

SECTION 501-29 Side Panel Sheet Metal Repairs

VEHICLE APPLICATION: 2011.00 Focus

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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

REMOVAL AND INSTALLATION

Rocker Panel — 3-Door

1. Replacement parts

- Rocker panel

Removal

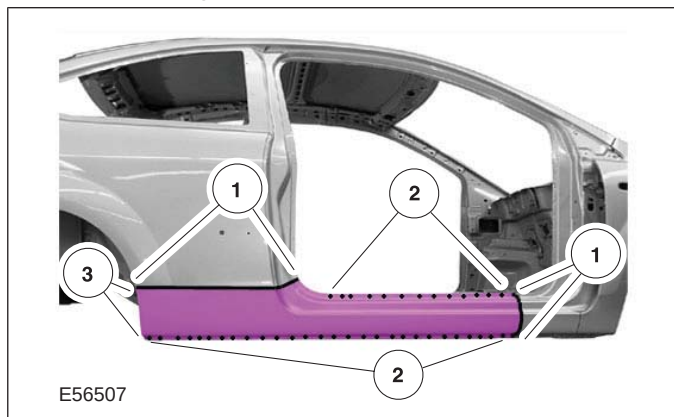
1. General notes

- Necessary removal work: doors, front and rear seats, rocker panel inner trim, A- and B-pillar inner trim.
- Fold back the carpets and move the wiring harness out of the working area.

2. NOTE: The cut locations may vary depending on the extent of the damage. When cutting the quarter panel (pos. 1) ensure there is a sufficient gap (min. 10 mm) from the horizontal edge of the panel so that a strip can be left for welding.

Rocker panel

1. Cut locations.
2. Mill out the spot welds.
3. Grind down one panel thickness at the wheel arch edge.



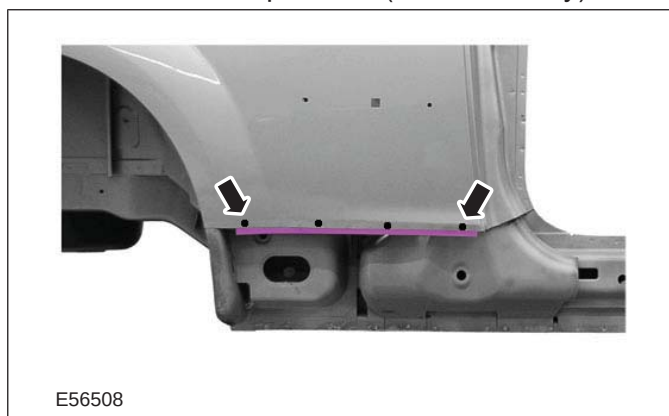
Installation

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. NOTE: Remove the damping matting which is adhesive-bonded to the quarter panel. Before inserting the rocker panel offer up a panel strip to the quarter panel and insert. The panel strip can be cut from the remainder of the new part.

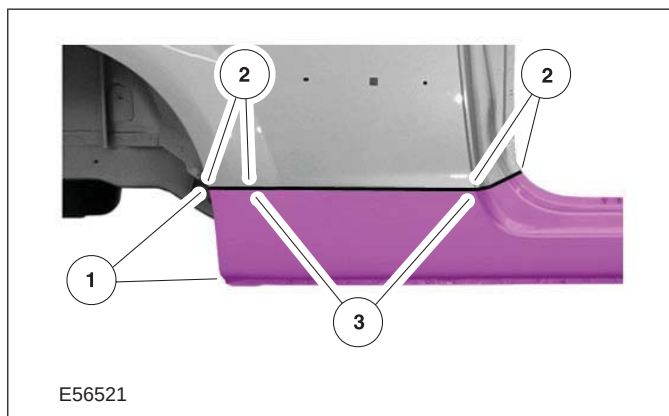
Panel strip

- Resistance spot weld (tack weld only).



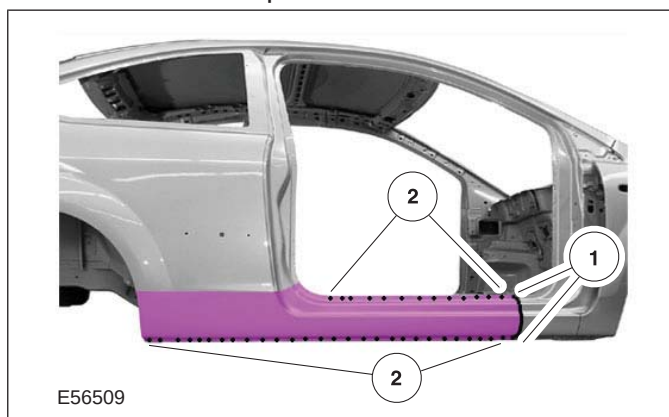
2. Rocker panel

1. Apply two-component metal adhesive to the clinched flange.
2. Continuous MIG weld.
3. MIG intermittent weld seam.



3. Rocker panel

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



REMOVAL AND INSTALLATION

Rocker Panel — 5-Door

1. Replacement Parts

- Rocker panel

Removal

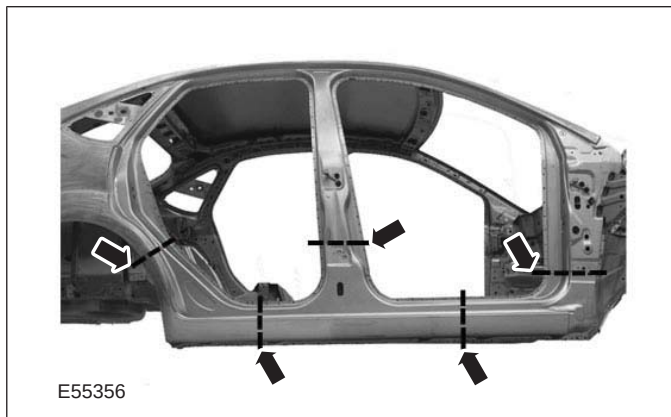
1. General notes

- Required removal operations: Doors, door hinges, front and rear seats, door sill inner trim, A- B- and C- pillar inner trim.
- Fold back the carpets and move the wiring harness out of the working area.

NOTE: The cut location may vary depending upon the extent of the damage. The repair shown describes a partial rear repair.

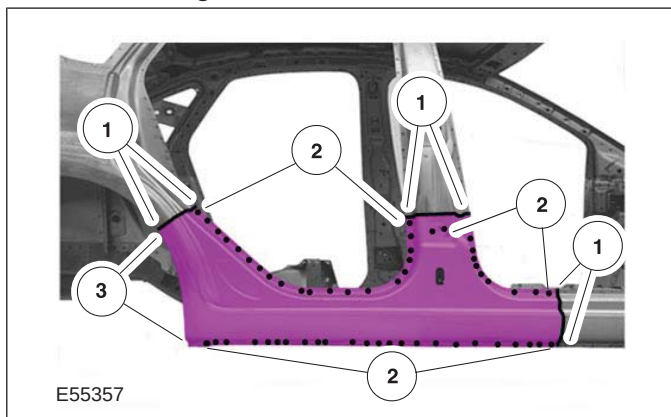
2. Rocker panel

- Cut locations.



