# RENAULT

# 4 Panelwork

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### X85

### **NOVEMBER 2009**

### EDITION ANGLAISE

"The repair procedures given by the manufacturer in this document are based on the technical specifications current when it was prepared.

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

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# **CLIO III - Chapitre 4**

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# GENERAL INFORMATION Specialised bodywork tools: Use



### USING THE DASHBOARD CROSS MEMBER REMOVAL TOOL Car. 1765



Use this tool as indicated in the dashboard removal procedure.



□ Fit the tool Car. 1765 as far as the stop (10).

Screw the rod (11) onto the body (10) as far as the stop.

Firmly lock tool body in the same way as a lock nut against the dashboard cross member nut while holding hexagon bolt.



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Unscrew the whole tool as far as the stop and tighten it gently (during this operation, the beam nut, which has a left-hand thread, screws into the beam and disengages it from the A-pillar).



□ Hold the tool body (10) and unlock the rod (11).

Unscrew dashboard cross member rod to remove the tool.

### WARNING

To maintain the adjustment of the dashboard cross member and therefore make refitting easier, only loosen the lock nut on one side.



### USING THE DASHBORAD PROTECTION TOOL Car.



- □ Use this tool when replacing the windscreen:
  - remove the A-pillar trims,
  - position the dashboard protector to prevent damage.

# GENERAL INFORMATION Specialised bodywork tools: Use



### PREPARING THE TOOL Car. 1504





- (2) Mandrels
- (3) Tightening bolt
- (4) Body
- (5) Anvils
- (6) Special nut
- (7) Nuts
- (8) Studs
- (9) Thrust nut
- Select the mandrel, anvil and insert assembly adapted to the crimping operation to be carried out.
- Into the mandrel mounting (1), screw the mandrel (2) (left-hand thread).
- Tighten the bolt (**3**) onto the body (**4**) until the stop (left-hand thread).
- Into the body (4), screw the anvil (5) (left-hand thread).
- Fit the assembly (1) and (2) into the body of the tool.
- Screw the insert (left-hand thread) onto the pull rod.

To fit the special nut  $({\bf 6})$  , position the mandrel across the crimped nut and tighten it onto the thrust nut  $({\bf 9})$  .

### WARNING

Each time a panel is stripped in the workshop (e.g. when drilling), degrease and wipe the area and then use a fine paintbrush to apply the following:

- a pre-treatment primer,
- a two-part primer,
- paint in the vehicle body colour.

### USING TOOL CAR. 1504



□ Turn the bolt using a **24** spanner, holding the tool handle manually.

### WARNING

The operator should be able to feel when the crimping is complete (more force required for tightening). The insert has been crimped correctly when there is no more rotational play, carry out this check before unscrewing the "pull rod - mandrel" assembly.

# Structural bodywork documentation: Use



B85 or C85				
I CLASSIFYING INFORMATION	- 48A Non-side opening elements.			
This information is classified in two complementary documents:	These subsections are linked to the Replacement Parts Catalogue and contain two types of information:			
1 - Vehicle structure bodywork repair procedures (MR of the vehicle concerned)	<ul> <li>Section 1: General description. This section con- tains information relating to generic structural spare parts and to their design. This information may be the same for several vehicles.</li> </ul>			
This document comprises two sections:	- Section 2: Description, Removal - Refitting, Strip			
a - Section 0:	Rebuild and Adjustment. This section contains in			
This section does not contain repair methods, it only contains description information; It consists of several subsections:	formation relating to structural spare parts and the special features of the vehicle concerned.			
- 01C Vehicle bodywork specifications,	Note:			
- 02A Lifting equipment,	Always read both parts in order to have all the ne			
- 02B Bodywork innovations,	essary information to repair the vehicle.			
- 03B Collision,	2 - Fundamentals of the structure bodywork repair			
- 04E Painting,	(MR 400)			
- 05B Bodywork equipment and tooling.	This document comprises two sections:			
b - Section 4:	a - Section 0:			
This section consists of several subsections:	This section does not contain any repair procedures; it			
- 40A General information,	only contains descriptive information and has only one subsection:			
- 41A Lower front structure,	- 03B Collision			
- 41B Lower central structure,				
- 41C Lower side structure,	b - Section 4:			
- 41D Lower rear structure,	This section contains information about using the equi pment and products, and basic operating ranges which			
- 42A Upper front structure,	concern the bodyshop technician. This section only			
- 43A Upper side structure,	has one subsection.			
- 44A Upper rear structure,	- 40A Structure general information			
- 45A Top of body,	II - INFORMATION SEARCH			
- 47A Side opening elements,				

Questions	Answers
Features of specific tools to repair a given vehicle.	Refer firstly to section 0 of the Vehicle MR then refer to the « special tooling catalogue » or the « garage equipment catalogue ».
Features of specific products to repair a given vehicle.	Firstly refer to section 0 of the Vehicle MR then refer to the « IXELL product catalogue ».
Use of a specific tool to repair a given vehicle.	firstly refer to subsection 0 of the Vehicle MR.
Using a bodywork tool.	Firstly refer to subsection 40 of the Vehicle MR then MR 400.

# GENERAL INFORMATION Structural bodywork documentation: Use



B85 or C85

Questions	Answers
Information concerning the replacement parts of a given vehicle regarding:	Refer to the subsection which corresponds to the part concerned: 41 to 48 of the Vehicle MR, section 2
- the possibilities of replacement with the position on vehicle,	
- an adaptation before the assembly,	
- a cutting place with the special notes on this cut,	
- special notes on right-left symmetry.	
- special features of the version or equipment.	
	Firstly refer to the parts description exploded view in subsection 40 of the Vehicle MR.
Information concerning the spare parts of a given vehicle, the composition and the specifications of each part it contains.	If this is detailed in the document, refer to subsections 41 to 48 of the Vehicle MR part 2 which corresponds with the part concerned.
	If this does not appear in the description, refer to sub- section 41 to 48 for the part in the next level up.
Information concerning:	Refer to the subsection which corresponds to the part
- details of panel overlap on a joint,	concerned: 41 to 48 of the Vehicle MR then subsection 40 of Vehicle MR 400.
<ul> <li>a procedure and an operational mode relating to a new type of assembly in Renault,</li> </ul>	
- a method for using a tool or a new product which is unfamiliar in Renault.	
Towing and raising a vehicle after an accident.	Firstly refer to subsection 40 of the Vehicle MR then the equipment catalogue.
Conveyance and handling of a vehicle after an accident.	Firstly refer to subsection 40 of the MR 400 then the equipment catalogue.
Combination of impacts to repair a given vehicle.	Refer to section 0 of the Vehicle MR
Logic of the impact combination.	Refer to section 0 of the Vehicle MR
Fault finding on an impact for a given vehicle.	Firstly refer to section 0 of the Vehicle MR then sec- tion 0 of Repair Manual 400.
Logic of impact fault finding.	See section 0 of MR 400.
General instructions for:	See section 0 of MR 400.
- repair,	
- safety,	
- preparing a vehicle,	
- tool classification,	



### I - MAIN REFERENCE POINTS BEFORE TRIM-SETTING

### 1 - Front sub-frame in place



The jig crowns the front sub-frame rear mounting bolt  $(\mathbf{A})$  .

Use this situation for a rear impact or a light frontal impact without removal of the mechanical components.

### 2 - Front mechanical components removed



The jig rests under the sub-frame mounting unit and is centred in the threaded hole  $({\bf B})$  .

Use this situation for a frontal impact with removal of the mechanical components.

### Note:

If it is suspected that one of these points may be deformed, use two additional points located in an area not affected by the impact in order to confirm trim-setting.

### II - SECONDARY FRONT TRIM-SETTING REFERENCE POINT



The body jig covers radiator mounting cross member mounting bolt  $(\mbox{C})$  .

Use this situation to confirm the trim-setting following a rear impact, (e.g.: to replace a rear side member assembly).

It is used to confirm the vehicle level in case of doubt about the deformation of a main rear reference point.



### **III - MAIN REAR TRIM-SETTING REFERENCE** POINT

### 1 - Rear mechanical components in place



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The jig supports the underside of the rear axle fork and is centred in rear axle mounting bolt tapped hole (D).

Use this situation for a frontal impact or a light rear impact.

### 2 - Rear mechanical components removed



The jig rests under the rear side member and is centred in the tapped hole (E).

Use this situation for a rear impact with removal of the mechanical components.

### Note:

If it is suspected that one of these points may be deformed, use two additional points located in an area not affected by the impact in order to confirm trim-setting.

### **IV - SECONDARY REAR TRIM-SETTING REFERENCE POINT**



The jig rests under the rear side member and is positioned in square hole (F).

Use this situation to confirm the trim-setting following a frontal impact (e.g.: to replace a complete front half unit).

It is used to confirm the vehicle trim setting in case of doubt about the deformation of a main front reference point.



### **V - FITTING THE VEHICLE ANCHORING KIT**

### 1 - At the front



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### Remove

- the wheels,
- the blanking covers (1) and (2).



Fit inserts (3).



Fit the mountings (4) without tightening them.



Position the (5) and secure it with the bolts (6) . Finish the tightening operation with the mountings (7).

# GENERAL INFORMATION Vehicle on repair bench: Description



### 2 - At the rear



Position the clamp  $({\bf 8})$  on the horizontal flange on the rear section of the sill panel and lock it with the bolt  $({\bf 9})$  .

Position the vehicle on the body jig bench clamps.

### WARNING

The sub-frame on this vehicle is protected by products which guarantee the 12-year anti-corrosion warranty.

After the operation, protect the hollow sections of the front side cross members and refit the blanking covers. Replace any damaged blanking covers.

Re-apply the anti-gravel protection if it has deteriorated.



			K85			
No.	Description	x	Dimen- sion Y	Dimen- sion Z	Diameter	Angle (in degrees)
	Front sub-frame rear mounting with mechanical components	301	305	6.5	M12	
	Rear axle guide	1921	-582	118	20 x 20	
	Rear axle assembly front mounting, without mechanical components	2077.3	-633	118	24 x 24	
	Rear axle assembly front mounting, with mechanical components	2077.3	-633	113	M10	
	Rear axle assembly front mounting, without mechanical components	2047.4	-541.3	118	24 x 24	
	Rear axle assembly front mounting, with mechanical components	2047.4	-541.3	113	M10	
	Rear axle assembly front mounting, without mechanical components	2166	-536	118	24 x 24	
	Rear axle assembly front mounting, with mechanical components	2166	-536	113	M10	
	Front subframe front mounting	-141.5	-478	260.5	M12	
	Front subframe front mounting	-141.5	468	256	M12	
	Rear shock absorber upper mounting	2614.2	-561.9	534.4	Ø <b>20</b>	
	Front shock absorber upper stop	6.81	-583.6	669.4	Ø 98	X 7°; Y 1°
	Front shock absorber upper mounting	-55.5	-618.4	673.8	M8	X 7° ; Y 1°
	Front shock absorber upper mounting	-23.3	-518.7	669.2	M8	X 7° ; Y 1°
	Front shock absorber upper mounting	68.1	-624	660	M8	X 7° ; Y 1°
	Front side member rear mount- ing	547	-410	9.8	Ø 16	
	Front side member front leader pin	-283.5	-460.8	292.8	16 x 16	



Front side member front leader pin	-305.5	471.3	292.8	16 x 16	
Front side member front mount- ing without mechanical compo- nents	-502	-476	83.5	M12	
Front side member front mount- ing with mechanical compo- nents	-502	-476	77.5	M12	
Front side member front mount- ing without mechanical compo- nents	-525	492	83.5	M12	
Front side member front mount- ing with mechanical compo- nents	-525	492	77.5	M12	
Rear side member front leader pin	1957.5	-614	118	20 x 20	
Rear side member rear leader pin	2533	-497.9	176.8	20 x 20	
Rear side member rear leader pin	2533	487.5	176.8	20 x 20	
Rear side member rear mount- ing	2942	-529.4	220	Ø 12.2	90°
Rear side member rear mount- ing	2942	519.4	220	Ø 12.2	90°
Front end cross member leader pin	-498.2	-530.9	265	Ø 16	90°
Front end cross member leader pin	-496.4	534.9	265	Ø 16	90°
Front end cross member mount- ing	-503.6	-453	415	M10	90°
Front end cross member mount- ing	-503.3	464.6	415	M10	90°
Engine mounting	-317	489	449	M10	180°
Engine mounting	-147	511	449	M10	180°
Additional engine mounting (tie- rod)	-86.2	481.1	604.5	M12	180°

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	C85 or S85					
No.	Description	x	Dimen- sion Y	Dimen- sion Z	Diameter	Angle (in degrees)
	Front sub-frame rear mounting with mechanical components	301	305	6.5	M12	
	Rear axle guide	1921	-582	118	20 x 20	
	Rear axle assembly front mounting, without mechanical components	2077.3	-633	118	24 x 24	
	Rear axle assembly front mounting, with mechanical components	2077.3	-633	113	M10	
	Rear axle assembly front mounting, without mechanical components	2047.4	-541.3	118	24 x 24	
	Rear axle assembly front mounting, with mechanical components	2047.4	-541.3	113	M10	
	Rear axle assembly front mounting, without mechanical components	2166	-536	118	24 x 24	
	Rear axle assembly front mounting, with mechanical components	2166	-536	113	M10	
	Front subframe front mounting	-141.5	-478	260.5	M12	
	Front subframe front mounting	-141.5	468	256	M12	
	Rear shock absorber upper mounting	2614.2	-561.9	534.4	Ø 20	
	Front shock absorber upper stop	6.81	-583.6	669.4	Ø 98	X 7°; Y 1°
	Front shock absorber upper mounting	-55.5	-618.4	673.8	M8	X 7° ; Y 1°
	Front shock absorber upper mounting	-23.3	-518.7	669.2	M8	X 7° ; Y 1°
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	Front side member rear mount- ing	547	-410	9.8	Ø 16	
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Rear side member front leader pin	1957.5	-614	118	20 x 20	
Rear side member rear leader pin	2533	-497.9	176.8	20 x 20	
Rear side member rear leader pin	2533	487.5	176.8	20 x 20	
Rear side member rear mount- ing	2876	-529.4	220	Ø 12.2	90°
Rear side member rear mount- ing	2876	519.4	220	Ø 12.2	90°
Front end cross member leader pin	-498.2	-530.9	265	Ø 16	90°
Front end cross member leader pin	-496.4	534.9	265	Ø 16	90°
Front end cross member mount- ing	-503.6	-453	415	M10	90°
Front end cross member mount- ing	-503.3	464.6	415	M10	90°
Engine mounting	-317	489	449	M10	180°
Engine mounting	-147	511	449	M10	180°
Additional engine mounting (tie- rod)	-86.2	481.1	604.5	M12	180°







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Interior A-pillar insert (3) .



A-pillar insert (4).

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B-pillar insert (5).



Wheel arch insert (6).

B85 or K85







Interior quarter panel insert (7).



Rear quarter panel insert (8).

Exterior quarter panel insert (9) .



Right-hand quarter panel insert (10) .

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13



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Quarter panel insert (13).

B-pillar insert (11).



Exterior quarter panel insert (12).

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Rear quarter panel insert (14) .





Front quarter panel insert (15).



Interior quarter panel insert (16).



### 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**).

For the earth stud replacement procedure, see **MR 400**.

B85





C85 or S85









DETAILED VIEW OF THE POSITION OF EARTHS ON THE VEHICLE





Earth stud on the right-hand front end side cross member (1).



Earth studs on left-hand front half unit (2).



Earth stud on bulkhead (3).



Earth studs on left and right-hand centre floor, side section, and tunnel (4).



Left side



Earth stud on left-hand inner wheel arch (5).

### **Right-hand side**



Earth stud on right-hand inner wheel arch.







Earth stud on left-hand inner wheel arch (7).

### **Right-hand side**



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Earth stud on left-hand rear wheel arch (9).

