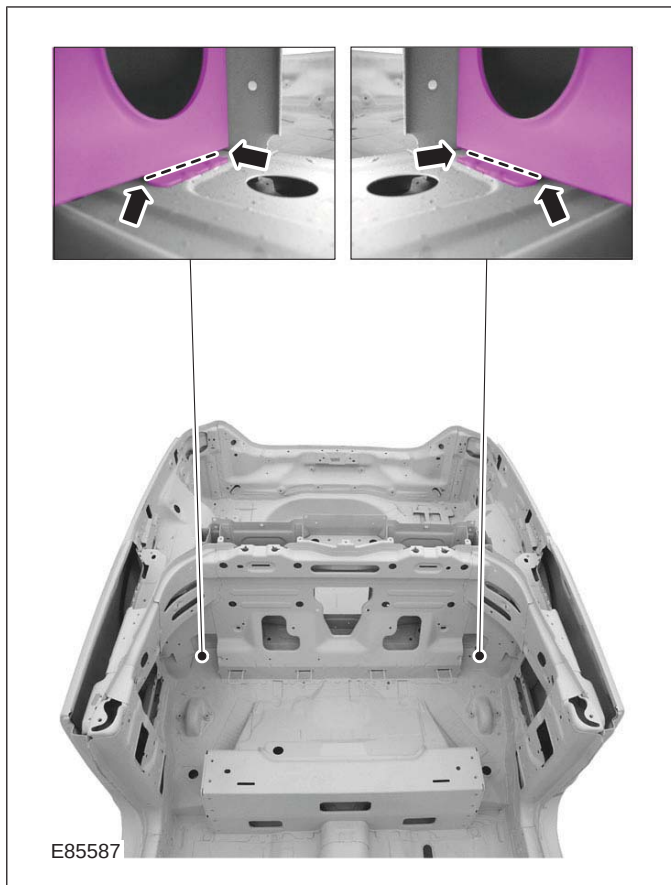
- Grind out the MIG weld seams.



4. Luggage compartment bulkhead

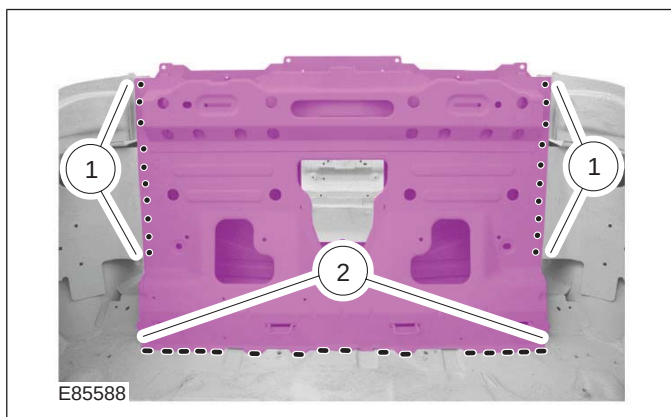
REMOVAL AND INSTALLATION

- Rough separating cuts.



5. Luggage compartment bulkhead (view from front)

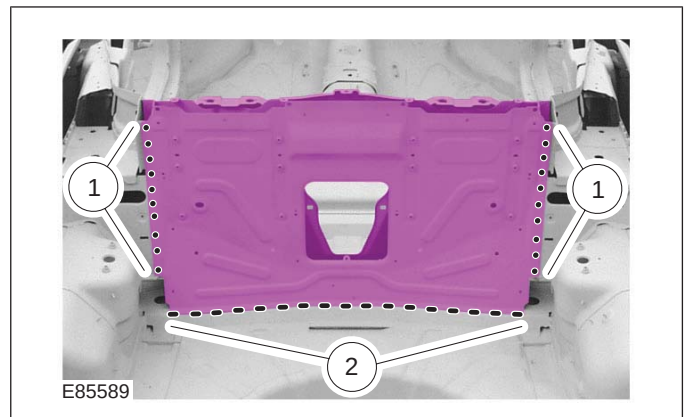
1. Mill out the spot welds.
2. Grind out the MIG weld seams.



