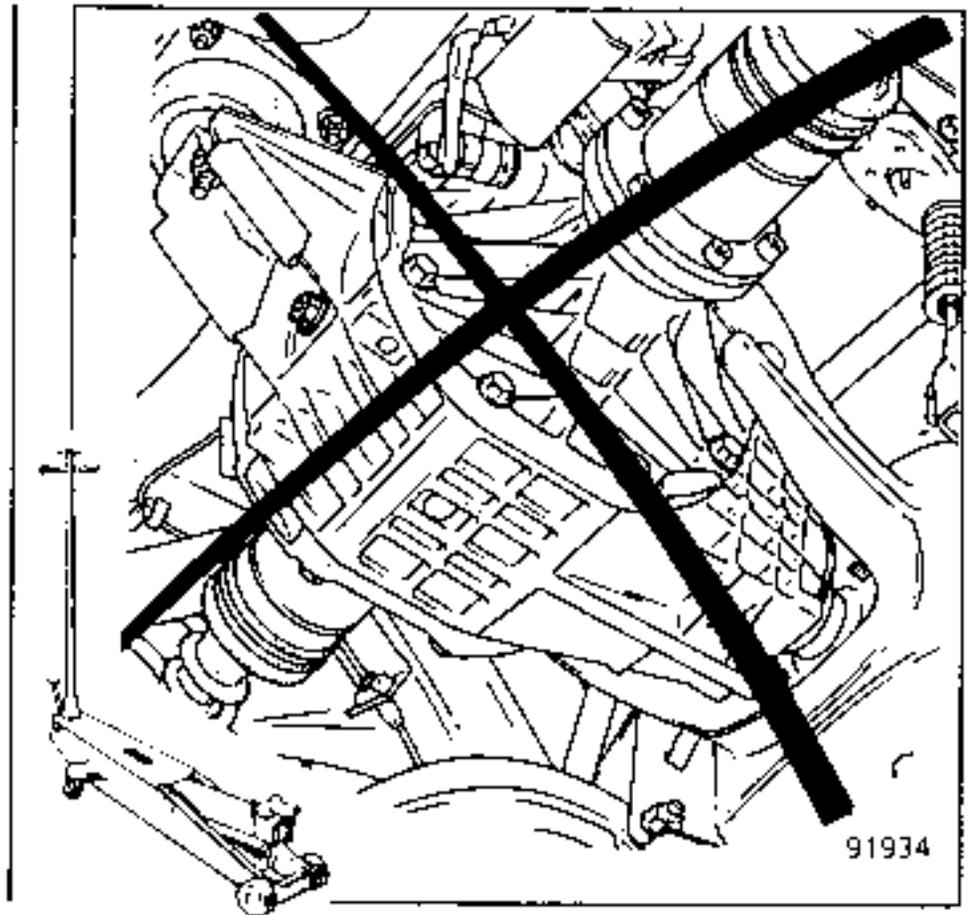
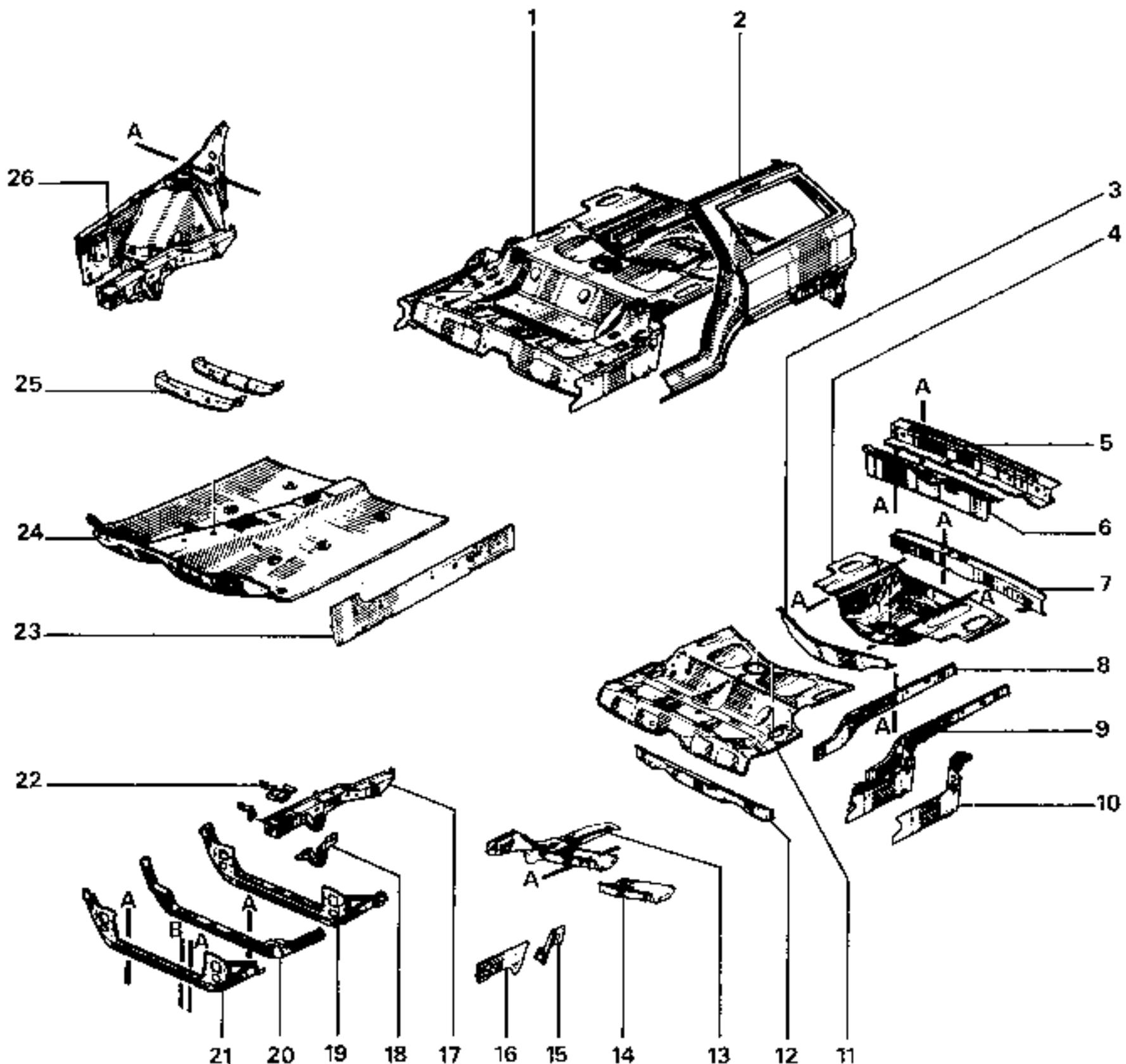


MARK	IN-LINE ENGINE						TRANSVERSE ENGINE			
	GTX	TXE	TD TD Sec.	GTD	Turbo D	GTX 4 x 4	GTD 4 x 4	TL TL Sec.	TS TS Sec.	GTS
A	2 750					2 742		2 809		
B	4 644									
C	1 430		1 421		1 430	1 440	1 431		1 427	
D	1 454		1 449		1 454		1 449		1 429	
E	1 406					1 423		1 406		
F	1 722									

The dimensions are given in millimetres.

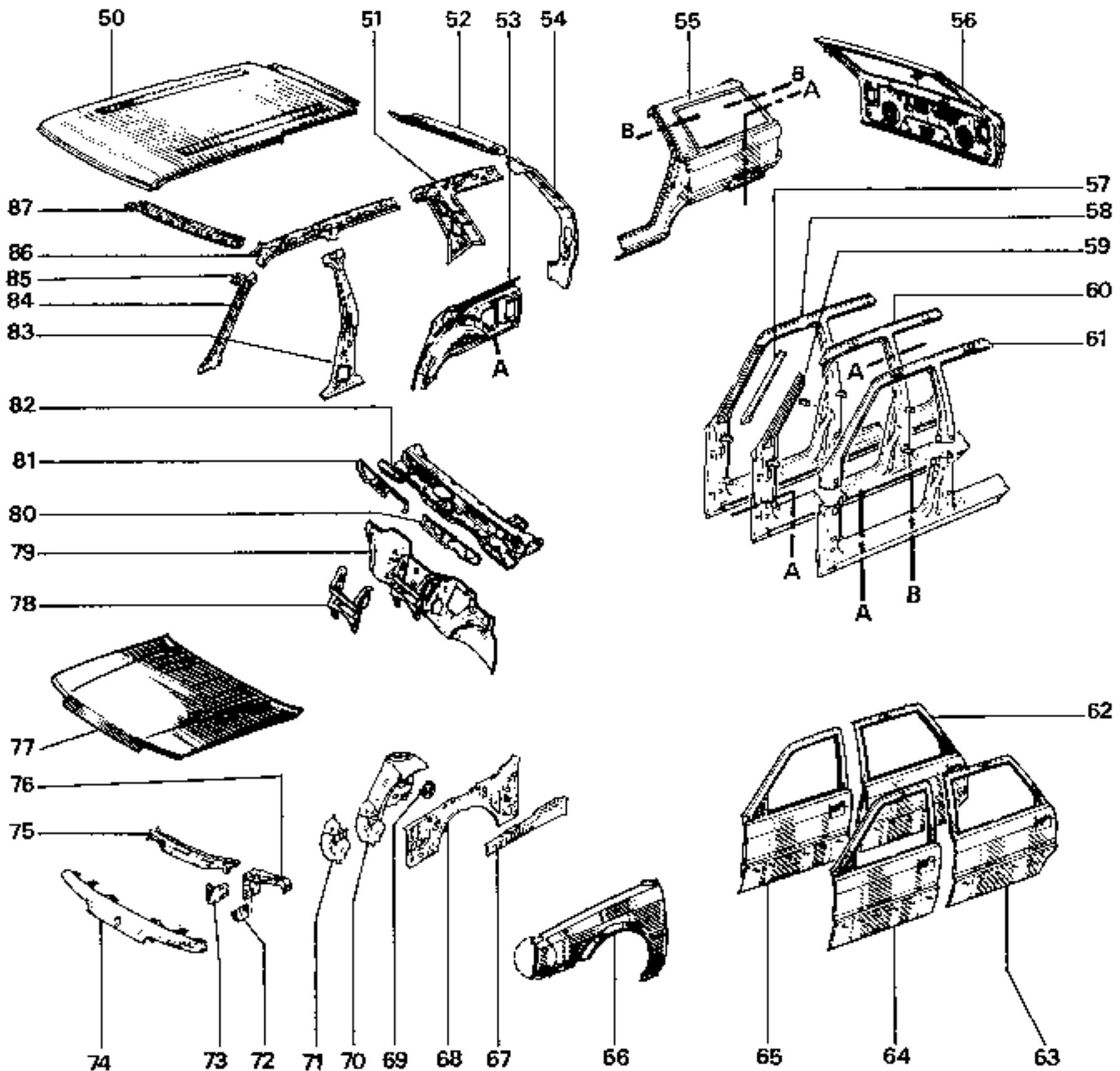
It is forbidden to lift 4 x 4 vehicles
by taking the weight under the
rear axle.





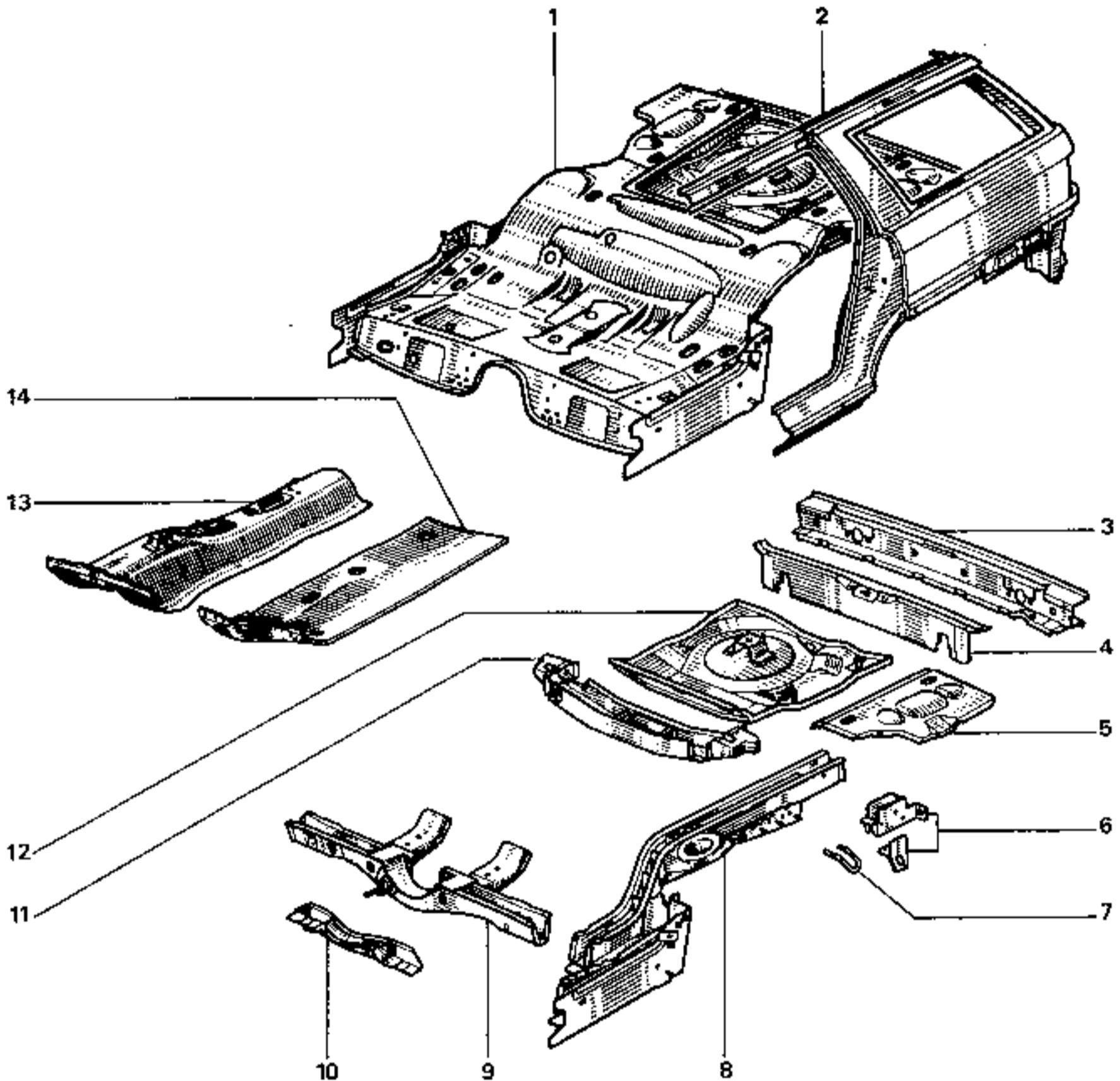
K48-4 x 2 LOWER STRUCTURE

- | | |
|--|--|
| 1. Rear floor panel assembly | 13. Front side member - rear part |
| 2. Rear half unit | 13A. Rear part of side member according to Section A |
| 3. Luggage compartment panel | 14. Side cross-member |
| 4. Luggage compartment bottom floor panel rear section | 15. Rear closure panel component |
| 4A. Side part of floor panel along Section A | 16. Front side member closure panel |
| 5. Rear cross-member | 17. Side member complete front part |
| 5A. Rear cross-member according to Section A | 18. Cradle front gusset |
| 6. Luggage compartment panel | 19. Complete front lower cross-member |
| 6A. Luggage compartment panel according to Section A | 20. Front lower cross-member |
| 7. Rear cross-member | 20A. Lower cross-member according to Section A |
| 7A. Rear cross-member according to Section A | 21. Lower cross-member closure panel |
| 8. Bare rear side member | 21AA. Cross-member closure panel according to Section AA |
| 8A. Rear side member according to Section A | 21B. Cross-member closure panel according to Section B |
| 9. Complete rear side member | 22. Connection gusset |
| 10. Body closure panel | 23. Body sill closure panel |
| 11. Centre floor panel | 24. Bare floor panel |
| 12. Cross-member under floor panel | 25. Seat cross member |
| | 26. Front half unit |



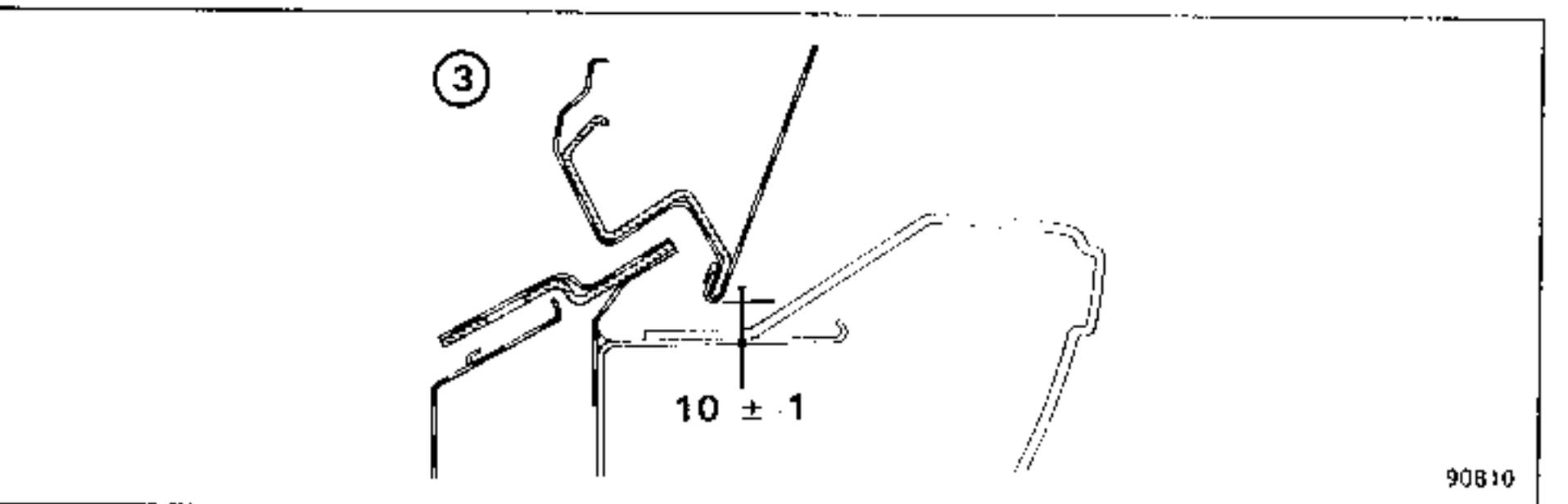
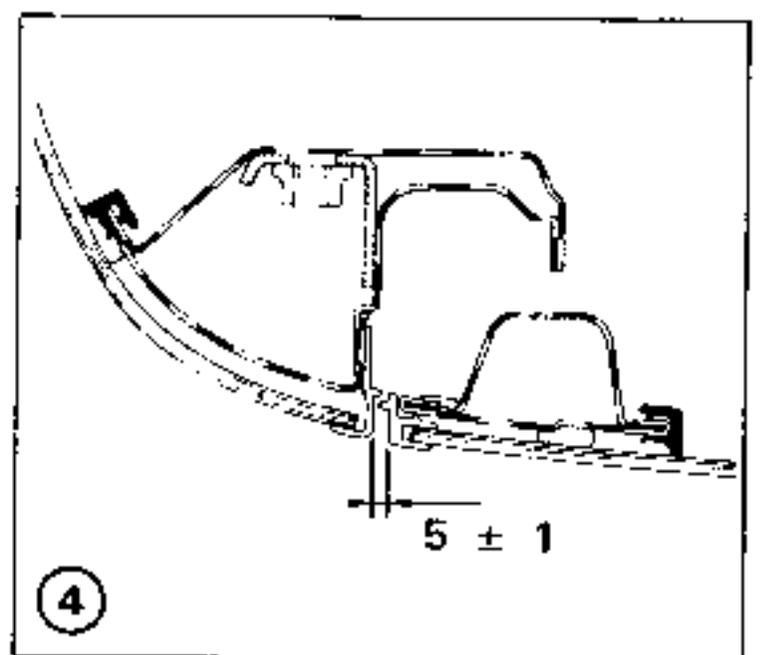
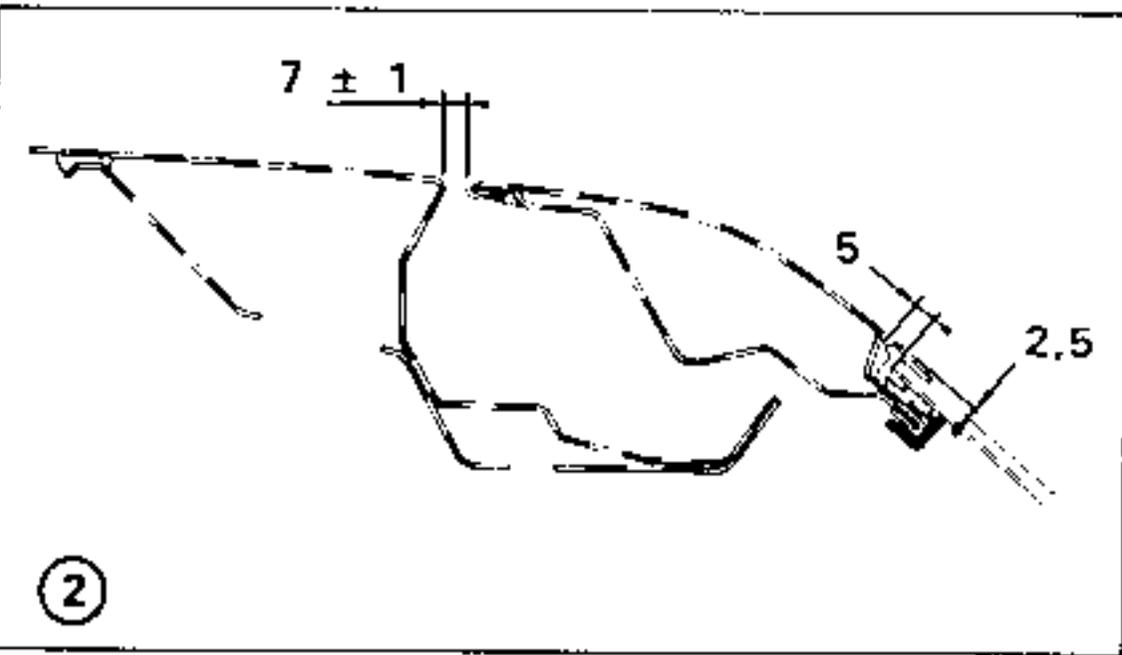
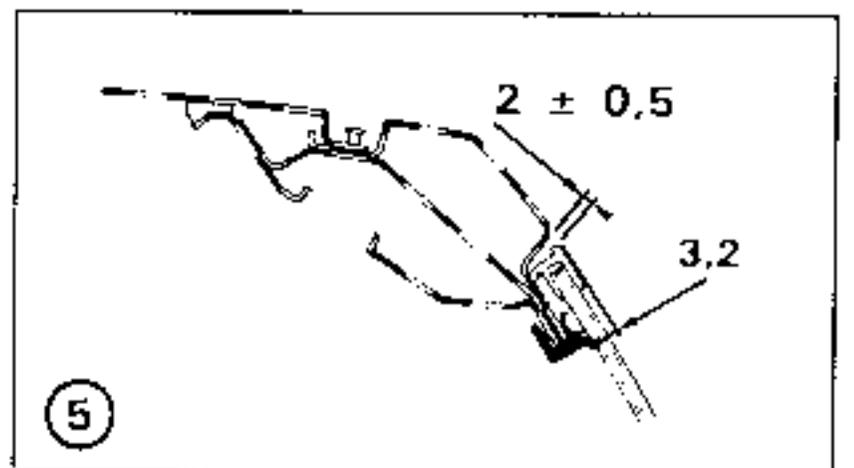
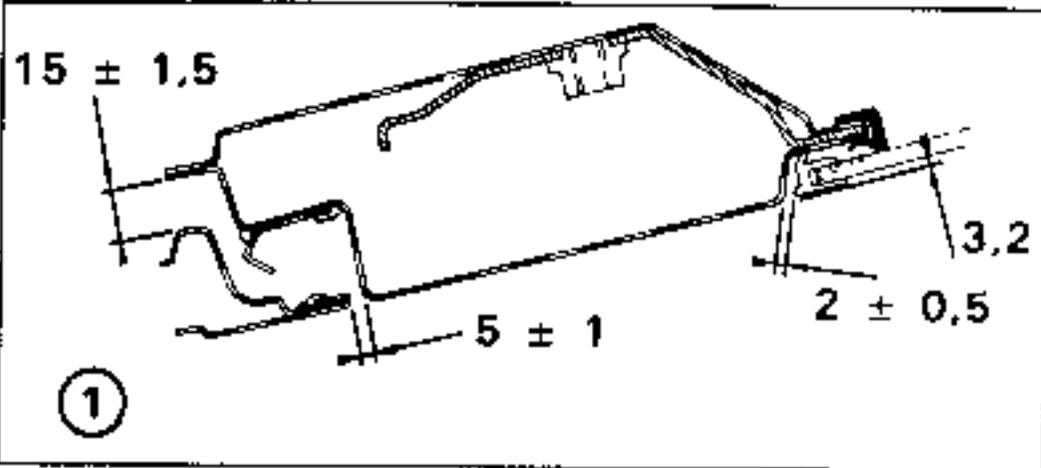
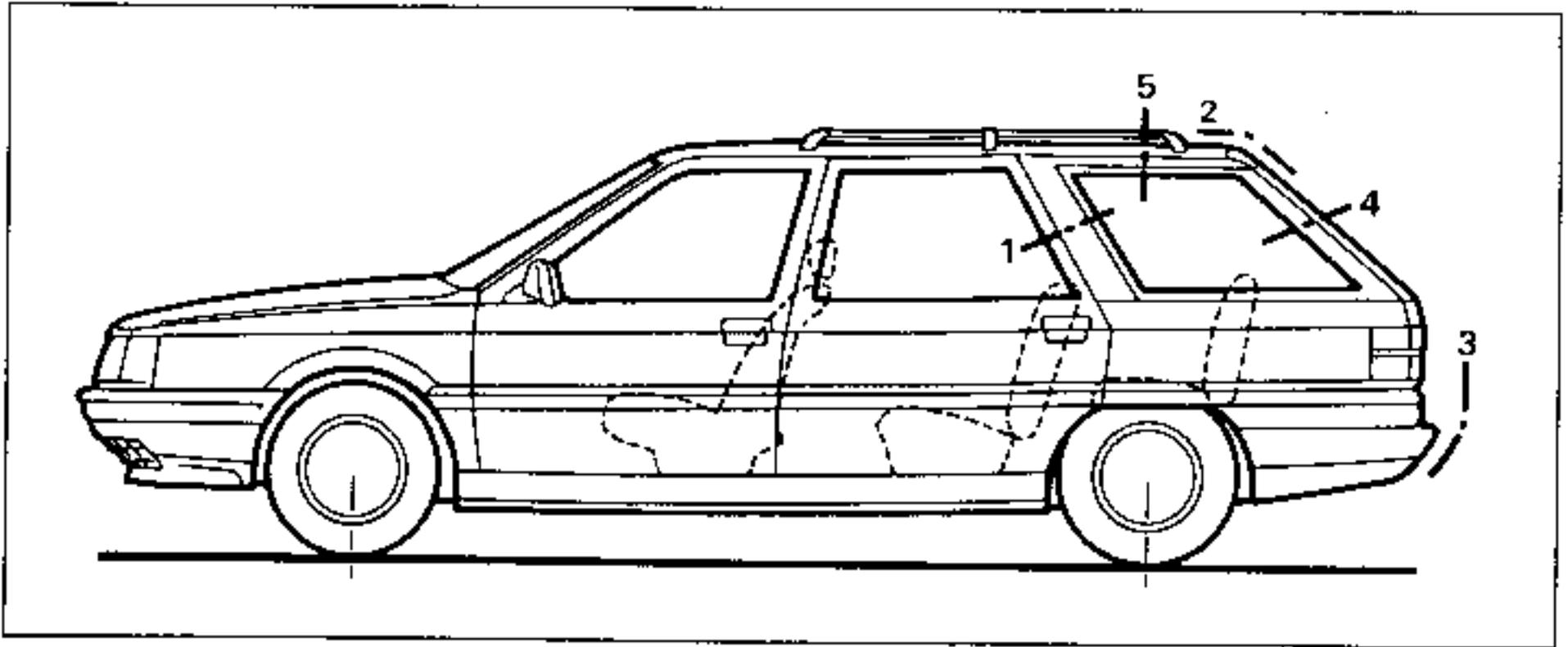
UPPER STRUCTURE - K48 ALL TYPES

- | | | |
|-------------------------------|---|--|
| 50. Roof | 66. Front wing | 81. Right-hand bulkhead under cross-member |
| 51. Rear quarter panel lining | 67. Lining strengthener | 82. Screen aperture lower cross-member |
| 52. Roof rear cross-member | 68. Front pillar lining | 83. Centre pillar lining |
| 53. Wing panel lining | 69. Steering mounting flange | 84. Windscreen upright lining |
| 54. Rear side rain channel | 70. Wheel arch | 85. Strengthener gusset |
| 55. Wing panel | 71. Wheel arch extension | 86. Side stretcher |
| 56. Tailgate | 72. Moving gusset | 87. Roof front cross-member |
| 57. Screen aperture stretcher | 73. Hinge mounting | |
| 58. Body side front part | 74. Front end upper panel | |
| 59. Front pillar | 75. Upper front cross-member | |
| 60. Centre pillar | 76. Headlight carrier component | |
| 61. Body top | 77. Bonnet | |
| 62. Rear door | 78. Steering mounting | |
| 63. Rear door panel | 79. Bulkhead | |
| 64. Front door panel | 80. Left hand bulkhead under cross-member | |
| 65. Front door | | |



LOWER STRUCTURE K48-4 x 4

1. Rear floor panel assembly
2. Rear half unit
3. Rear cross-member
4. Rear cross-member closure panel
5. Extreme rear side floor panel
6. Absorber unit
7. Towing eye
8. Rear side member
9. Cross-member assembly under seat
10. Rear lower spacer assembly
11. Rear axle mounting cross-member
12. Extreme rear centre floor panel
13. Floor panel tunnel
14. Side floor panel



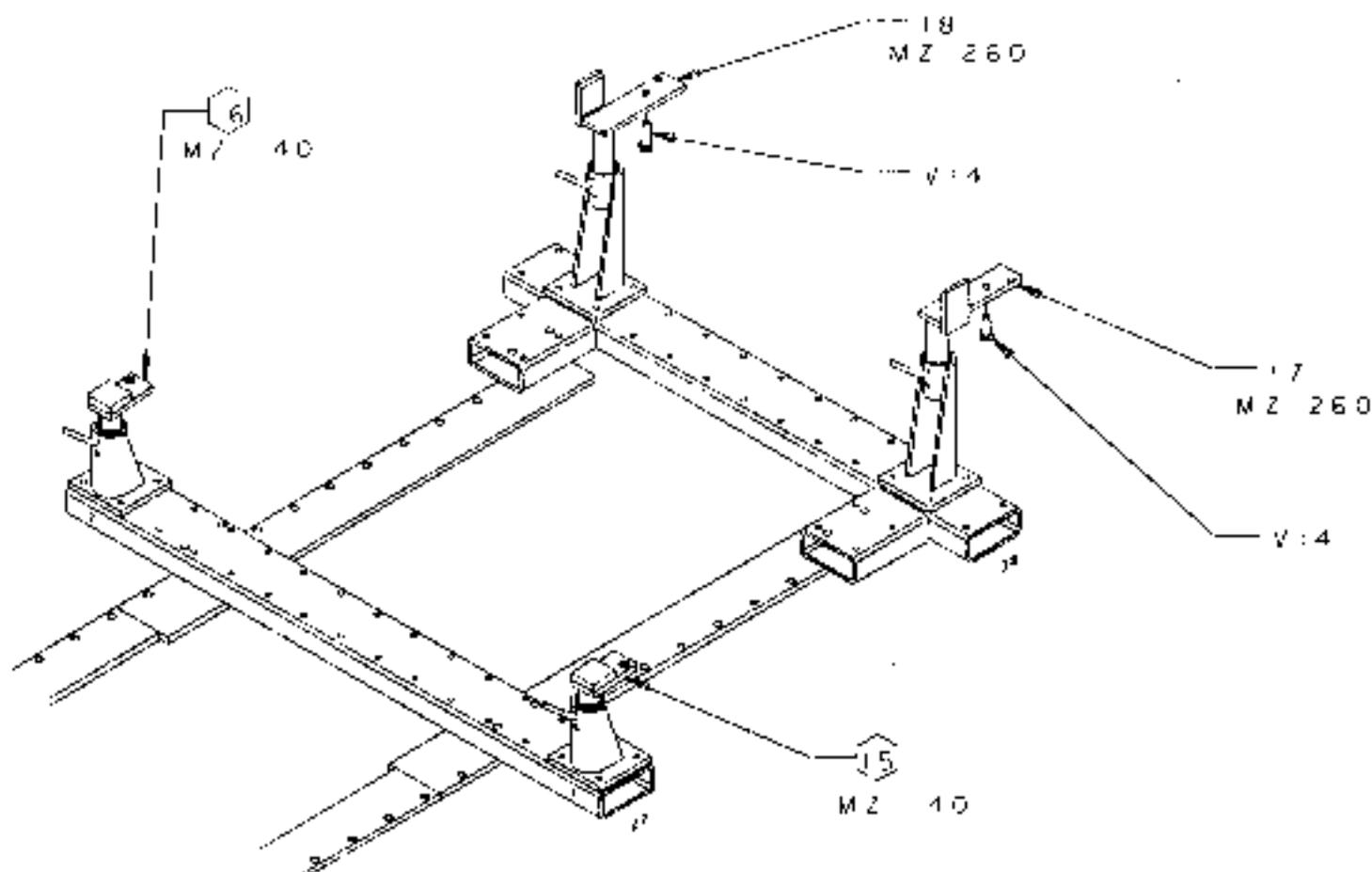
NOTE: Depending on the equipment you have, there are 2 possibilities for repairing R21 vehicles.