# GENERAL INFORMATION Vehicle structure, removable section: Description



### STRUCTURE WHICH CAN BE DISMANTLED



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		1	
No.	Description	Classification	Туре
(1)	Front side door	(see 47A, Side opening ele- ments, Front side door: Removal - Refitting, page 47A-1)	
(2)	Front wing lower mounting support	(see 42A, Front upper structure, Front wing lower mounting sup- port: Removal - Refitting, page 42A-12)	SMC
(3)	Front wing	(see 42A, Front upper structure, Front wing: Removal - Refitting, page 42A-3)	Noryl
(4)	Front side door	(see 47A, Side opening ele- ments, Front side door: Removal - Refitting, page 47A-1)	
(5)	Rear side door	(see 47A, Side opening ele- ments, Rear side door: Removal - Refitting, page 47A-8)	

# **GENERAL INFORMATION**

**40**A

# Vehicle structure, removable section: Description

(6)	Front wing upper mounting support	(see 42A, Front upper structure, Front wing upper mounting sup- port: Removal - Refitting, page 42A-14)	
(7)	Radiator support cross member	(see 41A, Front lower structure, Radiator mounting cross mem- ber: Removal - Refitting, page 41A-4)	
(8)	Frontal impact cross member	(see 41A, Front lower structure, Front impact cross member: Removal - Refitting, page 41A-2)	Aluminium
(9)	Front end panel	(see 42A, Front upper structure, Front end panel: Removal - Refit- ting, page 42A-18)	Polypropy- lene
(10)	Bonnet	(see 48A, Non-side opening ele- ments, Bonnet: Removal - Refit- ting, page 48A-1)	Aluminium
(11)	Dashboard cross member	(see 42A, Front upper structure, Dashboard cross member: Removal - Refitting, page 42A-31)	
(12)	Luggage retainer cross piece	(see )	
(13)	Rear impact lower cross member	(see 41D, Rear lower structure, Rear impact lower cross mem- ber: Removal - Refitting, page 41D-24)	Polypropy- lene
(14)	Tailgate	(see 48A, Non-side opening ele- ments, Tailgate: Removal - Refit- ting, page 48A-6)	
(15)	Fuel filler flap cover	(see 47A, Side opening ele- ments, Fuel filler flap cover: Removal - Refitting, page 47A-14)	Noryl

# GENERAL INFORMATION Vehicle structure, front section: Description



### FRONT STRUCTURE

1



No.	Description	Classification	Туре	Thickness (mm)
(1)	Scuttle side panel upper reinforcement	(see 42A, Front upper struc- ture, Upper reinforcement of scuttle side panel: Description, page 42A-25)	HLE	1.2
(2)	Scuttle side panel	(see 42A, Front upper struc- ture, Scuttle side panel: Description, page 42A-22)	HLE/ THLE	0.85/2
(3)	Front end side cross member	(see 41A, Front lower struc- ture, Engine stand: Description, page 41A-22)	HLE	1.5
(4)	Front side member	(see 41A, Front lower struc- ture, F ront side member: Description, page 41A-8)	HLE/ THLE	1.6/2.6
(5)	Front side member closure panel	(see 41A, Front lower struc- ture, F ront side member clo- sure panel, front section: Description, page 41A-15)	HLE/ THLE	1.6/2.7

I


No.	Description	Classification	Туре	Thickness (mm)
(6)	Radiator cross member mounting	(see 41A, Front lower struc- ture, Radiator cross member mounting: Description, page 41A-19)	HLE	1.2/2.5
(7)	Front left-hand half unit	(see 41A, Front lower struc- ture, Front half unit: Descrip- tion, page 41A-24)		
(8)	Centre floor front side cross member	(see 41B, Centre lower struc- ture, Centre floor front side cross member: Description, page 41B-3)	HLE	1
(9)	Front right-hand half unit	(see 41A, Front lower struc- ture, Front half unit: Descrip- tion, page 41A-24)		
(10)	Front left-hand wheel arch	(see 42A, Front upper struc- ture, Front wheel arch: Descrip- tion, page 42A-28)	HLE	1.2/2
(11)	Heater bulkhead reinforcement	(see 41A, Front lower struc- ture, F ront side member: Description, page 41A-8) ;		1.5
(12)	Engine stand	(see 41A, Front lower struc- ture, Engine stand: Description, page 41A-22)	HLE	1.5/2
(13)	Windscreen wiper mounting	(see 42A, Front upper struc- ture, Front wheel arch: Descrip- tion, page 42A-28)		1.5
(14)	Front right-hand wheel arch	(see 42A, Front upper struc- ture, Front wheel arch: Descrip- tion, page 42A-28)	HLE	1.2/2
(15)	Engine tie-rod attachment	(see 41A, Front lower struc- ture, Engine tie-rod attachment: Description, page 41A-30)	HLE	2



## SIDE STRUCTURE

B85 or K85



I

No.	Description	Classification	Туре	Thickness (mm)
(1)	Body side front section	(see 43A, Side upper struc- ture, Body side, front sec- tion: Description, page 43A- 28)		0.65/0.95
(2)	Jacking point bridge piece	(see 41C, Side lower struc- ture, Sill panel: Description, page 41C-1)	VHEL	2
(3)	Sill panel	(see 41C, Side lower struc- ture, Sill panel: Description, page 41C-1)		0.65/0.95
(4)	Double seal mounting	(see 43A, Side upper struc- ture, Body side, front sec- tion: Description, page 43A- 28)		0.8



No.	Description	Classification	Туре	Thickness (mm)
(5)	Upper body	(see 43A, Side upper struc- ture, Upper body: Descrip- tion, page 43A-35)		0.65/0.95
(6)	Side impact reinforcement	(see MR 400)	HLE	1.5
(7)	Sill panel closure panel	(see 41C, Side lower struc- ture, Sill panel closure panel: Description, page 41C-11)	HLE	1.2
(8)	Sill panel reinforcement	(see 41C, Side lower struc- ture, Sill panel reinforce- ment: Description, page 41C-17)	HLE	1.5
(9)	A-pillar reinforcement	(see 43A, Side upper struc- ture, A-pillar reinforcement: Description, page 43A-6)	HLE	1.2
(10)	B-pillar reinforcement	(see 43A, Side upper struc- ture, B-pillar reinforcement: Description, page 43A-17)	VHEL	1.8
(11)	B-pillar lining	(see 43A, Side upper struc- ture, B-pillar reinforcement: Description, page 43A-17)	HLE	1.3
(12)	Windscreen pillar lining	(see 43A, Side upper struc- ture, Windscreen pillar lin- ing: Description, page 43A- 8)	HLE	1.4
(13)	Front roof drip moulding stiffener	(see 43A, Side upper struc- ture, Windscreen pillar lin- ing: Description, page 43A- 8)	HLE	1.2
(14)	Roof drip moulding lining	(see 43A, Side upper struc- ture, Side roof rail lining: Description, page 43A-40)		0.95
(15)	Roof centre cross member	(see 45A, Top of body, Roof centre cross member: Description, page 45A-12)	VHEL	1.8
(16)	Roof front cross member	(see 45A, Top of body, Roof front cross member: General description, page 45A-10)		0.65
(17)	Roof	(see 45A, Top of body, Roof: Description, page 45A-2)		0.75
(18)	Roof rear cross member	(see 45A, Top of body, Roof rear cross member: Descrip- tion, page 45A-15)	HLE	0.95





112468

No.	Description	Classification	Туре	Thickness (mm)
(1)	Body side front section	(see 43A, Side upper struc- ture, A-pillar: Description, page 43A-2)		0.65/0.95
(2)	Jacking point bridge piece	(see 41C, Side lower struc- ture, Sill panel: Description, page 41C-1)	VHEL	2
(3)	Sill panel	(see 41C, Side lower struc- ture, Sill panel: Description, page 41C-1)		0.65/0.95
(4)	Double seal mounting	(see 43A, Side upper struc- ture, A-pillar: Description, page 43A-2)		0.8
(5)	Upper body	(see 43A, Side upper struc- ture, Upper body: Descrip- tion, page 43A-35)		0.65/0.95
(6)	Side impact reinforcement	(see MR 400)	HLE	1.5



No.	Description	Classification	Туре	Thickness (mm)
(7)	Sill panel closure panel	(see 41C, Side lower struc- ture, Sill panel closure panel: Description, page 41C-11)	HLE	1.2
(8)	Sill panel reinforcement	(see 41C, Side lower struc- ture, Sill panel reinforce- ment: Description, page 41C-17)	HLE	1.5
(9)	A-pillar reinforcement	(see 43A, Side upper struc- ture, A-pillar reinforcement: Description, page 43A-6)	HLE	1.2
(10)	B-pillar reinforcement	(see 43A, Side upper struc- ture, B-pillar reinforcement: Description, page 43A-17)	VHEL	1.8
(12)	Windscreen pillar lining	(see 43A, Side upper struc- ture, Windscreen pillar lin- ing: Description, page 43A- 8)	HLE	1.4
(13)	Front roof drip moulding stiffener	(see 43A, Side upper struc- ture, Windscreen pillar lin- ing: Description, page 43A- 8)	HLE	1.2
(14)	Roof drip moulding lining	(see 43A, Side upper struc- ture, Side roof rail lining: Description, page 43A-40)		0.95
(15)	Roof centre cross member	(see 45A, Top of body, Roof centre cross member: Description, page 45A-12)	VHEL	1.8
(16)	Roof front cross member	(see 45A, Top of body, Roof front cross member: General description, page 45A-10)		0.65
(17)	Roof	(see 45A, Top of body, Roof: Description, page 45A-2)		0.75
(18)	Roof rear cross member	(see 45A, Top of body, Roof rear cross member: Descrip- tion, page 45A-15)	HLE	0.95





### **CENTRAL STRUCTURE**



I

No.	Description	Classification	Туре	Thickness (mm)
(1)	Centre floor, side section	(see 41B, Centre lower structure, Centre floor, side section: Description, page 41B-11)	HLE	0.65/1.2
(2)	Rear floor centre cross member	(see 41D, Rear lower struc- ture, Rear floor centre cross member: Description, page 41D-21)	HLE	1/1.2
(3)	Front side member centre section	(see 41A, Front lower struc- ture, F ront side member, centre section: Description, page 41A-12)	Very high yield strength	2
(4)	Bulkhead side reinforcement	(see 42A, Front upper struc- ture, Bulkhead side rein- forcement: General description, page 42A-40)	Very high yield strength	1.6

# GENERAL INFORMATION

# Vehicle structure, centre section: Description



No.	Description	Classification	Туре	Thickness (mm)
(5)	Bulkhead lower cross member	(see 42A, Front upper struc- ture, Bulkhead lower cross member: General descrip- tion, page 42A-39)	Very high yield strength	1.7
(6)	Front cross member under front seat	(see 41B, Centre lower structure, Front cross mem- ber under front seat: Description, page 41B-6)	HLE	1.1
(7)	Rear cross member under front seat	(see 41B, Centre lower structure, Rear cross mem- ber under front seat: Description, page 41B-8)	HLE	1.1
(8)	Floor partition cross member	(see 41D, Rear lower struc- ture, Rear floor, front sec- tion: Description, page 41D- 4)		0.65
(9)	Rear floor front cross member reinforce- ment	(see 41D, Rear lower struc- ture, Rear floor front cross member reinforcement: Description, page 41D-19)		1.2
(10)	Front section of rear floor	(see 41D, Rear lower struc- ture, Rear floor, front sec- tion: Description, page 41D- 4)		0.65
(11)	Windscreen aperture lower cross mem- ber closure panel	(see 42A, Front upper struc- ture, Windscreen aperture lower cross member clo- sure panel: Description, page 42A-37)		0.7



## REAR STRUCTURE

B85



116930

	116930					
No.	Description	Classification	Туре	Thickness (mm)		
(1)	Rear wing panel	(see 44A, Rear upper structure, Rear wing panel: Description, page 44A-3)		0.75		
(2)	Outer rear wheel arch	(see 44A, Rear upper structure, Outer rear wheel arch: Description, page 44A-24)		0.65		
(3)	Body side rear lining	(see 44A, Rear upper structure, Body side rear lining: Description, page 44A-30)		0.65/2		
(4)	Lights support lining	(see 44A, Rear upper structure, Light mount- ing lining: Description, page 44A-18)		0.85/1		
(5)	Rear light mounting	(see 44A, Rear upper structure, Rear lights mounting: Description, page 44A-15)		0.85/2		
(6)	Rear side member assembly	(see 41D, Rear lower structure, Rear side member assembly: Description, page 41D-10)	HLE/ THLE	1.2/2		
(7)	Rear floor rear section	(see 41D, Rear lower structure, Rear floor, rear section: Description, page 41D-7)		0.65/1.5		



No.	Description	Classification	Туре	Thickness (mm)
(8)	Quarter panel upper reinforcement	(see 44A, Rear upper structure, Body side rear lining: Description, page 44A-30)		1.2
(9)	Rear end panel lining	(see 44A, Rear upper structure, Rear end panel lining: Description, page 44A-44)		0.85/1.2
(10)	Rear end panel	(see 44A, Rear upper structure, Rear end panel: Description, page 44A-41)	HLE	0.85
(11)	Rear section of rear side member	(see 41D, Rear lower structure, Rear side member, rear section: Description, page 41D- 16)		1.5/2





I

No.	Description	Classification	Туре	Thickness (mm)
(1)	Jacking point bridge piece	(see 44A, Rear upper structure, Rear wing panel: Description, page 44A-3)	VHEL	2
(2)	Rear wing panel	(see 44A, Rear upper structure, Rear wing panel: Description, page 44A-3)		0.75
(3)	Rear airbag deflector	(see 44A, Rear upper structure, Body side rear lining: Description, page 44A-30)		0.95
(4)	Quarter panel strip rein- forcement	(see 43A, Side upper structure, B-pillar rein- forcement: Description, page 43A-17)	HLE	1.8
(5)	Outer wheel arch	(see 44A, Rear upper structure, Outer rear wheel arch: Description, page 44A-24)		0.65
(6)	Body side rear lining	(see 44A, Rear upper structure, Body side rear lining: Description, page 44A-30)		0.65/2
(7)	Lights support lining	(see 44A, Rear upper structure, Light mount- ing lining: Description, page 44A-18)		0.85/1
(8)	Rear light mounting	(see 44A, Rear upper structure, Rear lights mounting: Description, page 44A-15)		0.85/2
(9)	Rear side member assembly	(see 41D, Rear lower structure, Rear side member assembly: Description, page 41D-10)	HLE/ THLE	1.2/2.8
(10)	Rear section of rear side member	(see 41D, Rear lower structure, Rear side member, rear section: Description, page 41D- 16)		1.5/2
(11)	Rear floor rear section	(see 41D, Rear lower structure, Rear floor, rear section: Description, page 41D-7)		0.65/1.5
(12)	Quarter panel upper reinforcement	(see 44A, Rear upper structure, Body side rear lining: Description, page 44A-30)		1.2
(13)	Rear end panel lining	(see 44A, Rear upper structure, Rear end panel lining: Description, page 44A-44)		0.85/1.2
(14)	Rear end panel	(see 44A, Rear upper structure, Rear end panel: Description, page 44A-41)	HLE	0.85



C85, and EQUIPMENT LEVEL SPORT



116929

No.	Description	Classification	Туре	Thickness (mm)
(1)	Jacking point bridge piece	(see 44A, Rear upper structure, Rear wing panel: Description, page 44A-3)	VHEL	2
(2)	Rear wing panel	(see 44A, Rear upper structure, Rear wing panel: Description, page 44A-3)		0.75
(3)	Rear airbag deflector	(see 44A, Rear upper structure, Body side rear lining: Description, page 44A-30)		0.95
(4)	Body side rear lining	(see 44A, Rear upper structure, Body side rear lining: Description, page 44A-30)		0.65/2
(5)	Lights support lining	(see 44A, Rear upper structure, Light mount- ing lining: Description, page 44A-18)		0.85/1
(6)	Rear light mounting	(see 44A, Rear upper structure, Rear lights mounting: Description, page 44A-15)		0.85/2
(7)	Outer rear wheel arch	(see 44A, Rear upper structure, Outer rear wheel arch: Description, page 44A-24)		0.65

I



No.	Description	Classification	Туре	Thickness (mm)
(8)	Quarter panel strip rein- forcement	(see 43A, Side upper structure, B-pillar rein- forcement: Description, page 43A-17)	HLE	1.8
(9)	Rear side member assembly	(see 41D, Rear lower structure, Rear side member assembly: Description, page 41D-10)	HLE/ THLE	1.2/2.8
(10)	Rear section of rear side member	(see 41D, Rear lower structure, Rear side member, rear section: Description, page 41D- 16)		1.5/2
(11)	Rear floor rear section	(see 41D, Rear lower structure, Rear floor, rear section: Description, page 41D-7)		0.65/1.5
(12)	Quarter panel upper reinforcement	(see 44A, Rear upper structure, Body side rear lining: Description, page 44A-30)		1.2
(13)	Rear end panel lining	(see 44A, Rear upper structure, Rear end panel lining: Description, page 44A-44)		0.85/1.2
(14)	Rear end panel	(see 44A, Rear upper structure, Rear end panel: Description, page 44A-41)	HLE	0.85



K85



# GENERAL INFORMATION



No.	Description	Classification	Туре	Thick- ness (mm)
(1)	Emergency spare wheel arch stiffener	(see 41D, Rear lower structure, Rear floor extension: Description, page 41D-26)	HLE	1,7
(2)	Rear floor extension	(see 41D, Rear lower structure, Rear floor extension: Description, page 41D-26)	HLE	0.65
(3)	Rear floor rear cross member	(see 41D, Rear lower structure, Rear floor rear cross member: Description, page 41D- 23)	HLE	1.2
(4)	Rear floor rear section	(see 41D, Rear lower structure, Rear floor, rear section: Description, page 41D-7)	Mild steel	0.65
(5)	Rear side member assembly	(see 41D, Rear lower structure, Rear side member assembly: Description, page 41D-10)	HLE	1.5
(6)	Rear side member extension	(see 41D, Rear lower structure, Rear side member extension: Description, page 41D- 28)	HLE	2
(7)	Rear end panel lining	(see 44A, Rear upper structure, Rear end panel lining: Description, page 44A-44)	Mild steel	0.85
(8)	Rear end panel	(see 44A, Rear upper structure, Rear end panel: Description, page 44A-41)	Mild steel	0.95
(9)	Body side rear lining	(see 44A, Rear upper structure, Body side rear lining: Description, page 44A-30)	Mild steel	0.6
(10)	Outer rear wheel arch	(see 44A, Rear upper structure, Outer rear wheel arch: Description, page 44A-24)	Mild steel	0.67
(11)	Rear wing panel	(see 44A, Rear upper structure, Rear wing panel: Description, page 44A-3)	Mild steel	0.75
(12)	Quarter panel stiffener	(see )		
(13)	C-pillar stiffener	(see )	HLE	1.2
(14)	Lights support lining	(see 44A, Rear upper structure, Light mount- ing lining: Description, page 44A-18)	Mild steel	0.85
(15)	Rear light mounting	(see 44A, Rear upper structure, Rear lights mounting: Description, page 44A-15)	Mild steel	0.85
(16)	Rear wing panel rain channel	(see 44A, Rear upper structure, Rear wing panel rain channel: Description, page 44A- 12)	Mild steel	0.95

I

Structural components to be positioned on the repair bench: Description



# I - PARTS REQUIRING THE USE OF A BODY JIG BENCH



112487

- (1) Radiator cross member support
- (2) Centre floor front side cross member
- (3) Front side member closure panel
- (4) Front side member
- (5) Engine stand
- (6) Front half-unit
- (7) Front wheel arch
- (8) Engine tie-rod attachment
- (9) Inner rear wheel arch
- (10) Rear side member
- (11) Rear section of rear side member

#### **II - FRONT SUBFRAME REAR MOUNTING**



The jig rests under the subframe mounting unit and is centred in the threaded hole  $({\bf A})$  .



