

4 Sheet metal work

- **40 GENERAL**
- 41 LOWER STRUCTURE
- 43 UPPER SIDE STRUCTURE
- 44 UPPER REAR STRUCTURE
- 45 TOP OF BODY

Mechanisms and accessories

55 EXTERIOR PROTECTION

JE0 AL - JE0 EL - JE0 HL

77 11 196 742 DECEMBER 1997 Edition Anglaise

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

All copyrights reserved by Renault.

Copying or translating, in part or in full, of this document or use of the service part reference numbering system is forbidden without the prior written authority of Renault.



 $^{^{\}rm II}$ "The repair methods given by the manufacturer in this document are based on the technical specifications current when it was prepared.

Sheet metal work

Contents

		Page			Page
40	GENERAL		43	UPPER SIDE STRUCTURE	
	Dimensions and engines Description of plastic parts (exploded view) Description of metal parts (exploded view)	40-1 40-2 40-3	A	Upper stretcher, rear section	43-1
	Sub-frame dimensions Repair bench	40-5 40-7	44	UPPER REAR STRUCTURE	
	1	10 /	C E F G	Rear wheel arch with inertia reels Bumper mounting side support Rear quarter panel lining Bonding bridge	44-1 44-8 44-9 44-12
41	LOWER STRUCTURE				
J L	Lower rear cross member Rear floor, part section Side floor, part section	41-1 41-5 41-7		_	
M	Third row seat mounting rear side member	41-8	45	TOP OF BODY	
N	Third row seat mounting front side member	41-10	В	Rear roof	45-1
T	Rear axle cross member, part section	41-13			
V	Valance side extension, panel	41-19	I		
W	Complete rear side member	41-22			

Mechanisms and accessories

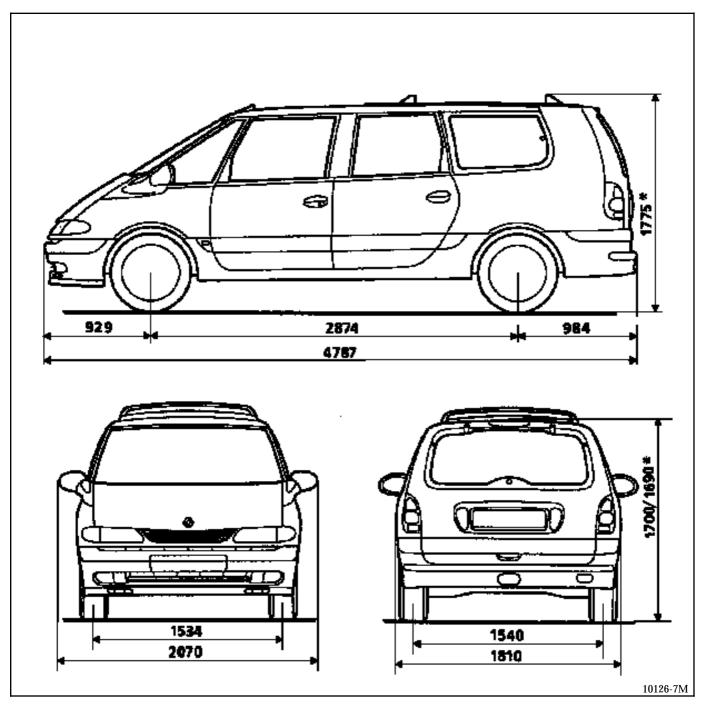
Contents

Page

55 EXTERIOR PROTECTION

Side protection strips 55-1

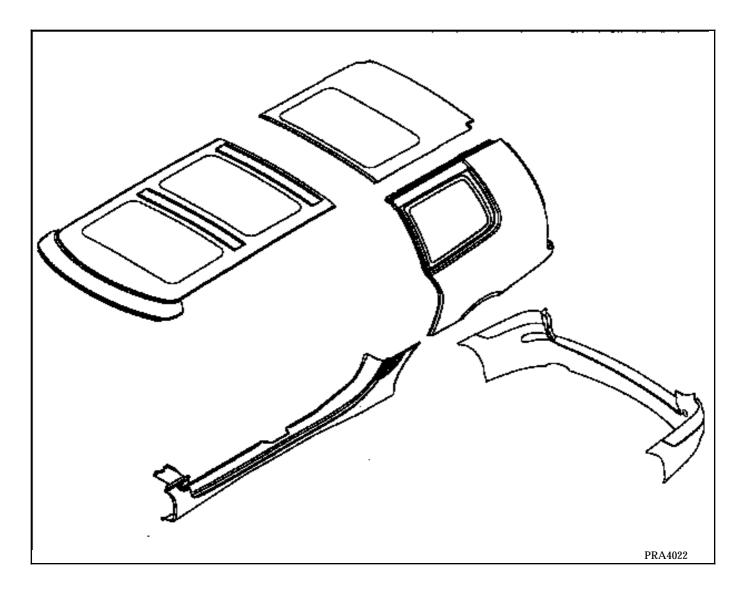
GENERAL Dimensions - Engines



* Unladen ** Depending on version Dimensions in millimetres

Vehicle type	Eng	gine	Clutch type	Gearbox type	
vemtle type	Туре	Capacity	Ciuten type	Gearbox type	
JE0 AL5	F3R 768	1998	215 DBRN 4400	JC5 061	
JE0 EL5	G8T 716	2188	B02300308	PK1 064	
JE0 HL5	G8T 714	2188	B02300308	PK1 064	

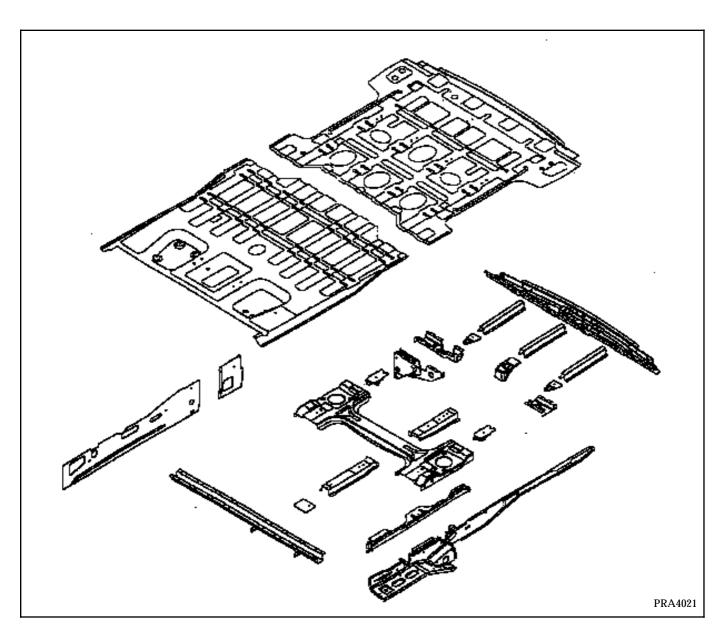
GENERAL Description of plastic parts (exploded view)



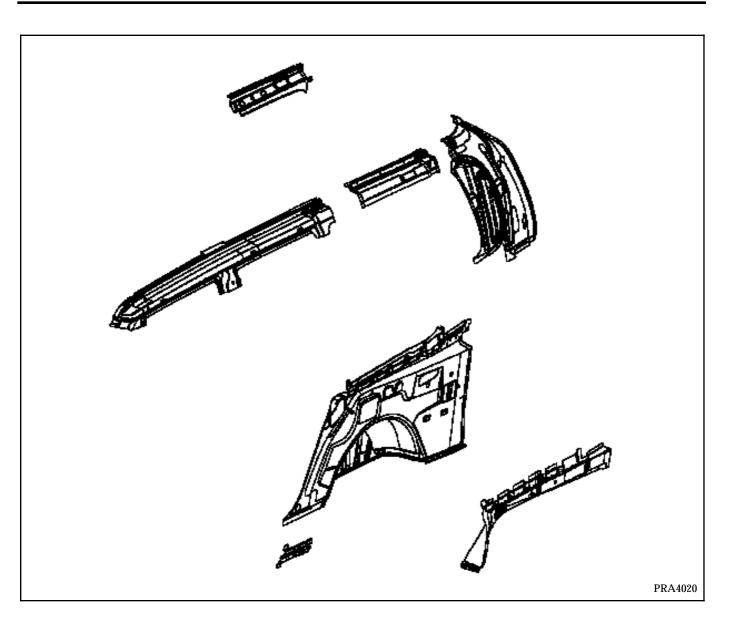
PLASTIC STRUCTURE

PARTS SPECIFIC TO THE "GRAND ESPACE"