6. Luggage compartment bulkhead (view from rear)

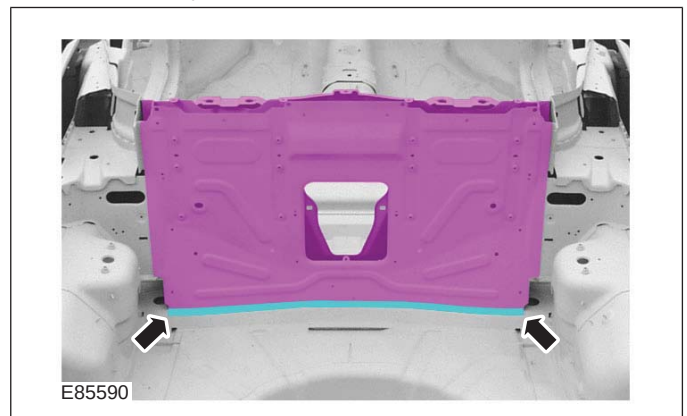
1. Mill out the spot welds.

2. Grind out the MIG weld seams.



7. Luggage compartment bulkhead (view from rear)

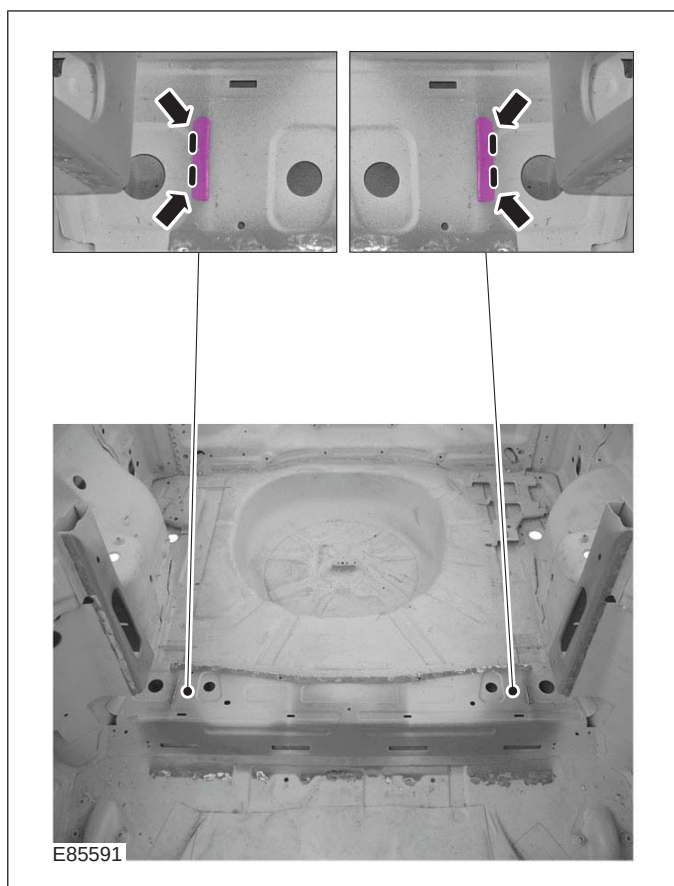
- Warm the adhesive application area (approx. 170° C).



8. Luggage compartment bulkhead remaining flanges

REMOVAL AND INSTALLATION

- Grind out the MIG weld seams.



