

RENAULT

4 Panelwork

40A GENERAL INFORMATION

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41C SIDE LOWER STRUCTURE

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X45

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Edition Anglaise

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The methods may be modified as a result of changes introduced by the manufacturer in the production of the various component units and accessories from which his vehicles are constructed."

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KOLEOS - Section 4

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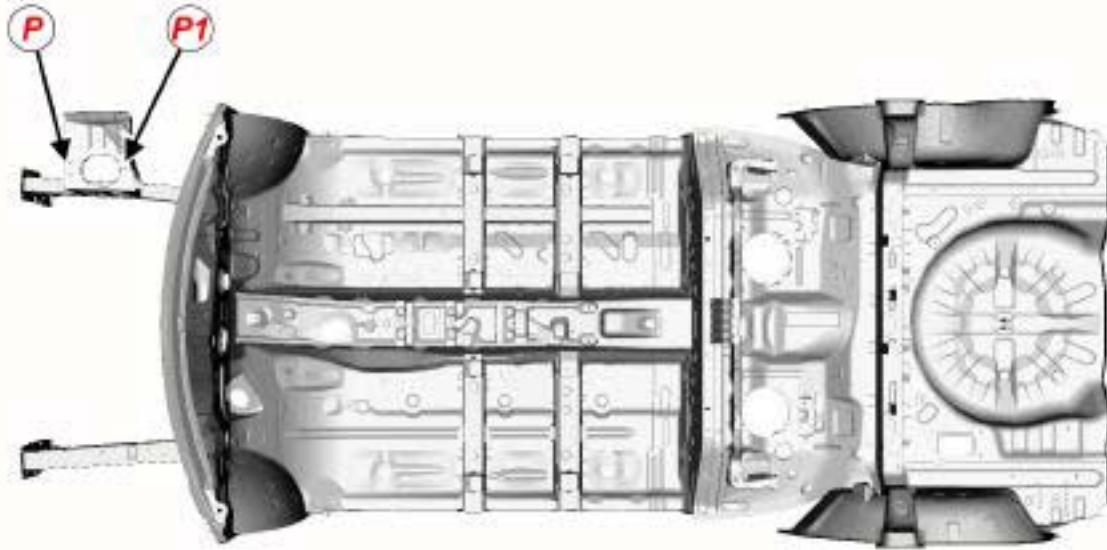
GENERAL INFORMATION

Sub-frame: Specifications

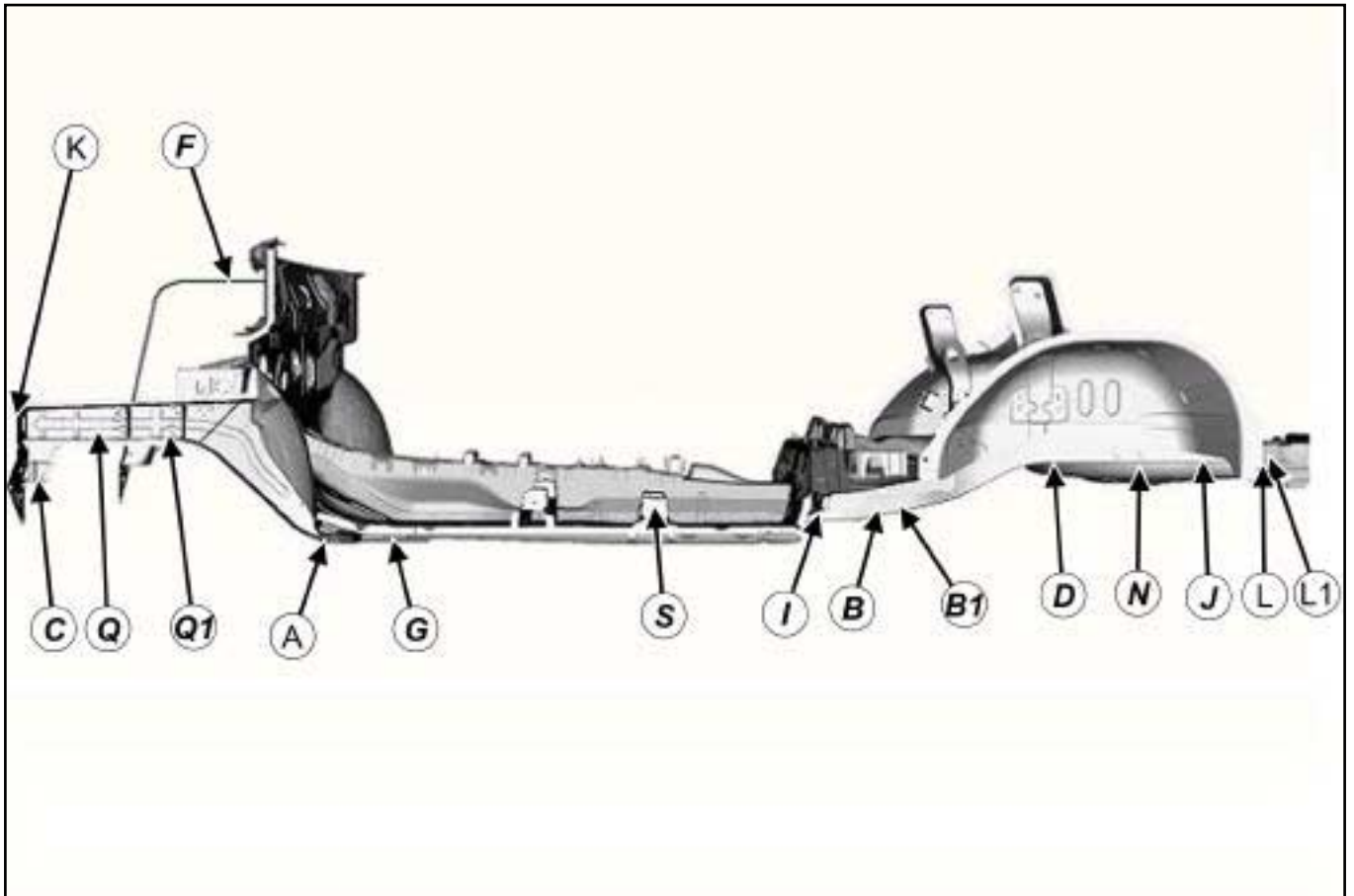
40A

	Description	Dimension X (mm)	Dimension Y (mm)	Dimension Z (mm)	Diameter (mm)
(Ag)	Front left-hand sub-frame rear mounting	301	-305	77.5	M12.125
(Ad)	Front right-hand sub-frame rear mounting	301	305	77.5	M12.125
(B)	Rear axle assembly front mounting	2027.5	± 652.7	88.1	M12.125
(B1)	Additional rear axle assembly front mounting	2138.9	± 568.3	107.7	M12.125
(C)	Front sub-frame front mounting	-566.6	-478/501	174.5	M12.125
(D)	Rear axle assembly rear mounting	2501	± 330	235.6	M12.125
(F)	Front shock absorber upper mounting	12.2	± 593	700	Ø 98
(G)	Front side member rear leader pin	545	± 410	-9.5	Ø 16
(I)	Rear side member front leader pin	1954	± 650	73	Ø 16
(J)	Rear side member rear leader pin	3220	-550.5/523.5	233	Ø 16
(K)	Front end cross member	-594	± 448	413.2	M8
(L)	Rear end cross member	3289	-601/574	277.5	Stud M8
(L1)	Additional rear end cross member	3289	-493/471	277.5	Stud M8
(N)	Rear axle assembly additional mounting	2911/2897	-549/525.5	235	M12.125
(I)	Engine mounting	-339.2	507	534.1	M10.125
(P1)	Additional engine mounting	-149.2	529	534.1	M10.125
(Q)	Gearbox mounting	-263	-428	322	M10.125
(Q1)	Additional gearbox mounting	-118	-417.8	322	M10.125
(S)	Front driveshaft mounting	1250.3	-73.6/88.4	77.3	Stud M10

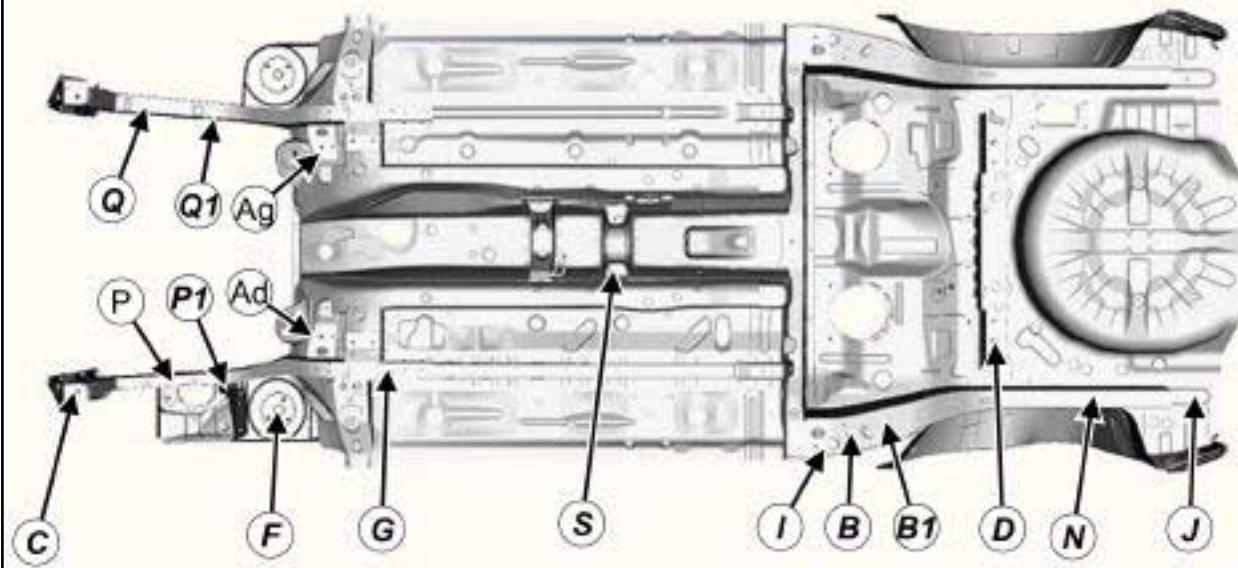
A and B = vehicle trim level reference.



137524



137525



137526

Front impact cross member: General description

Note:

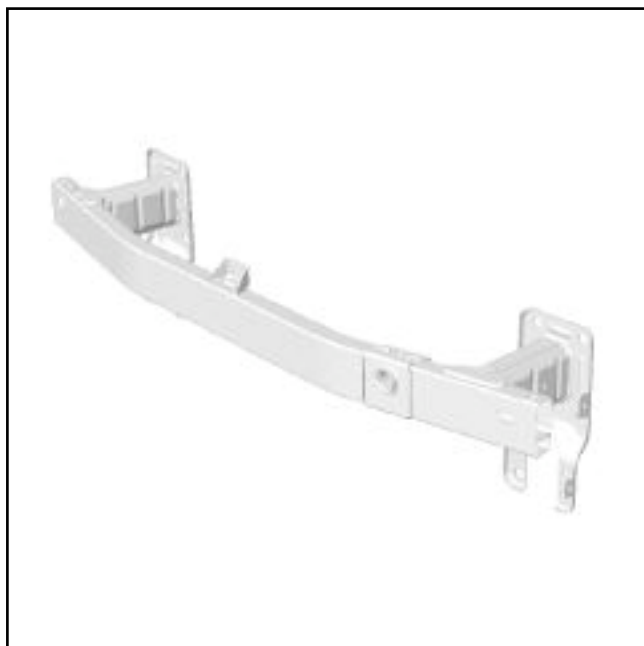
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

DESIGN OF THE STRUCTURAL COMPONENT



130086

This part is bolted on the ends of the front side member via the radiator cross member support.

FRONT LOWER STRUCTURE

Front impact cross member: Removal - Refitting

41A

Tightening torques

front impact cross member bolts	21 N.m
---------------------------------	--------

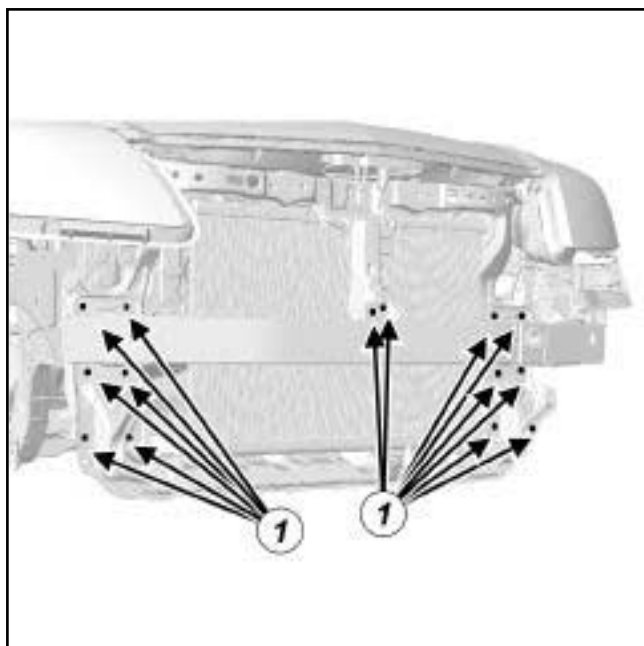
REMOVAL

I - REMOVAL PREPARATION OPERATION

- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).
- ☐ Remove:
 - partially the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection),
 - the engine lower cover,
 - the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
 - the radiator upper grille.

II - OPERATION FOR REMOVAL OF PART CONCERNED

- ☐ Remove the energy absorber from the front bumper.



130264

- ☐ Remove:
 - the bolts (1) ,
 - the front impact cross member.

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit:
 - the front impact cross member,
 - the bolts (1) .
- ☐ Torque tighten the **front impact cross member bolts (21 N.m)**.
- ☐ Refit the energy absorber of the front bumper.

II - FINAL OPERATION

- ☐ Refit:
 - the radiator upper grille,
 - the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
 - the engine lower cover,
 - the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection).

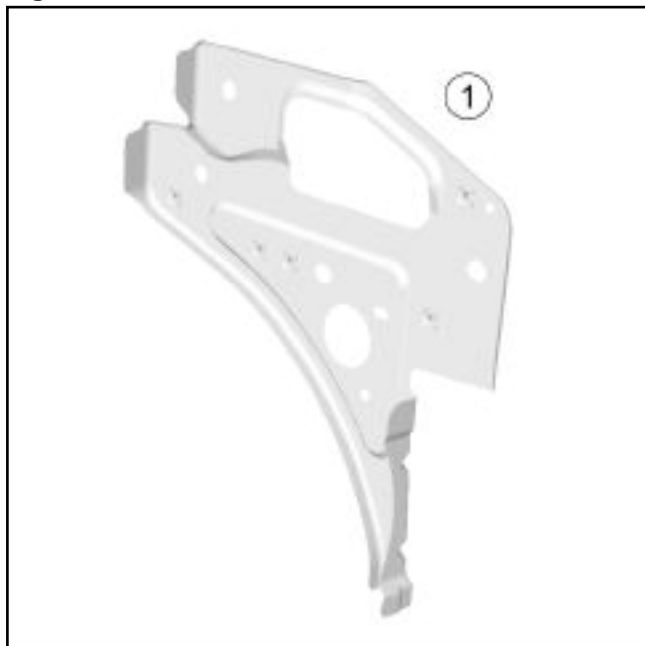
FRONT LOWER STRUCTURE
Front end side cross member: Description

41A

There is only one way of replacing this part:
- complete replacement.

I - COMPOSITION OF THE SPARE PART

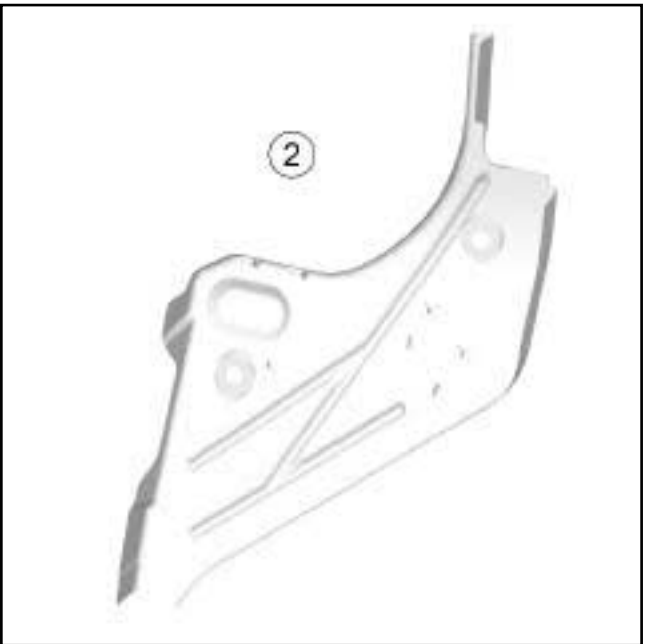
Right-hand side



130087

No.	Description	Type	Thickness (mm)
(1)	Front end side cross member, right-hand side	HEL	1.4

Left side

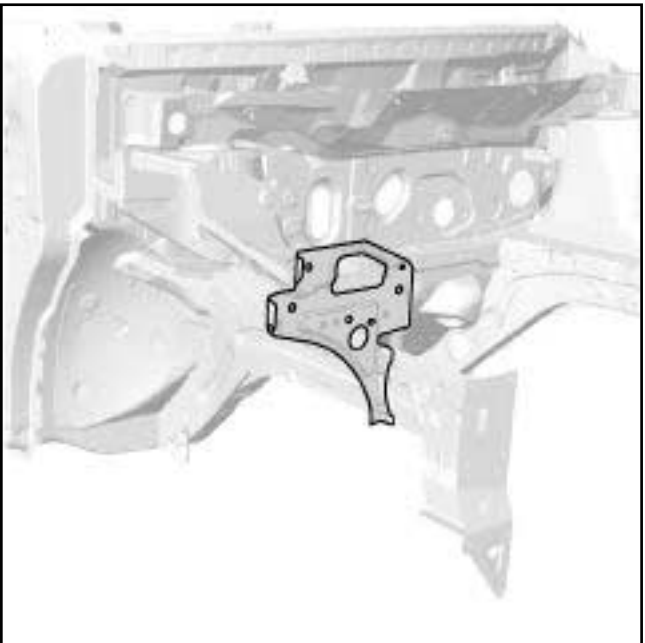


130088

No.	Description	Type	Thickness (mm)
(2)	Front end side cross member, left-hand side	HEL	1.6

II - PART FITTED

Right-hand side



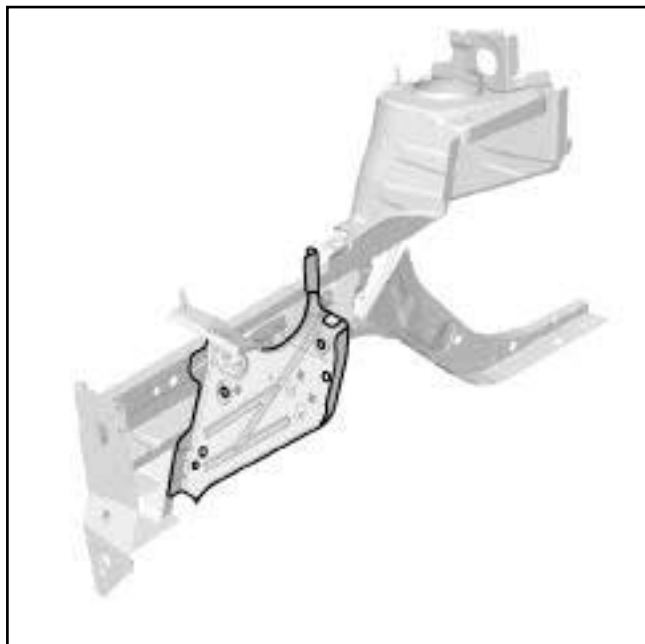
130089

FRONT LOWER STRUCTURE

Front end side cross member: Description

41A

Left side



130090

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

FRONT LOWER STRUCTURE

Front side member: General description

41A

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

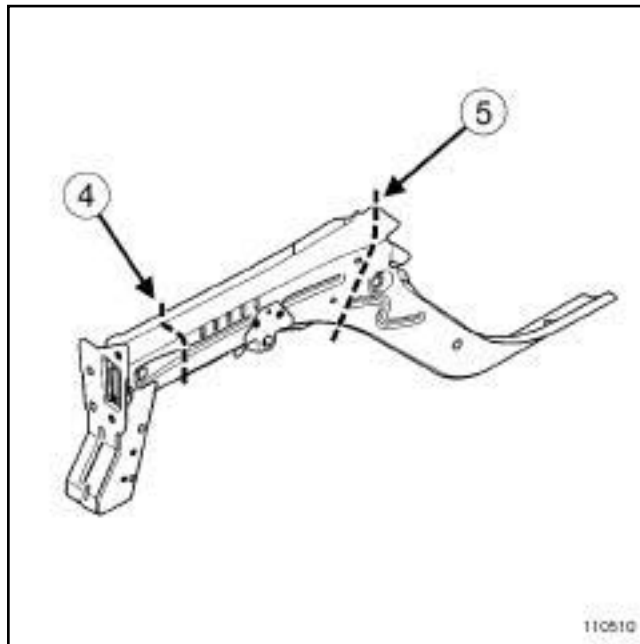
I - DESIGN OF THE STRUCTURAL COMPONENT



110509

The special feature of this type of part is that it combines the functions of front section and rear section of the front side member and that it is made of two different kinds of panels of different thicknesses assembled by laser butt welding.

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



110510

1 - Cut 1:

This line shows the centre of the area in which it is possible to carry out a partial replacement.

This operation allows you to access the inside of the hollow section of the structural element to straighten it.

Note:

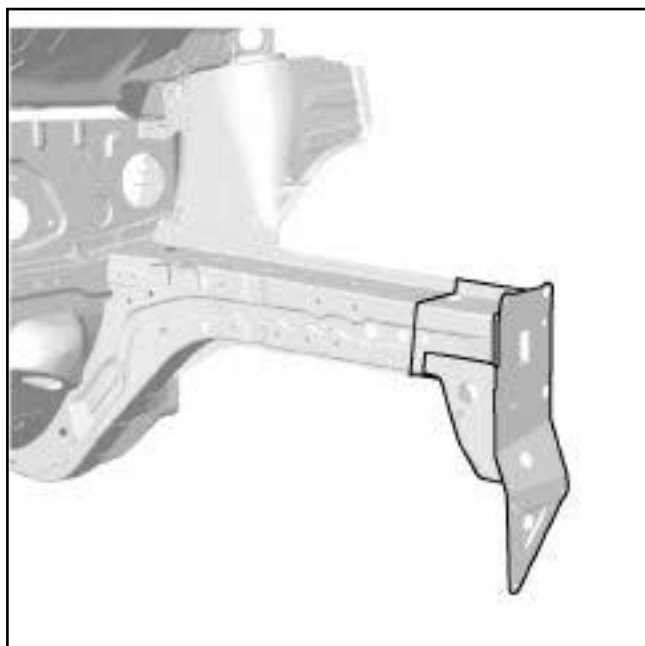
For the partial replacement of parts constituting a single structural component, it is essential to stagger the welds of each of the components.

In this case, the side member weld line must be staggered from that of its closure panel.

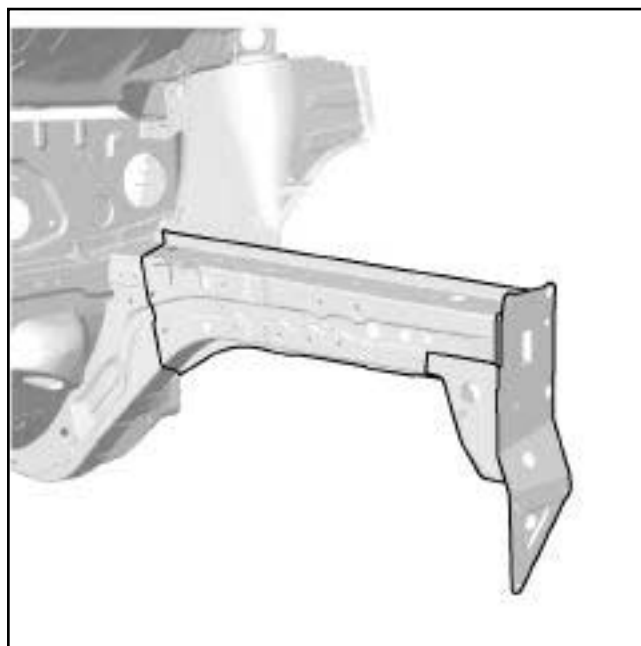
FRONT LOWER STRUCTURE

Front side member: General description

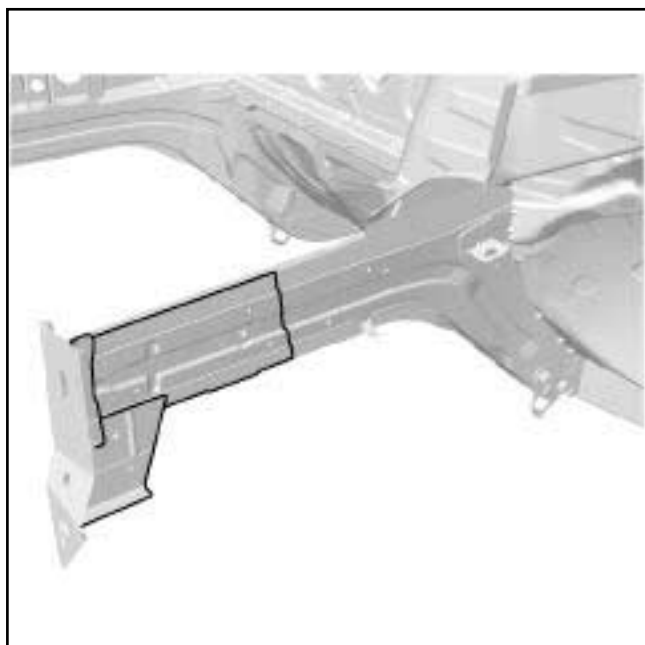
41A



130093



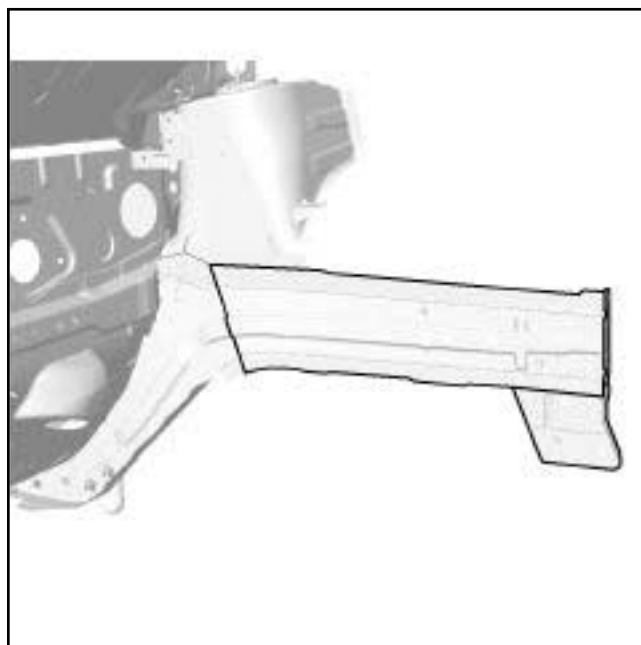
130095



130094

2 - Cut 2:

The cut is made along the butt weld.



130096

III - ASSEMBLY METHOD FOR A PARTIAL REPLACEMENT

Only the connections which are specific to the partial replacement by cutting are indicated.

WARNING

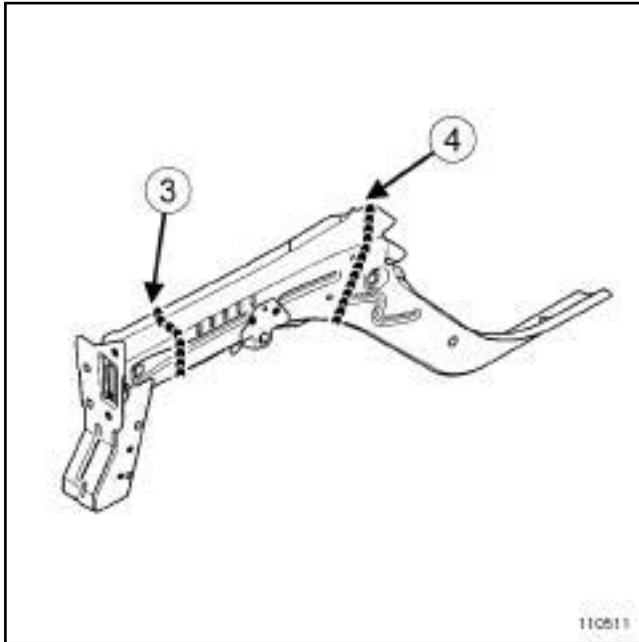
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

FRONT LOWER STRUCTURE

Front side member: General description

41A

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).



110511

Lines (3) and (4) on the diagram show a butt weld by continuous EGW welding.

Weld (4) along the butt weld line.

FRONT LOWER STRUCTURE
Front side member: Description

41A



130098

To replace this part, order the front side member expanding insert (A) .

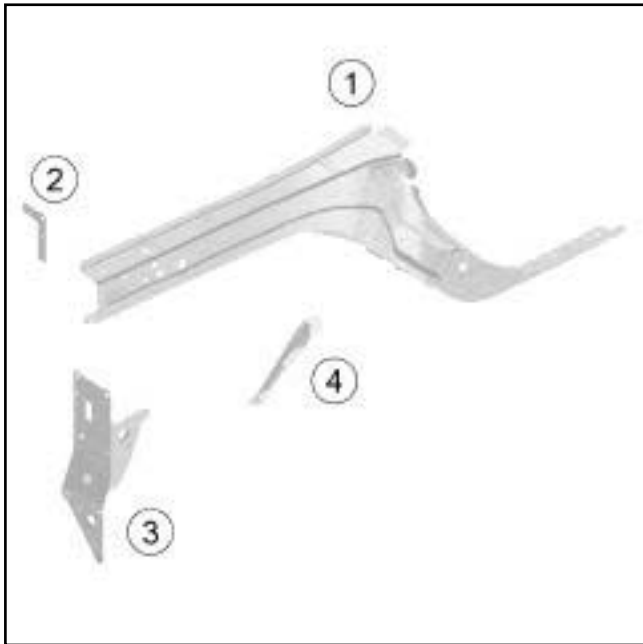
The options for replacing this part are as follows:

- partial replacement of front end section,
- partial replacement of the front section.

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

I - COMPOSITION OF THE SPARE PART



130099

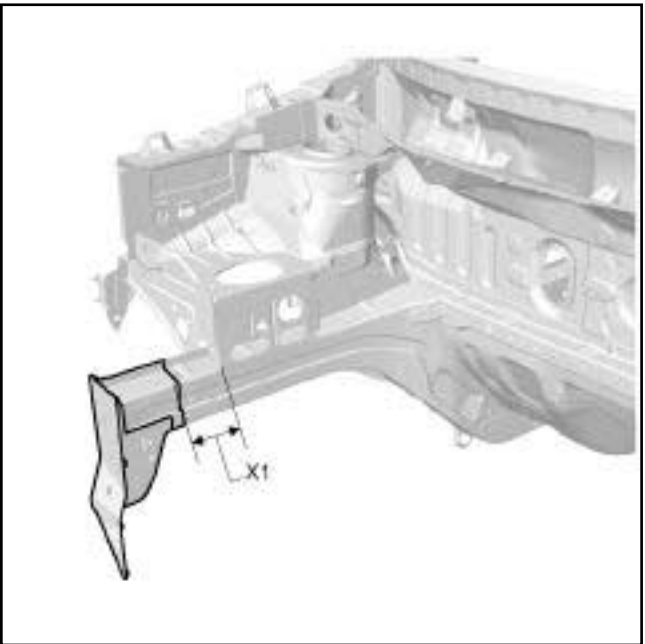
No.	Description	Type	Thic- kness (mm)
(1)	Front side member	HLE/ THLE	1.7 / 2.0
(2)	Front side member brace	HEL	1.8
(3)	Front suspension member mounting bracket		
(4)	Front side member reinforcement	HEL	1.4

II - PART FITTED

1 - Partial replacement of front end section (right-hand side)

WARNING

Respect the position of this cut which has been determined in accordance with the position of the inner stiffeners or acoustic inserts, in order to prevent damaging the parts (inner stiffener and/or acoustic insert).



130100

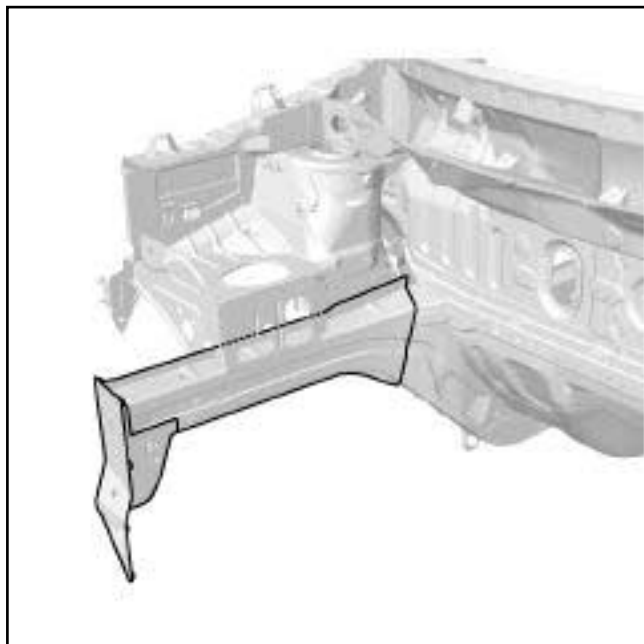
FRONT LOWER STRUCTURE

Front side member: Description

41A

(X1) = 82 mm

2 - Partial replacement of front end section (right-hand side)

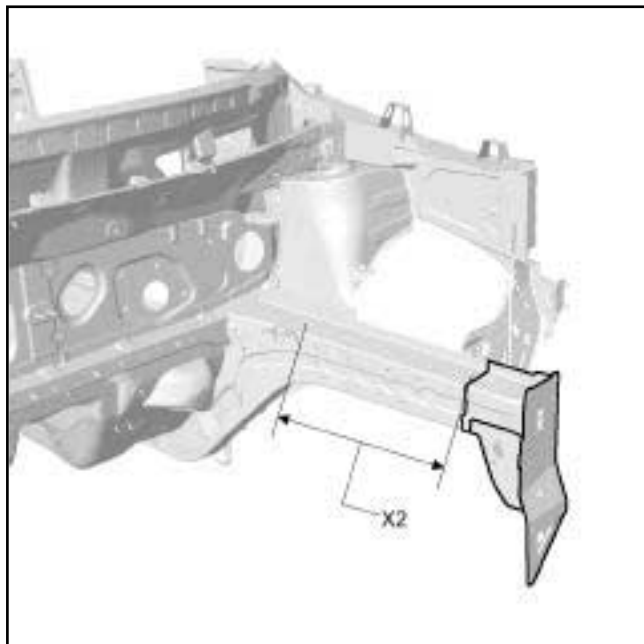


130101

WARNING

To preserve the mechanical specifications of the part, make the cut along the line of the original butt weld.

3 - Partial replacement of front end section (left-hand side)



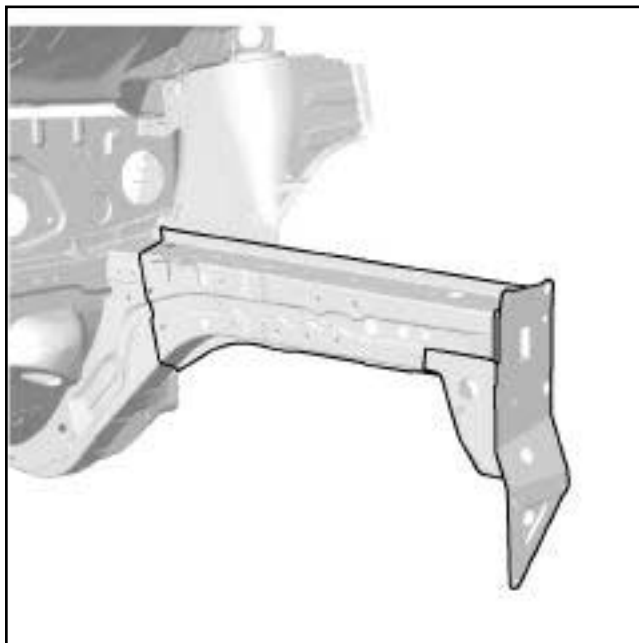
130102

(X2) = 335 mm

WARNING

Respect the position of this cut which has been determined in accordance with the position of the inner stiffeners or acoustic inserts, in order to prevent damaging the parts (inner stiffener and/or acoustic insert).

4 - Partial replacement of front end section (left-hand side)



130103

WARNING

To preserve the mechanical specifications of the part, make the cut along the line of the original butt weld.

III - POSITIONING OF LOCAL ELECTRICAL EARTHS

WARNING

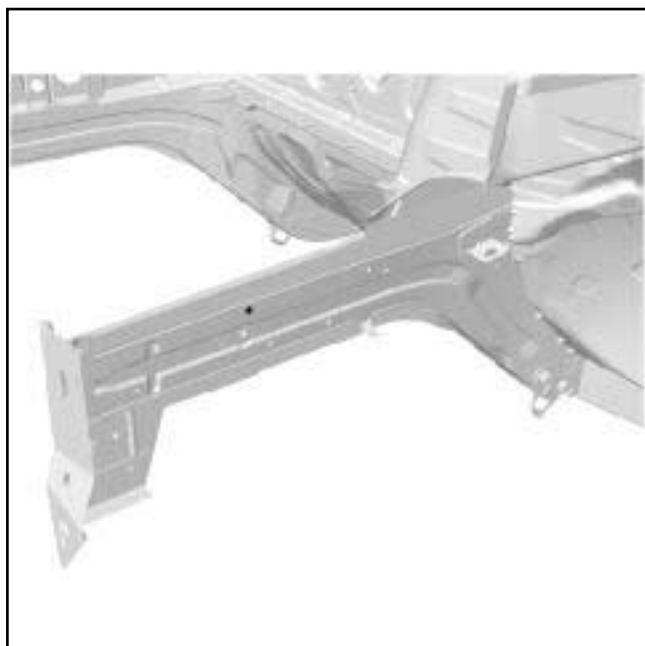
To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

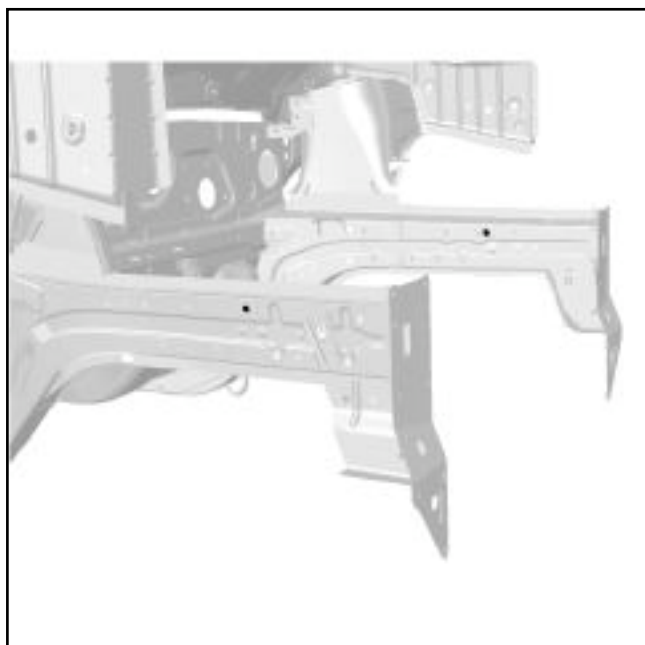
FRONT LOWER STRUCTURE

Front side member: Description

41A



130104



130105

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

Note:

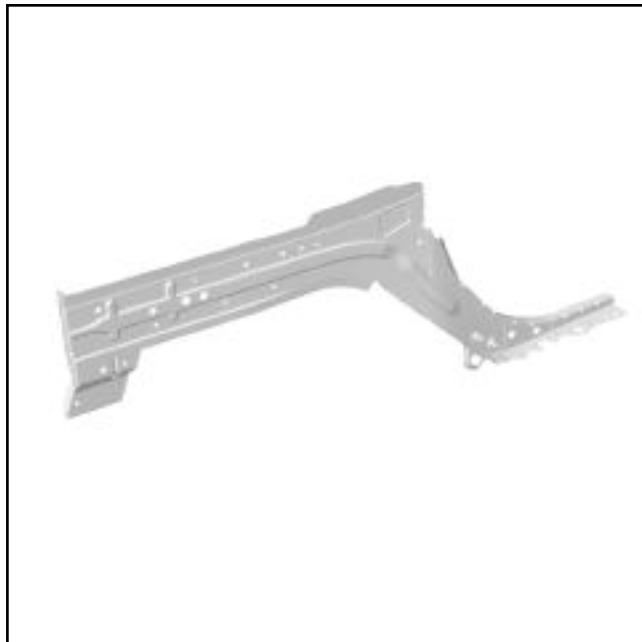
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

I - DESIGN OF THE STRUCTURAL COMPONENT



130106

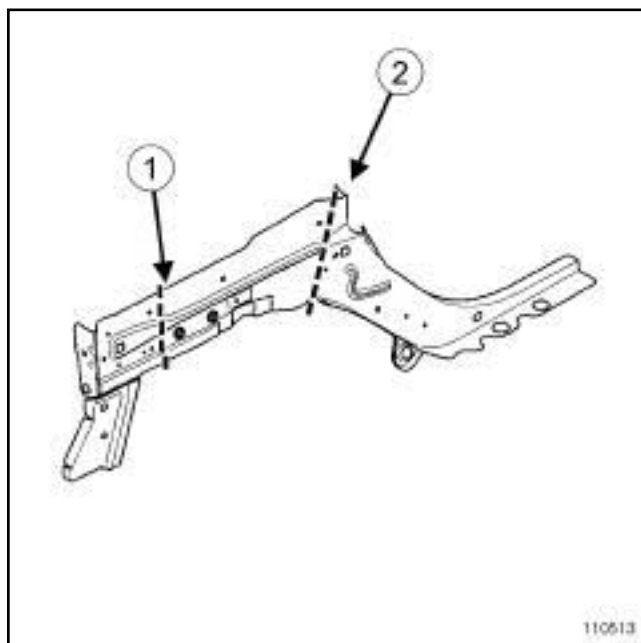
The special feature of this type of part is that it combines the functions of both the front section and rear section of the front side member closure panel and that it is made of two different kinds of panels of different thicknesses assembled by laser butt welding.

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT

Note:

For the partial replacement of parts constituting a single structural component, it is essential to stagger the welds of each of the components.

For removal of the side member (see **41A, Front lower structure, Front side member: Description**, page **41A-8**).

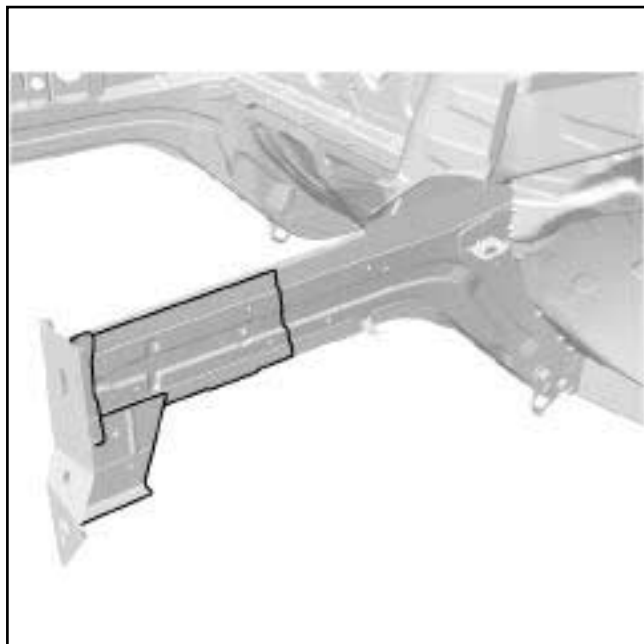


110513

1 - Cut 1:

This line shows the centre of the area in which it is possible to carry out a partial replacement.

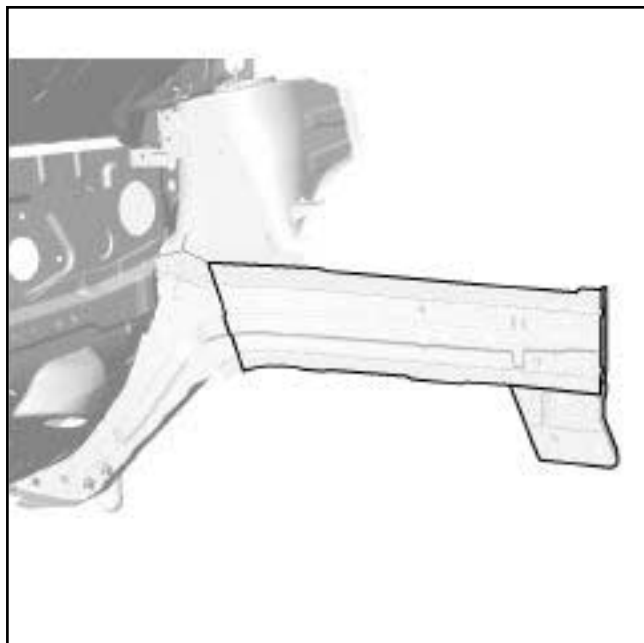
This operation allows you to access the inside of the hollow section of the structural component to straighten it.



130108

2 - Cut 2:

The cut must be made on the splice.



130109

III - ASSEMBLY INSTRUCTIONS FOR A PARTIAL REPLACEMENT

In this case, the side member weld line must be staggered from that of its closure panel.

Note:

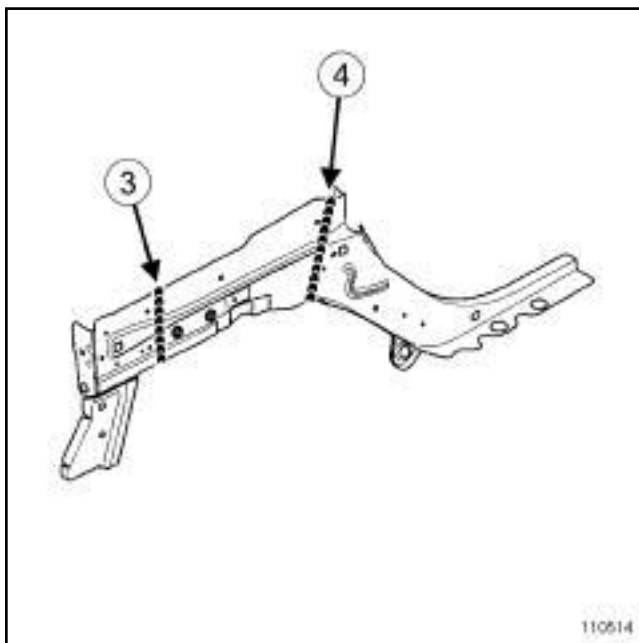
For the partial replacement of parts constituting a single structural component, it is essential to stagger the welds of each of the components.

Only the connections which are specific to the partial replacement by cutting are indicated.

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).



110514

110514

Lines (3) and (4) on the diagram show a butt weld by continuous EGW welding.

Weld (4) along the butt weld line.



130111

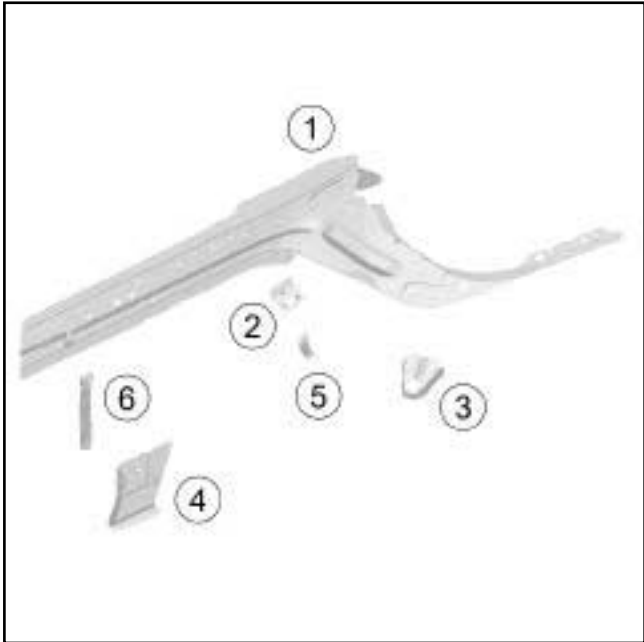
The options for replacing this part are as follows:

- partial replacement of front end section,
- partial replacement of the front section.