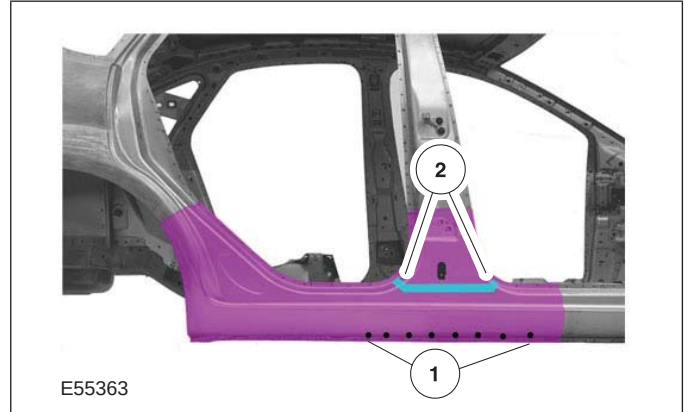
3. Rocker panel

1. Cut locations.
2. Grind out the spot welds.
3. Grind down one panel thickness at the wheel arch edge.



4. Rocker panel

1. Mill out the spot welds.
2. Heat the area (approx. 170°) and detach the NVH element.



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.

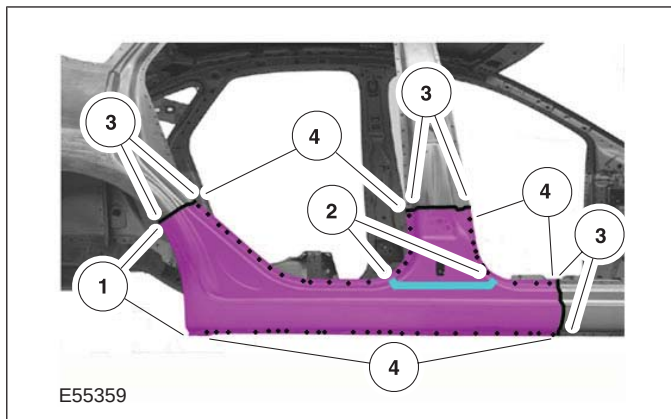
1. Rocker panel

- Drill holes for puddle welding.



2. Rocker panel

1. Apply two-component metal adhesive to the clinched flange.
2. Apply PU glass adhesive to the NVH element.
3. Continuous MIG weld.

REMOVAL AND INSTALLATION**4. Resistance spot weld.****3. Rocker panel**

- Puddle weld.



REMOVAL AND INSTALLATION

A-Pillar Outer Panel Section and Reinforcement

General Equipment

Measurement and alignment angle system

1. Replacement parts

- A-pillar outer panel
- A-pillar inner panel
- A-pillar reinforcement
- A-pillar/fender apron panel reinforcement

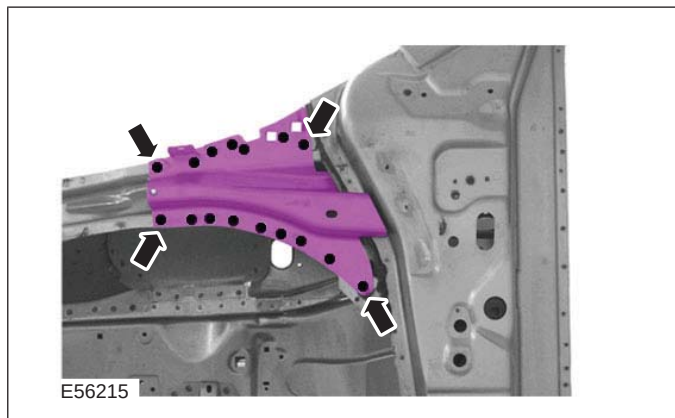
Removal

1. General notes

- The fender apron panel reinforcement is already removed before commencing the repair.
- Required removal operations: A-pillar trim panel, rocker panel trim and driver or passenger seat.
- Move the carpeting and the wiring away from the working area.

2. A-pillar/fender apron panel reinforcement

- Mill out the spot welds.

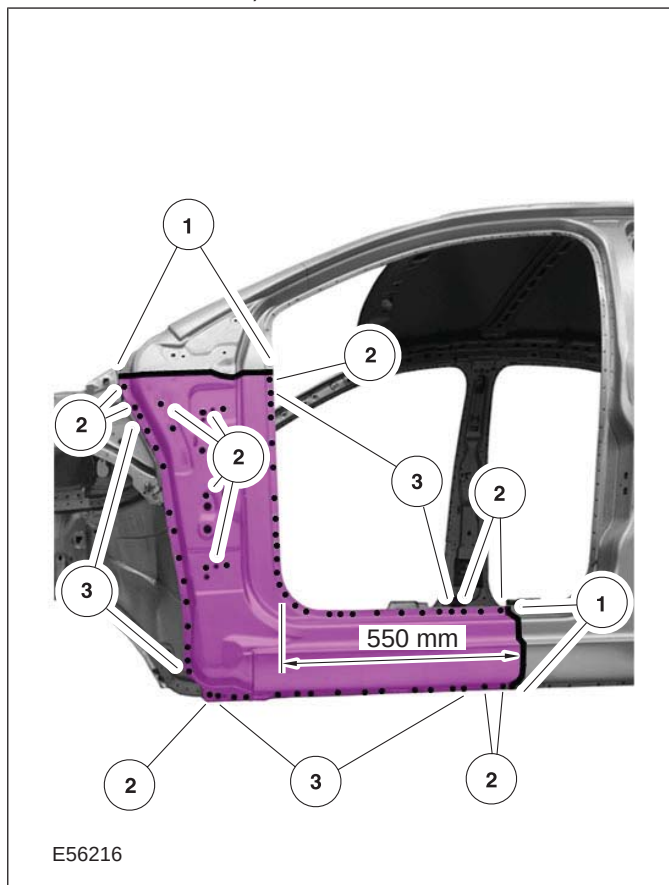


NOTE: To gain access to the front area of the B-pillar inner panel, the separating cut on the outer rocker panel must be made according to the specified dimensions (550 mm).

3. Outer A-pillar

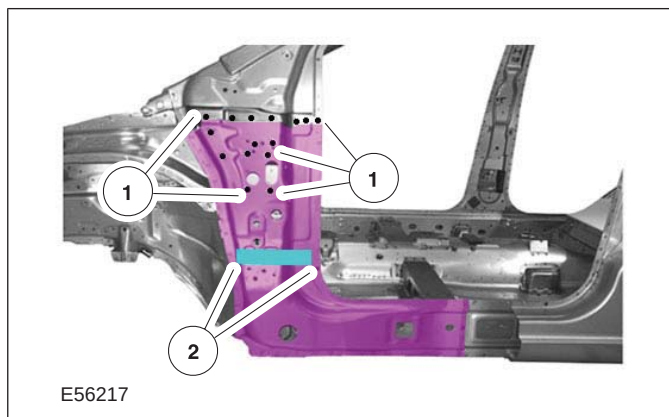
1. Cut point.
2. Mill out the spot welds.