Installation

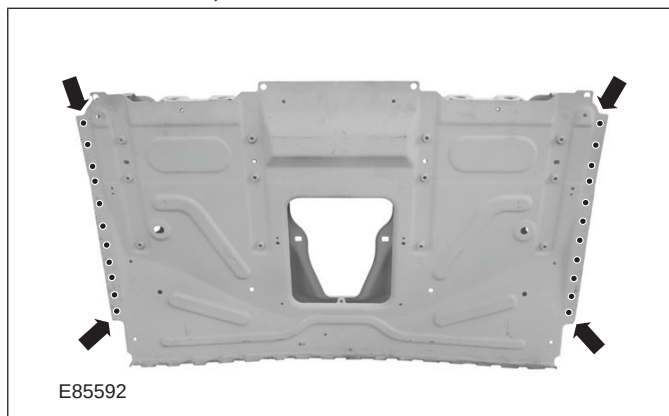
NOTE:

- Before resistance spot welding of body panels with a total panel thickness of 3 mm and greater, the welding equipment instructions contained in sub-section 501-25 must be followed.
- The new parts must be positioned accurately in order for the roof mechanism to work properly.

1. Fit the new parts and fix with the alignment angle.

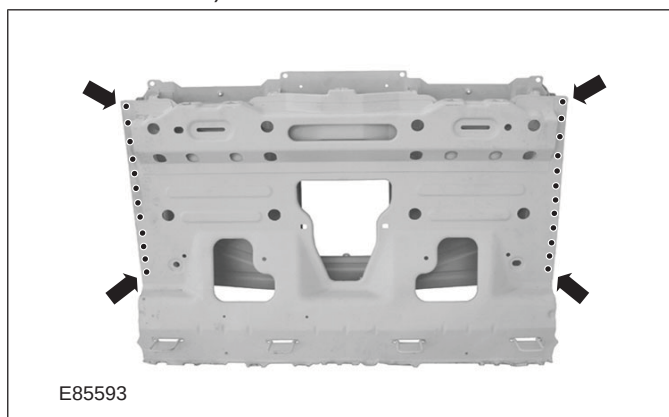
2. Luggage compartment bulkhead (view from rear)

- Drill holes for puddle welding (10 mm diameter).



3. Luggage compartment bulkhead (view from front)

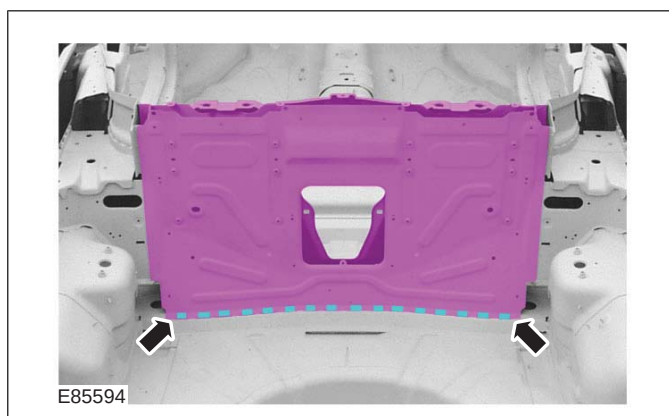
- Drill holes for puddle welding (10 mm diameter).



4. NOTE: Adhesive may only be applied thinly between the welding points (MIG welding areas) on the panel flange. Adhesive must not get into the welding areas.

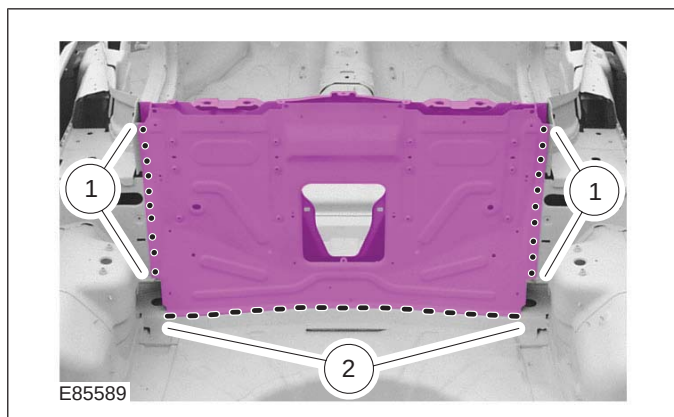
Luggage compartment bulkhead (view from rear)

- Before inserting the bulkhead, apply 2 K metal adhesive.