1. Using the Z Modular system (CELFITE M.Z.)

Please contact your local After-Sales head office in order to obtain the assembly required for repairs.

The bases are universal and can be used for future vehicles.

The heads are specific to this vehicle.



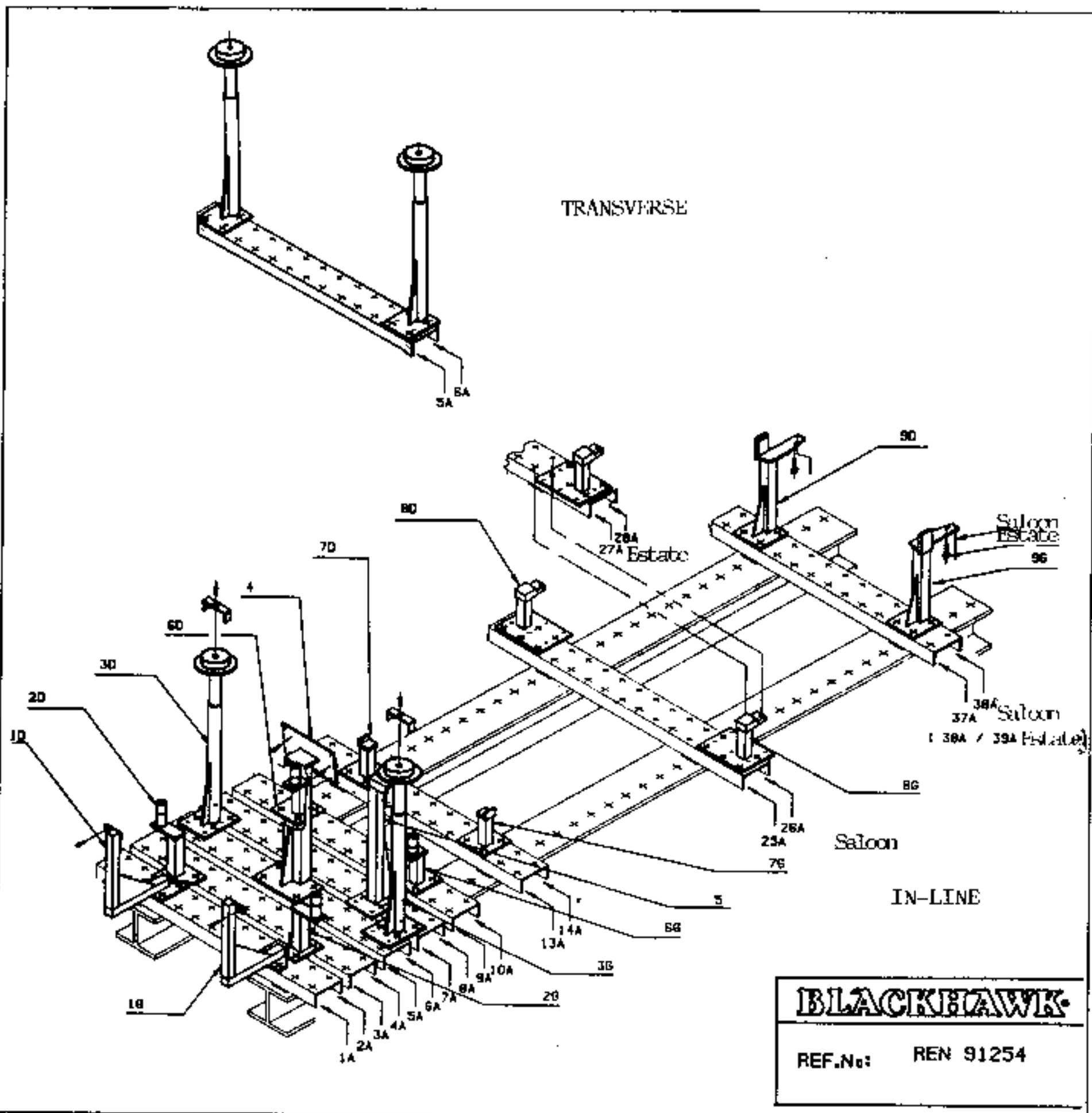
 CELFITE VIENNE FRANCI.	
RENAULT	
R 21 BREAK	
TYPE K481 K482 K483 K486 K488	
486.800	1985-1987 1988-1989 1990-1991 1992-1993

2. Using a set of special brackets

Contact your local After-Sales head office in order to obtain the set of brackets for the Renault 21.

These brackets can be used on BLACKHAWK* modular drilling benches in accordance with the instructions supplied with the equipment.

The set of brackets for fitting to the BLACKHAWK bench has the Reference No 91254 MMS.



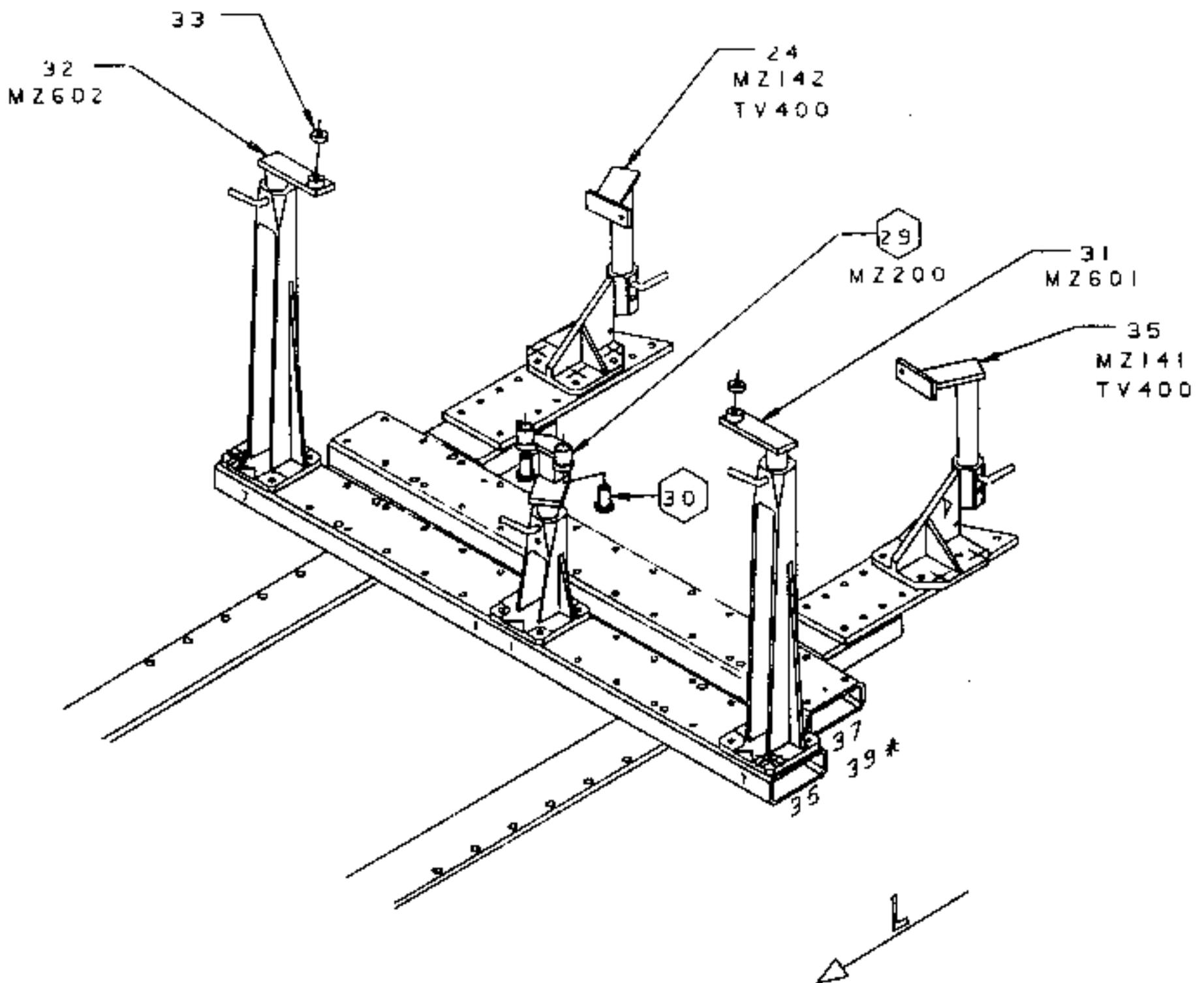
* Not applicable to UK

CELETTE:

Contact your local After-Sales head office in order to obtain the necessary repair kit.

Reference Numbers:

Renault 21 assembly: 486-800
4 x 4 additional set: 486-308



* = M 85
MT10
MUF7RC
CAR780

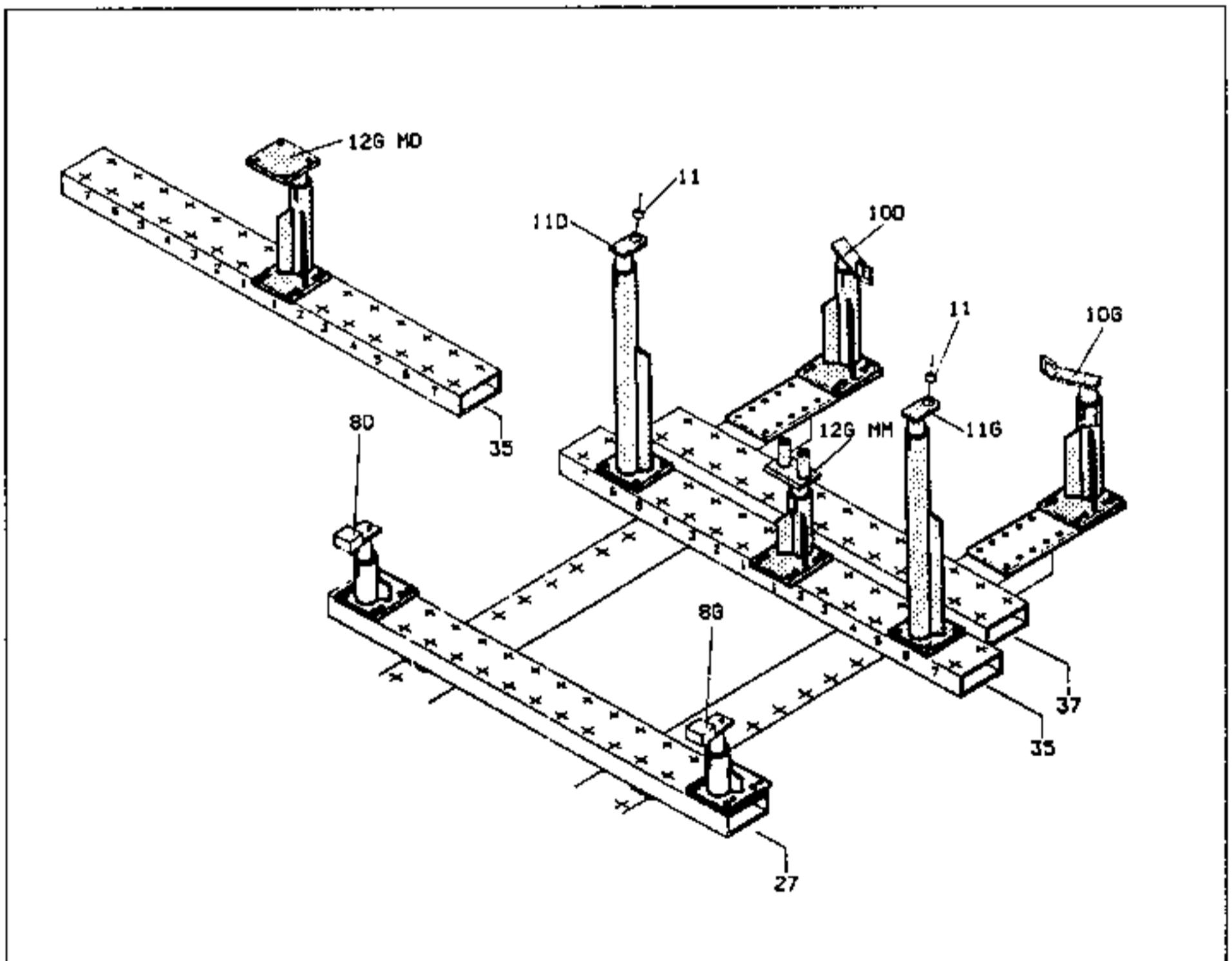
BLACKHAWK ; *

Contact your local After-Sales head office to obtain the set of brackets for Renault 21 vehicles.

Reference Numbers:

R21 assembly : 91254 MMS or REN 87107 for the modular system;
 4 x 4 additional set: REN 87106 for the modular system or REN 87107 for the compact system.

These brackets are used on the BLACKHAWK modular drilling repair bench in accordance with the instructions supplied with the equipment.



There is no change for brackets 1 - 7 (consult MR 292).

BRACKET NO 5 APPLICATION

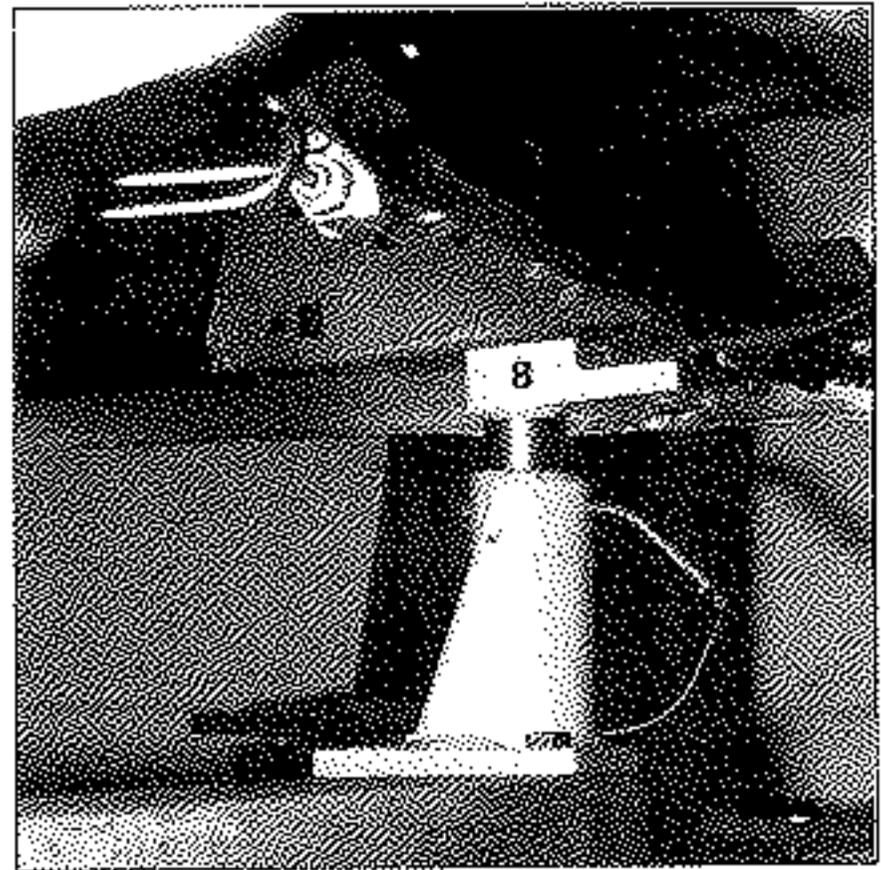
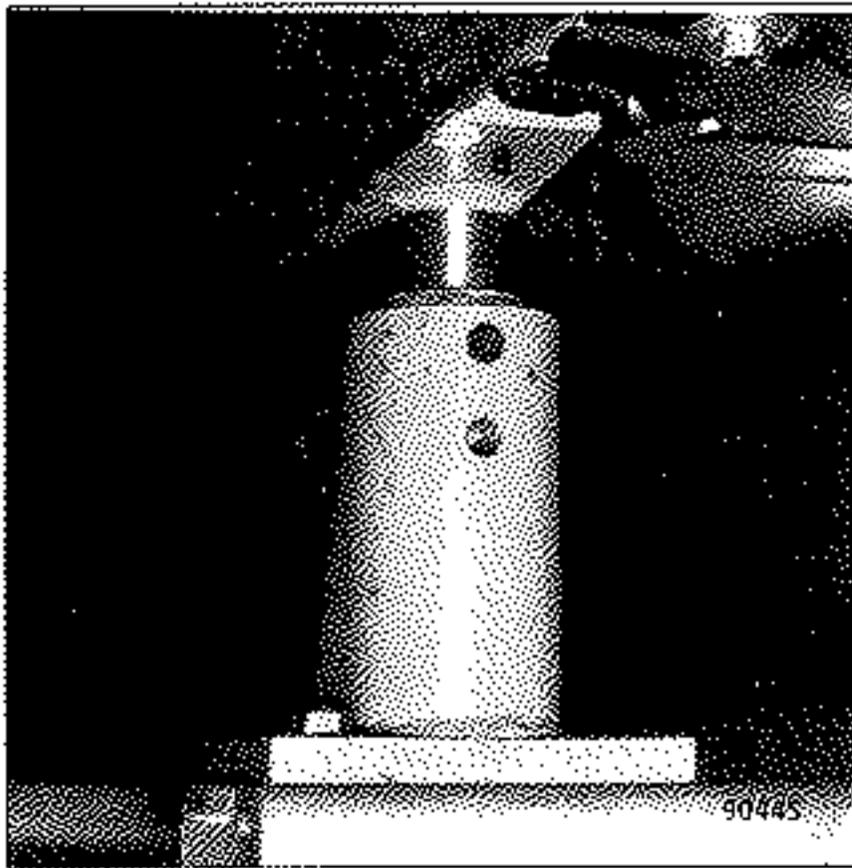
This bracket is used for supporting the rear side member and for centring the suspension arms.

Front impact:

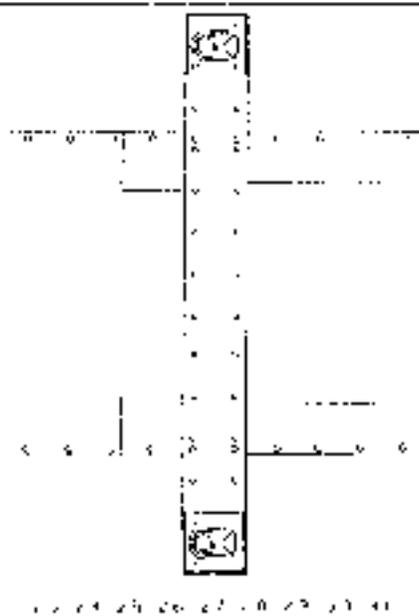
It is used with the rear mechanical units in place and helps to centre the rear part of the vehicle on the bench.

Rear impact:

It is used with the rear mechanical units removed and enables the side arms to be mounted.



POSITIONING



Use the two MZ 140 bases.

Lock the head in the upper hole in the base.

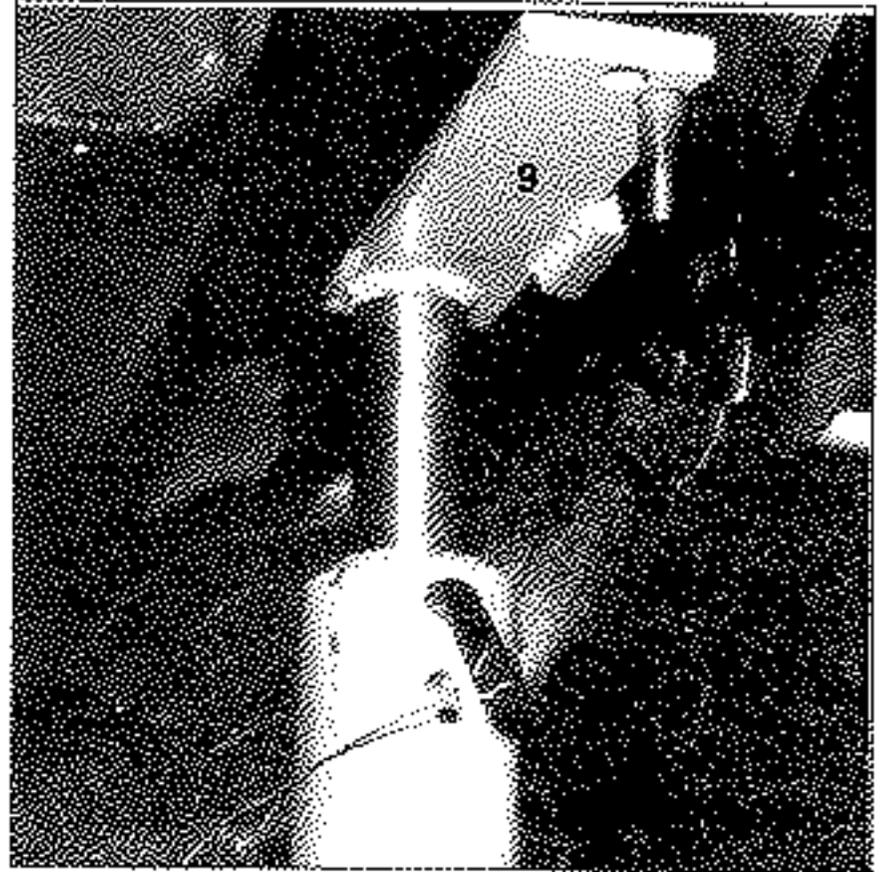
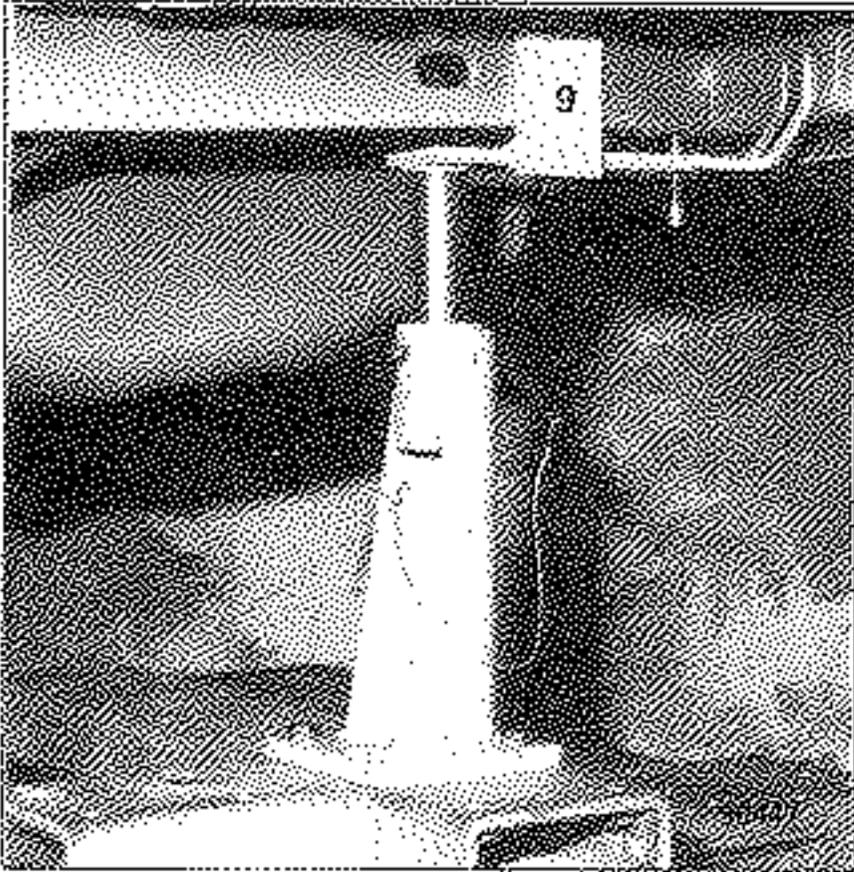
Position the bases at space number 7 of the cross-member which is itself positioned on modular space 27 of the bench.

The arrows are pointing towards the front.

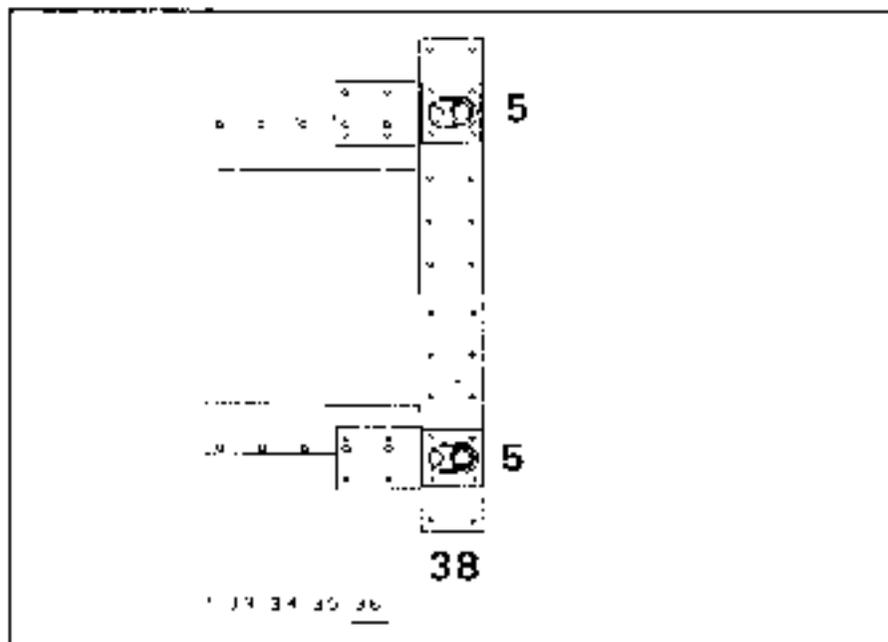
BRACKET NO 9
APPLICATION

This bracket is used to support the floor panel at the rear and for positioning the ends of the rear side members.

It is mainly used with the mechanical units removed when repairing a rear impact.



POSITIONING



Using the two MZ200 bases.

Lock the head in the upper hole in the base.

Position the bases at space number 5 on the rear cross-member.

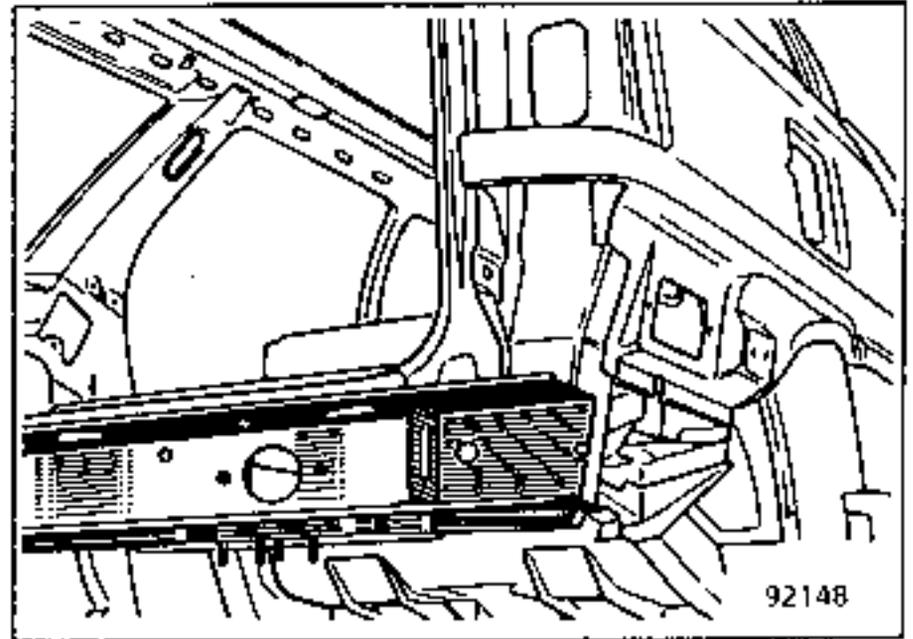
The arrows are pointing towards the rear, base at space number 38.

For brackets numbers 1 to 8 there is no change in relation to the vehicle in question.

BRACKET NO 9

Extreme rear point for rear side member.

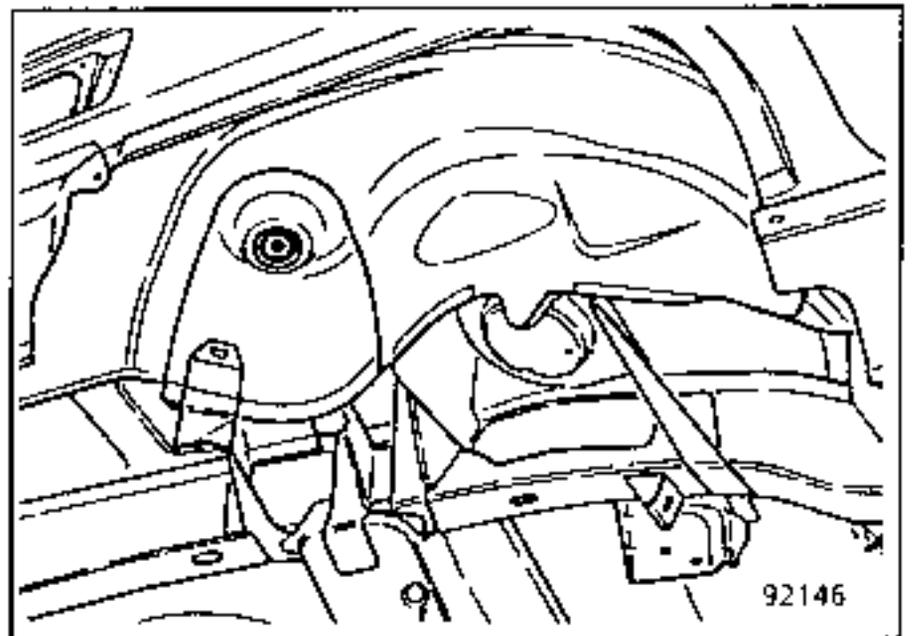
This is used when re-building the rear, when replacing the side member.



BRACKET NO 10

Rear shock absorber upper mounting point.

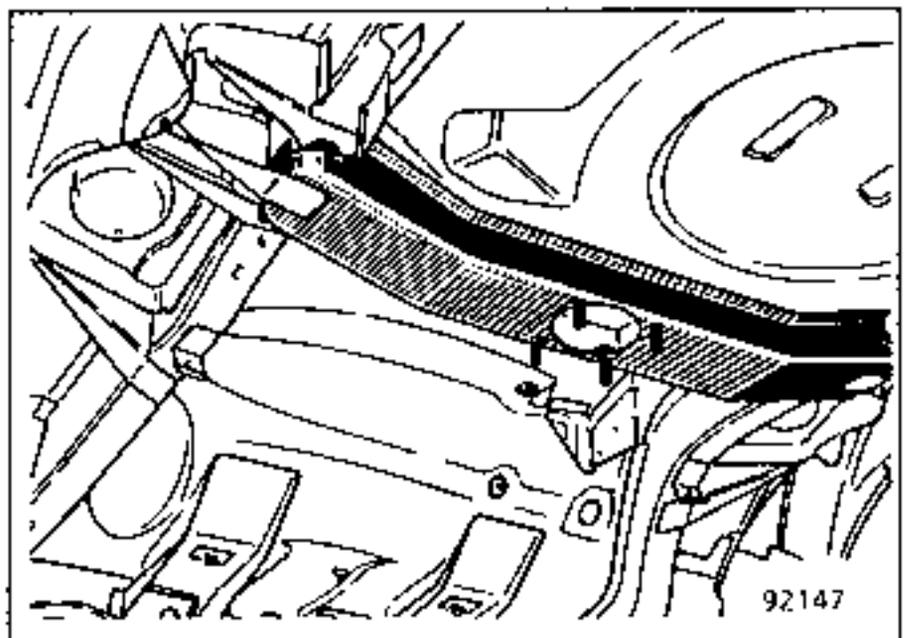
This is used when re-building the rear, for replacing the inner wheel arch panel.



BRACKET NO 11

Rear axle mechanical mounting point
4 x 4.