It is used for replacing a complete front half unit.

# IMPORTANT

This/these point/s help(s) to ensure axle geometry.

### **III - REAR AXLE ASSEMBLY FRONT MOUNTING**



112249

The jig supports the underneath of the rear axle assembly mounting unit and is centred on square hole (**B**) and fixed on tapped hole (**B1**) of the rear axle bearing mounting.

It is used for replacing a rear side member assembly.

#### IMPORTANT

This/these point/s help(s) to ensure axle geometry.

#### **IV - FRONT SUB-FRAME FRONT MOUNTING**



The jig supports the underneath of the front sub-frame mounting and is centred on tapped hole  $(\mathbf{C})$ .

It is used when replacing:

- a complete front side member,
- a front half unit.

IMPORTANT

This/these point/s help(s) to ensure axle geometry.

#### **V - FRONT SHOCK ABSORBER UPPER MOUNTING**



**40A** 

The jig supports the underneath of the shock absorber cup and is centred on the hole (F) of the shock absorber cup.

It is used when replacing:

- a wheel arch,

- a front half unit.

It is also used in straightening.

### IMPORTANT

This/these point/s help(s) to ensure axle geometry.

### VI - ENGINE MOUNTING



112242

The jig rests on the engine mounting and is centred in engine mounting securing holes (P1) and (P2).

It is used with the mechanical components removed for the replacement of:

- a front half unit.

- the engine mounting.

#### **VII - ENGINE TIE-ROD ATTACHMENT**



The jig supports the engine tie-rod attachment mounting and is centred on hole  $({\bf R})$  .

It is used with the mechanical components removed for the replacement of:

- the engine tie-rod attachment,
- a front half unit.

### VIII - RADIATOR MOUNTING CROSS MEMBER MOUNTING



The jig supports the underneath of the radiator cross member and is centred in tapped hole  $({\rm H1})$  .

# GENERAL INFORMATION

### Structural components to be positioned on the repair bench: Description



- It is used when replacing:
- the radiator cross member mounting,
- the front side member completely or partially,
- a half unit.

#### **IX - FRONT IMPACT CROSS MEMBER MOUNTING**



112863

The jig rests vertically against the radiator cross member mounting unit and is centred in mounting holes  $({\bf K})$  and  $({\bf K1})$  .

It is used when replacing:

- the radiator cross member mounting,
- the front side member completely or partially,.

X - END OF REAR SIDE MEMBER



The jig rests vertically against the side member and is centred in hole  $({\bf J1})$  .

It is used for partially replacing a rear side member.



The jig rests under the rear side member and is centred in hole  $({\bf J})$  .

It should be used with the mechanical components in place to realign a rear side member.

It is used with the mechanical components removed, under the same conditions, to replace the complete rear side member.

# GENERAL INFORMATION

Structural components to be positioned on the repair bench: Description



#### XI - INNER REAR WHEEL ARCH



The jig supports the underneath of the rear shock absorber cup and is centred on hole  $({\bf E})$  .

Use it when replacing the rear wheel arch.



## 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



A special feature of this part is that it is bolted to the ends of the front side members via the radiator cross member mounting support.



Tightening torques $\bigtriangledown$	
side mounting bolts (1)	44 Nm

#### I - REMOVAL

### **1 - REMOVAL PREPARATION OPERATION**

- Remove the front bumper (see Front bumper: Removal Refitting) .
- Remove the headlights (see ) (see Xenon headlight: Removal - Refitting).

# 2 - OPERATION FOR REMOVAL OF PART CONCERNED



Remove side mounting bolts (1) (three on either side).

### **II - REFITTING**

#### 1 - REFITTING OPERATION FOR PART CONCERNED

□ Refit the side mounting bolts.

#### WARNING

The cross member contributes to the structural rigidity of the engine compartment. For this reason, the tightening torque must be observed following any operation.

Torque tighten the side mounting bolts (1) (44 Nm).

#### **2 - FINAL OPERATION**

- □ Refit the headlights (see ) (see Xenon headlight: Removal Refitting).
  - Refit the front bumper (see Front bumper: Removal - Refitting) .



### 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



This steel part, which bolts onto the front axle subframe, combines two functions:

- distribution of front impact forces,
- radiator support cross member.



Tightening torques 🖓	
the mounting bolts (1)	21 Nm
mounting bolts (2)	105 Nm

### I - REMOVAL

### **1 - REMOVAL PREPARATION OPERATION**

- Remove the front bumper (see Front bumper: Removal Refitting).
  - Attach the radiator upper section.
  - Remove the engine undertray.

# 2 - OPERATION FOR REMOVAL OF PART CONCERNED



 $\hfill\square$  Remove the mounting bolts (1) from each side.



**□** Remove the mounting bolt (**2**) from each side.

### **II - REFITTING**

### 1 - REFITTING OPERATION FOR PART CONCERNED

- □ Refit the mounting bolts (1) and (2).
- Torque tighten the
  - the mounting bolts (1) (21 Nm),
  - mounting bolts (2) (105 Nm).

### 2 - FINAL OPERATION

- □ Refit the engine undertray.
  - Detach the radiator upper section.
  - Refit the front bumper (see Front bumper: Removal - Refitting) .

# FRONT LOWER STRUCTURE Front side member: General description



### 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



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



### 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





130093



## 2 - Cut 2:

The cut is made along the butt weld.





### **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**).



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





112615

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

The straightening bench must be used.

#### **I - COMPOSITION OF THE SPARE PART**



No.	Description	Туре	Thick- ness (mm)
(1)	Front side member	HLE/ THLE	1.6 / 2.6
(2)	Impact reinforce- ment	HLE	2
(3)	Radiator cross member mounting	HLE	1.2 / 2.5
(4)	Front subframe mounting support	HLE	2

#### **II - PART FITTED**

#### 1 - Partial replacement of front end section (righthand side)

### WARNING

Position this part correctly; its position is determined by the position of the inner reinforcements.







#### 2 - Partial replacement of the front section



112490

### WARNING

The cut is made along the line of the original butt weld.

#### 3 - Partial replacement of front end section (lefthand side)





#### WARNING

Position this part correctly; its position is determined by the position of the inner reinforcements.

4 - Partial replacement of the front section



#### WARNING

The cut is made along the line of the original butt weld.

# III - POSITIONING OF LOCAL ELECTRICAL EARTHS

### WARNING

- To avoid damaging the vehicle's electrical and electronic components, be sure to disconnect the earths of any wiring near the weld zone.
- The welding machine earth must be placed as close as possible to the weld zone.

# FRONT LOWER STRUCTURE Front side member: Description





112244



# Front side member, centre section: General description



### 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



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**).

# FRONT LOWER STRUCTURE Front side member, centre section: Description





112710

There is only one way of replacing this part:

- Complete replacement:

## I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (mm)
(1)	Centre side mem- ber	Very high yield strength	2
(2)	Centre side mem- ber reinforcement	VHEL	2.5

### **II - PART FITTED**

### WARNING

- To avoid damaging the vehicle's electrical and electronic components, be sure to disconnect the earths of any wiring near the weld zone.
- The welding machine earth must be placed as close as possible to the weld zone.



112677

#### IMPORTANT

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 properties.

# FRONT LOWER STRUCTURE

# Front side member closure panel, front section: General description



### 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**).



#### 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.

# FRONT LOWER STRUCTURE

## Front side member closure panel, front section: General description





130108

### 2 - Cut 2:

The cut must be made on the splice.



# 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**).



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 closure panel, front section: Description





112612

The options for replacing this part are as follows:

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

#### IMPORTANT

The straightening bench must be used.

### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (mm)
(1)	Side member clo- sure panel	HLE/ THLE	1.6 / 2.7
(2)	Radiator cross member mounting closure panel	HLE	1.2
(3)	Connecting bracket	HLE	2
(4)	Flexible brake pipe mounting		2

### **II - PART FITTED**

#### 1 - Partial replacement of the front end section

### WARNING

Position this part correctly; its position is determined by the position of the inner reinforcements.





### IMPORTANT

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.



#### 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.



112248

### WARNING

The cut is made along the line of the original butt weld.



### 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

This part is bolted to the front side member. It is made of plastic. The type of plastic is indicated on the part itself.


#### 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.

#### IMPORTANT

The straightening bench must be used.

Note:

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

### DESIGN OF THE STRUCTURAL COMPONENT



It is composed of the following components:

- cross member mounting component (1) ,
- mounting support unit (2).

This part acts as:

- a radiator cross member support,
- front end cross member support,
- front end panel support.

# FRONT LOWER STRUCTURE Radiator cross member mounting: Description





112613

There is only one way of replacing this part:

- complete replacement.

#### IMPORTANT

A straightening bench is essential when simultaneously replacing the left-hand and right-hand parts.

#### I - COMPOSITION OF THE SPARE PART



Description Thick-No. Туре ness (mm) HLE 2.5 Radiator (1) cross member mounting closure panel HLE 1.2 (2) Radiator cross member mounting unit

#### **II - PART FITTED**



#### 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.

## FRONT LOWER STRUCTURE Front subframe front mounting: General description



#### 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

#### 1 - Right-hand side



The subframe mounting (1) is attached to the side member.

#### 2 - Left side

The mounting is integrated into the side member.



#### 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



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

# FRONT LOWER STRUCTURE Engine stand: Description





112702

To replace this part, order, in addition, the front end side cross member  $(\mathbf{A})$  .

There is only one way of replacing this part:

- complete replacement.

#### IMPORTANT

The straightening bench must be used.

#### I - COMPOSITION OF THE SPARE PART

#### Engine mounting, low torque



No.	Description	Туре	Thickness (mm)
(1)	Engine mount- ing upper sec- tion	HLE	1.5
(2)	Engine mount- ing rear section	HLE	1.5
(3)	Engine mount- ing centre sec- tion	HLE	2
(4)	Engine mount- ing reinforce- ment	HLE	1
(5)	Engine mount- ing lower sec- tion	HLE	2

#### Engine mounting, high torque



No.	Description	Туре	Thickness (mm)
(1)	Engine mount- ing upper sec- tion	HLE	1.5
(2)	Engine mount- ing rear section	HLE	1.5

# FRONT LOWER STRUCTURE Engine stand: Description

No.	Description	Туре	Thickness (mm)
(3)	Engine mount- ing centre sec- tion	HLE	2
(4)	Engine mount- ing reinforce- ment	HLE	1
(5)	Engine mount- ing lower sec- tion	HLE	2

### **II - PART FITTED**

#### Engine mounting, low torque



Engine mounting, high torque



41

Д

#### 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.

# III - POSITIONING OF LOCAL ELECTRICAL EARTHS

For the earth stud fitting procedure (see **40A**, **General information**, **Earths on body: List and location of components**, page **40A-23**)





#### Left-hand side



#### **Right-hand side**



To replace this part, order the heater bulkhead reinforcement (A) and the side member expanding insert (B).

There is only one way of replacing this part:

- complete replacement.

#### IMPORTANT

The straightening bench must be used.

I - COMPOSITION OF THE SPARE PART





No.	Description	Туре	Thickness (mm)
(1)	Front side mem- ber	HLE/ THLE	1.6 / 2.6
(2)	Wheel arch	HLE	1.2 / 2
(3)	Side member closure panel	HLE/ THLE	1.6 / 2.7
(4)	Centre floor front side cross mem- ber	HLE	1
(5)	Front end side cross member	HLE	1.5

41A

#### Right-hand side, low torque



112122

No.	Description	Туре	Thick- ness (mm)
(6)	Wheel arch	HLE	1.2 / 2
(7)	Engine stand	HLE	1.5 / 2
(8)	Front end side cross member	HLE	1.5
(9)	Side member closure panel	HLE/ THLE	1.6 / 2.7
(10)	Front side mem- ber	HLE/ THLE	1.6 / 2.6
(11)	Centre floor front side cross member	HLE	1

Right-hand side, high torque



No.	Description	Туре	Thickness (mm)
(6)	Wheel arch	HLE	1.2 / 2
(7)	Engine stand	HLE	1.5 / 2
(8)	Front end side cross member	HLE	1.5
(9)	Side member closure panel	HLE/ THLE	1.6 / 2.7
(10)	Front side mem- ber	HLE/ THLE	1.6 / 2.6
(11)	Centre floor front side cross member	HLE	1

#### **II - PART FITTED**

#### IMPORTANT

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 properties.



### 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.

#### Front half unit, low torque



112675

#### Front half unit, high torque





### Note:

The heater bulkhead reinforcement is available separately (see **Parts Catalogue**).

# III - POSITIONING OF LOCAL ELECTRICAL EARTHS









### IMPORTANT

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

The earth of the welding machine must be placed as close as possible to the weld area.

# FRONT LOWER STRUCTURE Subframe rear mounting: General description



### 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  $\ensuremath{\text{MR}}$  400.

#### DESIGN OF THE STRUCTURAL COMPONENT



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



#### 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



This part is welded to the right hand unit (1) of the frontal impact cross member and therefore cannot be replaced. Replace the cross member unit if the thread is damaged.

# FRONT LOWER STRUCTURE **Engine tie-rod attachment: Description**





112701

To replace this part, order the heater bulkhead reinforcement (A).

There is only one way of replacing this part:

- complete replacement.

#### I - COMPOSITION OF THE SPARE PART

Part supplied on its own.

No.	Description	Туре	Thick- ness (mm)
(1)	Engine tie-rod attachment	HLE	2

### **II - PART FITTED**

### IMPORTANT

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 properties.



#### 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.

#### **III - POSITIONING OF LOCAL ELECTRICAL** EARTHS

#### WARNING

- The wiring harness earths near the weld zone must be disconnected to avoid damaging the electrical and electronic components of the vehicle.
- The welding machine earth must be placed as close as possible to the weld zone.





## CENTRE LOWER STRUCTURE

### Centre floor front side cross member: General description



#### 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



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

# II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



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

# 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**).

# CENTRE LOWER STRUCTURE Centre floor front side cross member: General description





Line (3) on the drawing shows a butt weld by continuous EGW welding.

# CENTRE LOWER STRUCTURE Centre floor front side cross member: Description



112614

The options for replacing this part are as follows:

- partial replacement of side section,

- complete replacement.

#### IMPORTANT

For complete replacement, the straightening bench must be used.

#### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (mm)
(1)	Centre floor front side cross member	HLE	1
(2)	Side cross member reinforcement	HLE	2
(3)	Sub-frame assem- bly mounting unit	HLE	2
(4)	Sub-frame mount- ing reinforcement	HLE	2.6
(5)	Welded nut		

41

B

#### II - PART FITTED

#### 1 - Partial replacement of side section



#### WARNING

The correct position of this cut must be observed, as it is determined according to the cut of the internal reinforcements or the acoustic inserts.

# CENTRE LOWER STRUCTURE Centre floor front side cross member: Description



#### 2 - Complete replacement



#### IMPORTANT

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 properties.

### 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.

### Front cross member under front seat: 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 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



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.

# CENTRE LOWER STRUCTURE Front cross member under front seat: Description





112707

There is only one way of replacing this part:

- complete replacement.

### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (in mm)
(1)	Front cross mem- ber under front seat	HLE	1.1
(2)	Seat mounting rein- forcement	HLE	1.5
(3)	Outer seat mount- ing support	HLE	1.5
(4)	Seat mounting com- ponent retainer		0.8
(5)	Inner seat mount- ing support	HLE	1.5

#### II - PART FITTED



(X1) = 355 mm

#### 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.



#### 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



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.

# CENTRE LOWER STRUCTURE Rear cross member under front seat: Description



112708

There is only one way of replacing this part:

- complete replacement.

### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (mm)
(1)	Rear cross mem- ber under front seat	HLE	1.1
(2)	Seat mounting rein- forcement	HLE	1.5
(3)	Seat mounting com- ponent retainer		0.8
(4)	Inner seat mount- ing support	HLE	1.5

41

B

#### II - PART FITTED



(X1) = 355 mm

#### 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.

# CENTRE LOWER STRUCTURE Centre floor, side section: General description



#### 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 special feature of this type of part is that it combines the functions of the centre floor side section and the sill panel closure panel and it is made of two different kinds of panel of different thicknesses 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





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



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



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

# CENTRE LOWER STRUCTURE Centre floor, side section: Description





#### B85 or C85

To replace this part, also order the centre part of the front side member (A).

The options for replacing this part are as follows:

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

#### K85

To replace this part, also order the separation net piece and the centre part of the front side member (A).

The options for replacing this part are as follows:

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

#### **I - COMPOSITION OF THE SPARE PART**



No.	Description	Туре	Thick- ness (mm)
(1)	Centre floor, side section	HLE	0.65 / 1.2
(2)	Satellite support fixing reinforce- ment	HLE	2

#### **II - PART FITTED**

#### 1 - Partial replacement of front side section

#### Note:

In the three cases below, the area to be cut is beneath the front cross member under the front seat.