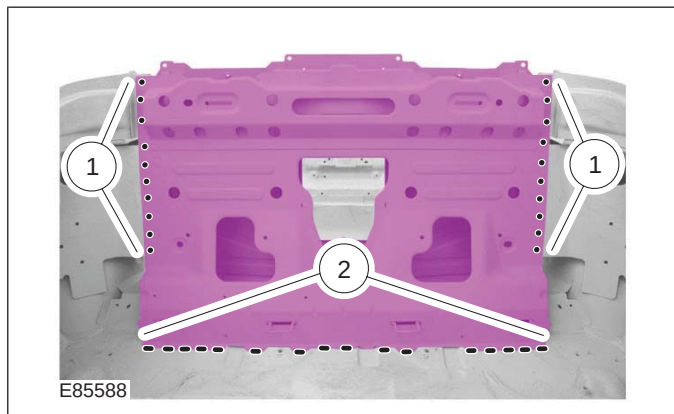


REMOVAL AND INSTALLATION**5. Luggage compartment bulkhead (view from rear)**

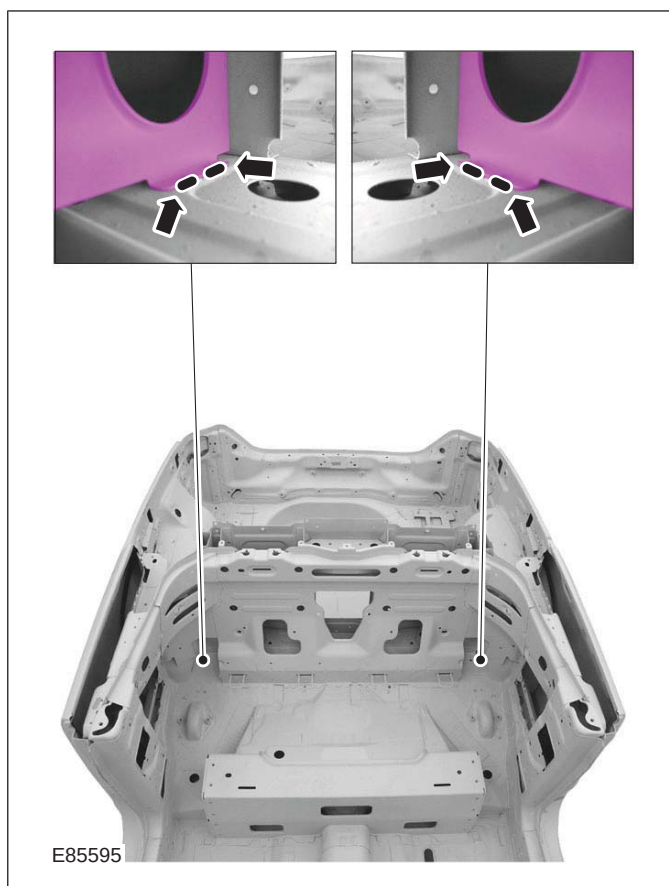
1. Puddle weld.
2. Intermittent MIG weld.