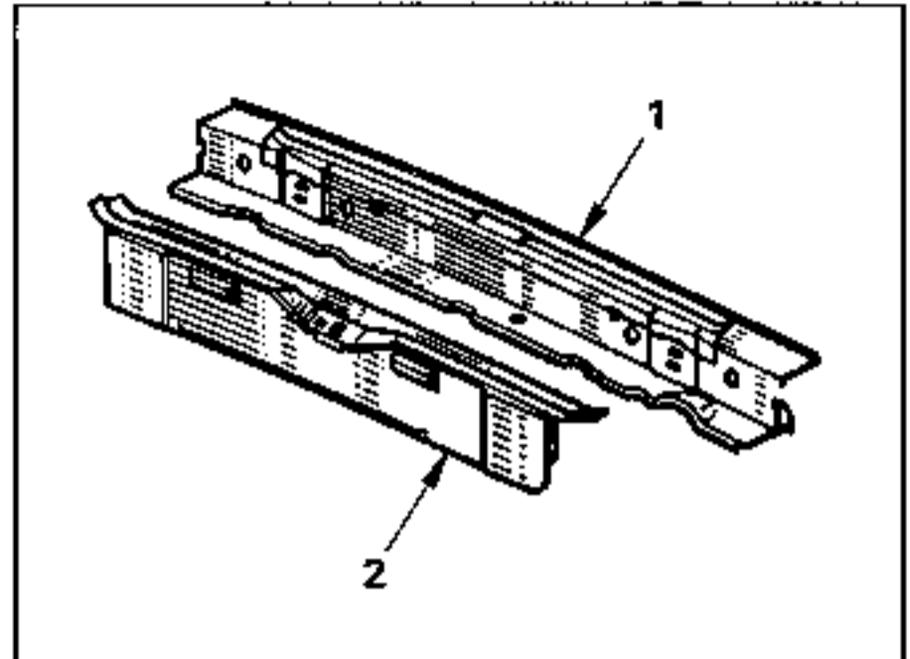
This is used for re-building the rear, for replacing the rear axle mounting cross-member and, when re-building the front, for centring the rear of the vehicle.



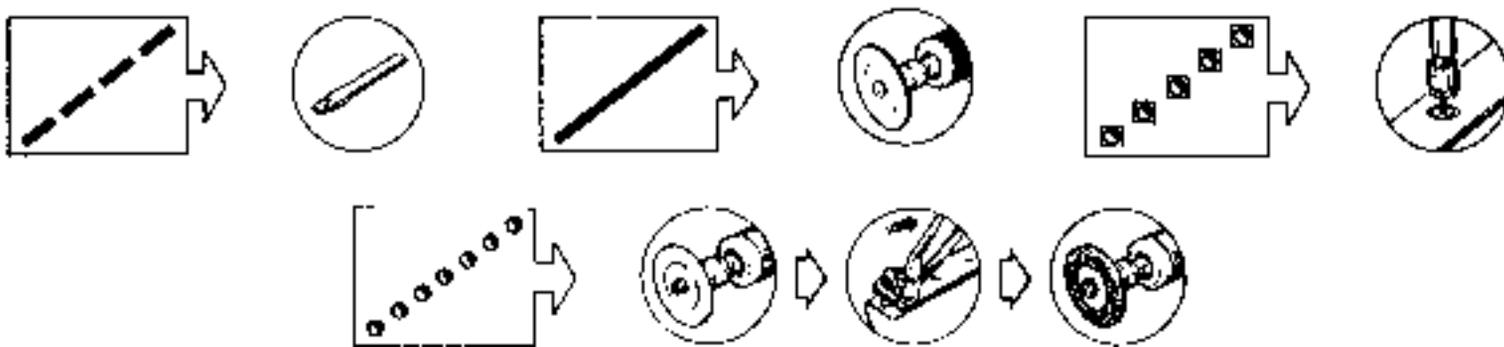
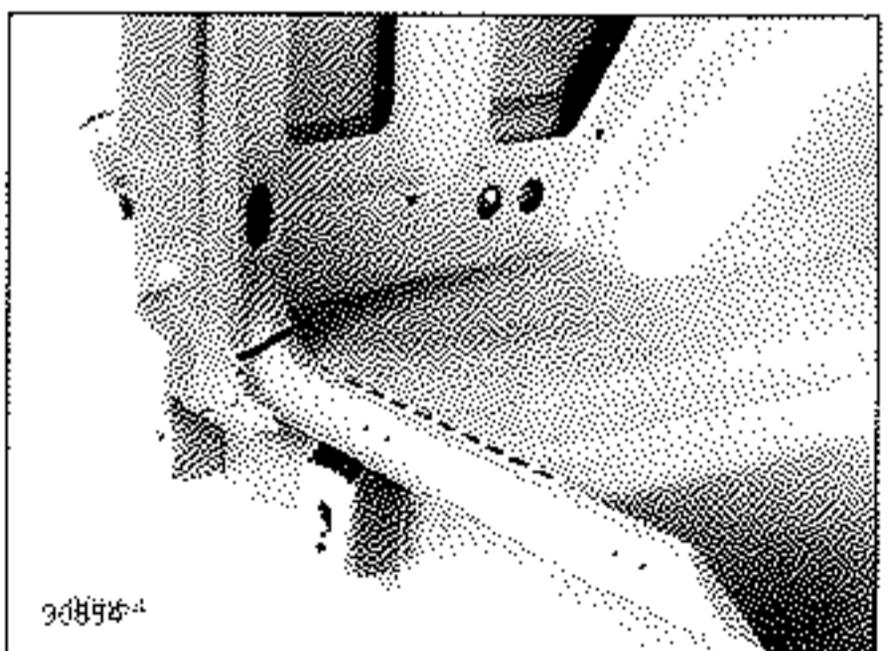
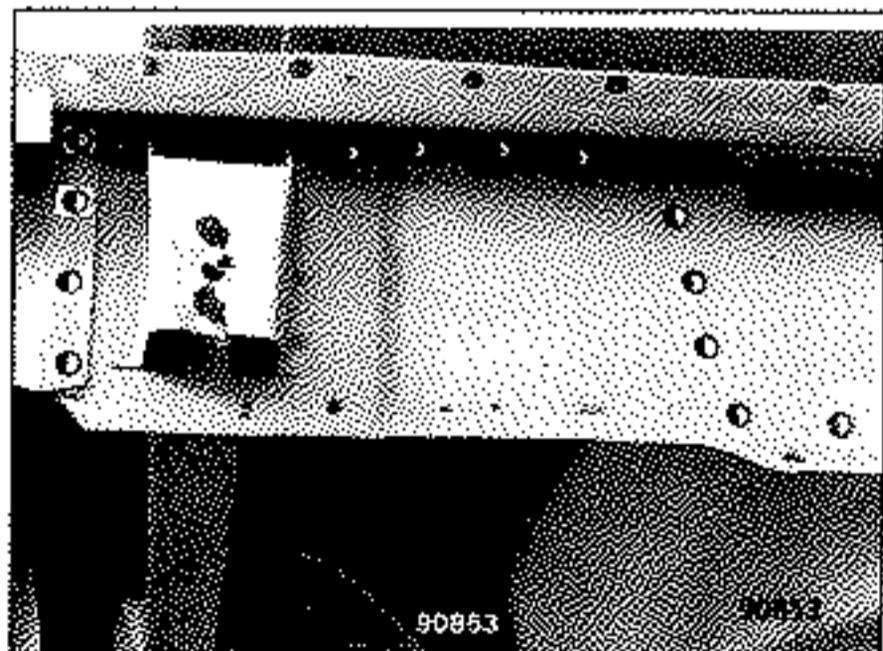
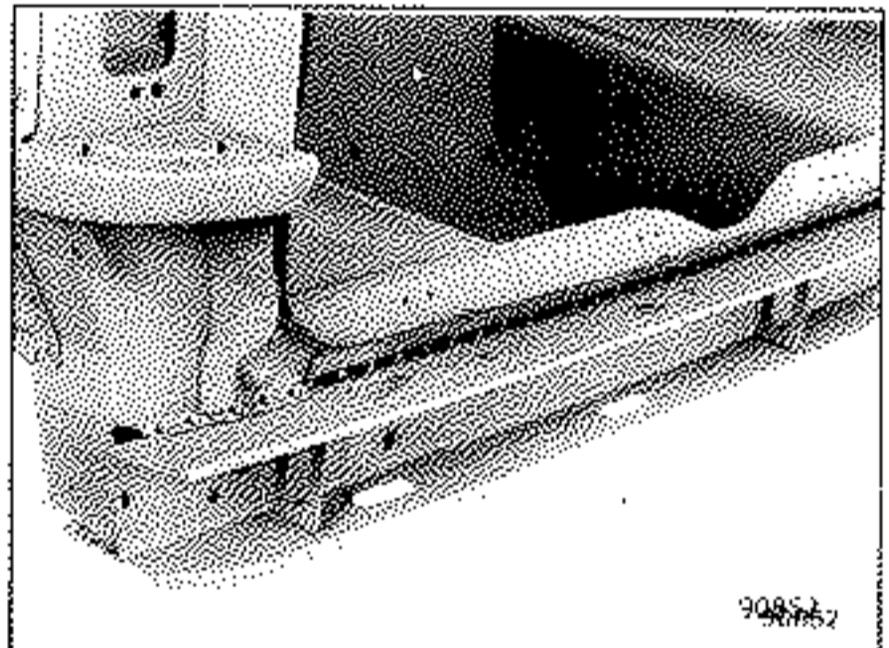
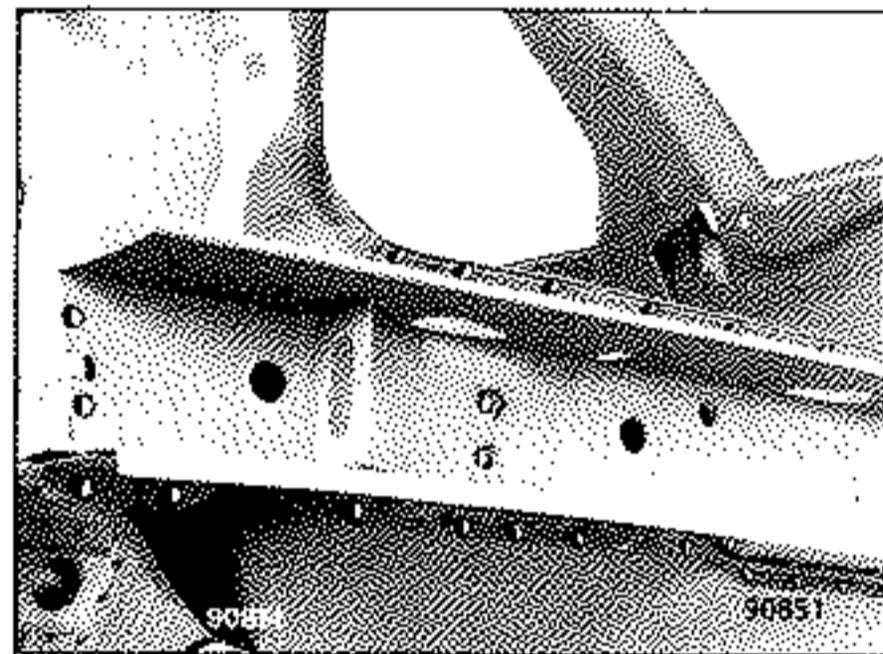
COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT.

Assembled part comprising:

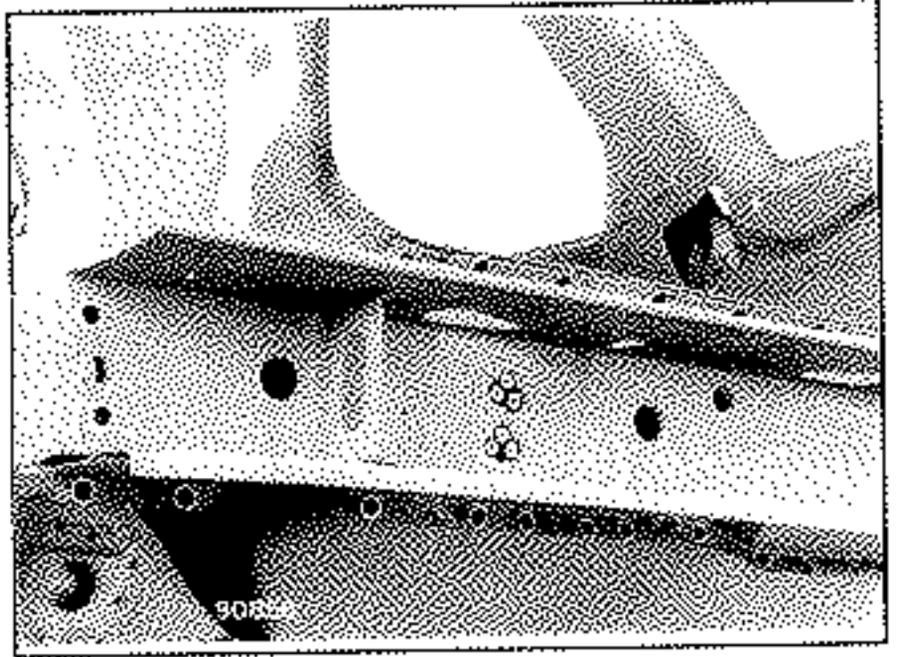
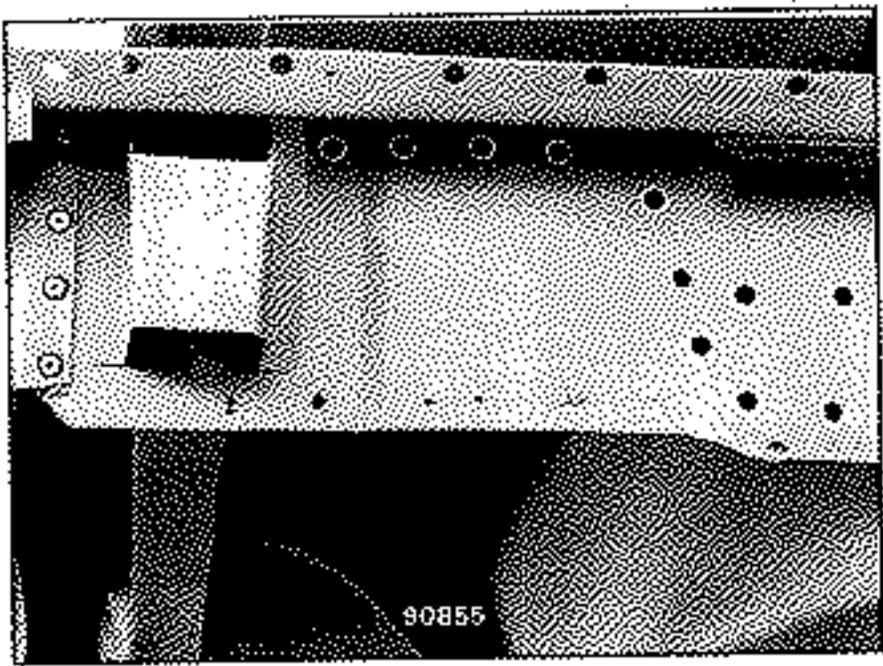
1. Absorber mounting cross-member with:
 bulkheads
 striker plate mounting cross-member
 lower closure plate
 upper closure plate
2. Striker plate mounting cross-member with:
 floor panel closure plate
 striker plate strengthener
 connection strengtheners



CUTTING OUT - UNPICKING

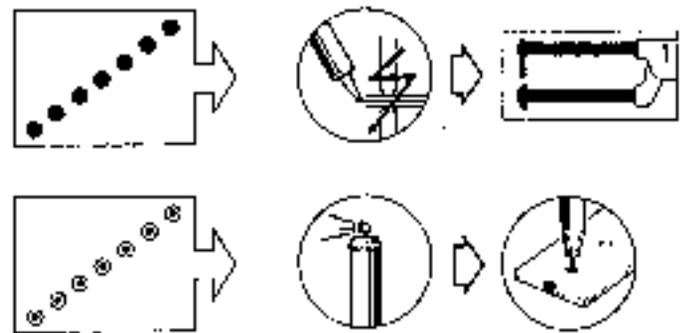
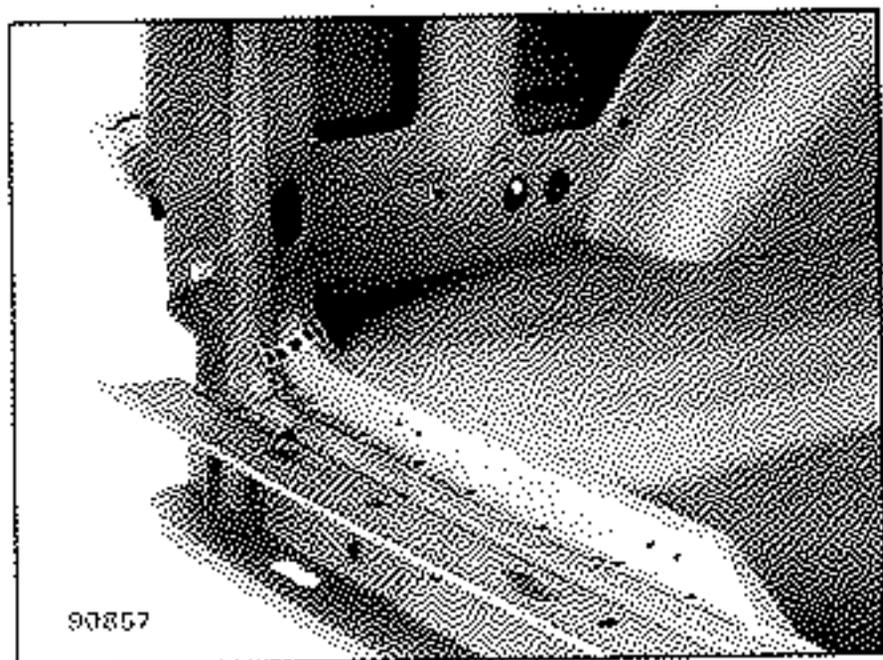


WELDING

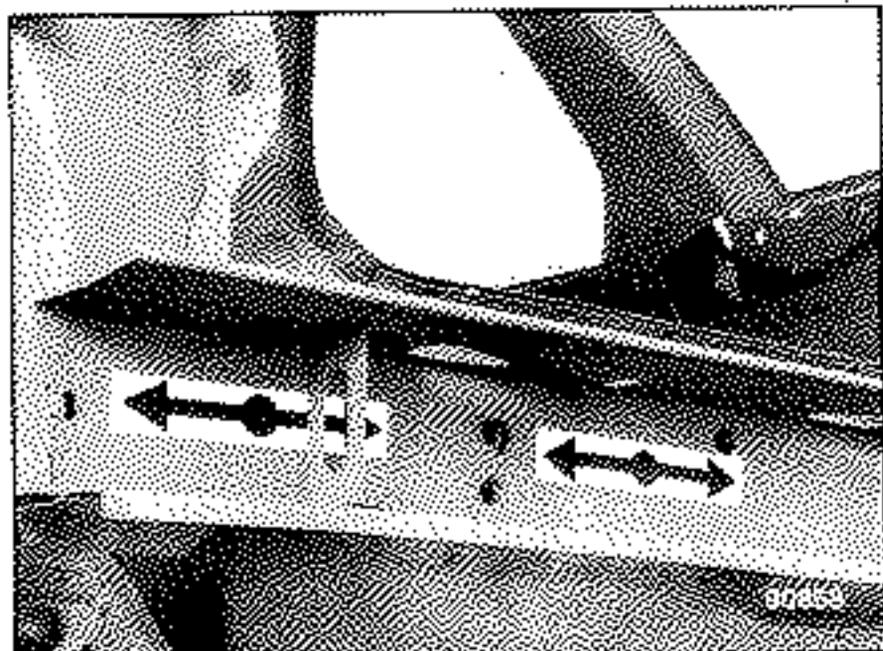


e = 1,5 mm H = 30 mm

e = 1,5 mm H = 30 mm



ANTI-CORROSION PROTECTION

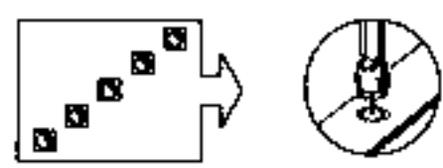
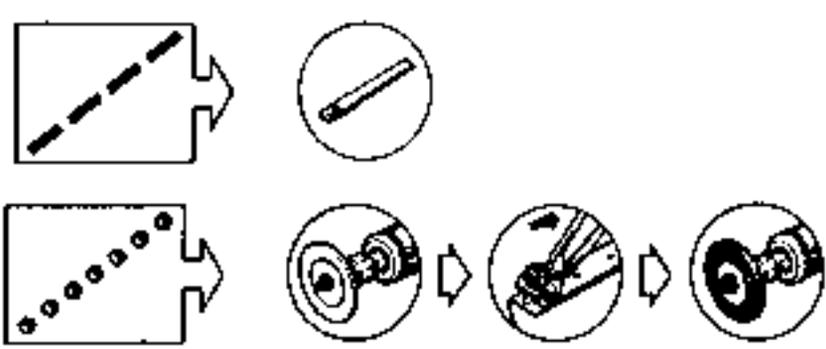
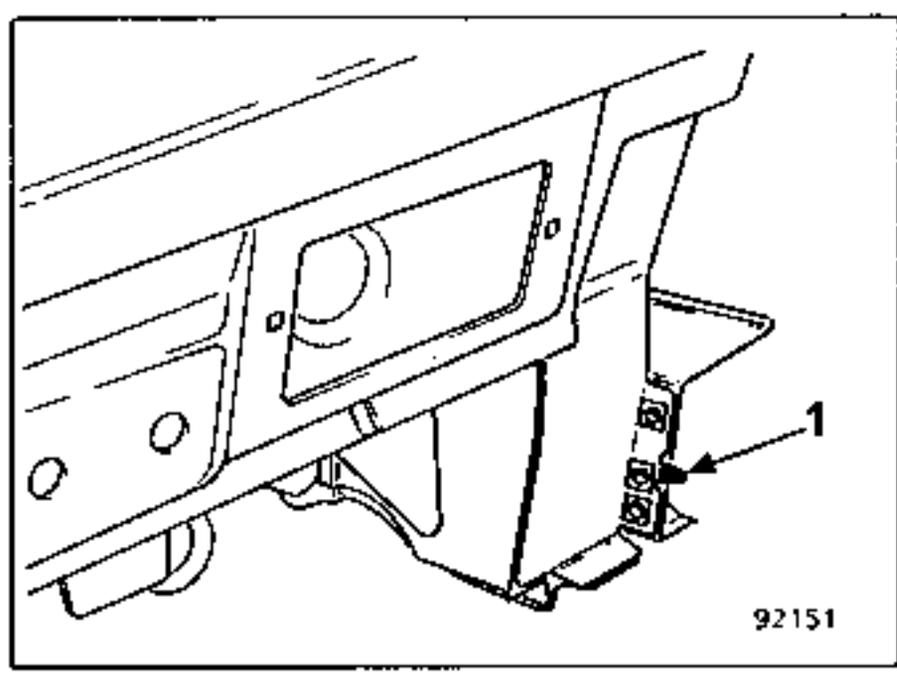
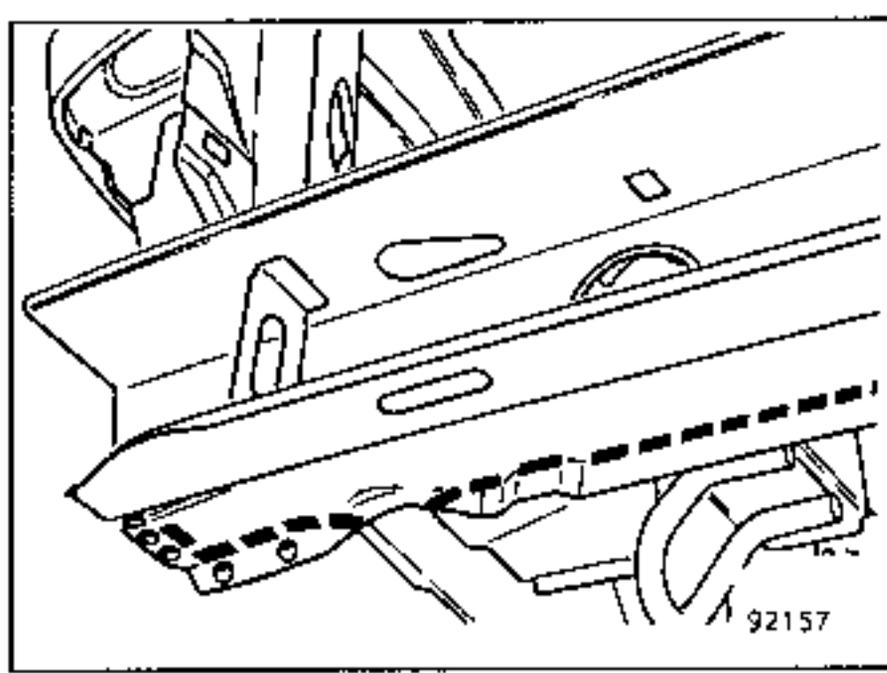
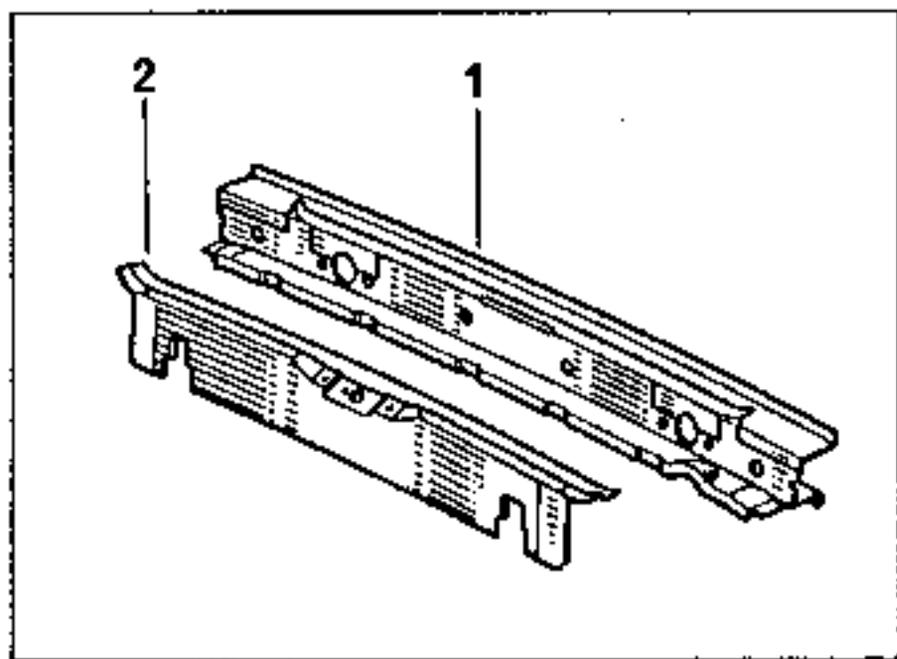


COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT.

Assembled part comprising:

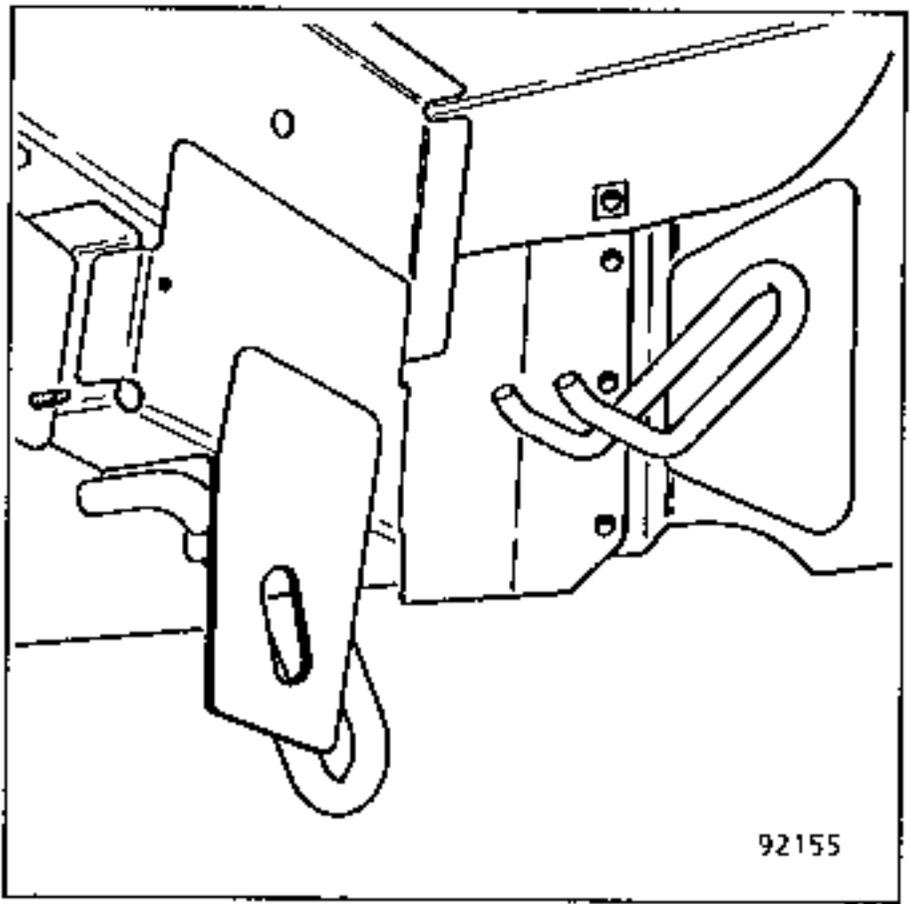
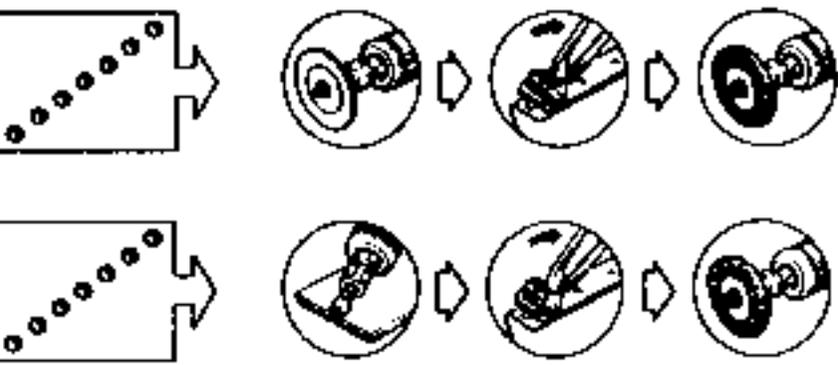
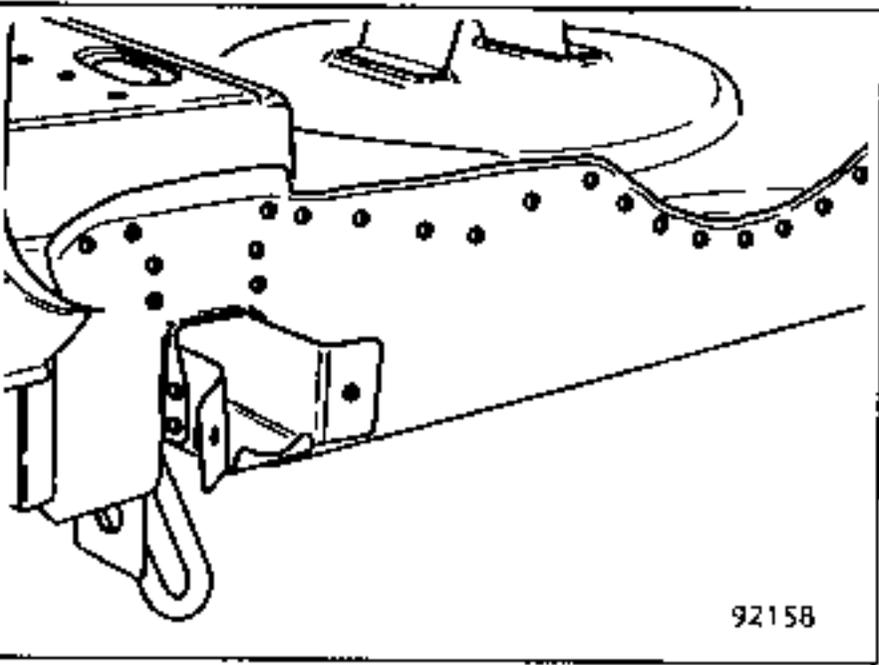
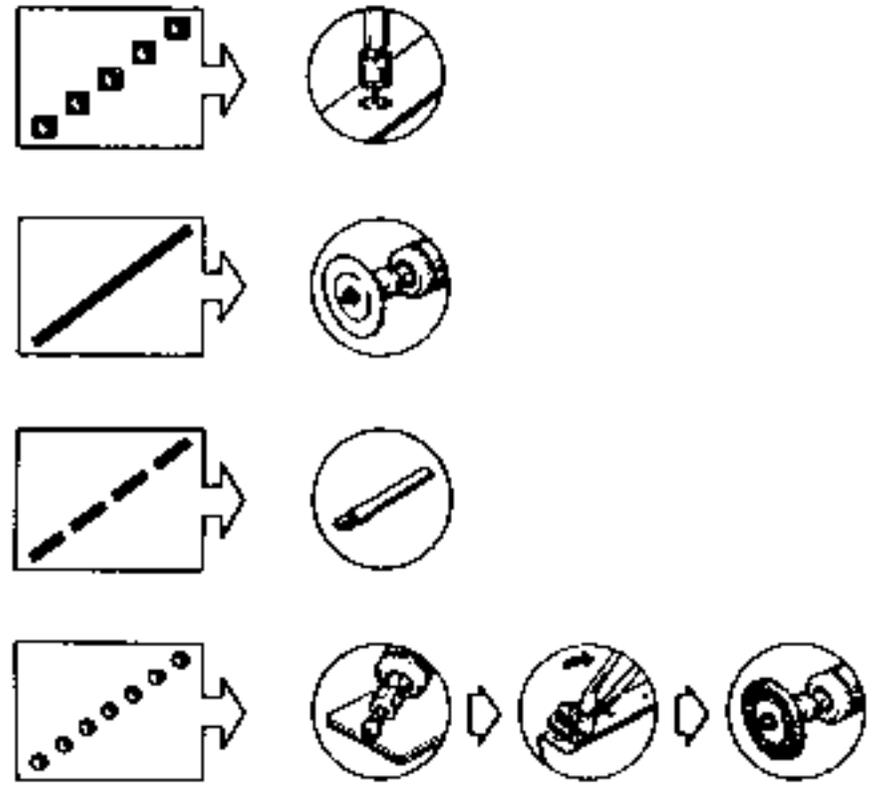
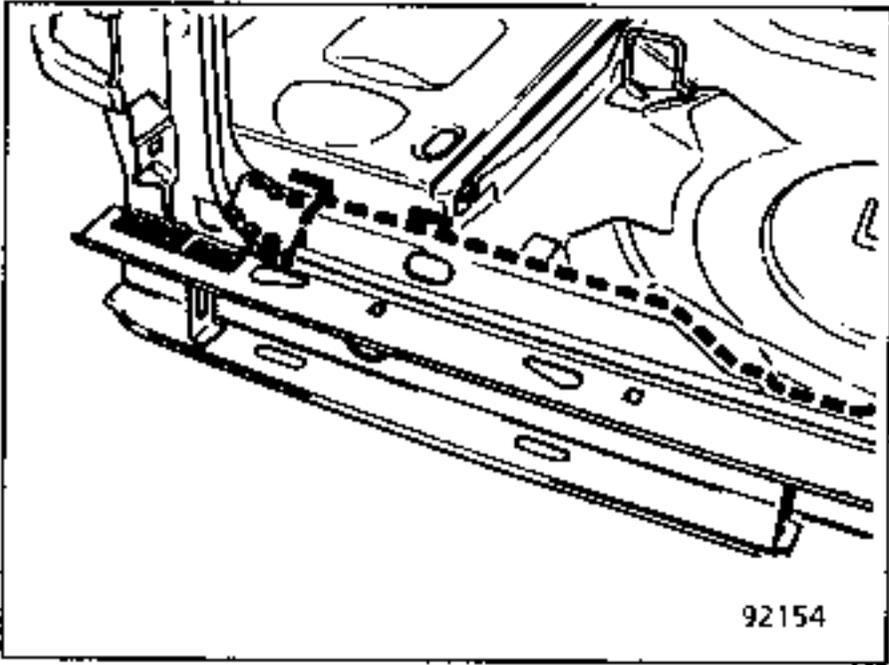
- 1. Rear cross-member
3 bulkheads
lower cross-member
- 2. Cross-member
closure panel