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



4. A-pillar reinforcement

1. Mill out the spot welds.
2. Heat the area (approx. 170°) and detach the NVH element.

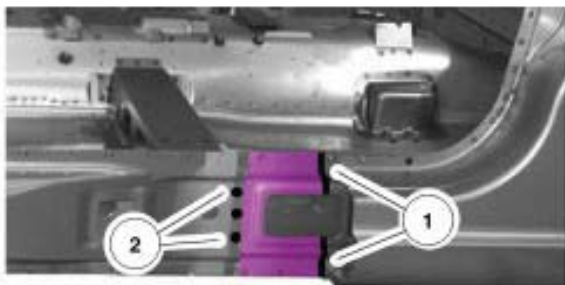


5. **NOTE:** To gain access to the original A-pillar inner panel join, the B-pillar inner panel must be cut at the front and removed. The part cut away will be re-used for the installation.

B-pillar inner panel

REMOVAL AND INSTALLATION

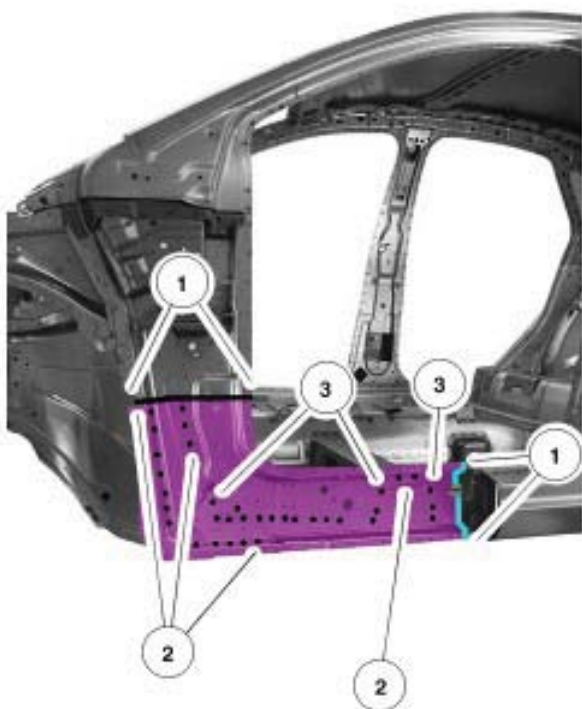
1. Cut point.
2. Mill out the spot welds.



E56239

6. Inner A-pillar

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



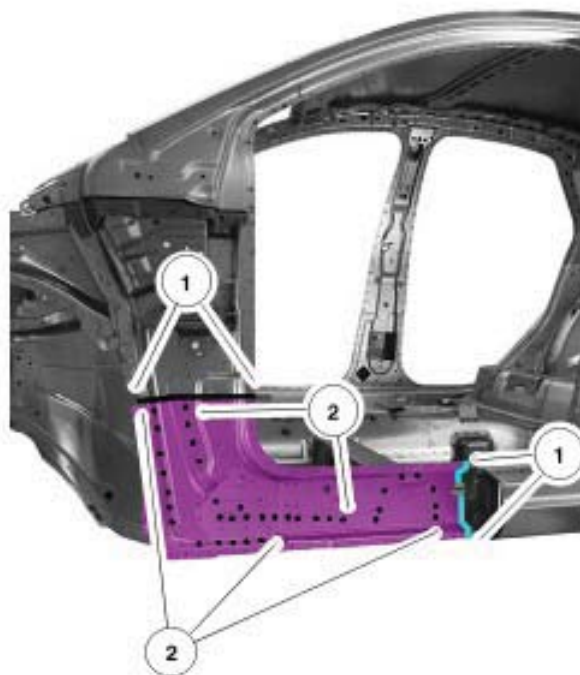
E56218

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. Inner A-pillar

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



E56220

2. A-pillar reinforcement

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



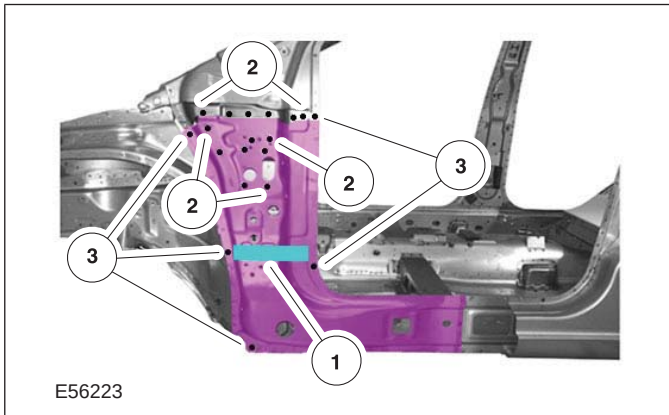
E56221

3. **NOTE:** Only tack-weld A-pillar reinforcement. The final weld joint is made with the outer A-pillar installed. The puddle weld areas (item 2) on the A-pillar reinforcement must be ground down, otherwise the outer A-pillar cannot be inserted correctly.

A-pillar reinforcement

REMOVAL AND INSTALLATION

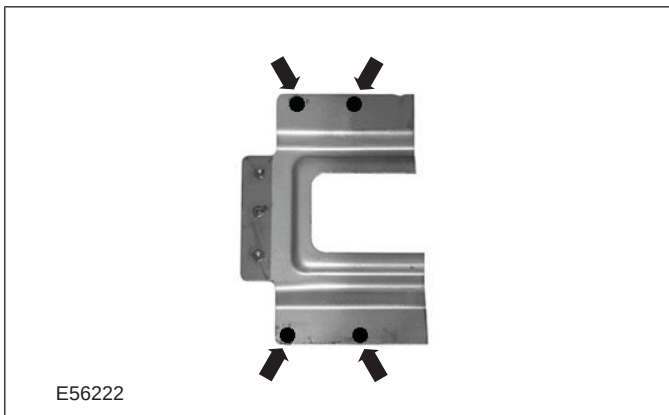
1. Apply PU glass adhesive to the NVH element.
2. Puddle weld.
3. Resistance spot weld.



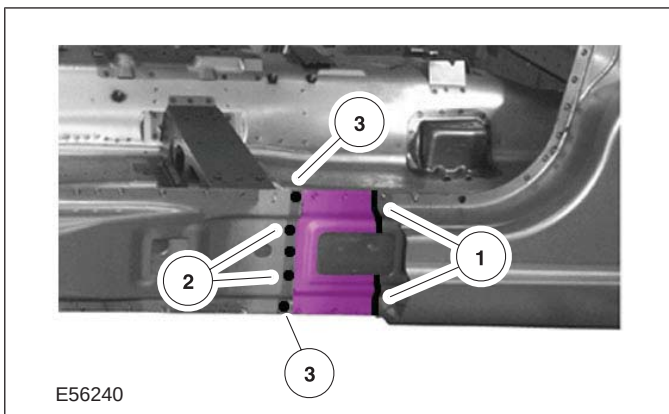
- 4. NOTE:** The puddle weld areas on the B-pillar inner panel must be ground down, otherwise it cannot be installed using resistance spot welding.