# CENTRE LOWER STRUCTURE Centre floor, side section: Description





2 - Partial replacement of rear side section



112650

3 - Partial replacement of side section



112648

### 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**).

# 4 - Detailed view of separation net piece replacement

### K85



# **CENTRE LOWER STRUCTURE** Centre floor, side section: Description



#### **Positioning dimensions**



126699

(X1) = 40.76 mm

(X2) = 120.92 mm

#### **III - POSITIONING OF LOCAL ELECTRICAL** EARTHS



#### 112674

#### 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).

#### B85 or K85



113238

To replace this part, also order the expanding inserts corresponding to each of the following cases.

The options for replacing this part are as follows:

- partial replacement of the front end section, order the exterior A-pillar insert (see 40A, General information, Hollow section inserts: List and location of components, page 40A-16),
- partial replacement under door:
- partial replacement of the front section, order the insert (A) and the exterior A-pillar insert (see 40A, General information, Hollow section inserts: List and location of components, page 40A-16),
- partial replacement of the rear end section, order the wheel arch insert (see 40A, General information, Hollow section inserts: List and location of components, page 40A-16),
- partial replacement of the rear section, order the insert (A) and the wheel arch insert (see 40A, General information, Hollow section inserts: List and location of components, page 40A-16),
- complete replacement, order the insert (A), the exterior A-pillar insert and the wheel arch insert (see 40A, General information, Hollow section inserts: List and location of components, page 40A-16).

#### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (mm)
(1)	Sill panel	HLE	0.65/0.95
(2)	Jacking point	HLE	2

#### **II - PART FITTED**

#### Partial replacement of the front end section





### B85 or K85

#### Replacement under door



#### Front section replacement





Partial replacement of the rear section





### B85 or K85

### Complete replacement





B85 or K85

### **III - SPECIAL NOTES ON THE CUTS**

### Positioning of the cuts



I

#### 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).

- (X1) = 28 cm
- (X2) = 13 cm
- (X3) = 26 cm

Detailed view of cut A



**41C** 

### B85 or K85

#### Detailed view of cut B



113020

#### Detailed view of cut C





### Detailed view of cut E





### B85 or K85

### Detailed view of cut F



113018

#### Detailed view of cut G





#### C85 or S85



The options for replacing this part are as follows:

- partial replacement of the front end section: also order the A-pillar insert (see 40A, General information, Hollow section inserts: List and location of components, page 40A-16),
- partial replacement under door:
- partial replacement of the rear end section,
- complete replacement: also order the A-pillar insert (see 40A, General information, Hollow section inserts: List and location of components, page 40A-16).

### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (mm)
(1)	Sill panel	HLE	0.65/0.95
(2)	Jacking point	HLE	2

#### **II - PART FITTED**

#### Partial replacement of the front end section



#### Replacement under door





### C85 or S85





### **Complete replacement**





C85 or S85

### **III - SPECIAL NOTES ON THE CUTS**

#### Positioning of the cuts



I

#### 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).

- (X1) = 28 cm
- (X2) = 17 cm

Detailed view of cut H


# SIDE LOWER STRUCTURE Sill panel: Description

**41C** 

# C85 or S85

### Detailed view of cut I



113020

#### Detailed view of cut J





Detailed view of cut K







To replace this component, also order the expanding

insert for the A-pillar (A).

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

No.	Description	Туре	Thick- ness (mm)
(1)	Sill panel closure panel	HLE	1.2

# **II - PART FITTED**

B85 or K85

### Partial replacement of the front section



### WARNING

To maintain mechanical properties during a partial replacement of parts constituting a single structural component, stagger the welds of each of the components.



#### Partial replacement of the rear 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**).

### **III - SPECIAL NOTES ON THE CUTS**

B85 or K85

#### Note:

The position of the cuts given in the procedure can be modified according to the severity of impact.





#### Detailed view of cut A



113173

#### Detailed view of cut B



#### **IV - PART FITTED**

C85 or S85

#### Partial replacement of the front section



# WARNING

To maintain mechanical properties during a partial replacement of parts constituting a single structural component, stagger the welds of each of the components.

#### Partial replacement of the rear 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**).

### **V - SPECIAL NOTES ON THE CUTS**

C85 or S85

#### Note:

The position of the cuts given in the procedure can be modified according to the severity of impact.





#### Detailed view of cut C



# Detailed view of cut D



# SIDE LOWER STRUCTURE Sill panel reinforcement: 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 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



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

# II - AREA TO BE CUT FOR PARTIAL REPLACEMENT





# SIDE LOWER STRUCTURE Sill panel reinforcement: Description





113263

The options for replacing this part are as follows:

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

### Description and thickness of the component

No.	Description	Туре	Thick- ness (mm)
(1)	Sill panel rein- forcement	HLE	1.5

### PART FITTED

B85

#### Partial replacement of the front section



# WARNING

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

### Partial replacement of the rear section





# 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.

C85

## WARNING

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



# 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.



Tightening torques $\bigtriangledown$	
the mounting bolts (1)	21 N.m
the mounting bolts (2)	21 N.m

## I - REMOVAL

### 1 - REMOVAL PREPARATION OPERATION

□ Remove the luggage compartment carpet (see ) .

Remove the rear bench seat (see ) .

Remove the protective carpet of the luggage retaining cross member.

#### 2 - OPERATION FOR REMOVAL OF PART CONCERNED



□ Remove:

- the mounting bolts (1) on each side,

- the mounting bolts (2) on each side.

# II - REFITTING

### 1 - OPERATION FOR REFITTING PART CONCERNED

Refit:

- the mounting bolts (1) on each side,
- the mounting bolts (2) on each side.

Tighten to torque:

- the mounting bolts (1) (21 N.m),
- the mounting bolts (2) (21 N.m).

## 2 - FINAL OPERATION

Refit the protective carpet of the luggage retaining cross member.

Refit the rear bench seat (see ) .

Refit the luggage compartment carpet (see ) .

# REAR LOWER STRUCTURE Rear floor, front section: General description



### 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**.

#### I - DESIGN OF THE STRUCTURAL COMPONENT



This is a basic part; its only function is that of rear floor front section.

# 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.

# REAR LOWER STRUCTURE Rear floor, front section: General 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**).

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**).



Line (2) on the diagram shows a joint made by joggling connected with plug welds at regular intervals.

# REAR LOWER STRUCTURE Rear floor, front section: Description





112594

The options for replacing this part are as follows:

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

#### I - COMPOSITION OF THE SPARE PART



112133

B85 or C85 or S85

No.	Description	Туре	Thick- ness (mm)
(1)	Floor cross mem- ber		0.65
(2)	Front section of rear floor		0.65
(3)	Floor side rein- forcement	HLE	1.5
(4)	Central reinforce- ment of seat	HLE	1.5

# K85

No.	Description	Туре	Thick- ness (mm)
(1)	Emergency spare wheel arch rear reinforcement	HLE	1,7
(2)	Rear floor rear section	Mild steel	0.65
(3)	Rear section of rear floor exten-	HLE	0.65
(4)	Emergency spare wheel mounting reinforcement	HLE	1.5

#### **II - PART FITTED**

#### Partial replacement of the rear section

#### WARNING

To maintain mechanical properties during a partial replacement of parts constituting a single structural component, stagger the welds of each of the components.

# REAR LOWER STRUCTURE Rear floor, front section: Description



# 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).



### Note:

Carry out partial replacement by superposition of panels, and make two welds.



113098

### 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**.

## I - DESIGN OF THE STRUCTURAL COMPONENT



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



Thickness



			(mm)
(1)	Rear section of floor	-	0.65
(2)	Emergency spare wheel side mount- ing reinforcement	HLE	1.5
(3)	Emergency spare wheel mounting reinforcement	HLE	1.5
(4)	Rear wheel arch reinforcement	HLE	1.5

Туре

Description

No.

112593

There is only one way of replacing this part:

- complete replacement.

# I - COMPOSITION OF THE SPARE PART

B85 or C85 or S85, and EQUIPMENT LEVEL E3 LEISURE or EQUIPMENT LEVEL EA1 or EQUIP-MENT LEVEL EA2 or EQUIPMENT LEVEL EA3 or EQUIPMENT LEVEL EA4 or EQUIPMENT LEVEL EA5 or EQUIPMENT LEVEL EAG



C85, and EQUIPMENT LEVEL EAC or EQUIP-MENT LEVEL SPORT





No.	Description	Туре	Thickness (mm)
(5)	Rear floor rear section	-	0.65
(6)	Rear floor rein- forcement	-	1.5

K85



No.	Description	Туре	Thick- ness (mm)
(7)	Rear floor rear section	Mild steel	0.65
(8)	Emergency spare wheel mounting reinforcement	HLE	1.5
(9)	Emergency spare wheel arch rear reinforcement	HLE	1.7
(10)	Rear floor exten- sion	HLE	0.65

# **II - PART IN POSITION**

# **Complete replacement**

B85 or C85 or S85, and EQUIPMENT LEVEL E3 LEISURE or EQUIPMENT LEVEL EA1 or EQUIP-MENT LEVEL EA2 or EQUIPMENT LEVEL EA3 or EQUIPMENT LEVEL EA4 or EQUIPMENT LEVEL EA5 or EQUIPMENT LEVEL EAG





C85, and EQUIPMENT LEVEL EAC or EQUIP-MENT LEVEL SPORT



# K85



# P = pitch

D = distance covered

### 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.

# 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 assembly: Description





126792

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

B85 or C85 or S85



No.	Description	Туре	Thick- ness (mm)
(1)	Towing ring rein- forcement	HLE	2
(2)	Central reinforce- ment	HLE	1.5
(3)	Rear axle mounting interior reinforce- ment	HLE	2.8
(4)	Rear side member	HLE	1.5
(5)	Sill connection component		1.2
(6)	Rear axle mounting exterior reinforce- ment	HLE	2.8
(7)	Sill reinforcement	VHEL	1.5
(8)	Suspension spring support	HLE	2

## K85





No.	Description	Туре	Thick- ness (mm)
(9)	Sill reinforcement	VHEL	1.5
(10)	Upper sill con- nection compo- nent	Mild steel	1.2
(11)	Rear axle mount- ing exterior rein- forcement	HLE	2.8
(12)	Rear central side member rein- forcement	HLE	1.5
(13)	Rear axle mount- ing interior rein- forcement	HLE	2.8
(14)	Rear side mem- ber	HLE	1.5
(15)	Lower sill con- nection compo- nent	HLE	1.5
(16)	Suspension spring support	HLE	2
(17)	Side member extension	HLE	2

# **II - PART IN POSITION**

**Complete replacement** 

B85 or C85 or S85





# REAR LOWER STRUCTURE Rear side member assembly: Description





Note:

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

126705

# 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: General description



# 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  $\ensuremath{\text{MR}}$  400.

#### I - DESIGN OF THE STRUCTURAL COMPONENT



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: General description





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

# REAR LOWER STRUCTURE Rear side member, rear section: Description





112598

There is only one way of replacing this part:

- Partial replacement of the rear section.

#### IMPORTANT

The straightening bench must be used.

#### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (mm)
(1)	Rear side member	HLE	1.5
(2)	Towing ting rein- forcement	HLE	2
(3)	Threaded bushing		
(4)	Towing ring		Ø 8

#### **II - PART IN POSITION**

#### Partial replacement of the rear section

#### WARNING

The correct position of this cut must be observed, as it is determined according to the mounting points for the mechanical components.

#### 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.





# **REAR LOWER STRUCTURE**

# Rear floor front cross member reinforcement: General description



### 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 features associated with this vehicle. These special features will be specified if applicable in other parts of this sub-section dealing with the part.

Note:

For detailed information on a specific connection, (see

Workshop Repair Manual 400, 40A, General information).

#### I - STRUCTURAL COMPONENT DESIGN



112595

This is a basic part; it simply fulfils the function of a rear floor front cross member stiffener.

# II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



This line (1) marks the place in which it is possible to make a partial replacement.

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

# III - ASSEMBLY INSTRUCTIONS FOR A PARTIAL REPLACEMENT

Only the connecting pieces relevant to partial replacement by cutting are shown.



# Rear floor front cross member reinforcement: General description



Line (2) of the drawing shows a butt weld by continuous MAG welding.

### WARNING

If the spot welds cannot be made as they were originally using an electrical spot welding machine, these 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**).

# REAR LOWER STRUCTURE Rear floor front cross member reinforcement: Description





112595

The options for replacing this part are as follows:

- partial replacement of side section,
- complete replacement.

# I - COMPOSITION OF THE SPARE PART



112138

No.	Description	Туре	Thick- ness (mm)
(1)	Front cross mem- ber reinforcement	HLE	1.2
(2)	Exhaust mounting bracket	HLE	2

### **II - PART IN POSITION**

### Partial replacement of side section

## WARNING

The correct position of this cut must be observed, as it is determined according to the position of the reinforcements and the areas to be cut on adjacent parts.



# 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.

# Rear floor centre cross member: General description



# 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



112596

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



No.	Description	Туре	Thick- ness (mm)
(1)	Rear centre cross member	HLE	1.4
( <b>2</b> )	Fuel tank protec- tion component	HLE	1
(3)	Fuel tank mount- ing reinforcement	HLE	1

41



There is only one way of replacing this part:

- complete replacement.

# I - COMPOSITION OF THE SPARE PART

# B85 or C85 or S85







No.	Description	Туре	Thick- ness (mm)
(4)	Seat belt anchor- age point rein- forcement	HLE	1.2
(5)	Side member	HLE	1.2
(6)	Rear centre cross member	HLE	1.2
(7)	Tank mounting reinforcement	HLE	1
(8)	Fuel tank protec- tion component	HLE	1

#### **II - PART IN POSITION**

#### **Complete replacement**



## 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 LOWER STRUCTURE Rear floor rear cross member: Description**

**41D** 

K85



126783

There is only one way of replacing this part:

- complete replacement.

# **I - COMPOSITION OF THE SPARE PART**

No.	Description	Туре	Thick- ness (mm)
(1)	Rear floor rear cross member	HLE	1.2

### **II - PART IN POSITION**



126713

# 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).

12 Nm



Tightening torques $\bigtriangledown$	
---------------------------------------	--

side mounting nuts

6

#### I - REMOVAL

### **1 - REMOVAL PREPARATION OPERATION**

- □ Remove the two rear wing lights (see **Rear wing** light: Removal Refitting).
  - Remove the rear bumper (see Rear bumper: Removal Refitting) .

# 2 - OPERATION FOR REMOVAL OF PART CONCERNED



□ Remove the side mounting nuts (1) (two on each side).

#### **II - REFITTING**

#### 1 - OPERATION FOR REFITTING PART CONCERNED

□ Refit the side mounting nuts.

Torque tighten the (1) side mounting nuts (12 Nm).

#### 2 - FINAL operation

- □ Refit the rear bumper (see **Rear bumper: Remov**al - **Refitting**).
  - Refit the two rear wing lights (see **Rear wing light: Removal Refitting**).



### 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 detailed information about a specific connecting piece, see:

(MR 400, 40A, General information).

### DESIGN OF THE STRUCTURAL COMPONENT



110613

This component is composed of two parts:

- tapped and welded tow eye (1),
- tow eye mounting (2) .

# 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.

# **REAR LOWER STRUCTURE Rear floor extension: Description**



K85



126780

To replace this part, also order the centre floor reinforcement.

There is only one way of replacing this part:

- complete replacement.

# I - COMPOSITION OF THE SPARE PART

No.	Description	Туре	Thick- ness (mm)
(1)	Allonge de plancher arrière	HLE	0.65

### **II - PART IN POSITION**

# **Complete replacement**



## Vue de détail 1



126709

Lors du remplacement de l'allonge de plancher arrière, commander en supplément le renfort bac de roue de secours.

# REAR LOWER STRUCTURE Rear floor extension: Description



# K85

# Vue de détail 2



126711

P = pas

D = distance de recouvrement

# 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 extension: Description



K85



126782

There is only one way of replacing this part:

- complete replacement.

### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (mm)
(1)	Allonge de long- eron arrière droit	Mild steel	2

No.	Description	Туре	Thick- ness (mm)
(2)	Rear towing ring		
(3)	Douille anneau d'arrimage	Mild steel	

### **II - PART IN POSITION**

### Vue de dessus



### Vue de dessous



# REAR LOWER STRUCTURE Rear side member extension: Description



K85

### 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.

### I - DESIGN OF THE STRUCTURAL COMPONENT



This type of front wing has the following characteristics:

- plastic wing (NORYL),

- wing bolted to its upper mounting bracket.

### **II - REMOVAL - REFITTING**

### Note:

In all cases of removal of a component without its replacement with a new one, mark the position of the mountings before removing the mountings to avoid adjustments during refitting.

To remove or replace the front wing, remove:

- the front wheel arch liner,
- the front bumper,
- the headlight,

- the windscreen lower trim piece.

### **III - ADJUSTMENT**

### Note:

The front wing is the penultimate removable component to be fitted to the vehicle body in the factory.

For final adjustment, correctly position all the other components including the bumper and the headlights for them to be correctly positioned.

Two main areas of adjustment may be identified:

- the adjustment of the rear area,
- the adjustment of the front area

### 1 - Adjustment of the rear area:



# FRONT UPPER STRUCTURE Front wing: General description





Adjust the flush fitting and alignment with the front door using mountings (4) and (5).

### 2 - Adjustment of the front area:



Adjust the alignment of the front wing using mountings (14) and (15).





Tightening	torques 灾
bolt (1)	6.5 Nm
bolt (2)	6.5 Nm
bolt (3)	6.5 Nm
bolt (4)	6.5 Nm
bolt (5)	6.5 Nm
bolt (6)	4.5 Nm
bolt (7)	4.5 Nm
bolt (8)	4.5 Nm
bolt (9)	6.5 Nm
nut (10)	4.5 Nm

The front wing is a structural bodywork component made of thermoplastic, and can be removed.