CUTTING OUT - UNPICKING

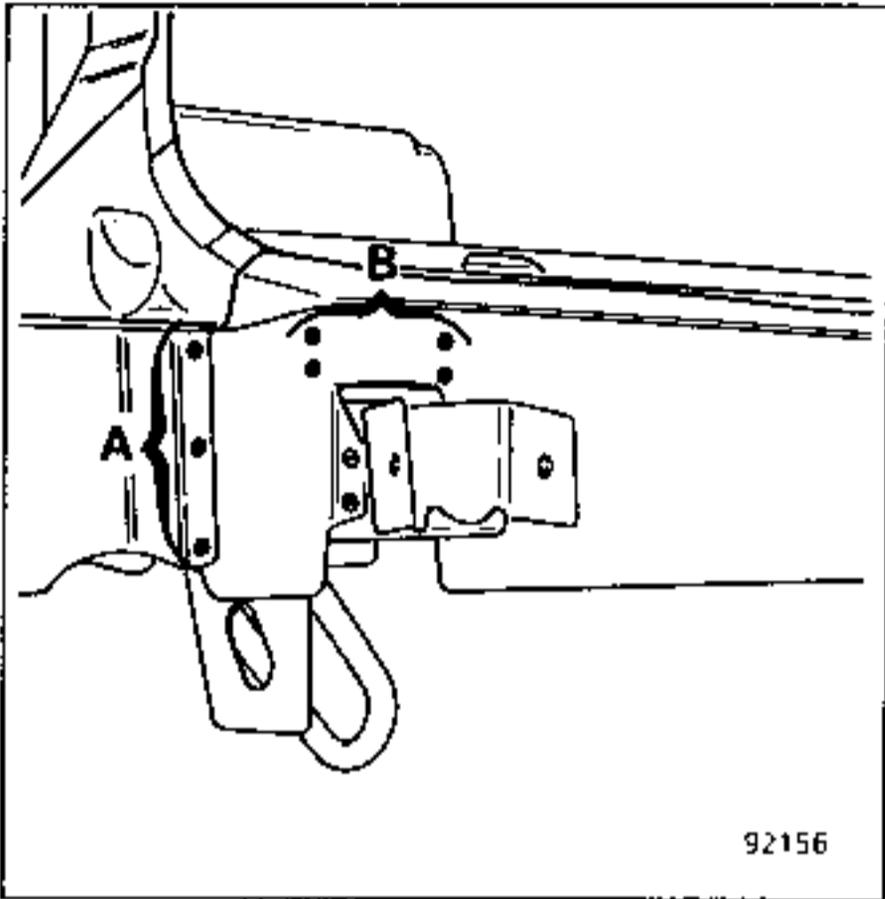


Open retaining catch (1).

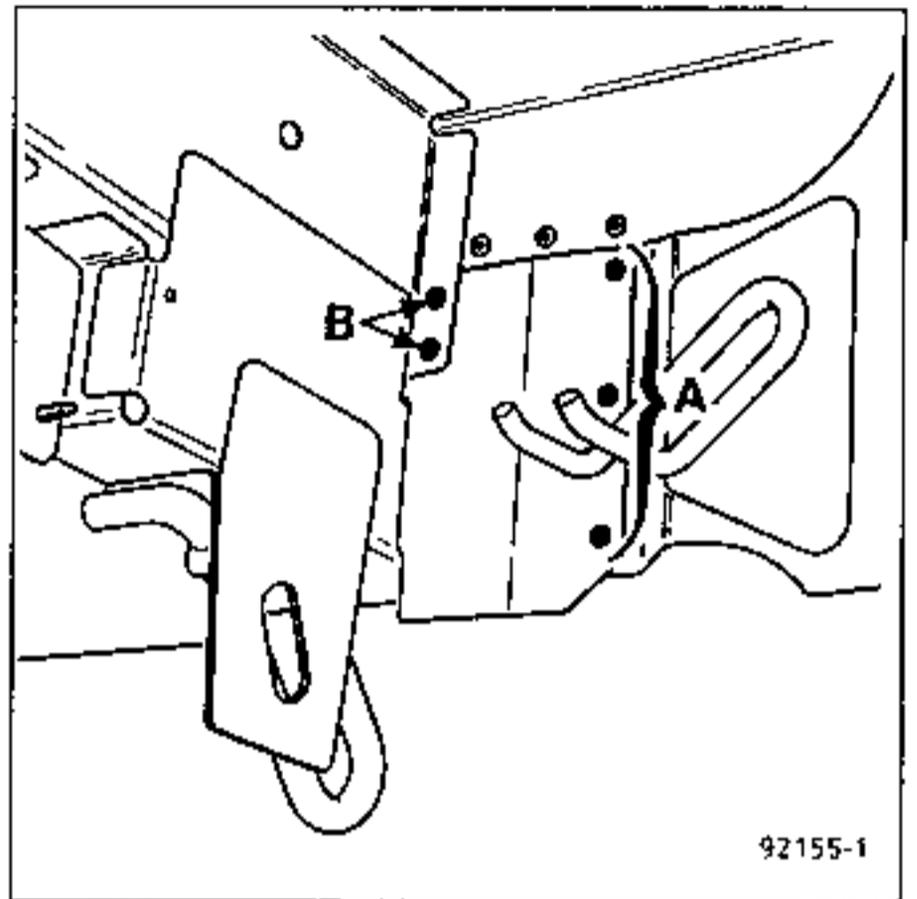
NOTE: The general sequence for replacing a welded component is described in Sub-section 40.



WELDING



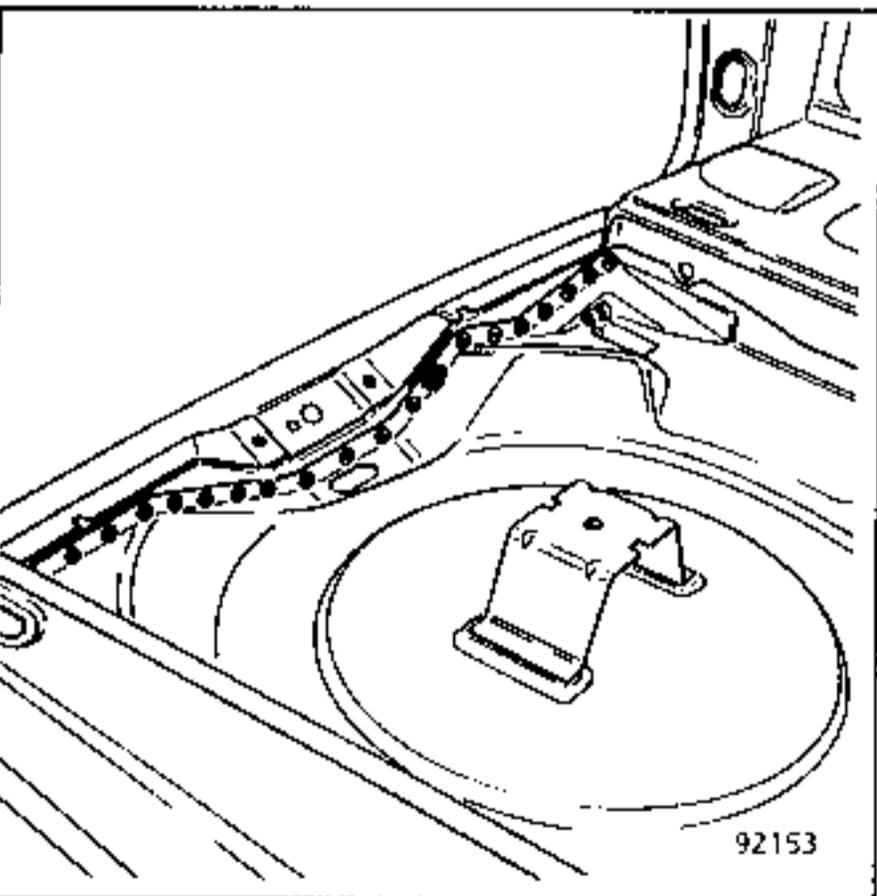
92156



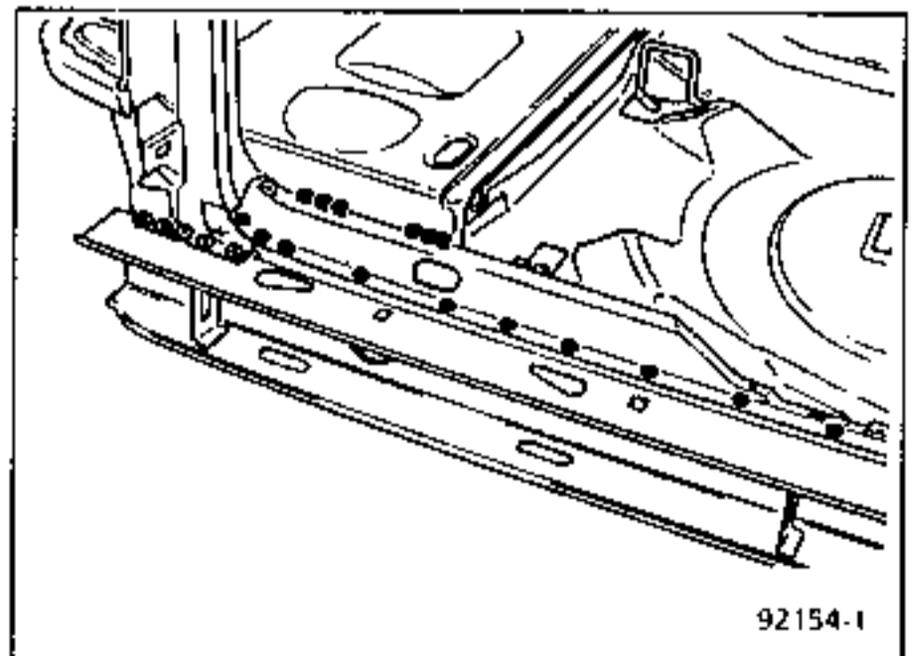
92155-1

A : e = 2 mm
B : e = 3,5 mm H = 65 mm D = 5,5 mm

A : e = 2 mm
B : e = 3,5 mm H = 65 mm D = 5,5 mm



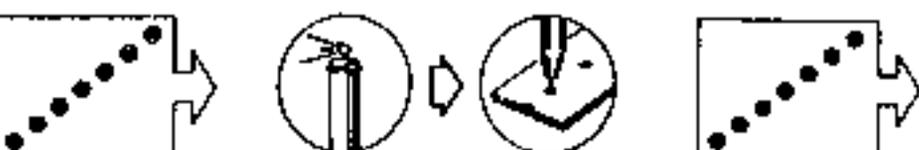
92153

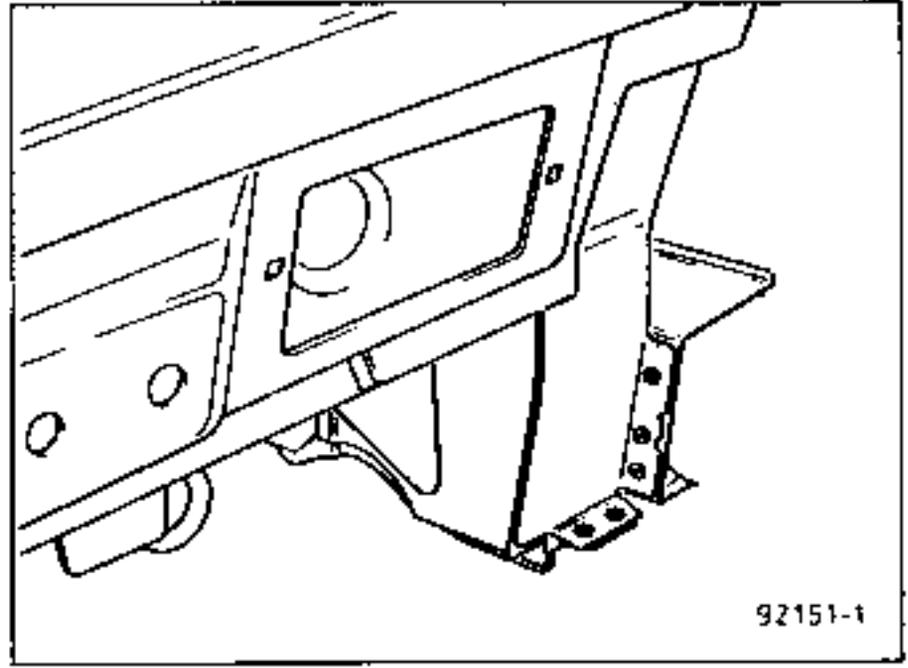
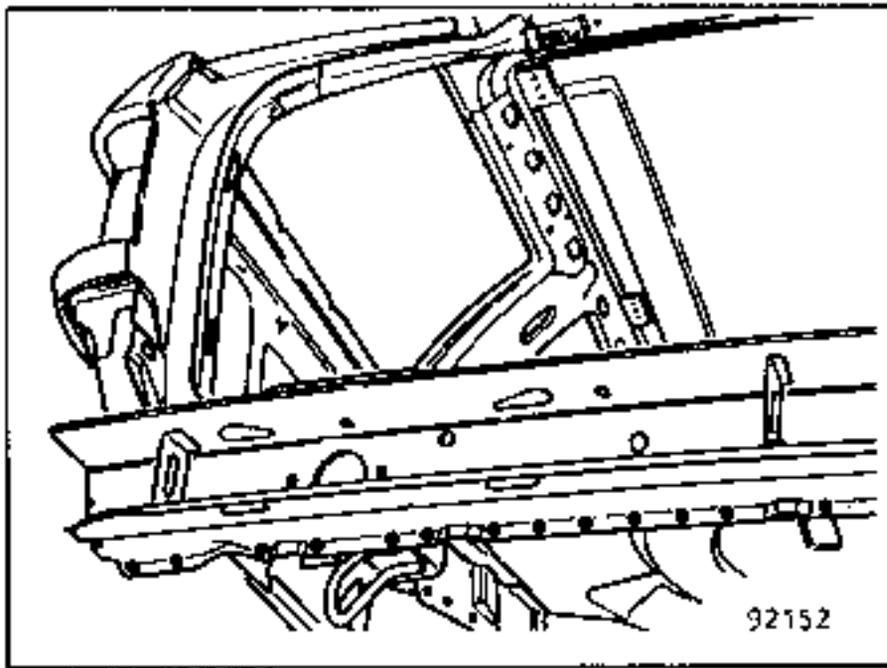


92154-1

D = 5 mm

e = 2 mm H = 65 mm D = 5,5 mm

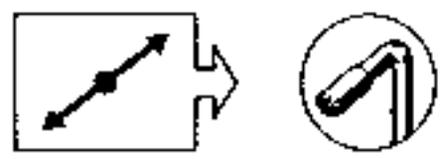
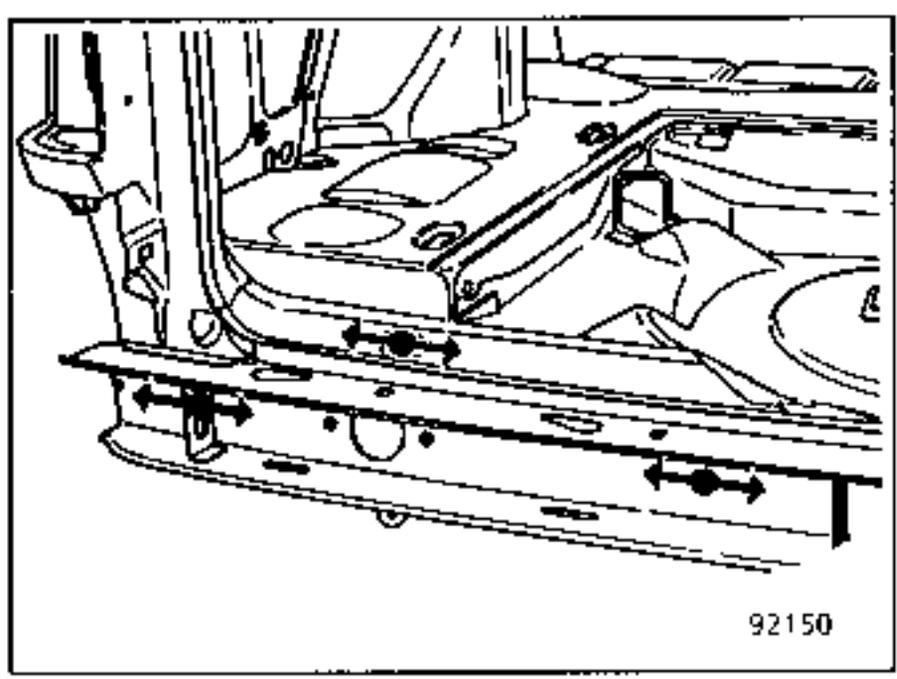




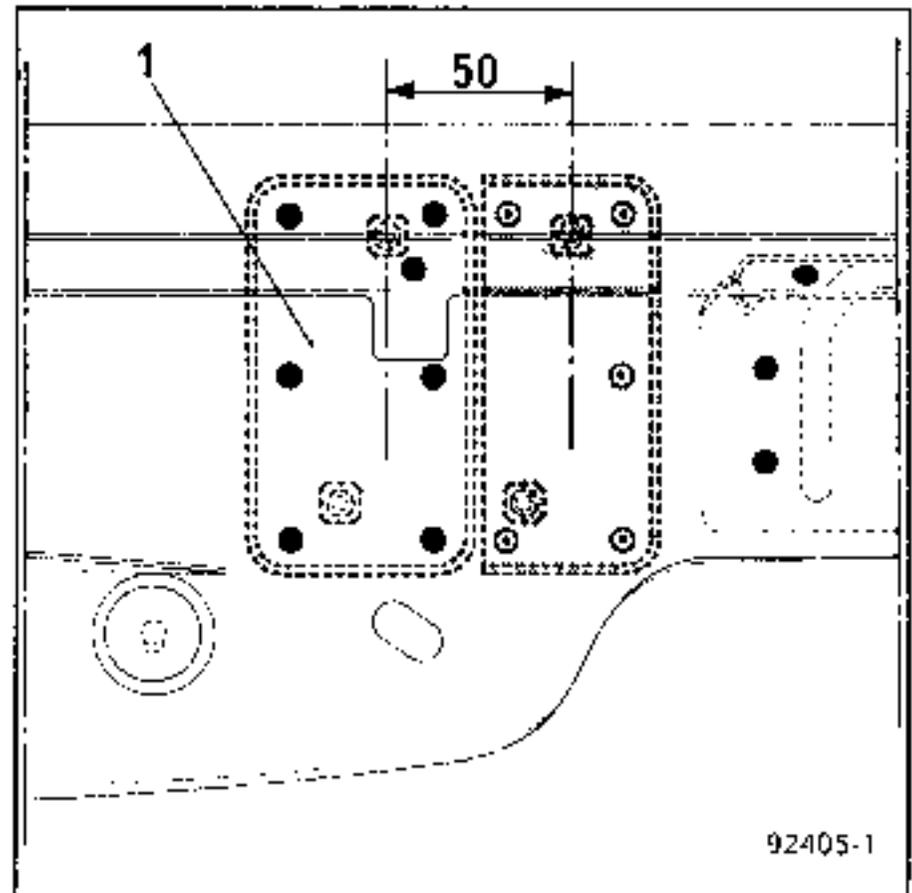
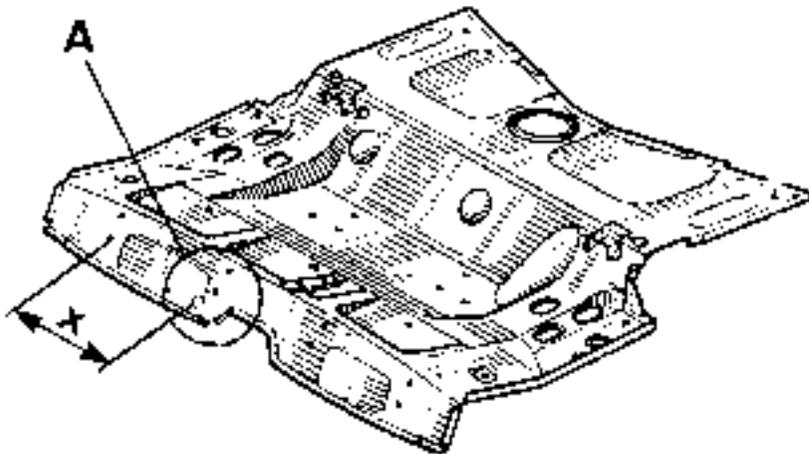
e = 2 mm H = 65 mm



ANTI-CORROSION PROTECTION



MOVING THE LEFT-HAND STRENGTHENER FOR THE REAR RIGHT-HAND SEAT ANCHORAGE

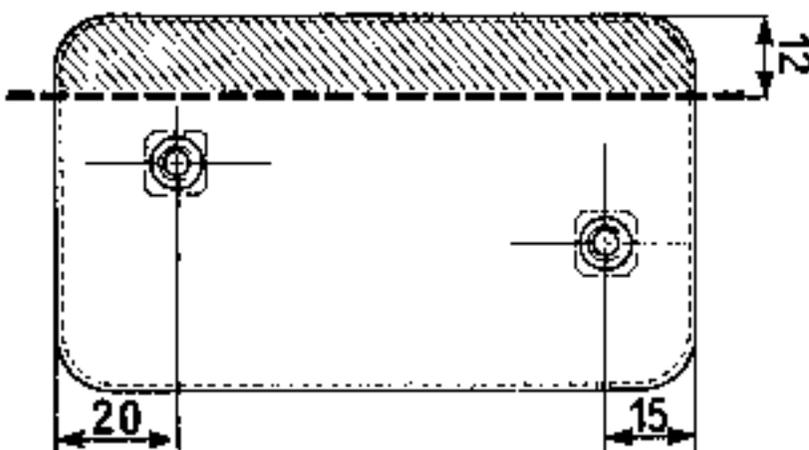


92405-1

In production, the strengthener (1) - shown in detail A - has been moved 50 mm to the right-hand side. For reasons of standardisation, the service exchange parts affected by this modification will be supplied to the new specification. When replacing one of these parts, therefore, the following part must also be ordered:

- Rear right-hand seat mounting central strengthener
Part No 77 50 768 214 (in order to convert the new parts to the old definition specification so that the original seat may be re-used).

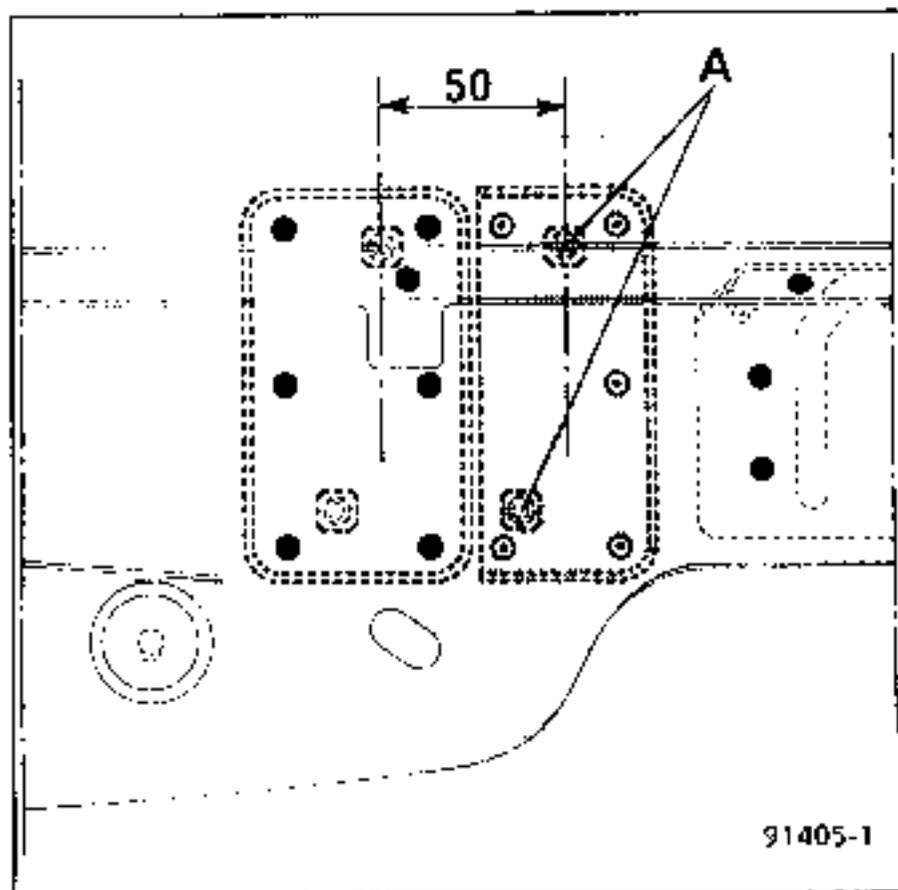
NOTE: Before ordering any parts, check the vehicle specification. For this purpose, check the distance (X) between the seat mounting strengtheners - old specification: X = 400 mm
new specification: X = 350 mm



91405

Saw part of the new strengthener to the dimension shown in the drawing.

NOTE: The part is not symmetrical along its transverse axis: mark the side to be cut in relation to the dimensions for positioning the welded nuts.



Fit the strengthener to the new floor panel. Mark its position according to the dimension indicated above.

Punch the 2 holes to be drilled (A).

Drill the 2 holes (A) in the floor panel to a diameter of 8.5 mm.

Prepare the parts to be plug welded: for this purpose drill the first panel to diameter D shown below each welding diagram and coat them with aluminium paint.

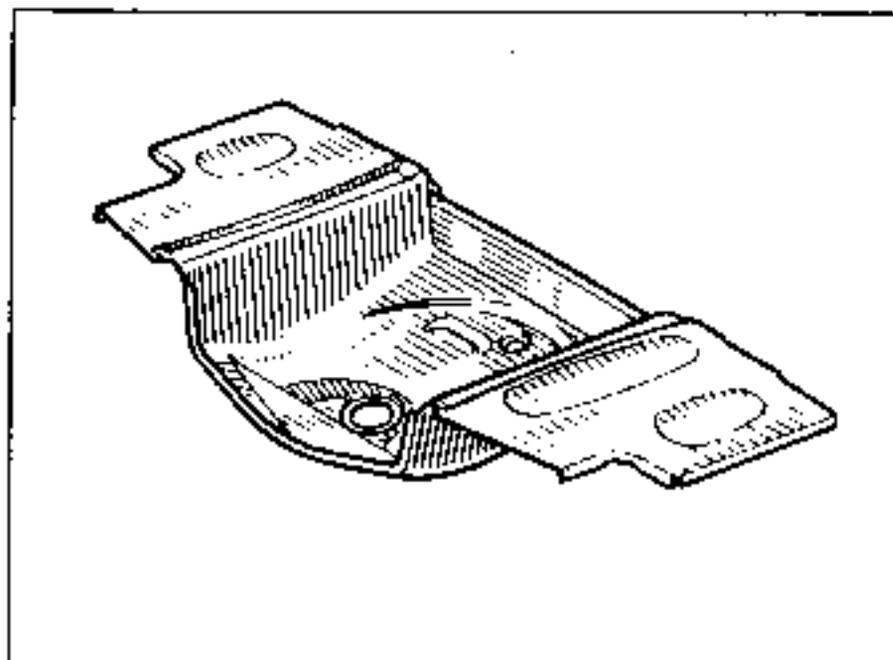
Secure the strengthener using 2 bolts.

Apply the plug welds under a protective gas envelope.

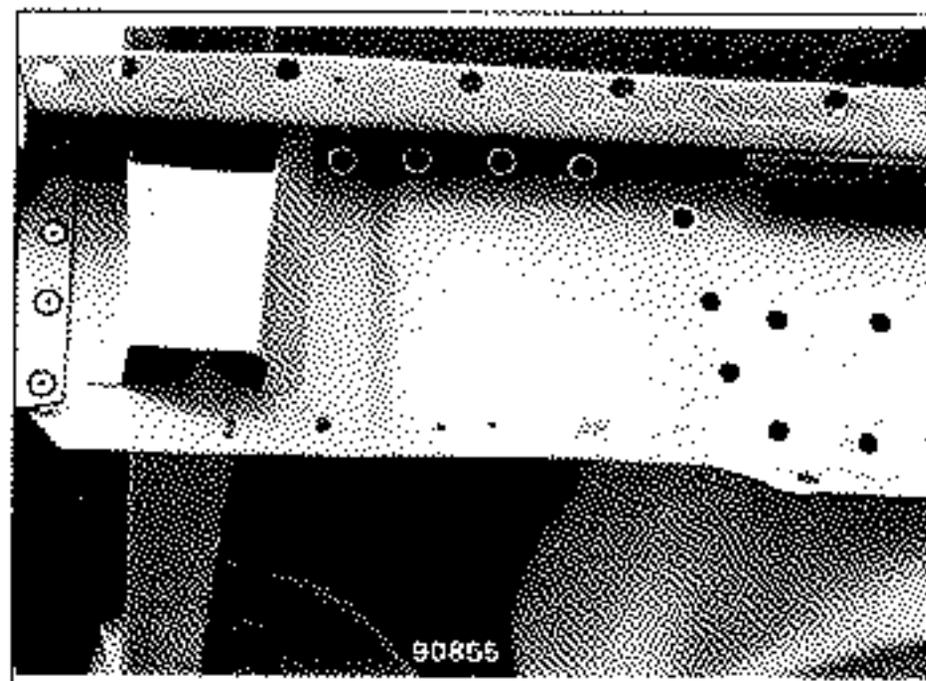
COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT.

Assembled parts comprising:

Rear floor panel
closure panel



For reasons of standardisation the Parts Department supplies the same part for this vehicle as for the saloon version. When welding the connection between the floor panel and cross-member, an additional electric weld line will have to be applied (see diagram).