B-pillar inner panel

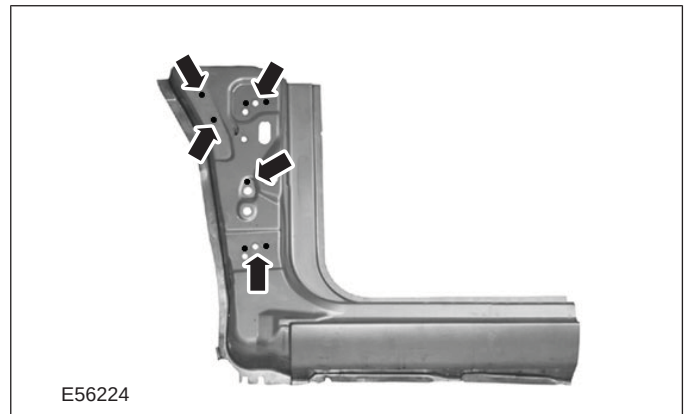
- Puddle weld.

**5. B-pillar inner panel**

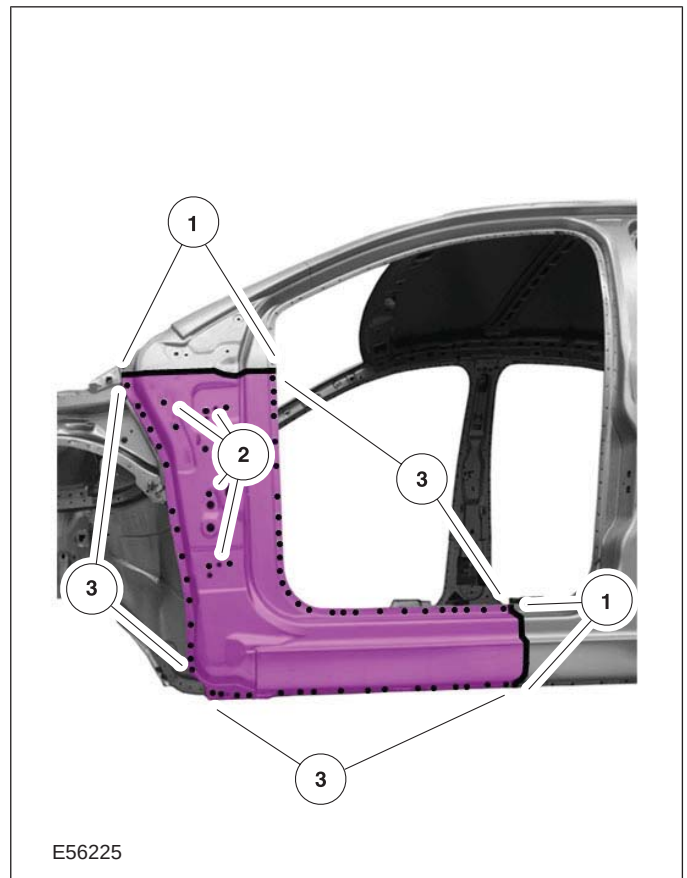
1. Continuous MIG weld.
2. Puddle weld.
3. Resistance spot weld.

**6. Outer A-pillar**

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

**7. Outer A-pillar**

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

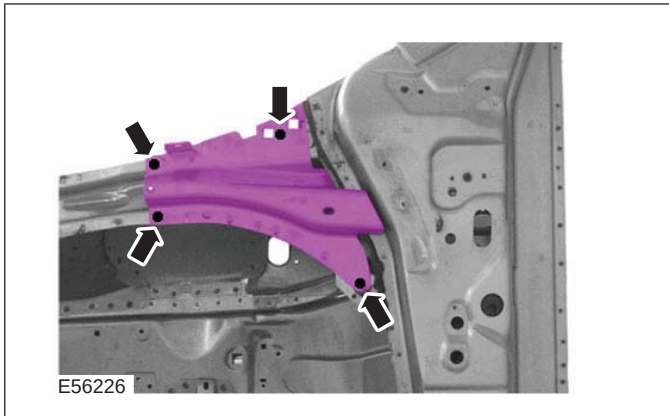


- 8. NOTE:** Only tack-weld A-pillar/fender apron panel reinforcement. The final welded joint is made with the fender panel reinforcement installed.

A-pillar/fender apron panel reinforcement

REMOVAL AND INSTALLATION

- Resistance spot weld.



REMOVAL AND INSTALLATION

B-Pillar and Reinforcement — 3-Door

General Equipment

Measurement and alignment angle system

1. Replacement parts

- B-pillar inner panel
- B-pillar reinforcement

Removal

1. General notes

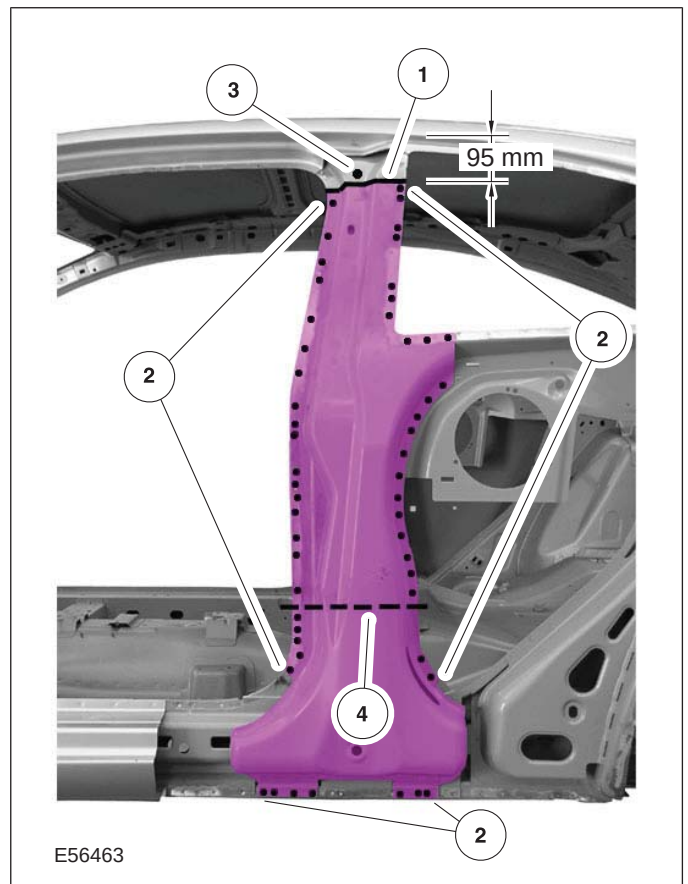
- Necessary removal work: Front door, B-pillar trim panel, rocker panel trim, headliner, front and rear seats.
- Fold back the carpets and move the wiring harness out of the working area.