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

I - COMPOSITION OF THE SPARE PART



130112

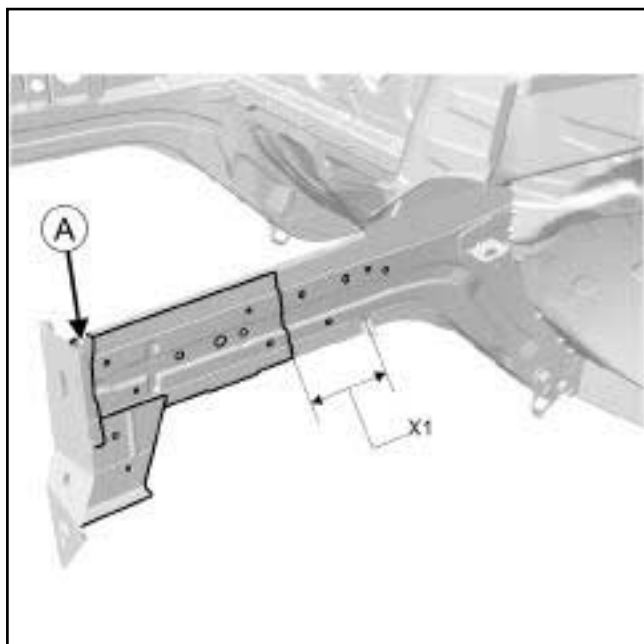
No.	Description	Type	Thickness (mm)
(1)	Side member closure panel	HLE/THLE	1.7/2.0
(2)	Flexible brake pipe mounting	HEL	2.3
(3)	Front tie down hook	Very high yield strength	4.0
(4)	Front suspension mounting outer bracket	HEL	1.5
(5)	Sensor wiring mounting	HEL	2
(6)	Front side member flange	HEL	2.3

II - PART IN POSITION

1 - Partial replacement of the front end section

WARNING

To preserve the mechanical specifications when partially replacing parts with a single structural component, alter the weld lines for each of these components.



130113

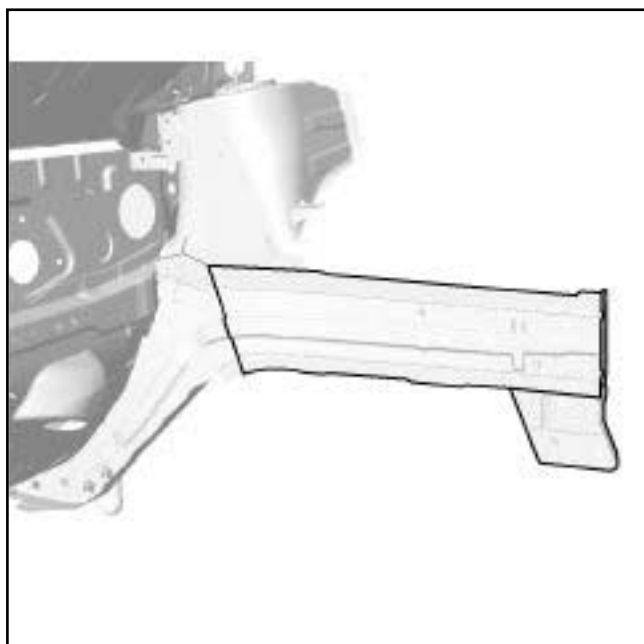
(X1) = 132 mm

Note:

For weld joints in three thicknesses (**A**), the spot welds on the part replaced should be made in the same place as for the original joint to retain its mechanical properties (see **MR 400**).

2 - Partial replacement of the front section

To make this cut, first remove the front side member part section along the line of the butt weld.



130114

WARNING

To preserve the mechanical specifications of the part, make the cut along the line of the original butt weld.

WARNING

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400, 40A, General Information**.

DESIGN OF THE STRUCTURAL COMPONENT



130115

This is a basic part; its only function is that of front side member, centre section.

WARNING

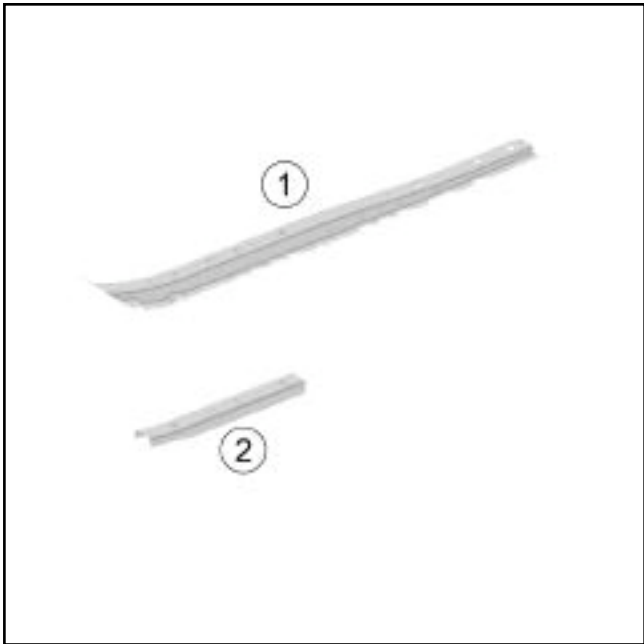
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).



130265

There is only one way of replacing this part:
- complete replacement.

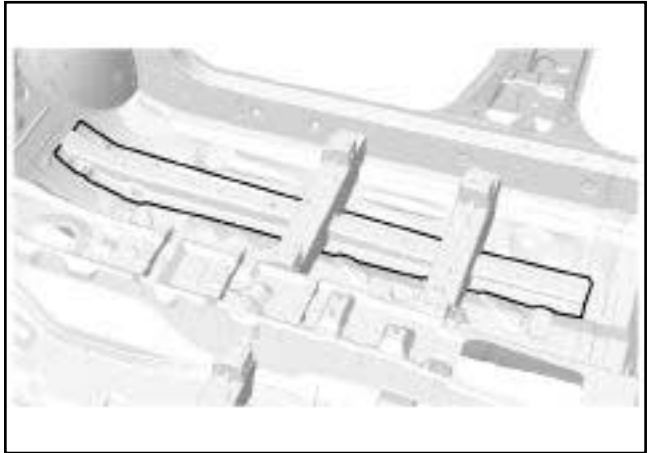
I - COMPOSITION OF THE SPARE PART



130266

No.	Description	Type	Thic- kness (mm)
(1)	Centre side member	Very high yield strengt h	1.8
(2)	Centre side member reinfor- cement	Very high yield strengt h	2.0

II - PART FITTED



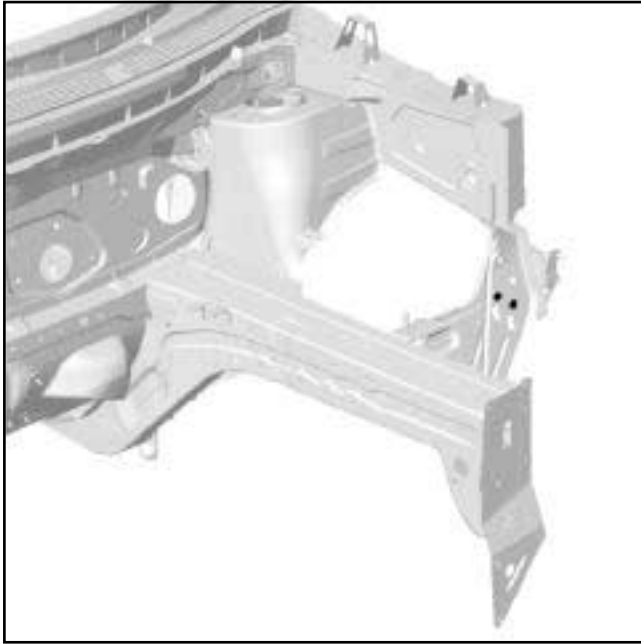
130267

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

Front side member, central section: Description

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



130270

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the earth of the welding machine as closely as possible to the weld area (see **MR 400**).

FRONT LOWER STRUCTURE

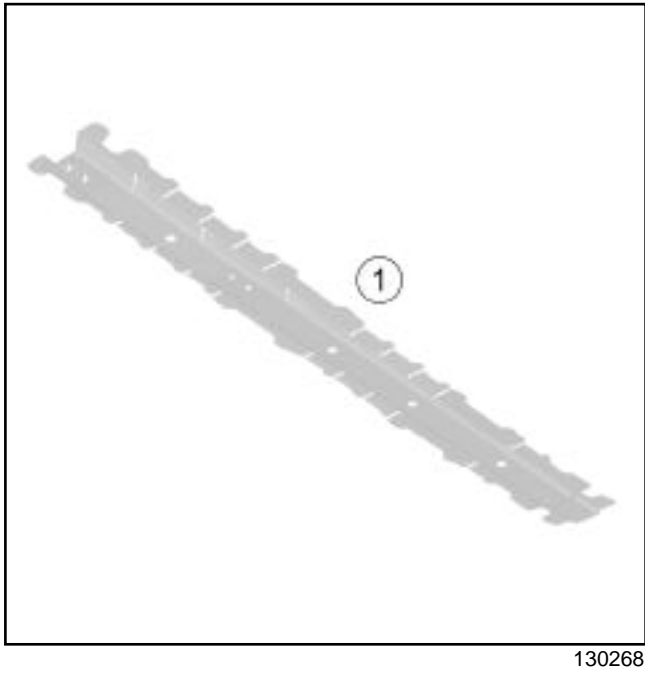
Front side member, rear section: Description

41A

There is only one way of replacing this part:

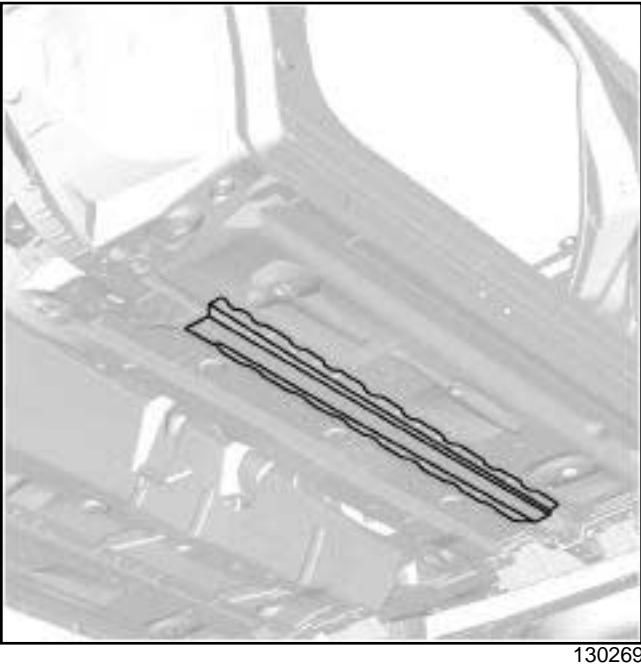
- complete replacement.

I - COMPOSITION OF THE SPARE PART



No.	Description	Type	Thic- kness (mm)
(1)	Front side mem- ber rear part	HEL	1.0

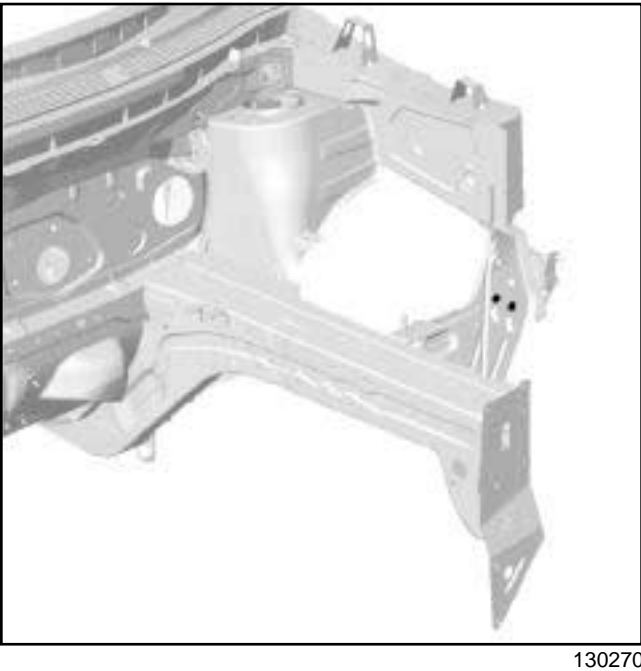
II - PART FITTED



WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the earth of the welding machine as closely as possible to the weld area (see **MR 400**).

FRONT LOWER STRUCTURE

Sub-frame rear mounting: General description

41A

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

Note:

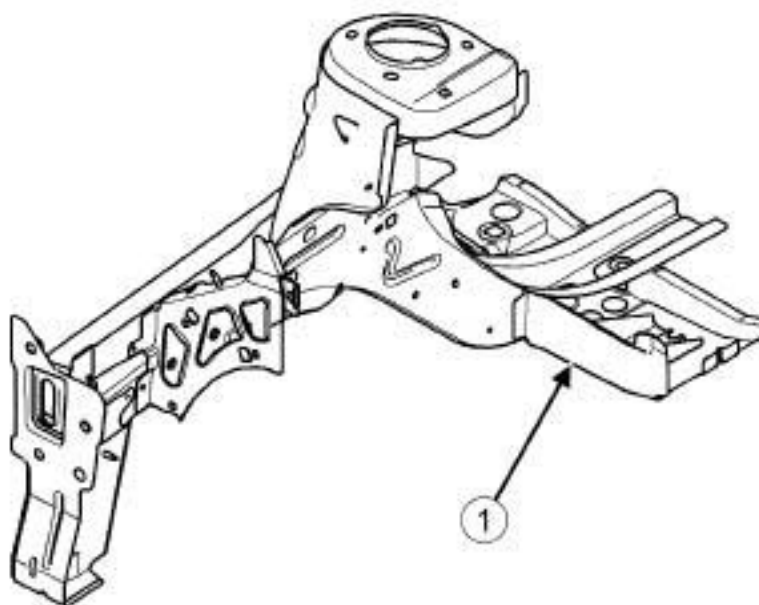
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

For a detailed description of a particular connection, see **MR 400**.

DESIGN OF THE STRUCTURAL COMPONENT



110489

110489

The front sub-frame rear mounting (1) is welded to the front half unit.

FRONT LOWER STRUCTURE

Sub-frame rear mounting: Description

41A

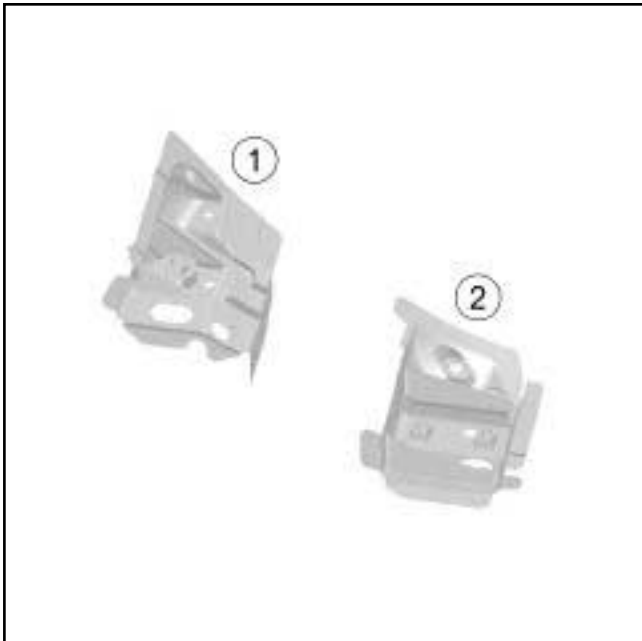


130271

There is only one way of replacing this part:

- complete replacement.

I - COMPOSITION OF THE SPARE PART



130272

No.	Description	Type	Thic- kness (mm)
(1)	Front subframe rear mounting	HEL	2.0
(2)	Rear subframe rear mounting	HEL	1.2

II - PART FITTED

Complete replacement



130273

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

FRONT LOWER STRUCTURE

Engine mounting: General description

41A

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

Note:

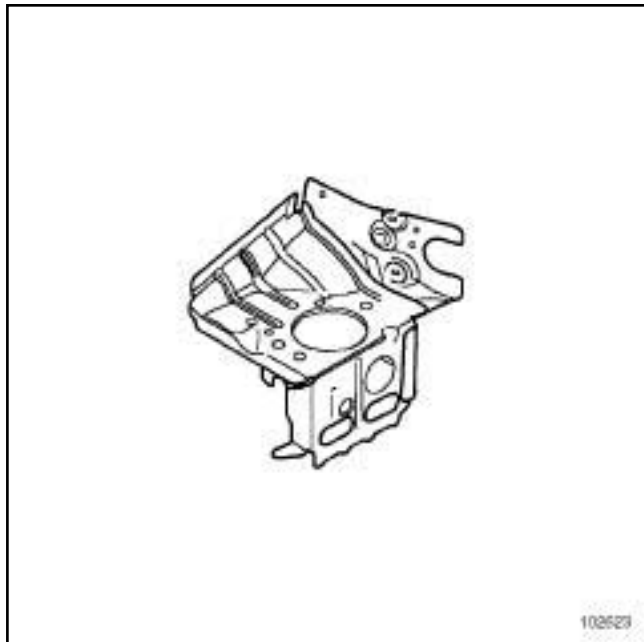
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

For a detailed description of a particular connection, see **MR 400**.

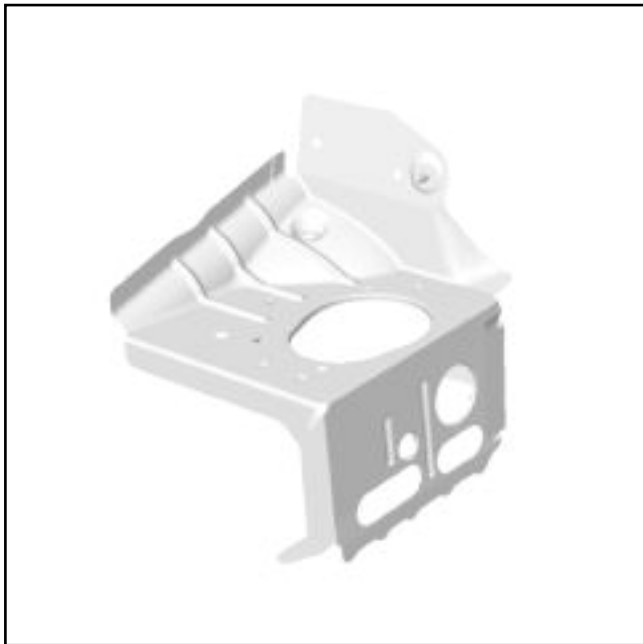
DESIGN OF THE STRUCTURAL COMPONENT



102623

102623

This is a basic part; it only functions as an engine mounting.



130117

There is only one way of replacing this part:

- Complete replacement: this operation complements the replacement of the scuttle panel for a frontal impact and the partial replacement of the front side member and front wheel arch for a right-hand side impact.

IMPORTANT
Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

I - COMPOSITION OF THE SPARE PART

Engine mounting, low torque

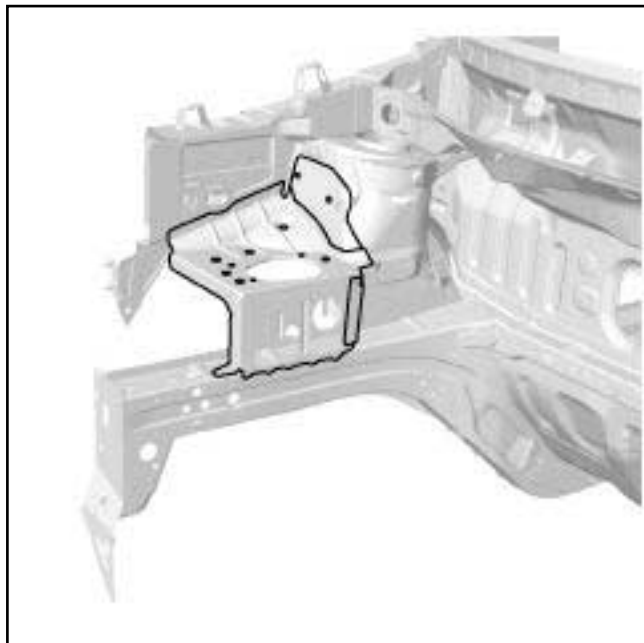


130119

No.	Description	Type	Thickness (mm)
(1)	Engine mounting upper section	HEL	2.0
(2)	Engine mounting rear section	HEL	2.0
(3)	Engine mounting height adjuster mounting	HEL	1.6
(4)	Engine mounting rear reinforcement	HEL	2.0

II - PART FITTED

Engine mounting, low torque



130120

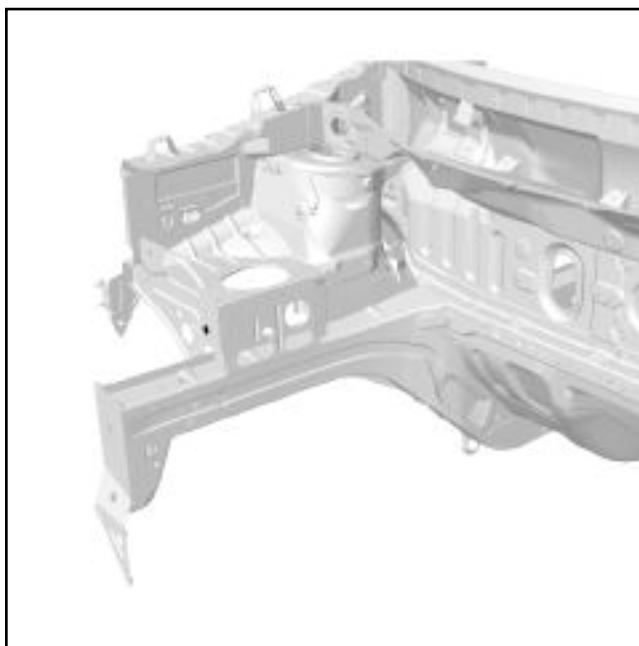
WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

III - POSITIONING OF LOCAL ELECTRICAL EARTHS

For the earth stud fitting procedure (see **Earths on the body: List and location of components**)

Position of the earth stud



130121

FRONT LOWER STRUCTURE

Front half unit: General description

41A

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

Note:

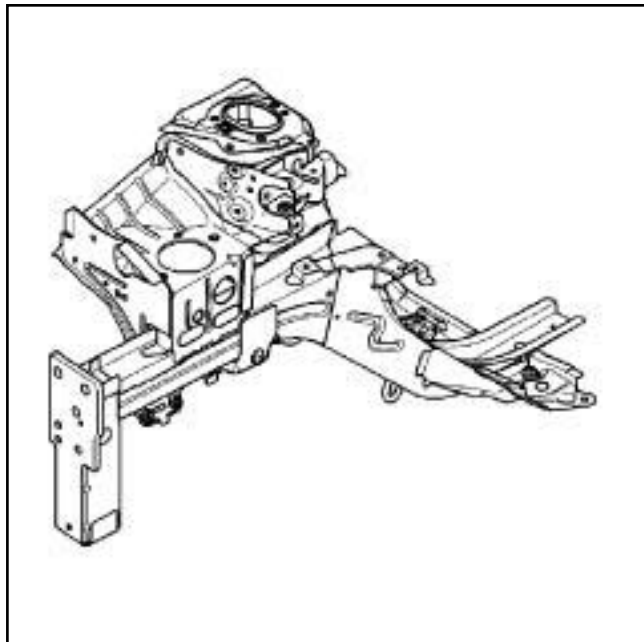
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

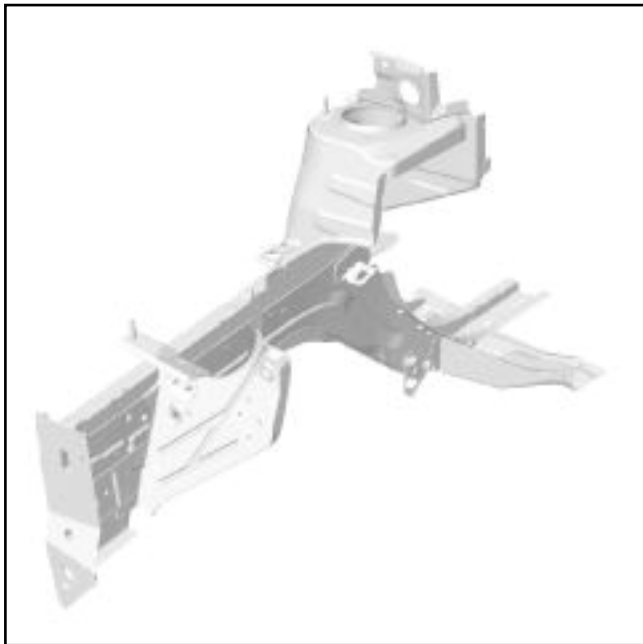
For a detailed description of a particular connection, see **MR 400**.

DESIGN OF THE STRUCTURAL COMPONENT

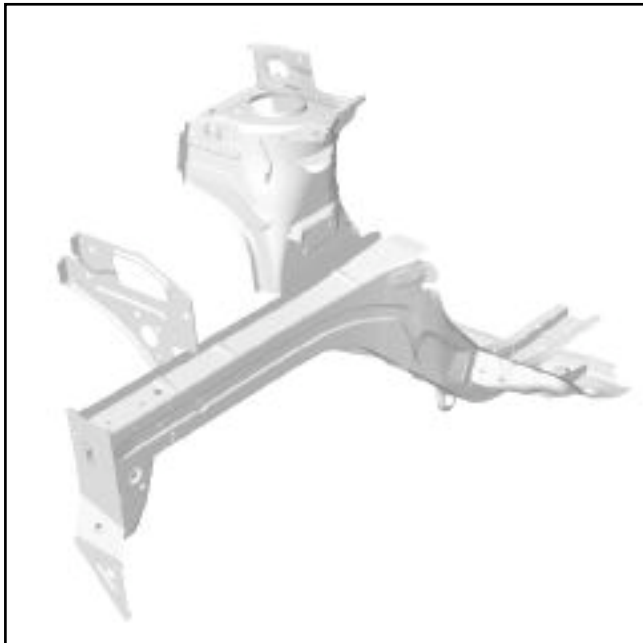


127232

The special feature of this type of part is that it combines the functions of front side member, front wheel arch, centre floor front side cross member and front end side cross member, and is made up of several panels of different types and thicknesses.



130123



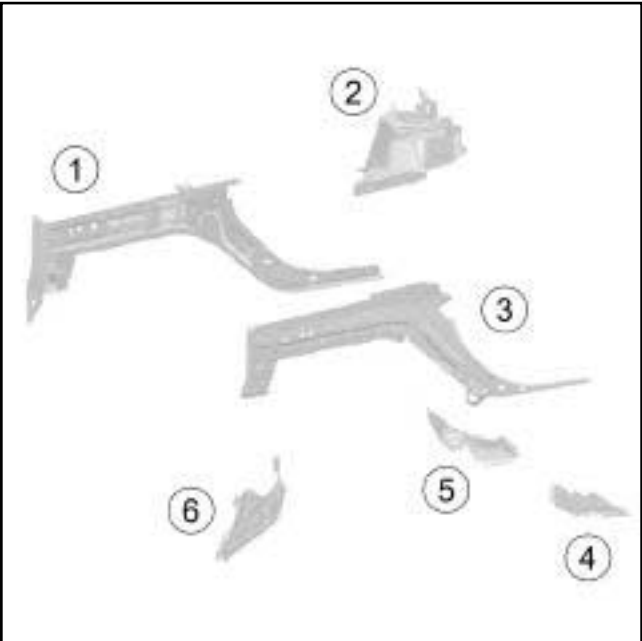
130124

There is only one way of replacing this part:
- complete replacement.

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

I - COMPOSITION OF THE SPARE PART



130125

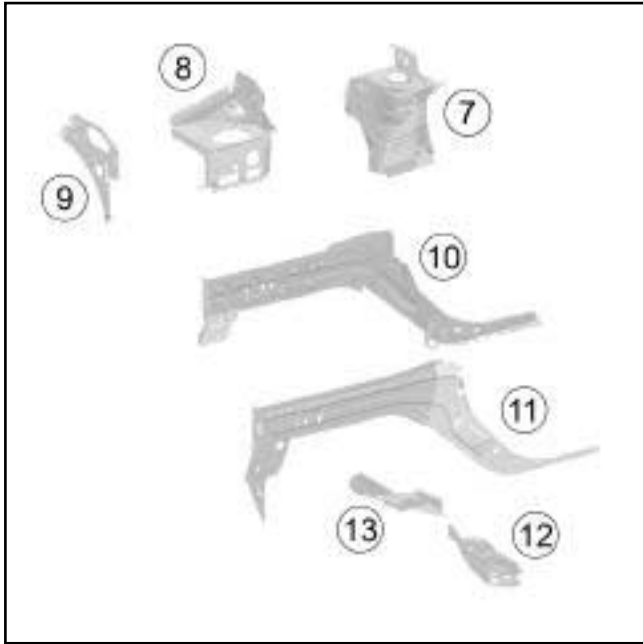
No.	Description	Type	Thic- kness (mm)
(1)	Front side member	HLE/ THLE	1.7/2.0
(2)	Front wheel arch	HLE	1.2
(3)	Side mem- ber closure panel	HLE/ THLE	1.7/2.0
(4)	Sub-frame rear mounting	HLE	1.2
(5)	Centre floor front side cross mem- ber	HLE/ THLE	1.2/1.6
(6)	Front end side cross member	HLE	1.6

FRONT LOWER STRUCTURE

Front half unit: Description

41A

Right-hand side

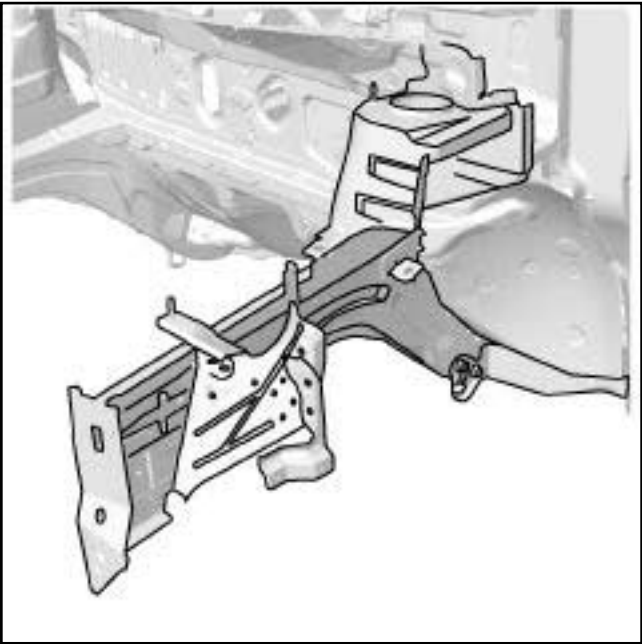


130126

No.	Description	Type	Thic- kness (mm)
(7)	Wheel arch	HLE	1.2
(8)	Engine mounting	HLE	1.6/2.0
(9)	Front end side cross member	HLE	1.4
(10)	Side mem- ber closure panel	HLE/ THLE	1.7/2.0
(11)	Front side member	HLE/ THLE	1.7/2.0
(12)	Sub-frame rear mounting	HLE	1.2/2.0
(13)	Floor front side cross member	HLE	1.2/1.6

II - PART FITTED

Complete replacement



130127

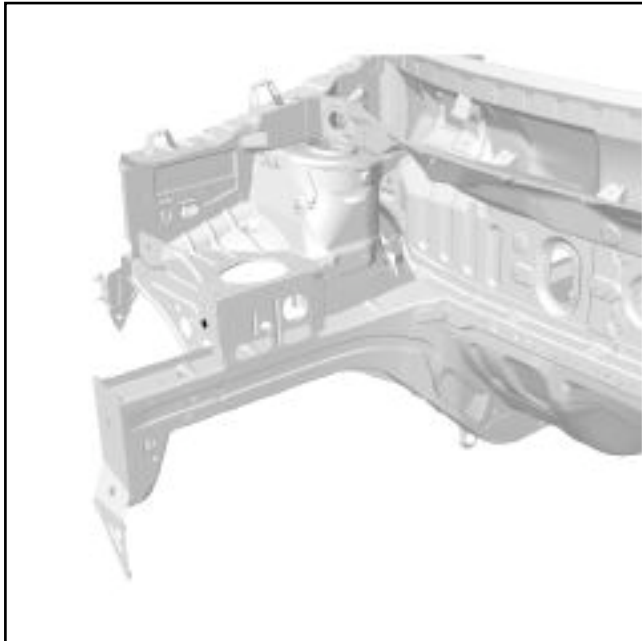
Note:

Use a repair bench to check the positioning of the points and the geometry of the axle assemblies.

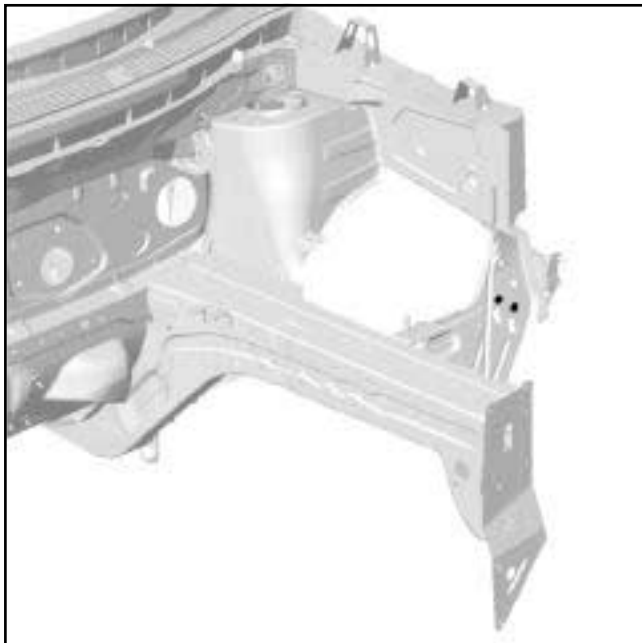
WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

III - POSITIONING THE EARTH POINTS



130128



130129

WARNING

To avoid damaging the vehicle's electrical and electronic components, disconnect the earths of any wiring near the weld area.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

CENTRE LOWER STRUCTURE

Centre floor, side section: General description

41B

WARNING

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

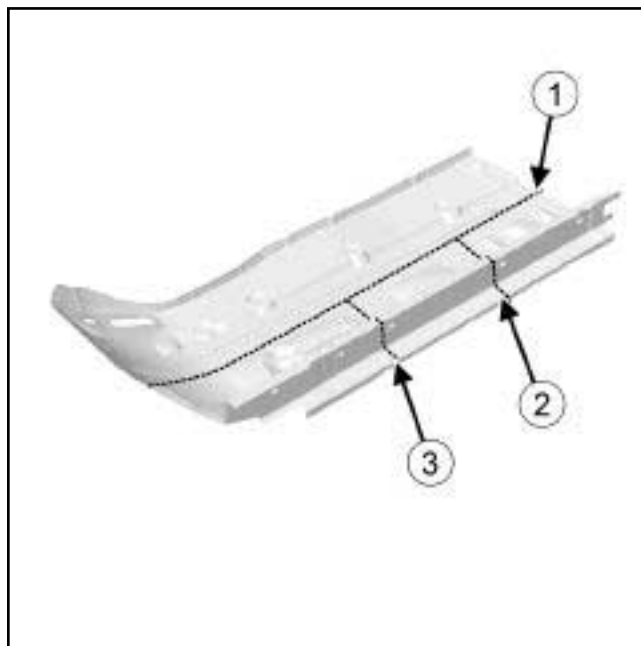
For a detailed description of a particular connection, (see **MR 400**).

I - DESIGN OF THE STRUCTURAL COMPONENT



The component is made of two different kinds of panel of different thickness assembled by laser butt welding.

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



These cutting lines show the area in which it is possible to carry out a partial replacement of the centre floor side section.

Cut 1, 2 and 3:

- cut (1) affects the partial replacement of the centre floor side section,
- cuts (1) and (2) affect the partial replacement of the rear section of the centre floor side section
- cuts (1) and (3) affect the partial replacement of the front section of the centre floor side section.

III - ASSEMBLY METHOD FOR A PARTIAL REPLACEMENT

Only the connections which are specific to the partial replacement by cutting are indicated.

WARNING

If the spot welds cannot be made as they were originally using an electrical spot welding machine, they should be replaced with plug welds after holes have been drilled in the first panel.

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400, 40A, General Information**).

CENTRE LOWER STRUCTURE

Centre floor, side section: General description

41B



130132

Line (1) on the diagram shows partial replacement and a weld by joggling with plug welds at regular intervals.



130134

Lines (1) and (3) on the diagram show the partial front replacement and a weld by joggling with plug welds at regular intervals.



130133

Lines (1) and (2) on the diagram show the partial rear replacement and a weld by joggling with plug welds at regular intervals.

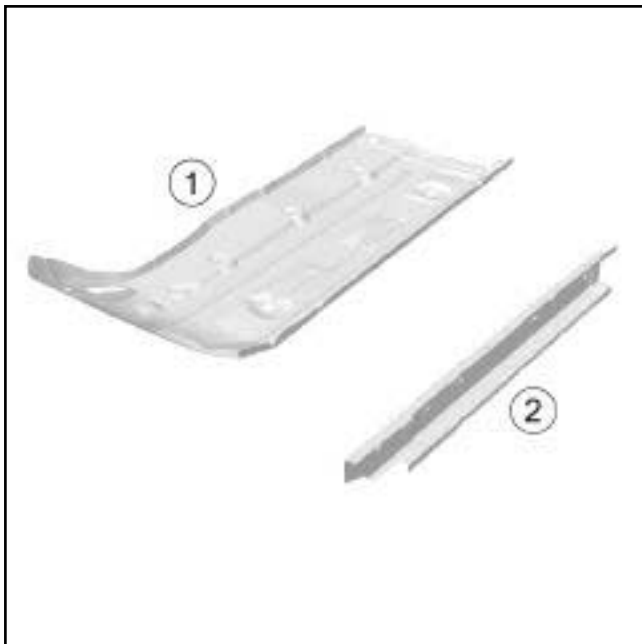


130274

The options for replacing this part are as follows:

- partial replacement of the front side section,
- partial replacement of rear side section,
- partial replacement of the side section.

I - COMPOSITION OF THE SPARE PART

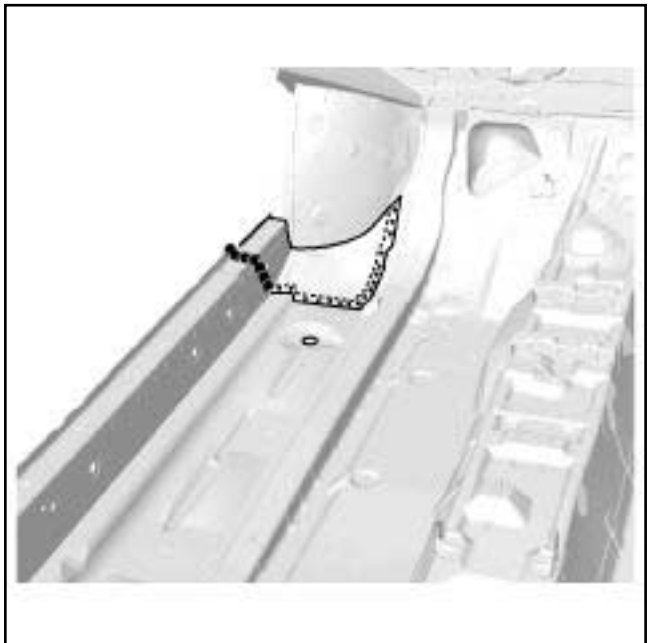


130275

No.	Description	Type	Thic- kness (mm)
(1)	Side floor	HLE	1.0/0.65
(2)	Sill panel closure panel	HLE	1.6

II - PART FITTED

Partial replacement of the front end side section



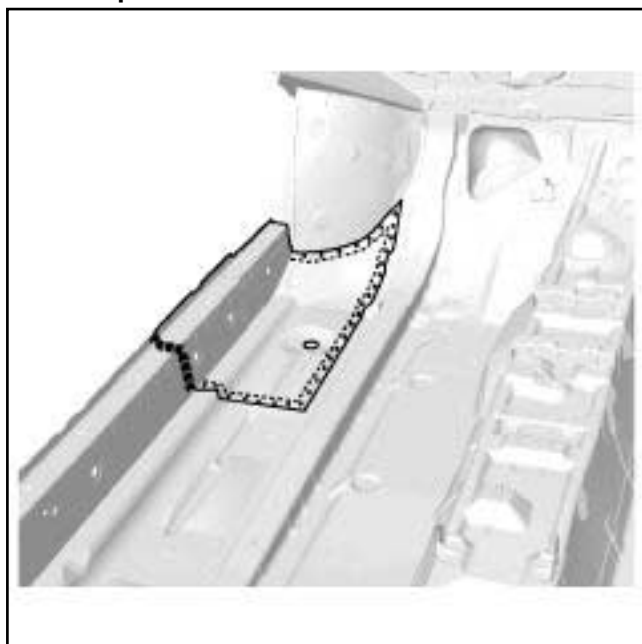
130276

CENTRE LOWER STRUCTURE

Central floor, side section: Description

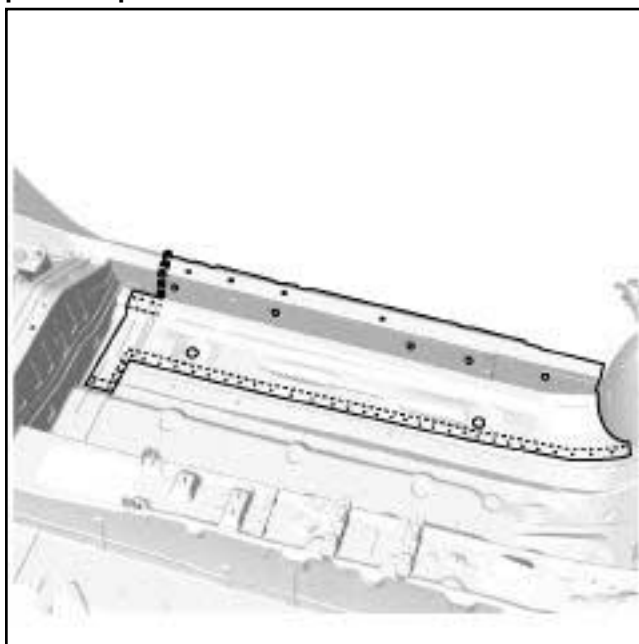
41B

Partial replacement of the front side section



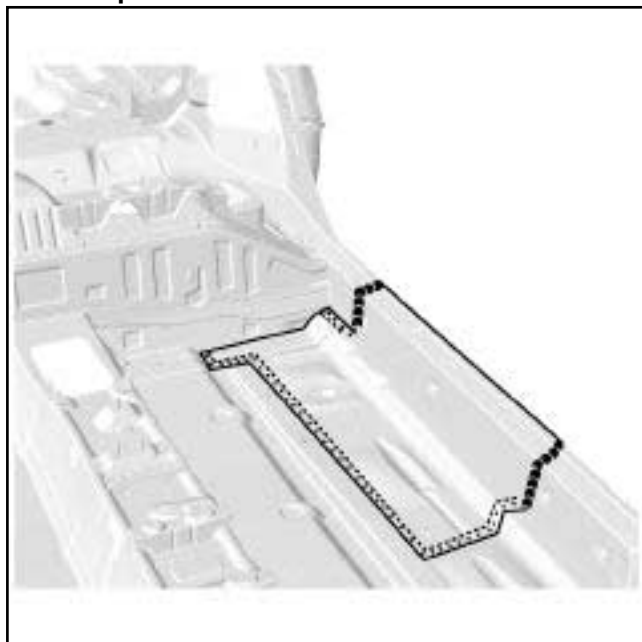
130277

partial replacement of the side section



130279

Partial replacement of the rear side section

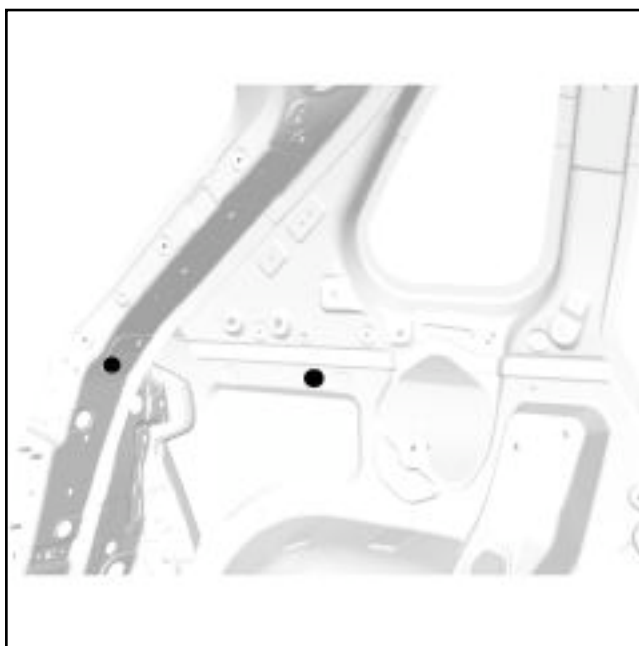


130278

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



130280

WARNING

To avoid damaging the vehicle's electrical and electronic components, disconnect the earths of any wiring near the weld area.

Position the welding machine earth as close as possible to the weld zone (see **MR 400**).



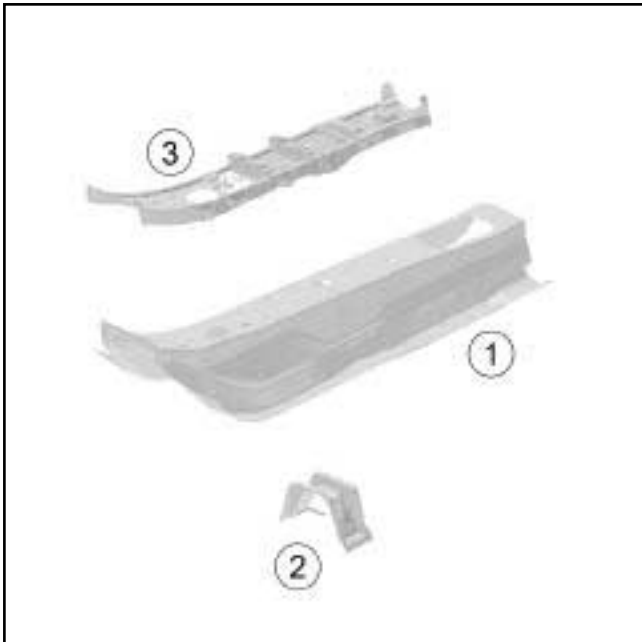
130138

There is only one way of replacing this part:

- complete replacement.

This operation complements the complete replacement of the centre floor side section for a side impact.

I - COMPOSITION OF THE SPARE PART

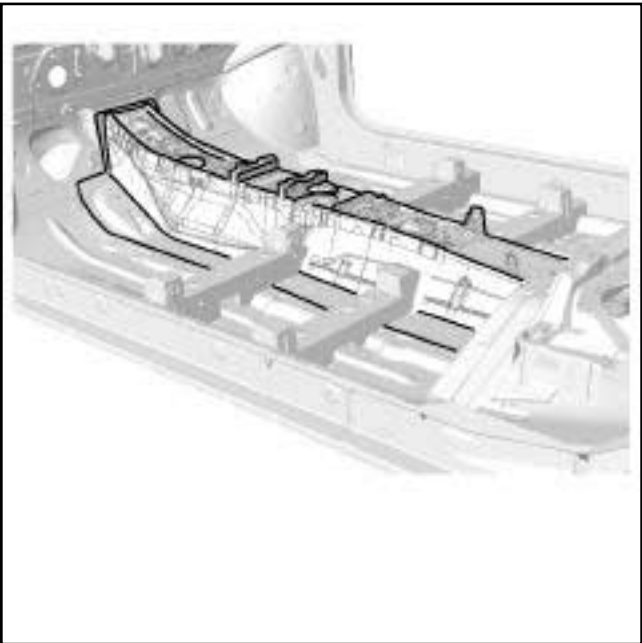


130139

No.	Description	Type	Thic- kness (mm)
(1)	Tunnel	HLE	1.2/0.7
(2)	Centre cross member under the tunnel	HLE	1.2/0.7
(3)	Tunnel rein- forcement	HLE	1.2/0.7

II - PART FITTED

Complete replacement



130140

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).