### REMOVAL

### I - REMOVAL PREPARATION OPERATION

### Remove:

- the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the front bumper (see Front bumper: Removal Refitting) (MR 393, 55A, Exterior protection),
- the headlight (see ) (MR 392, 80B, Headlights),
- the scuttle panel grille (see **Scuttle panel grille: Removal Refitting**) (MR 393, 56A, Exterior accessories),
- the windscreen trim piece (see **Windscreen trim: Removal Refitting**) (MR 393, 54A, Windows).

### II - OPERATION FOR REMOVAL OF PART CONCERNED



### □ Remove:

- the front wing interior soundproofing material,
- the front wing mounting bolts,

- the mounting nut (10),
- the plastic nuts (A),
- the front wing.



### REFITTING

### I - REFITTING PREPARATIONS OPERATION



□ In the event of a front wing replacement operation, provide the **Parts Department** with the details of the tyre dimensions written on the front wing (**11**).

### II - REFITTING OPERATION FOR PART CONCERNED

### Refit:

- the front wing,
- the plastic nuts (A),

### Note:

Tighten the plastic nuts (A) moderately so as not to damage them.

- Refit:
  - the front wing mounting bolts,
  - the nut (10),
  - the headlight (see ) (MR 392, 80B, Headlights).
- Adjust the shut lines of the front wing. (see 42A, Front upper structure, Front wing: Adjustment, page 42A-6)
- □ Torque tighten:
  - the bolt (1) (6.5 Nm),
  - the bolt (2) (6.5 Nm),
  - the bolt (3) (6.5 Nm),
  - the bolt (4) (6.5 Nm),
  - the bolt (5) (6.5 Nm),
  - the bolt (6) (4.5 Nm),
  - the **bolt (7) (4.5 Nm)**,
  - the bolt (8) (4.5 Nm),
  - the bolt (9) (6.5 Nm),
  - nut (10) (4.5 Nm).

### WARNING

The tightening order must always be observed.

□ Refit the front wing interior soundproofing material.

### **III - FINAL OPERATION.**

- Refit:
  - the windscreen trim piece (see **Windscreen trim: Removal Refitting**) (MR 393, 54A, Windows),
  - the scuttle panel grille (see **Scuttle panel grille: Removal Refitting**) (MR 393, 56A, Exterior accessories),
  - the front bumper (see Front bumper: Removal Refitting) (MR 393, 55A, Exterior protection),



- the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection).

# FRONT UPPER STRUCTURE Front wing: Adjustment



Tightening torques 灾	
bolt (A)	6.5 Nm
bolt (B)	6.5 Nm
bolts (D)	6.5 Nm
bolts (D)	4.5 Nm
bolt (E)	4.5 Nm
bolt (F)	6.5 Nm
nut (G)	4.5 Nm

### ADJUSTMENT VALUES

□ For information regarding shut line values (see Vehicle panel gaps: Adjustment value).

### ADJUSTMENT



□ Observe the adjustment sequence.



□ 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.

### I - ADJUSTMENT WITH BONNET

Note:

Adjust the front wing with bonnet during reinstallation of the front wing upper mounting support (see 42A, Front upper structure, Front wing upper mounting support: Removal - Refitting, page 42A-14).

# II - ADJUSTMENT WITH BUMPER AND FRONT DOOR

Remove:

- the front wheel arch liner (see Front wheel arch liner: Removal Refitting),
- the front bumper (see Front bumper: Removal Refitting) ,

- the front wing interior soundproofing material.

# FRONT UPPER STRUCTURE Front wing: Adjustment





112039

panel.

- Adjust the panel gaps with the front door.
- □ Torque tighten the **bolt (A) (6.5 Nm)**.

Note:

Tighten the plastic nuts moderately so as not to damage them.



Torque tighten the **bolt (B) (6.5 Nm)**.



- Adjust the panel gaps with the front door and the sill
- □ Torque tighten the **bolts (D) (6.5 Nm)**.



- Adjust the shut lines with the front bumper and the headlight.
- □ Torque tighten the **bolts (D) (4.5 Nm)**.

# FRONT UPPER STRUCTURE Front wing: Adjustment





□ Torque tighten the **bolt (E) (4.5 Nm)**.



- □ Adjust the panel gaps with the front door.
- Torque tighten:
  - the **bolt (F) (6.5 Nm)**,

- the nut (G) (4.5 Nm).

Refit:

- the front wing interior soundproofing material,
- the front bumper (see Front bumper: Removal Refitting) ,
- the front wheel arch liner (see Front wheel arch liner: Removal Refitting).



### EQUIPMENT LEVEL EAG

For standardisation purposes, the Parts Department only supplies front wings that have no holes for attaching the sill panel extender mounting.

When replacing the front wing on a vehicle fitted with sill panel extenders, it is necessary to drill holes in the front wing in order to fit the original mounting.

### Note:

Below you will find the necessary operations for making the holes for the original sill panel extender mounting on the front wing.

Two cases are detailed:

- Case no. 1: making the holes for the original sill panel extender mounting before refitting the front wing on the vehicle.
- Case no. 2: making the holes for the original sill panel extender mounting after refitting the front wing on the vehicle.

### I - COMPOSITION OF THE SPARE PART



□ For a description of the front wing (see ) (42A, Upper front structure).

- **II SPECIAL NOTES ON THE CONVERSION**
- 1 Case no. 1:



- □ Drill the three Ø **5 mm** holes for the sill panel extender mounting at the following dimensions:
  - X1 = **27.5 mm**,
  - X2 = **87 mm**,
  - X3 = **7.5 mm**,
  - X4 = **7.5 mm**,
  - X5 = **53.5 mm**,
  - X6 = **70 mm**.
- 2 Case no. 2:
- Refit the front wing (see 42A, Front upper structure, Front wing: Removal Refitting, page 42A-3).
- □ Adjust the front wing (see 42A, Front upper structure, Front wing: Adjustment, page 42A-6).

# FRONT UPPER STRUCTURE Front wing: Conversion









- □ Fit the sill panel extender mounting (1) (see Sill panel extension: Removal Refitting) (56A, Exterior equipment).
- □ Check the dimension (2) = 9.5 mm between the crease line and the upper edge of the sill panel extender mounting (1).
- Tighten the nuts.



 $\hfill \label{eq:constraint}$  Drill the three  $\varnothing$  5 mm (3) holes for the sill panel extender mounting.



### 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



113012

This is a basic part, it fulfils the function of a front wing lower mounting support and it enables the front wing to be adjusted in the Y axis.

This part is bolted to the scuttle side panel.

# **42A**

### I - REFITTING OPERATION FOR PART CONCERNED

Refit:

- the front wing lower mounting support,
- the nuts (1).
- □ Torque tighten the **nuts (1) (6.5 Nm)**.

### **II - FINAL OPERATION.**

Refit:

- the front wing (see **42A**, **Front upper structure**, **Front wing: Removal Refitting**, page **42A-3**),
- the headlight (see ) (MR 392, 80B, Headlights),
- the front bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the front wheel arch liner (see **Front wheel arch liner: Removal Refitting**) (MR 393, 55A, Exterior protection).



### REMOVAL

### I - REMOVAL PREPARATION OPERATION

### Remove:

- the front wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the front bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the headlight (see ) (MR 392, 80B, Headlights),
- the front wing (see **42A**, **Front upper structure**, **Front wing: Removal Refitting**, page **42A-3**).

# II - OPERATION FOR REMOVAL OF PART CONCERNED



Remove:

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



### 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



This is a basic part, it fulfils the function of front wing upper mounting support and it enables the front wing to be adjusted in the X and Y axes.



Tightening torques $\bigtriangledown$	
front panel indexing bolts (3)	21 Nm
front wing upper mount- ing support bolts (1)	8 Nm
nuts (2) of the front panel mounting	21 Nm

### REMOVAL

### I - REMOVAL PREPARATION OPERATION

- Remove:
  - the front wheel arch liner, front section (see Front wheel arch liner: Removal Refitting),
  - (see Front bumper: Removal Refitting),
  - the front headlights (see ) ,
  - the front impact cross member (see 41A, Front lower structure, Front impact cross member: Removal - Refitting, page 41A-2).
  - Remove the front wing (see **42A**, **Front upper structure**, **Front wing: Removal Refitting**, page **42A-3**).

### II - OPERATION FOR REMOVAL OF PART CONCERNED



Remove:

- the bolts (1),
- the mounting nuts (2) from each side of the front end panel (see 42A, Front upper structure, Front end panel: Removal - Refitting, page 42A-18).



112065

- □ Partly remove the front end panel.
- □ Remove the indexing bolts (3) from the front end panel.





- □ Cut out the expanding insert (4).
- □ Remove the front wing upper mounting support.

### REFITTING

### I - REFITTING PREPARATIONS OPERATION



- □ Fit the new expanding insert (5) on the upper mounting support of the front wing.
- Put a preformed mastic bead on the expanding insert.

### II - REFITTING OPERATION FOR PART CONCERNED

Refit:

- the front wing upper mounting support,
- the bolts (1),
- the indexing bolts (3).
- Desition the front wing on its bracket.
- Adjust the shut lines of the front wing. (see 42A, Front upper structure, Front wing: Adjustment, page 42A-6)
- Torque tighten the front panel indexing bolts (3) (21 Nm).
- **Remove the front wing.**
- Torque tighten the front wing upper mounting support bolts (1) (8 Nm).



- □ Place an (6) MJP type seal at the expanding insert.
- Refit:
  - the front end panel,
  - the front panel mounting nuts (2).
- Torque tighten the nuts (2) of the front panel mounting (21 Nm).

### **III - FINAL OPERATION.**

### Refit:

- the front wing (see **42A**, **Front upper structure**, **Front wing: Removal - Refitting**, page **42A-3**),

## Front wing upper mounting support: Removal - Refitting



- the front impact cross member (see 41A, Front lower structure, Front impact cross member: Removal - Refitting, page 41A-2).
- the front headlights (see ) ,
- the front bumper (see Front bumper: Removal Refitting) ,
- the front wheel arch liner, front section (see Front wheel arch liner: Removal Refitting).



**DESIGN OF THE STRUCTURAL COMPONENT** 

### 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.

# <image><image>



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.



Tightening	torques	$\heartsuit$
------------	---------	--------------

nuts (7) of the front panel mounting

21 Nm

### REMOVAL

### I - REMOVAL PREPARATION OPERATION

- Remove:
  - the front wheel arch liner, front section (see Front wheel arch liner: Removal Refitting),
  - the front bumper (see Front bumper: Removal Refitting) ,
  - the front headlights (see ) ,
  - the front impact cross member (see 41A, Front lower structure, Front impact cross member: Removal - Refitting, page 41A-2).



□ Remove:

- the bonnet catch (1) (see Bonnet lock: Removal
  Refitting) ,
- the buzzer (2) (see Audible warning: Removal Refitting),
- the clip (3) from the expansion bottle.
- Extract the expansion bottle from the front end panel.
- □ Unclip the wiring harness from the front end panel.
- □ Remove (depending on equipment level):
  - the air inlet nozzle (4),
  - the intercooler cover  $(\mathbf{5})$  .

### II - OPERATION FOR REMOVAL OF PART CONCERNED



### J \_\_\_\_

Note:

To maintain the adjustment of the front end panel, hold the indexing bolts (6) in position with a **5 mm** spanner while loosening the nuts.



- Remove:
  - the mounting nuts (7),
  - the front end panel.



### REFITTING

### I - REFITTING OPERATION FOR PART CONCERNED

- Refit:
  - the front end panel,
  - the mounting nuts (7).
- □ Torque tighten the nuts (7) of the front panel mounting (21 Nm).

### **II - FINAL OPERATION.**

- □ Refit (depending on equipment level):
  - the intercooler cover (5),
  - the air inlet nozzle (4).
- □ Insert the expansion bottle into the front end panel.

### Refit:

- the clip (3) to the expansion bottle,
- the wiring harness,
- the buzzer (2) (see Audible warning: Removal Refitting) ,
- the bonnet catch *(1)* (see **Bonnet lock: Removal Refitting**),
- the front impact cross member (see 41A, Front lower structure, Front impact cross member: Removal - Refitting, page 41A-2),
- the front headlights (see ),
- the front bumper (see Front bumper: Removal Refitting),
- the front wheel arch liner, front section (see Front wheel arch liner: Removal Refitting).



### 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



112703

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

- scuttle side panel,
- A-pillar lining.

# II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



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

This operation allows you to access the inside of the hollow 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 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





Line (5) on the diagram shows partial replacement and a weld by joggling with plug welds at regular intervals.

Depending on the exact position of the cut, EGW butt welding may also be used.

# FRONT UPPER STRUCTURE Scuttle side panel: Description





112703

The options for replacing this part are as follows:

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

### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thickness (mm)
(1)	A-pillar lining	HLE	0.85
(2)	Dashboard cross member mounting unit	HLE	2
(3)	A-pillar lining connecting bracket	Very high yield strength	2
(4)	A-pillar upper reinforcement	HLE	2
(5)	A-pillar lower reinforcement	Very high yield strength	2.5
(6)	A-pillar lining reinforcement	HLE	1.5

### **II - PART FITTED**

### 1 - Partial replacement of the front end section





### 2 - Partial replacement of the front section



This cut gives access to the front wheel arch.



### 3 - Complete replacement

### IMPORTANT

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 properties.

# III - POSITIONING OF LOCAL ELECTRICAL EARTHS



### IMPORTANT

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

The earth of the welding machine must be placed as close as possible to the weld area.

### WARNING

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

# FRONT UPPER STRUCTURE

### Upper reinforcement of scuttle side panel: 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



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

# FRONT UPPER STRUCTURE Upper reinforcement of scuttle side panel: Description





112704

There is only one way of replacing this part:

- complete replacement.

### WARNING

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

### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thickness (mm)
(1)	Scuttle side panel rein- forcement	-	1
(2)	Front end panel mounting reinforcement	HLE	1.4

### **II - PART FITTED**



### IMPORTANT

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 properties.



# III - POSITIONING OF LOCAL ELECTRICAL EARTHS



112244

### IMPORTANT

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

The earth of the welding machine must be placed as close as possible to the weld area.

# FRONT UPPER STRUCTURE Front wheel arch: General description



### 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**

### Left side



This is a basic part; it serves only as the front wheel arch.

### **Right-hand side**



110634

Two wheel arches are available, depending on the vehicle engine type:

- with windscreen wiper mechanism mounting (1),

- with engine tie-rod attachment.

# FRONT UPPER STRUCTURE Front wheel arch: Description



### Front left-hand wheel arch



### Front right-hand wheel arch



112706

There is only one way of replacing this part:

- complete replacement.

When replacing this part, also order:

- the heater bulkhead reinforcement  $(\boldsymbol{A})$  .

### IMPORTANT

The straightening bench must be used.

I - COMPOSITION OF THE SPARE PART

### Front left-hand wheel arch



No.	Description	Туре	Thickness (mm)
(1)	Shock absorber cup	HLE	2
(2)	Cup height adjuster	-	1.2

### Front right-hand low torque wheel arch





No.	Description	Туре	Thickness (mm)
(3)	Windscreen wiper mount- ing	HLE	2

### Front right-hand high torque wheel arch



No.	Description	Туре	Thickness (mm)
(4)	Engine tie-rod attachment	HLE	2

### **II - PART FITTED**



### WARNING

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

# III - POSITIONING OF LOCAL ELECTRICAL EARTHS



# FRONT UPPER STRUCTURE Front wheel arch: Description











### IMPORTANT

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

The welding machine earth must be placed as close as possible to the weld zone.

Т



Special tooling required	
Car. 1765	Bolt for repositioning the play compensation bushes of the dashboard cross member

Tightening torques $\heartsuit$		
centring device (8)	8 Nm	
side mounting bolt (6)	21 Nm	
mounting bolts (7)	21 Nm	
mounting bolts (4)	8 Nm	
mounting bolts (2)	21 Nm	

### Note:

In the event of a front impact with triggering of airbags, check the area of connection between both diameters of the beam. If there is any damage visible to the naked eye, this part must be replaced.

### REMOVAL

### I - REMOVAL PREPARATION OPERATION

- Remove:
  - the front doors (see 47A, Side opening elements, Front side door: Removal - Refitting, page 47A-1),
  - the dashboard (see **Dashboard: Removal Refitting**) (MR 393, 57A, Interior equipment),
  - the steering column (see **Steering column: Removal - Refitting**), partially (MR 392, 36A, Steering assembly).

### II - OPERATION FOR REMOVAL OF PART CONCERNED



Unclip:

- the wiring harness,
- the air ducts (1) from both sides of the vehicle.



□ Remove:

- the reinforcement mounting bolts  $({\bf 2})$  ,
- the reinforcement  $({\bf 3})$  .





Remove the dashboard cross member mounting bolts (4).



 $\hfill\square$  Remove the blanking cover (5) .



- Remove:
  - the side mounting bolt  $({\bf 6})$  ,
  - the mounting bolts  $({\bf 7})$  .
- □ Loosen the centring device (8) in order to align the holes in the A-pillar lining with the dashboard cross member lock nuts.





- □ Fit the (Car. 1765) as far as the stop (9).
- □ Screw the rod (10) onto the tool body (9) as far as the stop.
- Firmly lock tool body in the same way as a lock nut against the dashboard cross member nut while holding the hexagon bolt.



Unscrew the whole tool as far as the stop and tighten it gently (during this operation, the beam nut, which has a left-hand thread, screws into the beam and disengages it from the A-pillar).