- 1 Front roof
- 2 Rear roof
- 3 Rear wing
- 4 Sill panel
- 5 Rear bumper



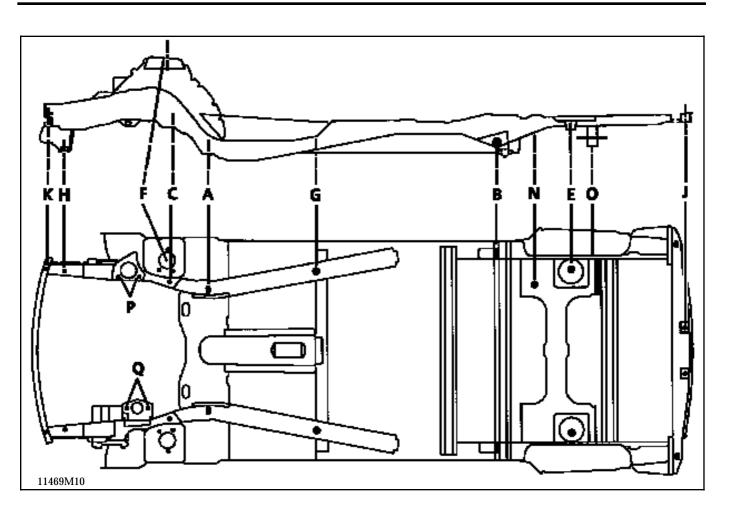
- 1 Front cross member of seats
- 2 Centre floor
- 3 Valance rear closure panel
- 4 Rear floor
- 5 Valance extension
- 6 Right hand side indexing plate
- 7 Side members under rear floor
- 8 Guiding clevice
- 9 Left hand side indexing plate
- 10 Third row seat mounting side member
- 11 Third row seat mounting reinforcement
- 12 Rear cross member side reinforcement
- 13 Rear side member, assembled
- 14 Third row seats, front mounting plates
- 15 Third row seat, front mounting side member
- 16 Rear axle cross member
- 17 Rear corner plate under the floor
- 18 Lower rear cross member



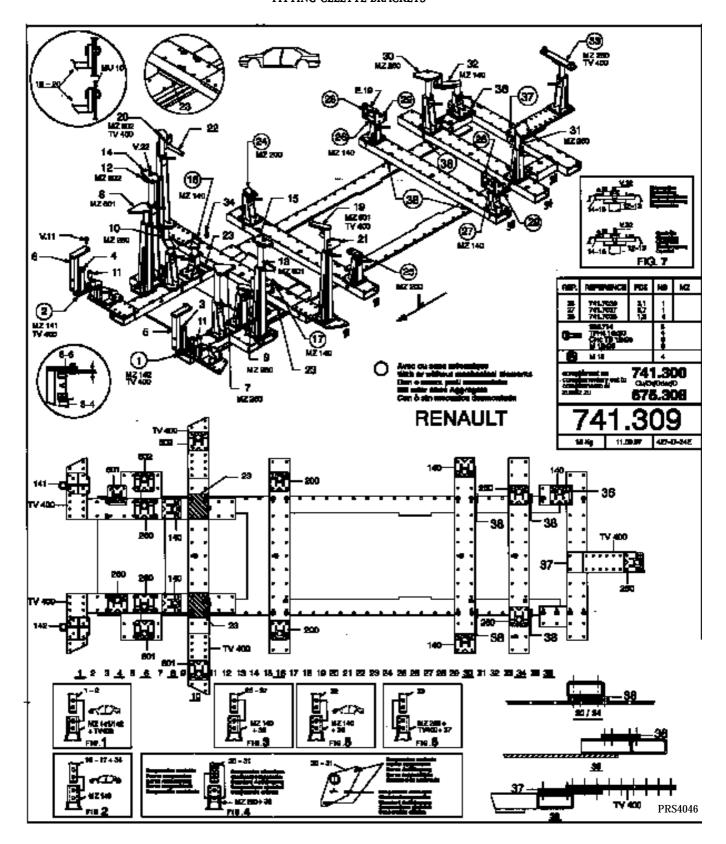
- 1 Front bonding bridge
- 2 Whole wheel arch
- 3 Rear quarter panel window lower stretchers
- 4 Rear quarter panel lining
- 5 Upper rear stretcher
- 6 Upper rear stretcher lining
- 7 Upper stretcher

GENERALSub-frame dimensions

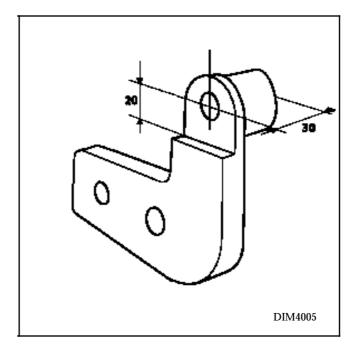
P52	DESCRIPTION	X	Y	z	DIAMETER	SLOPE %
A	Front sub-frame rear mounting	299	397	19	20.5	0
В	Rear axle assembly tie-rod mounting	2327	630	79.7		
С	Front sub-frame front mounting	39.5	459.5	210	15.5	0
K	Front end cross member mounting	-777.8	543.7	196		00
F	Front shock absorber mounting support	23.2	598.7	629.6	10.2	0
О	Guide bar mounting	2953	560	69.7	10.2	0
Н	Front end of front side member	-653.5	525	37	14.5	0
G	Rear section of front side member	995	525	31	24.4	0
Е	Bumper mounting	2717	527.35	163.6	hexagonal	0
J	Rear end cross member	3656.5	145	222.7	14	0
P	Front engine mounting	-299	492	500	M10	0
P ₁	Rear engine mounting	-159	492	500	M10	00
Q	Front gearbox mounting	-258.3	-411.5	359	M12	0
Q_1	Rear gearbox mounting	-124.8	-411.5	359	M12	0
N	Rear axle cross member reference point	2618	477		15	0



FITTING CELETTE BRACKETS



MODIFICATION OF CELETTE TOOLING



Countersink the upper parts of : part n° 741.70. 28. with head n° 26. part n° 741.70. 29. with head n° 27. Consult the fitting plan for Celettebrackets.

Parts modified in this way become multi-purpose, or they can be ordered under Celette part number: 741.308.

PART NUMBERS FOR SPECIAL TOOLS

Specific support for the CELETTE $\,$ Repair Bench , MZ SYSTEM

Order from : Consult your After Sales Head

Office

Supplier's part number :

- complete fitting 741.300

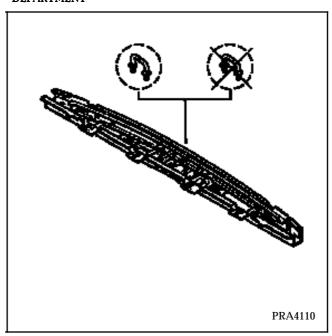
- complementary fitting 741.309

INTRODUCTION

The replacement of this part is a basic operation for a rear impact or is complementary to the rear end pillar for a side impact.

The repair should be carried out using a repair bench.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



Preliminary operations.

Remove:

- the mud guards,
- the bumper,
- the bumper cross member,
- the tailgate seal,
- the wheel arch trim,
- the anchoring covers,
- the floor trim,
- the emergency spare wheel,
- the exhaust,
- part of the wiring loom,
- part of the soundproofing.

1 JOINT WITH EXTERIOR SIDE MEMBER

Thickness of the panels (mm)

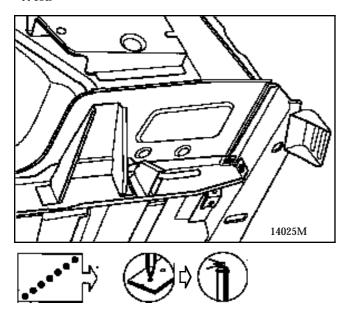
Lower rear cross member 2.0 Exterior side member 2.5

Unpick



2 spot welds on a thickness of 2.0

Weld



2 JOINT WITH CONNECTING PANEL

Thickness of the panels (mm)

Lower rear cross member 2.0 Connecting panel 2.0

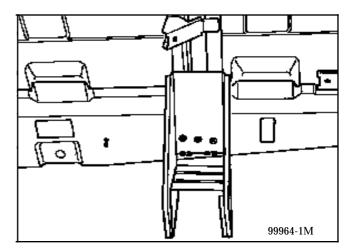
Unpick

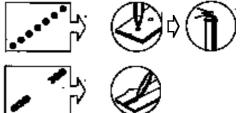


3 spot welds on a thickness of 2.0



+ 2 x 15 mm weld beads





JOINT WITH REAR CENTRE CONNECTING PLATE

Thickness of the panels (mm)

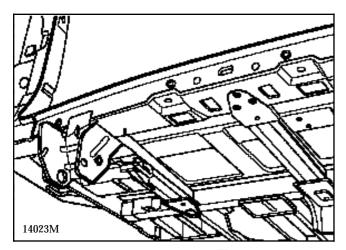
Lower rear cross member 2.0 Rear centre connecting plate 1.5

Unpick



3 spot welds on a thickness of 2.0

Weld





JOINT WITH STRIKER PLATE MOUNTING REAR GUSSET

Thickness of the panels (mm)

Lower rear cross member 2.0 Striker plate mounting rear gusset 2.0

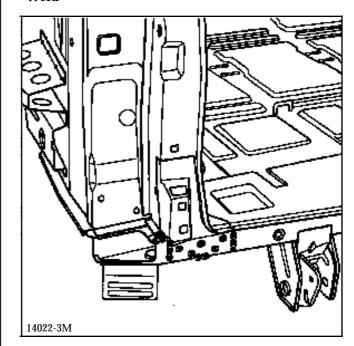
Unpick

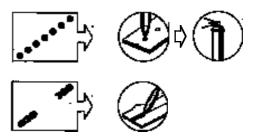


6 spot welds on a thickness of 2.0



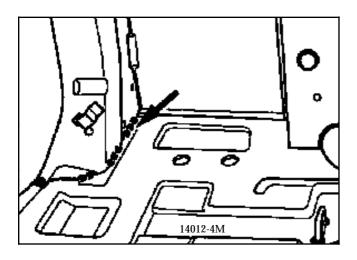
+2 x 30 mm MAG weld beads +2 x 20 mm MAG weld beads





5 JOINT WITH REAR END PILLAR

REMINDER: refer to operations **44-D-3**, 3 x 30 mm welds and 1 spot weld.