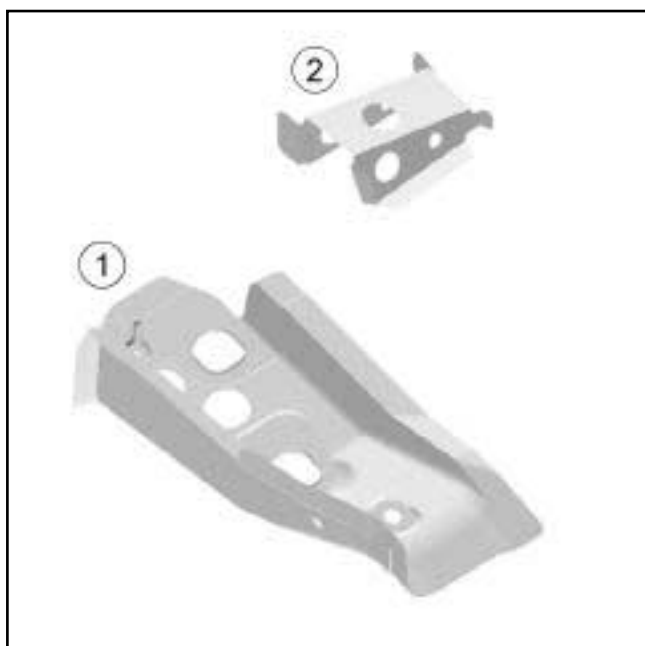
130135

There is only one way of replacing this part:

- complete replacement.

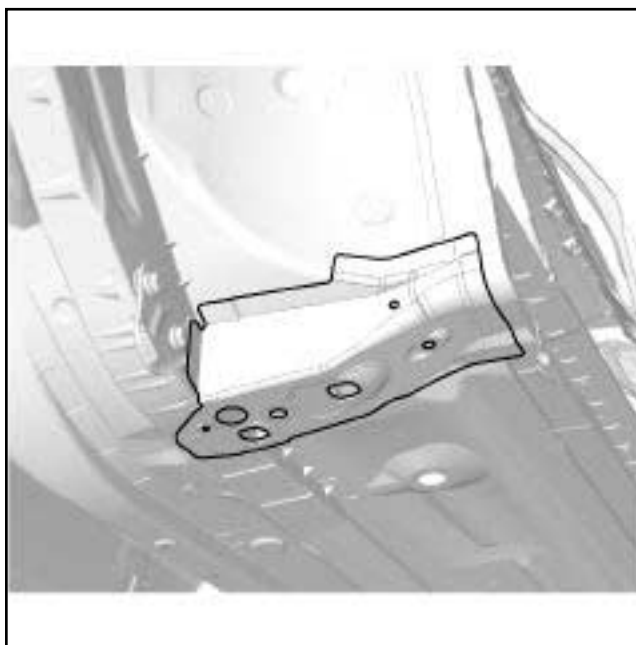
IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

I - COMPOSITION OF THE SPARE PART

130136

No.	Description	Type	Thic- kness (mm)
(1)	Centre floor front side cross member	HLE	1.2
(2)	Front suspension mounting bracket	HLE	1.6

II - PART FITTED

130137

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

Note:

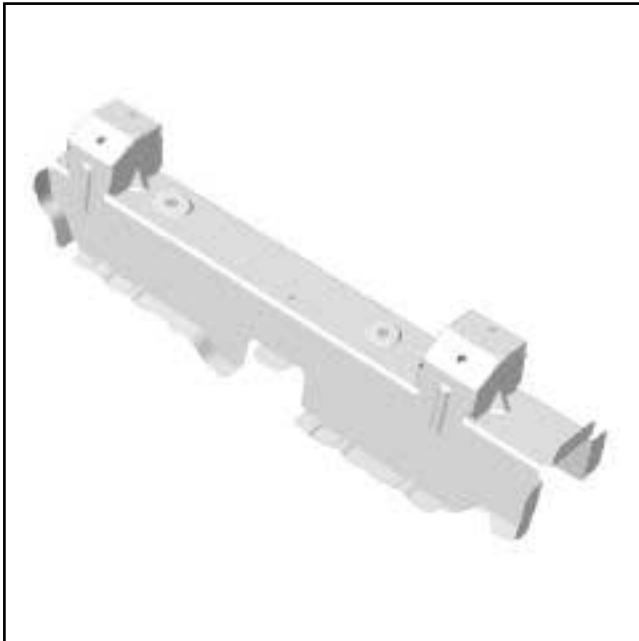
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

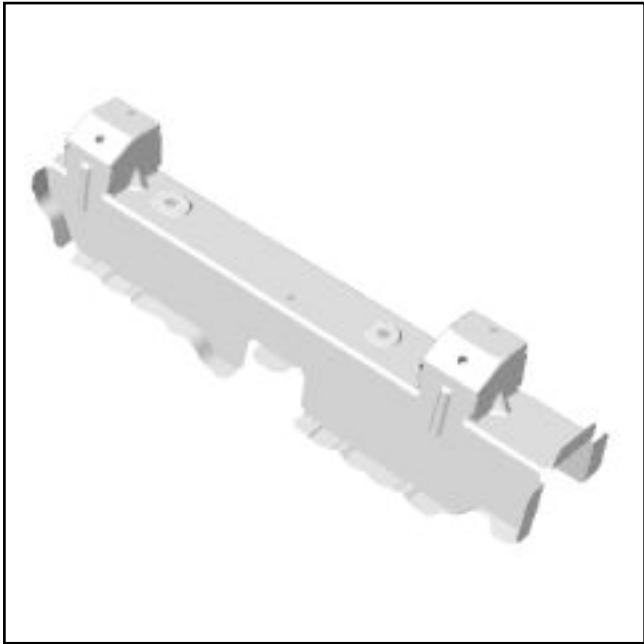
For a detailed description of a particular connection, see **MR 400**.

DESIGN OF THE STRUCTURAL COMPONENT



130176

This is a basic part; its function is to secure the front section of the front seat and to stiffen the bodywork in the event of a side impact.

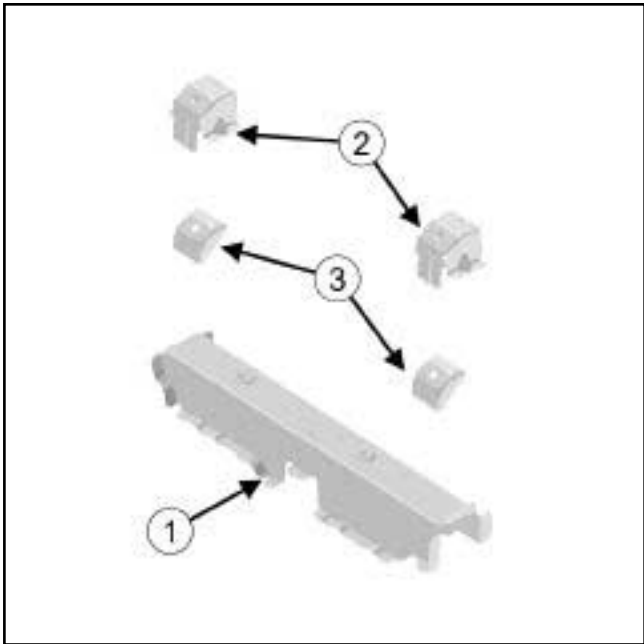


130177

There is only one way of replacing this part:

- complete replacement.

I - COMPOSITION OF THE SPARE PART

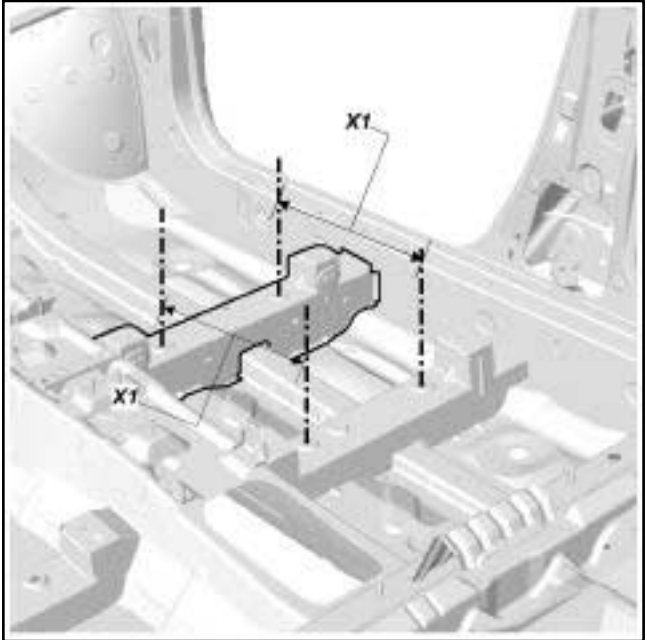


130178

No.	Description	Type	Thic- kness (mm)
(1)	Front cross mem- ber under front seat	HLE	1.0
(2)	Front seat outer support	HLE	1.0
(3)	Outer support reinforcement of front seat	HLE	1.0

II - PART FITTED

Complete replacement



130179

(X1) = 342 mm

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

Note:

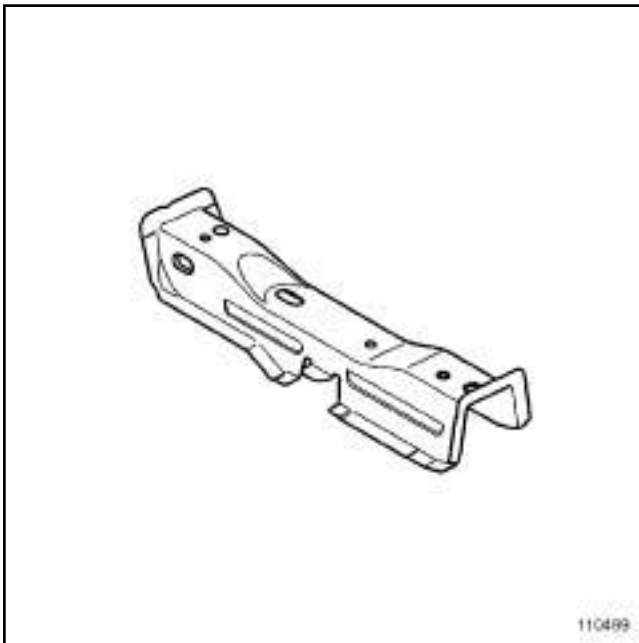
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

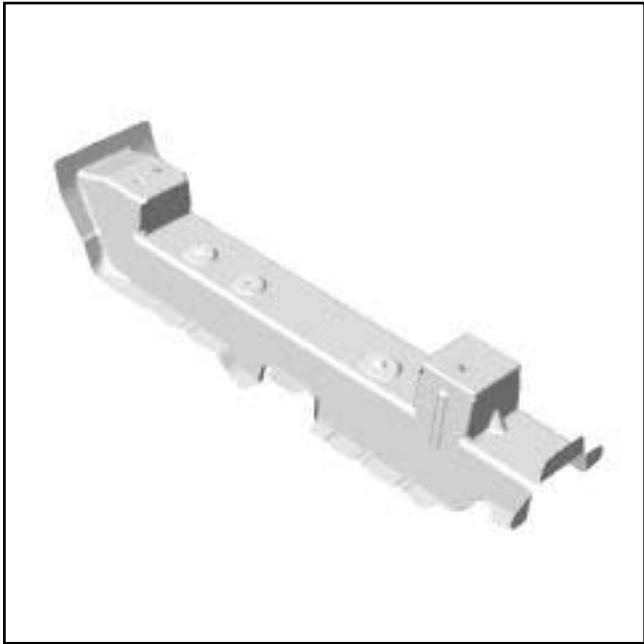
For a detailed description of a particular connection, see **MR 400**.

DESIGN OF THE STRUCTURAL COMPONENT



110499
110499

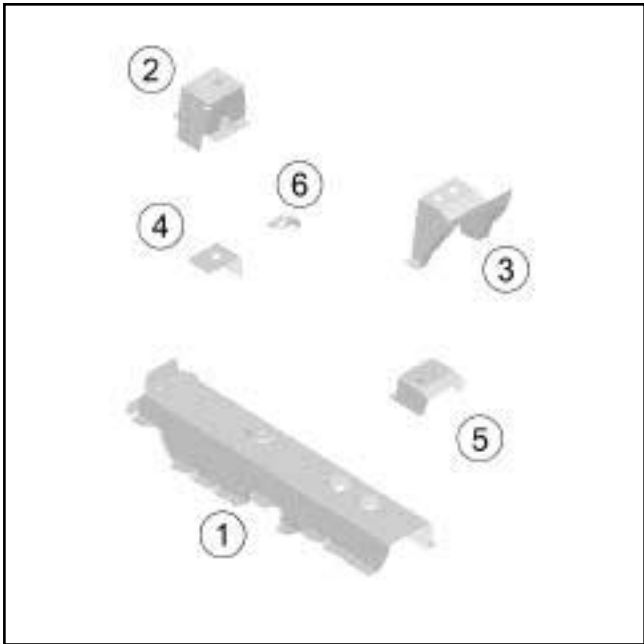
This is a basic part. It serves as a mounting for the rear part of the front seat and to rigidify the body in the event of a side impact.



There is only one way of replacing this part:

- complete replacement.

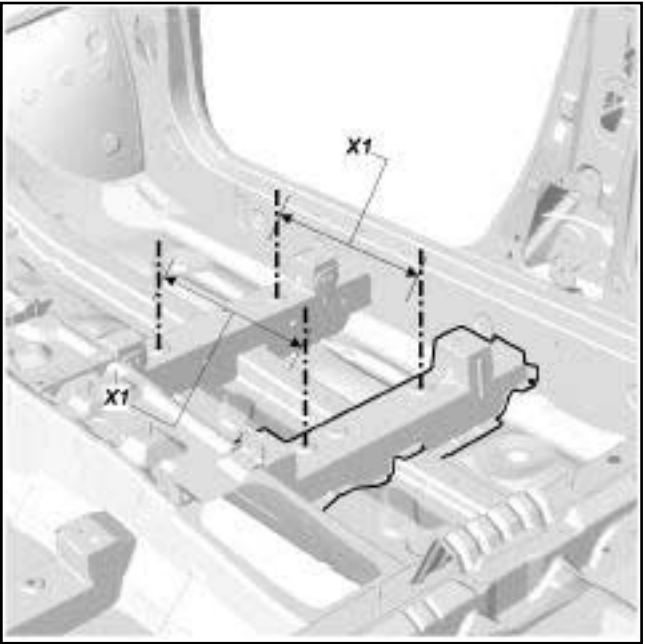
I - COMPOSITION OF THE SPARE PART



No.	Description	Type	Thic- kness (mm)
(1)	Rear cross mem- ber under front seat	HLE	0.8
(2)	Front seat outer mounting support	HLE	1.0
(3)	Front seat inner mounting support	HLE	1.6
(4)	Outer support reinforcement of front seat moun- ting	HLE	1.0
(5)	Inner support reinforcement of front seat moun- ting	HLE	1.6
(6)	Front seat outer mounting support	HLE	1.0

II - PART FITTED

Complete replacement



(X1) = 342 mm

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

Note:

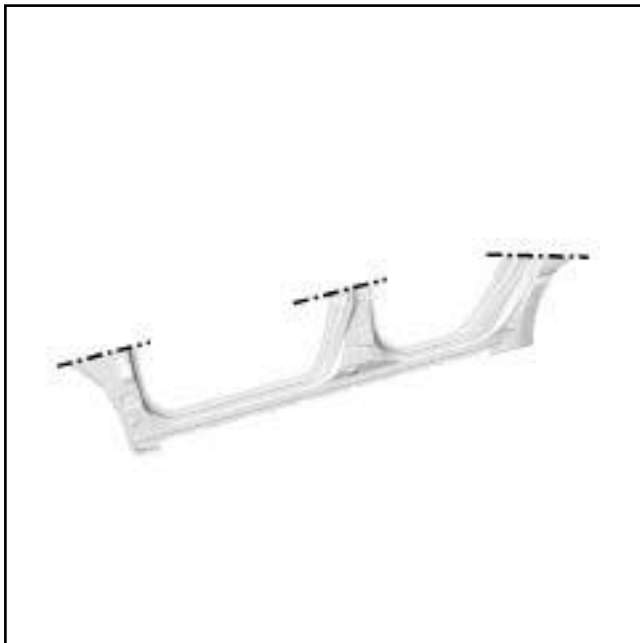
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, (see **MR 400**).

I - DESIGN OF THE STRUCTURAL COMPONENT



130183

The special feature of this part is that it is butt welded by laser on the lower section with two types of panels and two different thicknesses.

This is a basic part; its only function is that of a sill panel.

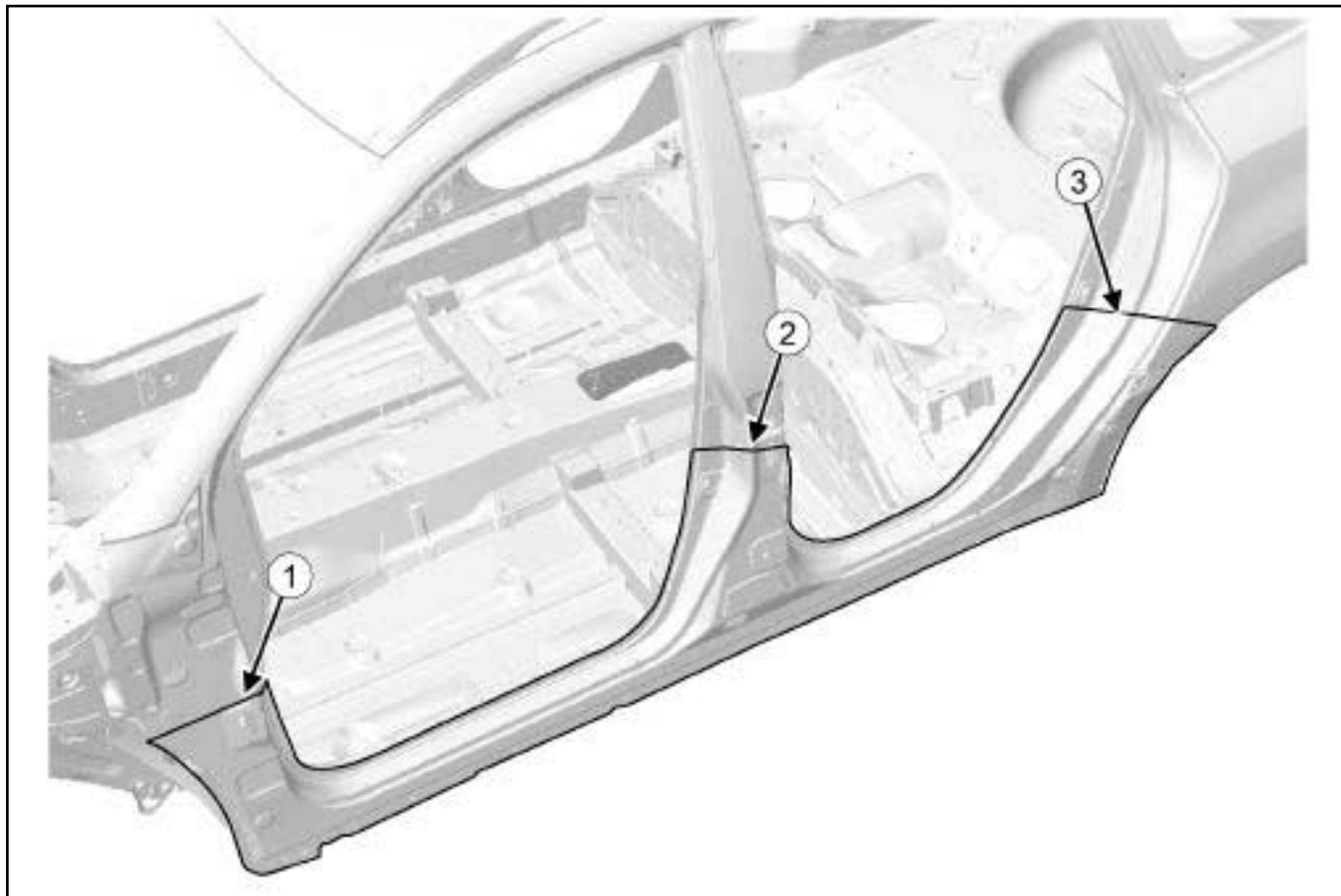
This part is removed by cutting into the complete body side. This part fulfils the basic function of the sill panel. It can be replaced partially by following the cuts described as follows.

SIDE LOWER STRUCTURE

Sill panel: General description

41C

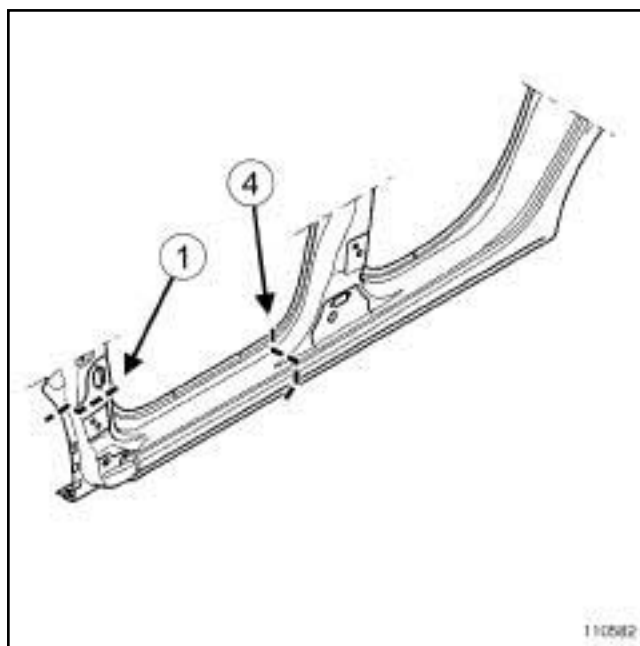
II - AREA TO BE CUT FOR COMPLETE REPLACEMENT



130184

The lines (1) , (2) and (3) mark the cutting areas for the complete replacement of the sill panel.

III - AREA TO BE CUT FOR PARTIAL REPLACEMENT



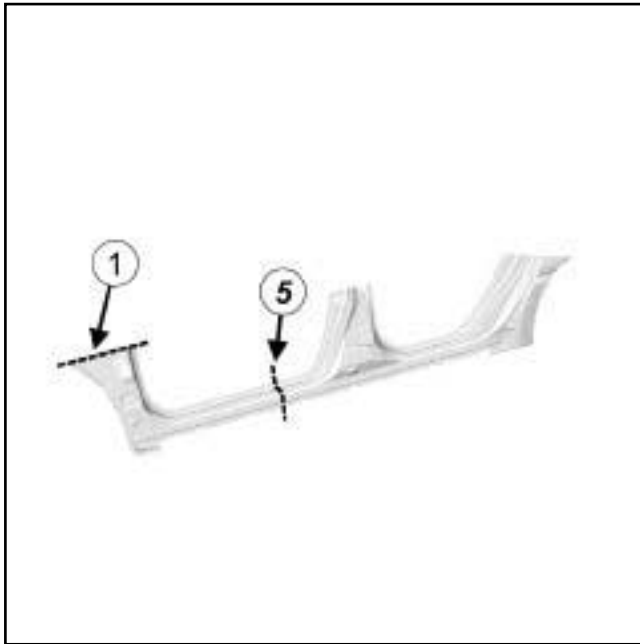
110582

SIDE LOWER STRUCTURE

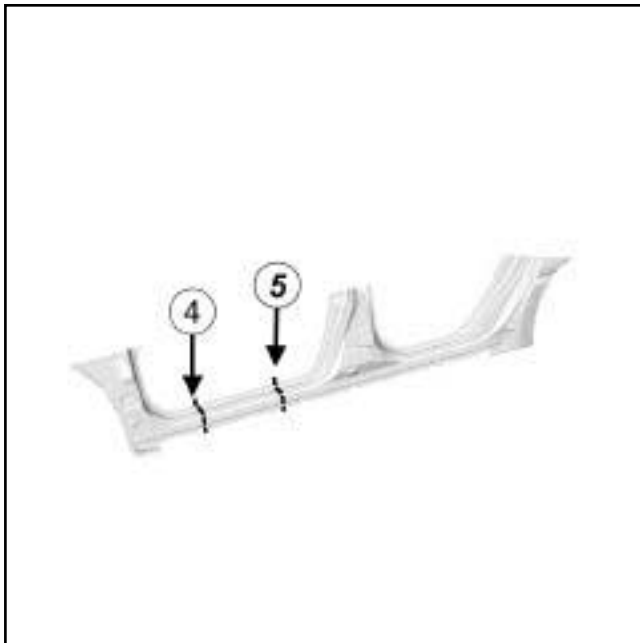
Sill panel: General description

41C

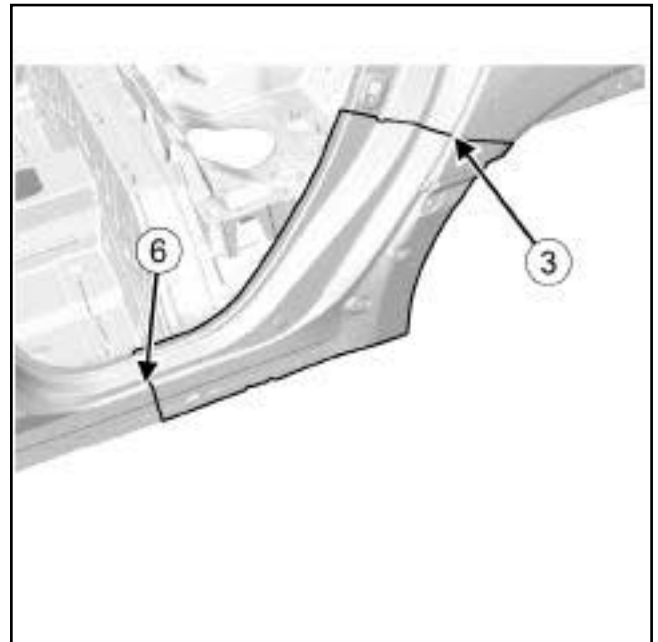
The lines (1) and (4) mark the areas for the partial replacement of the front of the sill panel.



The lines (1) and (5) mark the areas for the partial replacement of the front of the sill panel.



The lines (4) and (5) mark the areas for the partial replacement of the sill panel under the front door.



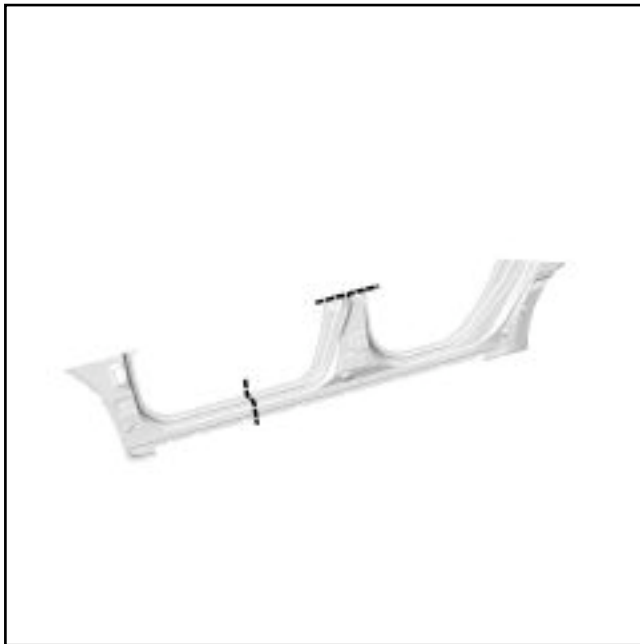
The lines (3) and (6) mark the areas for the partial replacement of the rear of the sill panel.



SIDE LOWER STRUCTURE

Sill panel: General description

41C

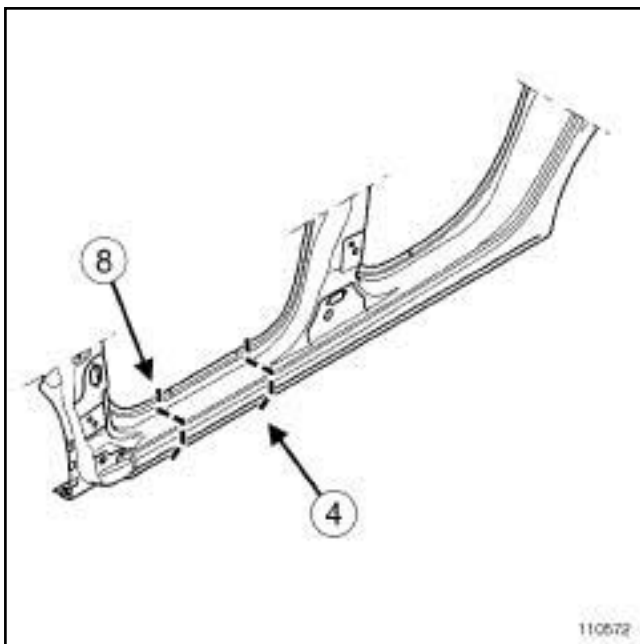


130188

It is possible to use cuts made earlier in order to carry out more significant partial replacements:

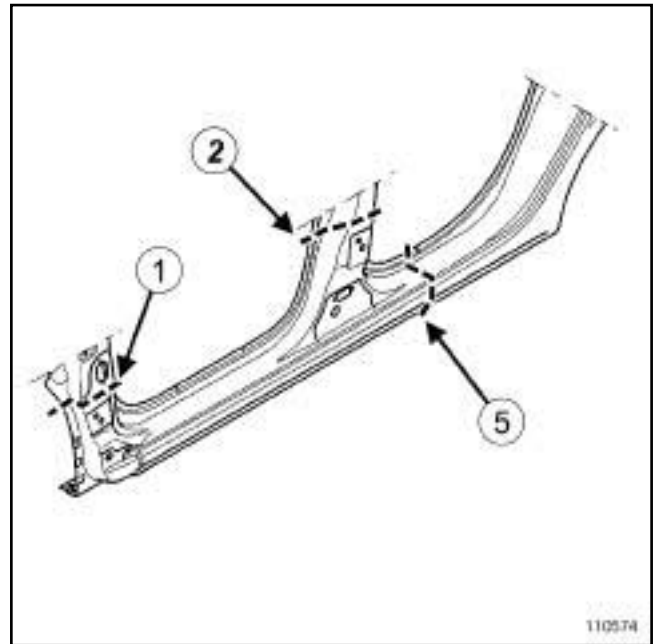
- front partial replacement,
- rear partial replacement.

These operations allow you to access the inside of the hollow section of the structural element to straighten it.



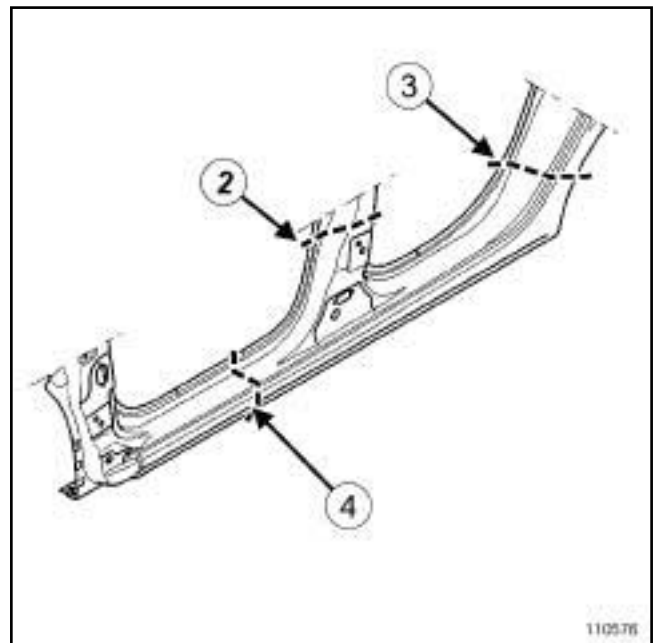
110572

The lines (4) and (8) mark the cutting areas for the partial replacement of the sill panel section under the door.



110574

110574



110576

110576

Previous cuts can be used to carry out more extensive partial replacements:

- front partial replacement, cut (1) , (2) and (5)
- Rear partial replacement, cut (2) , (3) and (4) .

These operations allow you to access the inside of the hollow section of the structural element to straighten it.

IV - ASSEMBLY INSTRUCTIONS FOR A PARTIAL REPLACEMENT

Only the connections which are specific to the partial replacement by cutting are indicated.

SIDE LOWER STRUCTURE

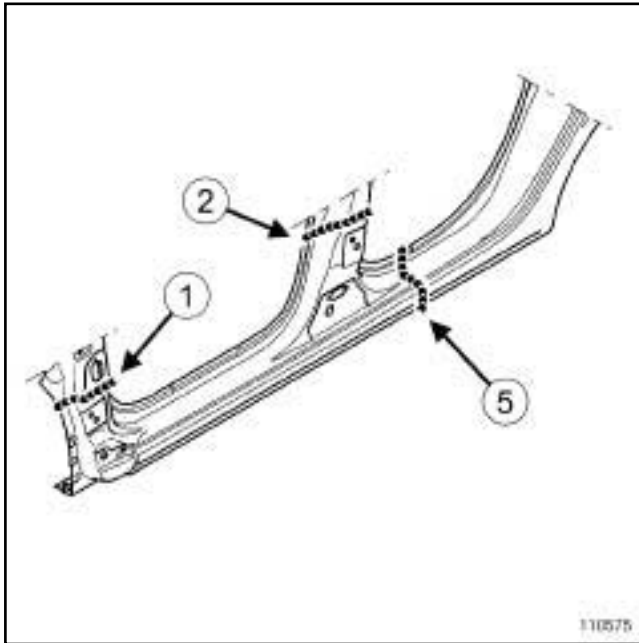
Sill panel: General description

41C

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

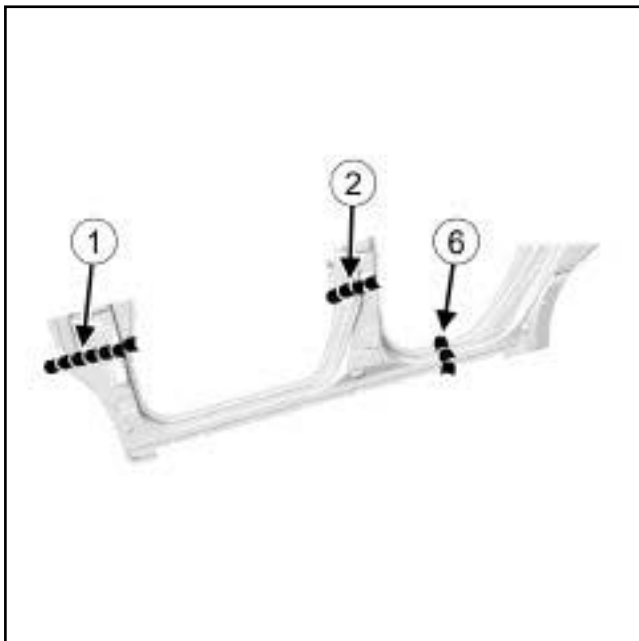
If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).



110575

Lines (1) , (2) and (5) on the drawing show a butt weld by continuous EGW welding.

The welds described in this procedure are all identical.



130189

Lines (1) , (2) and (6) on the drawing show a butt weld by continuous EGW welding.

The welds described in this procedure are all identical.

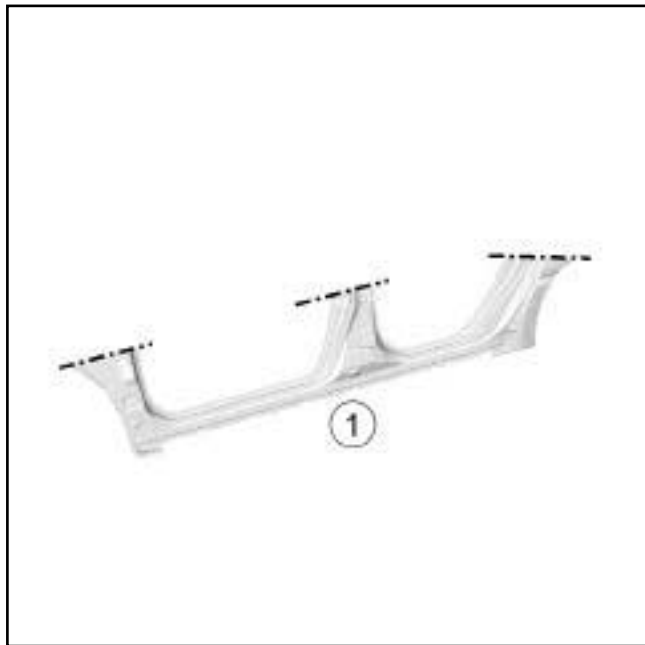
The options for replacing this part are as follows:

- front partial replacement,
- partial replacement under door:
- Rear partial replacement
- complete replacement.

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

I - COMPOSITION OF THE SPARE PART

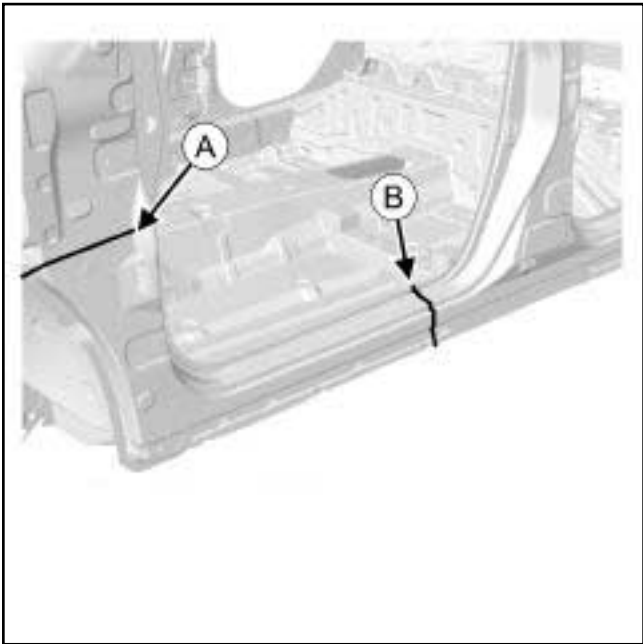


130191

No.	Description	Type	Thic- kness (mm)
(1)	Sill panel	-	-

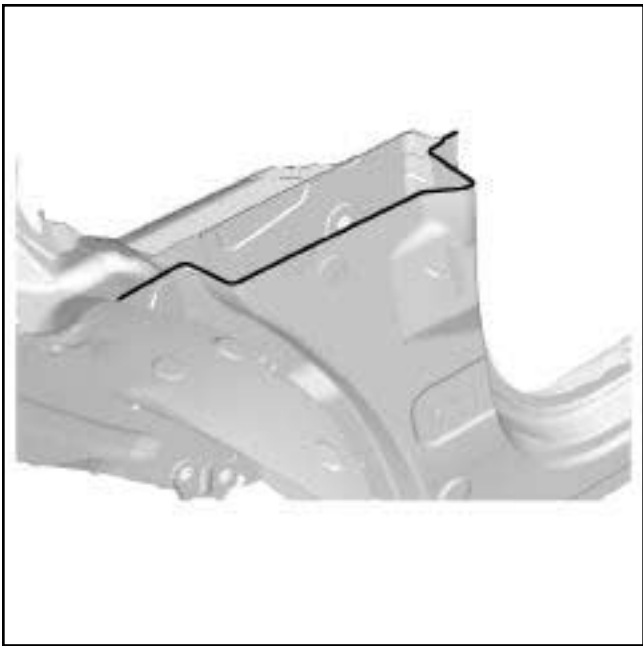
II - PART FITTED

Partial front replacement



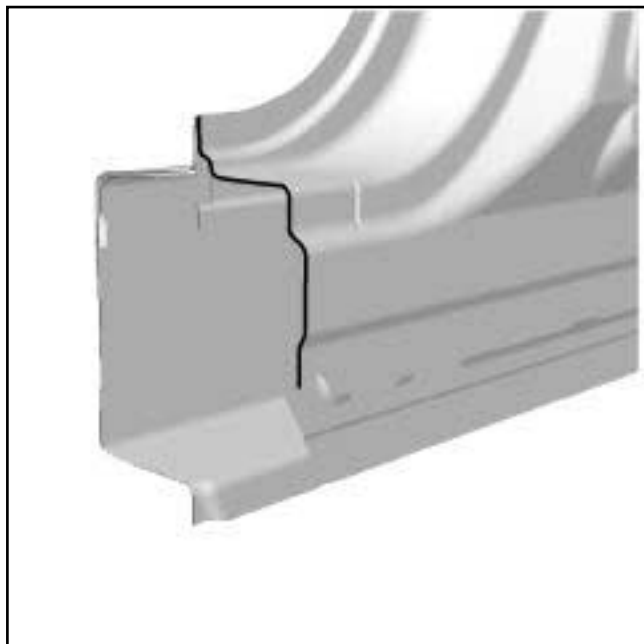
130192

Section A



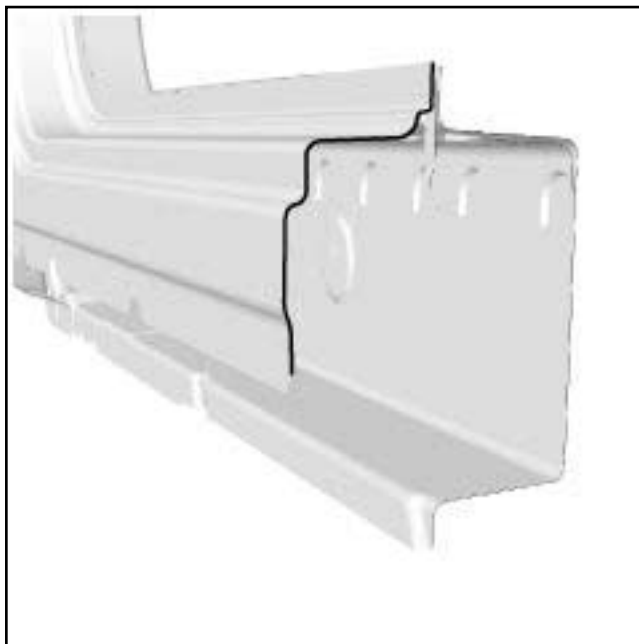
130193

Section B



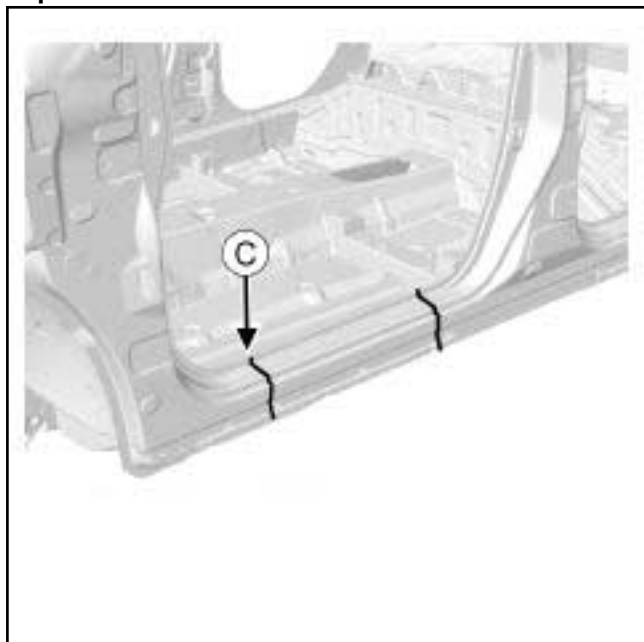
130194

Section C



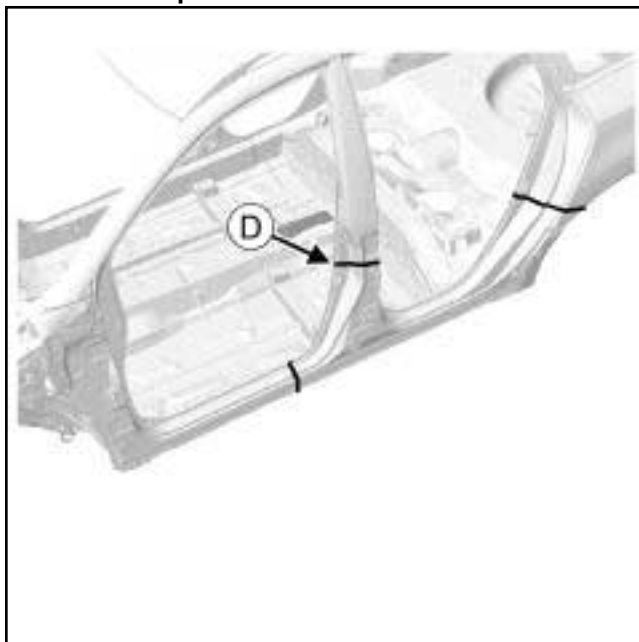
130196

Replacement under door



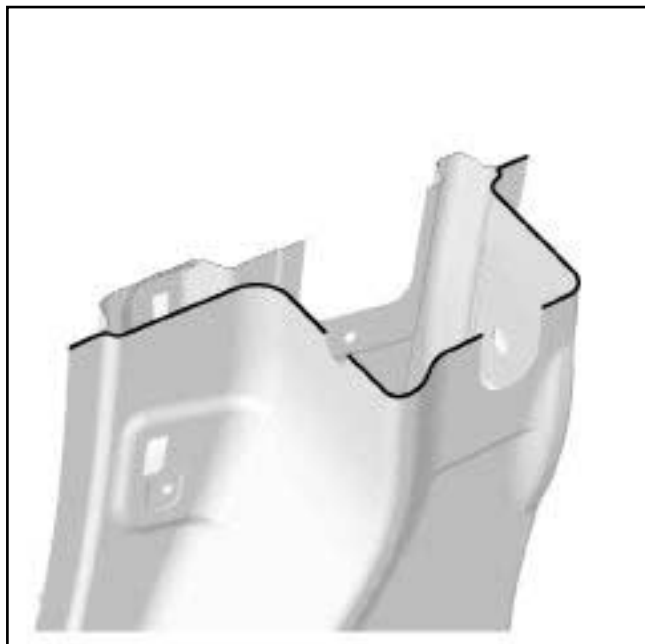
130195

Partial rear replacement



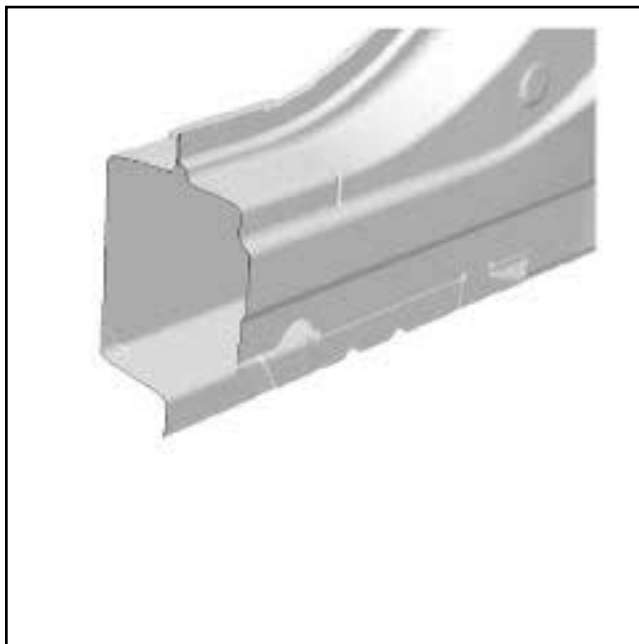
130197

Section D



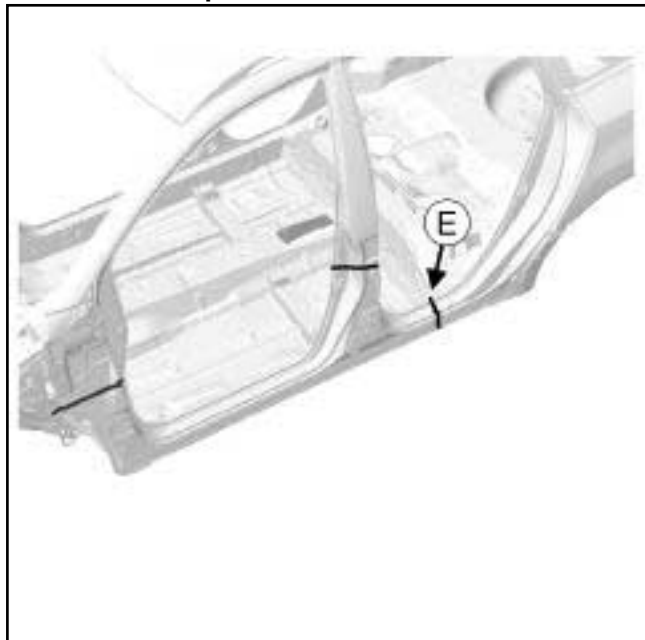
130198

Section E



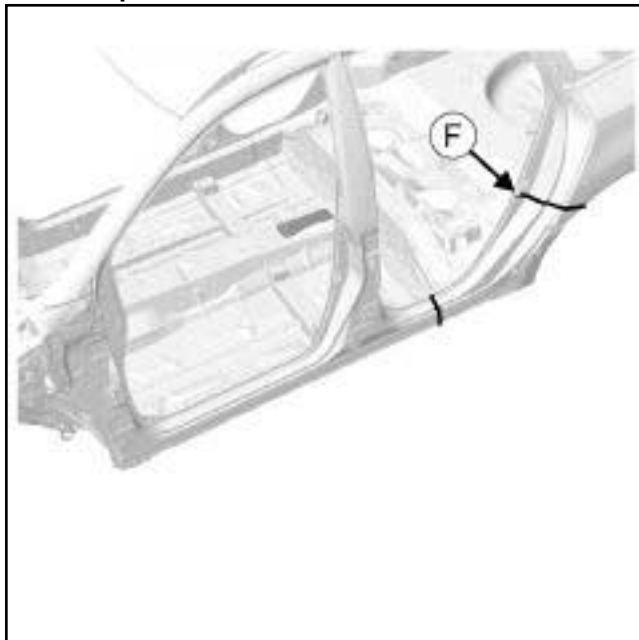
130200

Front section replacement



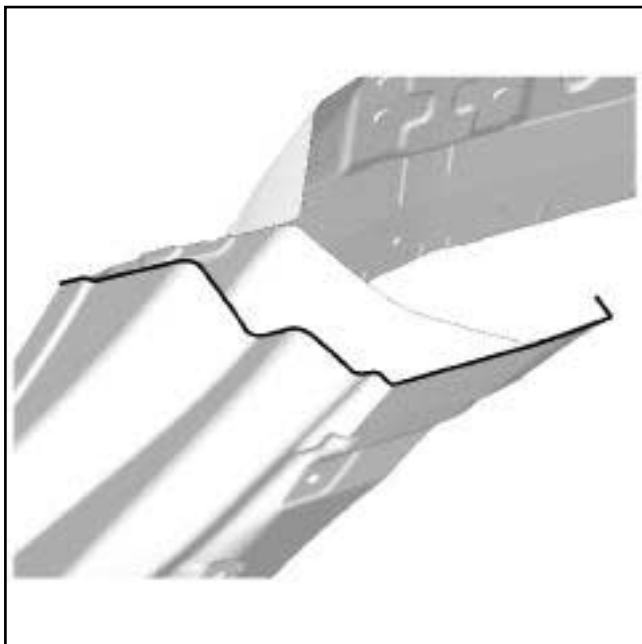
130199

Partial replacement of the rear end section



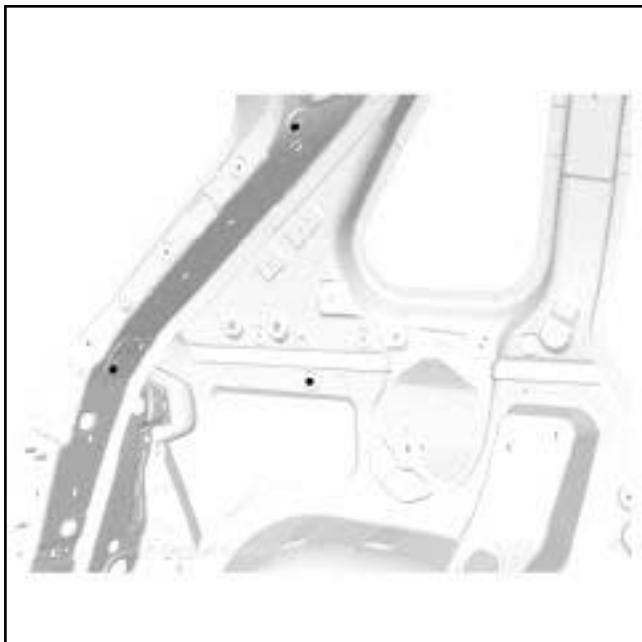
130201

Section F



130202

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



130203

WARNING

To avoid damaging the vehicle's electrical and electronic components, disconnect the earths of any wiring near the weld area.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

SIDE LOWER STRUCTURE

Sill panel closure panel: General description

41C

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

For a detailed description of a particular connection, (see **MR 400**).