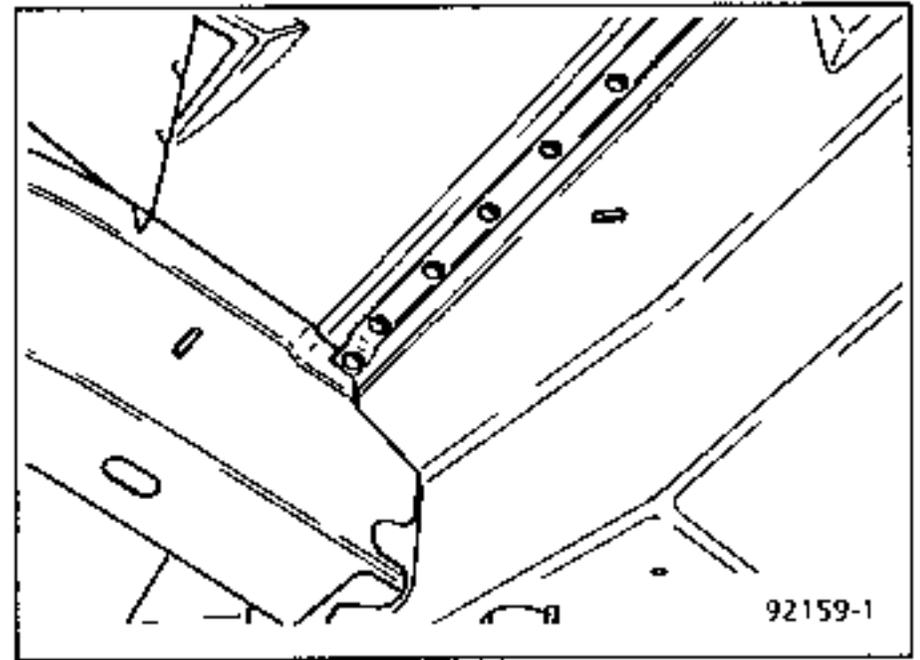
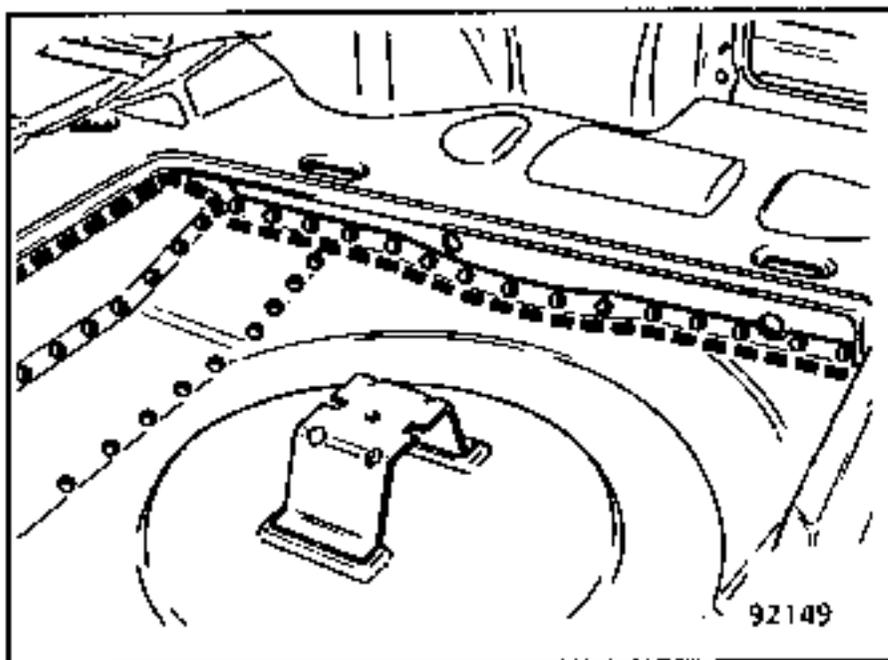
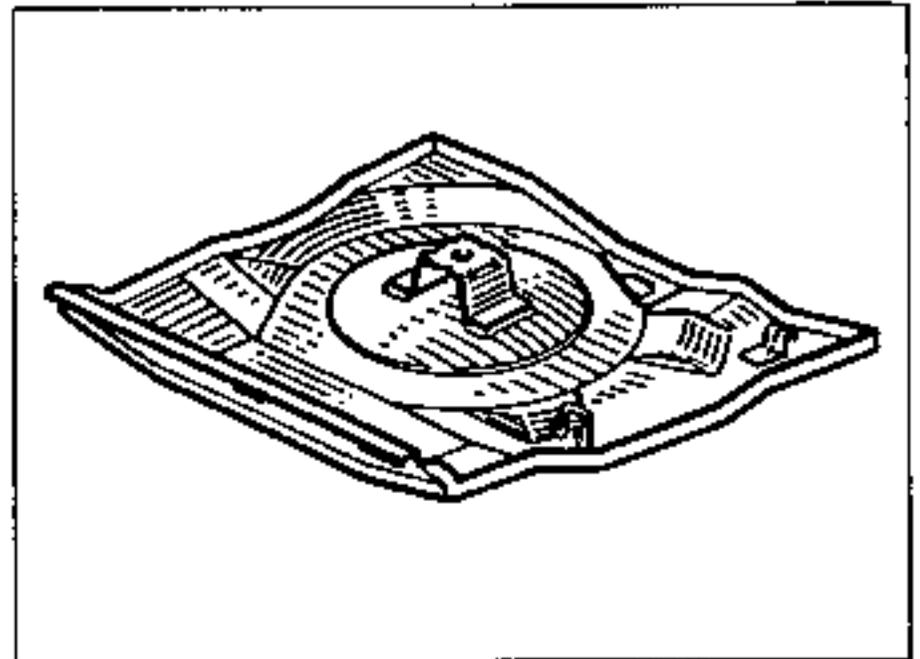


This operation is additional to the replacement of the rear cross-member.

COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT.

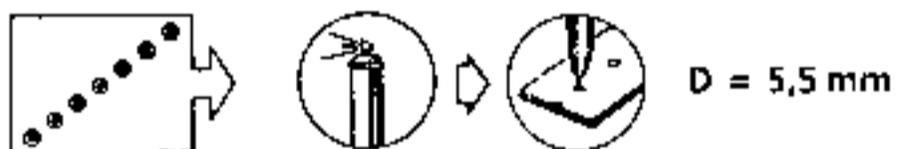
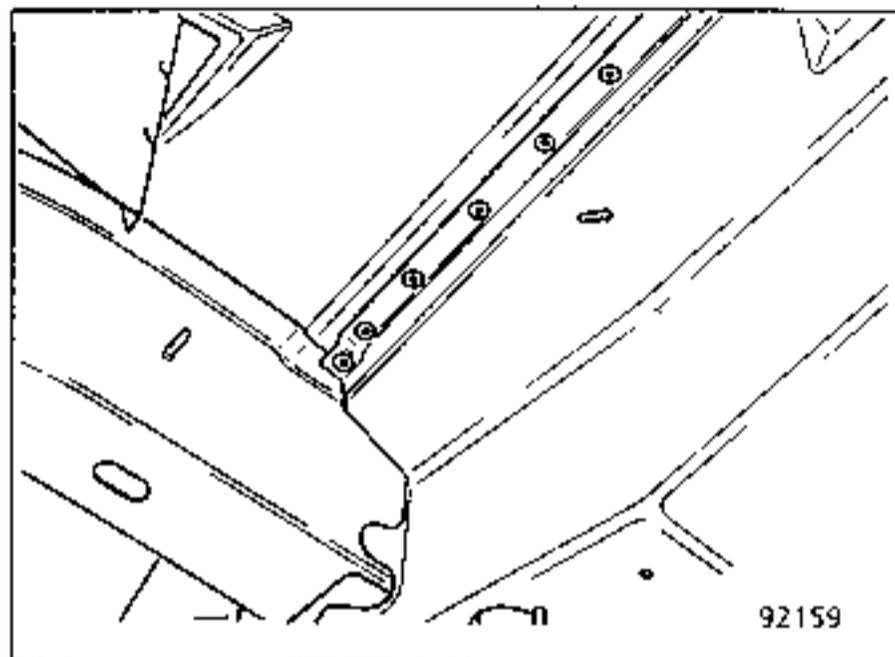
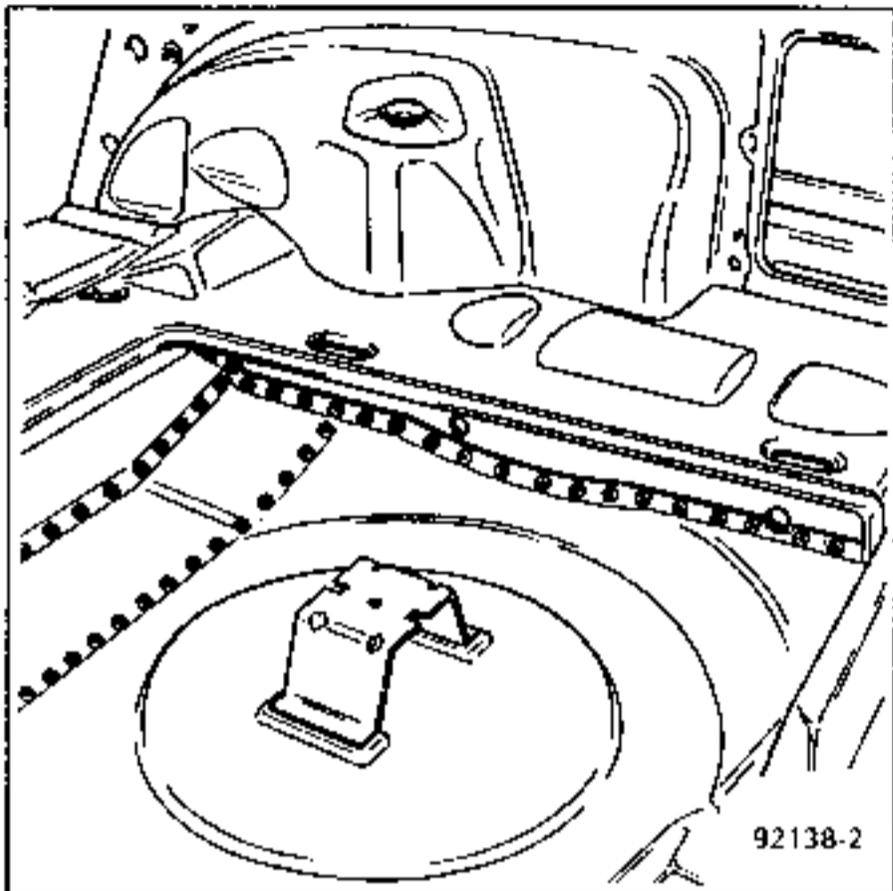
Assembled part comprising:
 luggage compartment bottom panel
 centre support
 hinge support
 front support

CUTTING OUT - UNPICKING



NOTE: the general sequence for replacing a welded component is described in Sub-section 40.

WELDING



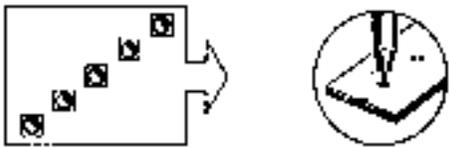
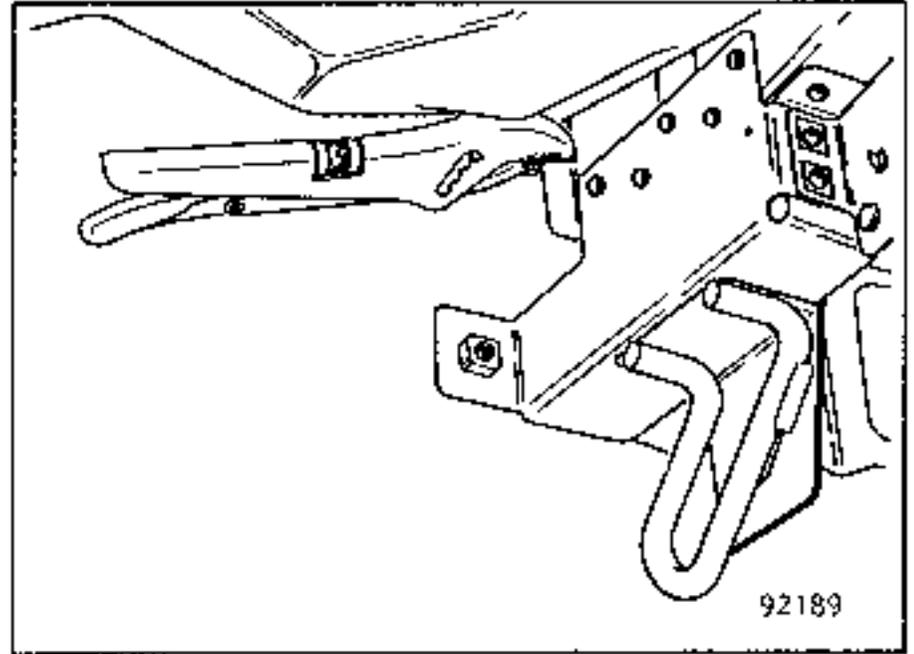
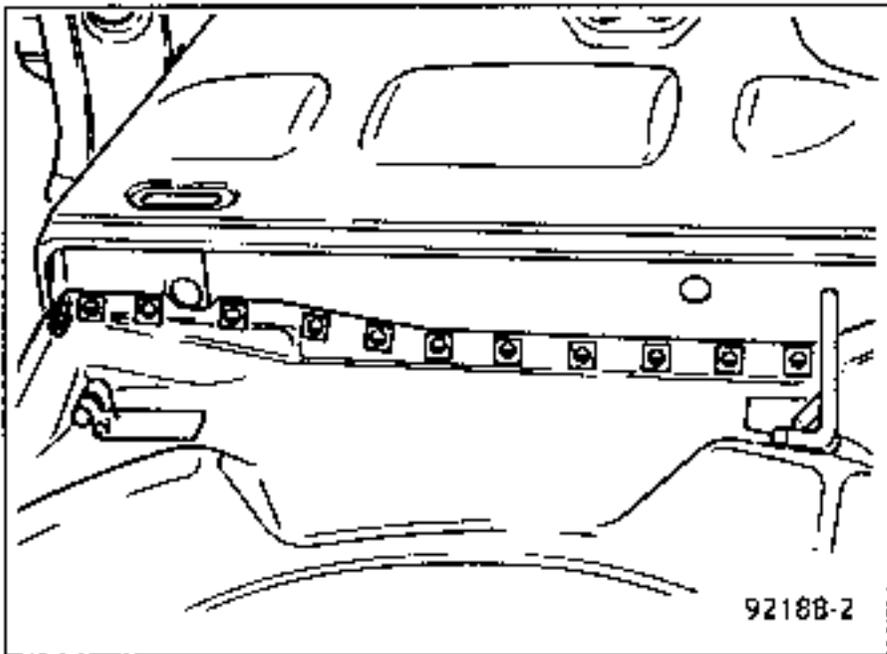
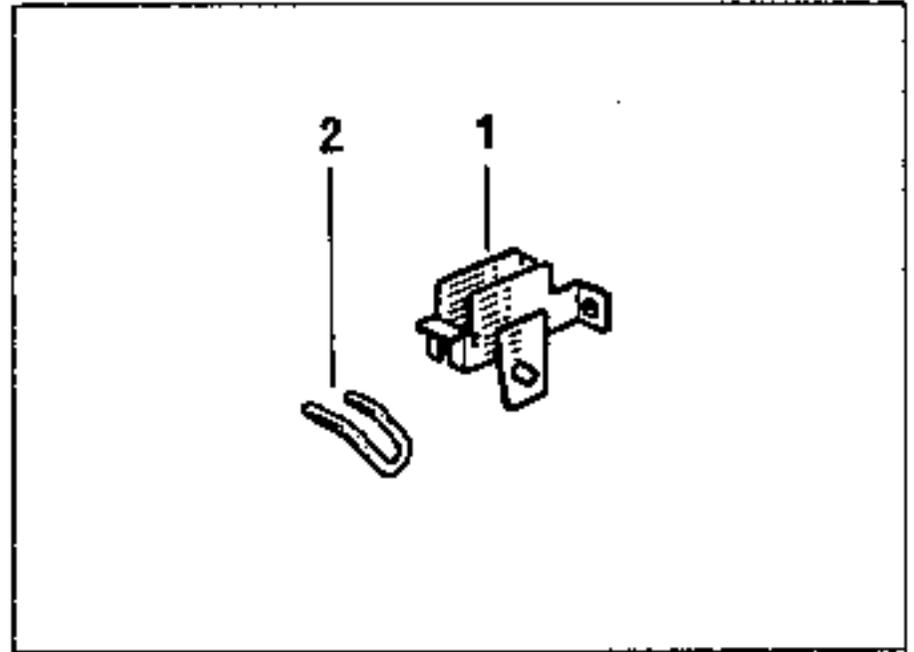
This operation is additional to the replacement of the rear cross-member.

COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT.

Assembled part comprising:

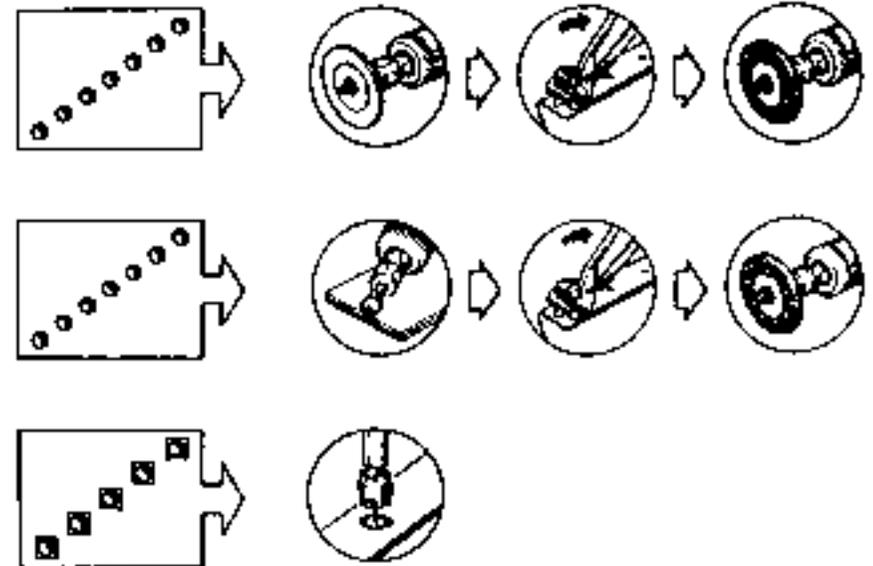
- 1. absorber unit
- stowing gusset
- 2. towing eye

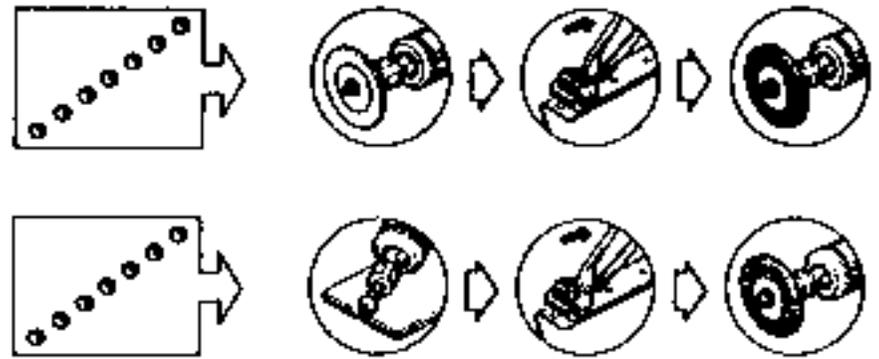
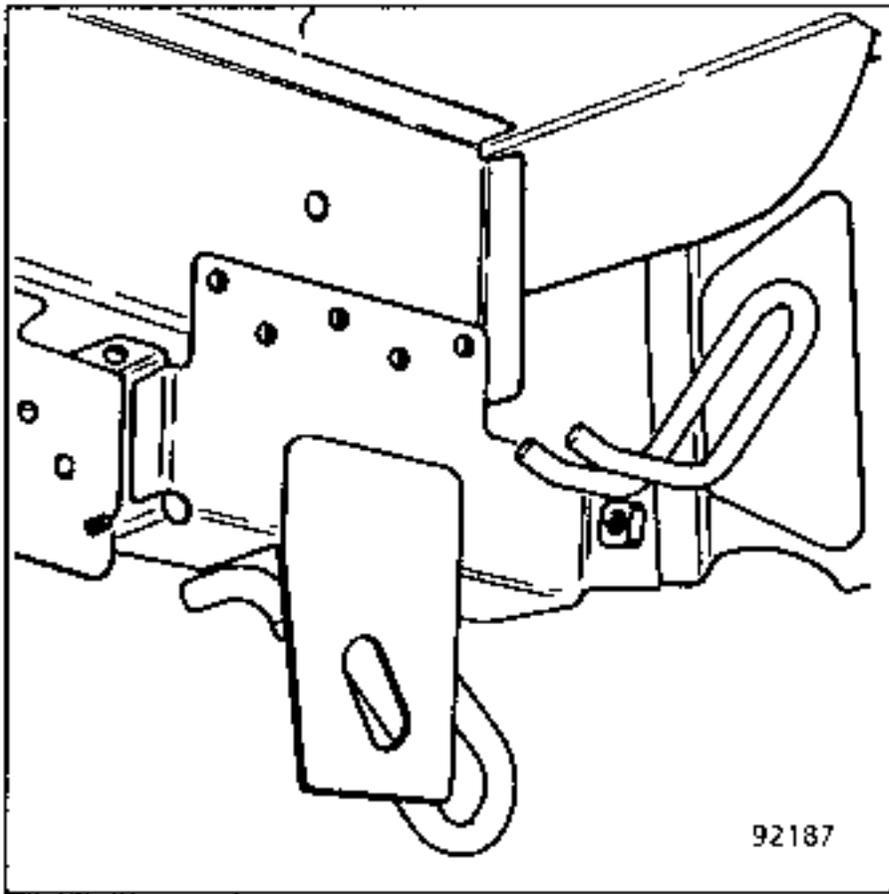
CUTTING OUT - UNPICKING



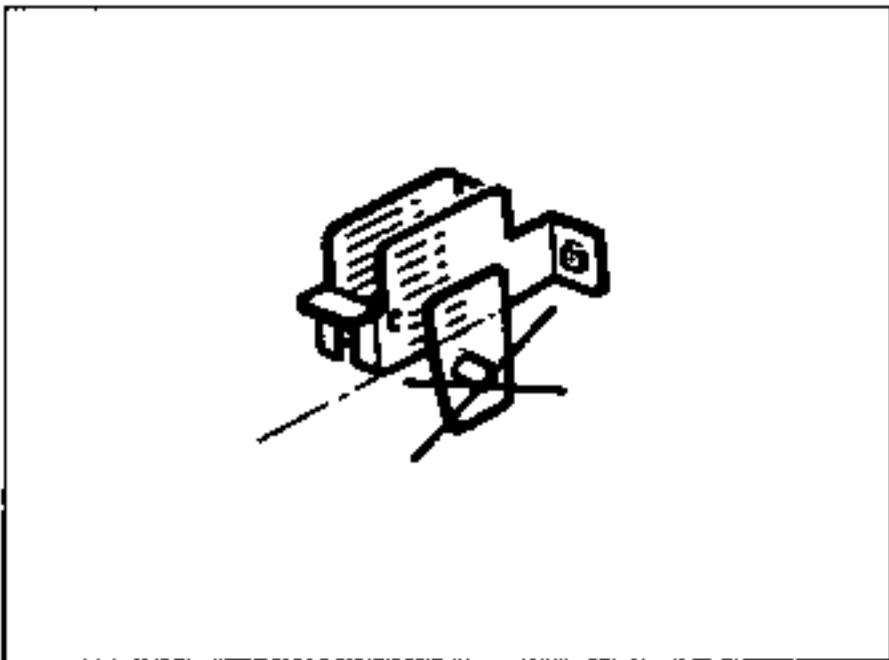
If the centre floor panel is not to be replaced, unpick its side section as shown in the diagram. Then lift it slightly and hold it using a vice grip wrench to reach the unit welding point located behind it.

NOTE: The general sequence for replacing a welded component is described in Sub-section 40.





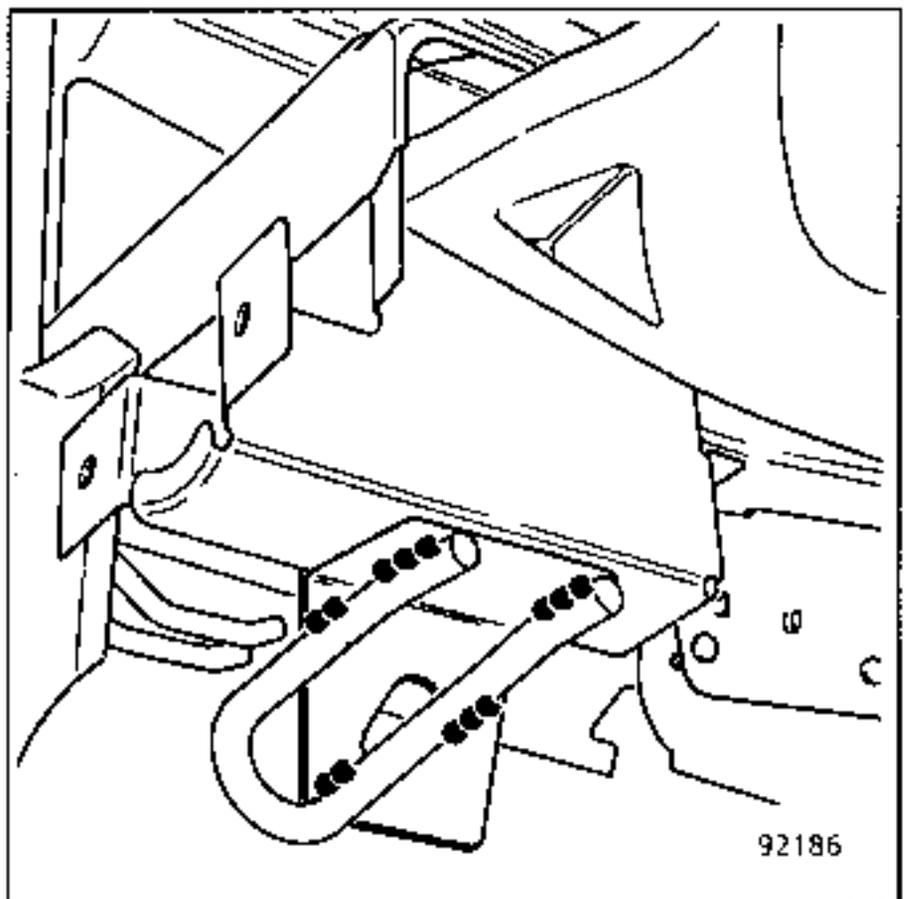
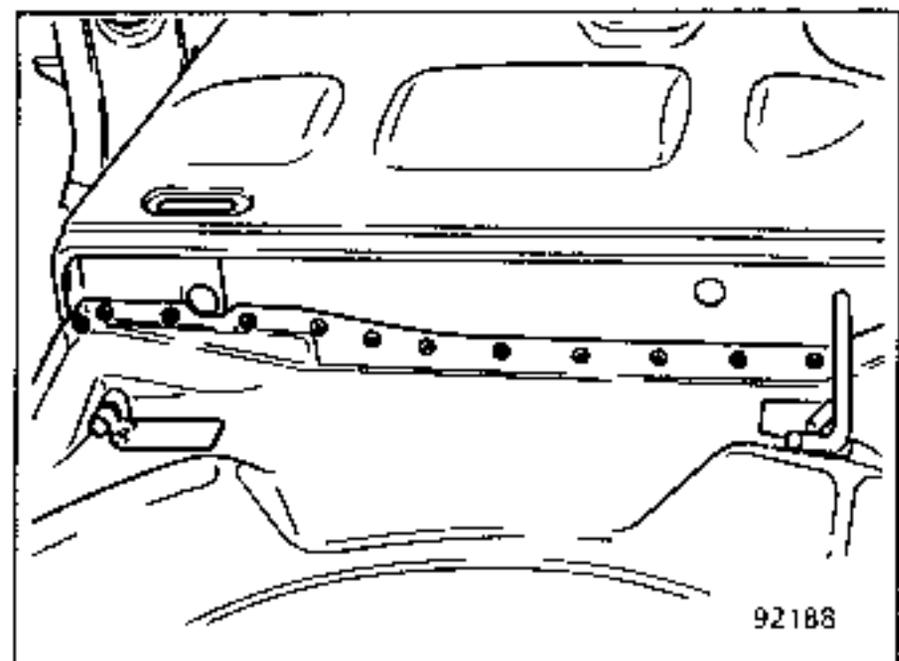
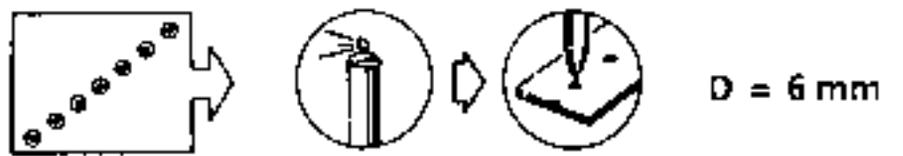
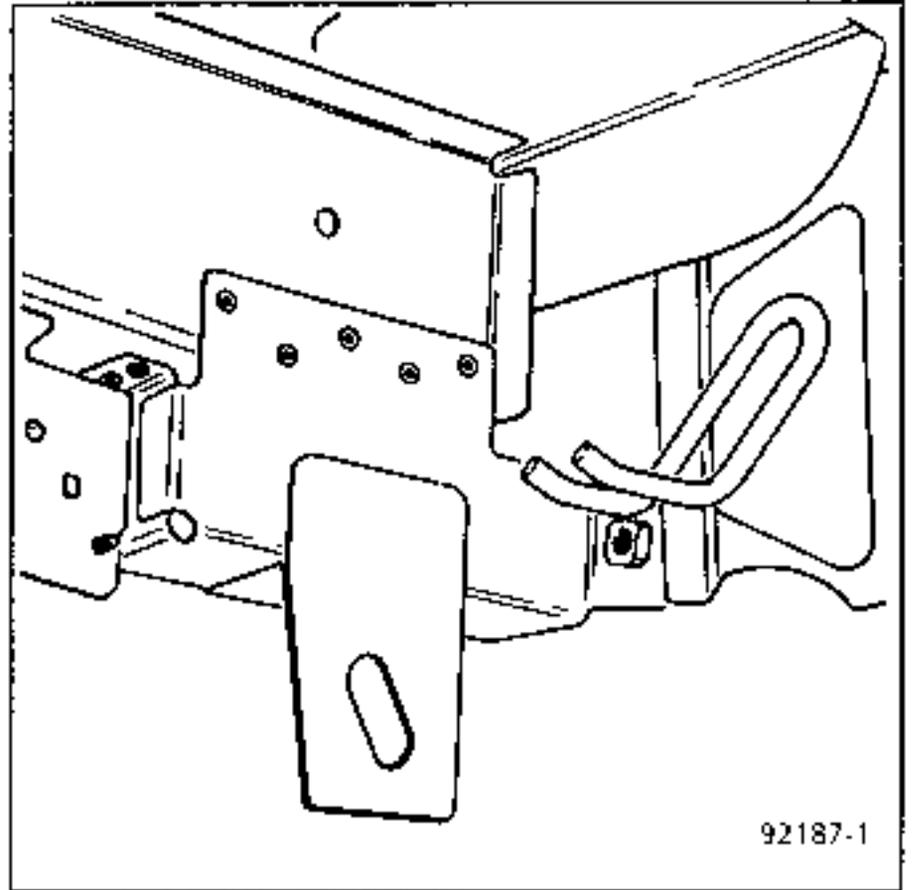
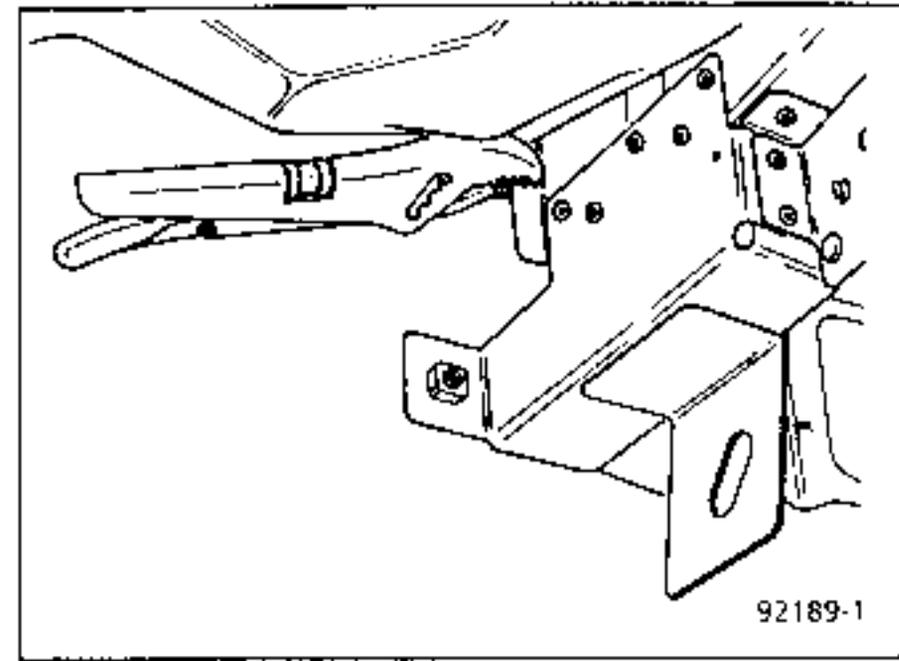
PREPARATION BEFORE WELDING



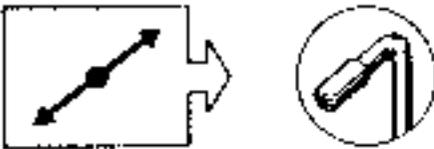
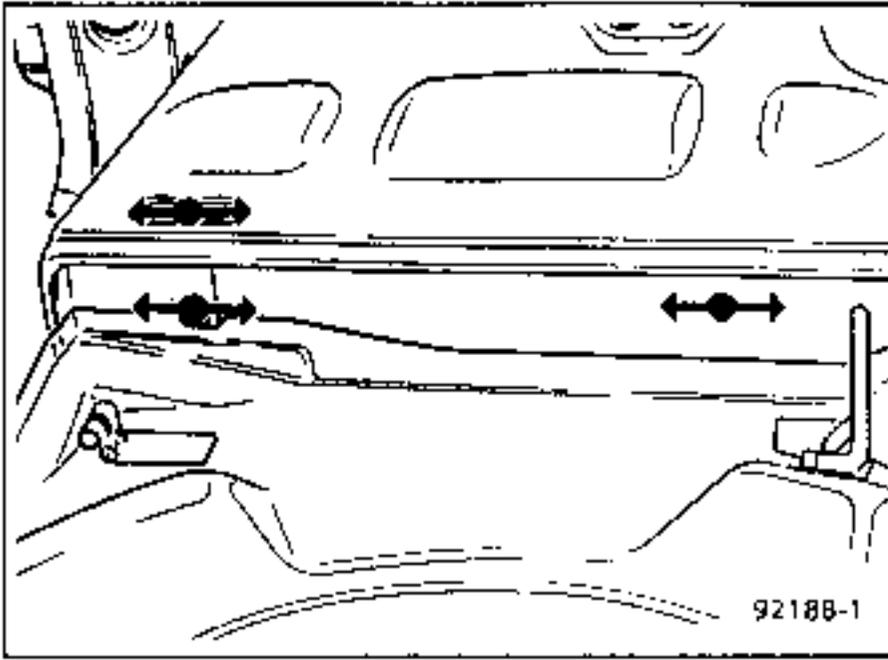
If the absorber unit is being replaced on the right-hand side, on the new part the stowage gusset must be sawn as shown in the diagram, before welding.