6 JOINT WITH REAR FLOOR

Thickness of the panels (mm)

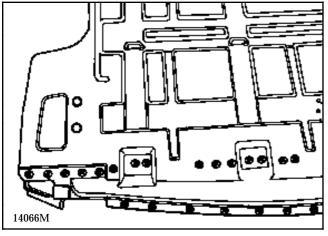
Lower rear cross member 2.0 Floor 0.8

Unpick



45 spot welds on a thickness of 2.0

Weld







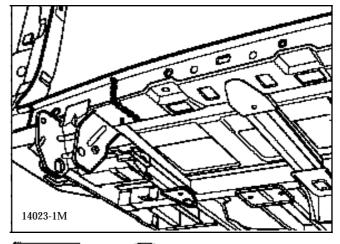
7 PARTIAL CUT

Unpick



250 mm on a thickness of 2.0

Weld





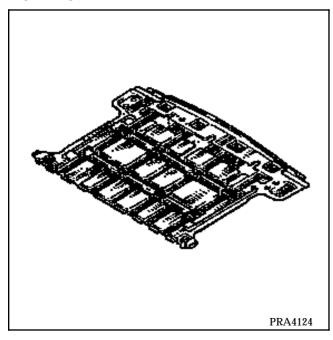
NOTE: refer to Paint Workshop Repair Manual 601, section 95, for protection and sealing.

LOWER STRUCTURE Rear floor, part section

INTRODUCTION

The replacement of this part is a complementary operation to the replacement of the lower rear cross member, the rear side member, and the rear end pillar for a rear impact, or of the wheel arch after a side impact.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT







Preliminary operations.

Remove:

- the bumper,
- the bumper cross member,
- the rear light,
- the rear wing panel,
- the tailgate seal,
- the wheel arch trim,
- the anchoring covers,
- the floor trim,
- the emergency spare wheel,
- the fuel tank
- the exhaust.

NOTE: for cutting and preparation before welding, refer to section 40, General.

NOTE: refer to Paint Workshop Repair Manual 601, section 95, for protection and sealing.

LOWER STRUCTURE Rear floor, part section

1 JOINT WITH FLOOR

Thickness of the panels (mm)

Rear floor	0.8
Exterior side member	2.5
Rear side member	1.5
Lower rear cross member	2.0

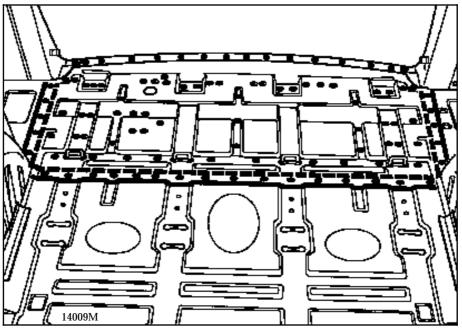
Unpick



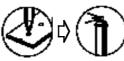
 $93\ spot$ welds on a thickness of $\ 0.8$



2690 mm weld on a thickness of 0.8







LOWER STRUCTURE Side floor, part section

1 JOINT WITH FLOOR

Thickness of the panels (mm)

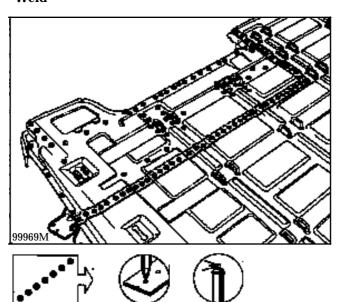
Floor	0.8
Rear axle assembly cross member	2.0
Rear cross member of 3 rd row seats	2.0
Rear side member	1.5
Lower rear cross member	2.0

Unpick



 $43\ spot$ welds on a thickness of $\ 0.8\ +1500\ mm$ on a thickness of $\ 0.8\$

Weld



NOTE: refer to section 40, General, for cutting and preparation before welding.

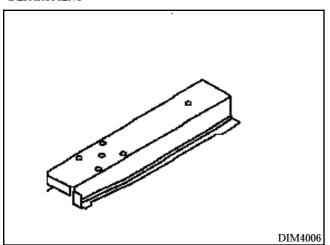
NOTE: refer to Paint Workshop Repair Manual 601, section 95, for protection and sealing.

Third row seat mounting, rear side member

INTRODUCTION

The replacement of this part is a complementary operation to the replacement of the side floor, part section or the rear floor, part section.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



Preliminary operations.

Remove:

- the emergency spare wheel,
- the wheel arch trim,
- the anchoring covers,
- the rear floor trim,
- part of the wiring loom,

on the right hand side

- the exhaust,
- the emergency spare wheel winch,
- the fuel tank.

1 JOINT WITH FLOOR

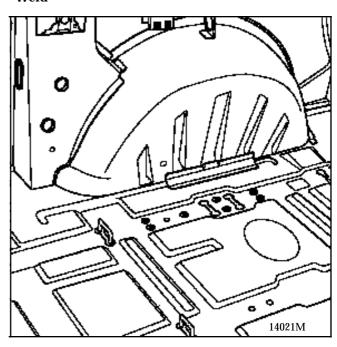
Thickness of the panels (mm)

Rear side member 2.0 Floor 0.8

Unpick



7 spot welds on a thickness of 0.8



Third row seat mounting, rear side member

2 JOINT WITH CONNECTING PLATE

Thickness of the panels (mm)

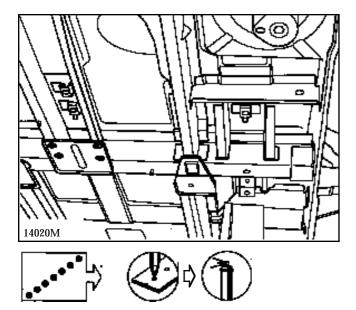
Rear side member 2.0 Connecting plate 1.5

Unpick



4 spot welds on a thickness of 1.5

Weld



3 JOINT WITH REAR AXLE CROSS MEMBER

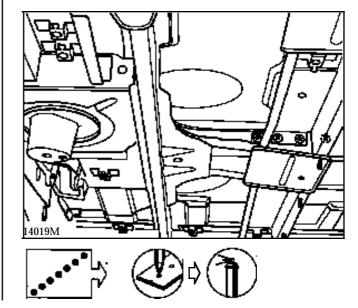
Thickness of the panels (mm)

Rear side member 2.0 Rear axle assembly cross member 2.0

Unpick



4 spot welds on a thickness of 2.0

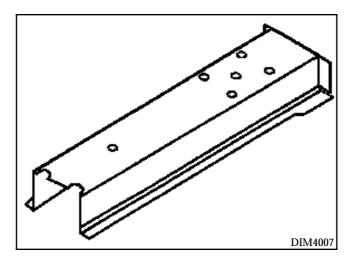




INTRODUCTION

The replacement of this part is a complementary operation to the replacement of the side floor, part section or the rear floor, part section.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



Preliminary operations

Remove:

- the emergency spare wheel,
- the wheel arch trim,
- the anchoring covers,
- the rear floor trim,
- part of the wiring loom,

on the right hand side:

- the exhaust,
- the emergency spare wheel winch,
- the fuel tank.

Third row seat mounting, front side member

1 JOINT WITH FLOOR

Thickness of the panels (mm)

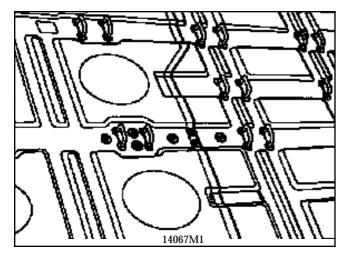
Floor 0.8 Rear side member 2.0

Unpick

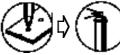


7 spot welds on a thickness of 0.8

Weld







2 JOINT WITH CONNECTING PLATE

Thickness of the panels (mm)

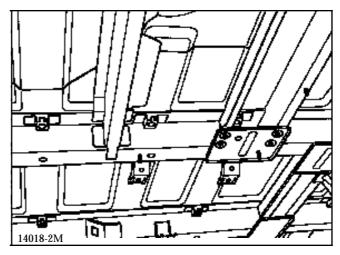
Connecting plate 1.5
Rear side member 2.0

Unpick



4 spot welds on a thickness of 1.5

Weld





NOTE: refer to Paint Workshop Repair Manual 601, section 95, for protection and sealing.