2. **NOTE:** If the B-pillar inner panel is also being renewed, the cut on the upper B-pillar must be made according to dimensions. Depending on the damage, it is also possible to carry out a partial replacement of the B-pillar reinforcement.

B-pillar reinforcement

1. Cut point.
2. Mill out the spot welds.
3. Mill out the spot weld and drill out to 10 mm.

4. Cut location for partial replacement.

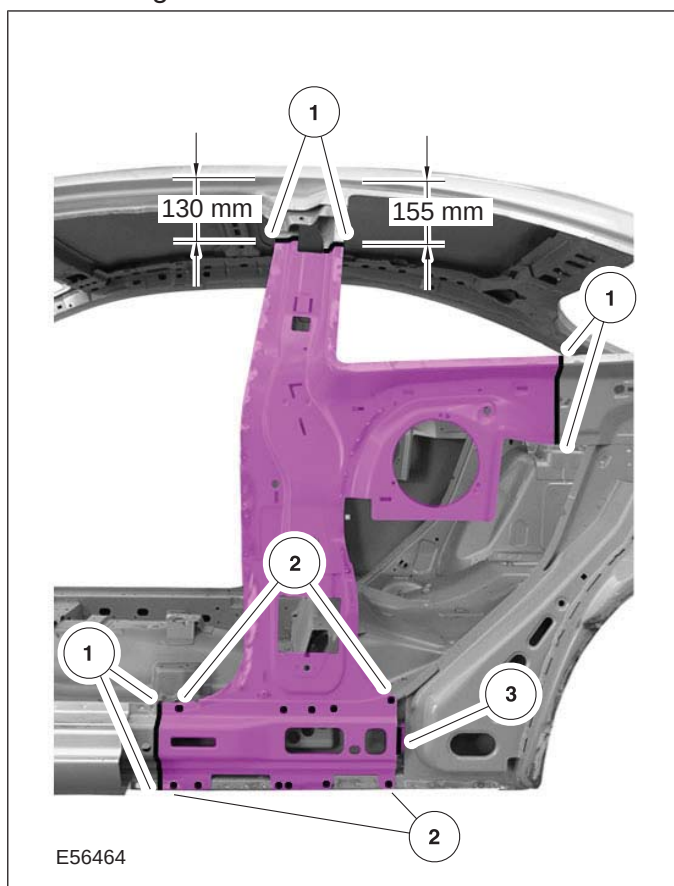


3. Inner B-pillar

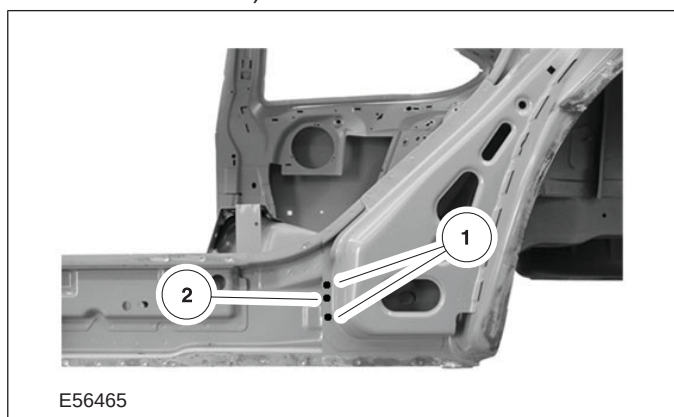
1. Cut locations.
2. Mill out the spot welds.

REMOVAL AND INSTALLATION

3. Rough cut location.

4. **NOTE:** The spot welds at pos. 1 only join the rear panel layers.**Inner B-pillar**

1. Mill out the spot welds from the rear using the spherical milling cutter.
2. Mill out the spot welds (three panel thicknesses).

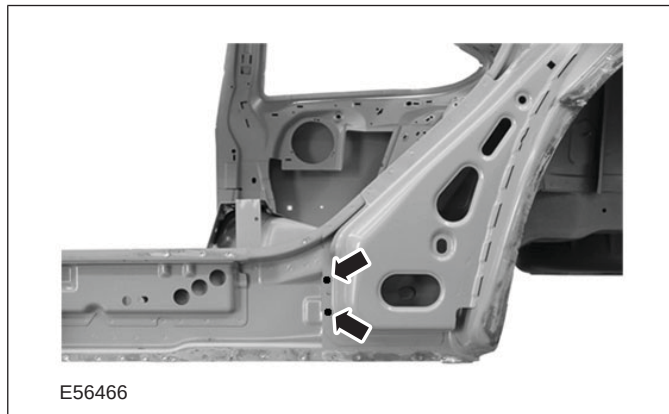
**Installation**

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. Inner B-pillar

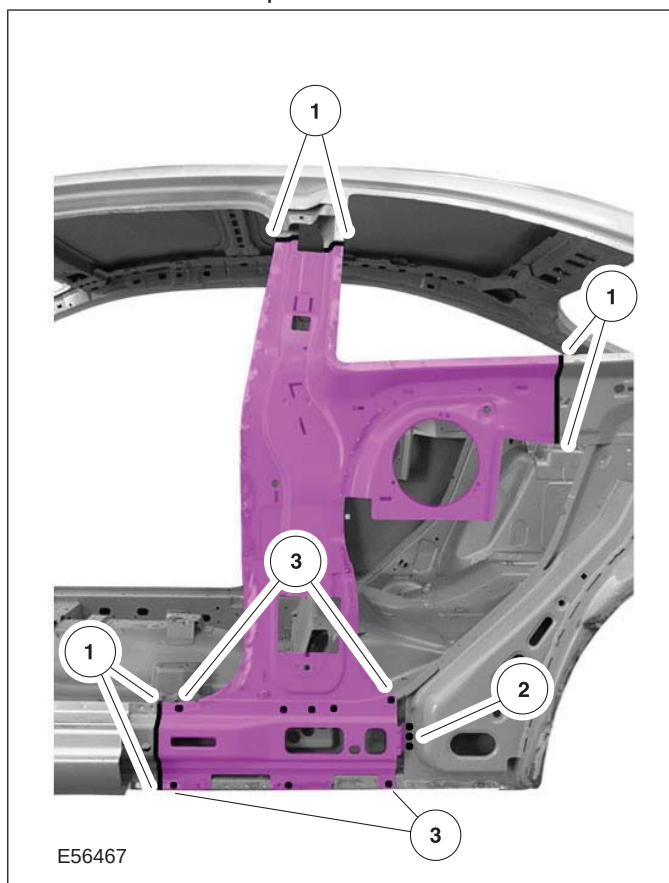
- Drill holes for puddle welding (two panel thicknesses).



2. NOTE: Only tack-weld the B-pillar inner panel to the lower rocker panel. The final weld joint is made with the B-pillar reinforcement and quarter panel installed.