**6. Luggage compartment bulkhead (view from front)**

1. Puddle weld.
2. Intermittent MIG weld.

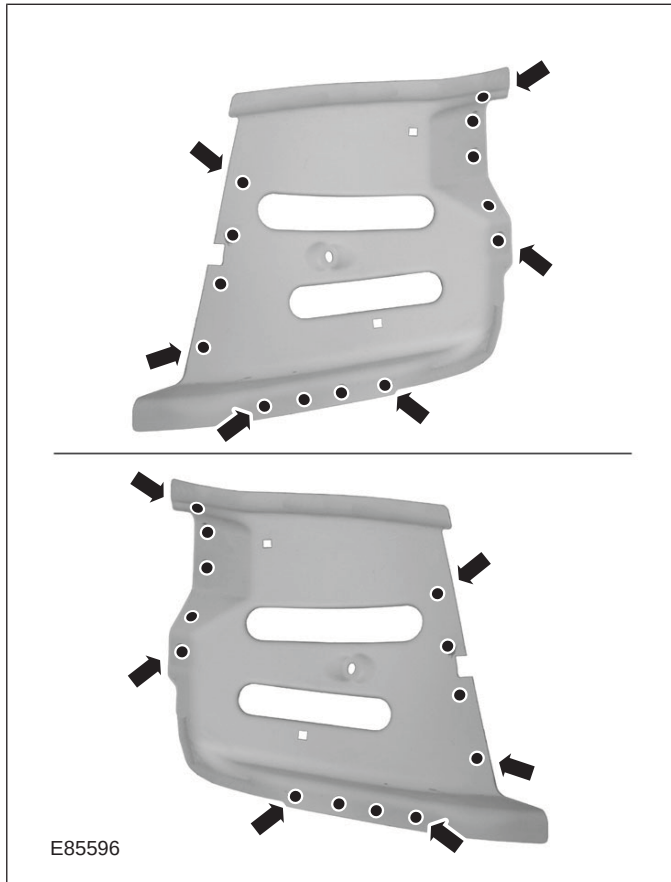
**7. Luggage compartment bulkhead**

- Intermittent MIG weld.

**8. Luggage compartment bulkhead connecting pieces (interior views)**

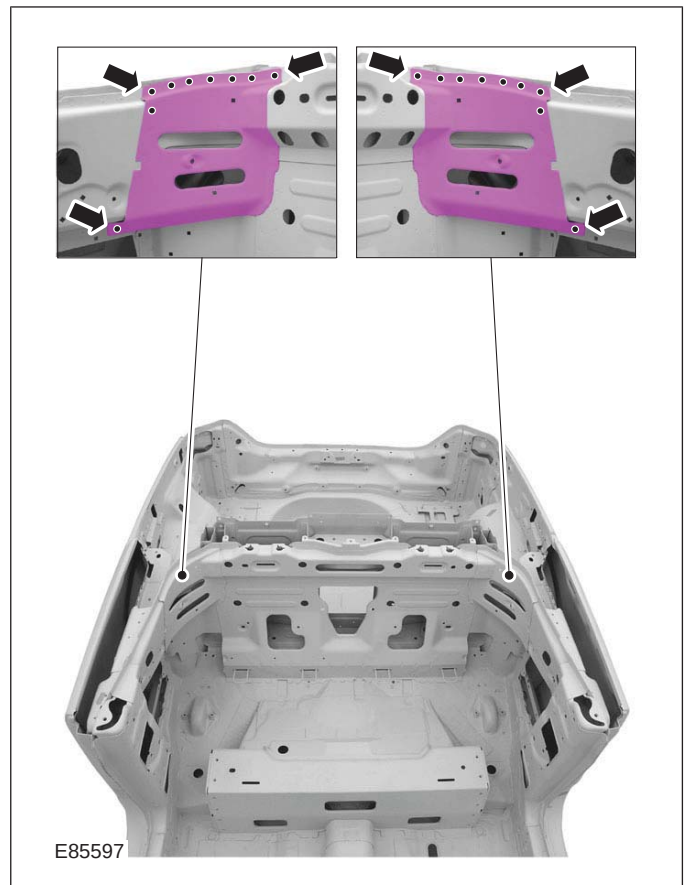
REMOVAL AND INSTALLATION

- Drill holes for puddle welding (10 mm diameter).