WELDING

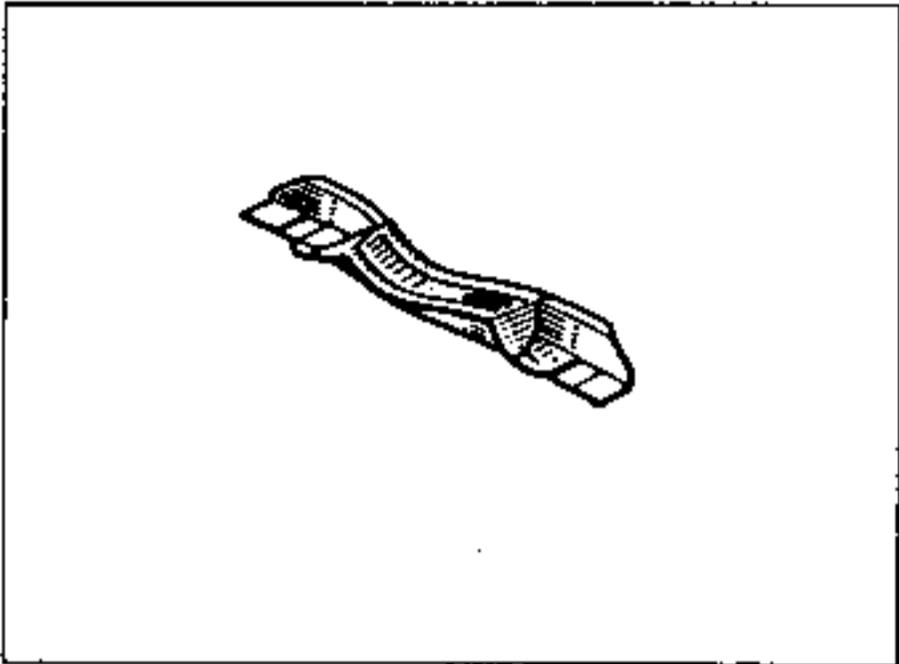


ANTI-CORROSION PROTECTION

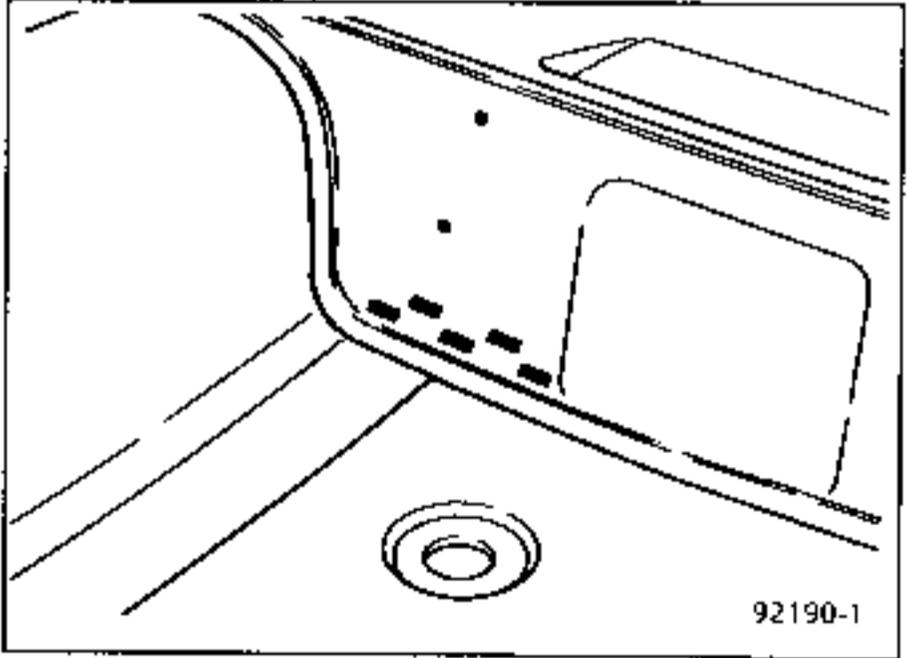
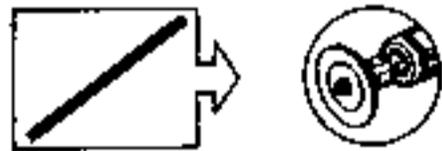
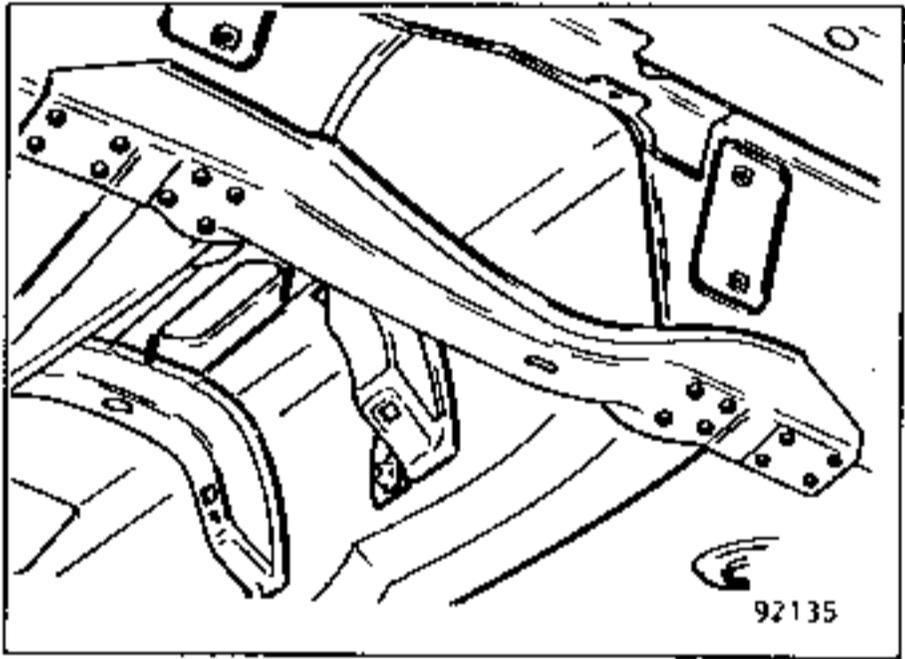


COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT

Assembled part comprising:
lower rear spacer
closure panel

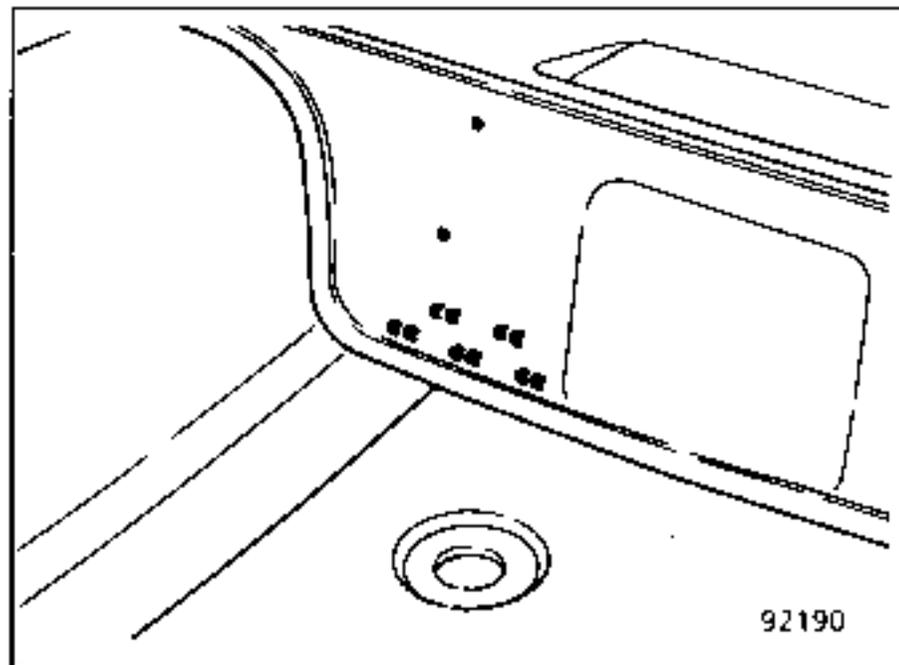
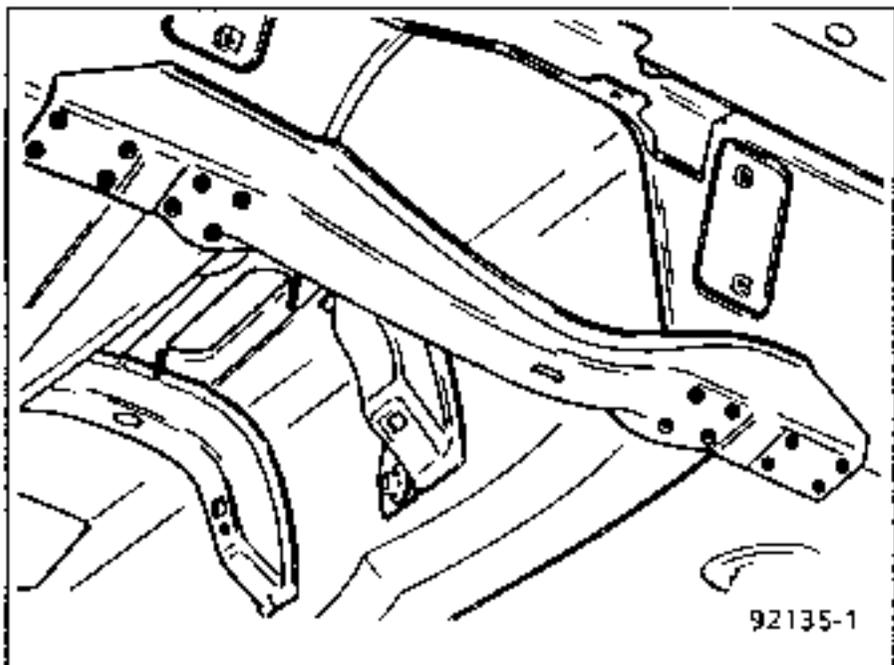


CUTTING OUT - UNPICKING



NOTE: The general sequence for replacing a welded component is described in Sub-section 40.

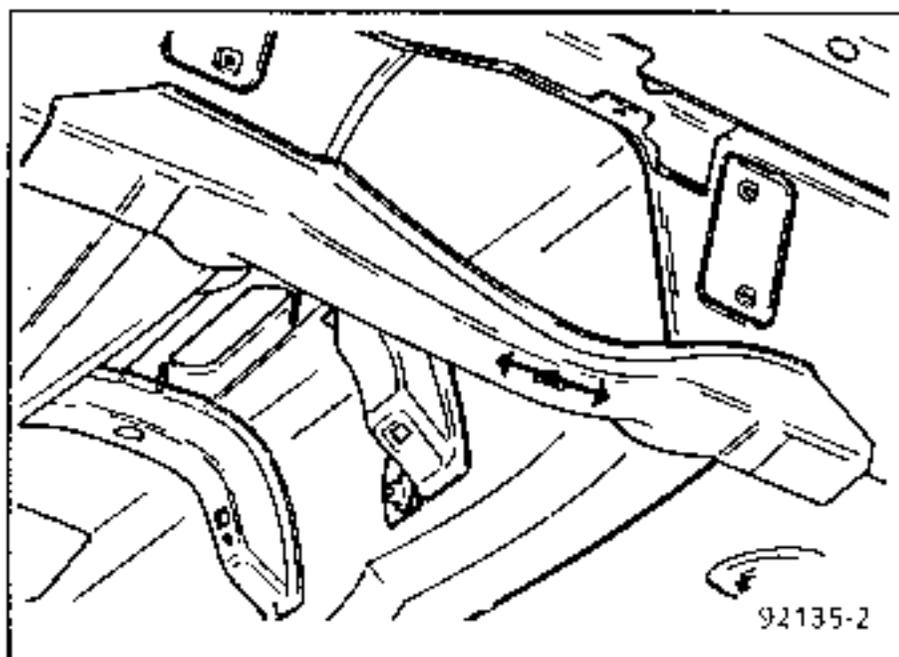
WELDING



D = 6,5 mm



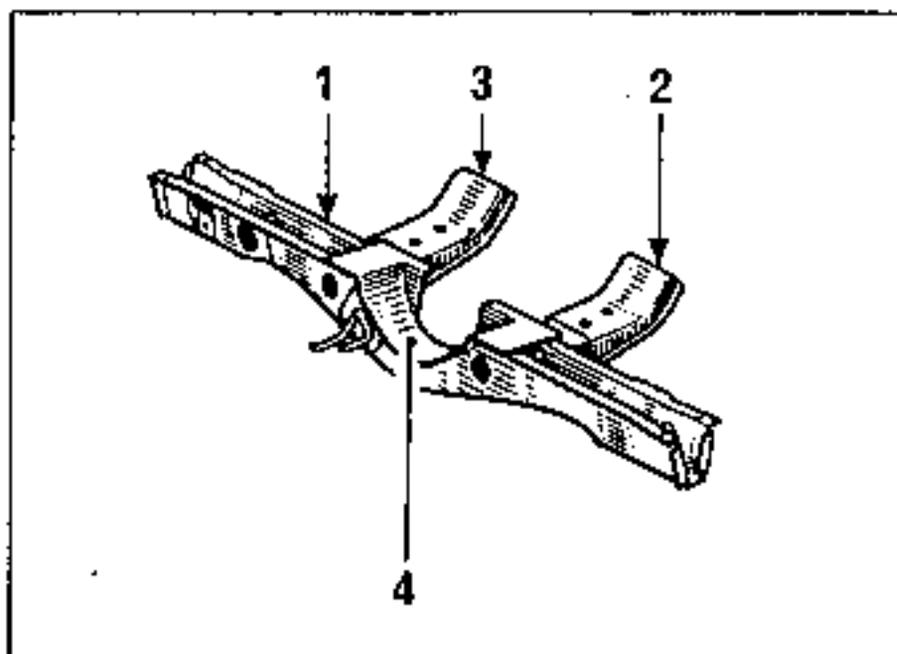
ANTI-CORROSION PROTECTION



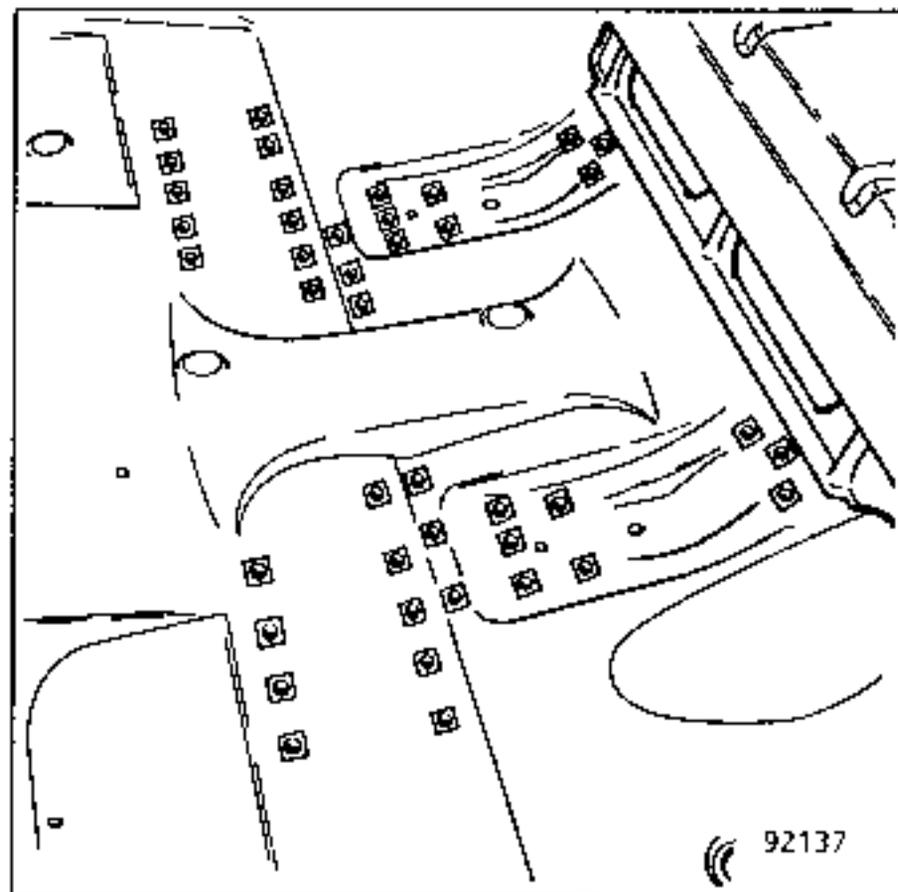
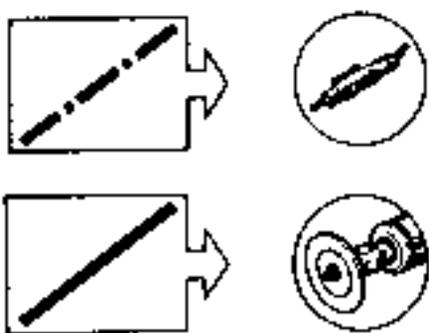
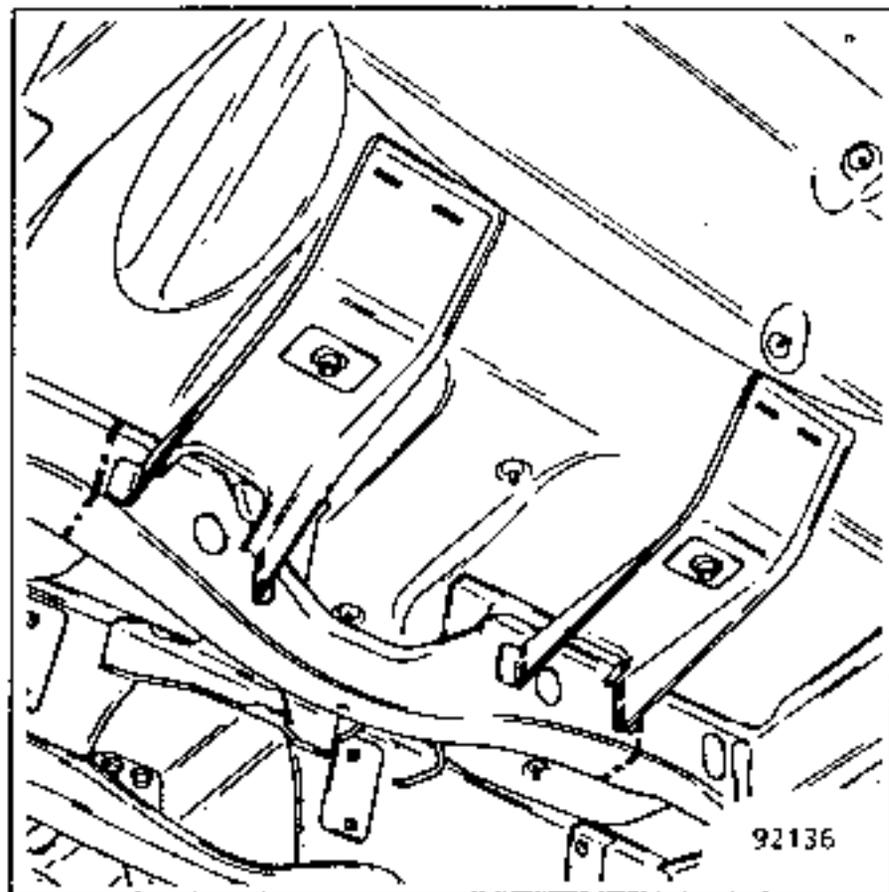
COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT.

Assembled part comprising:

1. Cross-member under seat
2. Left-hand anchorage strengthener
3. Right-hand anchorage strengthener
4. Closure plate

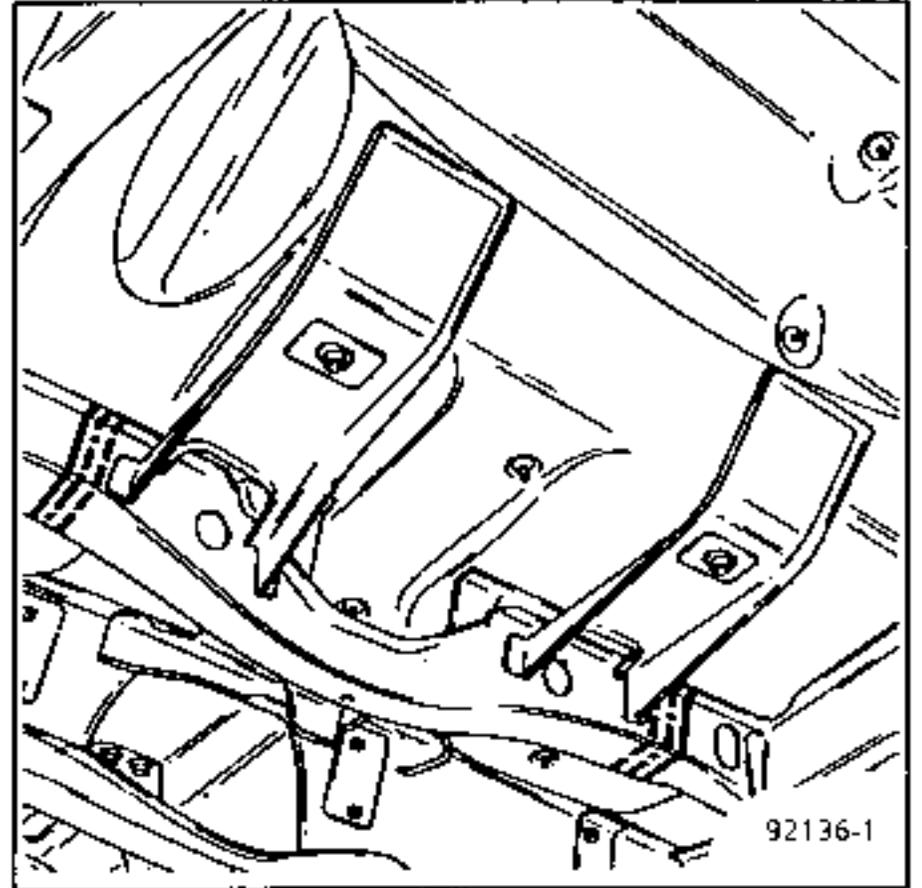
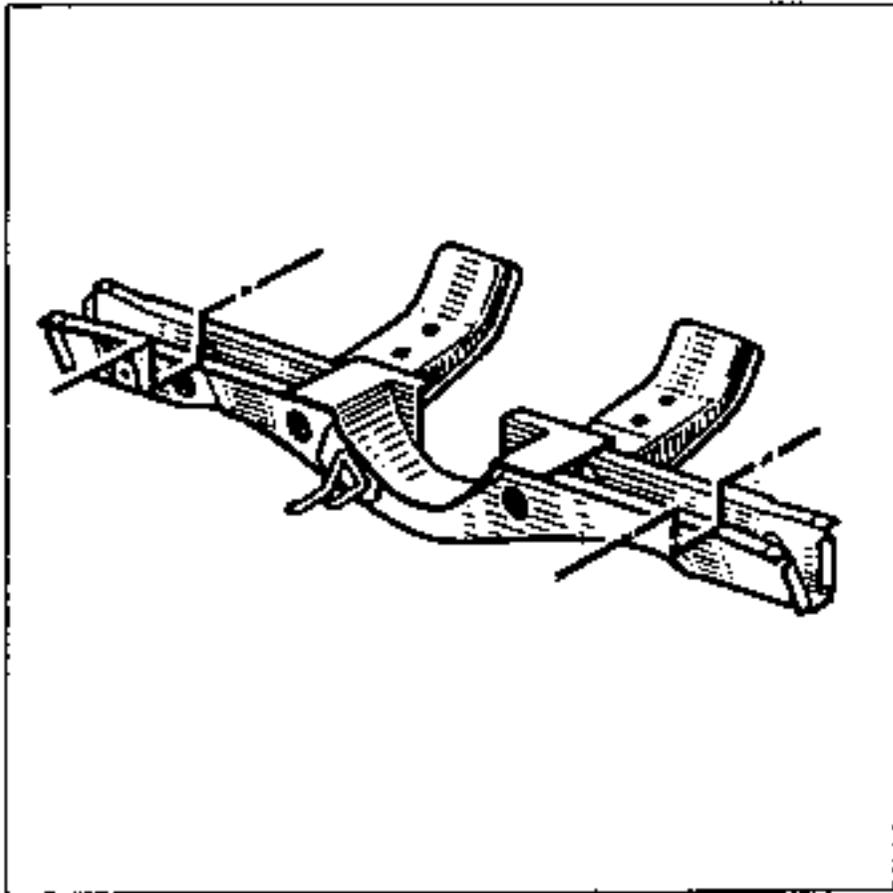


CUTTING OUT - UNPICKING

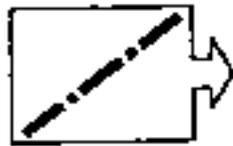


NOTE: The general sequence for replacing a welded component is described in Sub-section 40.

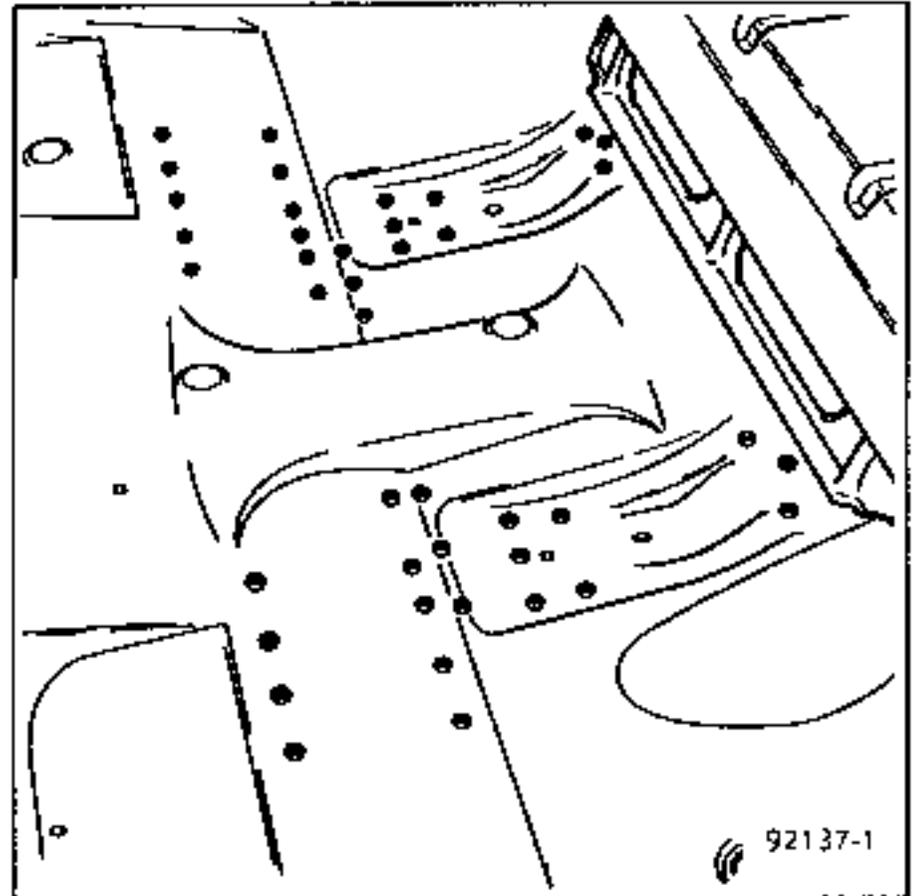
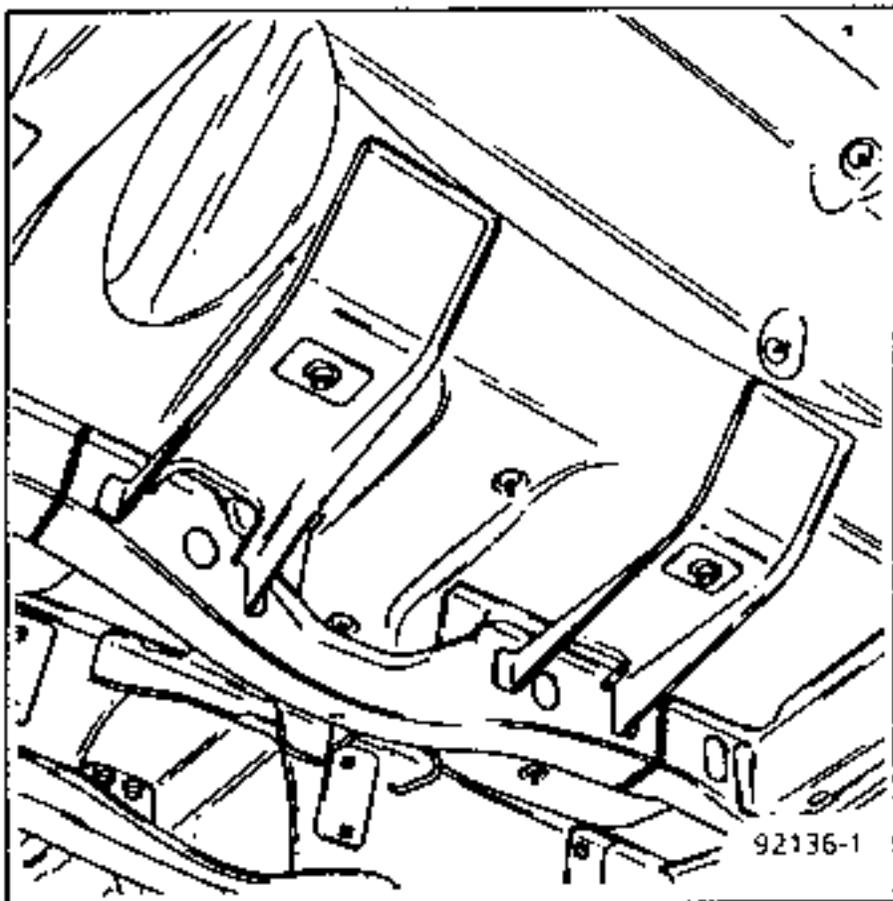
PREPARATION BEFORE WELDING



92136-1



WELDING

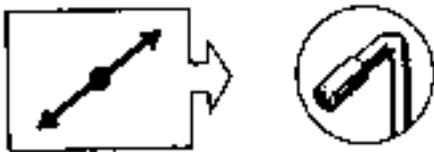
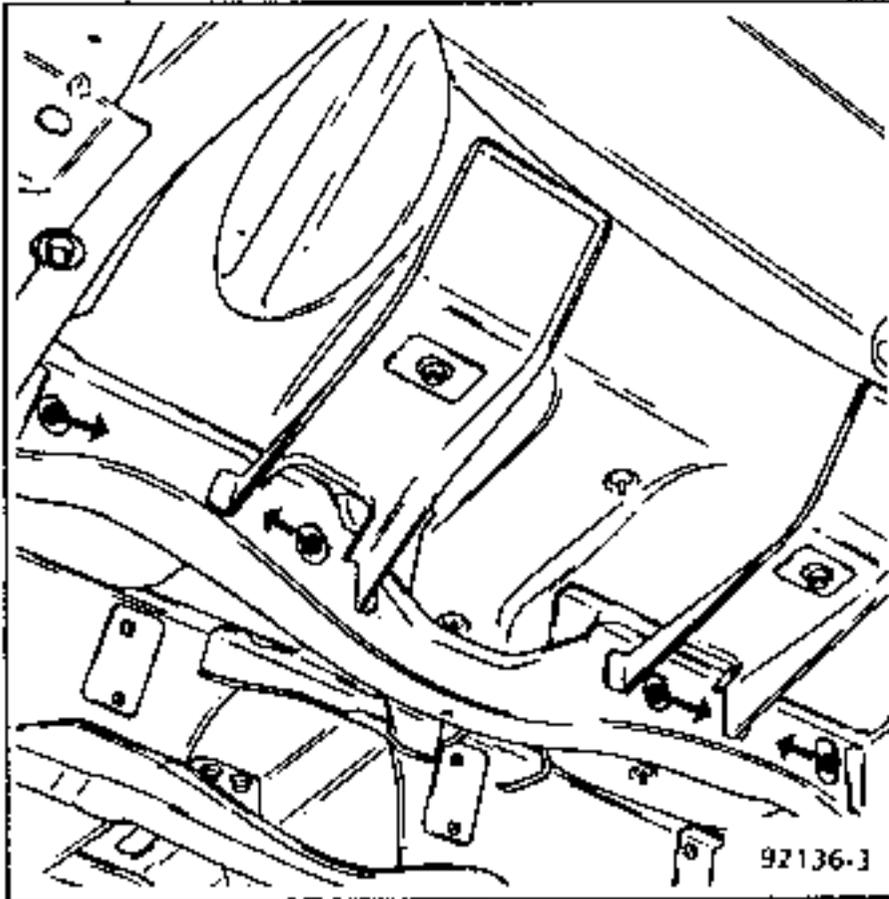


92136-1

92137-1



ANTI-CORROSION PROTECTION

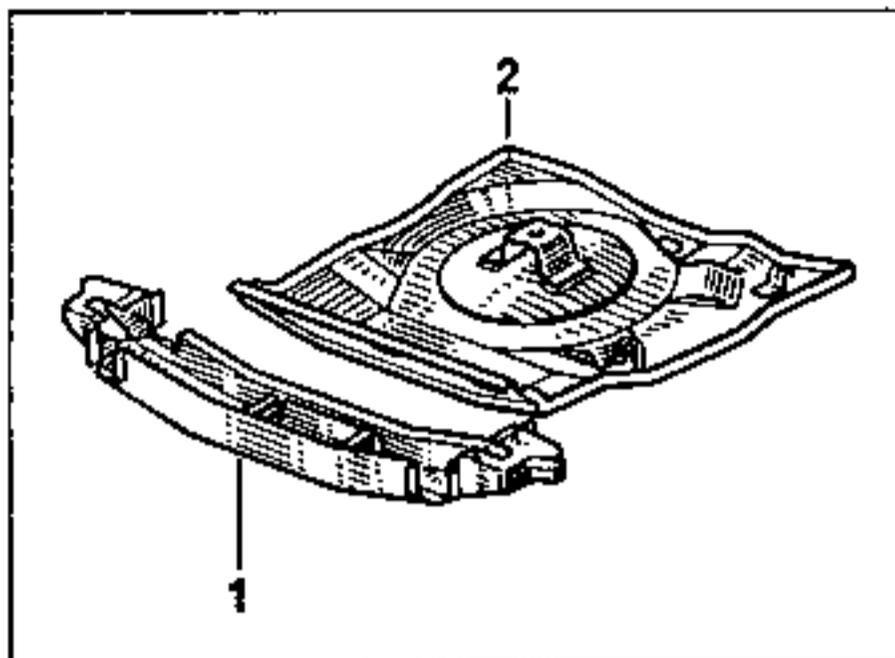


With replacement of far rear centre floor panel.

COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT:

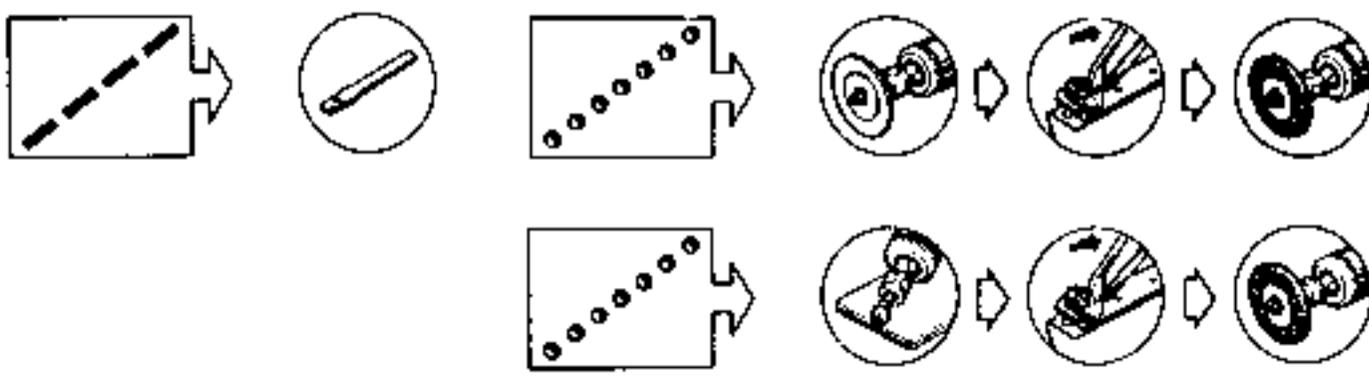
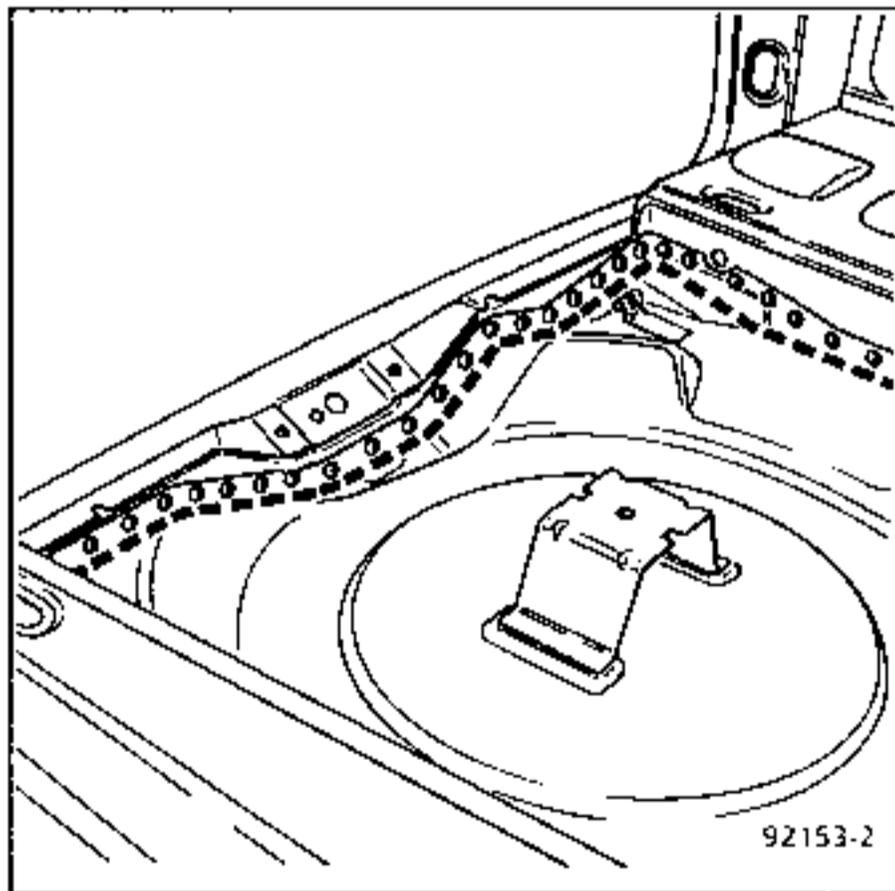
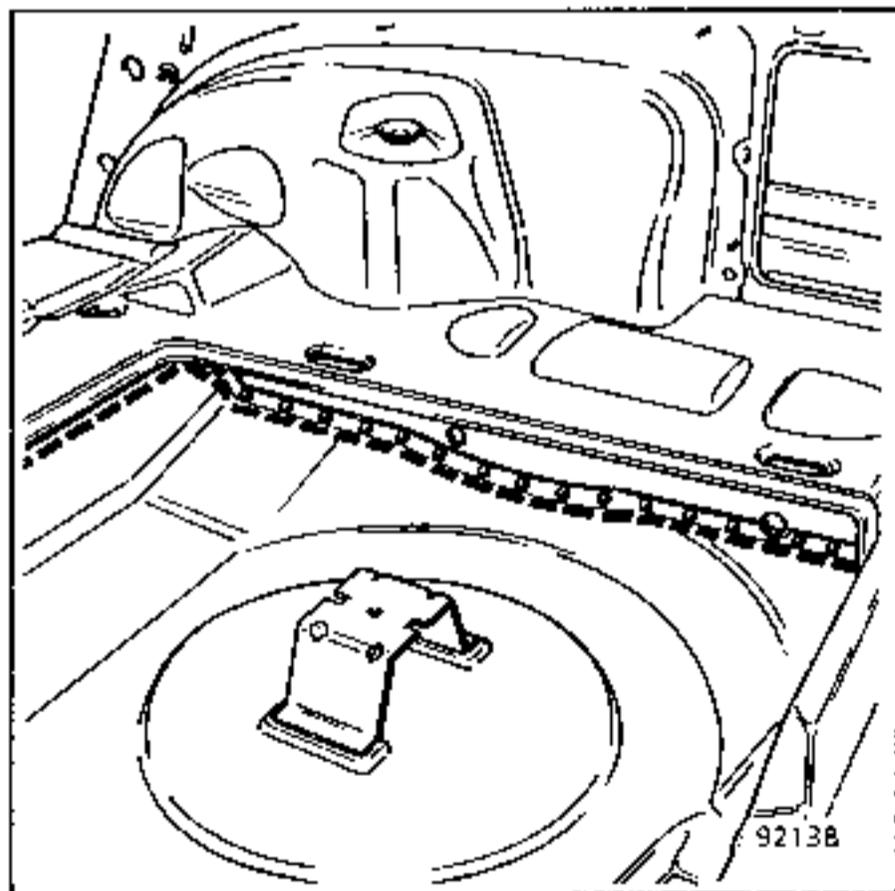
Assembled parts comprising:

1. rear axle cross-member:
 - centre strengthener
 - right-hand side strengthener
 - left-hand side strengthener
2. luggage compartment bottom panel:
 - centre mounting
 - hinge mounting
 - front mounting



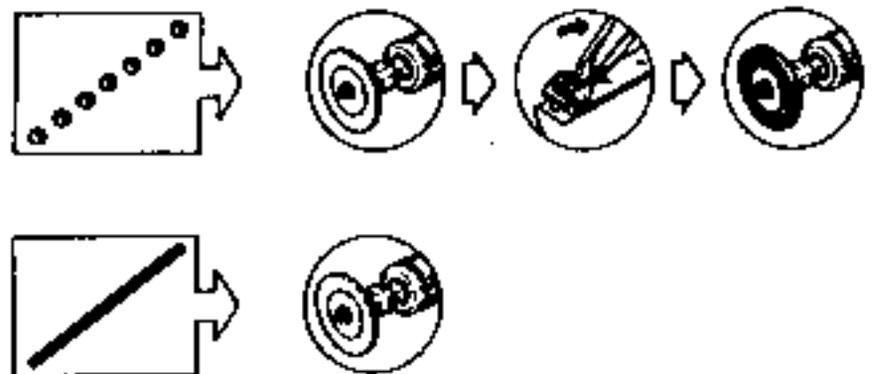
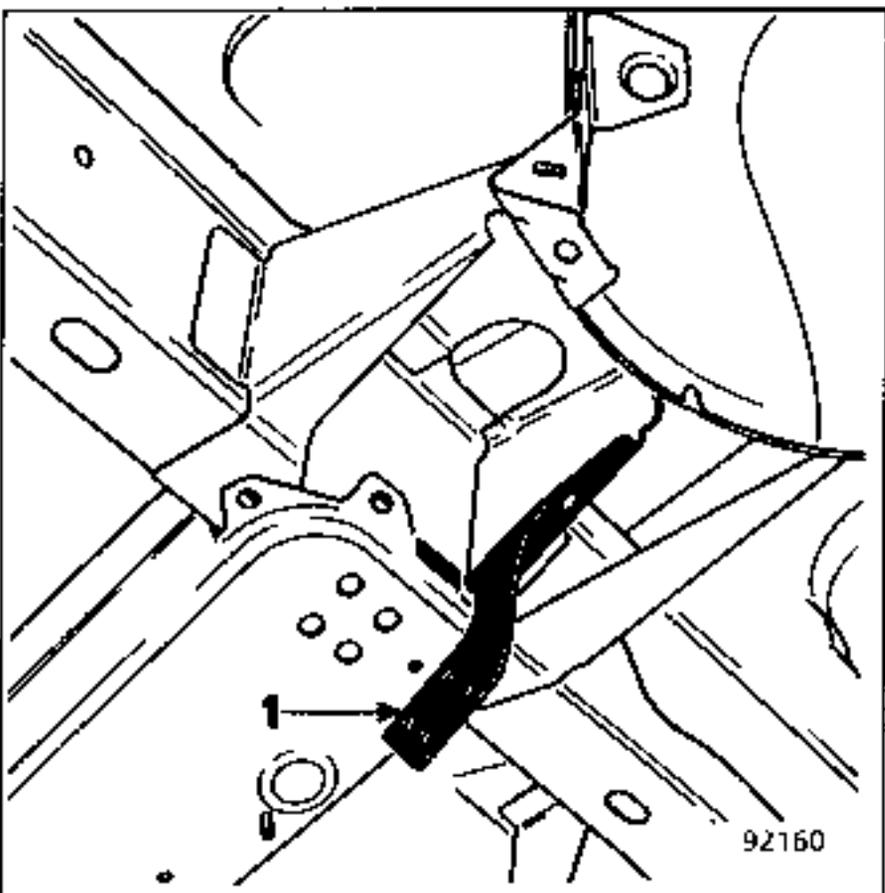
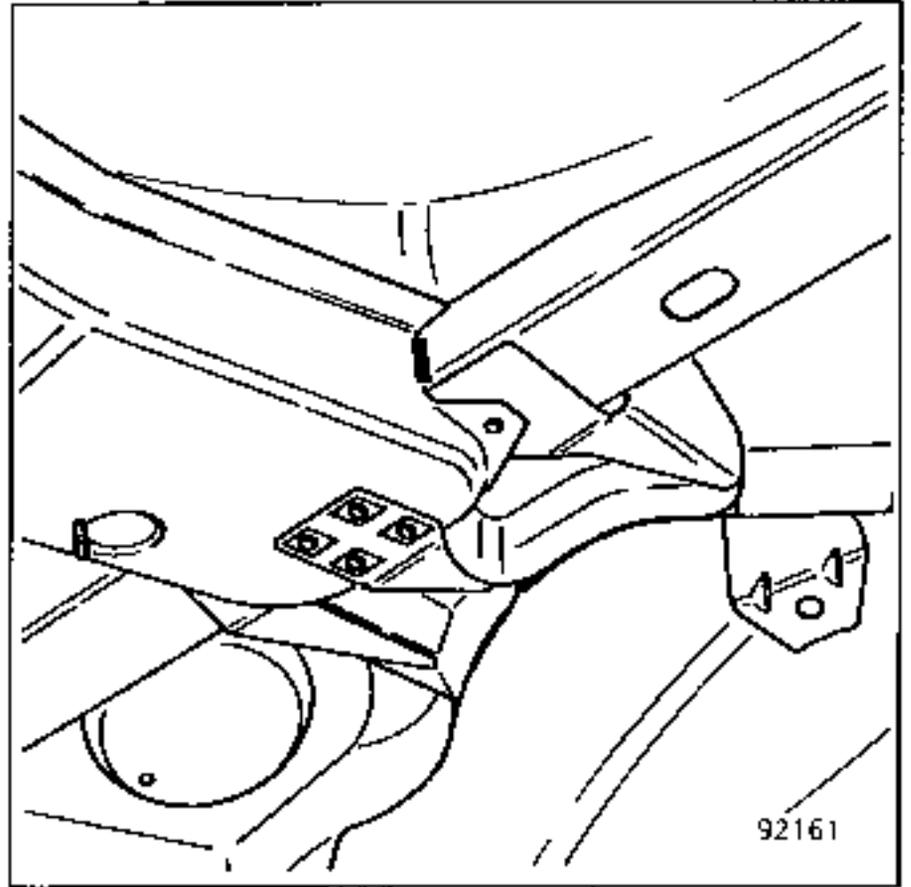
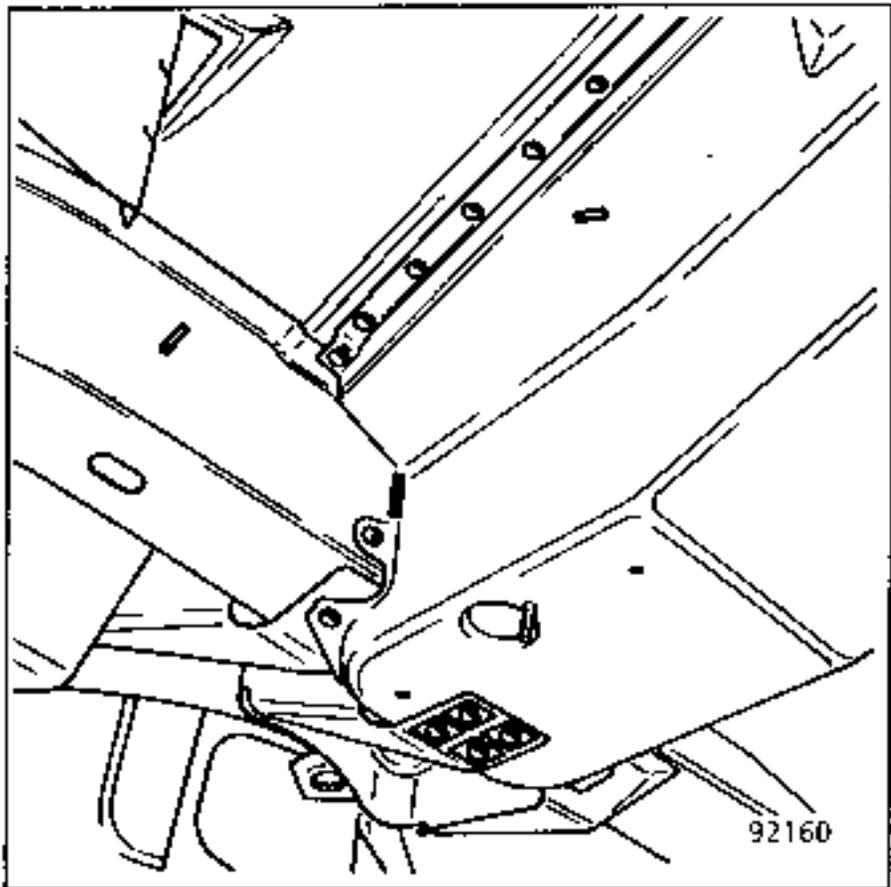
CUTTING OUT - UNPLICKING

Unpicking the floor panel



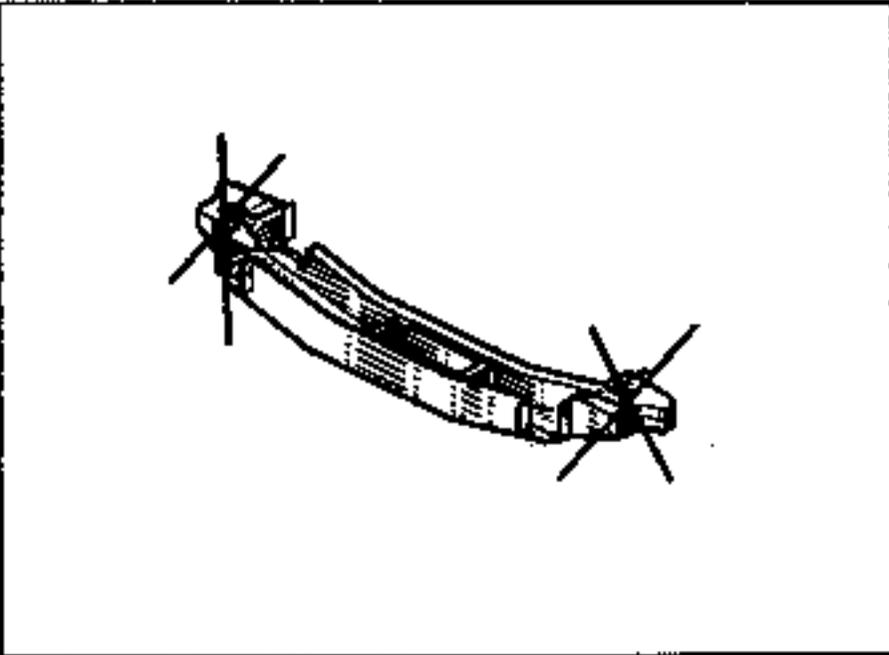
NOTE: The general sequence for replacing a welded component is described in Sub-section 40.

Unpicking the cross-member

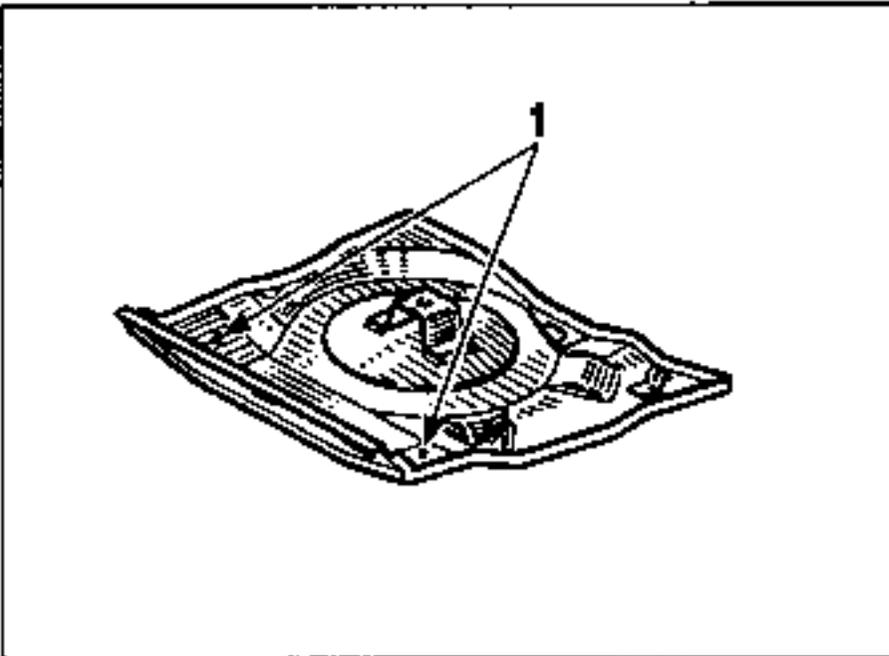


Fold over lug (1) on the side strengthener which stays in place on the vehicle, in order to reach the anchorage head located behind it.

PREPARATION BEFORE WELDING



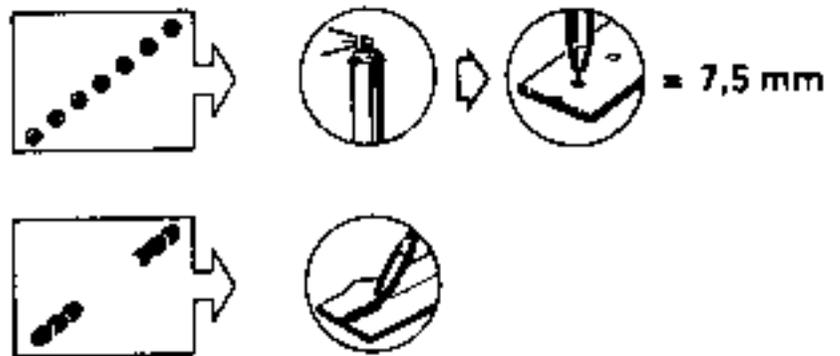
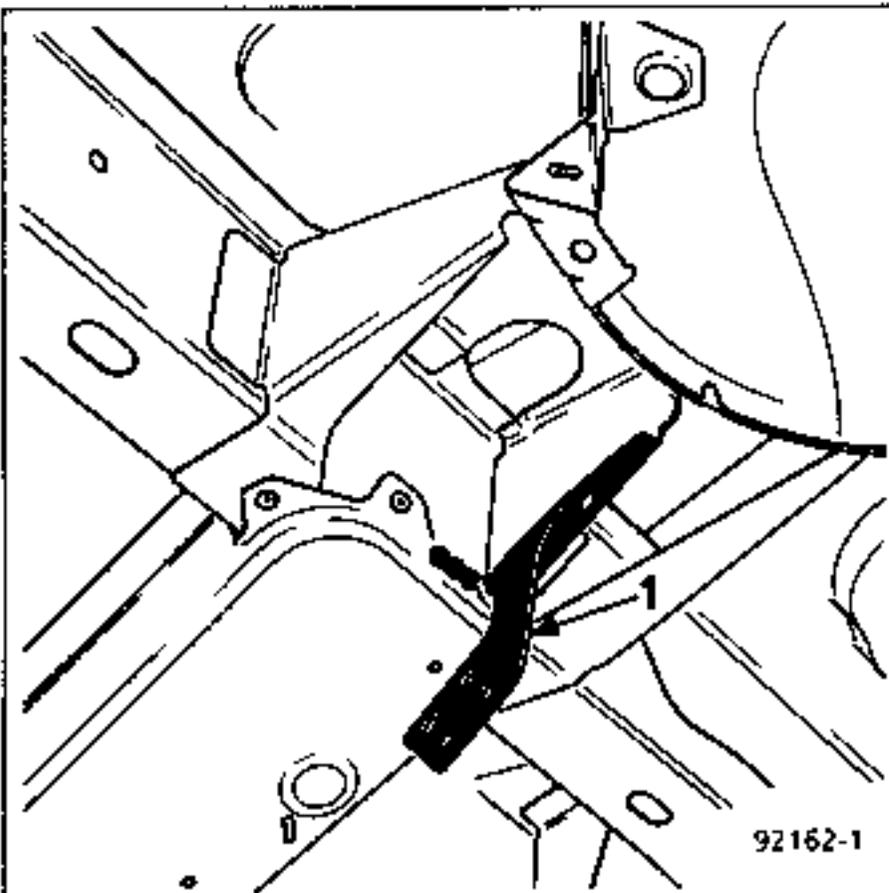
Unpick the 2 side strengtheners so that only the centre part of the cross-member is retained.



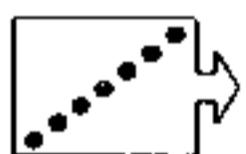
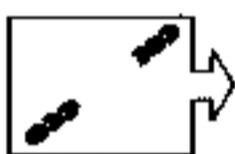
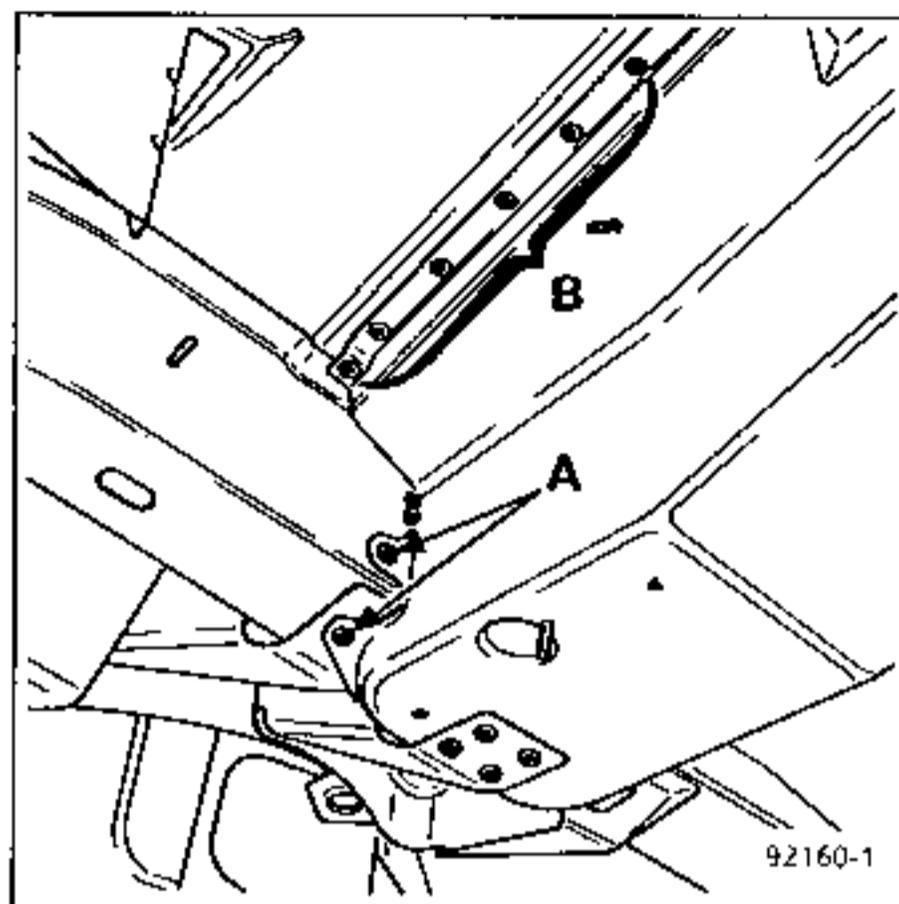
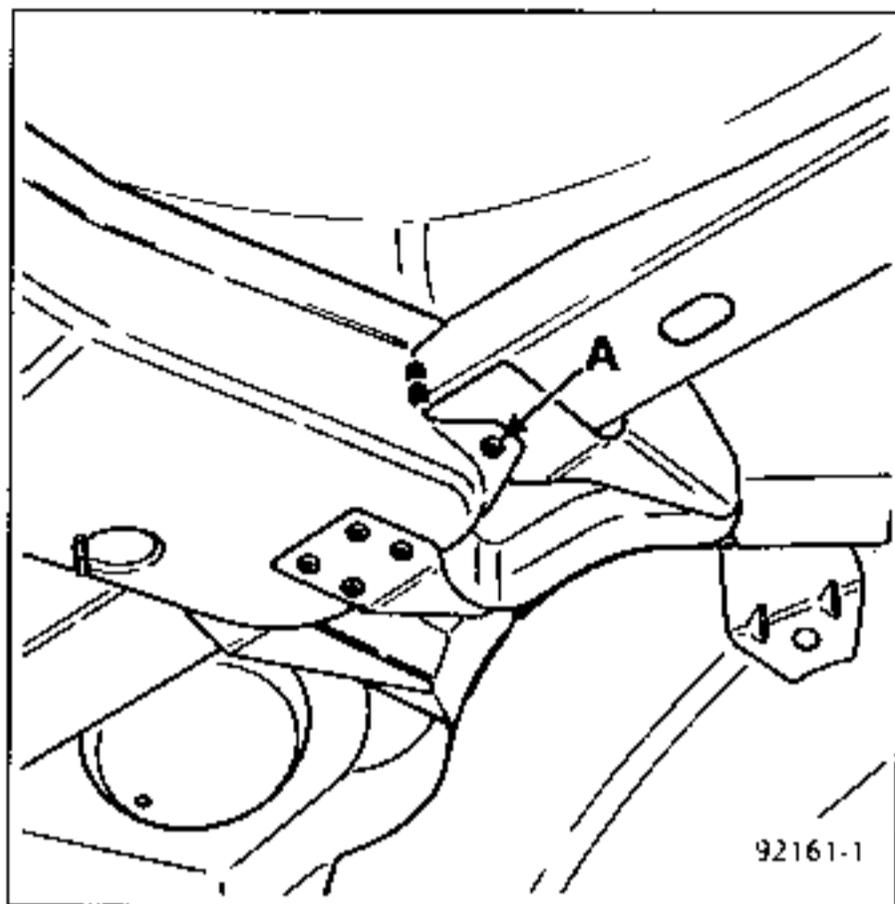
On the floor panel drill 2 holes (1) to a diameter of 8 mm for passing through the nozzle for injecting the product for hollow sections.