Inner B-pillar

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

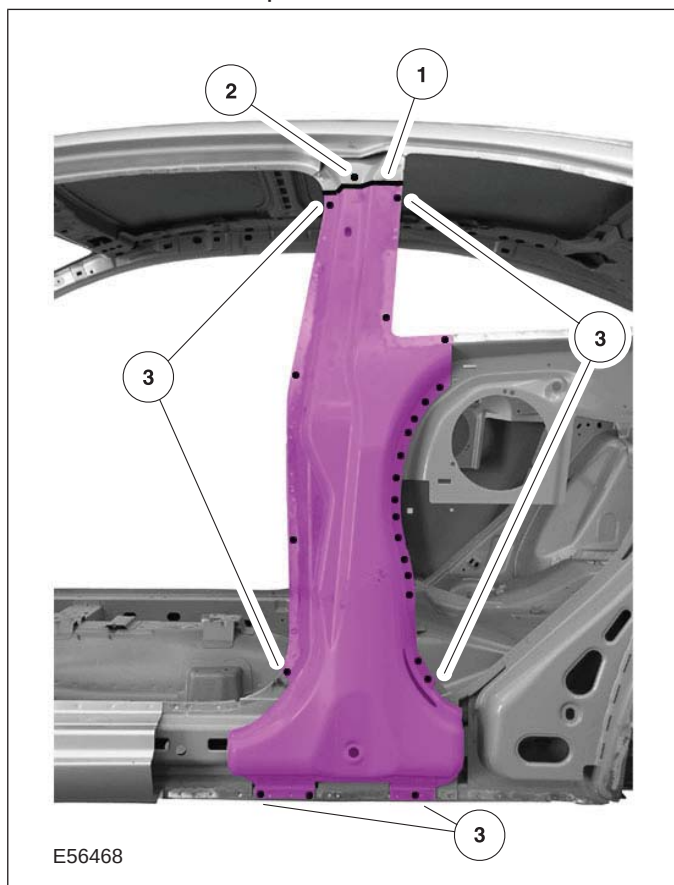


REMOVAL AND INSTALLATION

3. **NOTE:** Only tack-weld the B-pillar reinforcement in the areas of the door and side window cut-out and the lower rocker panel. The final welded joint is made with the quarter panel installed.

B-pillar reinforcement

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



REMOVAL AND INSTALLATION

B-Pillar and Reinforcement — 4-Door/5-Door/Wagon

General Equipment

Measurement and alignment angle system

1. Replacement Parts

- B-pillar outer panel
- B-pillar inner panel
- B-pillar reinforcement

Removal

1. General notes

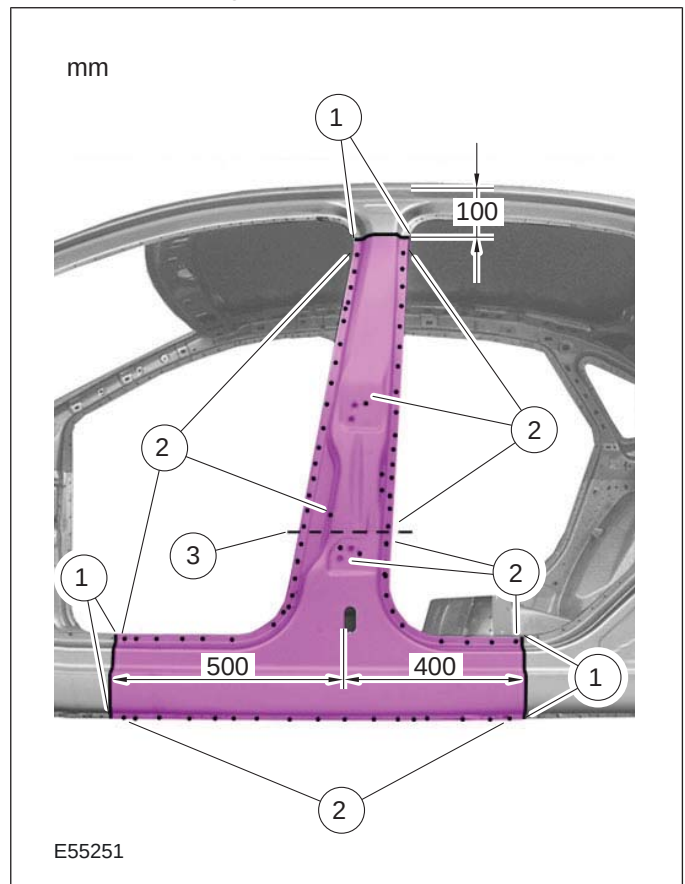
- Required removal operations: Front door, rear door, B-pillar trim panel, rocker panel trim, headliner, front and rear seats.
- Fold back the carpets and move the wiring harness out of the working area.

2. NOTE: If the B-pillar reinforcement is also to be renewed, the separating cuts on the door sill and the upper B-pillar must be made according to the specified dimensions. If only the lower part of the B-pillar outer panel is being renewed, the separating cut must be made above the lower door hinge mounting point.

Outer B-pillar

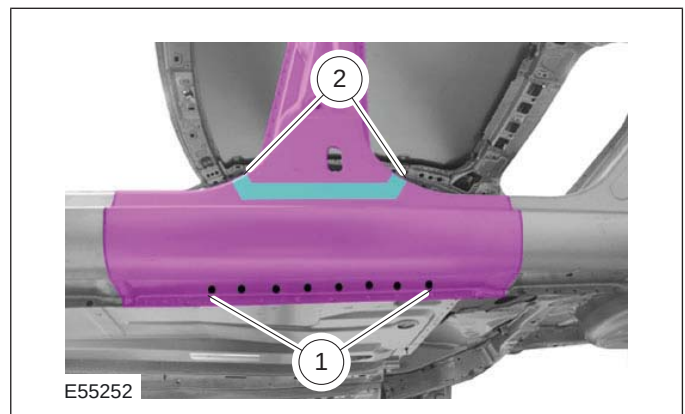
1. Cut locations.
2. Mill out the spot welds.