- 112408
- □ Hold the tool body (9) and unlock the rod (10).
- Unscrew dashboard cross member rod to remove the tool.
- □ Remove:
  - the mounting bolt **(6)** from the other side of the vehicle,
  - the dashboard cross member.

### Note:

To maintain the adjustment of the dashboard cross member and therefore make refitting easier, only loosen the lock nut on one side.

### REFITTING

### I - REFITTING OPERATION FOR PART CONCERNED

- Fully tighten the locking nut (left-hand thread) in the beam.
- Refit:
  - the dashboard cross member,
  - the mounting bolts (7) to position the cross member,
  - the side mounting bolt (6) on the side where the lock nut has not been adjusted.





□ Fit the (Car. 1765) as far as the stop.

- □ Screw the rod (10) onto the body (9) as far as the stop.
- Firmly lock tool body in the same way as a lock nut against the dashboard cross member nut while holding the hexagon bolt.



□ Screw the entire tool as far as the stop and then tighten gently.



112408

- □ Hold the tool body (9) and unlock the rod (10).
- Unscrew dashboard cross member rod to remove the tool.
- □ Torque tighten the centring device (8) (8 Nm).
- Refit:
  - the side mounting bolt (6),
  - the mounting bolts (4).
- □ Torque tighten:
  - the side mounting bolt (6) (21 Nm),
  - the mounting bolts (7) (21 Nm),
  - the mounting bolts (4) (8 Nm).
- Refit:
  - the reinforcement (3),
  - the mounting bolts (2).
- □ Torque tighten the mounting bolts (2) (21 Nm).
- Clip on:
  - the air duct (1) on both sides of the vehicle,
  - the wiring harness.

### **II - FINAL OPERATION**

- Refit:
  - the steering column (see Steering column: Removal Refitting) (MR 392, 36A, Steering assembly),
  - the dashboard (see **Dashboard: Removal Refitting**) (MR 393, 57A, Interior equipment),


- the front doors (see 47A, Side opening elements, Front side door: Removal - Refitting, page 47A-1).

## FRONT UPPER STRUCTURE

Windscreen aperture lower cross member closure panel: General description



### 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



113264

This is a basic part; it only fulfils the function of the windscreen aperture lower cross member closure panel.

## FRONT UPPER STRUCTURE

## Windscreen aperture lower cross member closure panel: Description

**42A** 

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

### I - COMPOSITION OF THE SPARE PART



113264

No.	Description	Туре	Thickness (mm)
(1)	Windscreen aperture lower cross mem- ber closure panel	-	0.7

#### **II - PART IN POSITION**



### (X1) = 50 mm

Preserve the windscreen aperture lower cross member when the cut is made.

## WARNING

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

## III - POSITIONING OF LOCAL ELECTRICAL EARTHS



112251

## FRONT UPPER STRUCTURE

## Windscreen aperture lower cross member closure panel: Description



## IMPORTANT

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

The welding machine earth must be placed as close as possible to the weld zone.



## WARNING

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



This is a basic part; it simply fulfils the function of a bulkhead cross member.

## 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.

## FRONT UPPER STRUCTURE Bulkhead side reinforcement: General description



### 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



110084

This is a basic part, it simply fulfils the function of bulkhead side reinforcement.

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**).



#### 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**.



113240

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 **A-pillar: Description**



#### C85 or S85



113240

#### **I - COMPOSITION OF THE SPARE PART**



No.	Description	Туре	Thickness (mm)
(1)	Body side	-	0.75

No.	Description	Туре	Thickness (mm)
(2)	Jacking point bridge piece	Very high yield strength	2
(3)	Roof bar mounting pad	HLE	1.5

#### IMPORTANT

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 properties.

#### 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.

#### **II - PART IN POSITION**

### 1 - Replacing the lower section of the A-pillar

#### WARNING

The position of this cut must be observed, and is determined according to the position of the internal reinforcements or acoustic inserts cut.

## SIDE UPPER STRUCTURE A-pillar: Description

**43A** 

## C85 or S85



## (X1) = 70 mm

Cut  $(\mathbf{B})$  in front of the jacking point.

### Cut A



113021

## Cut B



## 2 - A-pillar replacement



(X2) = 180 mm

## WARNING

The position of this cut must be observed, and is determined according to the position of the internal reinforcements or acoustic inserts cut.

## SIDE UPPER STRUCTURE **A-pillar: Description**



## C85 or S85



## 3 - Complete replacement



Cut D



## Cut E





### 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



112718

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

## 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 A-pillar reinforcement: Description





112718

To replace this part, order the expanding insert  $({\boldsymbol{\mathsf{A}}})$  .

There is only one way of replacing this part:

- complete replacement.

#### IMPORTANT

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 properties.

## I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thickness (mm)
(1)	A-pillar rein- forcement	HLE	1.2
(2)	Upper hinge reinforcement	HLE	2
(3)	Lower hinge mounting pad	Very high yield strength	2.5
(4)	Lower hinge reinforcement	HLE	1.5

#### **II - PART FITTED**



### 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.



### 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



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**).





To replace this part, also order the B-pillar insert  $(\mathbf{A})$  .

There is only one way of replacing this part:

- Complete replacement: this operation complements the replacement of the roof, the roof panel and the front roof drip moulding reinforcement.



To replace this part, also order the B-pillar insert  $(\mathbf{A})$  .

The options for replacing this part are as follows:

- partial replacement: this operation is linked to the complete replacement of the B-pillar reinforcement,
- Complete replacement: this operation complements the replacement of the roof, the roof panel and the front roof drip moulding reinforcement.



### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thickness (mm)
(1)	A-pillar lining	HLE	1.4
(2)	Airbag deflec- tor	-	1.2

C85 or S85

No.	Description	Туре	Thickness (mm)
(3)	A-pillar lining	HLE	1.4
(4)	Airbag deflec- tor	-	1.2



#### **II - PART FITTED**

## 1 - Partial replacement

C85 or S85



### Note:

The replacement operation presents no particular difficulties.

2 - Complete replacement

## B85 or K85



C85 or S85





## 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 B-pillar: General description



## 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



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

## SIDE UPPER STRUCTURE B-pillar: General description



B85 or K85

# II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



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



B85 or K85



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

Weld (6) 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.



### 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

#### B85 or K85



This is a basic part, its only function is that of a B-pillar reinforcement.

C85 or S85



<sup>112860</sup> 

The distinctive feature of this part is that it combines three functions:

- B-pillar reinforcement,
- rear roof drip moulding reinforcement,
- quarter panel reinforcement.

No cut is permitted on this part.

#### **II - AREA TO BE CUT FOR PARTIAL** REPLACEMENT

#### **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 UPPER STRUCTURE B-pillar reinforcement: General description





Line (2) on the drawing shows a butt weld by continuous EGW welding.





To replace this part, order the expanding insert (B).

There is only one way of replacing this part:

- Complete replacement: this operation requires the partial removal of the quarter panel lining (see **Quarter panel lining: Description**) and the windscreen Apillar lining (see **43A**, **Side upper structure**, **Windscreen pillar lining: Description**, page **43A-8**).

## I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thickness (mm)
(1)	B-pillar rein- forcement	VHEL	1.8
(2)	B-pillar upper reinforcement	VHEL	2.8
(3)	B-pillar hinge reinforcement	VHEL	2
(4)	Adjustment pad	HLE	2.5

## SIDE UPPER STRUCTURE B-pillar reinforcement: Description



C85 or S85



112861

No.	Description	Туре	Thickness (mm)
(5)	B-pillar rein- forcement	VHEL	1.8
(6)	Quarter panel strip reinforce- ment	HLE	1.1
(7)	Side impact retention bracket rein- forcement	HLE	1.8
(8)	Rear roof drip moulding rein- forcement	HLE	1
( <b>9</b> )	B-pillar impact reinforcement	VHEL	2.1
(10)	Adjustable pad	HLE	2.5

## SIDE UPPER STRUCTURE B-pillar reinforcement: Description



### **II - PART FITTED**

### **Complete replacement**

B85 or K85



For details of body side cuts (see **43A**, **Side upper structure**, **Body side**, **front section**: **Description**, page **43A-28**).



Remove the B-pillar reinforcement from inside the vehicle.

#### 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 B-pillar reinforcement: Description



C85 or S85 112860 112860 Ŕ 113215 113215

Remove the B-pillar reinforcement from inside the vehicle.

Note:

For more detailed information on welded connections with three thicknesses, see  ${\rm MR}$  400.



B85 or K85

#### 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



112157

This is a basic part, its only function is that of the B-pillar upper lining.

## 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  $\mbox{MR 400}\).$ 

## DESIGN OF THE STRUCTURAL COMPONENT

B85 or K85



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







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

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: Description



B85









## SIDE UPPER STRUCTURE Body side: Description





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

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

Pour le détails des méthodes, (see **43A**, **Side upper structure**, **Body side**, front section: Description, page **43A-28**) et (see **44A**, **Rear upper structure**, **Rear wing panel: Description**, page **44A-3**).

Note:

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

## SIDE UPPER STRUCTURE Body side, front section: General description



B85 or K85

#### 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



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



#### B85 or K85



113244

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



No.	Description	Туре	Thickness (mm)
(1)	Body side	-	0.75
(2)	Jacking point bridge piece	Very high yield strength	2
(3)	Roof bar mounting pad	HLE	1.5

### IMPORTANT

For weld 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.

#### 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.

### **II - PART IN POSITION**

1 - Replacing the lower section of the A-pillar

#### WARNING

The position of this cut must be observed, and is determined according to the position of the internal reinforcements or acoustic inserts cut.

## SIDE UPPER STRUCTURE Body side, front section: Description



B85 or K85





Cut (C) in front of the jacking point.

### Cut B



113021



## 2 - A-pillar replacement



(X2) = 180 mm.

## WARNING

When the cuts are made, keep the inner reinforcement in close proximity to the part to be cut.

## SIDE UPPER STRUCTURE Body side, front section: Description



## B85 or K85





This method of replacement involves replacing the Bpillar reinforcement without removing the roof.










# SIDE UPPER STRUCTURE Body side, front section: Description



# B85 or K85



113018

## 4 - Replacing the complete B-pillar

This method of replacement involves completely replacing the B-pillar reinforcement.



#### Cut H



# Cut I



# SIDE UPPER STRUCTURE Body side, front section: Description



B85 or K85

# 5 - Complete replacement





## 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



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

# II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



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: General description





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

Weld (6) along the butt weld line.





There is only one way of replacing this part:

- complete replacement.

Note:

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

## I - COMPOSITION OF THE SPARE PART

# B85 or K85



No.	Description	Туре	Thickness (mm)
(1)	Upper body	-	0.75
(2)	Roof bar mounting pad	HLE	1.5





No.	Description	Туре	Thickness (mm)
(3)	Upper body	-	0.75
(4)	Roof bar mounting pad	HLE	1.5

Note:

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

## **II - PART FITTED**

B85 or K85















C85 or S85



# Cut E







## 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.

## DESIGN OF THE STRUCTURAL COMPONENT

Note:

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



This is a basic part, its only function is that of the B-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 Side roof rail lining: Description



## B85 or K85



There is only one way of replacing this part:

- Complete replacement: this operation requires the replacement of the roof and the rear wing panel.

## I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thickness (mm)
(1)	Rear roof drip moulding lin- ing	-	0.95
(2)	Rear airbag deflector	-	0.95

#### **II - PART IN POSITION**



# IMPORTANT

For weld 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.

# SIDE UPPER STRUCTURE Front jacking point: General description



# 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



The special feature of this part is that it combines the functions of front and rear jacking point.



## 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



This part has three special features:

- it is welded under the roof,
- it is butt welded on the body side front section.
- it is supplementary to the body side front section for a complete body side replacement.

# II - AREA TO BE CUT FOR PARTIAL REPLACEMENT

# B85



Lines (1) and (2) in the drawing show the areas in which it is possible to carry out a partial replacement.

C85





Lines (3), (4) and (5) in the drawing show the areas in which it is possible to carry out a partial replacement.

# 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**).



Lines (7) in the diagram show butt welding by continuous EGW welding.





To replace this part, order expanding inserts  $({\bf A})$  ,  $({\bf B})$  and  $({\bf C})$  .

The options for replacing this part are as follows:

- partial replacement: this operation will allow you to retain the sill panel anti-gravel protection,
- Complete replacement: this operation requires the removal of the roof.

C85 or S85



To replace this part, order:

- expanding inserts  $(\mathbf{D})$  and  $(\mathbf{E})$ ,
- a roof bar mounting pad  $({\bf F})$  .

The options for replacing this part are as follows:

- partial replacement,
- Complete replacement: this operation requires the removal of the roof.





126784

Pour effectuer le remplacement de cette pièce, commander en supplément l'insert de custode avant, l'insert de custode arrière et l'insert de custode intérieur (see 40A, General information, Hollow section inserts: List and location of components, page 40A-**16**).

The options for replacing this part are as follows:

- partial replacement,
- complete replacement.

## Note:

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

#### I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thickness (mm)
(1)	Rear wing panel	-	0.75
(2)	Rear door striker plate reinforcement	-	1.5
(3)	Adjustable pad	HLE	2.5





No.	Description	Туре	Thick- ness (mm)
(4)	Rear wing panel	-	0.75
(5)	Roof bar mount- ing pad	HLE	1.5
(6)	Jacking point bridge piece	VHEL	2

K85



No.	Description	Туре	Thick- ness (mm)
(7)	Rear wing panel	Mild steel	0.75
(8)	Renfort gache de porte	Mild steel	1.5
(9)	Adjustable pad	HLE	2.5

#### 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**).



## **II - PART IN POSITION**

## 1 - Partial replacement



## (X1) = 200 mm

#### Note:

the position of the cut must be observed (H); it makes it possible to prevent damage to expanding insert (A) when the rear wing panel is refitted.

#### Section G



Section H







## Note:

avant le remplacement de l'aile arrière, coller une **PLAQUE INSONORISANTE** sur le panneau d'aile arrière.







Section K







# <image><image>

Section N

Section M









# 2 - Complete replacement



#### Section O



#### Section P



C85 or S85





#### Section Q



113255

# K85



Section R



126719

# 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 a detailed description of the welded connections, 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



109126

The special feature of this part is that it is made up of two components:

- the rear wing panel rain channel (1),
- the rear lights support (2) .

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 UPPER STRUCTURE Rear wing panel rain channel: Description



K85



126789

The options for replacing this part are as follows:

- complete replacement.

# I - COMPOSITION OF THE SPARE PART



No.	Description	Туре	Thick- ness (mm)
(1)	Gouttière latérale supérieure arrière	Mild steel	0.95
(2)	Upper side height adjuster closure panel	Mild steel	0.95
(3)	Strut mounting reinforcement	Mild steel	2

# **II - PART IN POSITION**



#### -

# 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 detailed information about a specific connecting piece see:

(MR 400, 40A, General information).

## DESIGN OF THE STRUCTURAL COMPONENT



The balancer ball joint (1) is distinctive in that it is sold welded onto the light mounting.



## 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



This is a basic part; its only function is that of a rear lights mounting.

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 Rear lights mounting: Description





110

## B85 or C85 or S85

The options for replacing this part are as follows:

- partial replacement at natural connections this operation requires the replacement of the rear end panel,
- Complete replacement: this operation requires the replacement of the rear wing panel.

## K85

There is only one way of replacing this part:

- Complete replacement: this operation requires the replacement of the rear wing panel.

#### I - COMPOSITION OF THE SPARE PART





No.	Description	Туре	Thick- ness (mm)
(2)	Rear light mount- ing	-	0.85
(3)	Upper side rain channel	-	0.95
(4)	Absorber sup- port plate	VHEL	2
(5)	Strut mounting reinforcement	-	2

K85

No.	Description	Туре	Thick- ness (mm)
(1)	Rear light mount- ing	Mild steel	0.85



## **II - PART IN POSITION**

1 - Partial replacement at natural connections

B85 or C85 or S85



112525

- 2 Complete replacement
- B85 or C85 or S85



112524





# REAR UPPER STRUCTURE Rear lights mounting: 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**).

# REAR UPPER STRUCTURE Light mounting lining: Description







No.	Description	Туре	Thick- ness (in mm)
(1)	Lights support lining	-	0.85
(2)	Rear parcel shelf mounting bridge piece	-	1

# K85



No.	Description	Туре	Thick- ness (mm)
(3)	Lights support lining	Mild steel	0.85
(4)	Absorber sup- port plate	UHLE	2

# 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**).

## **II - PART IN POSITION**

## 1 - Partial replacement

B85 or C85 or S85

## Left side



# REAR UPPER STRUCTURE Light mounting lining: Description



# **Right-hand side**



113211

# 2 - Complete replacement

# B85 or C85 or S85



K85







# III - POSITIONING OF LOCAL ELECTRICAL EARTHS



# 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**).





# REAR UPPER STRUCTURE Outer rear wheel arch: General description



B85 or C85

#### 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



The special feature of this part is its extension from the quarter panel lining to create the external rear wheel arch.

# II - AREA TO BE CUT FOR PARTIAL REPLACEMENT



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

# 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**).

# REAR UPPER STRUCTURE Outer rear wheel arch: General description



B85 or C85



Line (2) on the diagram shows partial replacement and a weld by joggling with plug welds at regular intervals.

# REAR UPPER STRUCTURE Outer rear wheel arch: Description



B85 or C85 or K85 or S85, and EQUIPMENT LEVEL E3 LEISURE or EQUIPMENT LEVEL EA1 or EQUIPMENT LEVEL EA2 or EQUIPMENT LEVEL EA3 or EQUIPMENT LEVEL EA4 or EQUIPMENT LEVEL EA5 or EQUIPMENT LEVEL EAG



There is only one way of replacing this part:

- partial replacement.