Third row seat mounting, front side member

JOINT WITH REAR AXLE ASSEMBLY CROSS MEMBER

Thickness of the panels (mm)

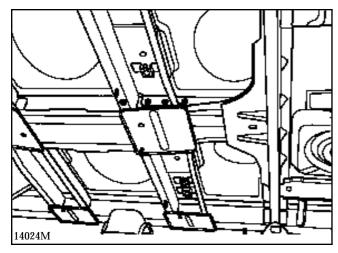
Rear axle assembly cross member 2.0 Rear side member 2.0

Unpick

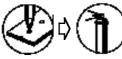


4 spot welds on a thickness of 2.0

Weld





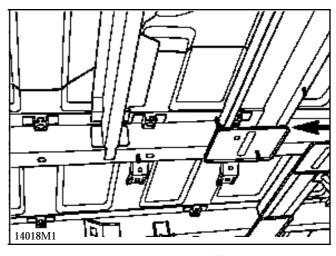


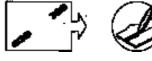
4 JOINT WITH 2nd ROW SEAT CROSS MEMBER

Unpick



 $2 \times 20 \text{ mm}$ weld beads, each on a thickness of 2.0



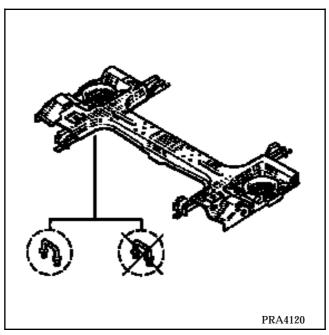




INTRODUCTION

The replacement of this part is a complementary operation to the replacement of the side floor, part section, of the whole wheel arch, and the complete side member for a side impact.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



Preliminary operations.

Remove:

- the rear axle assembly,
- the exhaust,
- the fuel tank on the right hand side,
- the wheel arch trim,
- the anchoring covers,
- the floor trim.

Rear axle assembly cross member, part section

1 JOINT WITH EXTERIOR SIDE MEMBER

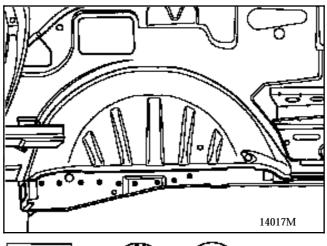
Thickness of the panels (mm)

Exterior side member 2.5
Rear axle assembly cross member,
side reinforcement 2.0

Unpick



9 spot welds on a thickness of 2.0





Rear axle assembly cross member, part section

JOINT WITH 2nd ROW SEAT REAR CROSS MEMBER

Thickness of the panels (mm)

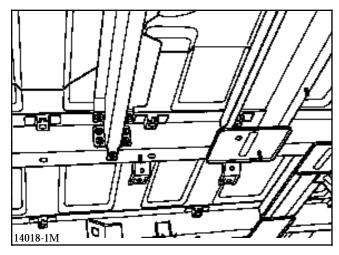
Rear cross member of 2 nd row seat	2.0
Side reinforcement of rear axle	
assembly cross member	2.0

Unpick



7 spot welds on a thickness of 2.0

Weld





3 JOINT WITH MIDDLE SIDE CONNECTING PLATE

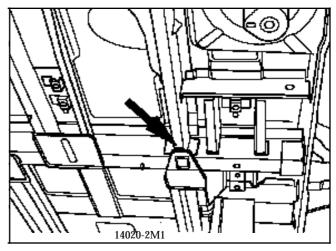
Thickness of the panels (mm)

Middle side connecting plate	1.2
Side reinforcement of rear axle	
assembly cross member	2.0

Unpick



1 x 15 mm MAG weld bead





4 JOINT WITH REAR CROSS MEMBER OF 3rd **ROW SEATS**

Thickness of the panels (mm)

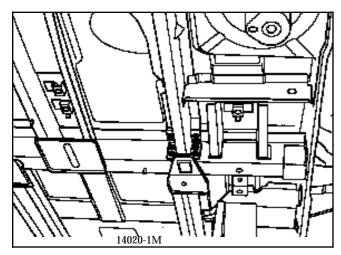
Rear cross member of 3 rd row seats	2.0
Side reinforcement of rear axle assembly	
cross member	2.0

Unpick



6 spot welds on a thickness of 2.0

Weld





5 JOINT WITH FLOOR

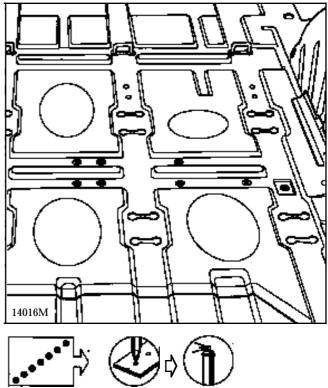
Thickness of the panels (mm)

Floor	0.8
Side reinforcement of rear axle	
assembly cross member	2.0

Unpick



 $8 \ \text{spot welds on a thickness of } 2.0$





JOINT WITH CROSS MEMBER/SIDE MEMBER PLATE

Thickness of the panels (mm)

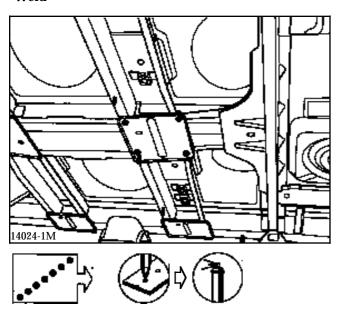
Rear axle assembly cross member 2.0 Plate 1.5

Unpick



4 spot welds on a thickness of 1.5

Weld



JOINT WITH 3RD ROW SEATS MOUNTING SIDE MEMBER

Thickness of the panels (mm)

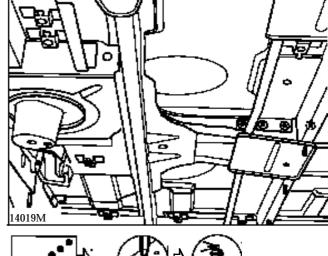
Rear axle assembly cross member 2.0 3rd row mounting side member 2.0

Unpick



4 spot welds on a thickness of 2.0

Weld





Before welding check:

For versions with a ring, measure the centre distance between the rings.

For versions with a rail:

Secure the rails without blocking them. Position a seat to check the centre distance. Lock the rail bolts to a torque of 1.2 daN.m

8 PARTIAL CUT

Thickness of the panels (mm)

Rear axle assembly cross member

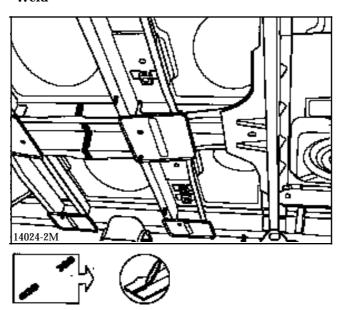
Cutting



 $340\ mm$ on a thickness of 2 mm

2.0

Weld



NOTE: Refer to the Paint Workshop Repair Manual 601, section 95, for protection and sealing.

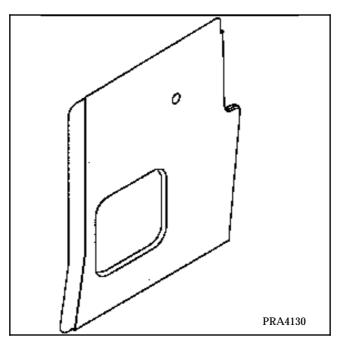
LOWER STRUCTURE Valance side panel extension

INTRODUCTION

The replacement of this part is a complementary operation to the replacement of :

- the complete rear side member,
- the rear wheel arch.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



Preliminary operations.

Remove:

- the inner sill protection,
- the door seal,
- the floor trim,
- part of the wiring loom,
- the valance.

LOWER STRUCTURE Valance side panel extension

JOINT WITH VALANCE SIDE PANEL CLOSURE PANEL

Thickness of the panels (mm)

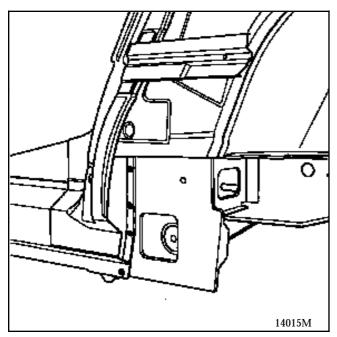
Valance extension 0.7 Valance side panel closure panel 0.7

Unpick

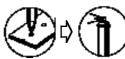


4 spot welds

Weld







JOINT WITH LEFT HAND SIDE WHEEL ARCH CONCEALING TRIM SECTION

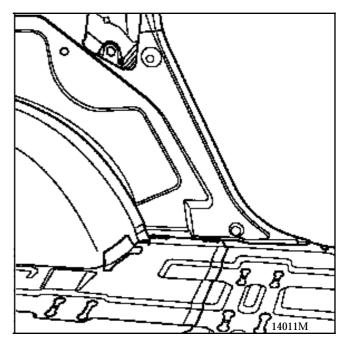
Thickness of the panels (mm)

Concealing trim section 0.7 Valance extension 0.7

Unpick



2 x 20 mm welds









LOWER STRUCTURE Valance side panel extension

JOINT WITH VALANCE SIDE PANEL CLOSURE PANEL FLANGE

Thickness of the panels (mm)

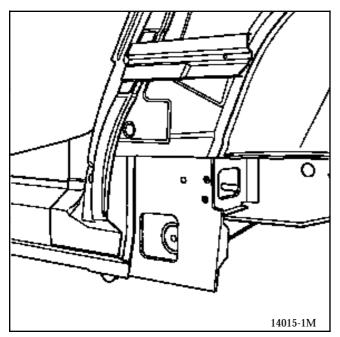
Valance extension 0.7 Valance side panel closure panel 0.7

Unpick



2 spot welds

Weld







JOINT WITH OUTER FLANGE OF THE REAR SUSPENSION MOUNTING ARMS

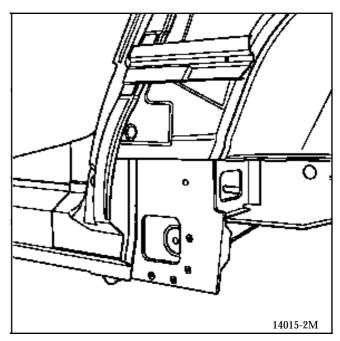
Thickness of the panels (mm)

Flange 0.7 Valance extension 0.7

Unpick



4 spot welds









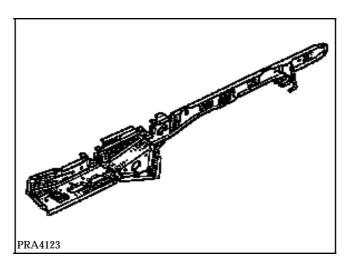
LOWER STRUCTURE Complete rear side member

INTRODUCTION

The replacement of this part is a complementary operation to the replacement of the whole wheel arch, with valance and side floor (part section) reinforcement for a side impact.