3. Separating cut for partial replacement.



3. Outer B-pillar

1. Mill out the spot welds.
2. Heat the area (approx. 170°) and detach the NVH element.

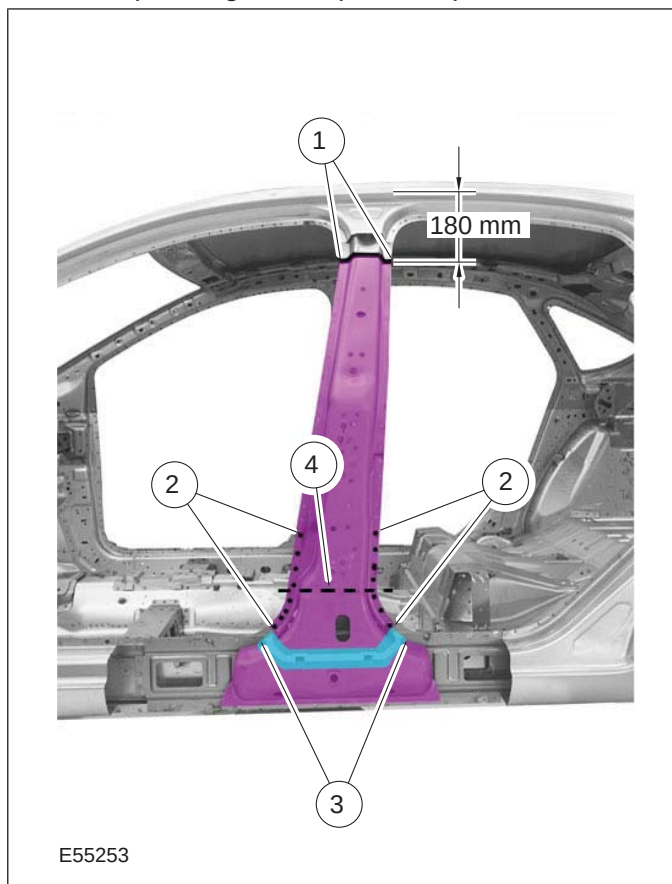


4. B-pillar reinforcement

1. Cut point.
2. Mill out the spot welds.
3. Heat the area (approx. 170°) and detach the NVH element.

REMOVAL AND INSTALLATION

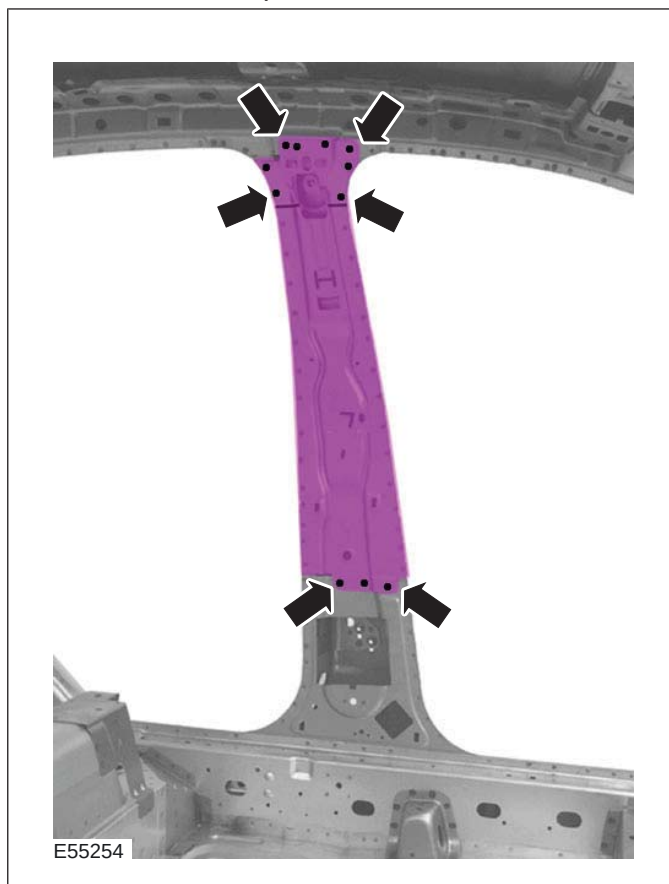
4. Separating cut for partial replacement.



5. **NOTE:** Remove the B-pillar reinforcement with B-pillar inner panel downwards.

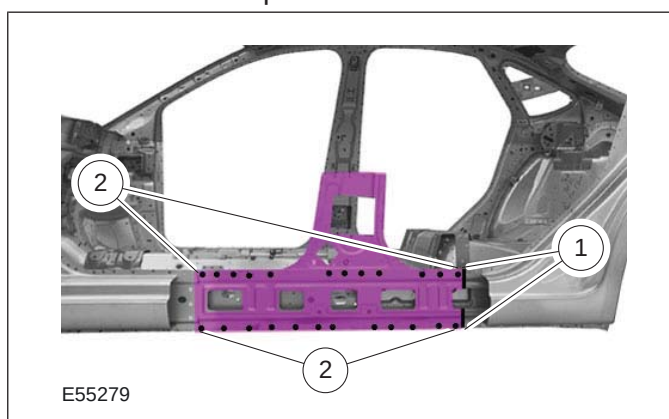
B-pillar (inside view)

• Mill out the spot welds.