C85 or S85



There is only one way of replacing this part:

- partial replacement.

## K85



The options for replacing this part are as follows:

- partial replacement,
- complete replacement.

Note:

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

## I - COMPOSITION OF THE SPARE PART

No.	Description	Туре	Thick- ness (mm)
(1)	Quarter panel lin- ing	Mild steel	0.65

# REAR UPPER STRUCTURE Outer rear wheel arch: Description



B85 or C85 or K85 or S85, and EQUIPMENT LEVEL E3 LEISURE or EQUIPMENT LEVEL EA1 or EQUIPMENT LEVEL EA2 or EQUIPMENT LEVEL EA3 or EQUIPMENT LEVEL EA4 or EQUIPMENT LEVEL EA5 or EQUIPMENT LEVEL EAG

#### **II - PART IN POSITION**

## 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**).

#### 1 - Partial replacement

# B85



## (X1) = 15 mm

Make the cut from inside the wheel arch so as not to damage the reinforcement nearby.



## *(X1)* = 15 mm

Make the cut from inside the wheel arch so as not to damage the reinforcement nearby.

## K85




B85 or C85 or K85 or S85, and EQUIPMENT LEVEL E3 LEISURE or EQUIPMENT LEVEL EA1 or EQUIPMENT LEVEL EA2 or EQUIPMENT LEVEL EA3 or EQUIPMENT LEVEL EA4 or EQUIPMENT LEVEL EA5 or EQUIPMENT LEVEL EAG

P = pitch

D = distance covered

#### 2 - Complete replacement

K85



126727

# III - POSITIONING OF LOCAL ELECTRICAL EARTHS

B85 or C85 or S85





B85 or C85 or K85 or S85, and EQUIPMENT LEVEL E3 LEISURE or EQUIPMENT LEVEL EA1 or EQUIPMENT LEVEL EA2 or EQUIPMENT LEVEL EA3 or EQUIPMENT LEVEL EA4 or EQUIPMENT LEVEL EA5 or EQUIPMENT LEVEL EAG



126698

#### 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**).



### C85, and EQUIPMENT LEVEL EAC or EQUIPMENT LEVEL SPORT

### **I - COMPOSITION OF THE SPARE PART**



116927

No.	Description	Туре	Thickness (mm)
(1)	Outer rear wheelarch	Mild steel	0.65

### **II - PART FITTED**



#### 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.

#### Special notes on the outer rear wheel arch

When replacing this component, the Spare Parts Department only supplies the outer rear wheel arch liners without studs for mounting the rear wheel arch liners.

It is essential to fit studs onto the spare part (see MR 400, Bodywork structure repair basics, 40A, General information, Screwed connection with welded stud: Repair) or (see MR 400, Bodywork structure repair basics, 40A, General information, Screwed connection with crimped mounting: Fitting).





### C85, and EQUIPMENT LEVEL EAC or EQUIPMENT LEVEL SPORT

#### Details of the stud (2)



#### Details of the stud (3)



#### III - POSITIONING OF LOCAL ELECTRICAL EARTHS



### IMPORTANT

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

The earth of the welding machine must be placed as close as possible to the weld area.





There is only one way of replacing this part:

- complete replacement.

## C85 or S85



The options for replacing this part are as follows:

- partial replacement: this operation complements the replacement of the B-pillar reinforcement,
- complete replacement.

#### K85

There is only one way of replacing this part:

- complete replacement.



### I - COMPOSITION OF THE SPARE PART

B85



No.	Description	Туре	Thickness (mm)
(1)	Quarter panel lin- ing	Mild steel	0.65
(2)	Side roof rail rear lining	Mild steel	0.95
(3)	Rear airbag deflector	Mild steel	0.95
(4)	Quarter panel reinforcement	Mild steel	0.7
(5)	Rear parcel shelf mounting bridge piece	Mild steel	1
(6)	Lights support lining	Mild steel	0.85

No.	Description	Туре	Thickness (mm)
(7)	Quarter panel upper section rear reinforce- ment	Mild steel	1.2
(8)	Inner rear wheel arch	HLE	0.75
(9)	Shock absorber connecting bracket	HLE	1.2
(10)	Shock absorber cup mounting	HLE	2
(11)	Rear seatback hinge mounting	HLE	1.2
(12)	Rear seatback mounting rein- forcement	Mild steel	2





No.	Description	Туре	Thickness (mm)
(1)	Quarter panel lining	Mild steel	0.65
(2)	Rear airbag deflector	Mild steel	0.95
(3)	Shoulder har- ness reinforce- ment	HLE	1.4
(4)	Quarter panel reinforcement	Mild steel	0.7
(5)	Rear parcel shelf mounting bridge piece	Mild steel	1

			116181
No.	Description	Туре	Thickness (mm)
(6)	Lights support lining	Mild steel	0.85
(7)	Quarter panel upper section rear reinforce- ment	Mild steel	1.2
(8)	Inner rear wheel arch	HLE	0.75
(9)	Shock absorber connecting bracket	HLE	1.2
(10)	Shock absorber cup mounting	HLE	2



No.	Description	Туре	Thickness (mm)
(11)	Rear seatback hinge mounting	HLE	1.2
(12)	Rear seatback mounting rein- forcement	Mild steel	2

C85, and EQUIPMENT LEVEL EAC or EQUIP-MENT LEVEL SPORT



No.	Description	Туре	Thickness (mm)
(1)	Quarter panel lining	Mild steel	0.65
(2)	Rear airbag deflector	Mild steel	0.95
(3)	Shoulder har- ness reinforce- ment	HLE	1.4
(4)	Outer wheel arch	Mild steel	0.65

No.	Description	Туре	Thickness (mm)
(5)	Quarter panel upper section rear reinforce- ment	Mild steel	1.2
(6)	Rear parcel shelf mounting bridge piece	Mild steel	1
(7)	Lights support lining	Mild steel	0.85
(8)	Quarter panel reinforcement	Mild steel	0.7



No.	Description	Туре	Thickness (mm)
(9)	Inner rear wheel arch	HLE	0.75
(10)	Shock absorber cup mounting	HLE	2
(11)	Shock absorber connecting bracket	HLE	1.2
(12)	Rear seatback hinge mounting	HLE	1.2
(13)	Rear seatback mounting rein- forcement	Mild steel	2

K85			





No.	Туре	Descri ption	Thick- ness (mm)
(14)	Left-hand C-pil- lar reinforcement	Mild steel	1.2
(15)	Roof drip mould- ing lining	Mild steel	0.95
(16)	Airbag deflector	Mild steel	0.95
(17)	Luggage retainer mounting	Mild steel	1.2
(18)	Quarter panel lin- ing	Mild steel	0.6
(19)	Seat belt inertia reel anchorage reinforcement	HLE	1.5
(20)	Quarter panel rear upper rein- forcement		
(21)	Outer wheel arch	Mild steel	0.67
(22)	Seatback mount- ing reinforce- ment plate		
(23)	Outer wheel arch reinforcement	Mild steel	1
(24)	Inner wheel arch	HLE	0.75
(25)	Left-hand seat- back hinge mounting	HLE	1.5
(26)	Seatback retain- ing hook	THLE	3
(27)	Seatback mount- ing reinforcement	Mild steel	2
(28)	Shock absorber turret mounting	HLE	2
(29)	Shock absorber connecting bracket	HLE	1.2
(30)	Removable floor reinforcement	Mild steel	1

No.	Туре	Descri ption	Thick- ness (mm)
(31)	Wheel arch clo- sure panel com- ponent	Mild steel	1
(32)	Absorber sup- port plate	UHLE	2
(33)	Lights support lining	Mild steel	0.85

### **II - PART FITTED**

### 1 - Partial replacement

C85 or S85, and EQUIPMENT LEVEL E3 LEISURE or EQUIPMENT LEVEL EA1 or EQUIPMENT LEVEL EA2 or EQUIPMENT LEVEL EA3 or EQUIPMENT LEVEL EA4 or EQUIPMENT LEVEL EA5 or EQUIPMENT LEVEL EAG







### Section B



Section C



## 2 - Complete replacement

## B85





C85 or S85, and EQUIPMENT LEVEL E3 LEISURE or EQUIPMENT LEVEL EA1 or EQUIPMENT LEVEL EA2 or EQUIPMENT LEVEL EA3 or EQUIPMENT LEVEL EA4 or EQUIPMENT LEVEL EA5 or EQUIPMENT LEVEL EAG







#### **Detailed view**



### 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**.

3 - Special features of the body side rear lining

C85, and EQUIPMENT LEVEL EAC or EQUIP-MENT LEVEL SPORT

When replacing this component, the **Parts Department** only supplies the body side rear lining without studs for mounting the rear wheel arch liners.



It is essential to fit studs onto the spare part (see **MR 400**).



### Details of the stud (14)







#### 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



This part is of an elementary type, and serves only as the rear end 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**).

# **REAR UPPER STRUCTURE Rear end panel: Description**





112603

There is only one way of replacing this part:

- complete replacement.

### I - COMPOSITION OF THE SPARE PART

## B85 or C85 or S85

No.	Description	Туре	Thick- ness (mm)
(1)	Rear end panel	HLE	0.85

K85

No.	Description	Туре	Thick- ness (mm)
(1)	Rear end panel	HLE	0.95

### **II - PART FITTED**

B85 or C85 or S85



K85





### 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 detailed information about a specific connecting piece see:

(MR 400, 40A, General information).

### DESIGN OF THE STRUCTURAL COMPONENT



The special feature of this part is that it combines the functions of rear end panel lining and rear end panel closure.

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 Rear end panel lining: Description





# REAR UPPER STRUCTURE Rear end panel lining: Description





No.	Description	Туре	Thickness (mm)
(3)	Rearend panel lining	Mild steel	0.85
(4)	Tailgate striker plate stiffener	HLE	1.2

### **II - PART FITTED**

B85 or C85 or S85



## K85

I



## REAR UPPER STRUCTURE Rear end panel lining: 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**).



#### 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



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

The roof is welded onto the body sides.

There are also models with a space for a sunroof.

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**).

# TOP OF BODY Roof: Description







112147 112147



# TOP OF BODY Roof: Description





No.	Description	Туре	Thick- ness (mm)
(2)	Normal roof	Mild steel	0.75
(3)	Roof bar mount- ing reinforcement	HLE	1.5

B85 or C85 or S85, and PANORAMIC SUNROOF



No.	Description	Туре	Thick- ness (mm)
(4)	Roof with sunroof	-	0.7
(5)	Sunroof rein- forcement rails	-	1





126741

No.	Description	Туре	Thick- ness (mm)
(6)	Roof with sunroof	Mild steel	0.75
(7)	Roof reinforce- ment rail	Mild steel	1
(8)	Water drain pipe	Mild steel	1
(9)	Roof bar mount- ing reinforcement	HLE	1.5

#### **II - PART FITTED**

### B85, and NORMAL ROOF



112683

### **Rear section**



# TOP OF BODY Roof: Description





# K85, and NORMAL ROOF



126738



112854

### Note:

The roof is sold with a tab on each side to prevent it from bending during transportation.

Cut this away before fitting the roof in position

K85, and PANORAMIC SUNROOF



# TOP OF BODY Roof: Description





126742

Note:

The roof is sold with a tab on each side to prevent it from bending during transportation.

Cut this away before fitting the roof in position

### 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 procedure presents no difficulties.

#### Roof bonding area

B85 or C85 or S85, and NORMAL ROOF

#### Front side section













112688



Apply a bead (10) of STRUCTURAL ADHESIVE to each side of the vehicle before refitting the roof (see ) (04B, Consumables - Products).

# TOP OF BODY Roof: Description





After applying the adhesive to the vehicle, fit the roof, then fit the tailgate hinges to keep the roof in place.

Note:

For a detailed description of a particular connection, 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.

### DESIGN OF THE STRUCTURAL COMPONENT

Note:

For a detailed description of a particular connection, see  $\ensuremath{\text{MR}}$  400.



This is a basic part; its only function is that of a roof front cross member and roof stiffener by means of a cemented connection.

For other issues regarding access to mating faces, the various replacement possibilities are described in the basic instructions for structural bodywork repair (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



122769

This is a basic part, it only fulfils the function of a roof middle cross member.

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**).

# **TOP OF BODY Roof centre cross member: Description**





112723

### PANORAMIC SUNROOF



There is only one way of replacing this part:

- complete replacement.

### I - COMPOSITION OF THE SPARE PART

NORMAL ROOF

No.	Description	Туре	Thick- ness (mm)
(1)	Normal roof cen- tre cross member	VHEL	1.8

### PANORAMIC SUNROOF

No.	Description	Туре	Thick- ness (mm)
(2)	Roof centre cross member closure panel	HLE	1.5
(3)	Roof centre cross member (with sunroof)	HLE	1

#### Note:

There is no specific method for this replacement; all the joints are made in the same way as originally.

# TOP OF BODY Roof centre cross member: Description



#### **II - PART IN POSITION**

### NORMAL ROOF



### PANORAMIC SUNROOF



### 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



112721

This is a basic part; its only function is that of roof rear cross member as well as roof stiffener by means of a cemented connection.

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

# TOP OF BODY Roof rear cross member: Description





There is only one way of replacing this part:

- complete replacement.

Note:

To replace this part, crimp a nut (1) available from the **Parts Department.** 

### **I - COMPOSITION OF THE SPARE PART**



112721

No.	Description	Туре	Thick- ness (mm)
(2)	Roof rear cross member	HLE	0.95

#### **II - PART IN POSITION**

B85 or C85 or S85



112689






Note:

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

Note:

There is no specific method for this replacement; all the joints are made in the same way as originally.



Tightening torques $\bigtriangledown$	
door mounting nuts	21 Nm
hinge mounting bolts	21 Nm

### I - REMOVAL WITHOUT HINGES

### **1 - REMOVAL PREPARATION OPERATION**

Disconnect the door wiring harness supply connector.

#### 2 - OPERATION FOR REMOVAL OF PART CONCERNED



Remove:

- the door mounting nuts  $\left( 1\right)$  ,
- the door.

## **II - REFITTING WITHOUT HINGES**

### 1 - OPERATION FOR REFITTING PART CONCERNED

- Refit:
  - the door,
  - the door mounting nuts (1).
- Adjust the door clearances and shut lines (see 47A, Side opening elements, Front side door: Adjustment, page 47A-3).

Torque tighten the door mounting nuts (21 Nm).

### 2 - FINAL OPERATION

□ Connect the wiring harness 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-3).
- Disconnect the door wiring harness supply connector.

#### 2 - OPERATION FOR REMOVAL OF PART CONCERNED



#### Remove:

- the hinge mounting bolts (2),
- the door.

### **IV - REFITTING WITH HINGES**

#### 1 - OPERATION FOR REFITTING PART CONCERNED

- Refit:
  - the door,
  - the hinge mounting bolts (2).



- Adjust the door clearances and shut lines (see 47A, Side opening elements, Front side door: Adjustment, page 47A-3).
- □ Torque tighten the **hinge mounting bolts (21 Nm)**.

### **2 - FINAL OPERATION**

- □ Connect the wiring harness supply connector.
- Refit the front wing (see 42A, Front upper structure, Front wing: Removal Refitting, page 42A-3).



Tightening torques $igodot$	
guide pins on the door box section	13 Nm
indexing bolt on the door box section	13 Nm
door box section nuts	21 Nm
hinge bolts on the A-pil- lar	21 Nm

## **ADJUSTMENT VALUES**

 For information on the front side door adjustment values (see Vehicle panel gaps: Adjustment value) (01C, Vehicle bodywork specifications).

## ADJUSTMENT

- □ There are two options for adjusting the door:
  - by means of the mountings on the door box section (opening clearance adjustment),
  - by means of the mountings on the A-pillar (shut line adjustment): the front wing needs to be removed for this operation.

B85 or K85

#### 5-door version



□ Observe the adjustment sequence.

# SIDE OPENING ELEMENTS Front side door: Adjustment



## C85 or S85

## 3-door version



□ Observe the adjustment sequence.



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.



# I - ADJUSTMENT OF OPENING CLEARANCES WITH THE FRONT WING AND THE REAR DOOR



- $\hfill\square$  Remove the door box section nuts (6) .
- $\hfill\square$  Undo the guide pins and the indexing bolt (7) .



- Adjust the opening clearance with the front wing and the rear door.
- □ Tighten to torque:
  - the guide pins on the door box section (13 Nm),
  - the indexing bolt on the door box section (13 Nm).
- □ Refit the door box section nuts (6).
- Torque tighten the door box section nuts (21 Nm).



#### **II - REAR DOOR SHUT LINE ADJUSTMENT**



- Remove the front wing (see 42A, Front upper structure, Front wing: Removal - Refitting, page 42A-3).
- □ Undo the door hinge bolts (8) on the A-pillar.



- □ Adjust the panel gaps with the rear door.
- □ Torque tighten the **hinge bolts on the A-pillar (21 Nm)**.
- Refit the front wing (see 42A, Front upper structure, Front wing: Removal Refitting, page 42A-3).



The order of the operations described below applies specifically to replacing the door.

#### Note:

It is possible to carry out the stripping operations on the vehicle before removing the door.

## STRIPPING

Remove:

- the door trim (see Front side door trim: Removal
  Refitting) ,
- (see Door sealing film: Removal Refitting),
- the door mirror (see **Door mirror: Removal Re-fitting**),
- the glass run channel (see Front side door window run channel: Removal - Refitting),
- the sliding window (see Front side door sliding window: Removal Refitting),
- the window lift mechanism (see Front side door electric window mechanism: Removal - Refitting) or (see Rear side door manual window winder mechanism: Removal - Refitting),
- the exterior handle (see Exterior door handle: Removal Refitting),
- the door lock (see Front side door lock: Removal Refitting) .
- the wiring harness,
- the door exterior protection strip (see Front side door protective strip: Removal - Refitting) ,
- the front door impact padding (see ) .