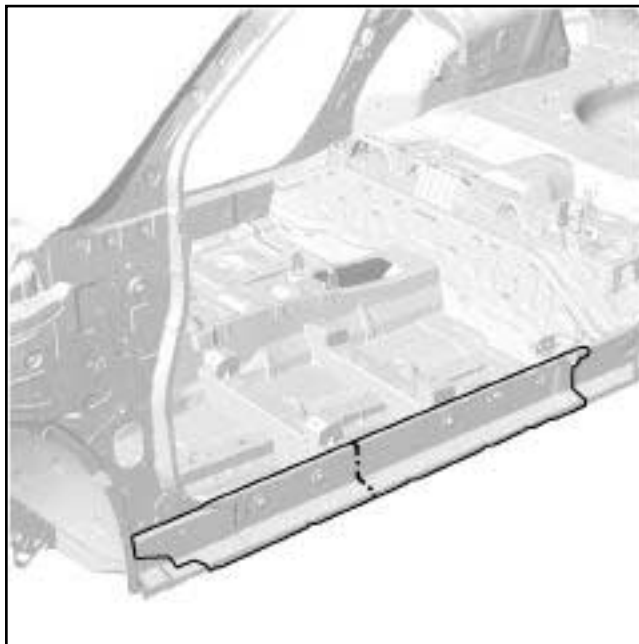
I - DESIGN OF THE STRUCTURAL COMPONENT



130204

This is a basic part; its only function is that of a sill panel closure panel.

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



130205

III - ASSEMBLY METHOD FOR A PARTIAL REPLACEMENT

Only the connections which are specific to the partial replacement by cutting are indicated.

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

If there are other issues regarding access to mating faces, the various options are described in the basic instructions for structural bodywork repair (see **MR 400**).

SIDE LOWER STRUCTURE

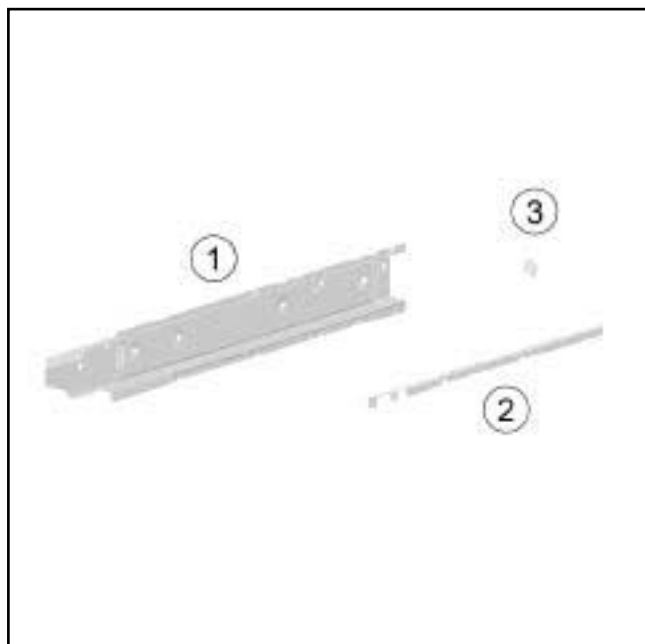
Sill panel closure panel: Description

41C

The options for replacing this part are as follows:

- front partial replacement,
- rear partial replacement.

I - COMPOSITION OF THE SPARE PART

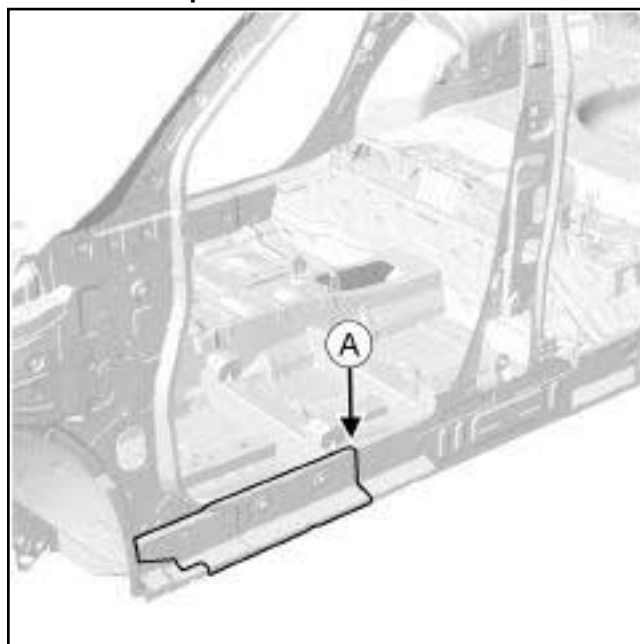


130206

No.	Description	Type	Thic- kness (mm)
(1)	Sill closure panel	HEL	1.6
(2)	Sill closure panel reinforcement	Very high yield strengt h	1.6
(3)	Anchor plate	HEL	2.0

II - PART FITTED

Partial front replacement

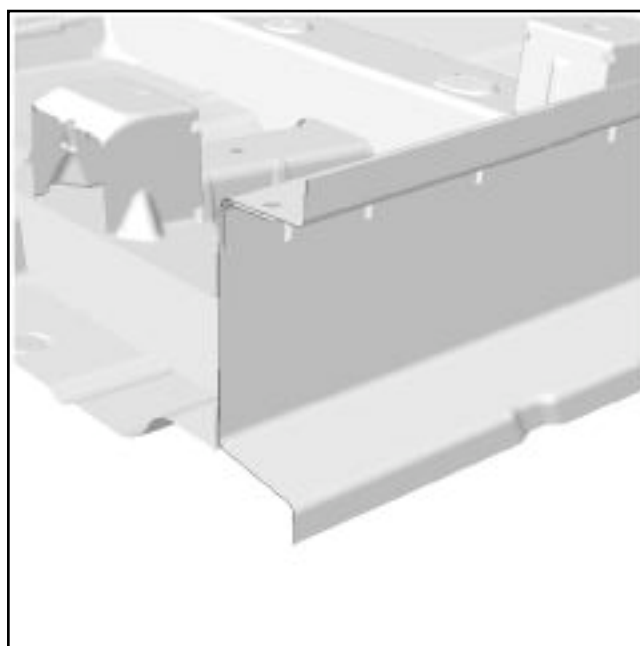


130207

WARNING

To preserve the mechanical specifications when partially replacing parts with a single structural component, alter the weld lines for each of these components.

Section A



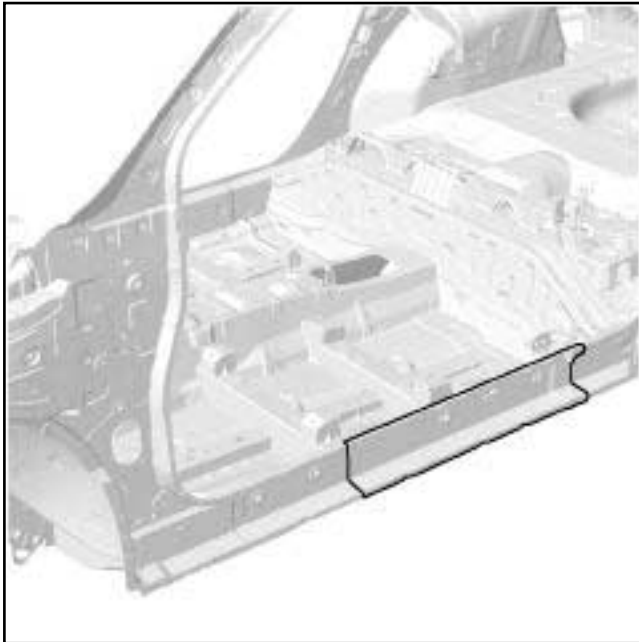
130208

SIDE LOWER STRUCTURE

Sill panel closure panel: Description

41C

Partial rear replacement



130209

WARNING

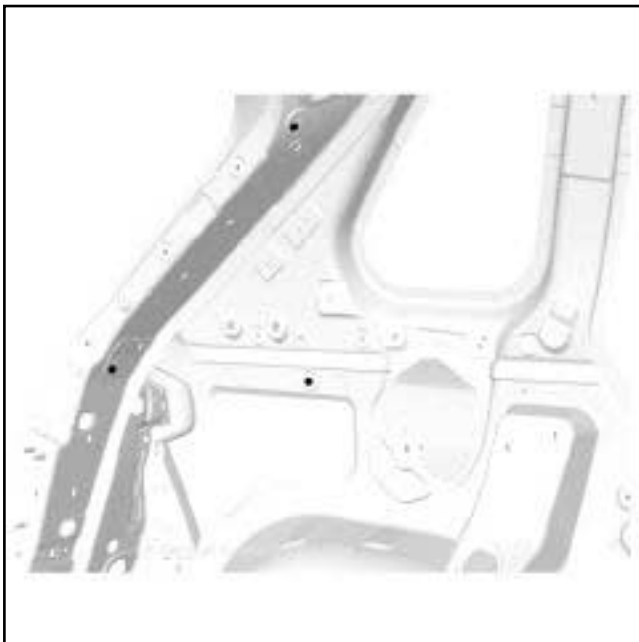
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



130210

SIDE LOWER STRUCTURE

Sill panel reinforcement: General description

41C

Note:

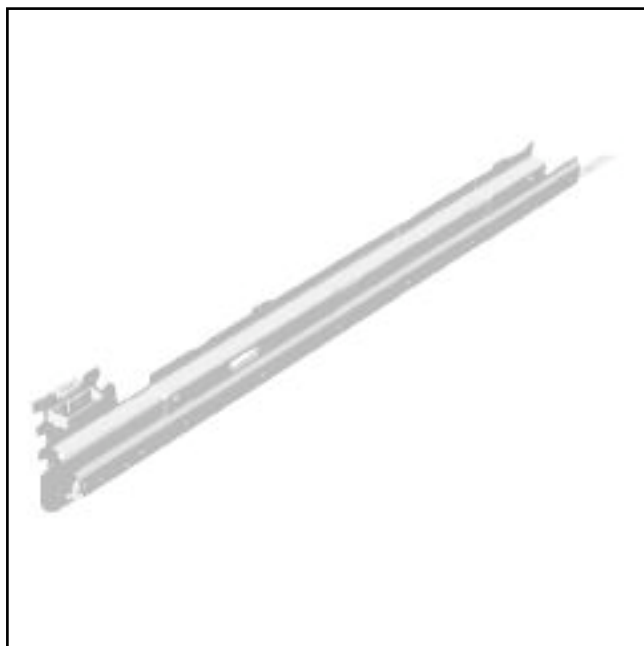
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

For a detailed description of a particular connection, see **MR 400**.

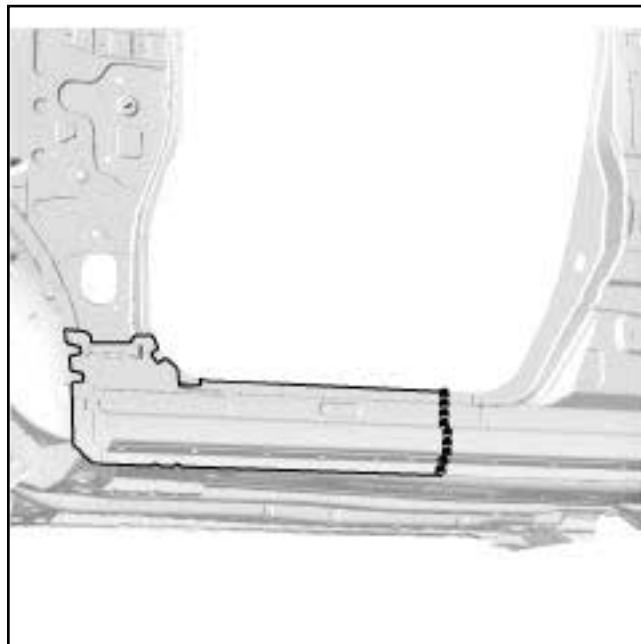
I - DESIGN OF THE STRUCTURAL COMPONENT



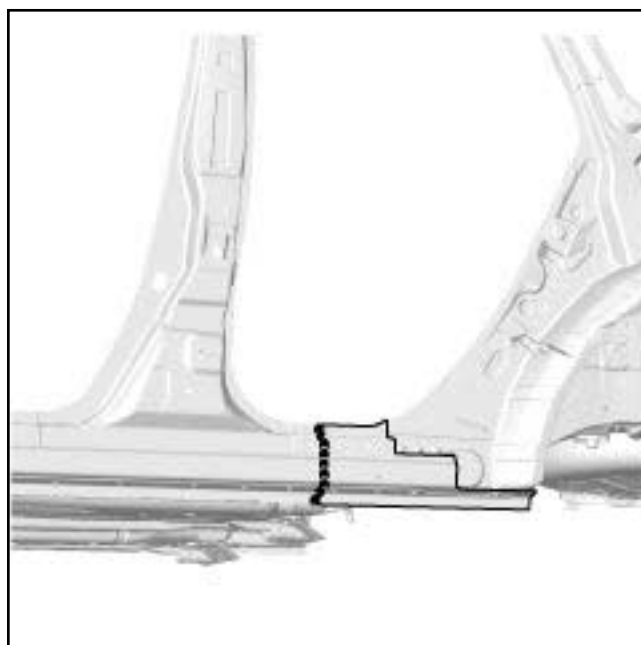
130211

Replacement of the sill panel reinforcement is linked to replacement of the inner sill panel.

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



130212



130213

SIDE LOWER STRUCTURE

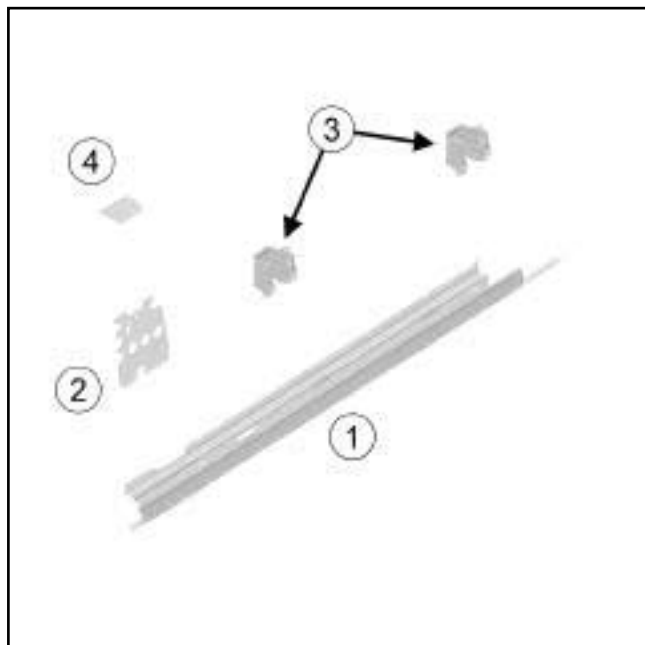
Sill panel reinforcement: Description

41C

The options for replacing this part are as follows:

- partial replacement of the front section,
- partial replacement of the rear section,
- complete replacement.

I - COMPOSITION OF THE SPARE PART

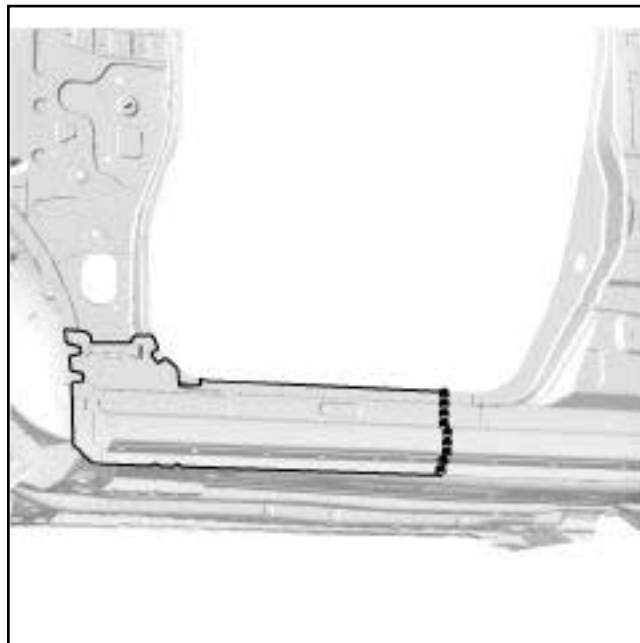


130214

No.	Description	Type	Thic- kness (mm)
(1)	Sill panel exterior reinforcement	HLE	1.4
(2)	Front pillar lower reinforcement	THLE	1.4
(3)	Sill panel exterior front bracket	HLE	1.0
(4)	Front pillar insulation assembly	ORO- TEXD- FORM	-

II - PART FITTED

1 - Partial replacement of the front section

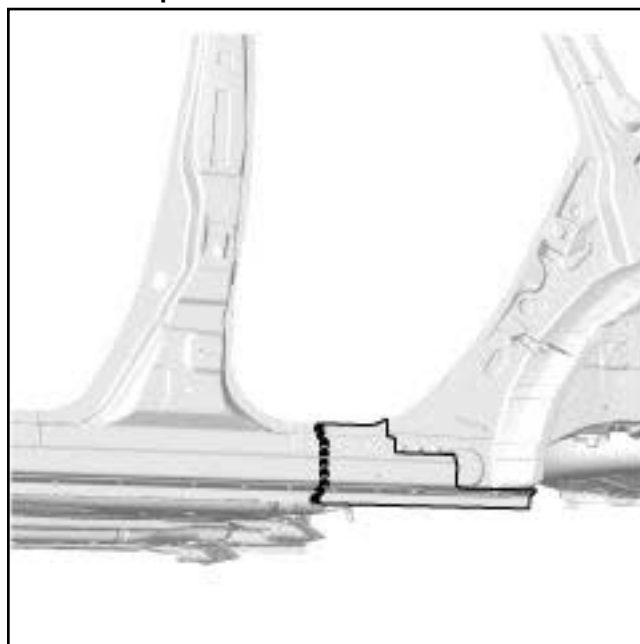


130215

WARNING

To preserve the mechanical specifications when partially replacing parts with a single structural component, alter the weld lines for each of these components.

2 - Partial replacement of the rear section



130216

SIDE LOWER STRUCTURE

Sill panel reinforcement: Description

41C

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

REAR LOWER STRUCTURE

Rear floor: General description

41D

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of welded connections, see **MR 400**.

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

DESIGN OF THE STRUCTURAL COMPONENT



130281

This part has the special feature of combining the functions of the rear side member, the rear wheel arch, the rear floor panel central cross member and the rear end panel, and to be comprised of several sorts of panels of different thicknesses and types.

REAR LOWER STRUCTURE

Rear floor, front section: Description

41D

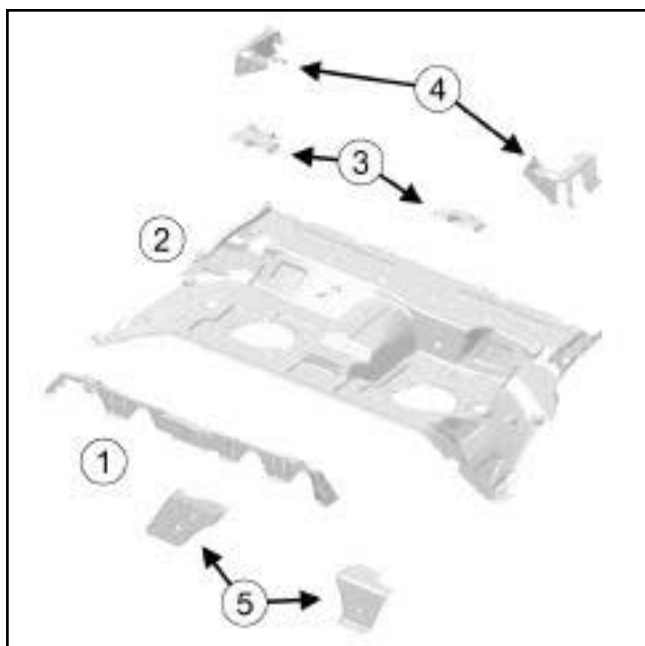


130282

The options for replacing this part are as follows:

- partial replacement of the side stiffener,
- complete replacement.

I - COMPOSITION OF THE SPARE PART



130283

No.	Description	Type	Thic- kness (mm)
(1)	Rear seat upper cross member	HEL	0.7
(2)	Front section of the rear floor	HEL	0.7
(3)	Mounting bracket of the rear seat	HEL	1.6
(4)	Exterior side floor support	HEL	0.7
(5)	Rear interior belt anchoring reinforcement	HEL	1.0

II - PART FITTED

WARNING

To preserve the mechanical specifications when partially replacing parts with a single structural component, alter the weld lines for each of these components.

WARNING

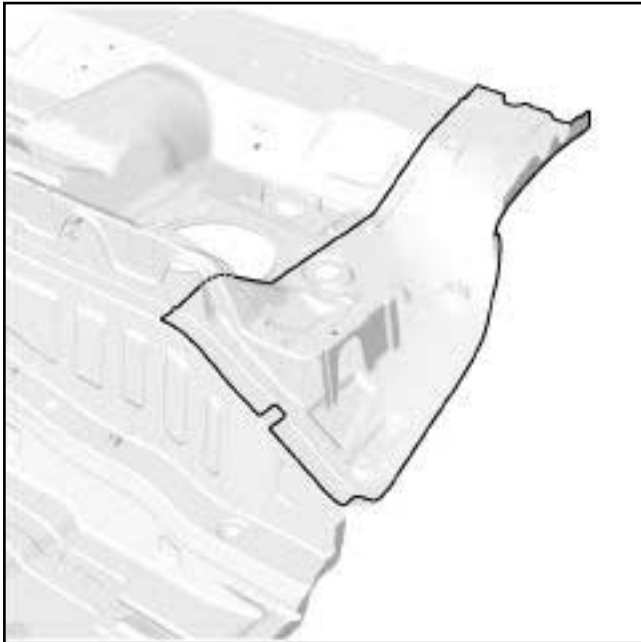
Respect the position of this cut which has been determined in accordance with the position of the inner stiffeners or acoustic inserts, in order to prevent damaging the parts (inner stiffener and/or acoustic insert).

REAR LOWER STRUCTURE

Rear floor, front section: Description

41D

Partial replacement of the rear section



130284

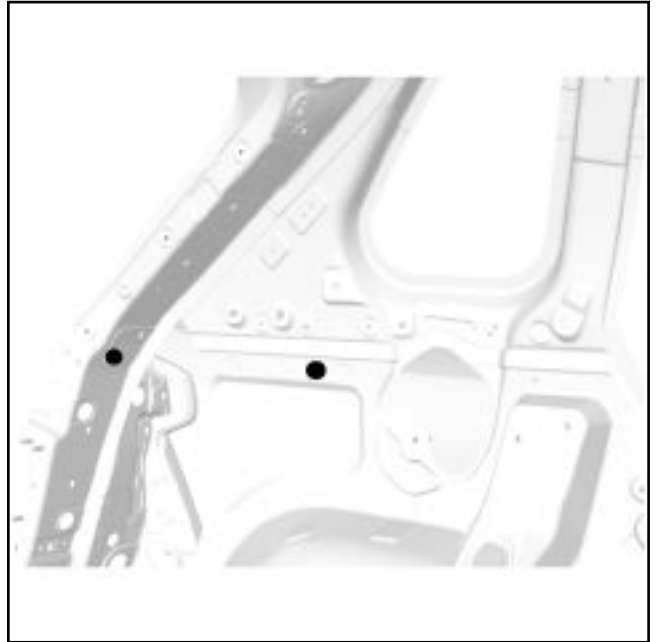
WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).



130285

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



130280

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the earth of the welding machine as closely as possible to the weld area (see MR 400).

REAR LOWER STRUCTURE

Rear floor rear section: General description

41D

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

I - DESIGN OF THE STRUCTURAL COMPONENT



130286

The distinctive feature of this part is that it combines the functions of the rear section of the rear floor and the emergency spare wheel mounting bracket.

Partial replacement is not possible for this part.

II - ASSEMBLY INSTRUCTIONS FOR A PARTIAL REPLACEMENT

Only the connections which are specific to the partial replacement by cutting are indicated.

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).

REAR LOWER STRUCTURE

Rear floor rear section: Description

41D



130287

There is only one way of replacing this part:

- complete replacement.

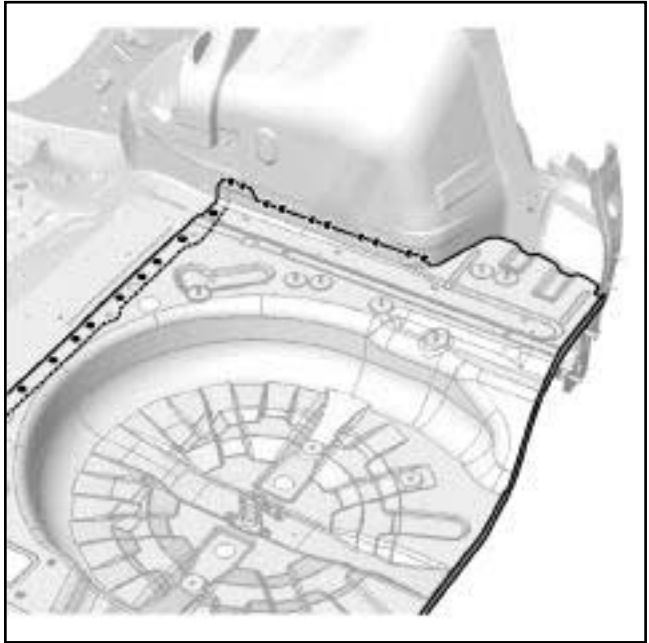
I - COMPOSITION OF THE SPARE PART



130288

No.	Description	Type	Thic- kness (mm)
(1)	Rear section of the rear floor	HEL	0.7
(2)	Side of the rear floor	HEL	0.7

II - PART FITTED



130290

WARNING

If the spot welds cannot be made as they were ori-
ginally using an electrical spot welding machine,
these should be replaced with anchoring beading.

REAR LOWER STRUCTURE

Rear side member assembly: Description

41D

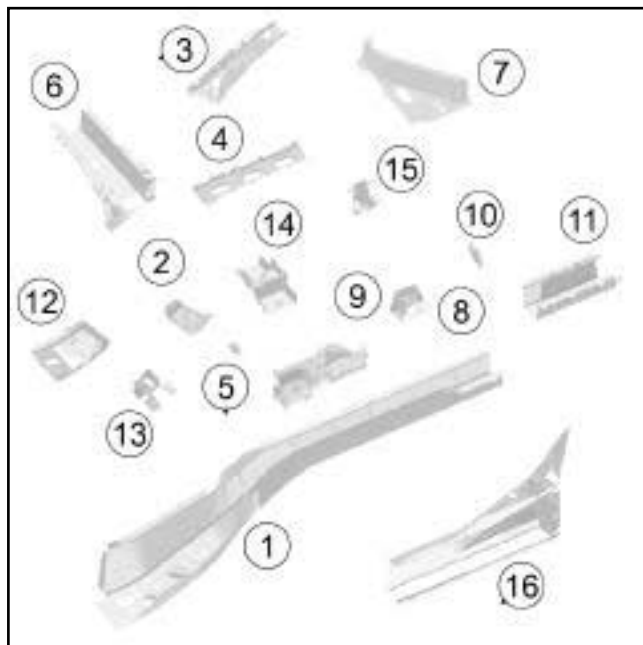
There is only one way of replacing this part:

- complete replacement.

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

I - COMPOSITION OF THE SPARE PART

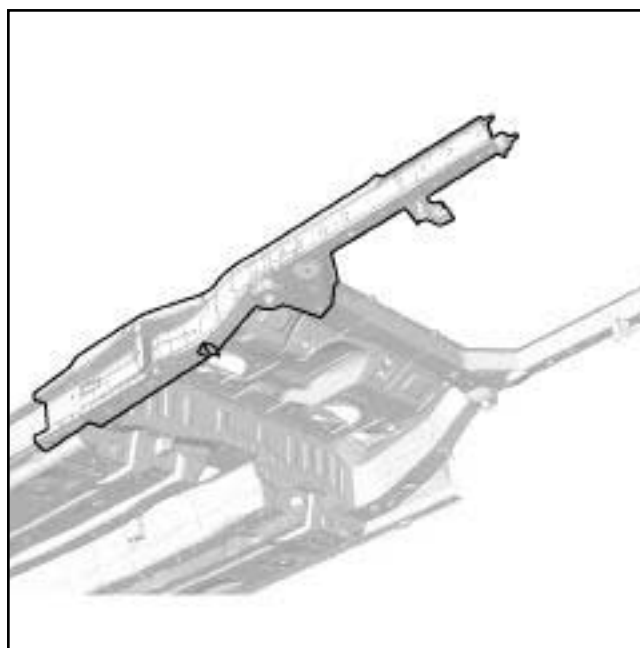


132757

No.	Description	Type	Thic- kness (mm)
(1)	Rear side member	HEL	1.6
(2)	Rear suspension mounting reinforcement	HEL	2.3
(3)	Rear side member reinforcement	HEL	1.6
(4)	Rear side member rear reinforcement	HEL	1.6
(5)	Rear brake hose bracket	HEL	2.3
(6)	Rear extension of the centre cross member	HEL	1.6
(7)	Centre cross member reinforcement	HEL	1.6

No.	Description	Type	Thic- kness (mm)
(8)	Rear spring mounting bracket	-	-
(9)	Rear suspension mounting reinforcement	-	-
(10)	Rear side member bracket	HEL	1.0
(11)	Rear side member extension	-	-
(12)	Rear anchoring hook reinforcement	HEL	2.6
(13)	Rear anchoring exterior reinforcement	HEL	1.6
(14)	Rear suspension mounting support	-	-
(15)	Rear silencer mounting support	-	-
(16)	Sill panel extension	HEL	1.6

II - PART FITTED

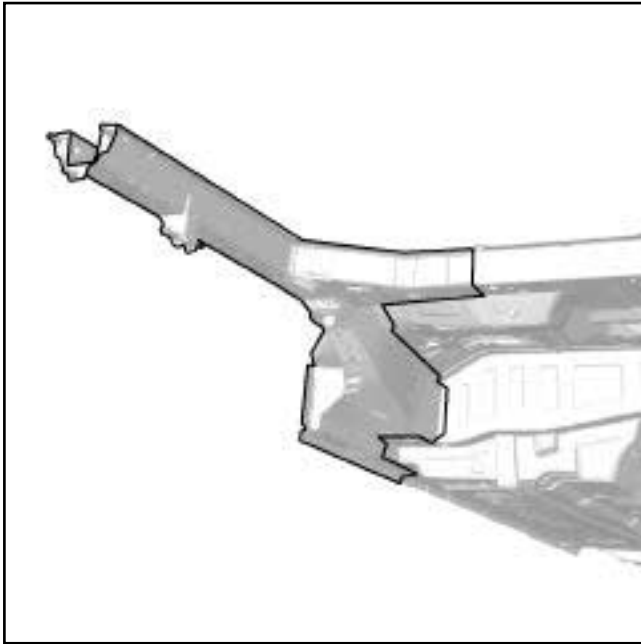


132758

REAR LOWER STRUCTURE

Rear side member assembly: Description

41D



132759

WARNING

If the spot welds cannot be made as they were originally using an electrical spot welding machine, these should be replaced with anchoring beading.

REAR LOWER STRUCTURE

Rear side member: General description

41D

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

For a detailed description of a particular connection, see **MR 400**.

I - DESIGN OF THE STRUCTURAL COMPONENT



130289

This is a basic part; it simply fulfils the function of a rear side member.

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT

Cut 1:

This line marks the area in which it is possible to make a partial replacement.

III - ASSEMBLY INSTRUCTIONS FOR A PARTIAL REPLACEMENT

Only the connections which are specific to the partial replacement by cutting are indicated.

WARNING

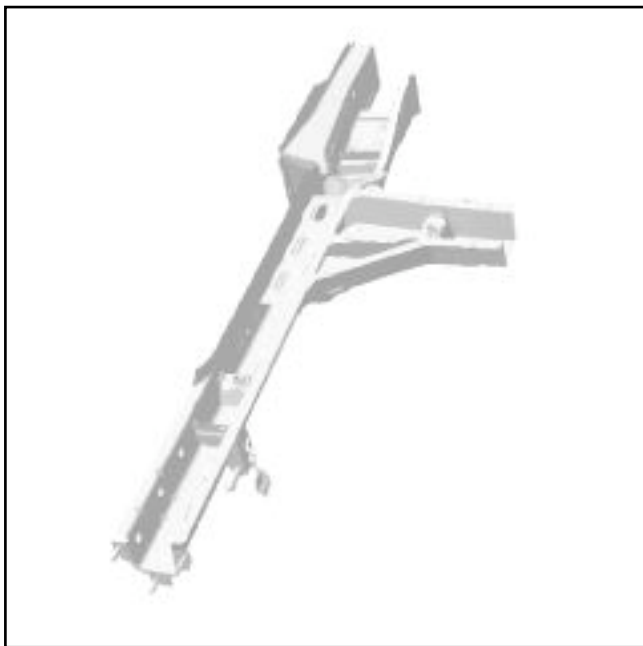
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).

REAR LOWER STRUCTURE

Rear side member: Description

41D



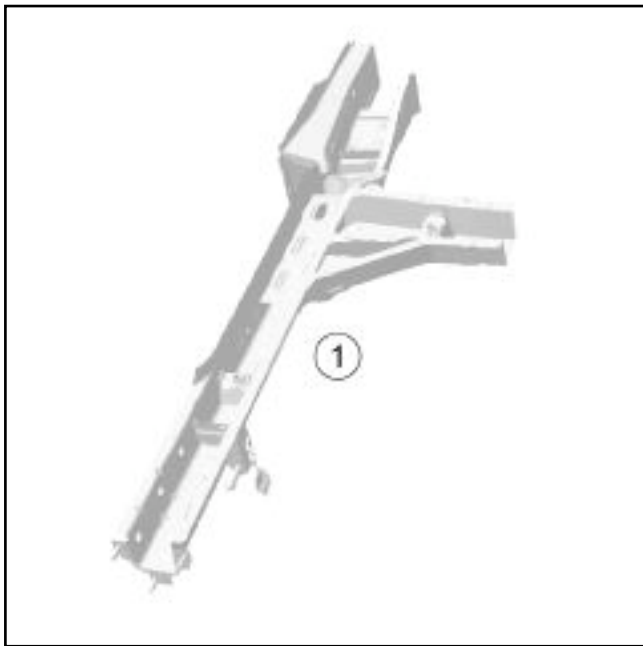
131805

There is only one way of replacing this part:
-partial replacement of the rear section.

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

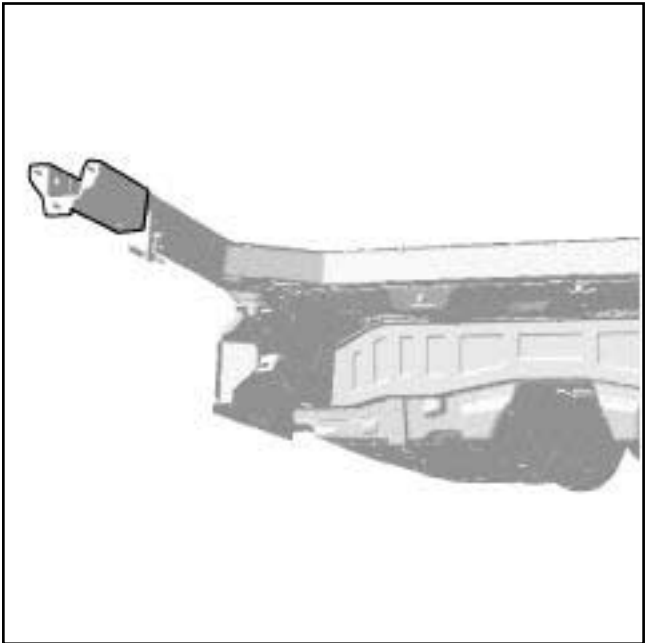
I - COMPOSITION OF THE SPARE PART



131806

No.	Description	Type	Thic- kness (mm)
(1)	Rear side mem- ber	HEL	1.6

II - PART FITTED



131807

WARNING

Respect the position of this cut which has been determined in accordance with the position of the inner stiffeners or acoustic inserts, in order to prevent damaging the parts (inner stiffener and/or acoustic insert).

WARNING

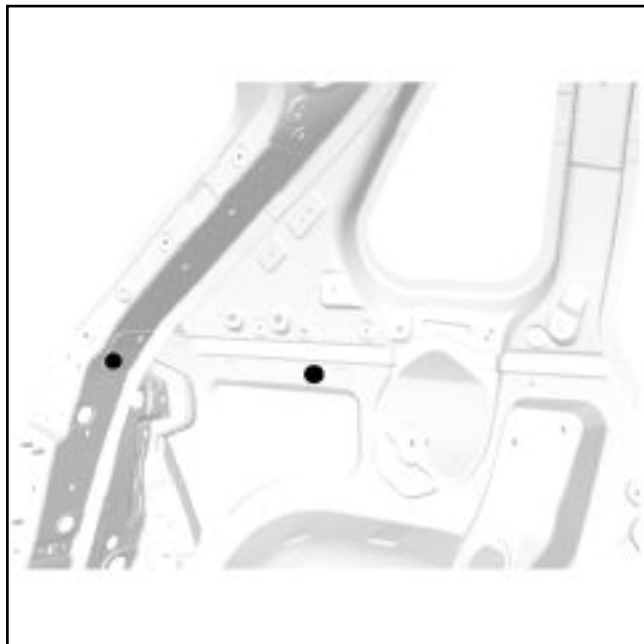
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

REAR LOWER STRUCTURE

Rear side member: Description

41D

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



131808

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

REAR LOWER STRUCTURE

Rear floor front cross member: Description

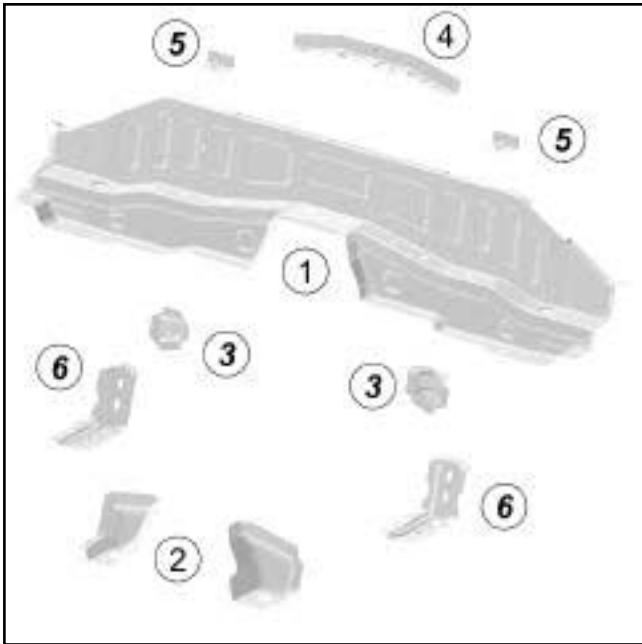
41D



130291

There is only one way of replacing this part:
- partial replacement.

I - COMPOSITION OF THE SPARE PART

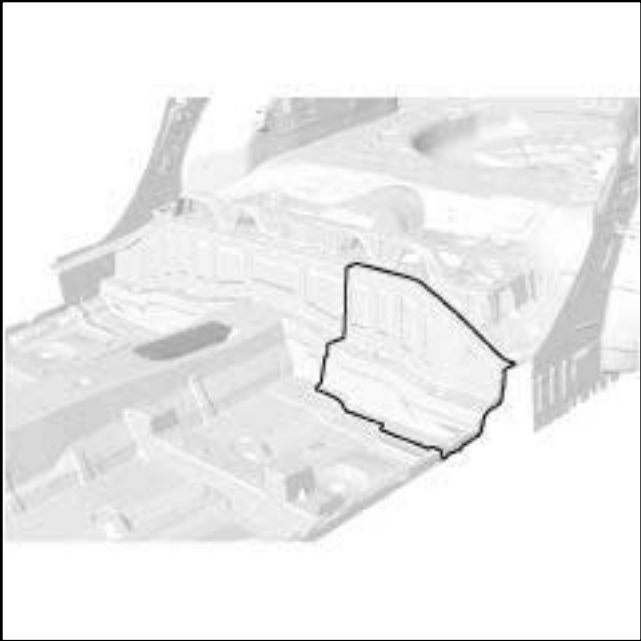


130292

No.	Description	Type	Thic- kness (mm)
(1)	Cross member	HEL	0.8
(2)	Floor tunnel rein- forcement	HEL	1.2
(3)	PKB mounting bracket	HEL	0.8/1.4
(4)	Plate nut reinfor- cement	HEL	1.2
(5)	Fuel tank moun- ting reinforce- ment	HEL	1.6
(6)	Fuel tank protec- tion component	HEL	1.8

II - PART FITTED

Partial replacement



130293

WARNING

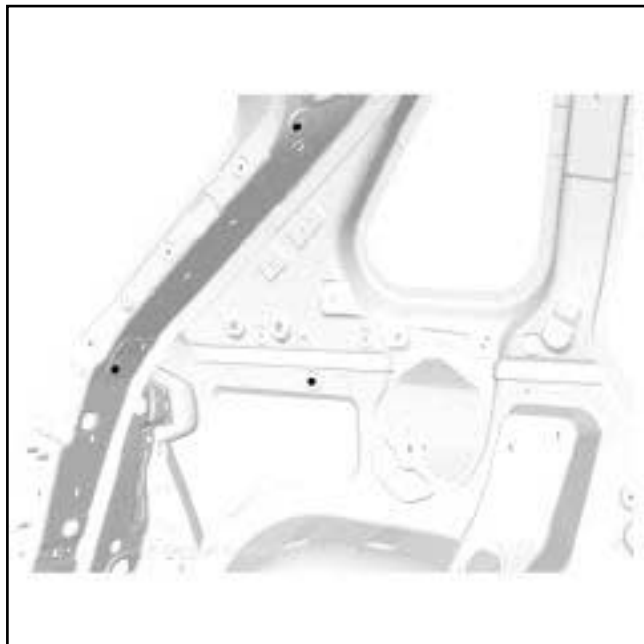
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

REAR LOWER STRUCTURE

Rear floor front cross member: Description

41D

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



130294

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the earth of the welding machine as closely as possible to the weld area (see **MR 400**).

WARNING

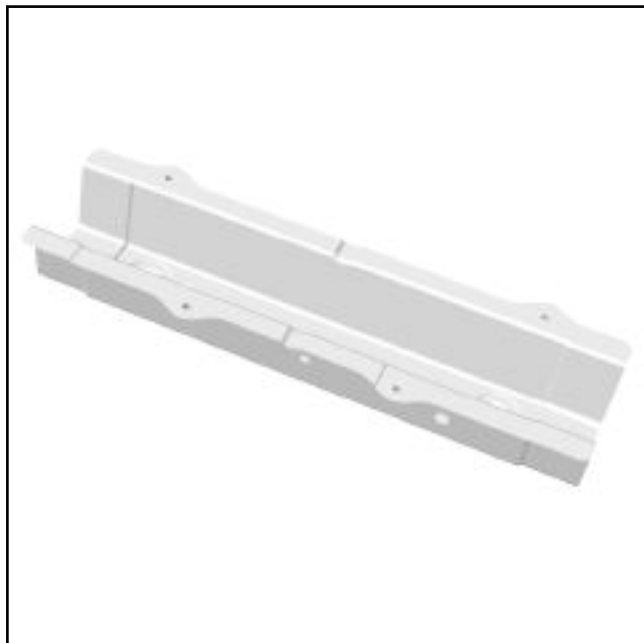
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

For a detailed description of a particular connection, see **MR 400, 40A, General Information**.

DESIGN OF THE STRUCTURAL COMPONENT



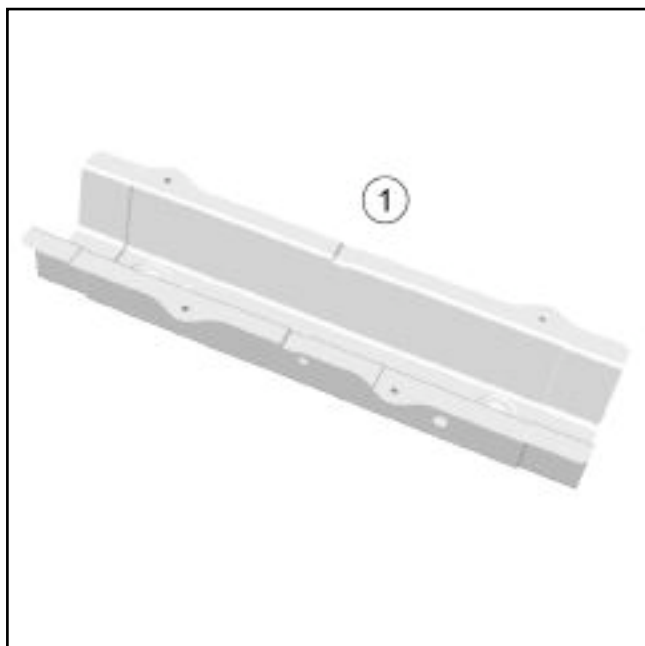
131027

This is a basic part; it only fulfils the function of a rear floor centre cross member.