This must be carried out on a repair bench.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



Preliminary operations.

Remove:

- the mudguard,
- the exhaust,
- the fuel tank on the right hand side,
- the rear axle assembly,
- the anchoring covers,
- the wheel arch trim,
- the floor trim.

LOWER STRUCTURE Complete rear side member

1 JOINT WITH VALANCE

Thickness of the panels (mm)

Valance	0.7
Jack mounting	2.0
Jack mounting closure panel	2.0
Closure panel outer flange	1.5
Valance closure panel side flange	1.5
Valance closure panel lower panel	0.8

JOINT WITH CROSS MEMBER BETWEEN CENTRE PILLARS

Thickness of the panels (mm)

Cross member between centre pillars	1.5
Exterior side member	2.5
Valance closure panel	1.2

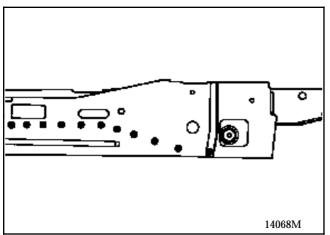
Unpick



11 spot welds on a thickness of 0.7

| |

Weld

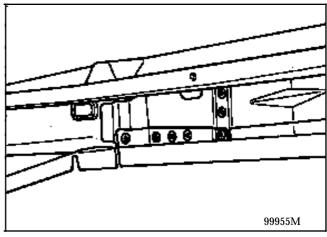




Unpick



7 spot welds on a thickness of 1.5





LOWER STRUCTURE Complete rear side member

JOINT WITH VALANCE CLOSURE PANEL, LOWER PANEL

Thickness of the panels (mm)

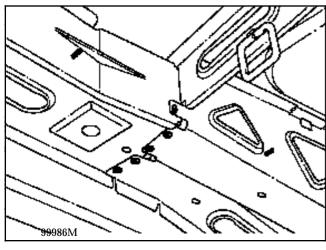
Valance closure panel, lower panel 0.8
Valance closure panel, lower front panel 0.8
Side member extension 1.2

Unpick



5 spot welds on a thickness of 0.8 and 1.2

Weld





JOINT WITH FRONT CROSS MEMBER OF 2ND ROW OF SEATS

Thickness of the panels (mm)

Suspension arms inner flange 1.5 Front cross member of 2nd row of seats 2.0

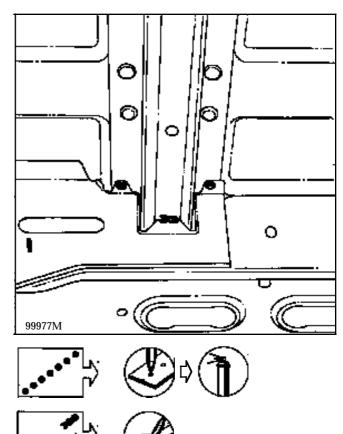
Unpick



3 spot welds on a thickness of 2.0



 $1 \times 10 \text{ mm MAG}$ weld bead on a thickness of 2.0



LOWER STRUCTURE Complete rear side member

JOINT WITH REAR CROSS MEMBER OF 2nd ROW OF SEATS

Thickness of the panels (mm)

Inner flange 1.5
Rear cross member of 2nd row of seats 2.0

Unpick

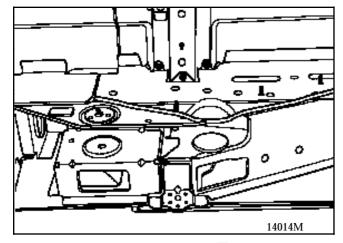


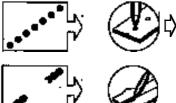
3 spot welds on a thickness of $\,2.0\,$



 $1 \times 10 \text{ mm}$ MAG weld bead on a thickness of 2.0

Weld





6 JOINT WITH JACK MOUNTING

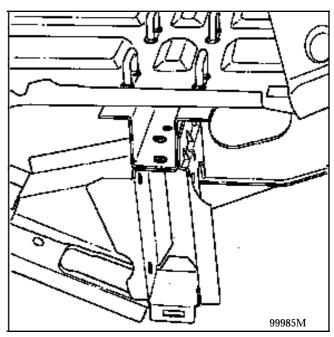
Thickness of the panels (mm)

Jack mounting 2.0 Rear cross member of 2nd row of seats 2.0

Unpick



2 spot welds on a thickness of $\ 2.0$





LOWER STRUCTURE Complete rear side member

JOINT WITH VALANCE CLOSURE PANEL SIDE PANEL REAR FLANGE

Thickness of the panels (mm)

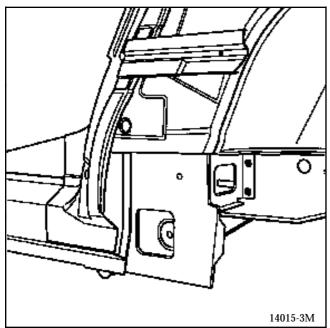
Floor 0.8 Valance side panel extension 0.7

Unpick

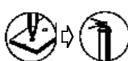


2 spot welds on a thickness of 0.8 and 0.7

Weld







JOINT WITH JACK MOUNTING CLOSURE

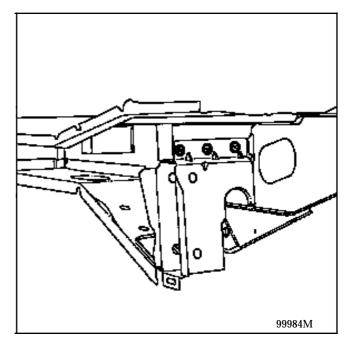
Thickness of the panels (mm)

 $\begin{array}{ll} \mbox{Jack mounting} & 2.0 \\ \mbox{Rear cross member of 2}^{\rm nd} \mbox{ row of seats} & 2.0 \\ \end{array}$

Unpick



3 spot welds on a thickness of 2.0









LOWER STRUCTURE Complete rear side member



9 JOINT WITH REAR AXLE ASSEMBLY CROSS MEMBER

Thickness of the panels (mm)

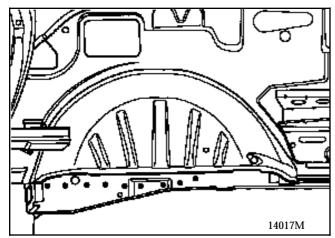
Exterior side member 2.5 Rear axle assembly cross member 2.0

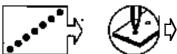
Unpick



9 spot welds on a thickness of 2.0

Weld







JOINT WITH CROSS MEMBER OF 3rd ROW OF SEATS

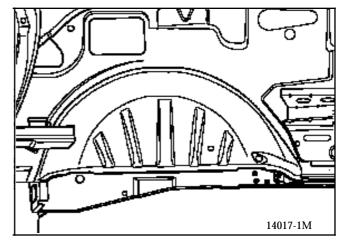
Thickness of the panels (mm)

Exterior side member 2.5 Third row cross member 2.0

Unpick



5 spot welds on a thickness of 2.0





LOWER STRUCTURE Complete rear side member



JOINT WITH REAR CORNER PLATE UNDER FLOOR

Thickness of the panels (mm)

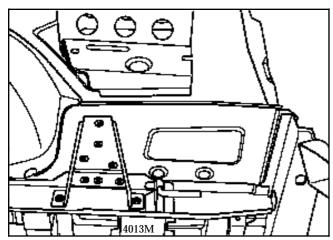
Exterior side member 2.5 Rear corner plate under floor 1.5

Unpick



9 spot welds on a thickness of 1.5

Weld







12

JOINT WITH INDEXING PLATE

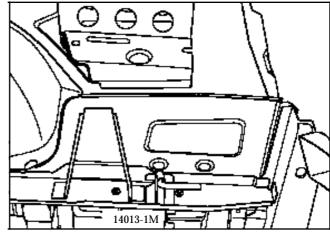
Thickness of the panels (mm)

Exterior side member 2.5 Indexing plate 2.0

Unpick



2 spot welds on a thickness of 2.5









LOWER STRUCTURE Complete rear side member



13 JOINT WITH LOWER CROSS MEMBER

Thickness of the panels (mm)