## REBUILDING

- □ Fit the decorative side strip (see Side decorative strips: Removal Refitting).
- Refit:
  - the front door impact padding (see ) ,
  - the wiring harness,
  - the door lock (see Front side door lock: Removal Refitting) .
  - the exterior handle (see Exterior door handle: Removal Refitting),
  - the window lift mechanism (see Front side door electric window mechanism: Removal - Refitting) or (see Rear side door manual window winder mechanism: Removal - Refitting),

- the sliding window (see Front side door sliding window: Removal Refitting) ,
- the glass run channel (see Front side door window run channel: Removal - Refitting),
- the door mirror (see **Door mirror: Removal Re-fitting**),
- the sealing film (see **Door sealing film: Removal - Refitting**),
- the door trim (see Front side door trim: Removal Refitting),
- the door exterior protection strip (see Front side door protective strip: Removal Refitting).



Tightening torques	$\mathbf{\overline{\nabla}}$
door nuts	21 Nm
hinge nuts	21 Nm

### I - REMOVAL WITHOUT HINGES

## **1 - REMOVAL PREPARATION OPERATION**

Disconnect the front side door connector.

## 2 - OPERATION FOR REMOVAL OF PART CONCERNED



Remove:

- the door nuts (1),
- the door.

## **II - REFITTING WITHOUT HINGES**

### 1 - OPERATION FOR REFITTING PART CONCERNED

- Refit:
  - the door,
  - the door nuts (1).
- Adjust the door clearances and flush fittings (see Vehicle panel gaps: Adjustment value) (01C, Vehicle bodywork specifications).

□ Torque tighten the door nuts (21 Nm).

## 2 - FINAL OPERATION

Connect the front side door connector.

## **III - REMOVAL WITH HINGES**

## **1 - REMOVAL PREPARATION OPERATION**

- □ Remove the B-pillar lower trim (see **B-pillar trim: Removal Refitting**) (71A, Body internal trim).
- Disconnect the front side door connector.

### 2 - OPERATION FOR REMOVAL OF PART CONCERNED



- Remove:
  - the hinge nuts (2),
  - the door.

## **IV - REFITTING WITH HINGES**

#### 1 - OPERATION FOR REFITTING PART CONCERNED

- Refit:
  - the door,
  - the hinge nuts (2).
- Adjust the door clearances and flush fittings (see Vehicle panel gaps: Adjustment value) (01C, Vehicle bodywork specifications).



□ Torque tighten the **hinge nuts (21 Nm)**.

#### **2 - FINAL OPERATION**

- □ Connect the front side door connector.
- Refit the B-pillar lower trim (see B-pillar trim: Removal - Refitting) (71A, Body internal trim).

47A

### B85 or K85

Tightening torques 灾	
guide pins on the door box section	13 Nm
indexing bolt on the door box section	13 Nm
hinge nuts on the door box section	21 N.m
hinge nuts on the B-pil- lar	21 Nm

## **ADJUSTMENT VALUES**

For information on the rear side door adjustment values (see Vehicle panel gaps: Adjustment value) (01C, Vehicle bodywork specifications).

## ADJUSTMENT

- □ There are two options for adjusting the door:
  - by means of the mountings on the door box section (opening clearance adjustment),
  - by means of the mountings on the B-pillar (shut line adjustment): this operation requires the removal of the B-pillar interior trim.



□ Observe the adjustment sequence.



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.



#### I - ADJUSTMENT OF OPENING CLEARANCE WITH THE FRONT DOOR AND THE REAR WING



□ Remove the door box section nuts (3) .

 $\hfill\square$  Undo the guide pins and the indexing bolt (4) .



- Adjust the door shut lines.
- □ Tighten to torque:
  - the guide pins on the door box section (13 Nm),
  - the indexing bolt on the door box section (13 Nm).
- □ Refit the door box section nuts (3).
- □ Torque tighten the hinge nuts on the door box section (21 N.m).



# II - ADJUSTMENT OF SHUT LINES WITH THE FRONT DOOR AND THE REAR WING



- Remove the B-pillar lower trim (see B-pillar trim: Removal - Refitting) (71A, Body internal trim).
- □ Undo the hinge nuts (5) on the B-pillar.



- □ Adjust the door shut lines.
- □ Torque tighten the **hinge nuts on the B-pillar (21 Nm)**.
- Refit the B-pillar lower trim (see B-pillar trim: Removal - Refitting) (71A, Body internal trim).



The order of the operations described below applies specifically to replacing the door.

#### Note:

It is possible to carry out the stripping operations on the vehicle before removing the door.

## STRIPPING

- □ Remove:
  - the door trim (see **Rear side door trim: Removal - Refitting**) ,
  - (see Rear speakers: Removal Refitting),
  - the sealing film (see **Door sealing film: Removal - Refitting**),
  - the glass run channel (see Rear side door window run channel: Removal - Refitting),
  - the sliding window (see Rear side door sliding window: Removal Refitting),
  - the window lift mechanism (see Rear side door electric window mechanism: Removal - Refitting) or (see Rear side door manual window winder mechanism: Removal - Refitting),
  - the rear door fixed window (see **Rear side door fixed window: Removal Refitting**),
  - the exterior handle (see Exterior door handle: Removal Refitting),
  - the door lock (see Rear side door lock: Removal
    Refitting) ,
  - the wiring harness,
  - the door strip (see Rear side door protective strip: Removal Refitting).

## REBUILDING

- □ Fit the decorative side strip (see Side decorative strips: Removal Refitting).
- Refit:
  - the wiring harness,
  - the door lock (see Rear side door lock: Removal
    Refitting) ,
  - the exterior handle (see Exterior door handle: Removal Refitting),
  - the rear door fixed window (see **Rear side door fixed window: Removal Refitting**),

- the window lift mechanism (see Rear side door electric window mechanism: Removal - Refitting) or (see Rear side door manual window winder mechanism: Removal - Refitting),
- the sliding window (see Rear side door sliding window: Removal Refitting),
- the glass run channel (see Rear side door window run channel: Removal - Refitting),
- the sealing film (see **Door sealing film: Removal - Refitting**),
- the speaker (see **Rear speakers: Removal Refitting**) ,
- the door trim (see **Rear side door trim: Removal - Refitting**) ,
- the door strip (see Rear side door protective strip: Removal Refitting).



## REMOVAL

# OPERATION FOR REMOVAL OF PART CONCERNED



□ Unclip the fuel filler flap from its mounting.

## REFITTING

## **REFITTING OPERATION FOR PART CONCERNED**





Tightening torques $\bigtriangledown$	
bonnet mounting bolts	8 Nm
bonnet hinge mounting bolts	8 Nm

## I - REMOVAL BY MEANS OF THE BONNET BOLTS

### **1 - REMOVAL PREPARATION OPERATION**

□ Remove the bonnet soundproofing (see Bonnet soundproofing: Removal - Refitting).



□ Remove the bonnet jet supply pipe (1).

#### 2 - OPERATION FOR REMOVAL OF PART CONCERNED



## Remove:

- the bonnet mounting bolts (2),
- the bonnet.
- **II REFITTING BY MEANS OF THE BONNET BOLTS**

#### 1 - OPERATION FOR REFITTING PART CONCERNED

- Refit:
  - the bonnet,
  - the bonnet mounting bolts (2).
- Adjust the opening clearances and flush fitting (see 48A, Non-side opening elements, Bonnet: Adjustment, page 48A-3).
- □ Torque tighten the **bonnet mounting bolts (8 Nm)**.

#### **2 - FINAL OPERATION**

- Refit:
  - the bonnet jet supply pipe (1),
  - the bonnet soundproofing (see **Bonnet sound**proofing: Removal - Refitting).



# 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),
  - the front bumper (see Front bumper: Removal Refitting) ,
  - the headlight (see ),
  - the front wing (see **42A**, **Front upper structure**, **Front wing: Removal Refitting**, page **42A-3**),
  - the front wing upper mounting bracket (see 42A, Front upper structure, Front wing upper mounting support: Removal - Refitting, page 42A-14),
  - the bonnet soundproofing (see **Bonnet sound**proofing: Removal - Refitting),
  - the bonnet jet supply pipe (1).

# 2 - OPERATION FOR REMOVAL OF PART CONCERNED



- Remove:
  - the bonnet hinge mounting bolts (3),
  - the bonnet.

#### IV - REFITTING BY MEANS OF THE BONNET HINGE BOLTS

#### 1 - OPERATION FOR REFITTING PART CONCERNED

- Refit:
  - the bonnet,
  - the bonnet hinge mounting bolts (3).
- Adjust the opening clearances and flush fitting (see 48A, Non-side opening elements, Bonnet: Adjustment, page 48A-3).
- Torque tighten the bonnet hinge mounting bolts (8 Nm).

### 2 - FINAL OPERATION

- Refit:
  - the bonnet jet supply pipe (1),
  - the bonnet soundproofing (see **Bonnet sound**proofing: Removal - Refitting),
  - the front wing upper mounting bracket (see 42A, Front upper structure, Front wing upper mounting support: Removal - Refitting, page 42A-14),
  - the front wing (see **42A**, **Front upper structure**, **Front wing: Removal Refitting**, page **42A-3**),
  - the headlight (see ) ,
  - the front bumper (see Front bumper: Removal Refitting) ,
  - the front wheel arch liner (see Front wheel arch liner: Removal Refitting).



Tightening torques $igodot$	
bonnet mounting bolts	8 Nm
bonnet hinge mounting bolts	8 Nm
bonnet striker mounting bolts	8 Nm

## **ADJUSTMENT VALUES**

□ For all information about bonnet adjustment values (see Vehicle panel gaps: Adjustment value) .

## **ADJUSTMENT**

- □ There are two options for adjusting the bonnet:
  - by means of the bonnet mounting bolts,
  - by means of the bonnet hinge mounting bolts: this operation requires the removal of the front wing and the front wing upper mounting bracket.

The bonnet striker must be adjusted in addition to the bonnet adjustment.



□ 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.



#### I - ADJUSTMENT BY MEANS OF THE BONNET MOUNTING BOLTS



- □ Undo the bonnet mounting bolts (4).
- □ Adjust the bonnet panel gaps.
- □ Torque tighten the **bonnet mounting bolts (8 Nm)**.

#### II - ADJUSTMENT BY MEANS OF THE BONNET HINGE MOUNTING BOLTS

Remove:

- the front wing (see **42A**, **Front upper structure**, **Front wing: Removal Refitting**, page **42A-3**),
- the front wing upper mounting support (see 42A, Front upper structure, Front wing upper mounting support: Removal - Refitting, page 42A-14),
- □ Undo the bonnet hinge mounting bolts (5).
- Refit:
  - the front wing upper mounting support,
  - the front wing.
- □ Adjust the bonnet panel gaps.
- Remove:
  - the front wing,
  - the front wing mounting bracket.
- Torque tighten the bonnet hinge mounting bolts (8 Nm).
- Refit:
  - the front wing upper mounting bracket (see 42A, Front upper structure, Front wing: Removal -Refitting, page 42A-3),
  - the front wing (see 42A, Front upper structure, Front wing upper mounting support: Removal -Refitting, page 42A-14).



#### **III - BONNET STRIKER ADJUSTMENT**



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#### Note:

When adjusting the bonnet striker, it is imperative to remove the striker plate and fill in the paintwork to protect the bonnet from corrosion.

#### □ Remove:

- the bonnet striker mounting bolts (6),

- the bonnet striker.
- □ Fill in the paintwork.
- □ Refit the striker and the mounting bolts (6).
- □ Adjust the bonnet striker with the bonnet lock.
- **D** Torque tighten the **bonnet striker mounting bolts** (8 Nm).



Tightening torques 灾	
tailgate mounting bolts	10 Nm
hinge mounting nuts	21 Nm

## I - REMOVAL WITHOUT THE HINGES

#### **1 - REMOVAL PREPARATION OPERATION**

- Remove the tailgate trim (see Tailgate trim: Removal - Refitting).
- Disconnect the electrical connectors from:
  - the rear screen wiper motor,
  - the tailgate lock,
  - the heated rear screen.
- □ Remove:
  - the tailgate electrical supply harness,
  - the tailgate washer jet tube,
  - the tailgate gas struts.

### 2 - OPERATION FOR REMOVAL OF PART CONCERNED



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

**II - REFITTING WITHOUT HINGES** 

## 1 - OPERATION FOR REFITTING PART CONCERNED

- Refit:
  - the tailgate,
  - the tailgate mounting bolts (1).
- □ Torque tighten the **tailgate mounting bolts (10 Nm)**.

#### 2 - FINAL OPERATION

- Refit:
  - the tailgate gas struts,
  - the tailgate washer jet tube,
  - the tailgate electrical supply harness,
- Connect the electrical connectors to:
  - the heated rear screen,
  - the tailgate lock,
  - the rear screen wiper motor,
- Refit the tailgate trim (see Tailgate trim: Removal -Refitting).

### **III - REMOVAL WITH HINGES**

#### **1 - REMOVAL PREPARATION OPERATION**

- □ Remove the headlining (see **Headlining: Removal - Refitting**).
- Disconnect the tailgate electrical supply harness.
- Remove:
  - the tailgate washer jet tube,
  - the tailgate gas struts.



# 2 - OPERATION FOR REMOVAL OF PART CONCERNED



#### □ Remove:

- the hinge mounting nut (2) on each side of the vehicle,
- the tailgate.

### **IV - REFITTING WITH HINGES**

# 1 - OPERATION FOR REFITTING PART CONCERNED

- Refit:
  - the tailgate,
  - the hinge mounting nut (2) on each side of the vehicle.
- □ Torque tighten the **hinge mounting nuts (21 Nm)**.

## **2 - FINAL OPERATION**

- Refit:
  - the tailgate gas struts,
  - the tailgate washer jet tube.
- □ Connect the tailgate electrical feed harness.
- Refit the headlining (see Headlining: Removal -Refitting).



## ADJUSTMENT VALUES

For information on the adjustment values for the tailgate (see Vehicle panel gaps: Adjustment value) (01C, Vehicle bodywork specifications).

## ADJUSTMENT

- □ There are two options for adjusting the tailgate:
  - using the tailgate bolts,
  - using the tailgate hinge nuts: operation in addition to the removal of the headlining.



□ 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.

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# I - ADJUSTMENT BY MEANS OF THE TAILGATE MOUNTING BOLTS





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- □ Undo the bolts (6) on each side of the vehicle.
- □ Adjust the tailgate panel gaps.
- □ Tighten the bolts (6).



Undo the bolts (6) on each side of the vehicle.

□ Adjust the tailgate panel gaps.

□ Tighten the bolts (6).

# II - ADJUSTMENT BY MEANS OF THE HINGE MOUNTING NUTS

Remove the headlining (see Headlining: Removal -Refitting) (71A, Body internal trim).

# NON-SIDE OPENING ELEMENTS Tailgate: Adjustment





- □ Undo the nut (7) on each side of the vehicle.
- □ Adjust the tailgate panel gaps.
- □ Tighten the bolts (7).
- Refit the headlining (see Headlining: Removal -Refitting) (71A, Body internal trim).



Described below is a special sequence of operations for tailgate replacement.

#### Note:

It is possible to carry out the trim removal operations on the vehicle before removing the tailgate.

## STRIPPING

- □ Remove:
  - the tailgate trim (see **Tailgate trim: Removal Re-fitting**) (73A, Non-side opening elements trim),
  - the rear screen wiper arm (see **Rear screen wiper arm: Removal - Refitting**) (85A, Washing - Wiping),
  - the rear screen wiper motor (see **Rear screen wiper motor: Removal - Refitting**) (85A, Washing -Wiping),
  - the tailgate lock (see **Tailgate lock: Removal Re-fitting**) (52A, Non-side opening element mechanisms),
  - the tailgate exterior opening control (see ) (52A, Non-side opening element mechanisms).

#### B85 or C85 or S85

Remove the high level brake light (see 3rd brake light: Removal - Refitting) (81A, Rear lighting).

#### K85

- Remove:
  - the tailgate spoiler (see **Tailgate spoiler: Removal - Refitting**) (56A, Exterior equipment),
  - the tailgate strip (see **Tailgate strip: Removal - Refitting**) (55A, Exterior protection).
- Remove:
  - the rear screen (see **Rear screen: Removal Re-fitting**) (54A, Windows),
  - the tailgate wiring.

## REBUILDING

- Refit:
  - the tailgate wiring,

- the rear screen (see **Rear screen: Removal - Refitting**) (54A, Windows).

## K85

#### Refit:

- the tailgate strip (see **Tailgate strip: Removal - Refitting**) (55A, Exterior protection),
- the tailgate spoiler (see **Tailgate spoiler: Removal - Refitting**) (56A, Exterior equipment).

B85 or C85 or S85

 Refit the high level brake light (see 3rd brake light: Removal - Refitting) (81A, Rear lighting).

#### Refit:

- the tailgate exterior opening control (see ) (52A, Non-side opening element mechanisms),
- the tailgate lock (see **Tailgate lock: Removal Re-fitting**) (52A, Non-side opening element mechanisms),
- the rear screen wiper motor (see Rear screen wiper motor: Removal Refitting) (85A, Washing Wiping),
- the rear screen wiper arm (see Rear screen wiper arm: Removal - Refitting) (85A, Washing - Wiping),
- the tailgate trim (see **Tailgate trim: Removal Re-fitting**) (73A, Non-side opening elements trim).