REAR LOWER STRUCTURE

Rear floor centre cross member: Description

41D



131028

There is only one way of replacing this part:

- complete replacement.

I - COMPOSITION OF THE SPARE PART

No.	Description	Type	Thic- kness (mm)
(1)	Rear floor centre cross member	HEL	1.6

II - PART FITTED


Complete replacement



131029

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

Tightening torques 	
bolts of the luggage retaining cross member	25 N.m
nuts of the luggage retaining cross member	25 N.m

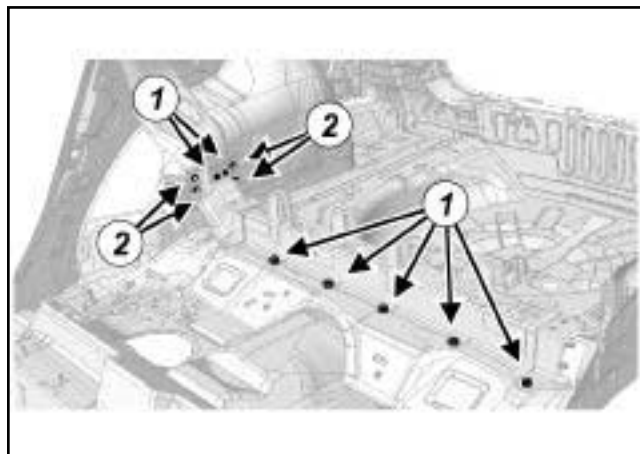
I - REMOVAL

1 - REMOVAL PREPARATION OPERATION

☐ Remove:

- the rear parcel shelf (see **Rear parcel shelf: Removal - Refitting**) (57A, Interior equipment),
- the rear bench seatback (see **Complete rear seat: Removal - Refitting**) (76A, Rear seat frames and runners),
- the luggage compartment floor trim (see **Luggage compartment floor lining: Removal - Refitting**) (71A, Body internal trim),
- the lower trim of the C-pillar (see **C-pillar lower trim: Removal - Refitting**) (71A, Body internal trim),
- the radio (see **Car radio: Removal - Refitting**) (86A, Radio),
- the receiver (see **Tuner-amplifier: Removal - Refitting**) (86A, Radio),
- the proximity radar computer (see **Proximity radar Removal - Refitting**) (87F, Parking distance control).

2 - OPERATION FOR REMOVAL OF PART CONCERNED



131030

☐ Disconnect the connector from the supply cable.

☐ Remove:

- the bolts (1) of the luggage retaining cross member on each side,
- the nuts (2) of the luggage retaining cross member on each side.

II - REFITTING

1 - OPERATION FOR REFITTING PART CONCERNED

☐ Refit:

- the bolts (1) of the luggage retaining cross member on each side,
- the nuts (2) of the luggage retaining cross member on each side.

☐ Connect the supply cable connector.

☐ Torque tighten:

- the bolts of the luggage retaining cross member (25 N.m),
- the nuts of the luggage retaining cross member (25 N.m).

2 - FINAL OPERATION

☐ Refit:

- the proximity radar computer (see **Proximity radar Removal - Refitting**) (87F, Parking distance control),
- the receiver (see **Tuner-amplifier: Removal - Refitting**) (86A, Radio),

Luggage retainer cross piece: Removal - Refitting

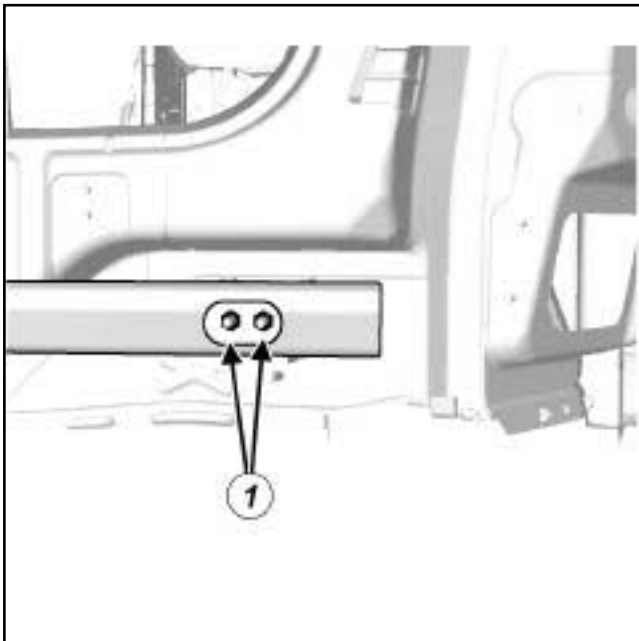
- the radio (see **Car radio: Removal - Refitting**) (86A, Radio),
- the lower trim of the C-pillar (see **C-pillar lower trim: Removal - Refitting**) (71A, Body internal trim),
- the luggage compartment floor trim (see **Luggage compartment floor lining: Removal - Refitting**) (71A, Body internal trim),
- the rear bench seatback (see **Complete rear seat: Removal - Refitting**) (76A, Rear seat frames and runners),
- the rear parcel shelf (see **Rear parcel shelf: Removal - Refitting**) (57A, Interior equipment).

REMOVAL

I - REMOVAL PREPARATION OPERATION

- ☐ Remove the rear bumper (see **Rear bumper: Removal - Refitting**) (55A, Exterior protection).

II - OPERATION FOR REMOVAL OF PART CONCERNED



131031

- ☐ Remove:
 - the nuts (1) ,
 - the rear impact lower cross member.

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit:
 - the rear impact lower cross member,
 - the nuts (1) .


II - FINAL OPERATION.

- ☐ Refit the rear bumper (see **Rear bumper: Removal - Refitting**) (55A, Exterior protection).

FRONT UPPER STRUCTURE

Front wing: Removal - Refitting

42A

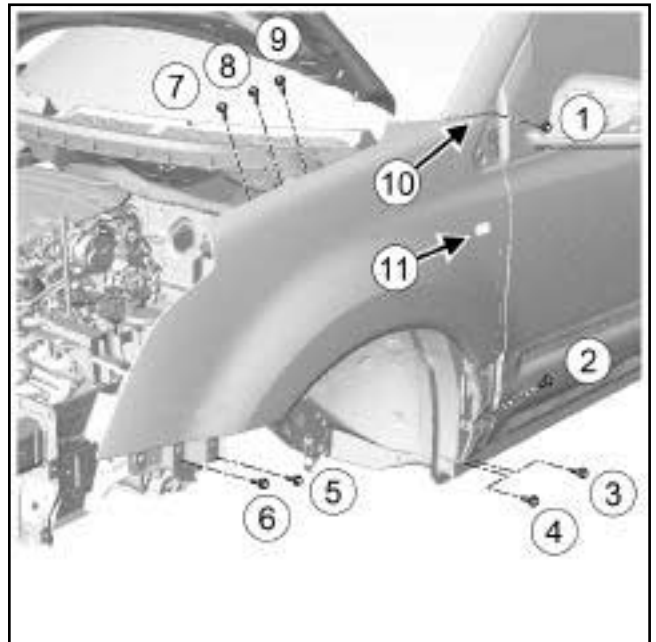
Tightening torques 	
bolt (1)	5.5 N.m
bolt (2)	5.5 N.m
bolt (3)	5.5 N.m
bolt (4)	5.5 N.m
bolt (5)	9 N.m
bolt (6)	9 N.m
bolt (7)	5.5 N.m
bolt (8)	5.5 N.m
bolt (9)	5.5 N.m

REMOVAL

I - REMOVAL PREPARATION OPERATION

- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).
- ☐ Remove:
 - the front wheel (see **Wheel: Removal - Refitting**) (35A, Wheels and tyres),
 - the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
 - the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection).
 - the headlight (see **Front headlight: Removal - Refitting**) (80B, Headlights),
 - the door mirror trim.

II - OPERATION FOR REMOVAL OF PART CONCERNED



131032

- ☐ Remove:
 - the windscreen trim (10) ,
 - the wing direction indicator (11) .
- ☐ Disconnect the wing direction indicator.
- ☐ Remove:
 - the bolts,
 - the front wing.

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit:
 - the front wing,
 - the bolts.

Note:

The separating foam seal on the front wing is supplied with the spare part.

- ☐ Connect the wing direction indicator.
- ☐ Refit:
 - the wing direction indicator (11) ,
 - the windscreen trim (10) .

FRONT UPPER STRUCTURE

Front wing: Removal - Refitting

42A

☐ Tighten to torque:

- the **bolt (1) (5.5 N.m)**,
- the **bolt (2) (5.5 N.m)**,
- the **bolt (3) (5.5 N.m)**,
- the **bolt (4) (5.5 N.m)**,
- the **bolt (5) (9 N.m)**,
- the **bolt (6) (9 N.m)**,
- the **bolt (7) (5.5 N.m)**,
- the **bolt (8) (5.5 N.m)**,
- the **bolt (9) (5.5 N.m)**,

II - FINAL OPERATION

☐ Refit:

- the door mirror trim,
- the headlight (see **Front headlight: Removal - Refitting**) (80B, Headlights),
- the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection).
- the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
- the front wheel (see **Wheel: Removal - Refitting**) (35A, Wheels and tyres).

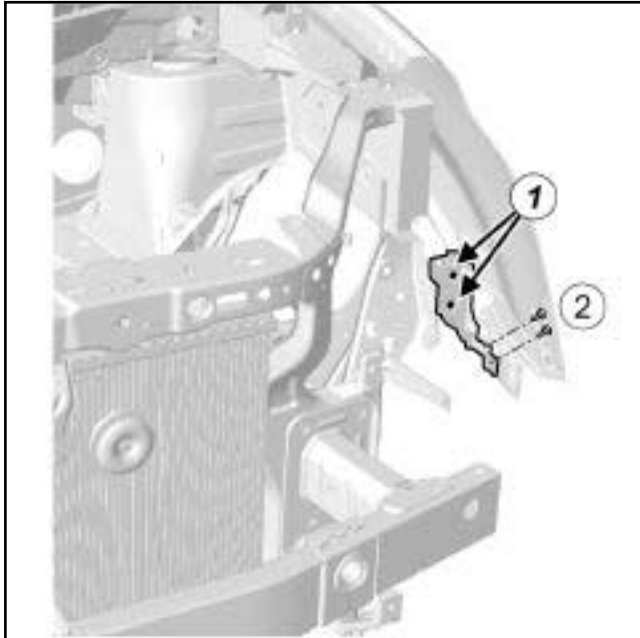
REMOVAL

I - REMOVAL PREPARATION OPERATION

☐ Remove:

- partially the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection),
- the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
- the headlight (see **Front headlight: Removal - Refitting**) (80B, Headlights),
- the windscreen washer pipe.

II - OPERATION FOR REMOVAL OF PART CONCERNED



135032

☐ Remove:

- the nuts (1) ,
- the bolts (2) ,
- the front wing lower mounting.

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

☐ Refit:

- the front wing lower mounting,
- the bolts (2) ,
- the nuts (1) .

II - FINAL OPERATION

☐ Refit:

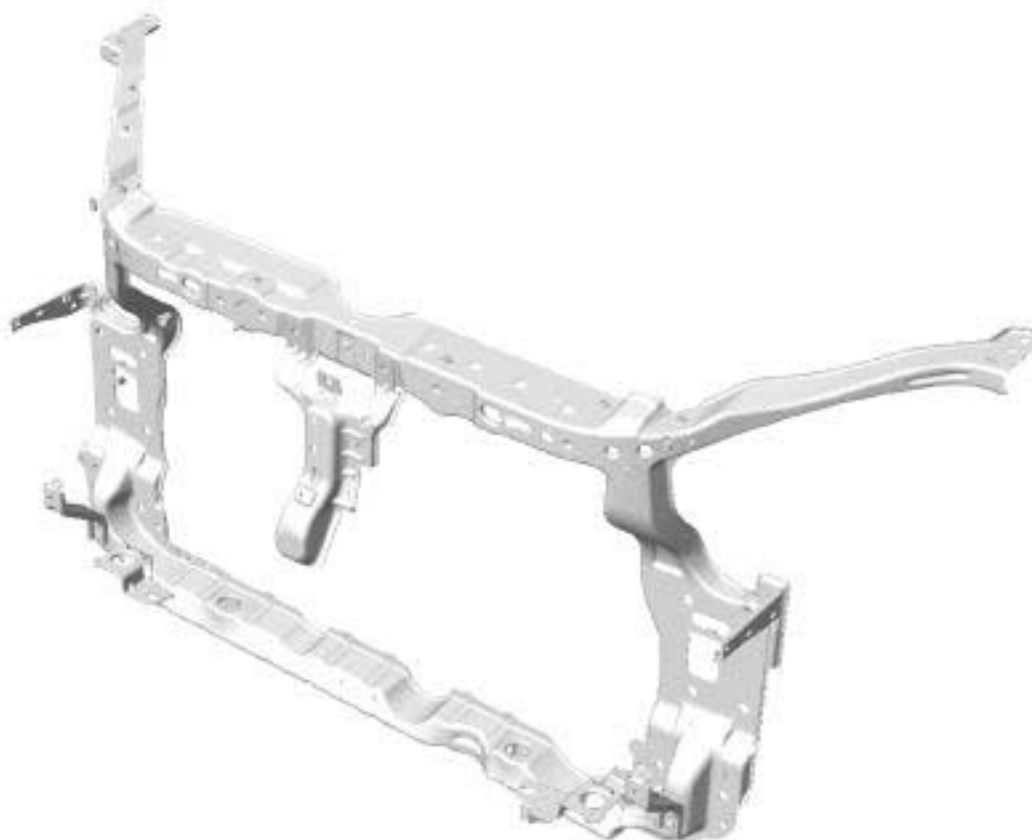
- the windscreen washer pipe,
- the headlight (see **Front headlight: Removal - Refitting**) (80B, Headlights),
- the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
- the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection).

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

DESIGN OF THE STRUCTURAL COMPONENT



130779

A special feature of this part is that it is made out of composite materials; it cannot be repaired and is bolted onto the vehicle.

This part is attached to the ends of the front side member and cannot be adjusted.

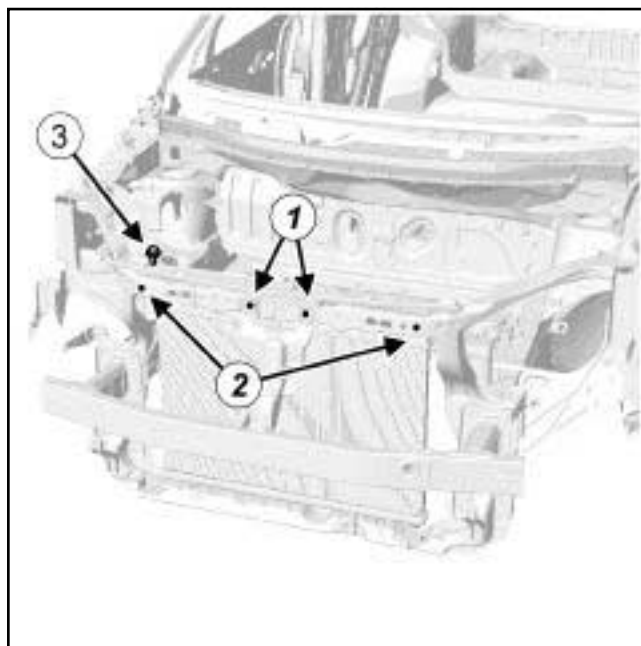
REMOVAL

I - REMOVAL PREPARATION OPERATION

- ❑ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).

- ❑ Remove:

- the front wheel (see **Wheel: Removal - Refitting**) (35A, Wheels and tyres),
- the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection),
- the bonnet (see **48A, Non-side opening elements, Bonnet: Removal - Refitting**, page 48A-1),
- the air inlet sleeve (see **Heating resistor relays: Removal - Refitting**) (61A, Heating),
- the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
- the radiator upper grille,
- the headlights (see **Front headlight: Removal - Refitting**) (80B, Headlights),
- the audible warning (see **Horn: Removal - Refitting**) (82B, Horn).



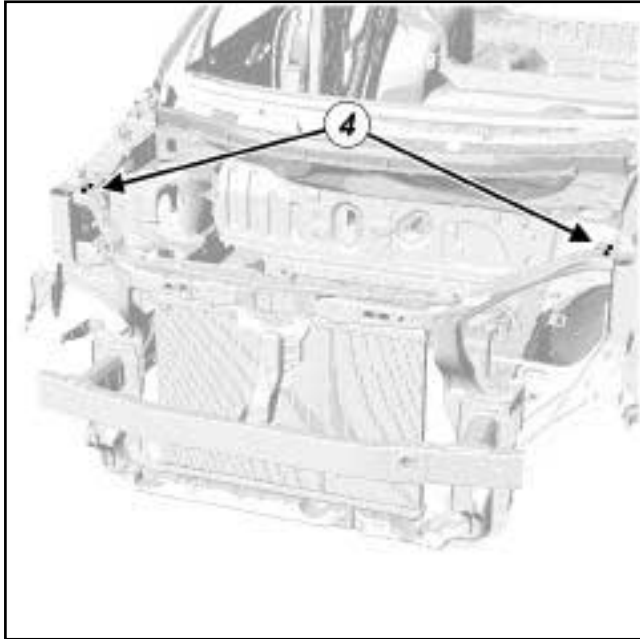
130780

- ❑ Remove:

- the bolts (1) from the radiator central mounting,
- the bolts (2) from the air deflector,
- the front impact cross member (see **41A, Front lower structure, Front impact cross member: Removal - Refitting**, page 41A-2),
- the cooling radiator (see **Cooling radiator: Removal - Refitting**) (19A, Cooling system),
- the expansion bottle (see **Expansion bottle: Removal - Refitting**) (19A, Cooling system),
- the bonnet switch bolt (3) .

- ❑ Disconnect the engine wiring.

II - OPERATION FOR REMOVAL OF PART CONCERNED



130781

- ☐ Remove the front bolts (4) .

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit the front bolts (4) .

II - FINAL OPERATION

- ☐ Connect the engine wiring.
- ☐ Refit:
 - the bonnet switch bolt (3) ,
 - the expansion bottle (see **Expansion bottle: Removal - Refitting**) (19A, Cooling system),
 - the cooling radiator (see **Cooling radiator: Removal - Refitting**) (19A, Cooling system),
 - the front impact cross member (see **41A, Front lower structure, Front impact cross member: Removal - Refitting**, page 41A-2) ,
 - the bolts (2) from the air deflector,
 - the bolts (1) from the radiator central mounting,
 - the audible warning (see **Horn: Removal - Refitting**) (82B, Horn),
 - the headlights (see **Front headlight: Removal - Refitting**) (80B, Headlights),
 - the radiator upper grille,

- the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
- the air inlet sleeve (see **Heating resistor relays: Removal - Refitting**) (61A, Heating),
- the bonnet (see **48A, Non-side opening elements, Bonnet: Removal - Refitting**, page 48A-1) ,
- the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection),
- the front wheel (see **Wheel: Removal - Refitting**) (35A, Wheels and tyres).

FRONT UPPER STRUCTURE

Scuttle side panel: General description

42A

Note:

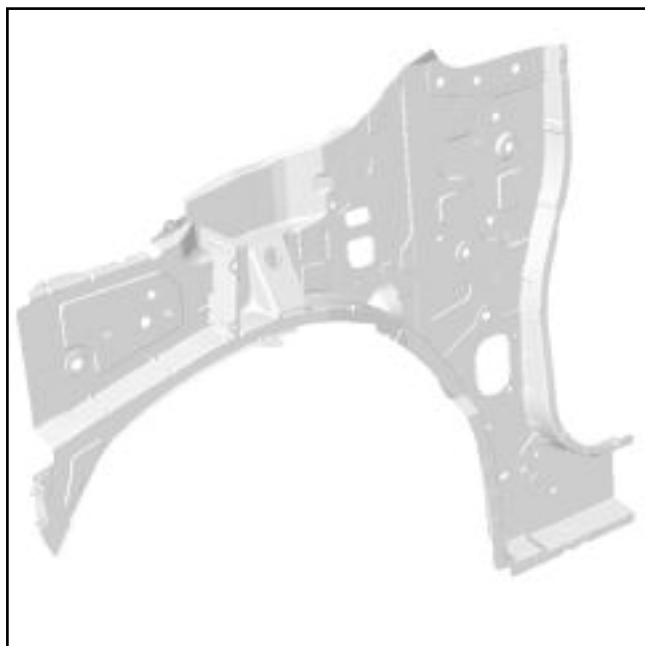
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

I - DESIGN OF THE STRUCTURAL COMPONENT

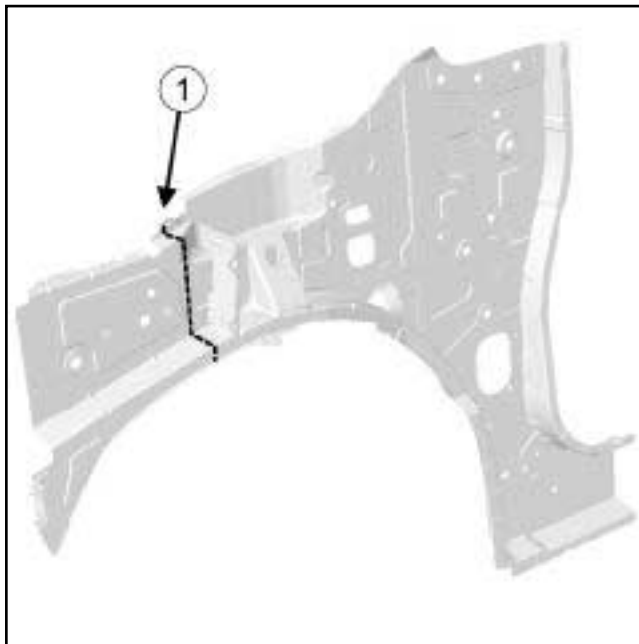


131034

The special feature of this part is that it concurrently serves two functions:

- scuttle side panel,
- A-pillar lining.

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



131035

Cutting line (1) shows the area in which it is possible to make a cut.

III - ASSEMBLY METHOD FOR A PARTIAL REPLACEMENT

Only the connections which are specific to the partial replacement by cutting are indicated.

WARNING

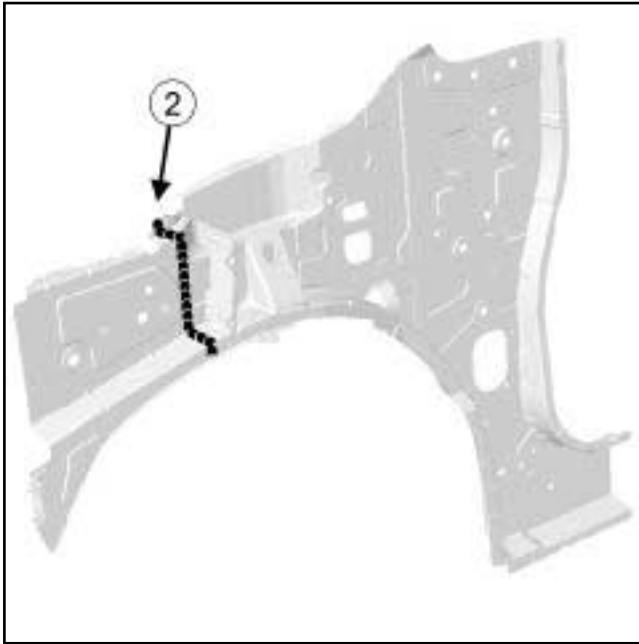
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).

FRONT UPPER STRUCTURE

Scuttle side panel: General description

42A



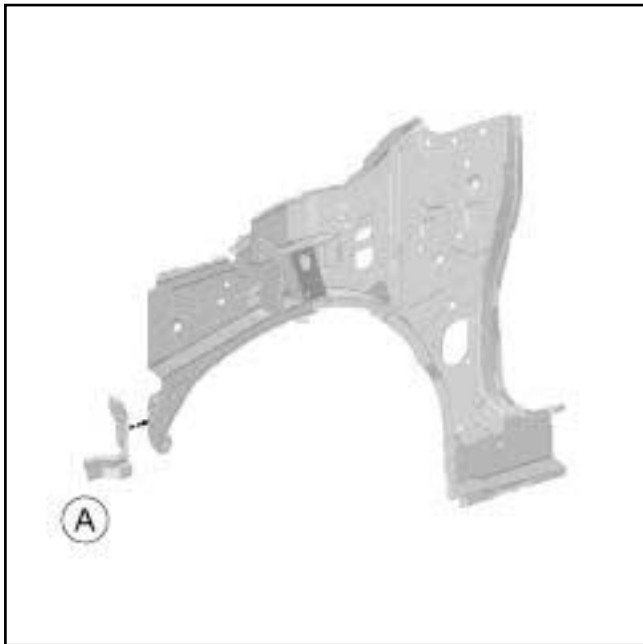
131036

Line (2) on the diagram shows the partial replacement and an EGW butt weld.

FRONT UPPER STRUCTURE

Cowl side panel: Description

42A



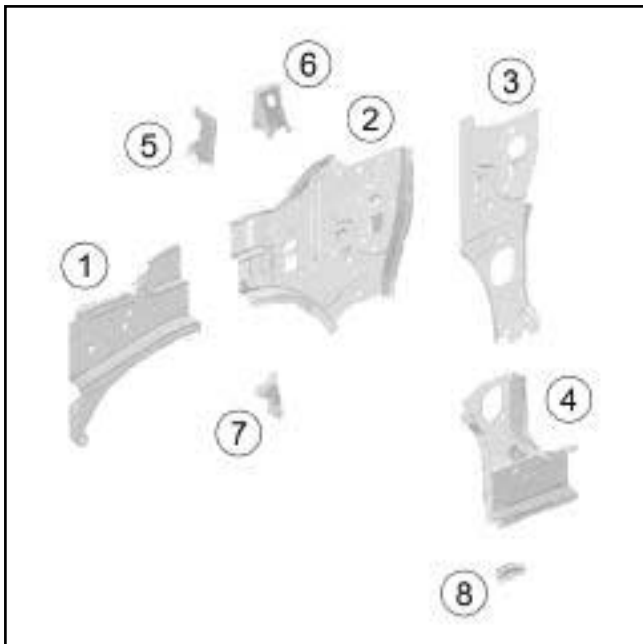
131037

To replace this part, also order the front wing mounting (A) .

The options for replacing this part are as follows:

- partial replacement of the front end section,
- front partial replacement,
- complete replacement.

I - COMPOSITION OF THE SPARE PART

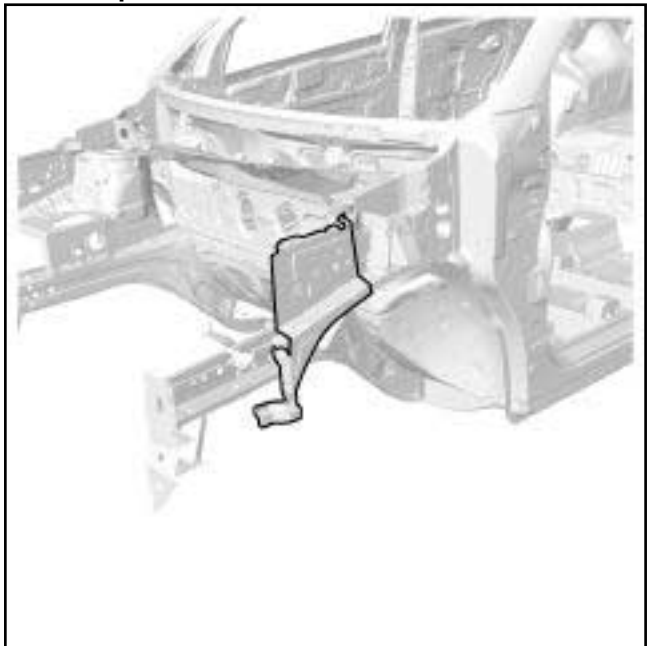


131812

No.	Description	Type	Thic- kness (mm)
(1)	Upper section of A-pillar lining	HEL	1.0
(2)	Side section of A-pillar lining	HEL	0.8
(3)	A-pillar lining reinforcement	HEL	1.6
(4)	Exterior scuttle side panel	HEL	1.4
(5)	A-pillar lining bracket	HEL	1.0
(6)	A-pillar lining bracket reinforcement	HEL	1.0
(7)	A-pillar lining cover	HEL	0.6
(8)	Front jack bearing support	HEL	2.0

II - PART IN POSITION

Partial replacement of the front end section



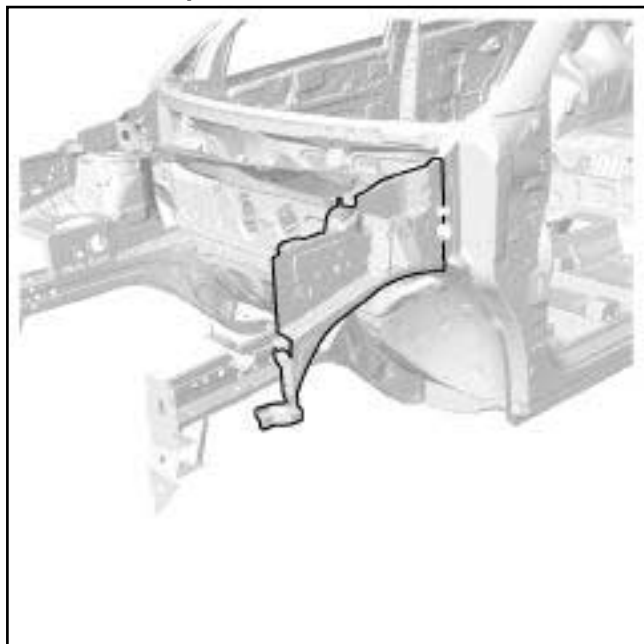
131039

FRONT UPPER STRUCTURE

Cowl side panel: Description

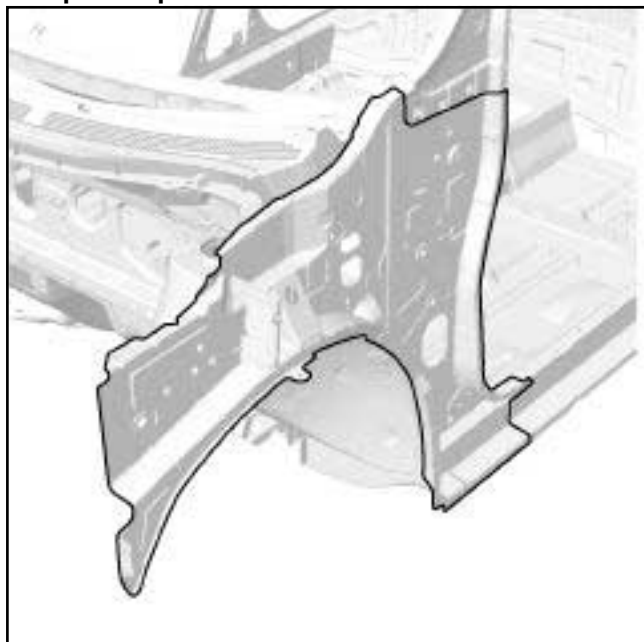
42A

Partial front replacement



131040

Complete replacement

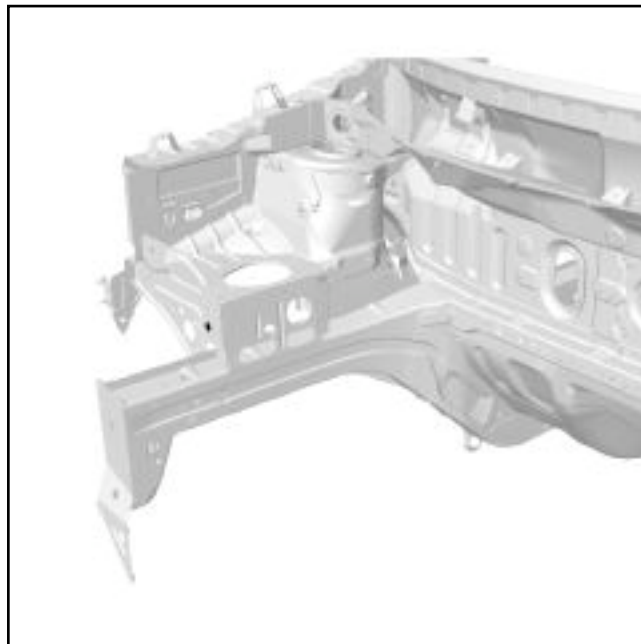


131814

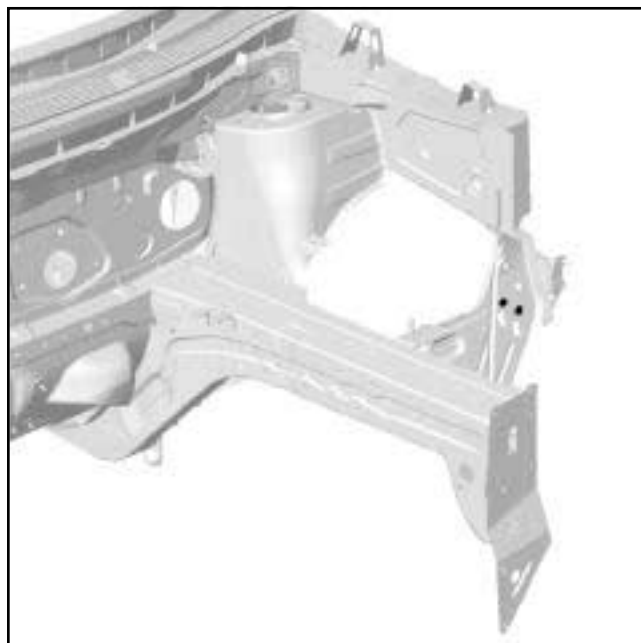
WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



131042



131043

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

Note:

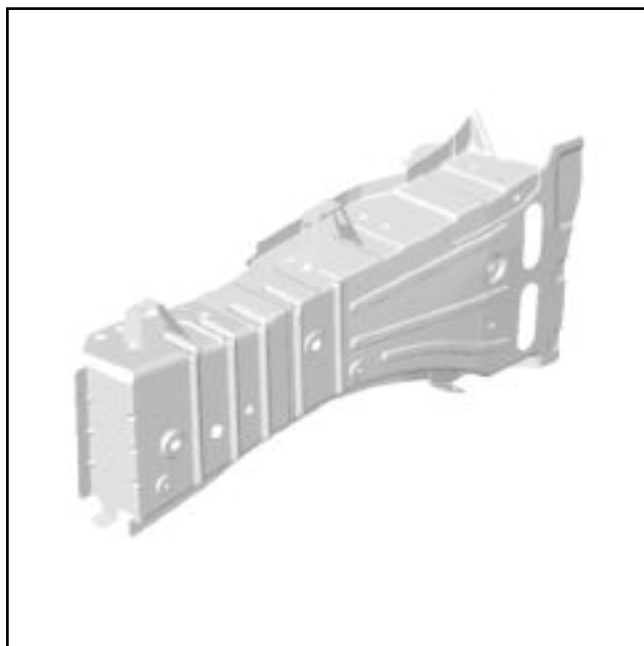
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

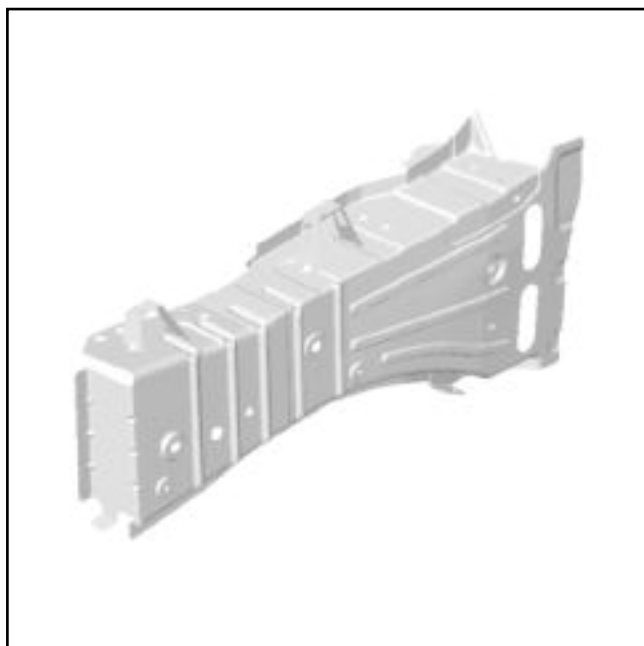
DESIGN OF THE STRUCTURAL COMPONENT



131044

This type of part secures the hinge mounting and the front wing upper mounting.

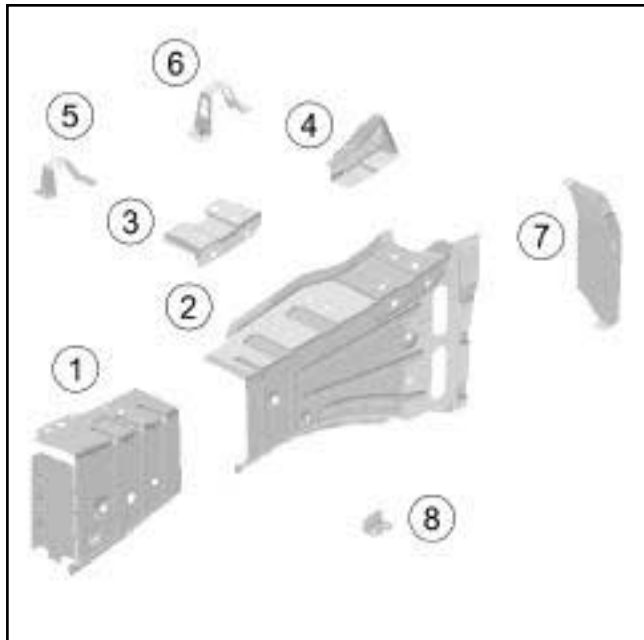
Scuttle side panel upper reinforcement: Description



131045

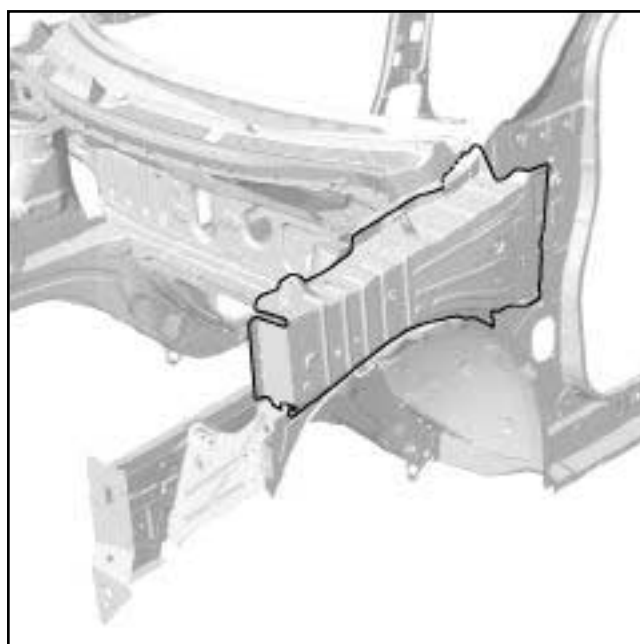
There is only one way of replacing this part:

- complete replacement.

I - COMPOSITION OF THE SPARE PART

131046

No.	Description	Type	Thic-kness (mm)
(1)	Scuttle side panel front rein-forcement	HEL	1.0
(2)	Scuttle side panel rear rein-forcement	HEL	1.4
(3)	Scuttle side panel hinge rein-forcement	HEL	0.8
(4)	Scuttle side panel exterior reinforcement	HEL	1.4
(5)	Front wing upper front mounting	HEL	1.0
(6)	Front wing upper rear mounting	HEL	1.0
(7)	Scuttle side panel reinforce-ment	HEL	0.7
(8)	Wiring harness clip bracket	HEL	1.0

II - PART IN POSITION

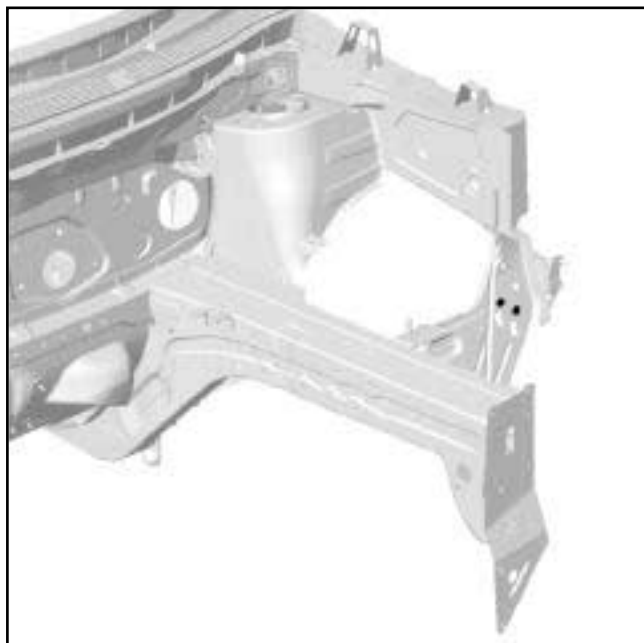
131047

Scuttle side panel upper reinforcement: Description

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



131048

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

Front left-hand wheel arch



131049

Front right-hand wheel arch



131050

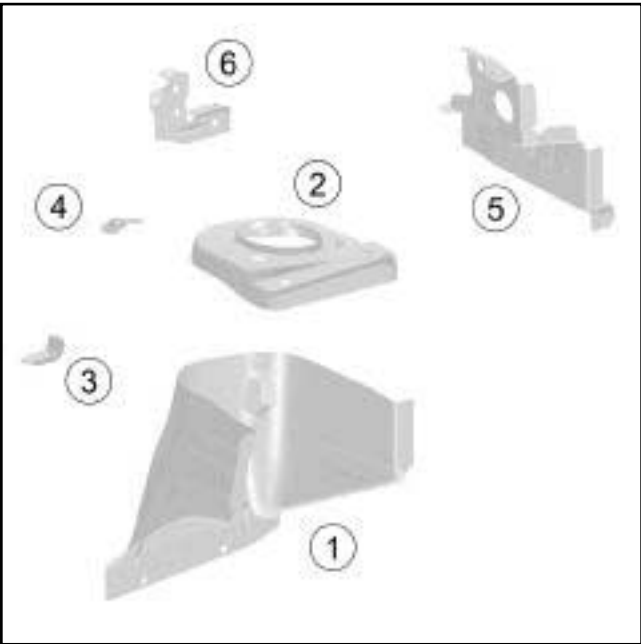
There is only one way of replacing this part:
- complete replacement.

IMPORTANT

Use a repair bench to ensure the positioning of the points and the geometry of the axle assemblies.

I - COMPOSITION OF THE SPARE PART

Front left-hand wheel arch



131051

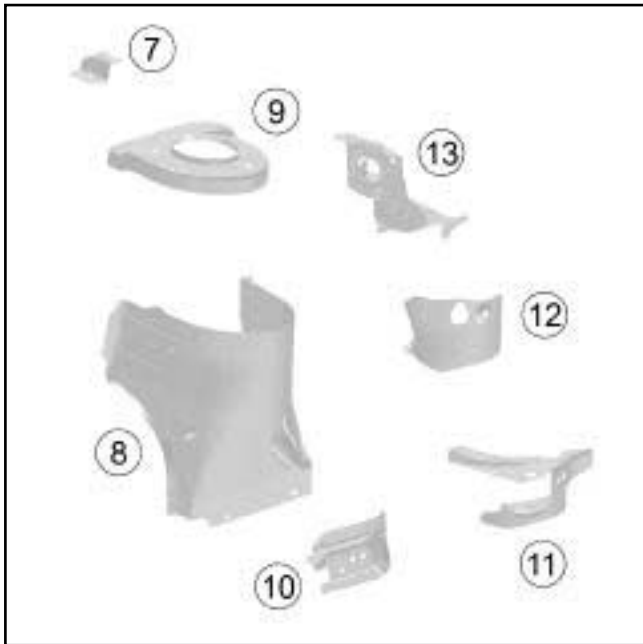
No.	Description	Type	Thickness (mm)
(1)	Shock absorber cup height adjuster	HEL	1.2
(2)	Shock absorber cup	HEL	2.5
(3)	Relay unit support	HEL	1.0
(4)	Resonator support	HEL	1.2
(5)	Upper side scuttle side panel	HEL	2.0
(6)	Lower side scuttle side panel	HEL	1.8

FRONT UPPER STRUCTURE

Front wheel arch: Description

42A

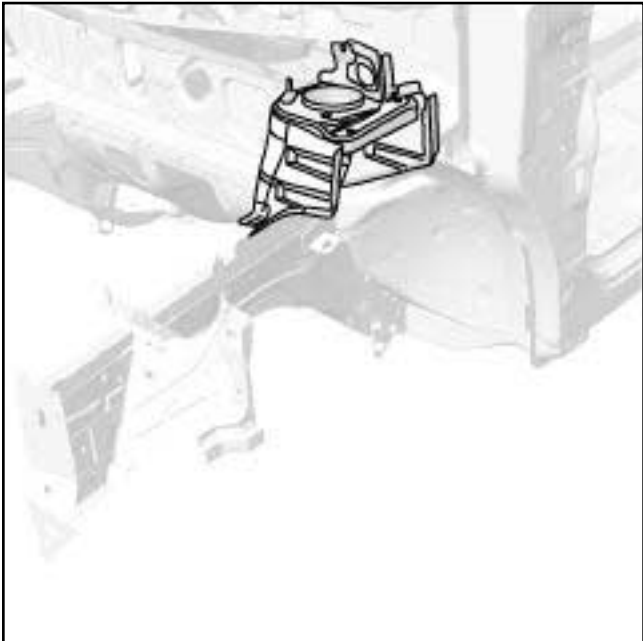
Front right-hand wheel arch



131052

No.	Description	Type	Thickness (mm)
(7)	Fuel filter holder	HEL	1.2
(8)	Shock absorber cup height adjuster	HEL	1.2
(9)	Shock absorber cup	HEL	2.5
(10)	Fuel tank torsion bar mounting	HEL	2.0
(11)	Lower torsion bar mounting	HEL	2.3
(12)	Upper reinforcement of torsion bar	HEL	1.2
(13)	Upper side scuttle side panel	HEL	2.0

II - PART FITTED

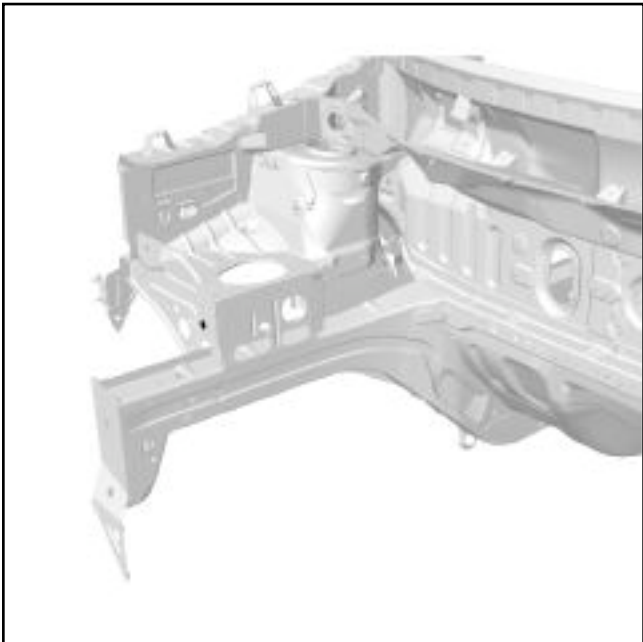


131053

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

III - POSITIONING OF LOCAL ELECTRICAL EARTHS

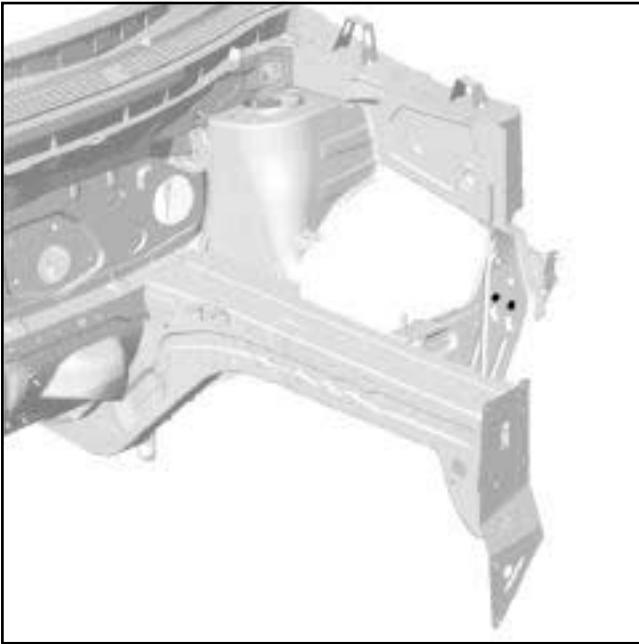


131054

FRONT UPPER STRUCTURE

Front wheel arch: Description

42A



131055

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

FRONT UPPER STRUCTURE

Windscreen aperture lower cross member: Description

42A

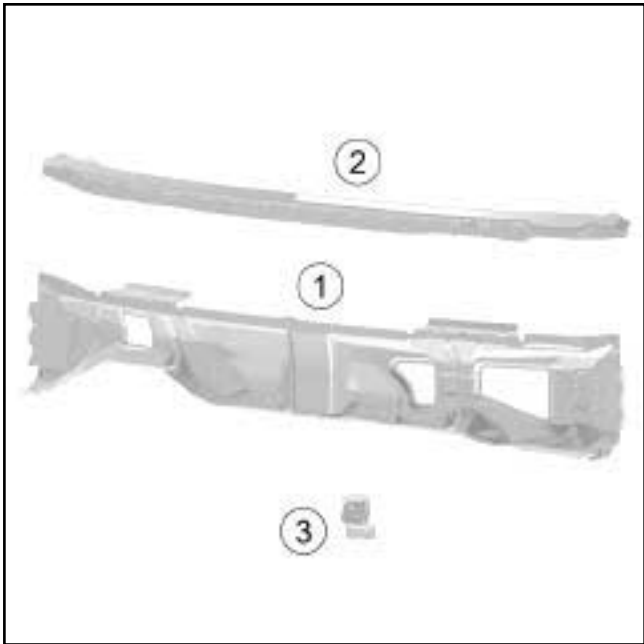


131056

There is only one way of replacing this part:

- complete replacement.