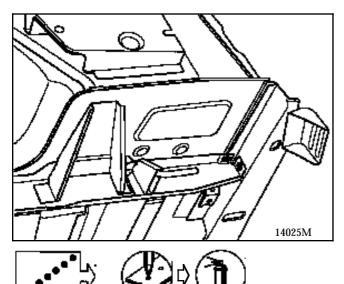
Exterior side member 2.5 Lower cross member 2.0

Unpick



2 spot welds on a thickness of 2.5

Weld



14 JOINT WITH FLOOR

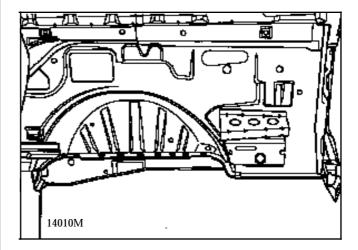
Thickness of the panels (mm)

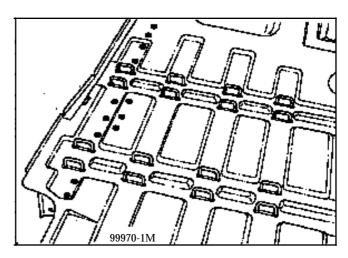
Exterior side member 2.5 Floor 0.8

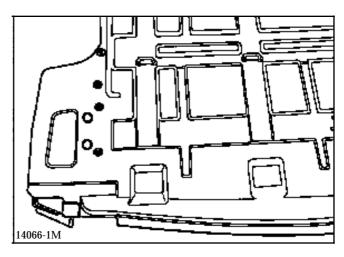
Unpick



 $25 \ \text{spot welds}$ on a thickness of $\ 0.8$







LOWER STRUCTURE Complete rear side member

15 PARTIAL CUT

Thickness of the panels (mm)

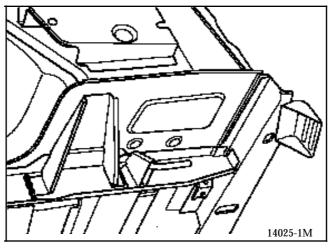
Rear side member, part section 2.5

Unpick



150 mm on a thickness of 2.5

Weld





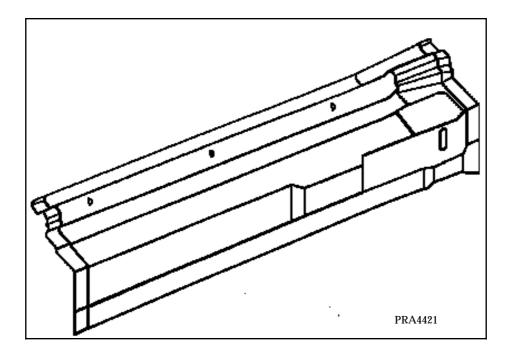
NOTE: refer to Paint Workshop Repair Manual 601, section 95 for protection and sealing.

UPPER SIDE STRUCTURE Upper stretcher, rear section

INTRODUCTION

The replacement of this part is a complementary operation to the replacement of the roof in the rear section and the rear wing.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



REPLACEMENT

Preliminary operations.

Remove:

- the quarter panel window,
- the rear roof,
- the rear wing.

UPPER SIDE STRUCTURE Upper stretcher, rear section

1 JOINT WITH UPPER STRUCTURE

Thickness of the panels (mm)

Upper structure 1.5 Upper stretcher 1.5

Unpick

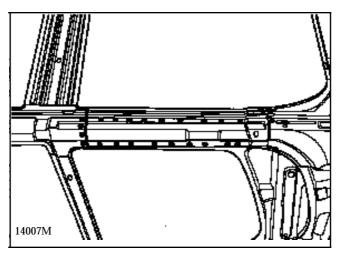


25 spot welds on a thickness of 1.5



 $2 \times 40 \text{ mm}$ weld beads on a thickness of 1.5

Weld





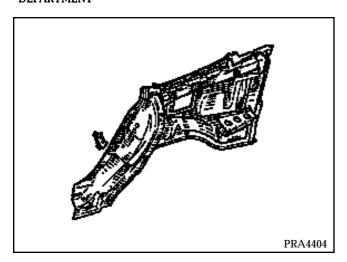


NOTE: refer to Paint Workshop Repair Manual 601, section 95 for protection and sealing.

INTRODUCTION

The replacement of this part is a complementary operation to the rear wing.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



Preliminary operations.

Remove:

- the inner sill,
- part of the door seal,
- the sill panel,
- the quarter panel window,
- the rear light,
- the rear wing,
- the wheel arch trim,
- part of the upper trim,
- the tailgate,
- the rear wheel,
- the mudguard,
- the bumper,
- part of the wiring loom,
- the seat belt,
- the fuel flap locking mechanism,
- the floor trim, part section.

1 JOINT WITH VALANCE REINFORCEMENT

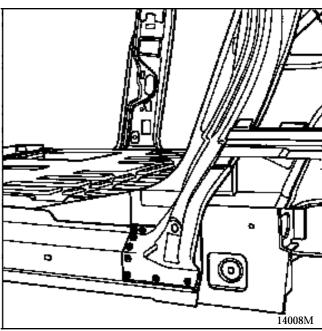
Thickness of the panels (mm)

Valance reinforcement 0.8 Rear pillar 0.7

Unpick



8 spot welds on a thickness of 0.8





JOINT WITH FRONT PILLAR OF QUARTER PANEL WINDOW

Thickness of the panels (mm)

Front pillar of quarter panel window 1.2
Rear pillar 0.7
Wheel arch 0.7

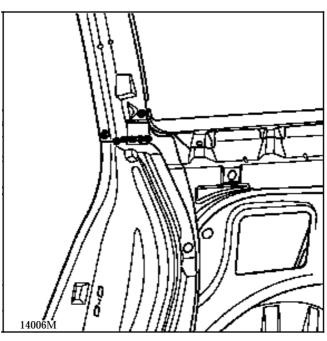
Unpick



2 spot welds on a thickness of 1.2+0.7+0.7



+1 x 40 mm MAG weld bead









3 JOINT WITH QUARTER PANEL WINDOW PILLAR LINING

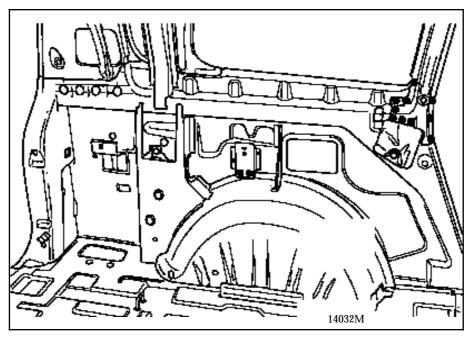
Thickness of the panels (mm)

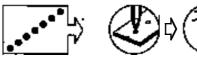
Lining of the quarter panel window pillar 0.8 Wheel arch 0.7

Unpick



10 spot welds on a thickness of 0.8





4 JOINT WITH QUARTER PANEL LINING

Thickness of the panels (mm)

Quarter panel lining	0.8
Wheel arch	0.7
Lower stretcher of quarter panel window	0.7
Rear rain channel, upper section	0.7
Rain channel lining	0.7

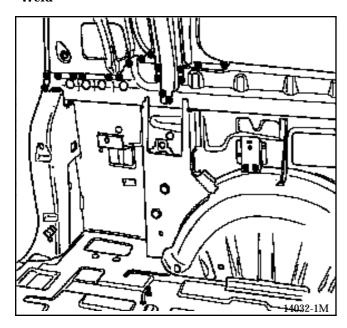
Unpick

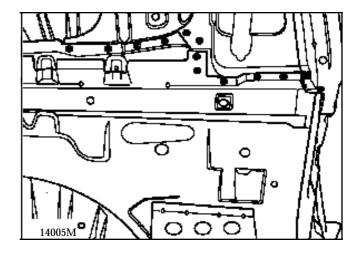


31 spot welds on a thickness of 0.7



 $+2 \times 20 \text{ mm MAG weld beads}$















5 JOINT WITH FLOOR

Thickness of the panels (mm)

Floor 0.8 Rear end pillar 0.7

Unpick

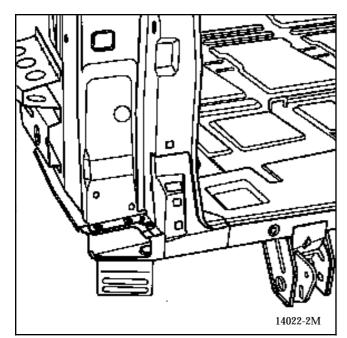


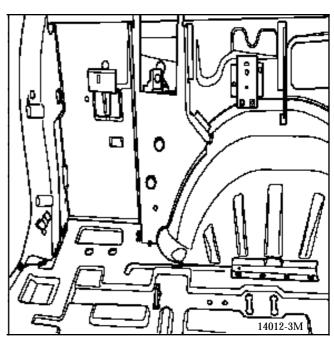
3 spot welds on a thickness of 0.8

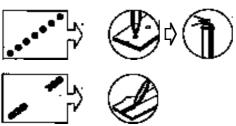


- + 4 plug welds
- + 6 x 20 mm MAG weld beads

Weld







Preparing the new part.

Level any uneven parts of the zinc on the surface to be welded, position the parts and secure them using vice grips.