9. Luggage compartment bulkhead connecting pieces

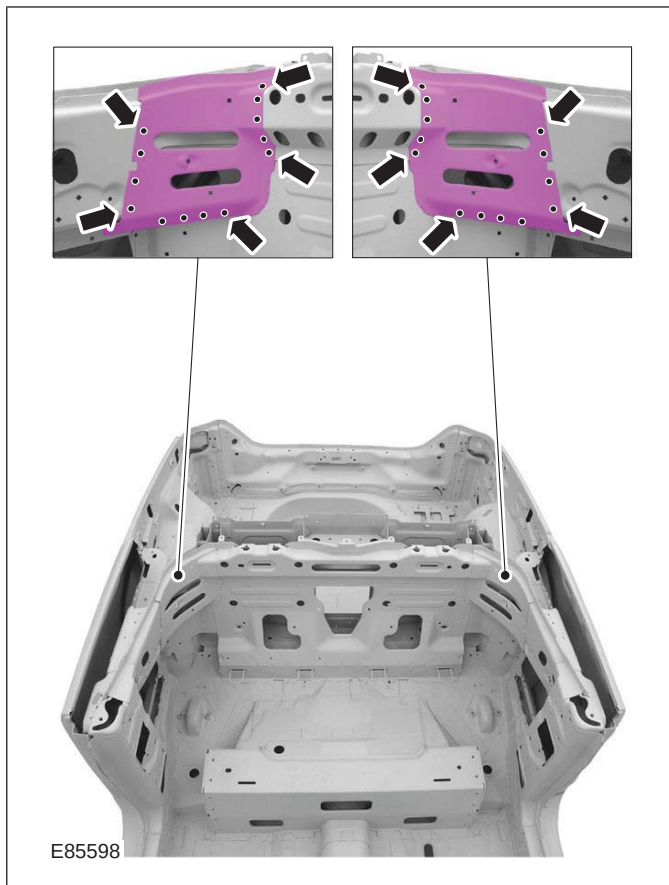
- Resistance spot weld.



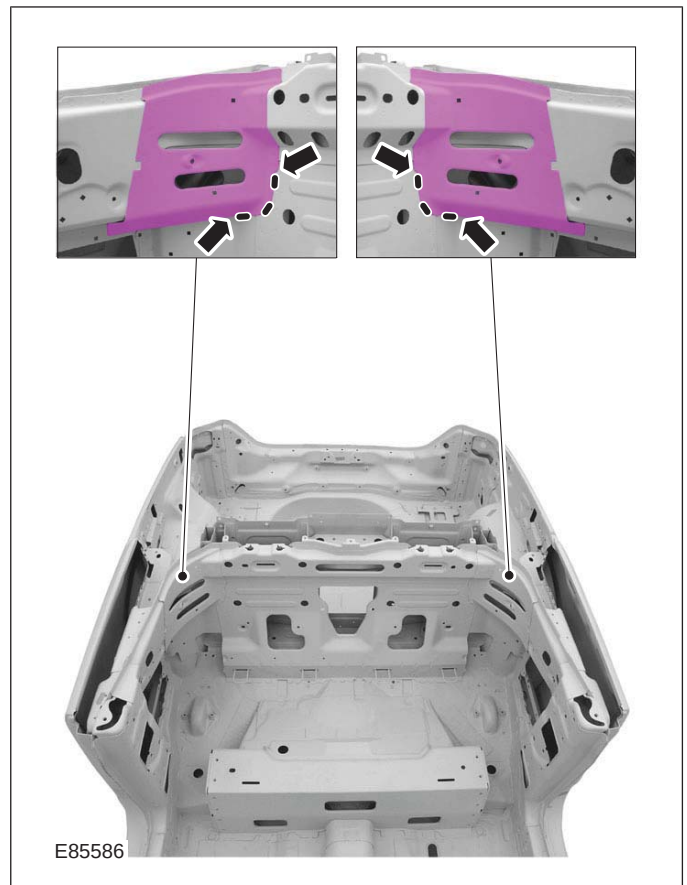
10. Luggage compartment bulkhead connecting pieces

REMOVAL AND INSTALLATION

- Puddle weld.



- Intermittent MIG weld.

**11. Luggage compartment bulkhead connecting pieces**