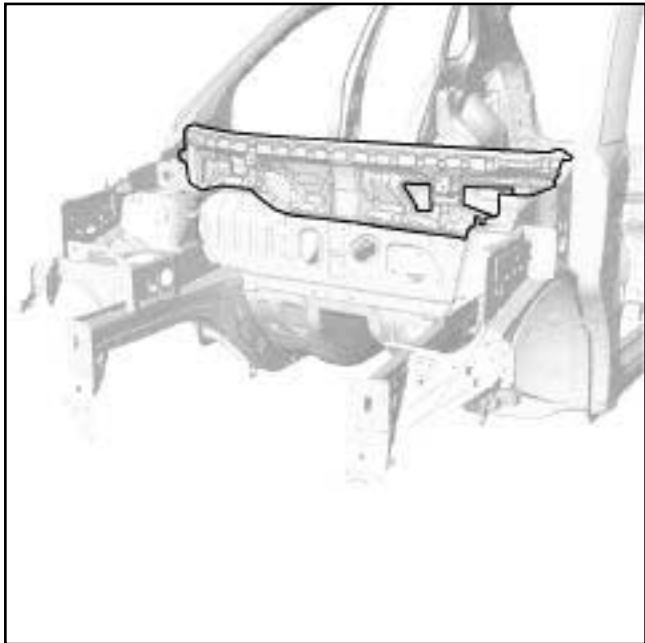
I - COMPOSITION OF THE SPARE PART



131057

No.	Description	Type	Thic- kness (mm)
(1)	Windscreen aperture front lower cross mem-ber	HEL	0.7
(2)	Windscreen aperture central lower cross mem-ber	HEL	0.6
(3)	Windscreen wiper mounting	HEL	1.2

II - PART FITTED



131058

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

FRONT UPPER STRUCTURE

Dashboard cross member: Removal - Refitting

42A

Tightening torques

dashboard cross member bolts	22 N.m
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REMOVAL

I - REMOVAL PREPARATION OPERATION

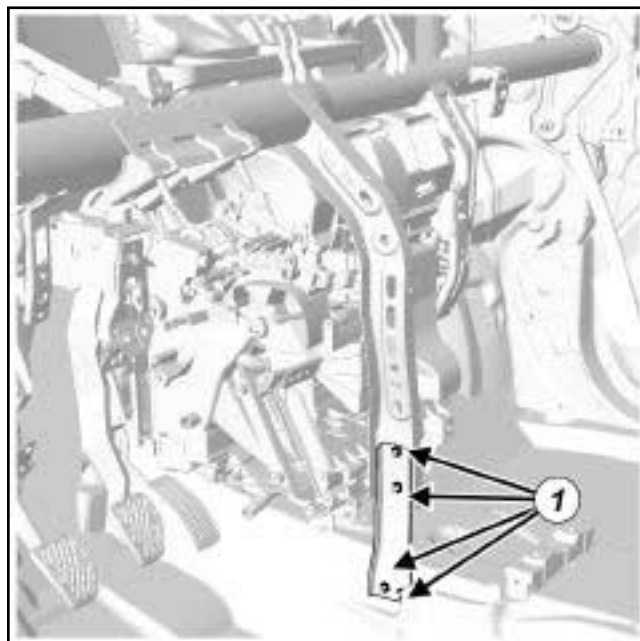
❑ Disconnect:

- the battery (see **Battery: Removal - Refitting**) (80A, Battery)
- the earths,
- the dashboard cross member wiring.

❑ Remove:

- the front side door (see **47A, Side opening elements, Front side door: Removal - Refitting**, page 47A-1),
- the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment),
- the steering column (see **Steering column: Removal - Refitting**) (36A, Steering assembly).
- the air distribution duct (see **Front side air distribution duct: Removal - Refitting**) and (see **Front central air distribution duct: Removal - Refitting**) (61A, Heating system).

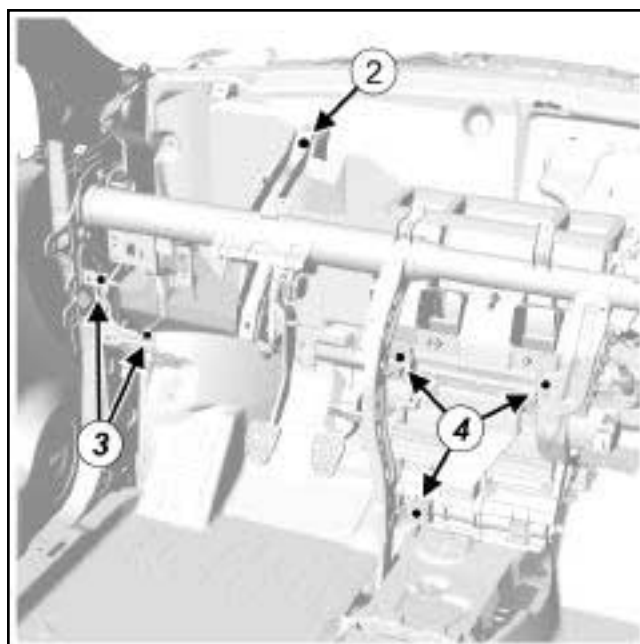
II - OPERATION FOR REMOVAL OF PART CONCERNED



131059

❑ Remove:

- the dashboard cross member flange bolts (1),
- the dashboard cross member flange.



131060

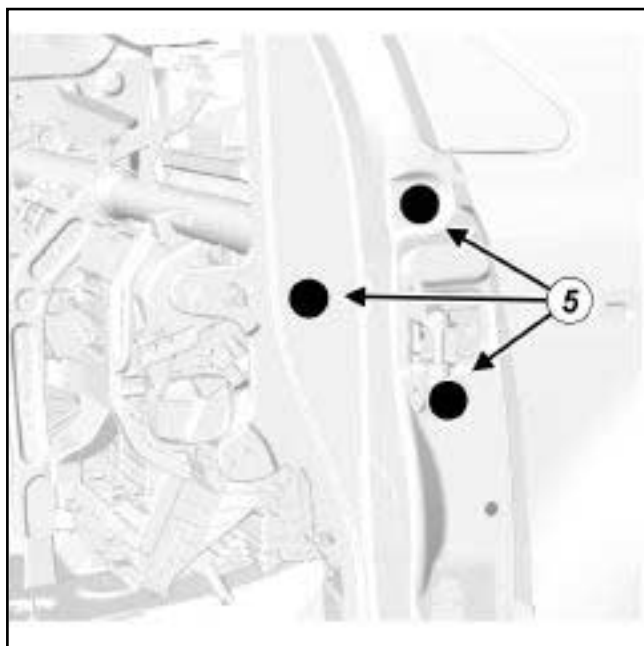
❑ Remove:

- the tie-rod bolt (2),
- the fuse box bolt (3),
- the bolts (4) from the air distribution unit.

FRONT UPPER STRUCTURE

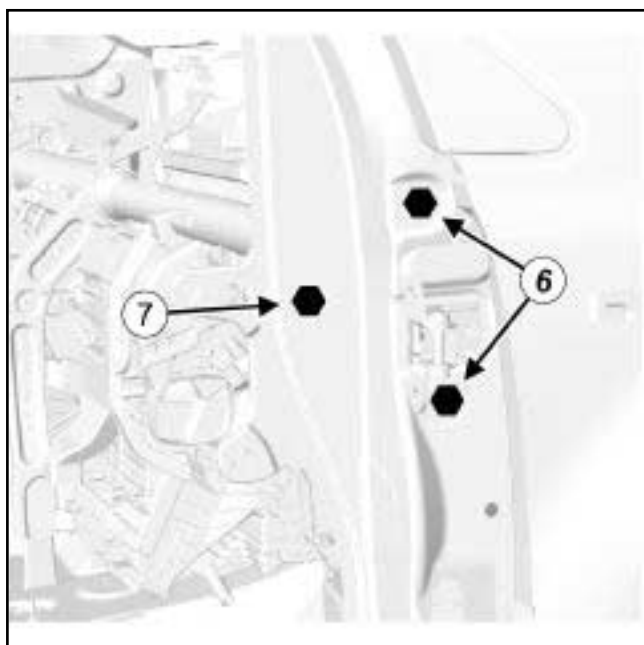
Dashboard cross member: Removal - Refitting

42A



131061

- ❑ Remove the blanking covers (5) .



131062

- ❑ Loosen the adjustment nut and remove the side bolts (6) from the dashboard cross member.
- ❑ Remove:
 - the dashboard cross member bolts (6) from both sides of the vehicle,
 - the dashboard cross member bolt (7) ,
 - the dashboard cross member.

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

❑ Refit:

- the dashboard cross member,
- the dashboard cross member bolt (7) ,
- the bolts (6) from the dashboard cross member on both sides of the vehicle,
- the blanking covers (5) ,
- the bolts (4) from the air distribution unit,
- the fuse box bolt (3) ,
- the tie-rod bolt (2) ,
- the dashboard cross member flange,
- the dashboard cross member flange bolts (1) .

- ❑ Torque tighten the **dashboard cross member bolts (22 N.m)**.

II - FINAL OPERATION.

❑ Refit:

- the air distribution duct (see **Front side air distribution duct: Removal - Refitting**) and (see **Front central air distribution duct: Removal - Refitting**) (61A, Heating system),
- the steering column (see **Steering column: Removal - Refitting**) (36A, Steering assembly).
- the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment),
- the front side door (see **47A, Side opening elements, Front side door: Removal - Refitting**, page 47A-1) .

❑ Connect:

- the dashboard cross member wiring,
- the earths,
- the battery (see **Battery : Removal - Refitting**) (80A, Battery).

FRONT UPPER STRUCTURE

Bulkhead: General description

42A

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading this general information, check that there are no special notes associated with this vehicle. These special notes will be specified if applicable in other parts of this subsection dealing with the part.

Note:

For a detailed description of a particular connection, see **MR 400**.

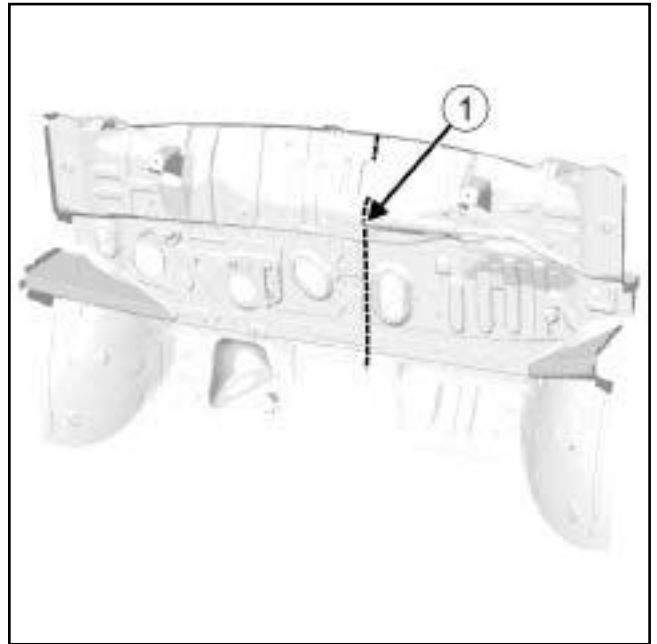
I - DESIGN OF THE STRUCTURAL COMPONENT



131063

This is a basic part; its only function is that of a bulkhead.

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



131064

Cutting line (1) shows the area in which it is possible to carry out a partial replacement.

III - ASSEMBLY INSTRUCTIONS FOR A PARTIAL REPLACEMENT

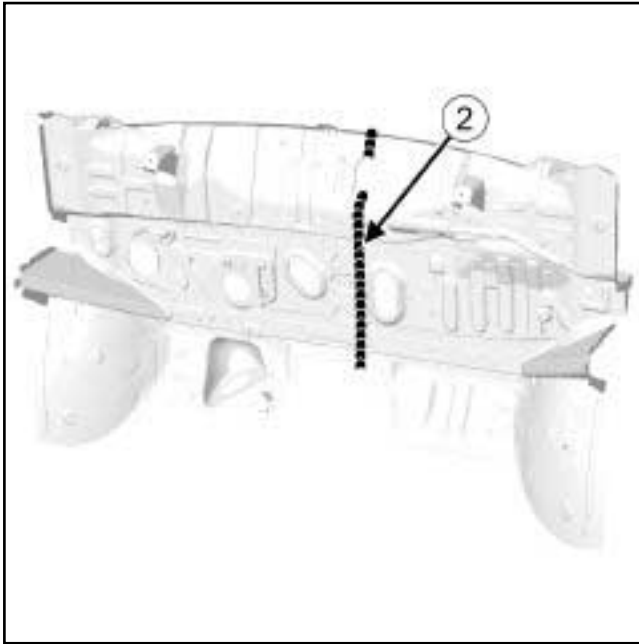
Only the connections which are specific to the partial replacement by cutting are indicated.

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **Connections for partial replacement edge-to-edge: Description**) .

FRONT UPPER STRUCTURE

Bulkhead: General description

42A



131065

The line (2) on the drawing shows a butt weld made by continuous **GMAW** welding.



131066

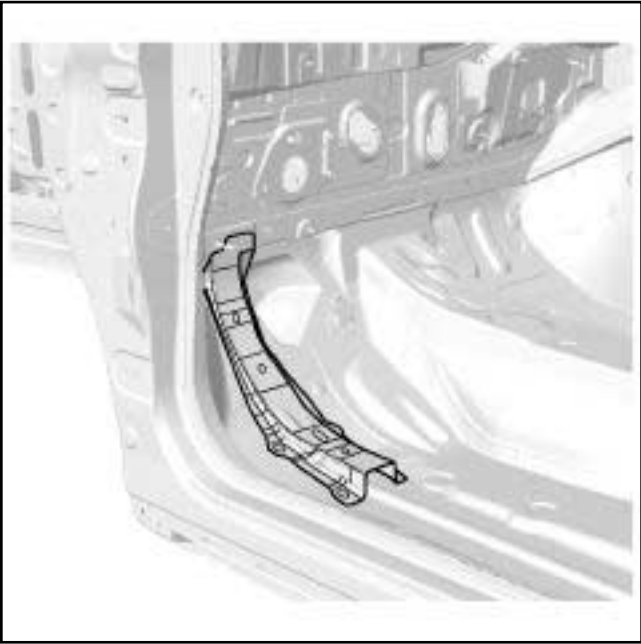
There is only one way of replacing this part:
- complete replacement.

I - COMPOSITION OF THE SPARE PART

No.	Description	Type	Thickness (mm)
(1)	Bulkhead reinforcement	Very high yield strength	2.0

II - PART FITTED

Complete replacement



131067

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



131068

FRONT UPPER STRUCTURE

Bulkhead reinforcement: Description

42A

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

FRONT UPPER STRUCTURE

Bulkhead lower cross member: Description

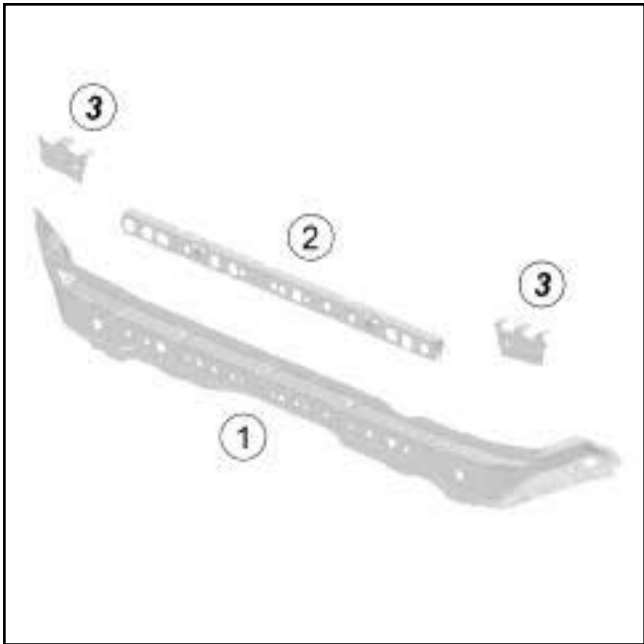
42A



131069

There is only one way of replacing this part:
- complete replacement.

I - COMPOSITION OF THE SPARE PART

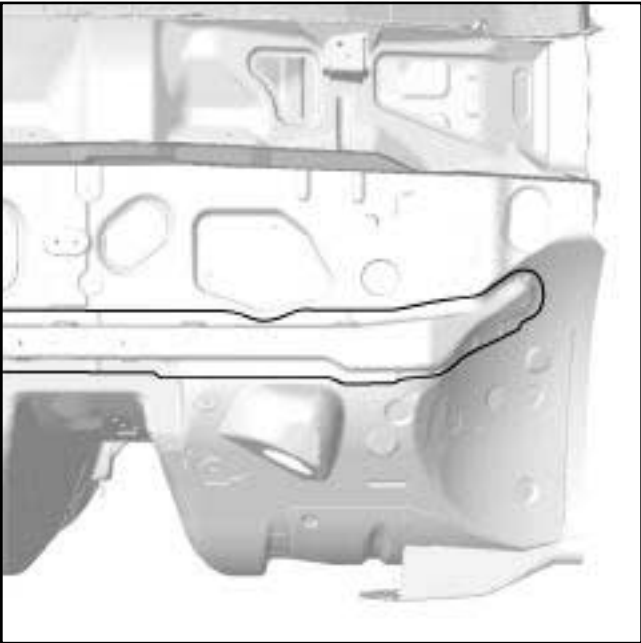


131070

No.	Description	Type	Thickness (mm)
(1)	Bulkhead lower cross member	HLE	1.0
(2)	Bulkhead lower cross member reinforcement	HLE	1.6
(3)	Bulkhead lower cross member reinforcement	HLE	1.6

II - PART FITTED

Complete replacement



131071

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

SIDE UPPER STRUCTURE

A-pillar: General description

43A

WARNING

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

DESIGN OF THE STRUCTURAL COMPONENT

Note:

For a detailed description of a particular connection, see **MR 400, 40A, General Information**.



131809

This is a basic part, its only function is that of an A-pillar.

WARNING

If the spot welds cannot be made as they were originally using an electrical spot welding machine, they should be replaced with plug welds after holes have been drilled in the first panel.

SIDE UPPER STRUCTURE

Windscreen pillar lining: General description

43A

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

DESIGN OF THE STRUCTURAL COMPONENT



131816

This is a basic part, its only function is that of the windscreen pillar lining.

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).

SIDE UPPER STRUCTURE
Windscreen pillar lining: Description

43A

The options for replacing this part are as follows:

- partial replacement,
- complete replacement.

I - COMPOSITION OF THE SPARE PART

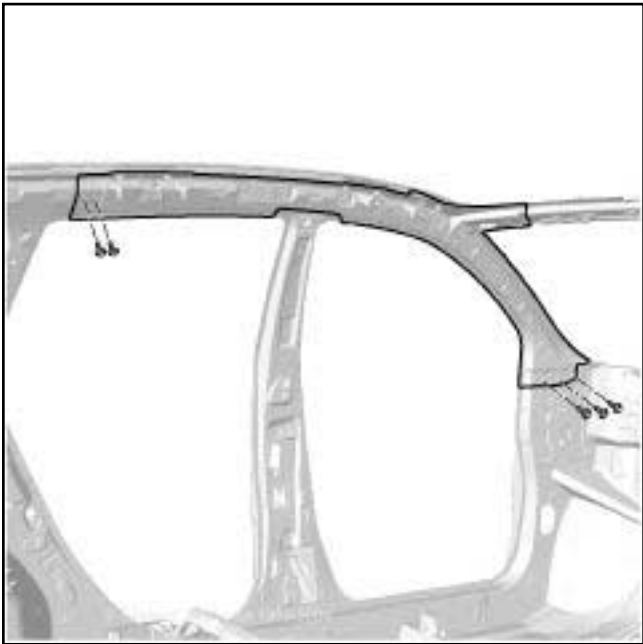


131817

No.	Description	Type	Thic- kness (mm)
(1)	Windscreen pillar lining	HEL	1.6

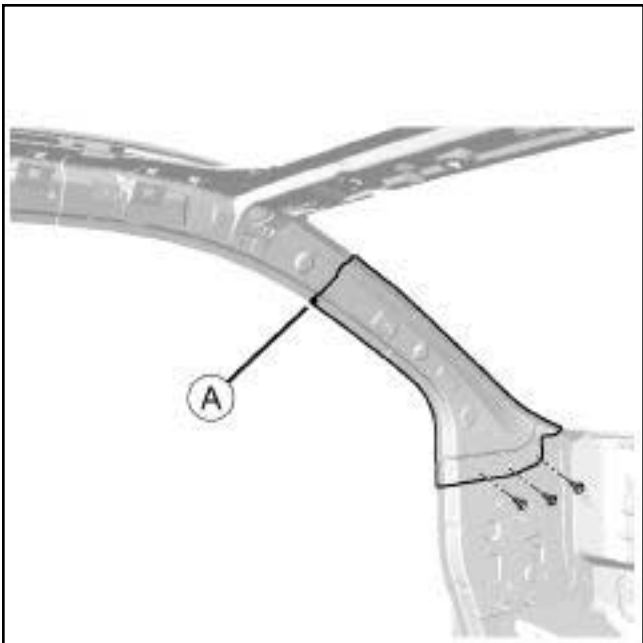
II - PART FITTED

Complete replacement



131818

Partial replacement



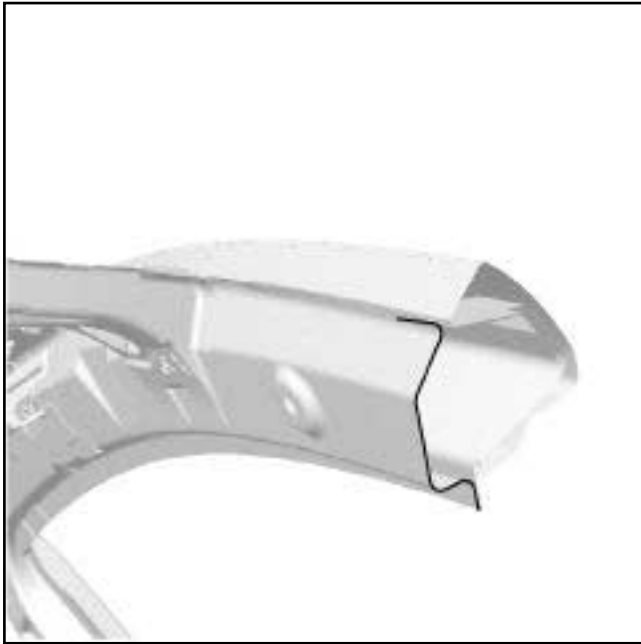
131819

SIDE UPPER STRUCTURE

Windscreen pillar lining: Description

43A

Detailed view of cut A



131820

SIDE UPPER STRUCTURE

B-pillar: General description

43A

WARNING

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400, 40A, General Information**.

IMPORTANT

Before any operation, remove the front seat belts.

I - DESIGN OF THE STRUCTURAL COMPONENT



131821

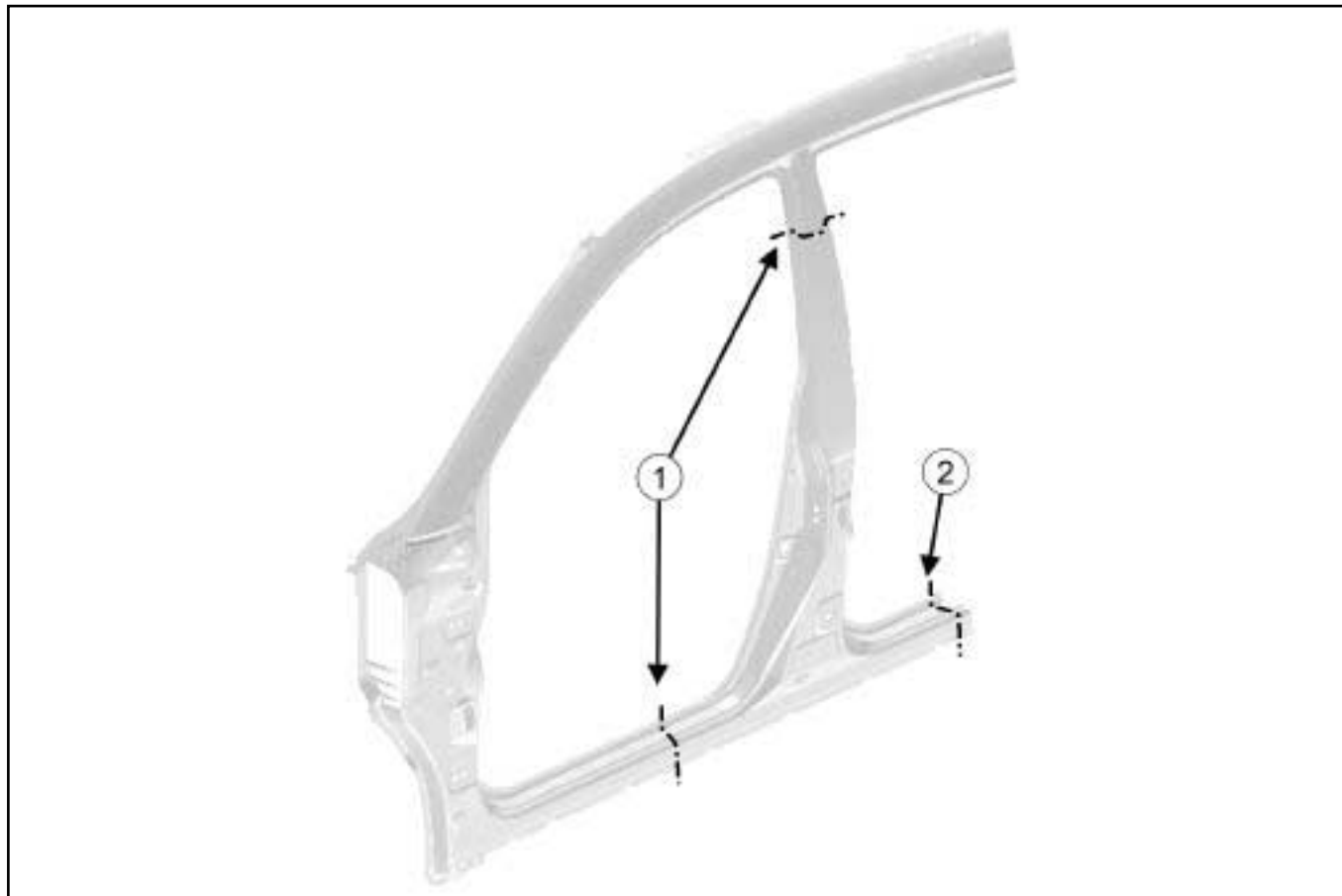
The B-pillar is obtained by extension from the front section body side.

SIDE UPPER STRUCTURE

B-pillar: General description

43A

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



131822

Cutting lines (1) and (2) show the area in which it is possible to carry out a partial replacement.

Make the cutting line (2) on the butt weld.

III - ASSEMBLY METHOD FOR A PARTIAL REPLACEMENT

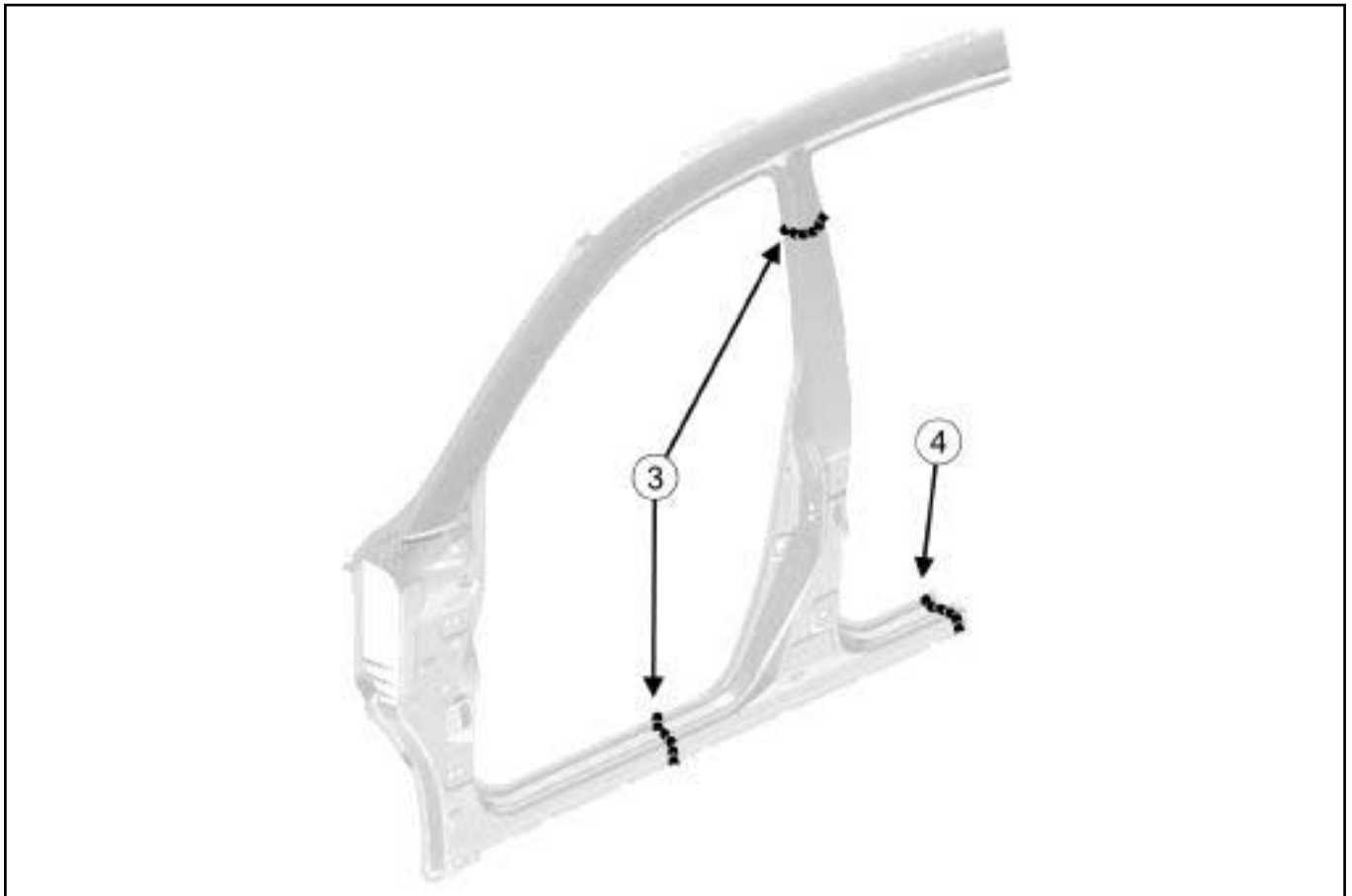
Only the connections which are specific to the partial replacement by cutting are indicated.

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400, 40A, General Information**).

SIDE UPPER STRUCTURE

B-pillar: General description

43A



131823

Lines (3) and (4) on the diagram show a butt weld by continuous EGW welding.

Weld (4) along the butt weld line.

WARNING

If the spot welds cannot be made as they were originally using an electrical spot welding machine, they should be replaced with plug welds after holes have been drilled in the first panel.

SIDE UPPER STRUCTURE

B-pillar reinforcement: Description

43A

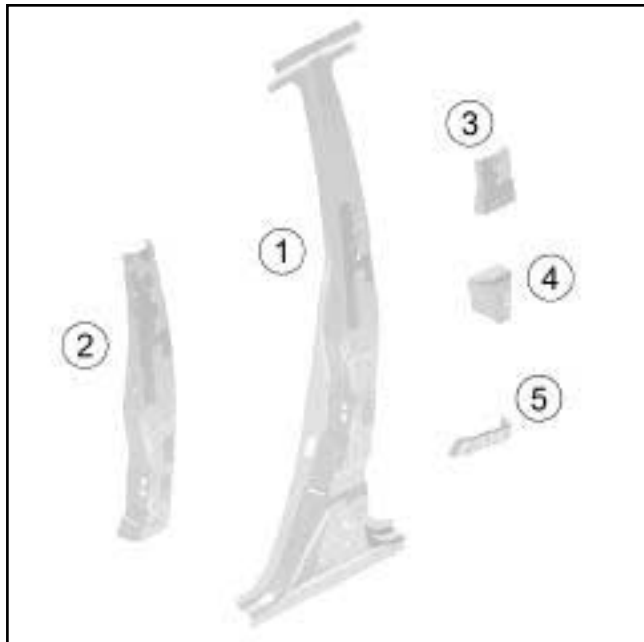


131824

There is only one way of replacing this part:

- complete replacement.

I - COMPOSITION OF THE REPLACEMENT PART

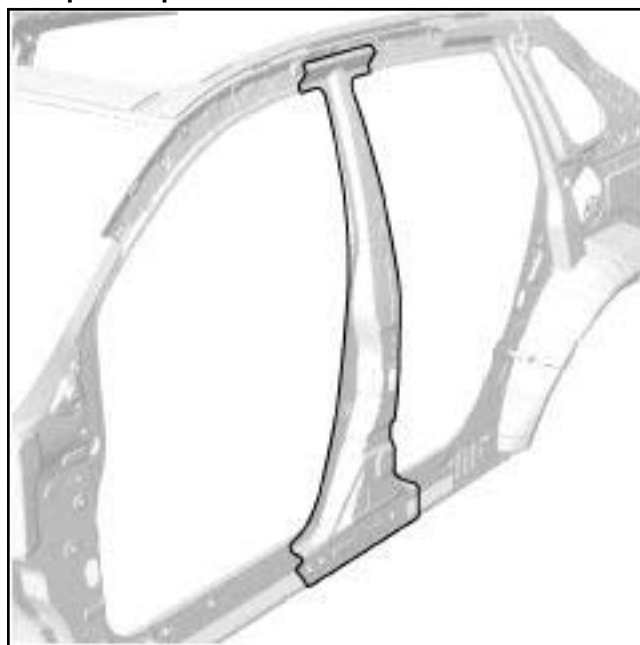


131825

No.	Description	Type	Thic- kness (mm)
(1)	B-pillar hinge reinforcement	HEL	1.0
(2)	B-pillar reinforcement	HEL	1.0
(3)	B-pillar upper bulkhead	HEL	1.6
(4)	B-pillar lower bulkhead	HEL	1.8
(5)	B-pillar lower reinforcement	HEL	1.4

II - PART FITTED

Complete replacement

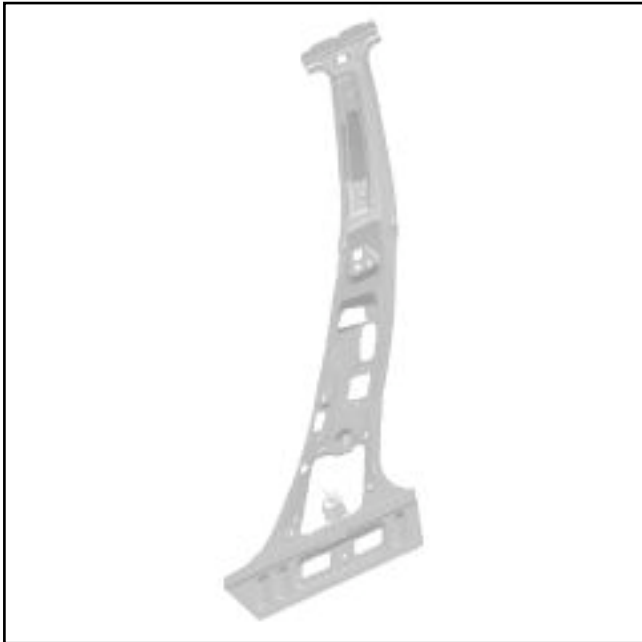


131826

For details of body side cuts (see **43A, Side upper structure, Body side front section: Description, page 43A-15**) .

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

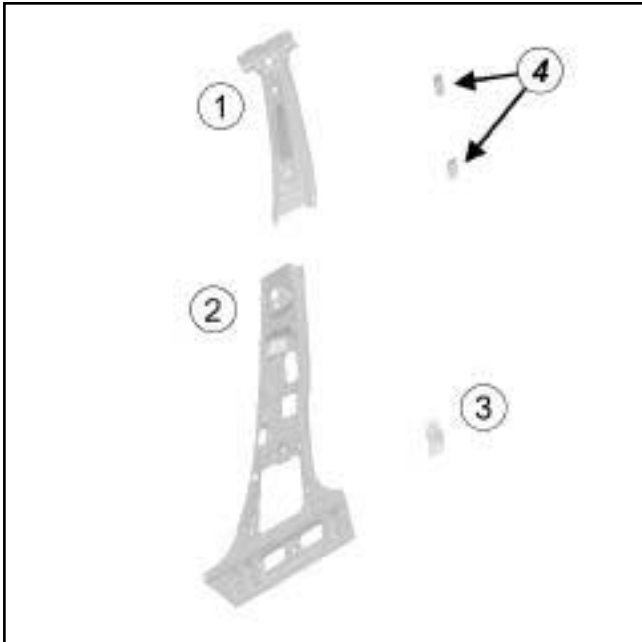


131827

The options for replacing this part are as follows:

- partial replacement,
- complete replacement.

I - COMPOSITION OF THE REPLACEMENT PART

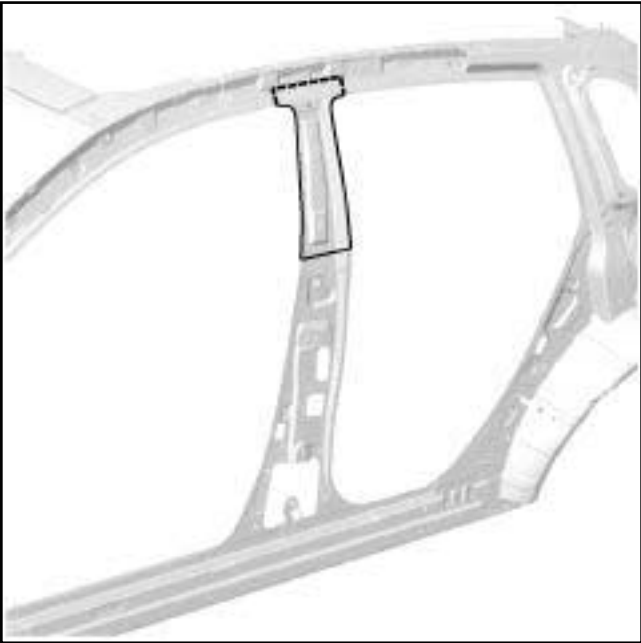


131828

No.	Description	Type	Thic- kness (mm)
(1)	Upper interior B-pillar	HEL	1.6
(2)	Lower interior B-pillar	HEL	1.0
(3)	Seat belt ancho- rage	HEL	2.0
(4)	Nut plate	-	-

II - PART FITTED

Partial replacement of the upper section



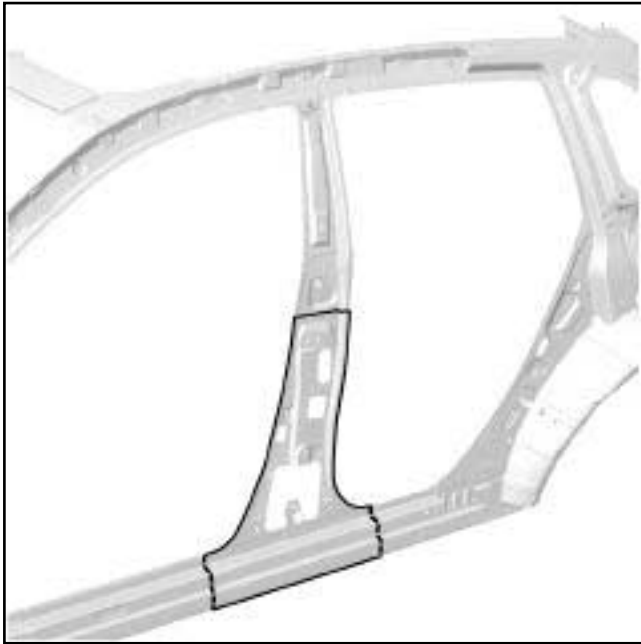
131829

SIDE UPPER STRUCTURE

B-pillar lining: Description

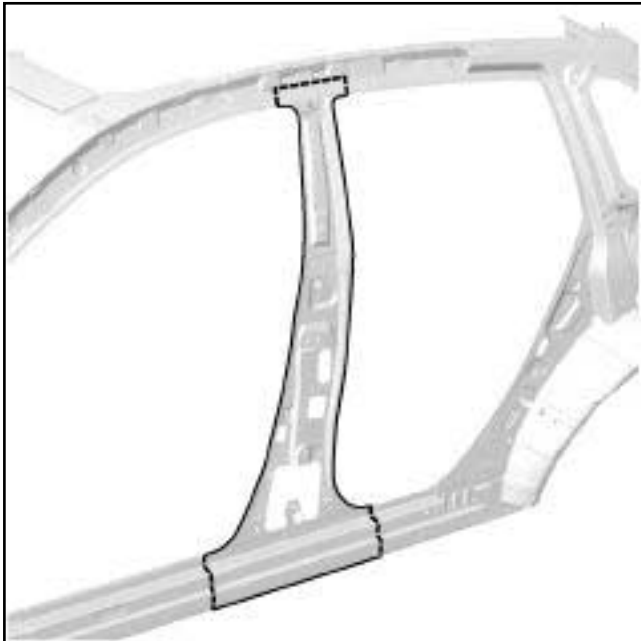
43A

Partial replacement of the lower section



131830

Complete replacement



131831

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

SIDE UPPER STRUCTURE

Body side: General description

43A

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

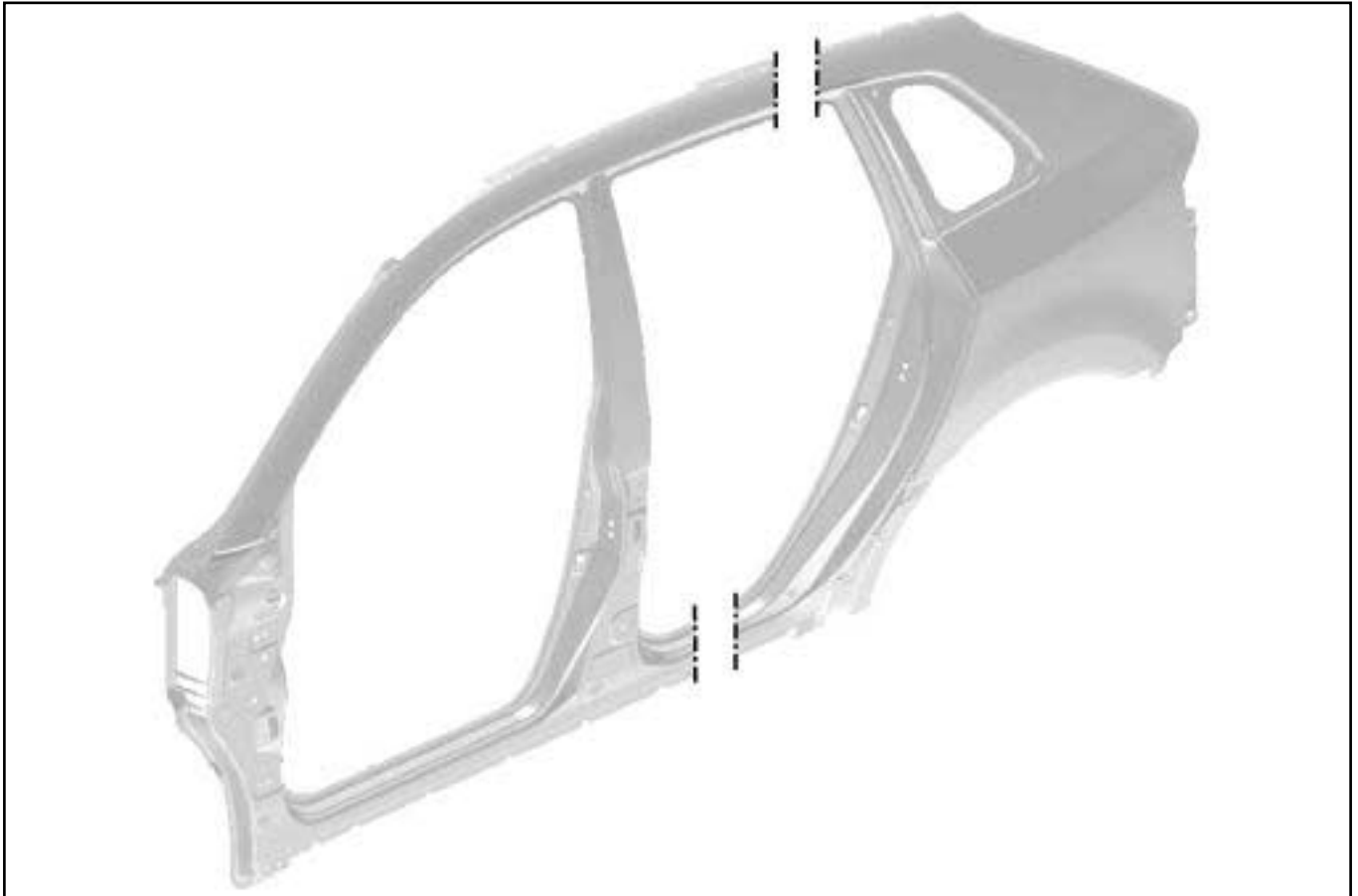
Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

DESIGN OF THE STRUCTURAL COMPONENT

The two parts must be welded at the joint (1) and butt welded by continuous EGW welding.



131833

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).