6 JOINT WITH FLOOR

Thickness of the panels (mm)

Floor 0.8 Wheel arch 0.7

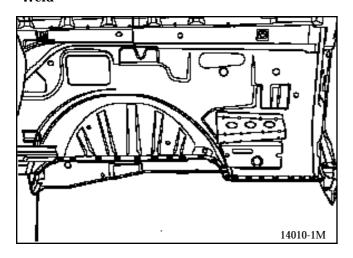
Unpick

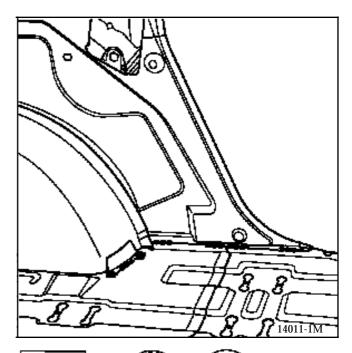


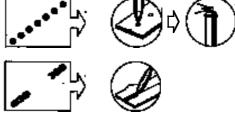
23 spot welds on a thickness of 0.8



- + 2 plug welds + 5 x 25mm MAG weld beads







NOTE: for positioning and drilling of the counter blade reinforcement, refer to section 44-E of Workshop Repair Manual 316.

7 JOINT WITH LOWER REAR CROSS MEMBER

Remove the bumper cross member

Thickness of the panels (mm)

Lower rear cross member 2.0 Striker plate mounting rear gusset 2.0

Unpick

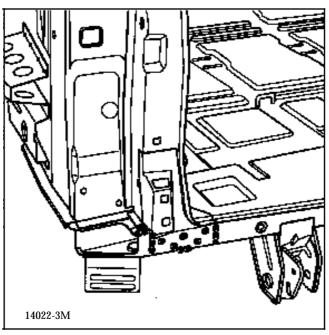


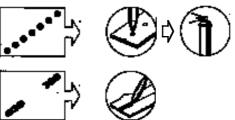
6 spot welds on a thickness of 2.0



2 x 50 mm MAG weld beads 2 x 20 mm MAG weld beads

Weld





NOTE: refer to Paint Workshop Repair Manual 601, section 95 for protection and sealing.

UPPER REAR STRUCTURE Bumper mounting side support

INTRODUCTION

The replacement of this part is a basic operation following a side impact.

Preliminary operations.

Remove:

- the bumper,
- the counter blade reinforcement,
- the wing,
- the quarter panel,
- the light,
- the mudguard,
- the wheel,
- part of the tailgate seal,
- the wheel arch trim.

1 JOINT WITH WHEEL ARCH

Thickness of the panels (mm)

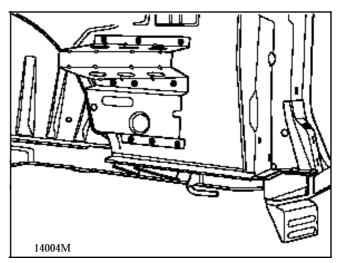
Wheel arch 0.7
Bumper mounting side support 0.7

Unpick



9 spot welds on a thickness of 0.7

Weld









NOTE: Counter-bore the holes to a diameter of 10 mm.

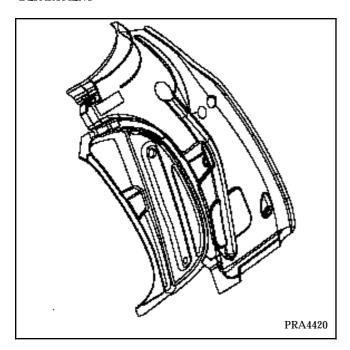
NOTE: refer to Paint Workshop Repair Manual 601, section 95 for protection and sealing.

UPPER REAR STRUCTURE Quarter panel lining

INTRODUCTION

The replacement of this part is a complementary operation to the replacement of the roof or the rear wing.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



1 JOINT WITH QUARTER PANEL LINING

Thickness of the panels (mm)

Quarter panel lining	0.8
Wheel arch	0.7
Quarter panel window lower stretcher	0.7
Rear rain channel upper section	0.7
Rain channel lining	0.7

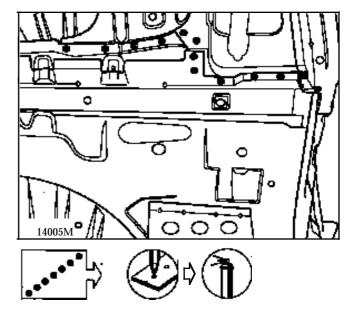
Unpick

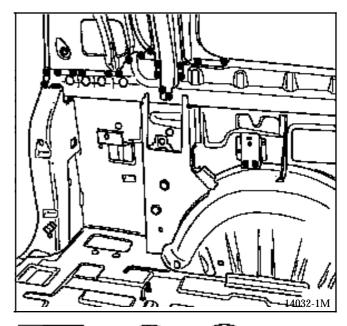


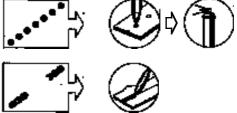
31 spot welds on a thickness of 0.7



+2 x 20 mm MAG weld beads







UPPER REAR STRUCTURE Quarter panel lining

2 JOINT WITH CONNECTING GUSSET

Thickness of the panels (mm)

Connecting gusset	1.0
Quarter panel lining	0.8
Upper stretcher	0.7

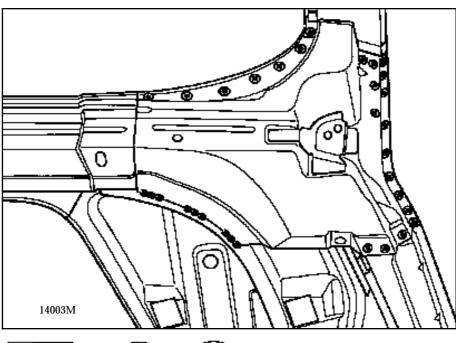
Unpick

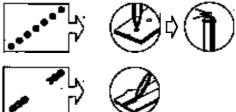


23 spot welds on a thickness of 1.0



3 x 20 mm MAG weld beads





UPPER REAR STRUCTURE Quarter panel lining

JOINT WITH REAR CROSS MEMBER UPPER LINING

Thickness of the panels (mm)

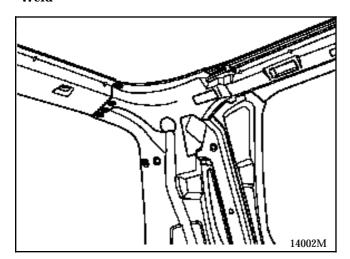
Upper lining 0.7 Quarter panel lining 0.8

Unpick



4 spot welds on a thickness of 0.7 1 plug weld

Weld







4 JOINT WITH REAR STRETCHER LINING

Thickness of the panels (mm)

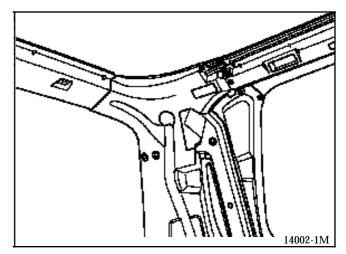
Rear stretcher lining 0.7 Quarter panel lining 0.8

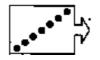
Unpick



6 spot welds on a thickness of 0.7

Weld









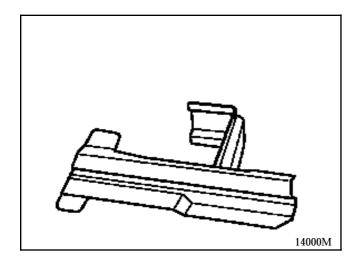
NOTE: refer to Paint Workshop Repair Manual 601, section 95 for protection and sealing.

UPPER REAR STRUCTURE Bonding bridge

INTRODUCTION

The replacement of this part is a complementary operation to the replacement of a rear wing or the sill panel for a side impact.

COMPOSITION OF THE PART FROM THE PARTS DEPARTMENT



Remove:

- the rear lights,
- the rear bumper,
- the mudguards,
- the rear wing,
- the sill panel.

1 JOINT WITH WHEEL ARCH

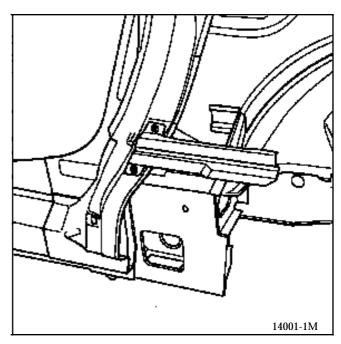
Thickness of the panels (mm)

Wheel arch 0.7 Bonding bridge 0.8

Unpick



2 spot welds on a thickness of 0.8





UPPER REAR STRUCTURE Bonding bridge

2 JOINT WITH REAR PILLAR

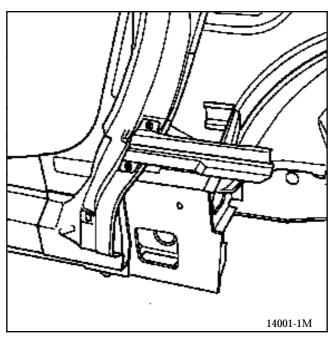
Thickness of the panels (mm)

Rear pillar 0.7 Bonding bridge 0.8

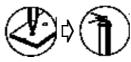
Unpick

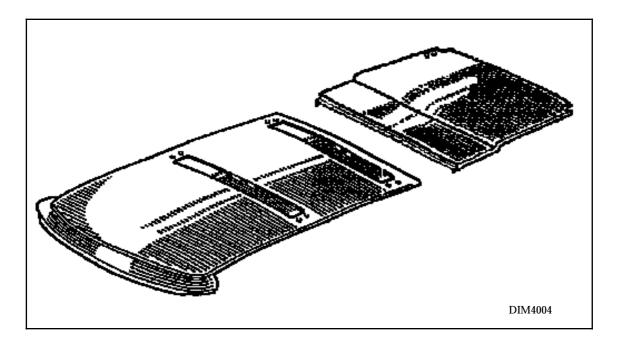


2 spot welds on a thickness of 0.8









REPLACEMENT

Parts to be replaced systematically:

The concealing trim section of the rear roof.