6. Inner B-pillar

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



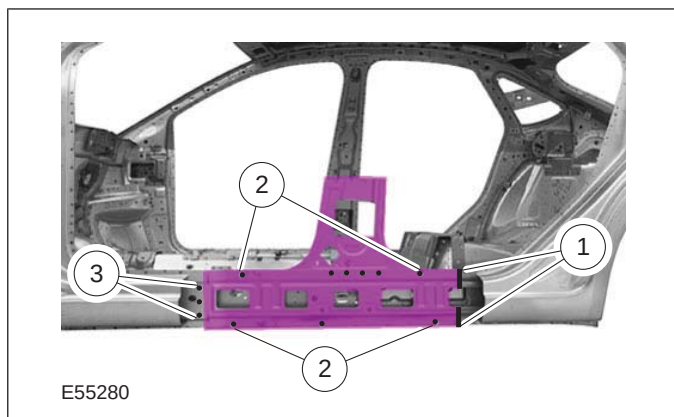
Installation

1. Inner B-pillar

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

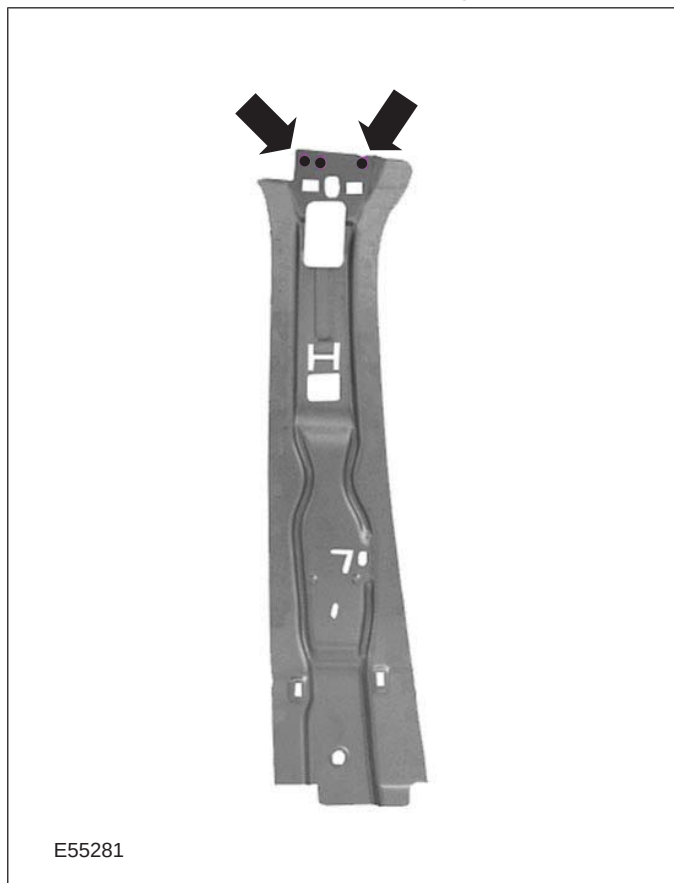
REMOVAL AND INSTALLATION

3. Puddle weld.



2. Inner B-pillar

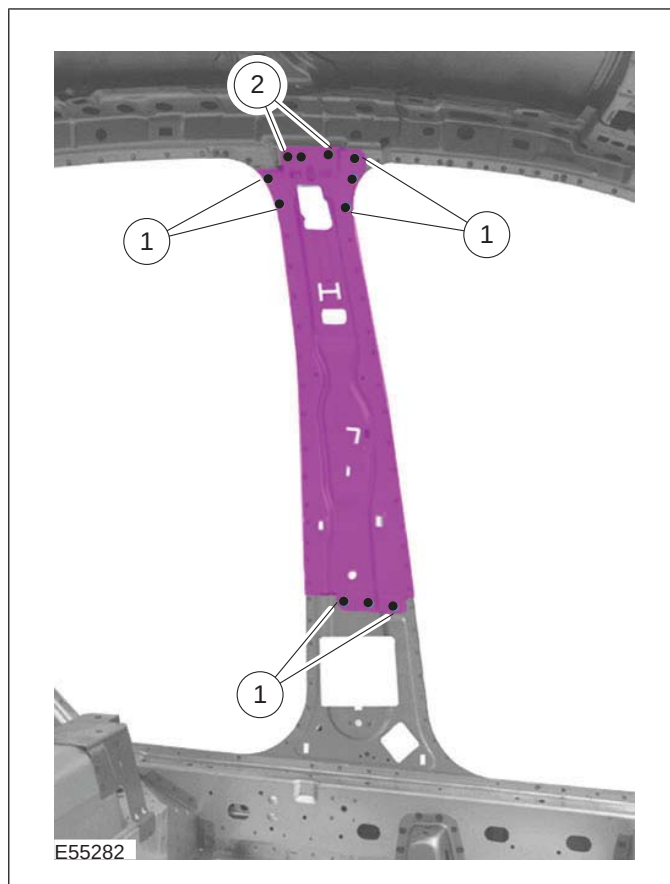
- Drill holes for puddle welding.



3. Inner B-pillar

1. Resistance spot weld.

2. Puddle weld.

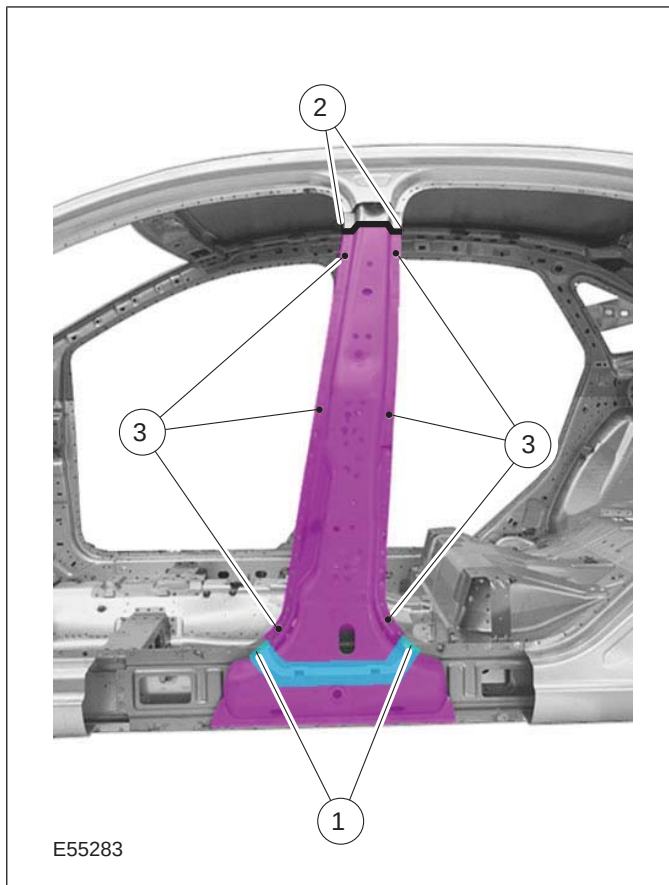


4. B-pillar reinforcement

1. Apply PU glass adhesive to the NVH element.
2. Continuous MIG weld.

REMOVAL AND INSTALLATION

3. Resistance spot weld (tack weld only).



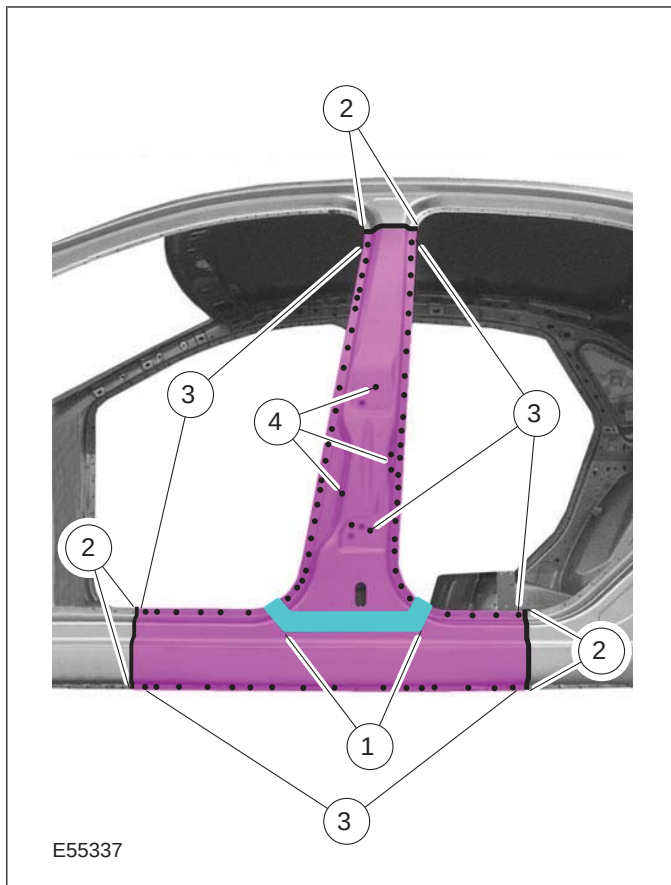
5. Outer B-pillar

- Drill holes for puddle welding.



6. Outer B-pillar

1. Apply PU glass adhesive to the NVH element.
2. Continuous MIG weld.
3. Resistance spot weld.

REMOVAL AND INSTALLATION**4. Puddle weld.****7. Outer B-pillar**

- Puddle weld.