WARNING

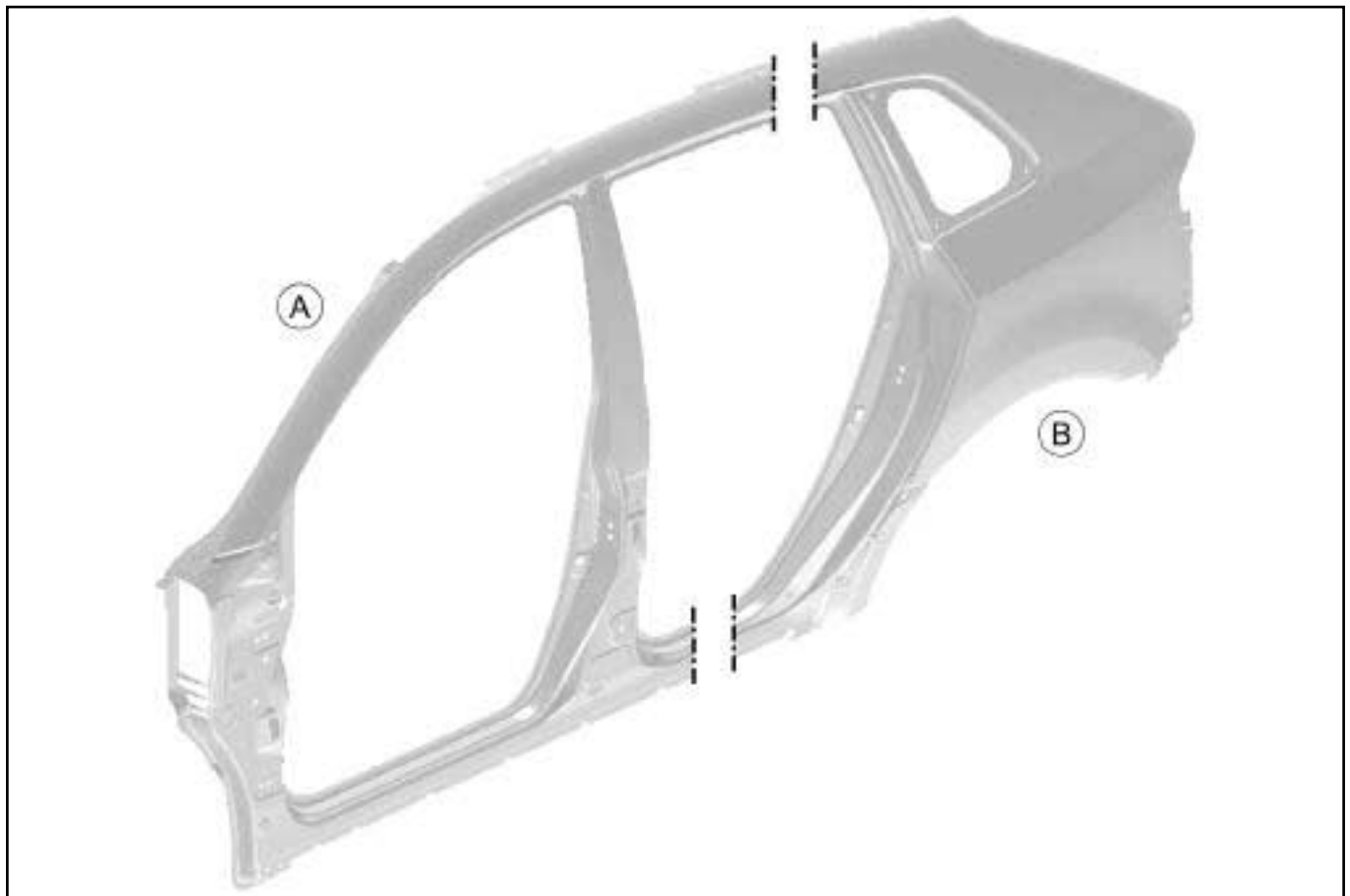
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

The body side is achieved by welding the rear wing and the body side front section.

SIDE UPPER STRUCTURE

Body side: General description

43A

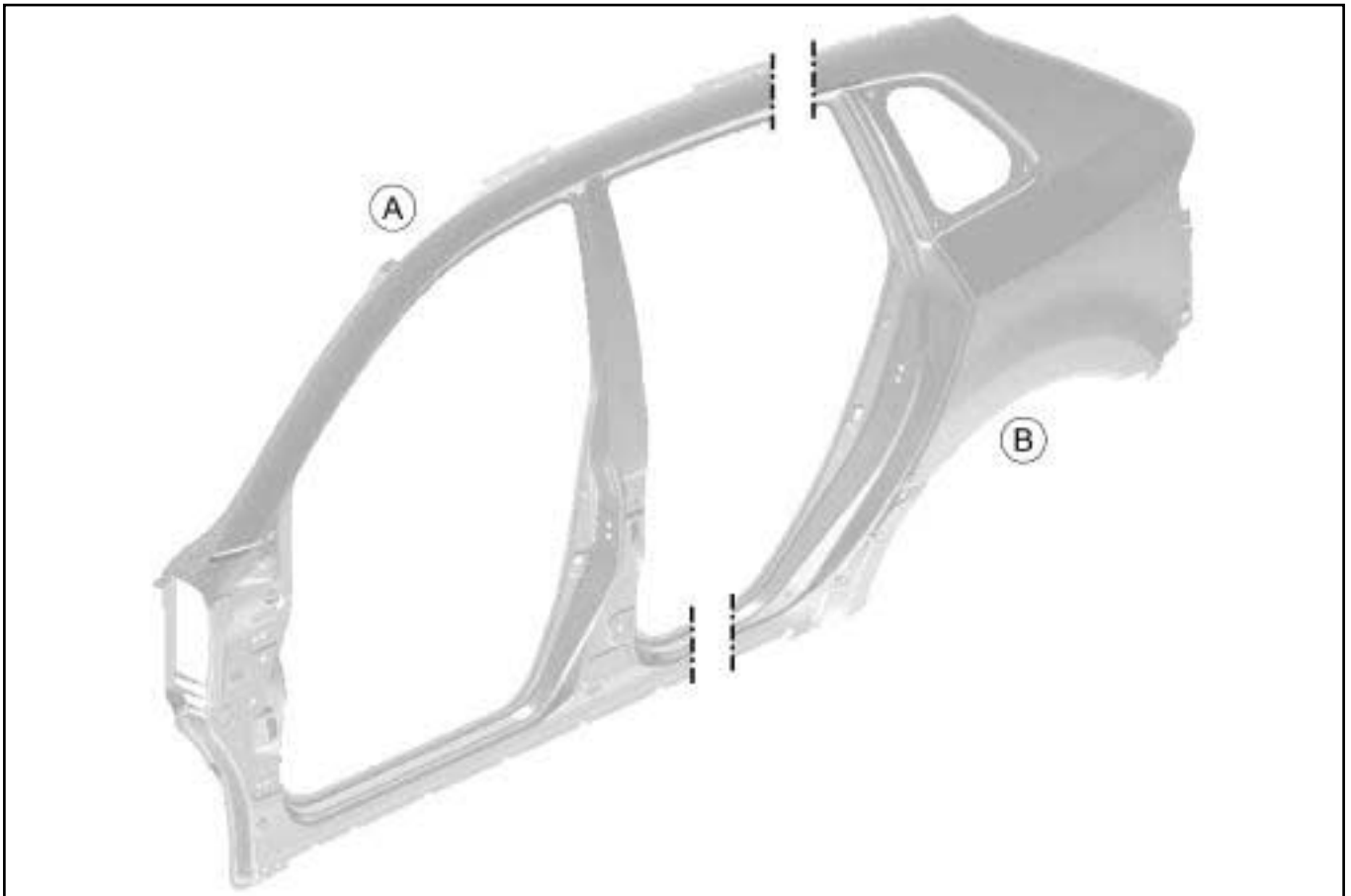


131833

To replace this part, order the body side front section (A) with the rear wing panel (B) .

The parts supplied are long enough to cover the parts to be replaced.

For a detailed explanation of procedures (see **43A, Side upper structure, Body side front section: Description**, page **43A-15**) and (see **44A, Rear upper structure, Rear wing panel: Description**, page **44A-1**) .



131833

To replace this part, order the body side front section **(A)** with the rear wing panel **(B)** .

The parts supplied are long enough to cover the parts to be replaced.

For details of the procedures, (see **43A, Side upper structure, Body side front section: Description**, page **43A-15**) and (see **44A, Rear upper structure, Rear wing panel: Description**, page **44A-1**) .

Note:

For a detailed description of a particular connection, see **MR 400**.

SIDE UPPER STRUCTURE

Body side front section: General description

43A

Note:

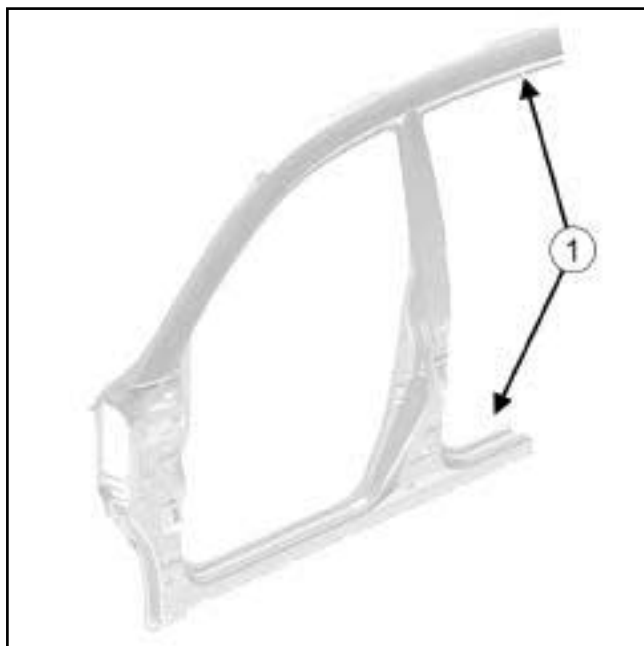
The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

DESIGN OF THE STRUCTURAL COMPONENT



131834

This part has two special features:

- it is welded under the roof,
- it is butt welded in part (1) .

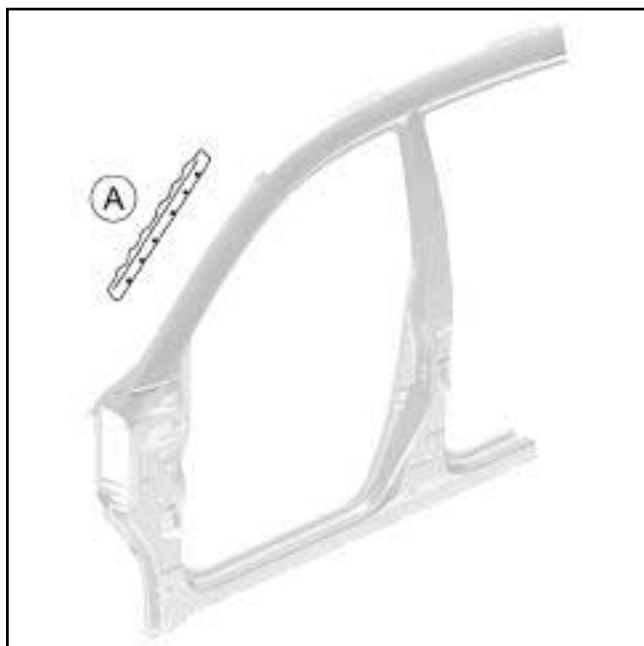
WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

SIDE UPPER STRUCTURE

Body side front section: Description

43A



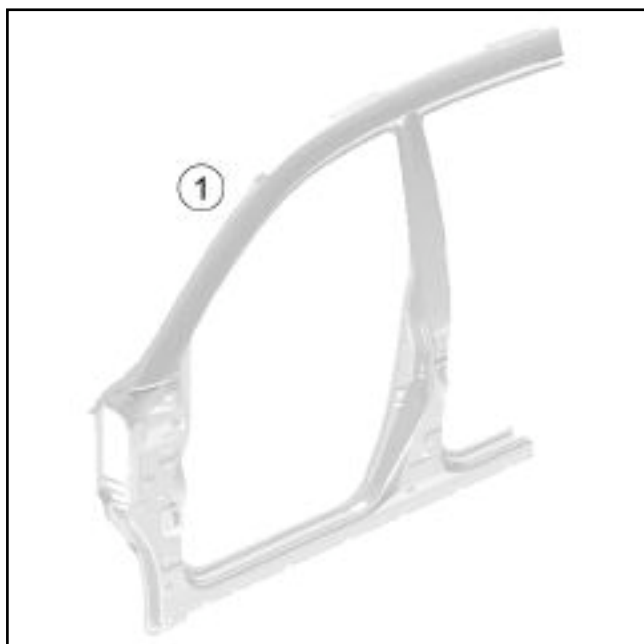
131835

To replace this part, order a double seal mounting (A) in the event that the A-pillar has to be replaced.

The options for replacing this part are as follows:

- replacement of the lower section of the A-pillar
- replacement of the A-pillar,
- replacement of the B-pillar,
- replacement of the entire B-pillar,
- complete replacement.

I - COMPOSITION OF THE SPARE PART

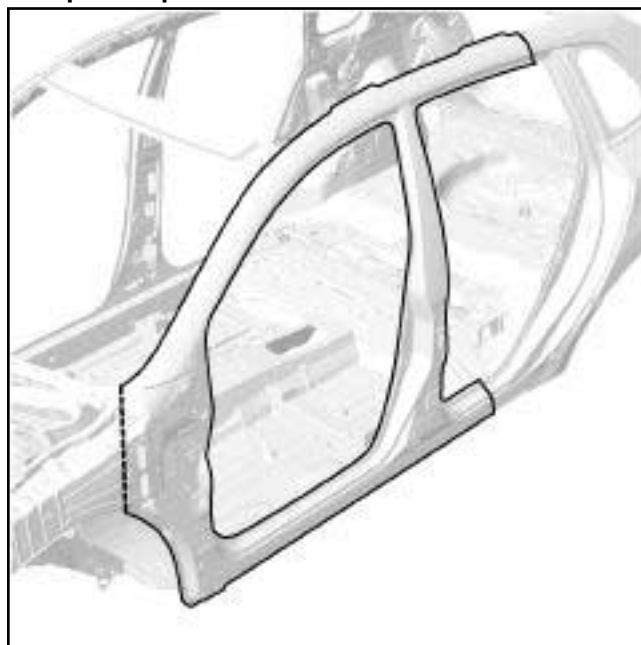


131836

No.	Description	Type	Thickness (mm)
(1)	Body side front section	HEL	0.75

II - PART IN POSITION

Complete replacement



131837

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

SIDE UPPER STRUCTURE

Upper body panel: General description

43A

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

Note:

Before any operation, remove the front seat belts.

I - DESIGN OF THE STRUCTURAL COMPONENT

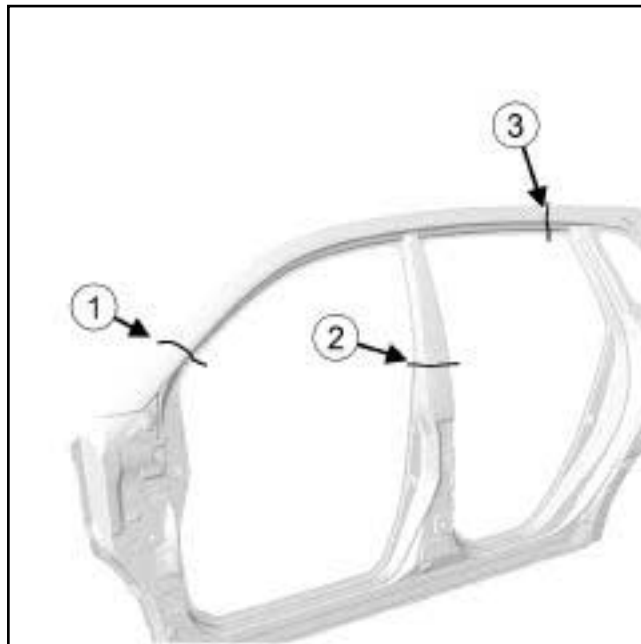


131840

This is a basic part; its only function is that of an upper body.

This is a basic part; its only function is that of an upper body.

II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



131841

Lines (1) , (2) and (3) in the drawing show the area in which partial replacement may be carried out.

III - ASSEMBLY METHOD FOR A PARTIAL REPLACEMENT

Only the connections which are specific to the partial replacement by cutting are indicated.

WARNING

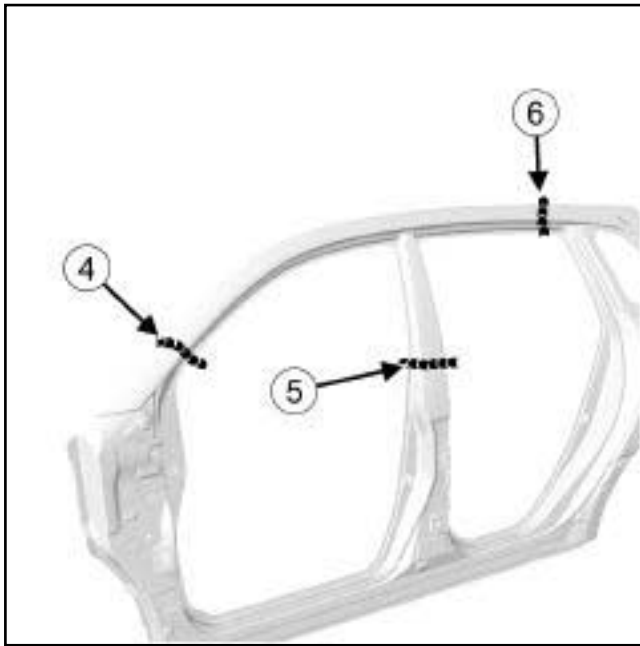
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see **MR 400**).

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).

SIDE UPPER STRUCTURE

Upper body panel: General description

43A



135093

Lines (4) , (5) and (6) on the drawing show a butt weld by continuous EGW welding.

Weld (6) along the butt weld line.

SIDE UPPER STRUCTURE
Upper body panel: Description

43A

There is only one way of replacing this part:
- partial replacement.

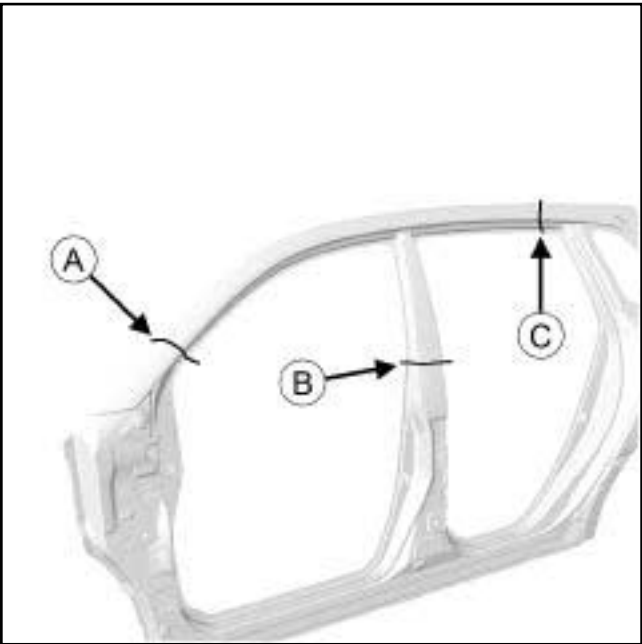
I - COMPOSITION OF THE SPARE PART



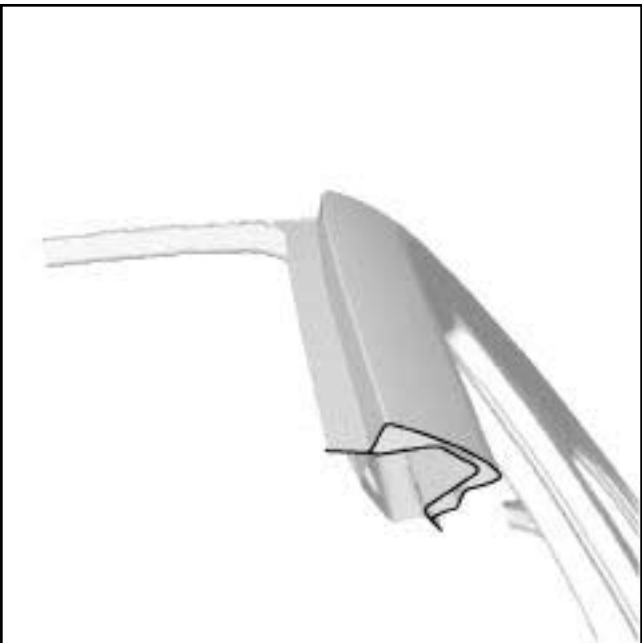
No.	Description	Type	Thic- kness (mm)
(1)	Roof panel	-	-

II - PART FITTED

Partial replacement



Section A



SIDE UPPER STRUCTURE

Upper body panel: Description

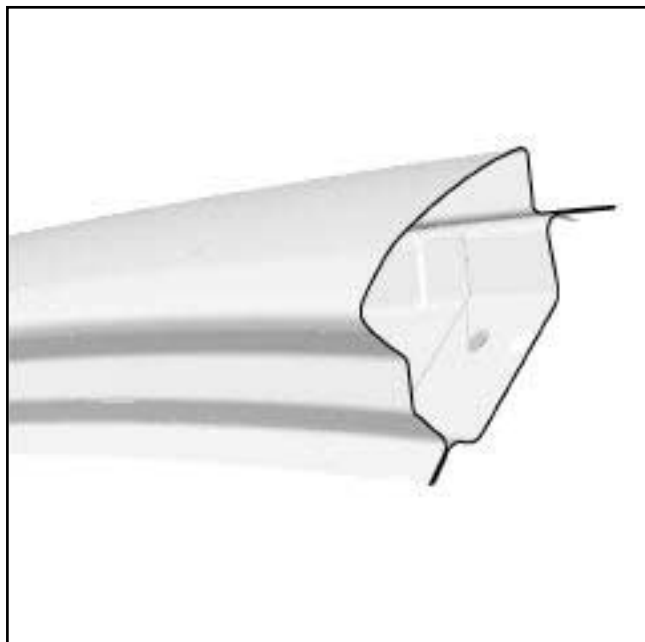
43A

Section B



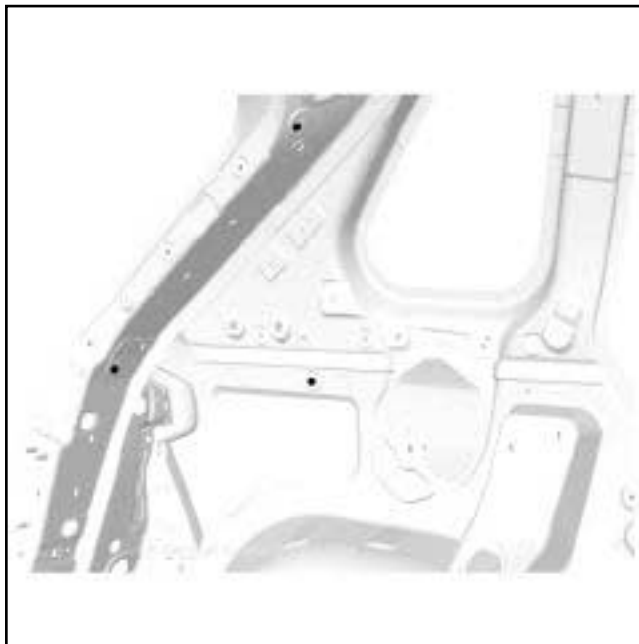
131843

Section C



131844

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



131845

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

REAR UPPER STRUCTURE

Rear wing panel: Description

44A

The options for replacing this part are as follows:

- partial replacement,
- complete replacement.

I - COMPOSITION OF THE REPLACEMENT PART



131846

No.	Description	Type	Thic- kness (mm)
(1)	Rear wing panel	HLE	0.75

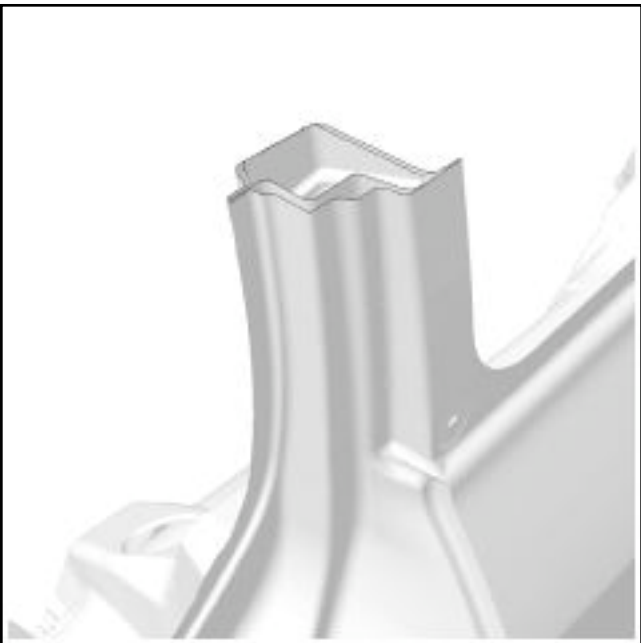
II - PART FITTED

Partial replacement



131847

Section A



131848

REAR UPPER STRUCTURE

Rear wing panel: Description

44A

Section B



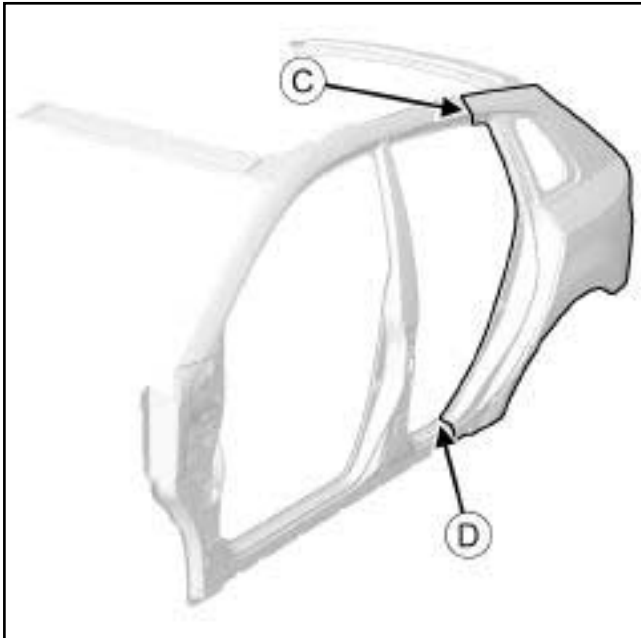
131849

Section C



131851

Complete replacement



131850

Section D



131852

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

REAR UPPER STRUCTURE

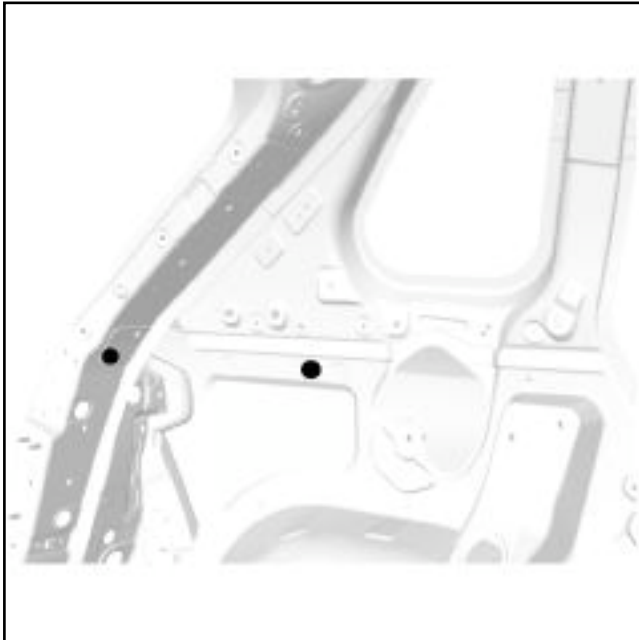
Rear wing panel: Description

44A

Note:

For welded connections in three thicknesses, the spot welds on the part replaced should be made in the same place as for the original joint to retain the mechanical specifications of the connection. See **MR 400**.

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



131853

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

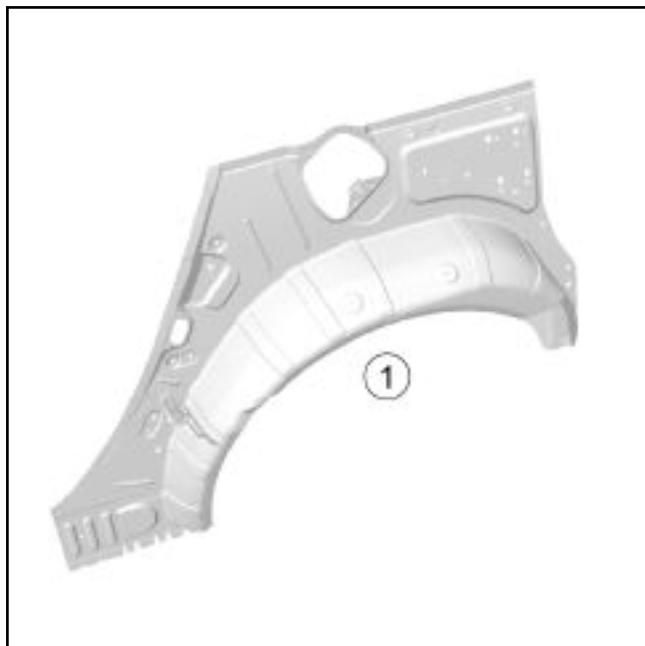
Position the welding machine earth as close as possible to the weld zone (see MR 400).

REAR UPPER STRUCTURE

Outer rear wheel arch: Description

44A

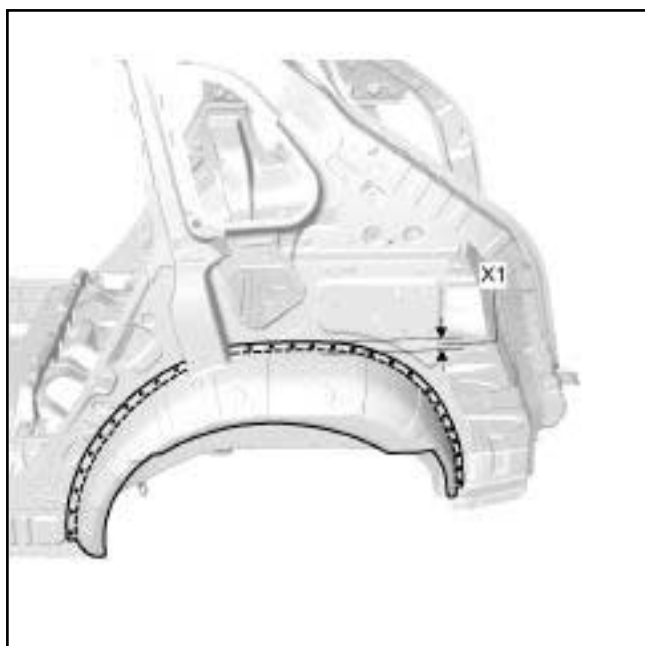
I - COMPOSITION OF THE SPARE PART



131854

No.	Description	Type	Thic- kness (mm)
(1)	Outer rear wheel arch	-	0.65

II - PART FITTED



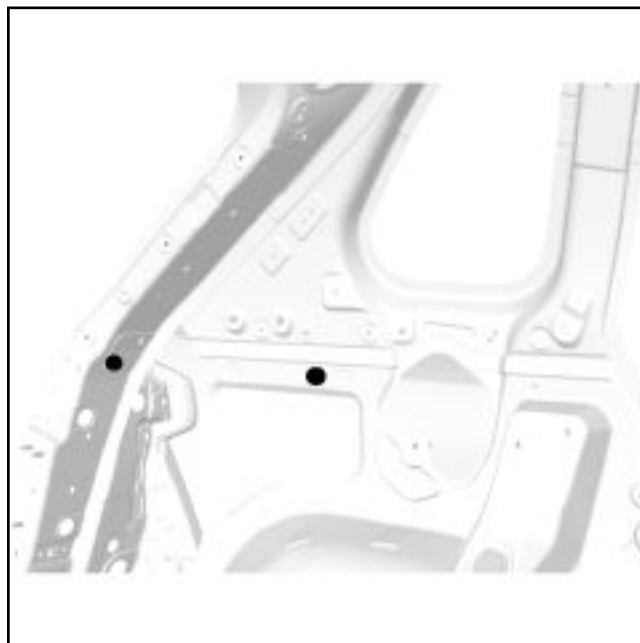
131855

(X1) =15 mm

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



131856

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the earth of the welding machine as closely as possible to the weld area (see **MR 400**).

REAR UPPER STRUCTURE

Inner wheel arch: Description

44A

Left-hand side



131857

Right-hand side



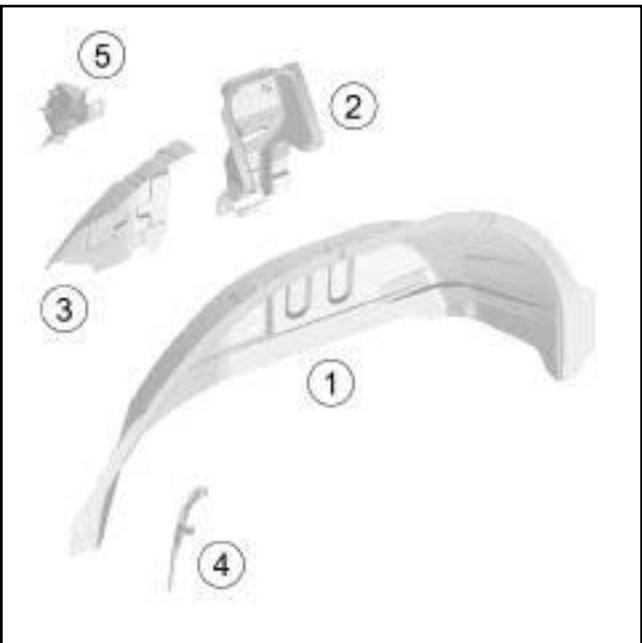
131858

There is only one way of replacing this part:

- complete replacement.

I - COMPOSITION OF THE SPARE PART

Left-hand side



131859

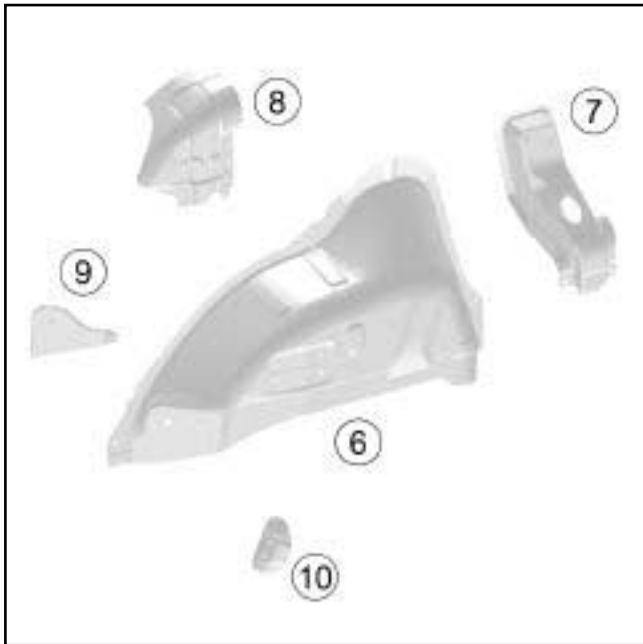
No.	Description	Type	Thic- kness (mm)
(1)	Inner rear wheel arch	HLE	0.9
(2)	Rear interior wheel arch reinforcement	HLE	1.6
(3)	Rear interior wheel arch reinforcement B	HLE	1.4
(4)	Rear seat anchorage plate	HLE	1.6
(5)	Rear seat backrest hinge support	HLE	1.4

REAR UPPER STRUCTURE

Inner wheel arch: Description

44A

Right-hand side

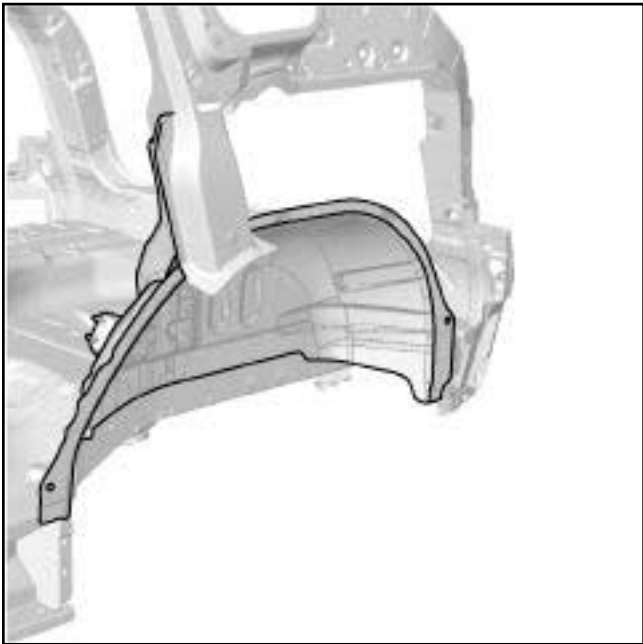


131860

No.	Description	Type	Thic- kness (mm)
(6)	Inner rear wheel arch	HLE	0.9
(7)	Rear interior wheel arch reinforcement	HLE	1.6
(8)	Rear interior wheel arch reinforcement B	HLE	1.4
(9)	Rear seat anchorage plate	HLE	1.6
(10)	Rear seat backrest hinge support	HLE	1.4

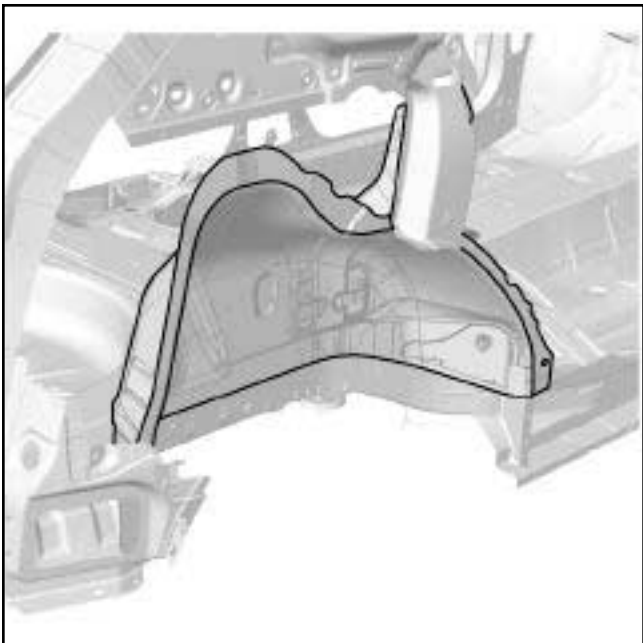
II - PART IN POSITION

Left-hand side



131861

Right-hand side



131862

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

WARNING

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400, 40A, General Information**.

DESIGN OF THE STRUCTURAL COMPONENT



131863

The special feature of this part is that it concurrently serves two functions:

- quarter panel lining,
- outer rear wheel arch.

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400, 40A, General Information**).

REAR UPPER STRUCTURE
Quarter panel lining: Description

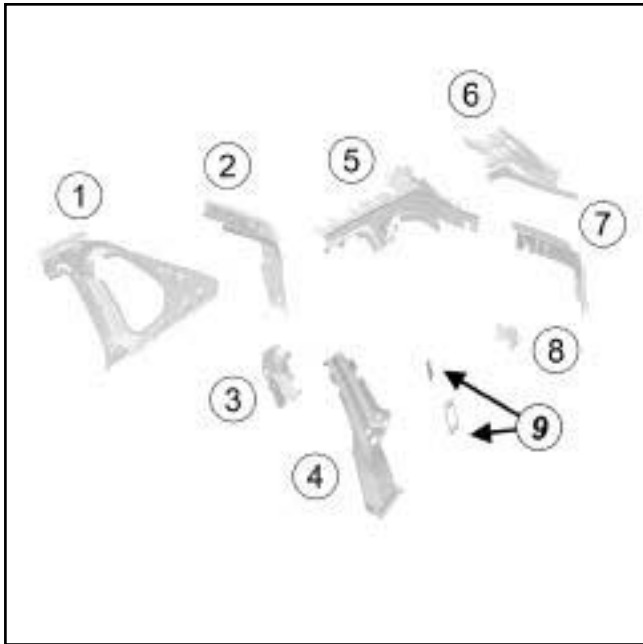
44A



131864

There is only one way of replacing this part:
- complete replacement.

I - COMPOSITION OF THE SPARE PART



131865

No.	Description	Type	Thic- kness (mm)
(1)	Quarter panel interior lining	HLE	0.65
(2)	Quarter panel rear interior lining	HLE	0.8
(3)	Seat belt anchorage on the quarter panel	HLE	1.6
(4)	Quarter panel interior reinforcement	HLE	0.8
(5)	Quarter panel rear side reinforcement	HLE	1.2
(6)	Quarter panel upper interior lining	HLE	1.4
(7)	Quarter panel upper reinforcement	HLE	0.8
(8)	Tailgate stop reinforcement	HLE	2.0
(9)	Striker plate	HLE	2.8

REAR UPPER STRUCTURE

Quarter panel lining: Description

44A

II - PART IN POSITION

Complete replacement



131866

WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

Note:

For more detailed information on welded connections with three thicknesses, see **MR 400**.

REAR UPPER STRUCTURE

Rear end panel assembly: Description

44A

There is only one way of replacing this part:

- complete replacement.

I - COMPOSITION OF THE SPARE PART



131867

No.	Description	Type	Thic- kness (mm)
(1)	Rear end panel	HEL	-

II - PART IN POSITION



132024

WARNING
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

Note:

The information contained in the following describes the general repair procedure for all vehicles having the same design for this part.

Before reading the following general information, make sure that there are no special notes associated with the vehicle. These special notes are specified if necessary in other parts of the sub-section dealing with the component.

Note:

For a detailed description of a particular connection, see **MR 400**.

DESIGN OF THE STRUCTURAL COMPONENT



130436

This is a basic part; its only function is that of a roof.

The roof is welded onto the body sides.

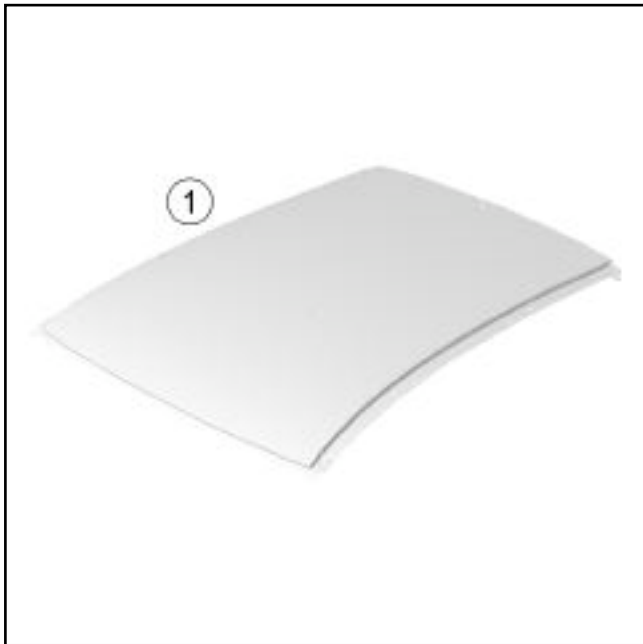
For vehicles fitted with a sunroof, the roof only has a front section and a rear section.

If there are other issues regarding access to mating faces, the various replacement options are described in the basic instructions for structural bodywork repair (see **MR 400**).

There is only one way of replacing this part:
- complete replacement.

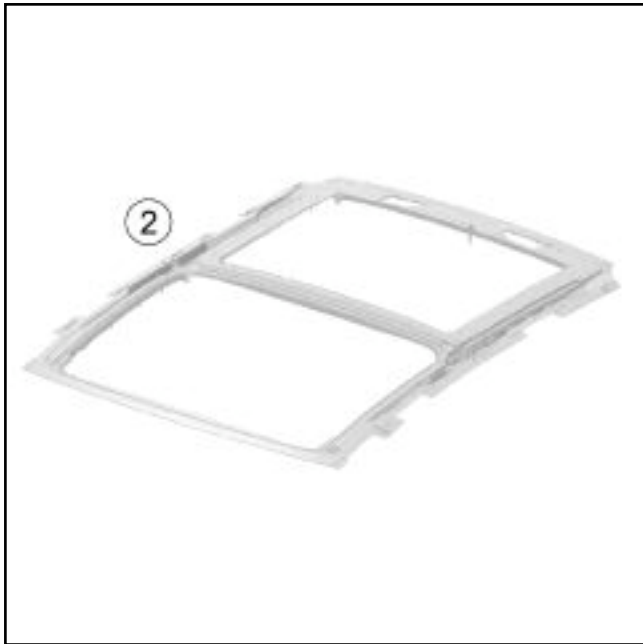
I - COMPOSITION OF THE SPARE PART

Normal roof



130437

Roof with sunroof



130438

No.	Description	Type	Thic- kness (mm)
(1)	Normal roof	HEL	0.8
(2)	Roof with sunroof	-	-

II - PART FITTED

Front section



130439

WARNING

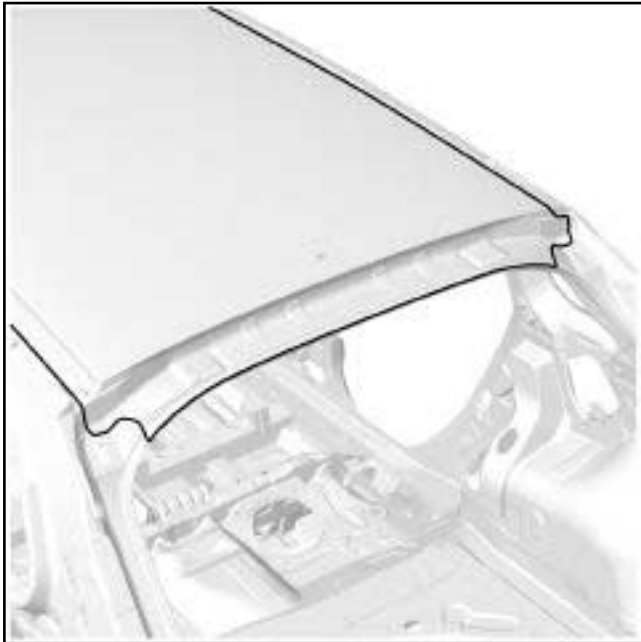
If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

TOP OF BODY

Roof: Description

45A

Rear section



130440

Note:

The procedure presents no difficulties.

Sunroof front side section



130442

Roof bonding area

Normal roof front side section



130441

TOP OF BODY

Roof front section: Description

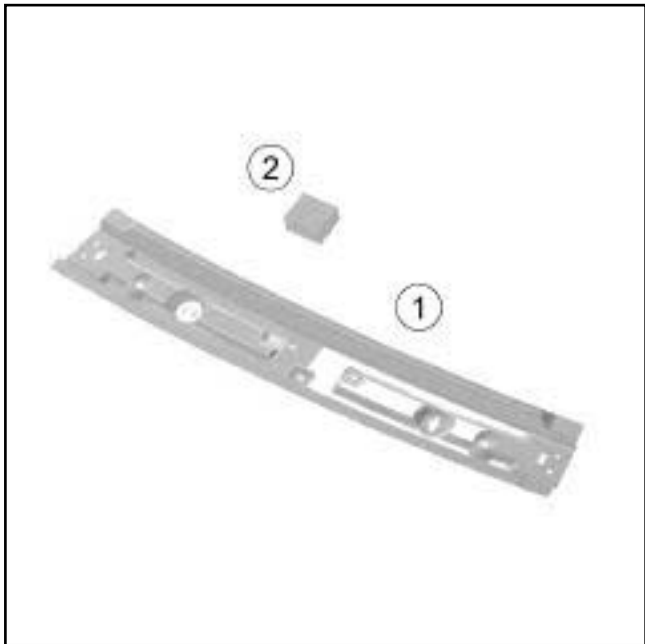
45A

There is only one way of replacing this part:

- complete replacement.