Tooling required:

Oscillating cutter or equivalent Sharp edged spatula Extrusion gun 2 bonding kits 60 25 170 306

REMOVAL

Remove:

- the roof rack,
- the sunroof,
- the telephone aerial,
- the hinge embellishers,
- all the rear seats.

Partially remove the roof trim on the rear surround.

NOTE:

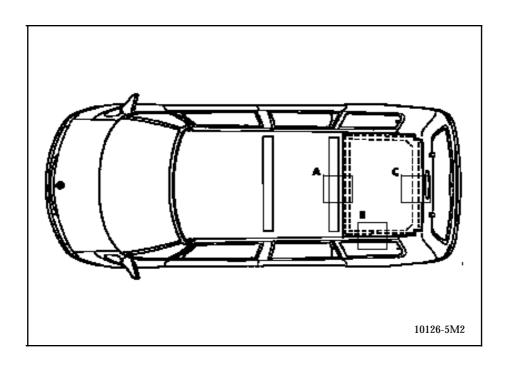
Carefully protect the inside of the vehicle from the dust produced when cutting, as well as around the roof extension with thick adhesive tape (the tailgate, the tops of the wings, and the rear section of the front roof).

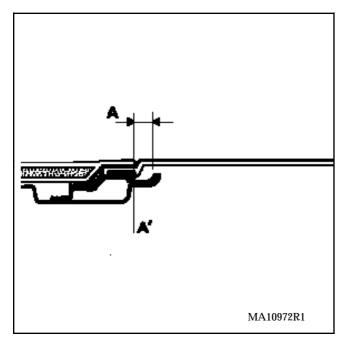
For your comfort whilst working, use a 50 cm scaffold.

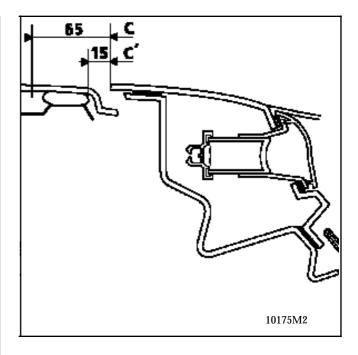
CUTTING

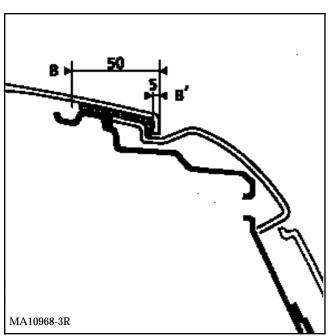
Make two cuts (diagram)

- 1 The section inside the strip to:
 - 40 mm from the side edge (A)
 - −15 mm from the edge of the front roof (B)
 - 65 mm from the edge of the tailgate (C) See (A) (B) (C) on the diagram.
- 2 The section outside the strip to:
 - vertical to the front roof cut (A')
 - 5 mm from the side edge (B')
 - -15mm from the edge of the tailgate (C') See (A') (B') (C') on the diagram.





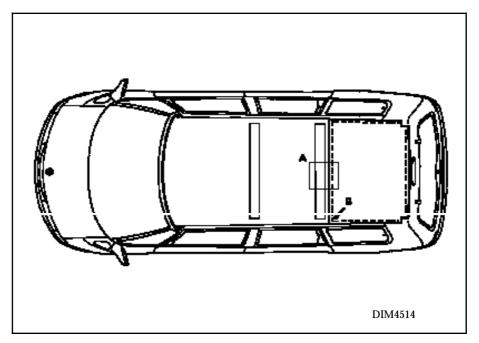




Using a cutting tool, remove the rest of the roof and the bonding bead.

Clean the areas being bonded without totally removing the bonding bead on the panel.



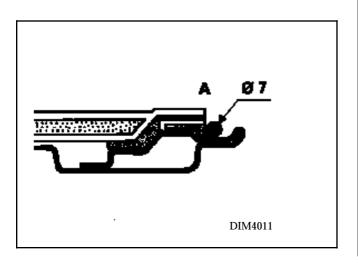


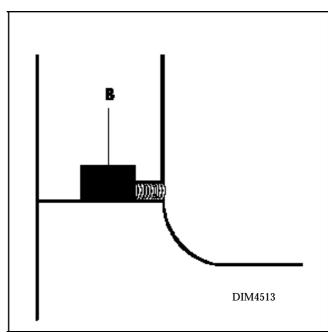
FITTING (cont)

Preparing for the bonding. Prepare all the necessary areas (roof, structure)

Fit the beads (diagram) on the structure using the precut nozzle.

For the front of the roof, extrude a 7 mm bead (C) using the round nozzle (diagram). This avoids too much adhesive getting into the seam channel.





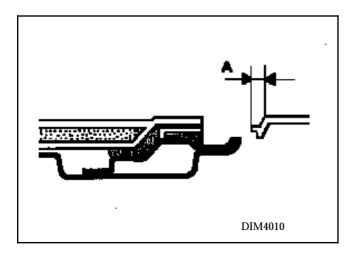
IMPORTANT: To ensure sealing, apply a small amount of adhesive in the cavities (B) located where the quarter panel front pillar lining and the rear roof cross member meet (diagram).

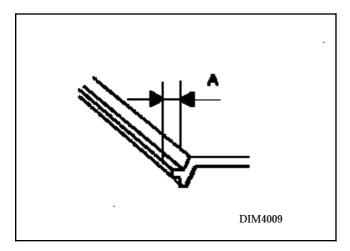
FITTING

Preparing the roof extension.

From the drop section of the old roof, take off the side section, (see A on the diagram) and refer to the new part.

Cut.

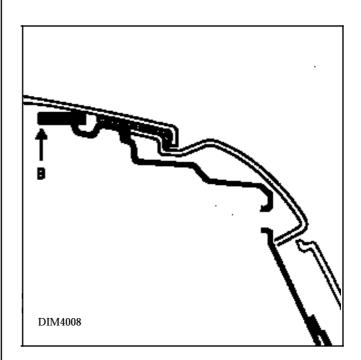




Place the roof on the vehicle.

Place the padding blocks on the edge of the trim seam channels (diagram) to judge its appearance in relation to the front roof (diagram).

If necessary, make the cut again to make adjustments.

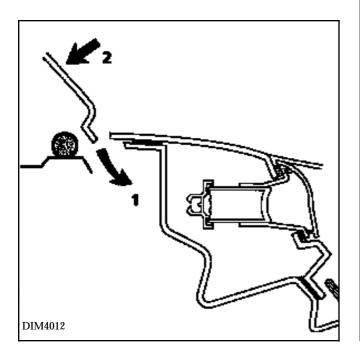


FITTING THE ROOF EXTENSION

Fit the suckers on the extension.

Two people must handle the part.

Place it carefully below the upper swaging of the tailgate, taking care not to crush the bonding bead.



Check the blocks and reposition if necessary.

Adjust the compression and alignment in relation to the front roof and the tailgate.

Apply adhesive tape either side of the front and rear roof joins to help with removal of excess adhesive.

Cut the round nozzle of the second kit to the diameter of the junction groove.

Apply a bead to the groove.

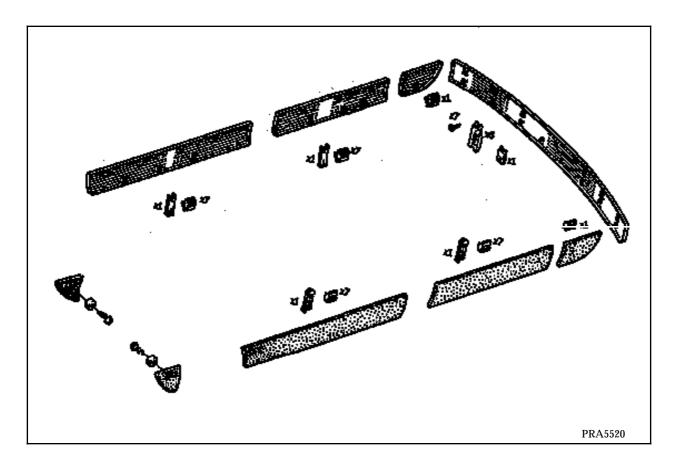
Smooth with a soaped glove, taking care not to move the bonded panel.

Remove the two strips of adhesive tape immediately without waiting for complete polymerisation.

Use water to check the sealing.

Remove the protective strips inside once polymerisation has occurred .

EXTERIOR PROTECTIONSide protection strips



The strips are clipped from the inside and are secured at both ends with double sided adhesive.

REMOVING THE VALANCE STRIP

Partially release the rear mudguards.

Unclip the inner retaining clip.

Pull off the double sided adhesive on the strip.

Remove the valance strip.

REFITTING

Refitting is the reverse of removal.