I - COMPOSITION OF THE SPARE PART

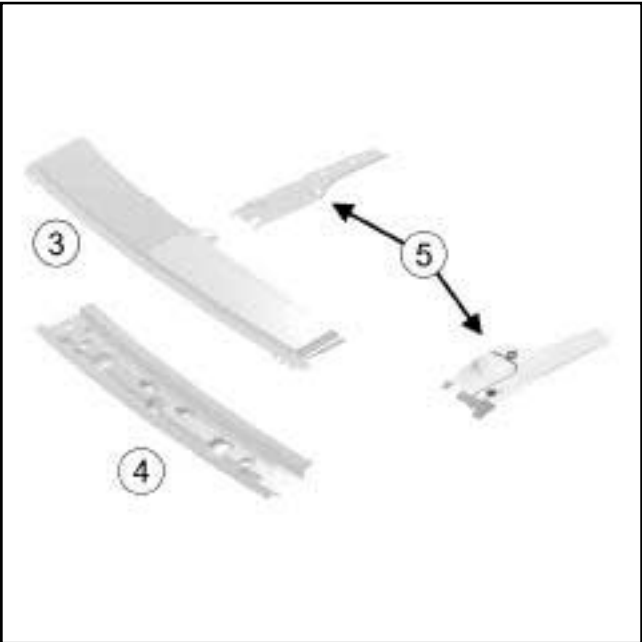
Normal roof



130443

No.	Description	Type	Thic-kness (mm)
(1)	Bottom of roof front section	HEL	0.6
(2)	Front roof rail energy absorber assembly	HEL	1.4

Roof with sunroof



130444

No.	Description	Type	Thic-kness (mm)
(3)	Top of roof front section	-	-
(4)	Bottom of roof front section	HEL	1.2
(5)	Part of roof front section	HEL	1.0

TOP OF BODY

Roof front section: Description

45A

II - PART FITTED

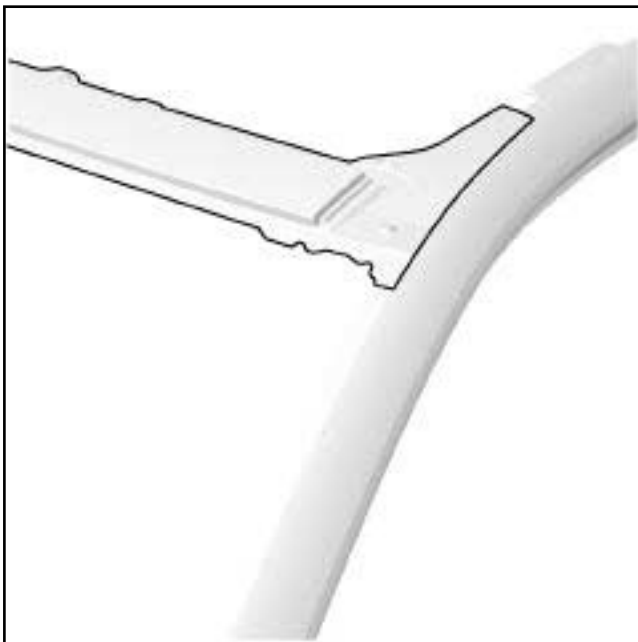
Complete replacement

Normal roof



130445

Roof with sunroof

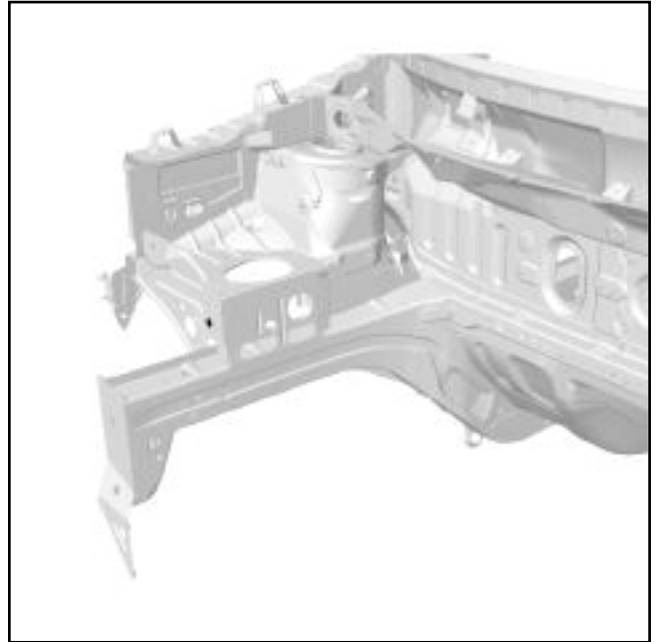


130446

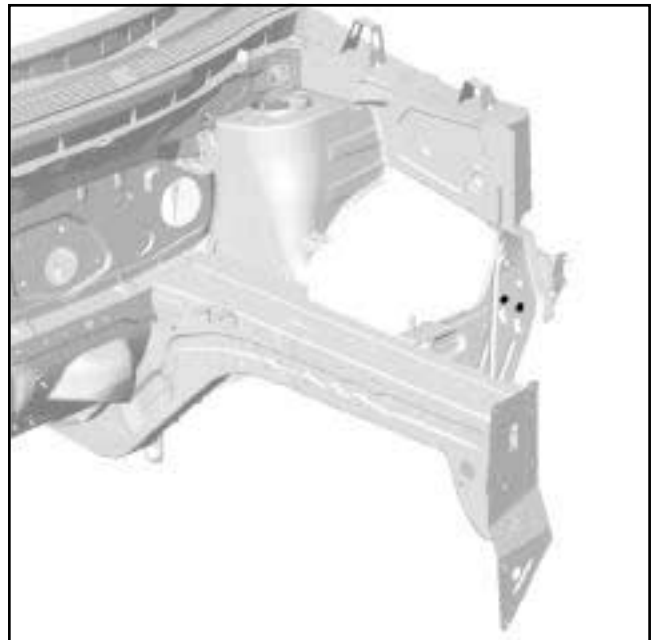
Note:

For welded connections in three thicknesses, the spot welds on the part replaced should be made in the same place as for the original joint to retain its mechanical specifications. See **MR 400**.

III - POSITIONING OF LOCAL ELECTRICAL EARTHS



130447



130448

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

TOP OF BODY
Roof rear section: Description

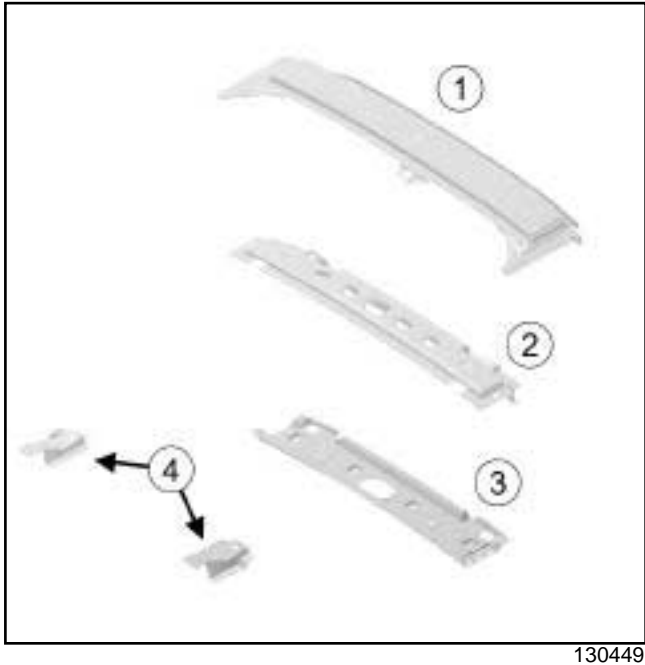
45A

There is only one way of replacing this part:

- complete replacement.

This operation only affects versions equipped with a sunroof.

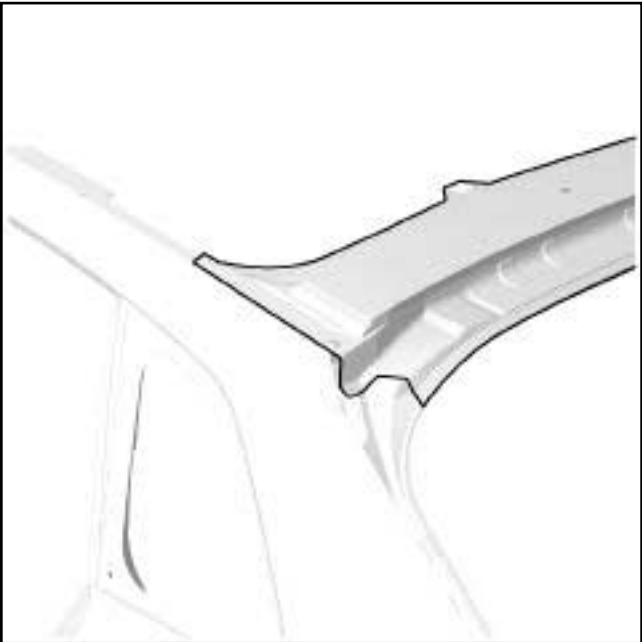
I - COMPOSITION OF THE SPARE PART



No.	Description	Type	Thic- kness (mm)
(1)	Rear roof	-	-
(2)	Top of roof rear section	HEL	0.8
(3)	Bottom of roof rear section	HEL	0.7
(4)	Roof rear section reinforcement	HEL	1.4

II - PART FITTED

Complete replacement



132355

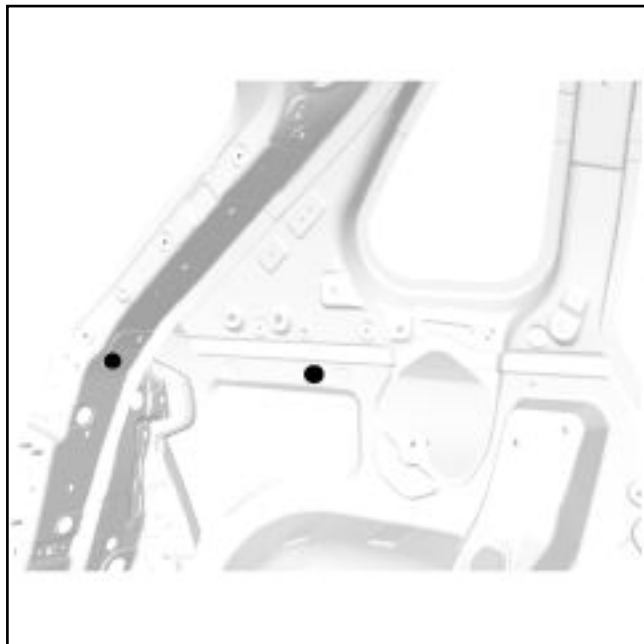
WARNING

If the mating faces of the parts to be welded are not accessible, make EGW plug welds to replace the original resistance welds (see MR 400).

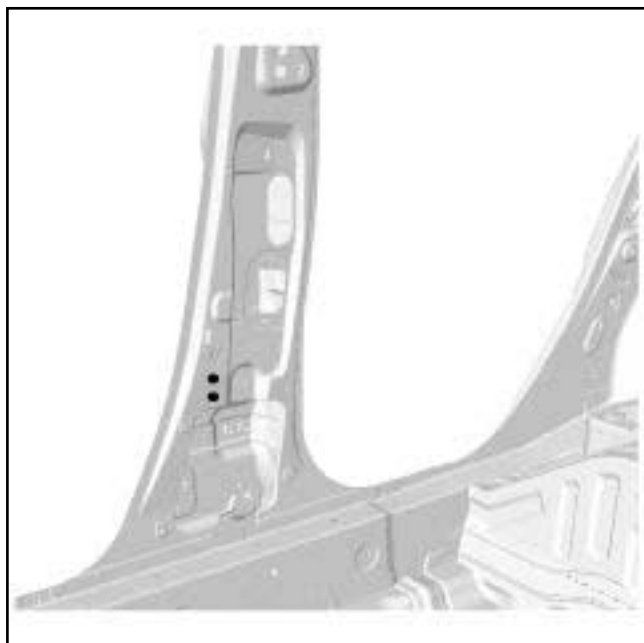
Note:

For welded connections in three thicknesses, the spot welds on the part replaced should be made in the same place as for the original joint to retain its mechanical specifications. See **MR 400**.

III - POSITIONING OF LOCAL ELECTRICAL
EARTHS



130450




130451

WARNING

To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the welding machine earth as close as possible to the weld zone (see MR 400).

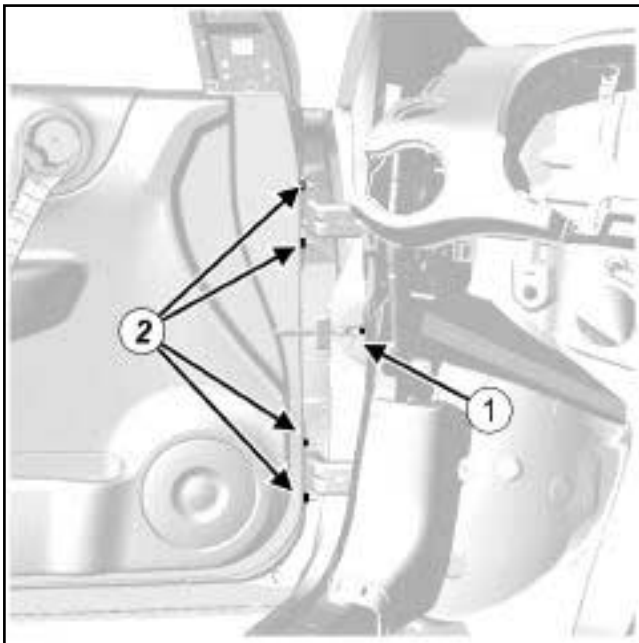
Tightening torques 	
front side door nuts	24 N.m
front side door hinge bolts	21 N.m
front side door hinge nuts	24 N.m

I - REMOVAL WITHOUT HINGES

1 - REMOVAL PREPARATION OPERATION

- ☐ Disconnect the wiring supply connectors.

2 - OPERATION FOR REMOVAL OF PART CONCERNED



130782

- ☐ Remove:
 - the front side door check strap (1) (see **Rear side door check strap: Removal - Refitting**) (51A, Side opening element mechanisms),
 - the front side door nuts (2) ,
 - the front side door.

II - REFITTING WITHOUT HINGES

1 - OPERATION FOR REFITTING PART CONCERNED

- ☐ Refit:
 - the front side door,
 - the front side door nuts (2) ,
 - the front side door check strap (1) (see **Rear side door check strap: Removal - Refitting**) (51A, Side opening element mechanisms)
- ☐ Adjust the door clearances and flush fitting (see **Vehicle clearances: Adjustment values**) (01C, Vehicle bodywork specifications).
- ☐ Torque tighten the **front side door nuts (24 N.m)**.

2 - FINAL OPERATION

- ☐ Connect the wiring supply connector.

III - REMOVAL WITH HINGES

1 - REMOVAL PREPARATION OPERATION

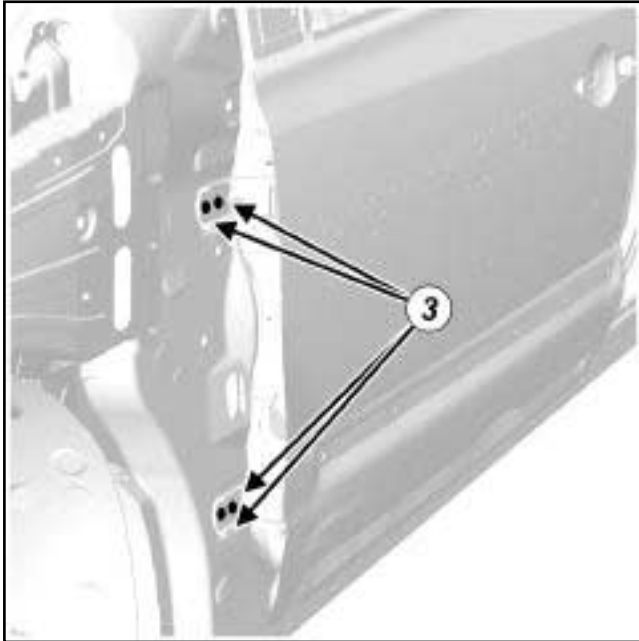
- ☐ Remove the front wing (see **42A, Front upper structure, Front wing: Removal - Refitting**, page 42A-1) .
- ☐ Disconnect the wiring supply connector.

SIDE OPENING ELEMENTS

Front side door: Removal - Refitting

47A

2 - OPERATION FOR REMOVAL OF PART CONCERNED



130783

☐ Remove:

- the front side door check strap **(1)** (see **Rear side door check strap: Removal - Refitting**) (51A, Side opening element mechanisms)
- the front side door hinge bolts **(3)** ,
- the front side door.

IV - REFITTING WITH HINGES

1 - OPERATION FOR REFITTING PART CONCERNED

☐ Refit:

- the front side door,
- the front side door hinge bolts **(3)** ,
- the front side door check strap **(1)** (see **Rear side door check strap: Removal - Refitting**) (51A, Side opening element mechanisms).

☐ Adjust the door clearances and shut lines (see **Vehicle clearances: Adjustment values**) .

☐ Torque tighten:

- the **front side door hinge bolts (21 N.m)**,
- the **front side door hinge nuts (24 N.m)**.

2 - FINAL OPERATION


- ☐ Connect the wiring supply connector.

☐ Refit the front wing (see 42A, **Front upper structure, Front wing: Removal - Refitting**, page 42A-1) .

SIDE OPENING ELEMENTS

Rear side door: Removal - Refitting

47A

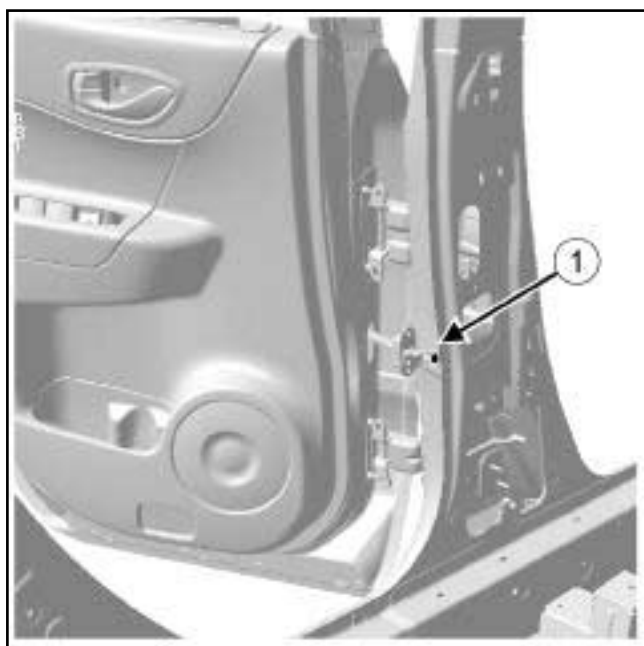
Tightening torques 	
rear side door nuts	24 N.m
rear side door hinge nuts	24 N.m
rear side door hinge bolts	21 N.m

I - REMOVAL WITHOUT HINGES

1 - REMOVAL PREPARATION OPERATION

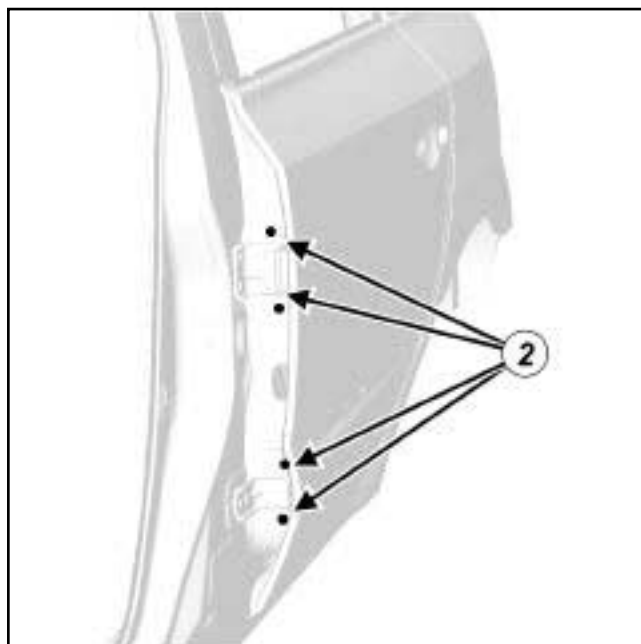
- ☐ Disconnect the wiring supply connectors.

2 - OPERATION FOR REMOVAL OF PART CONCERNED



130786

- ☐ Remove the rear side door check strap (1) (see **Rear side door check strap: Removal - Refitting**) (51A, Side opening element mechanisms).



130784

- ☐ Remove:

- the rear side door nuts (2) ,
- the rear side door.

II - REFITTING WITHOUT HINGES

1 - OPERATION FOR REFITTING PART CONCERNED

- ☐ Refit:

- the rear side door,
- the rear side door nuts (2) ,
- the rear side door check strap (1) (see **Rear side door check strap: Removal - Refitting**) (51A, Side opening element mechanisms)

- ☐ Adjust the door clearances and flush fitting (see **Vehicle clearances: Adjustment values**) (01C, Vehicle bodywork specifications).

- ☐ Torque tighten the **rear side door nuts (24 N.m)**.

2 - FINAL OPERATION

- ☐ Connect the wiring supply connector.

III - REMOVAL WITH HINGES

1 - REMOVAL PREPARATION OPERATION

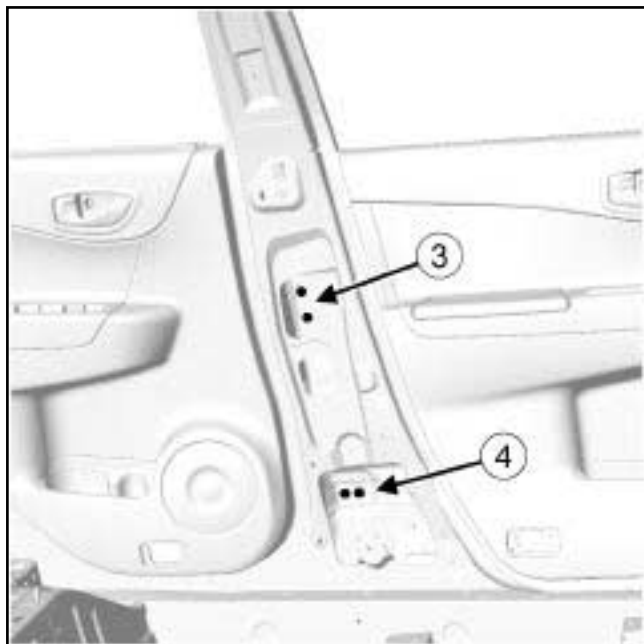
- ☐ Remove the B-pillar trim (see **B-pillar trim: Removal - Refitting**) (71A, Body internal trim),
- ☐ Disconnect the wiring supply connector.

SIDE OPENING ELEMENTS

Rear side door: Removal - Refitting

47A

2 - OPERATION FOR REMOVAL OF PART CONCERNED



130785

☐ Remove:

- the rear side door check strap **(1)** (see **Rear side door check strap: Removal - Refitting**) (51A, Side opening element mechanisms)
- the rear side door hinge nuts **(3)** ,
- the rear side door hinge bolts **(4)** ,
- the rear side door.

IV - REFITTING WITH HINGES

1 - OPERATION FOR REFITTING PART CONCERNED

☐ Refit:

- the rear side door,
- the rear side door hinge bolts **(4)** ,
- the rear side door hinge nuts **(3)** ,
- the rear side door check strap **(1)** (see **Rear side door check strap: Removal - Refitting**) (51A, Side opening element mechanisms).

☐ Torque tighten:

- the **rear side door hinge nuts (24 N.m) (3)** ,
- the **rear side door hinge bolts (21 N.m) (4)** .

☐ Adjust the door clearances and shut lines (see **Vehicle clearances: Adjustment values**) .

2 - FINAL OPERATION

- ☐ Connect the wiring supply connector.
- ☐ Refit the B-pillar trim (see **B-pillar trim: Removal - Refitting**) (71A, Body internal trim).

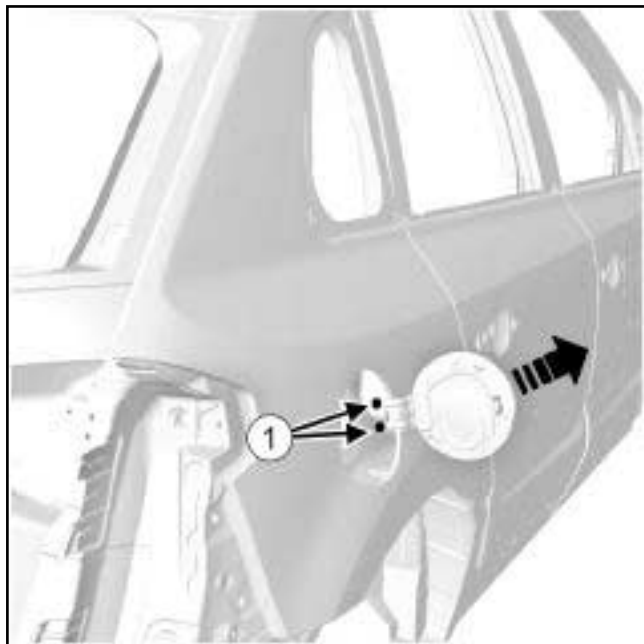
SIDE OPENING ELEMENTS

Fuel filler flap cover: Removal - Refitting

47A

REMOVAL

OPERATION FOR REMOVAL OF PART CONCERNED

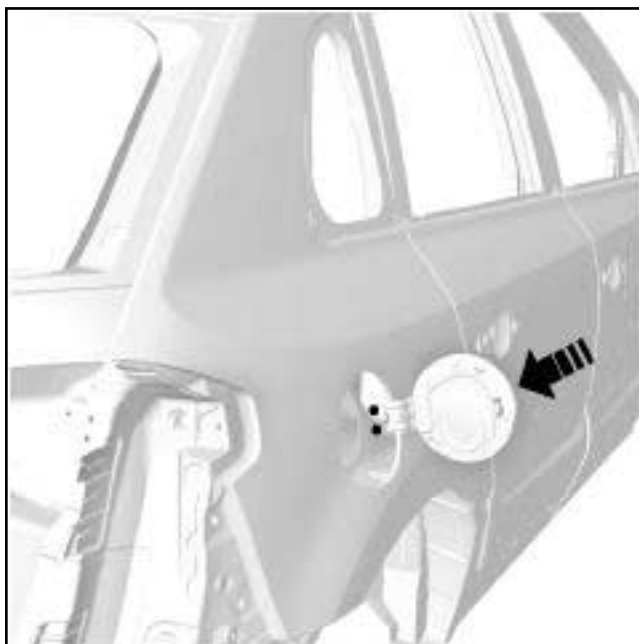


130787

- ☐ Remove the fuel filler flap bolts (1) .
- ☐ Unclip the fuel filler flap.


REFITTING

REFITTING OPERATION FOR PART CONCERNED



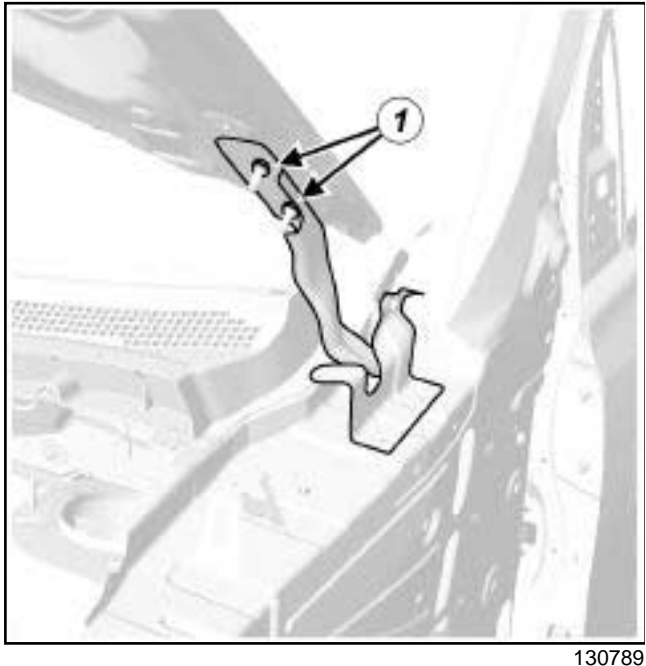
130788

- ☐ Clip on the fuel filler flap.
- ☐ Refit the fuel filler flap bolts.

Tightening torques 	
bonnet nuts	13.5 N.m
bonnet hinge bolts	13.5 N.m

I - REMOVAL BY MEANS OF THE BONNET NUTS

OPERATION FOR REMOVAL OF PART CONCERNED



- ☐ Remove:
- the nuts (1) ,
 - the bonnet.

II - REFITTING BY MEANS OF THE BONNET NUTS

OPERATION FOR REFITTING PART CONCERNED

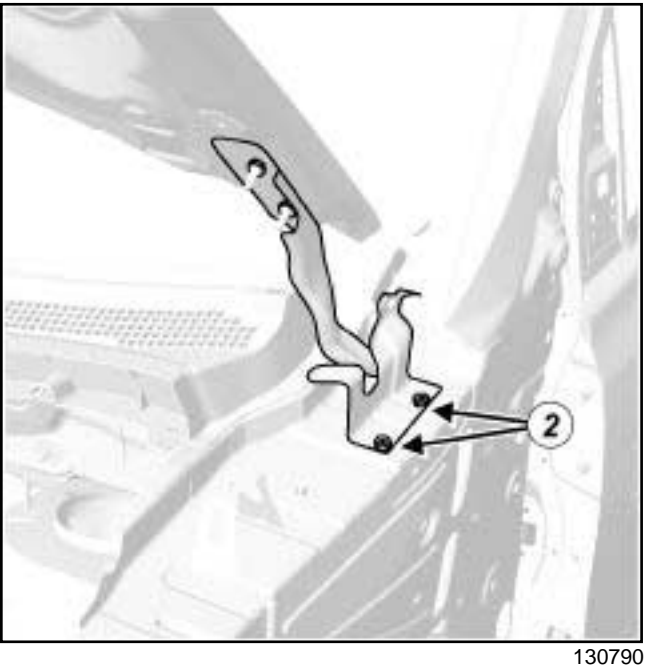
- ☐ Refit:
- the cover,
 - the nuts (1) .
- ☐ Adjust the opening clearances and flush fitting (see **Vehicle clearances: Adjustment values**) (01C, Vehicle bodywork specifications).
- ☐ Torque tighten the **bonnet nuts (13.5 N.m) (1)** .

III - REMOVAL BY MEANS OF THE BONNET HINGE BOLTS

1 - REMOVAL PREPARATION OPERATION

- ☐ Remove:
- the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection),
 - the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
 - the headlight (see **Front headlight: Removal - Refitting**) (80B, Headlights),
 - the front wing (see **42A, Front upper structure, Front wing: Removal - Refitting**, page 42A-1) .

2 - OPERATION FOR REMOVAL OF PART CONCERNED



- ☐ Remove:
- the bolts (2) ,
 - the bonnet.

IV - REFITTING BY MEANS OF THE BONNET HINGE BOLTS


1 - OPERATION FOR REFITTING PART CONCERNED

- ☐ Refit:
- the cover,
 - the bonnet hinge bolts (2) .

- ☐ Adjust the opening clearances and flush fitting (see **Vehicle clearances: Adjustment values**) (01C, Vehicle bodywork specifications).
- ☐ Torque tighten the **bonnet hinge bolts (13.5 N.m) (2)**.

2 - FINAL OPERATION

- ☐ Refit:
 - the front wing (see **42A, Front upper structure, Front wing: Removal - Refitting**, page 42A-1),
 - the headlight (see **Front headlight: Removal - Refitting**) (80B, Headlights),
 - the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection),
 - the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (55A, Exterior protection).

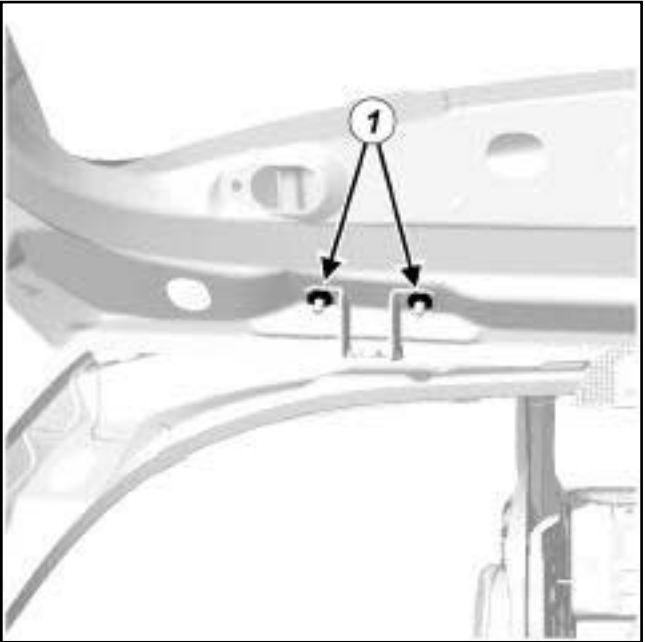
Tightening torques 	
tailgate bolts	40 N.m
tailgate earth nuts	30 N.m

I - REMOVAL WITHOUT HINGES

1 - REMOVAL PREPARATION OPERATION

- ☐ Remove the tailgate trim (see **Tailgate lining: Removal - Refitting**) (73A, Non-side opening elements trim).
- ☐ Disconnect:
 - the high level brake light connector (see **Third brake light: Removal - Refitting**) (81A, Rear lighting),
 - the radio aerial connector (see **Radio aerial: Removal - Refitting**) (86A, Radio),
 - the tailgate screen washer jet pipe (see **Rear screen washer jet: Removal - Refitting**) (85A, Wiping - Washing),
 - the heated rear screen connector.
- ☐ Remove:
 - the tailgate electrical supply harness,
 - the tailgate gas strut (see **Tailgate balancer: Removal - Refitting**) (52A, Non-side opening element mechanisms).

2 - OPERATION FOR REMOVAL OF PART CONCERNED



130791

- ☐ Remove:
 - the tailgate bolts (1) ,
 - the tailgate.

II - REFITTING WITHOUT HINGES

1 - OPERATION FOR REFITTING PART CONCERNED

- ☐ Remove:
 - the tailgate,
 - the tailgate bolts (1) .
- ☐ Torque tighten the **tailgate bolts (40 N.m) (1)** .

2 - FINAL OPERATION

- ☐ Refit:
 - the tailgate gas strut (see **Tailgate balancer: Removal - Refitting**) (52A, Non-side opening element mechanisms),
 - the tailgate electrical supply harness,
- ☐ Connect:
 - the heated rear screen connector,
 - the tailgate screen washer jet pipe (see **Rear screen washer jet: Removal - Refitting**) (85A, Wiping - Washing),
 - the radio aerial connector (see **Radio aerial: Removal - Refitting**) (86A, Radio),

- the high level brake light connector (see **Third brake light: Removal - Refitting**) (81A, Rear lighting).

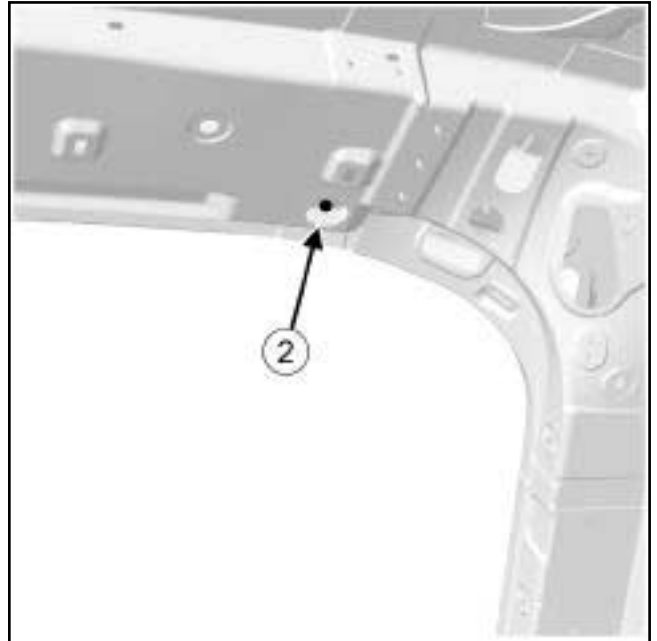
- ☐ Refit the tailgate trim (see **Tailgate lining: Removal - Refitting**) (73A, Non-side opening elements trim).

III - REMOVAL WITH HINGES

1 - REMOVAL PREPARATION OPERATION

- ☐ Remove:
 - the headlining (see **Headlining: Removal - Refitting**) (Body internal trim),
 - the tailgate trim (see **Tailgate lining: Removal - Refitting**) (73A, Non-side opening elements trim).
- ☐ Disconnect:
 - the high level brake light connector (see **Third brake light: Removal - Refitting**) (81A, Rear lighting),
 - the radio aerial connector (see **Radio aerial: Removal - Refitting**) (86A, Radio),
 - the tailgate screen washer jet pipe (see **Rear screen washer jet: Removal - Refitting**) (85A, Wiping - Washing),
 - the heated rear screen connector.
- ☐ Remove the tailgate gas strut (see **Tailgate balancer: Removal - Refitting**) (52A, Non-side opening element mechanisms).

2 - OPERATION FOR REMOVAL OF PART CONCERNED



130792

- ☐ Remove:
 - the tailgate hinge nuts on each side of the vehicle (2) ,
 - the tailgate.

IV - REFITTING WITH HINGES

1 - OPERATION FOR REFITTING PART CONCERNED

- ☐ Refit:
 - the tailgate,
 - the tailgate hinge nuts (2) on each side of the vehicle.
- ☐ Torque tighten the **tailgate earth nuts (30 N.m) (2)** .

2 - FINAL OPERATION


- ☐ Refit:
 - the tailgate gas strut (see **Tailgate balancer: Removal - Refitting**) (52A, Non-side opening element mechanisms),
 - the tailgate screen washer jet pipe (see **Rear screen washer jet: Removal - Refitting**) (85A, Wiping - Washing).
- ☐ Connect:
 - the heated rear screen connector,

Tailgate: Removal - Refitting

- the tailgate screen washer jet pipe (see **Rear screen washer jet: Removal - Refitting**) (85A, Wiping - Washing),
- the radio aerial connector (see **Radio aerial: Removal - Refitting**) (86A, Radio),
- the high level brake light connector (see **Third brake light: Removal - Refitting**) (81A, Rear lighting).

☐ Refit:

- the tailgate trim (see **Tailgate lining: Removal - Refitting**) (73A, Non-side opening elements trim),
- the headlining (see **Headlining: Removal - Refitting**) (Body internal trim).

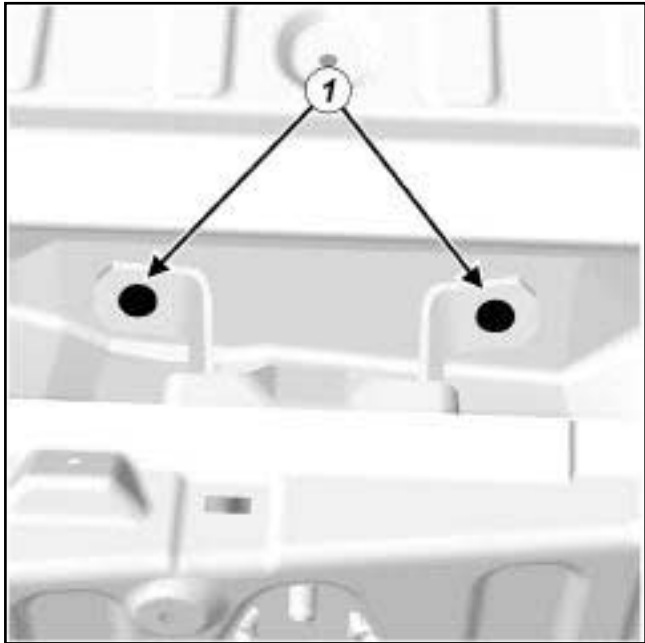
Tightening torques 	
boot chute bolts	60 N.m
hinge nut	60 N.m
hinge bolts	60 N.m

I - REMOVAL WITHOUT HINGES

1 - REMOVAL PREPARATION OPERATION

- ☐ Remove the boot chute gas strut.

2 - OPERATION FOR REMOVAL OF PART CONCERNED



130793

- ☐ Remove:
 - the boot chute hinge bolts (1) ,
 - the boot chute.

II - REFITTING WITHOUT HINGES

1 - OPERATION FOR REFITTING PART CONCERNED

- ☐ Refit:
 - the boot chute,
 - the boot chute hinge bolts (1) .
- ☐ Torque tighten the **boot chute bolts (60 N.m) (1)** .

2 - FINAL OPERATION

- ☐ Refit the boot chute gas strut.

III - REMOVAL WITH HINGES

1 - REMOVAL PREPARATION OPERATION

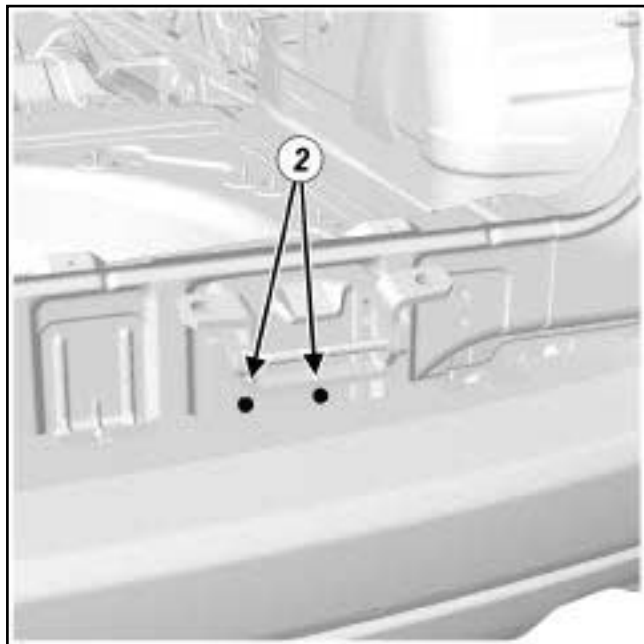
- ☐ Remove:
 - the rear bumper (see **Rear bumper: Removal - Refitting**) (55A, Exterior protection),
 - the boot chute gas strut.

NON-SIDE OPENING ELEMENTS

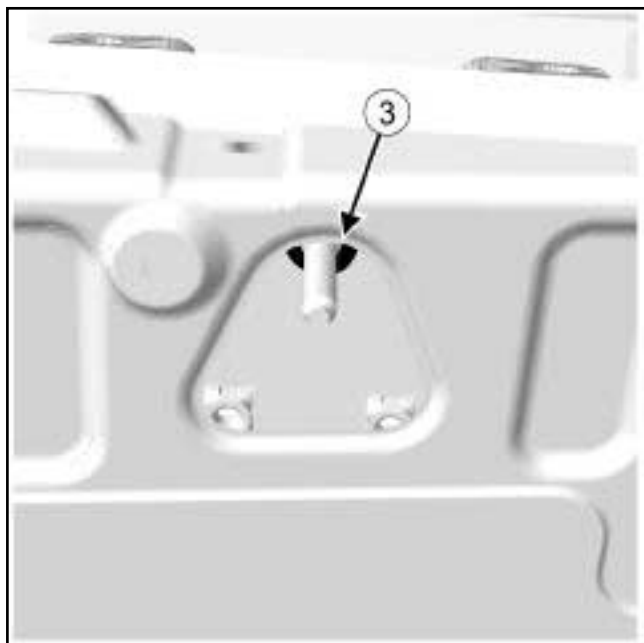
Opening element: Removal - Refitting

48A

2 - OPERATION FOR REMOVAL OF PART CONCERNED



130794



130795

❑ Remove:

- the boot chute hinge bolts (2) ,
- the boot chute hinge nut (3) ,
- the boot chute.

IV - REFITTING WITH HINGES

1 - OPERATION FOR REFITTING PART CONCERNED

❑ Refit:

- the boot chute,
- the boot chute hinge nut (3) ,
- the boot chute hinge bolts (2) .

❑ Torque tighten:

- the **hinge nut (60 N.m) (3)** ,
- the **hinge bolts (60 N.m) (2)** .

2 - FINAL OPERATION

❑ Refit:

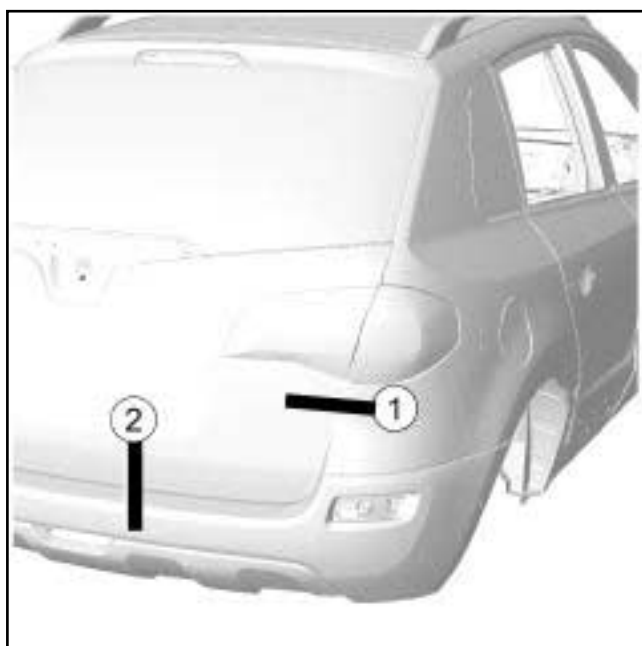
- the boot chute gas strut,
- the rear bumper (see **Rear bumper: Removal - Refitting**) (55A, Exterior protection).

I - ADJUSTMENT VALUE

- ❑ For all information about boot chute adjustment values (see **Vehicle clearances: Adjustment values**) (MR 389, 01C, Vehicle bodywork specifications).

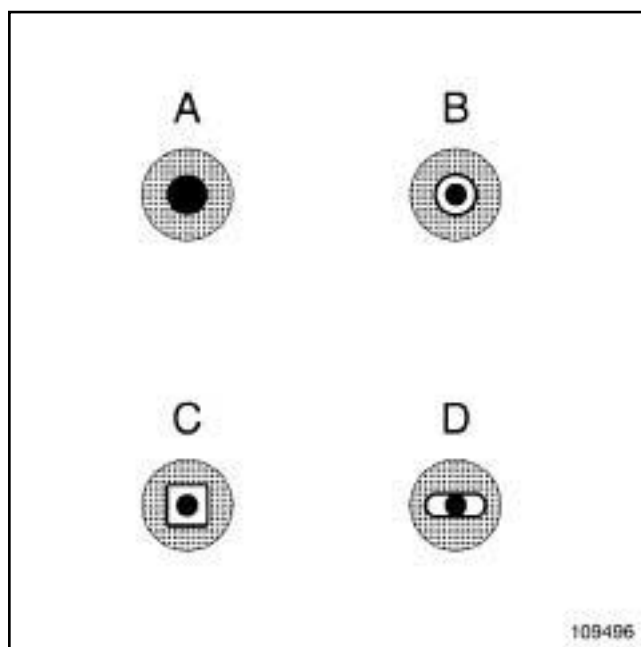
II - ADJUSTMENT

- ❑ There are two options for adjusting the boot chute:
 - using the boot chute bolts,
 - using the boot chute hinge nuts: supplementary step for the removal of the rear bumper.



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- ❑ Observe the adjustment sequence.



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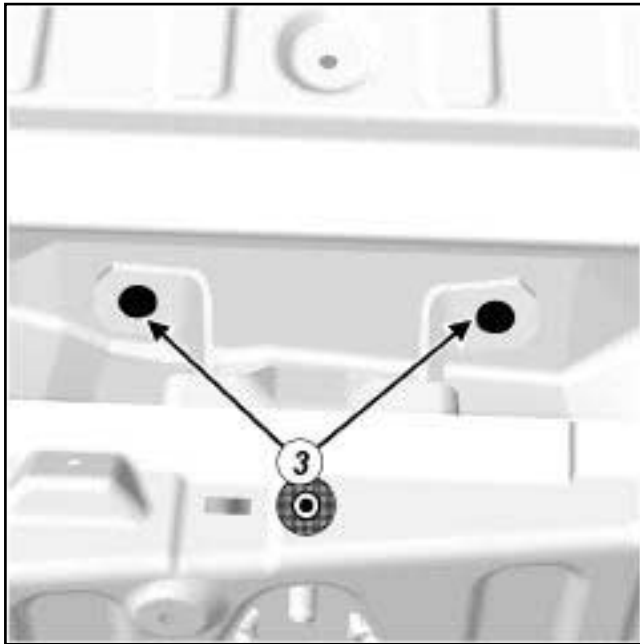
- ❑ Symbols A, B, C and D show the adjustment options.

The black dot in the centre represents the body of the bolt.

The grey section represents the component to be adjusted.

The white section represents the adjustment area.

III - ADJUSTMENT USING THE BOOT CHUTE BOLTS



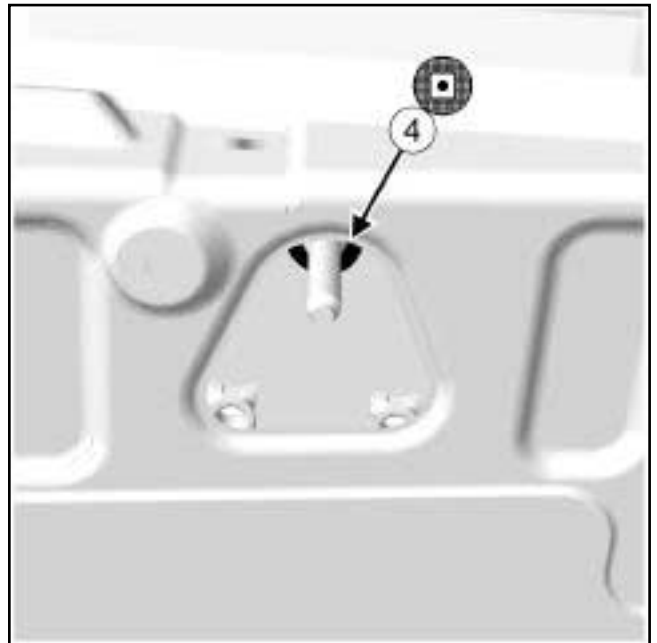
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- ☐ Loosen the boot chute bolts (3) on both sides of the vehicle.
- ☐ Adjust the flush fitting of the boot chute.

IV - ADJUSTMENT USING THE HINGE NUTS



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- ☐ Loosen the hinge nut (4) on both sides of the vehicle.
- ☐ Adjust the flush fitting of the boot chute.
- ☐ Refit the rear bumper (see **Rear bumper: Removal - Refitting**) (55A, Exterior protection).