WELDING

Cross-member

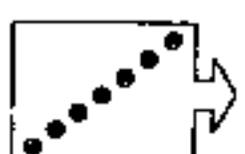
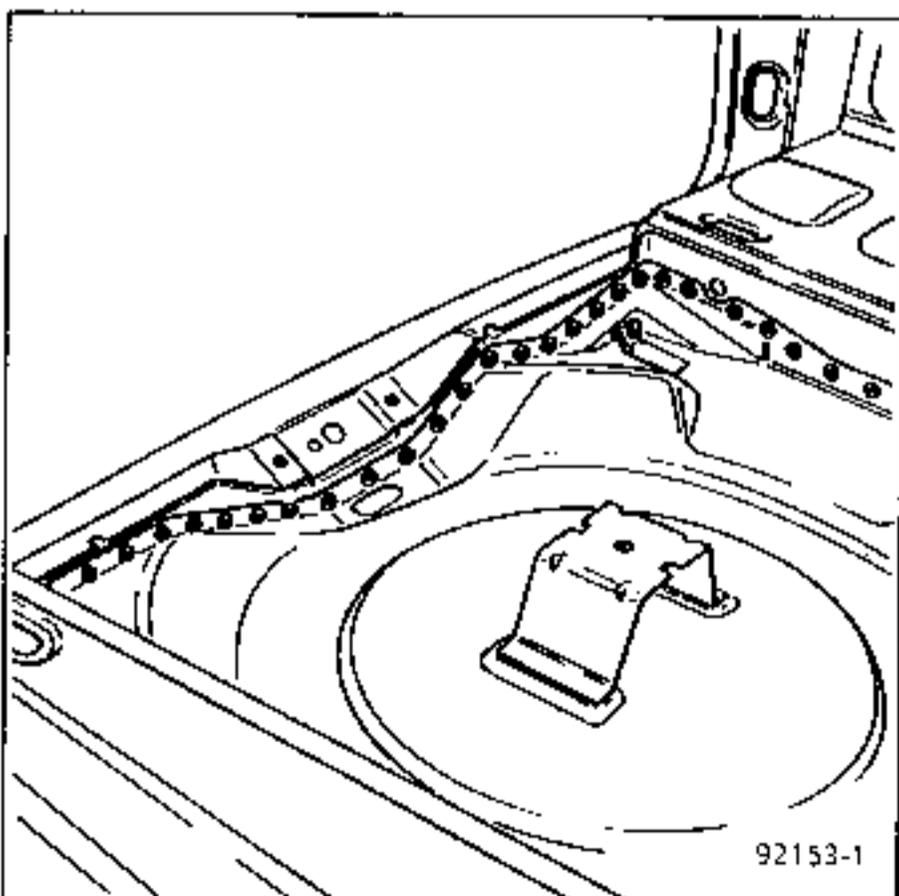
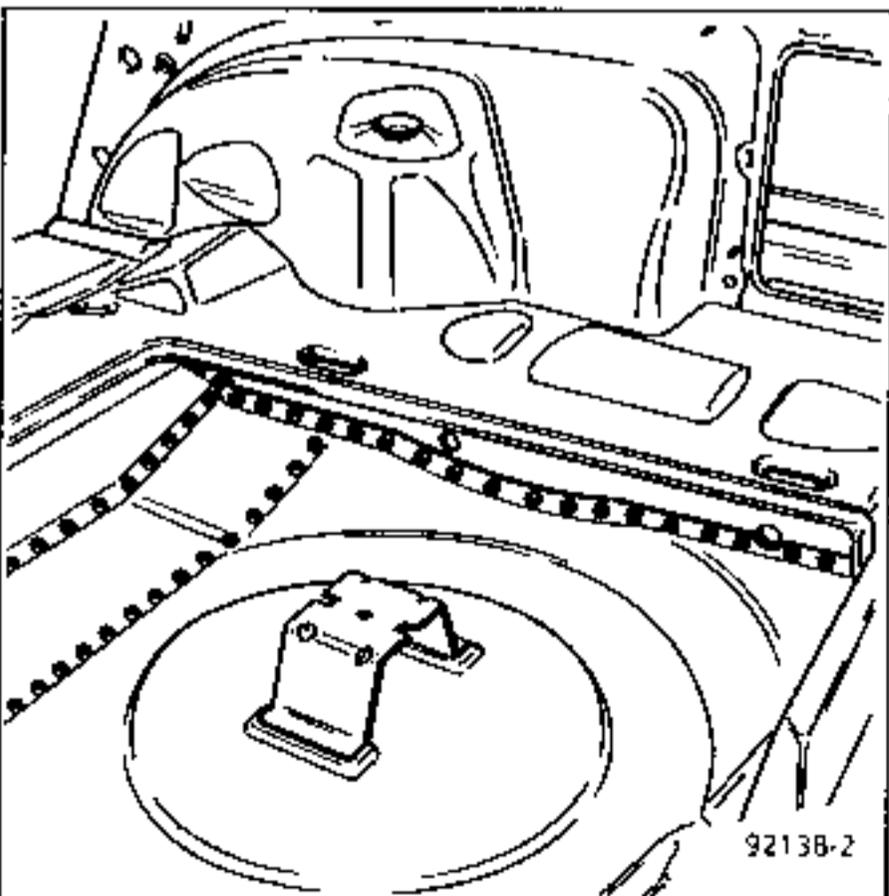


Fold down lug (1) on the side strengthener so that it can be re-welded to the new cross-member.



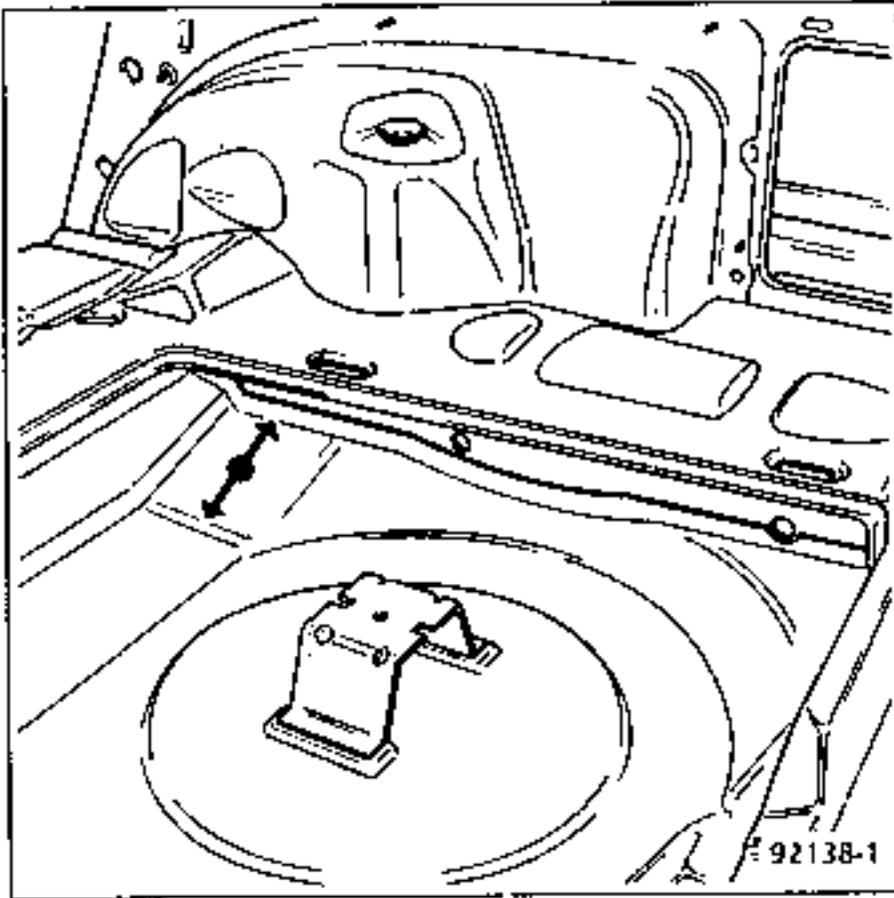
A.D = 7,5 mm
B.D = 5 mm

Floor panel



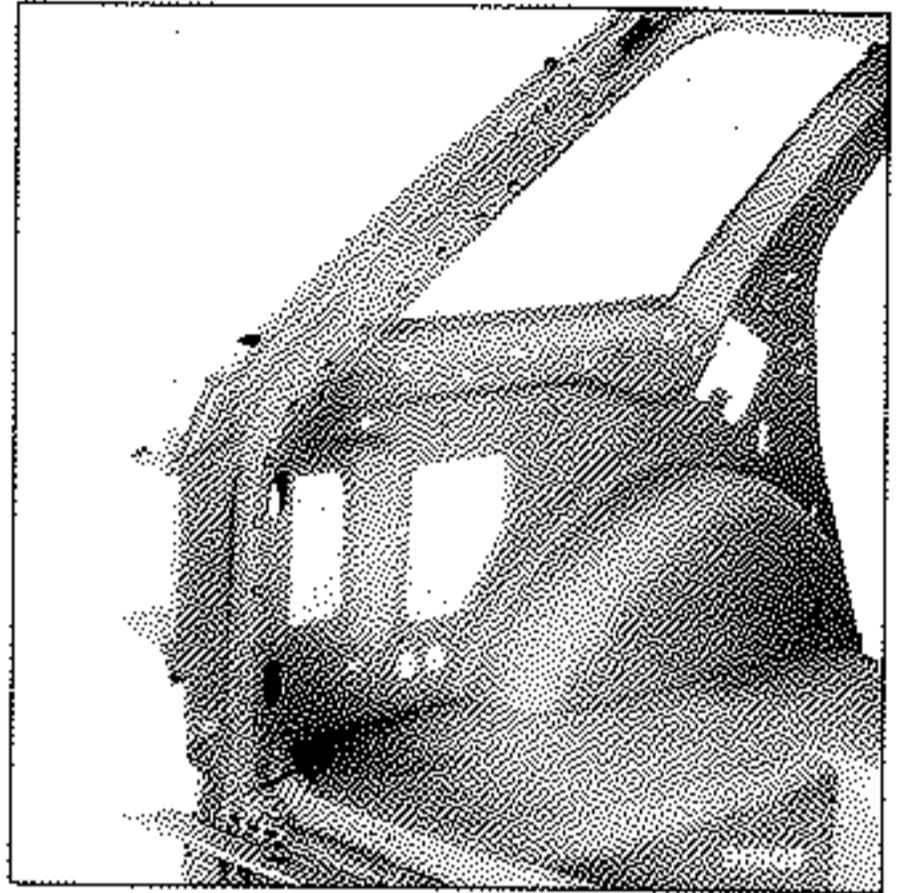
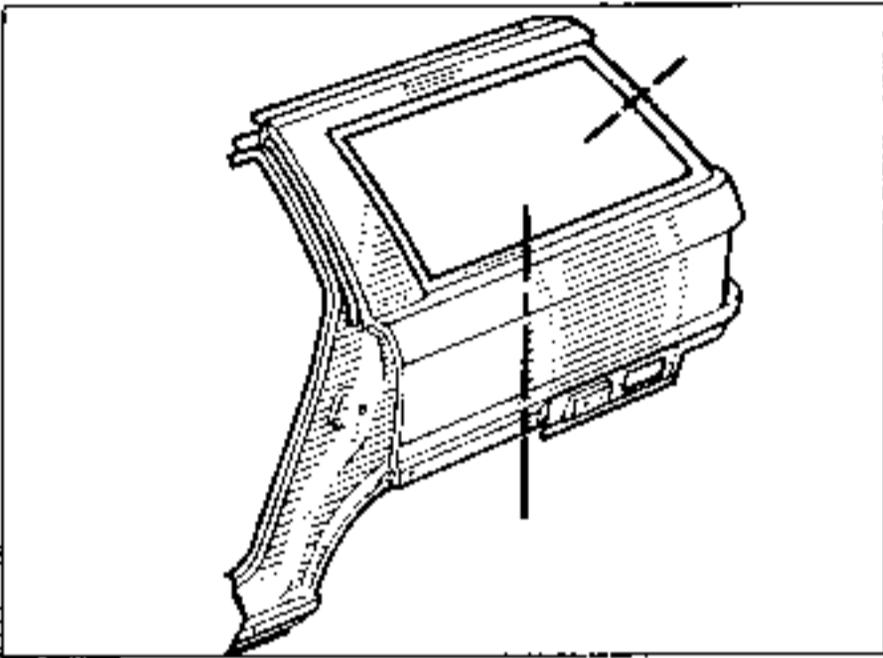
D = 5 mm

ANTI-CORROSION PROTECTION

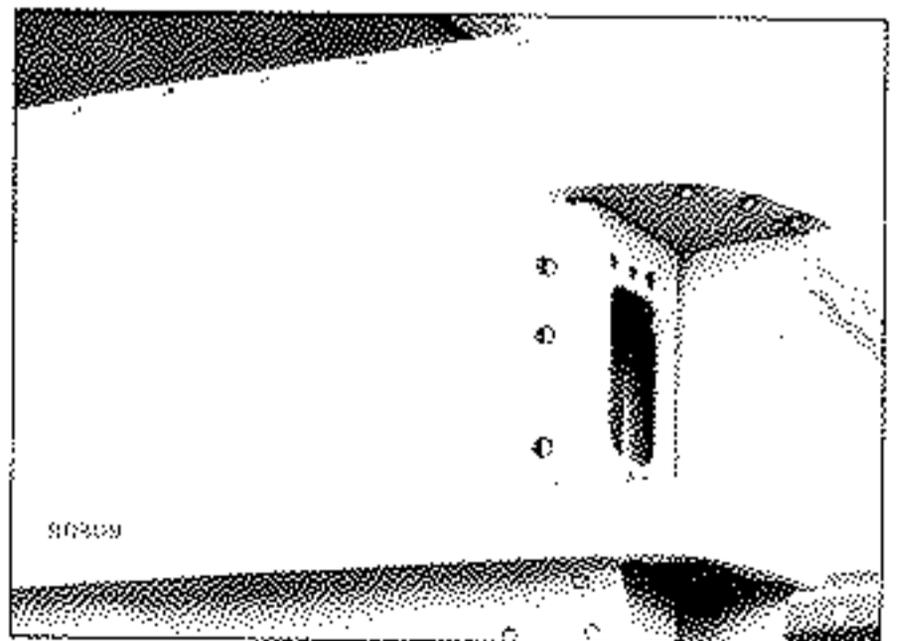
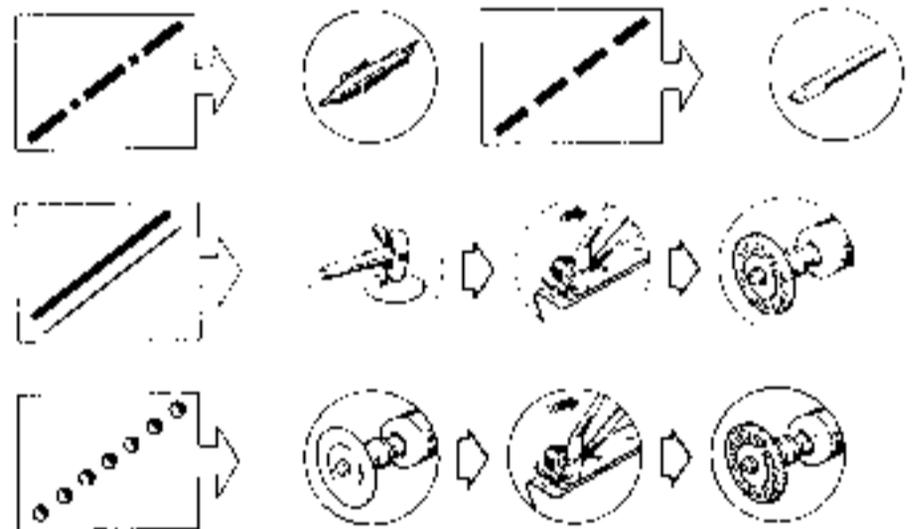
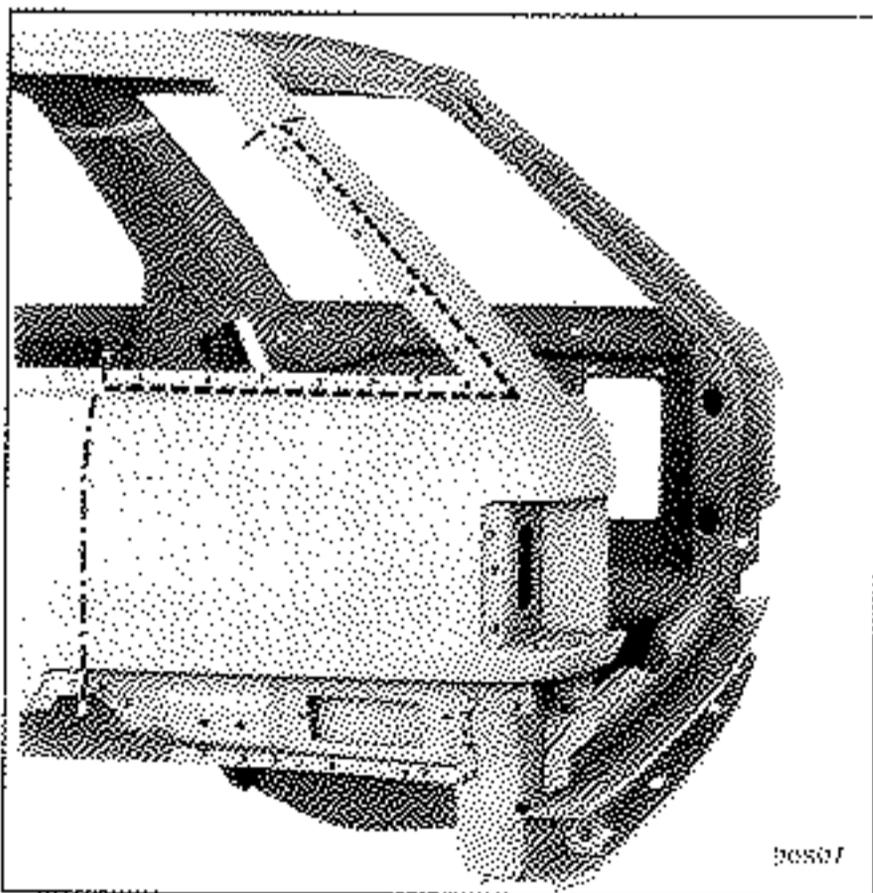


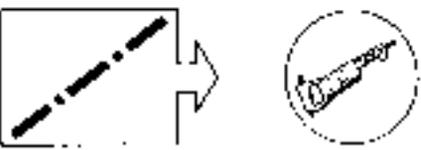
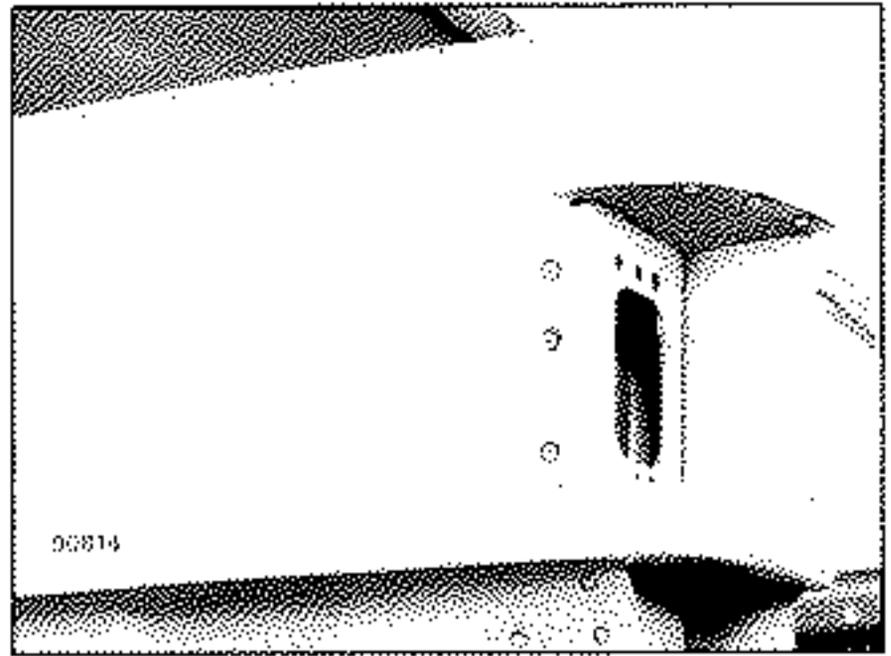
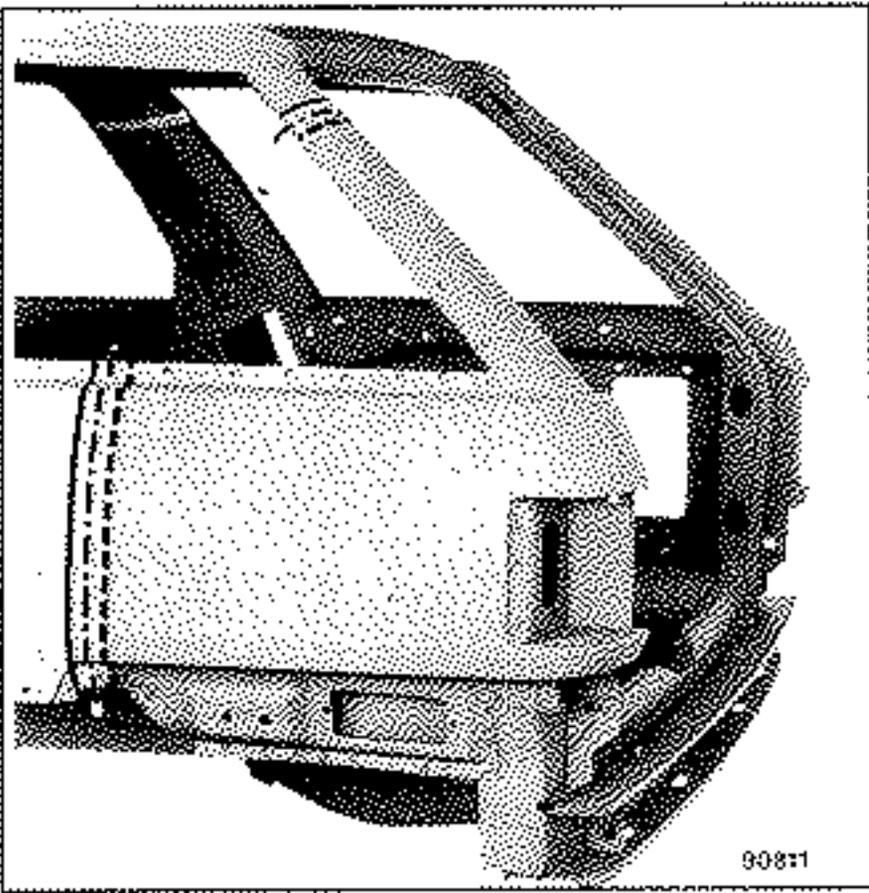
COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT

Assembled part comprising:
side panel
shield mounting strengthener
striker plate strengthener

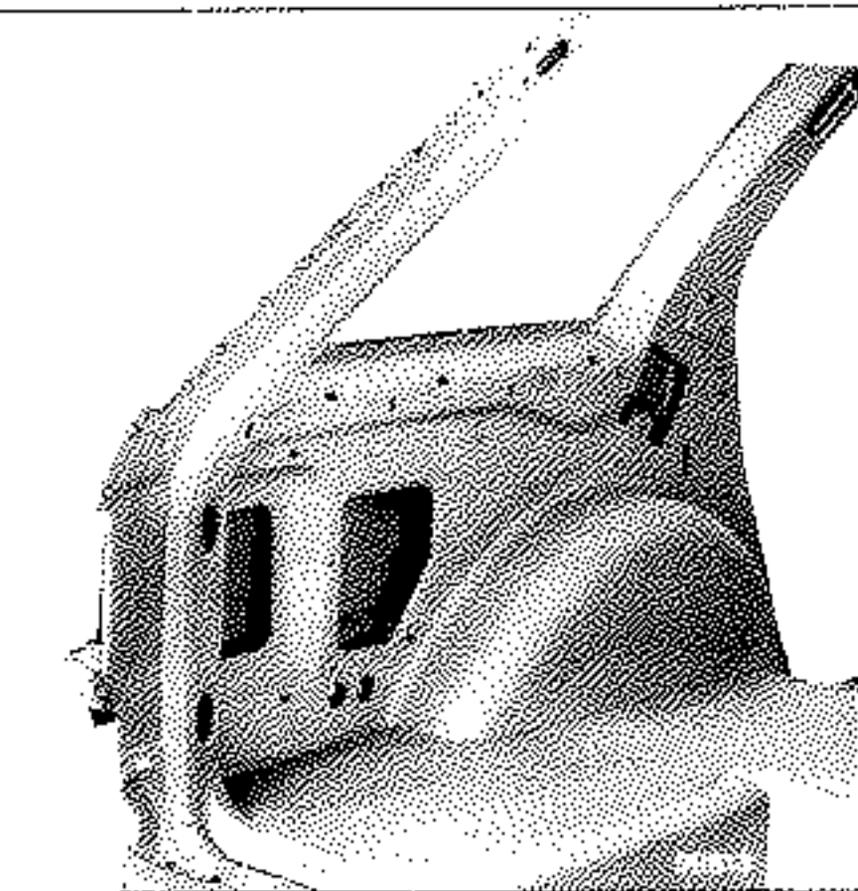
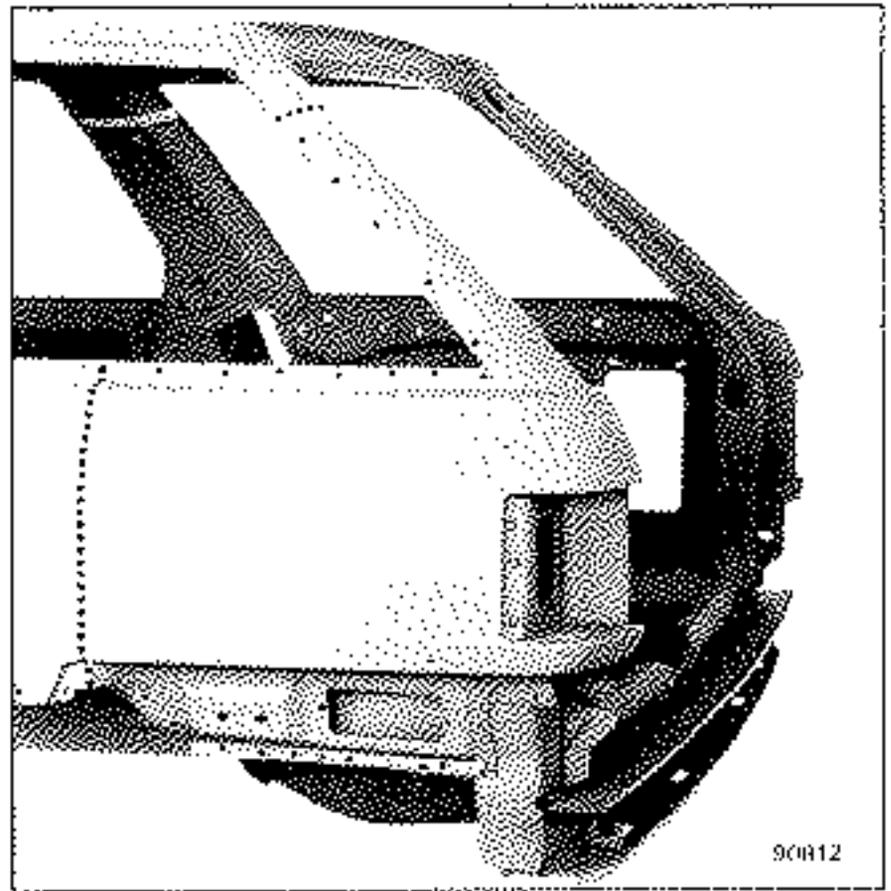


CUTTING OUT - UNPICKING

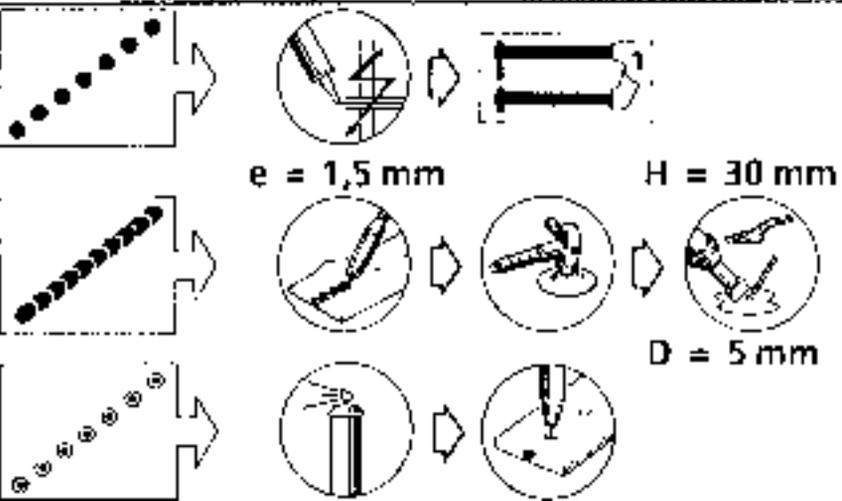
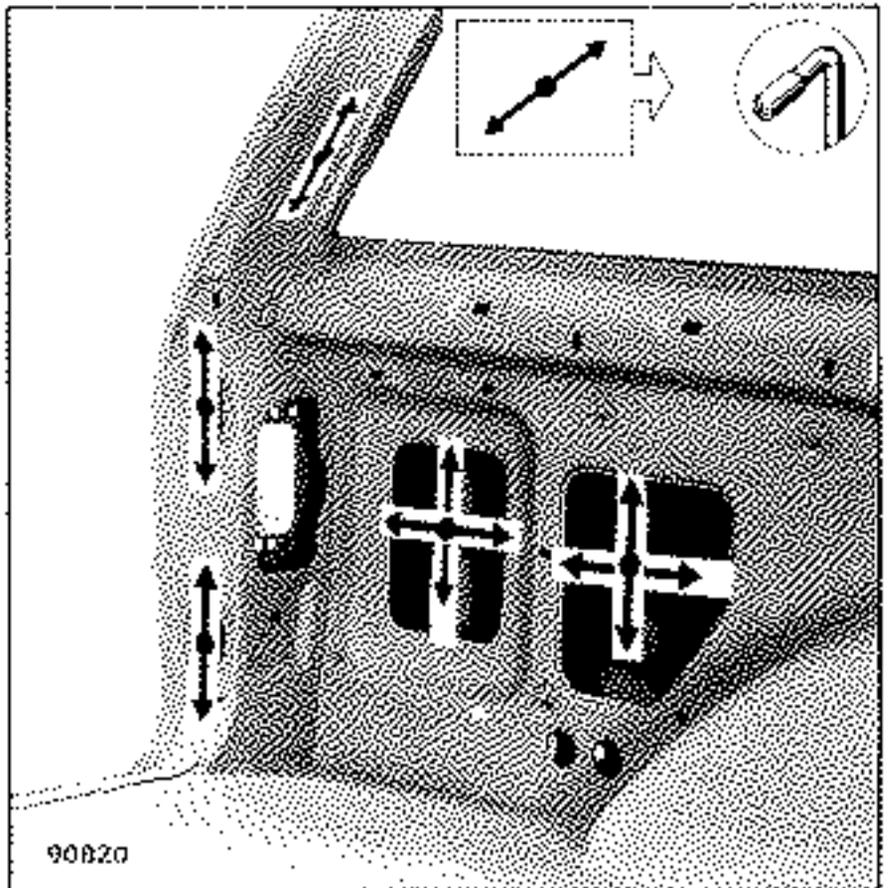




WELDING

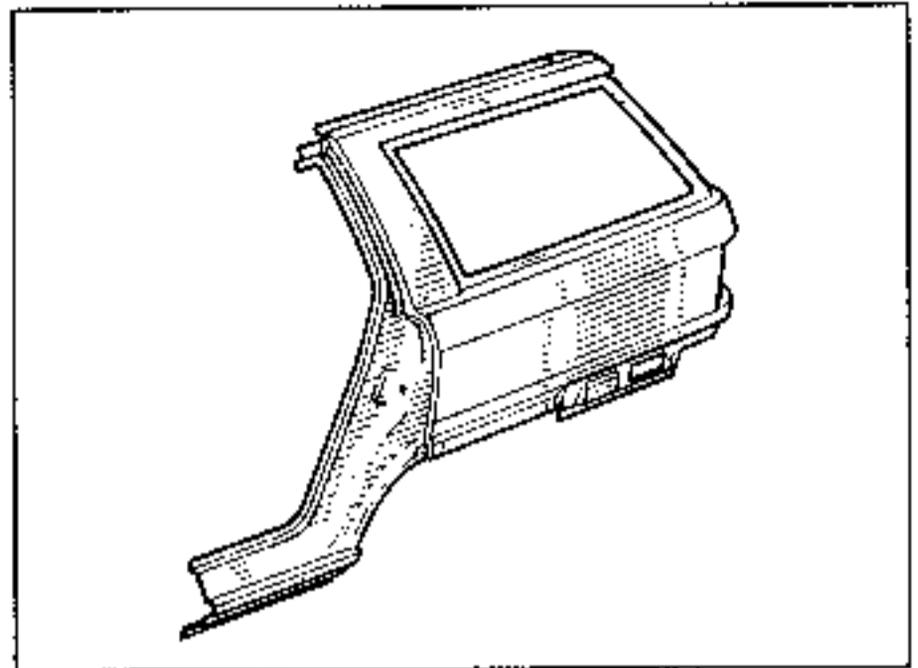


ANTI-CORROSION PROTECTION

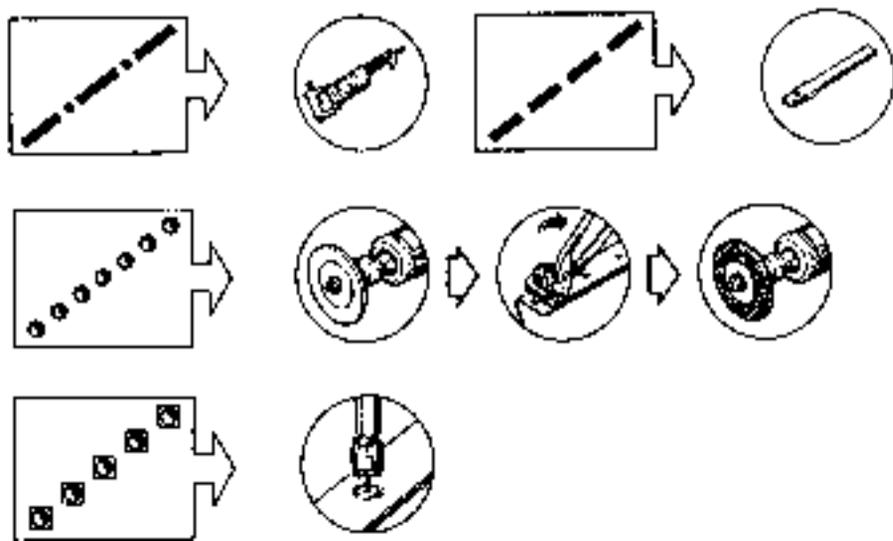
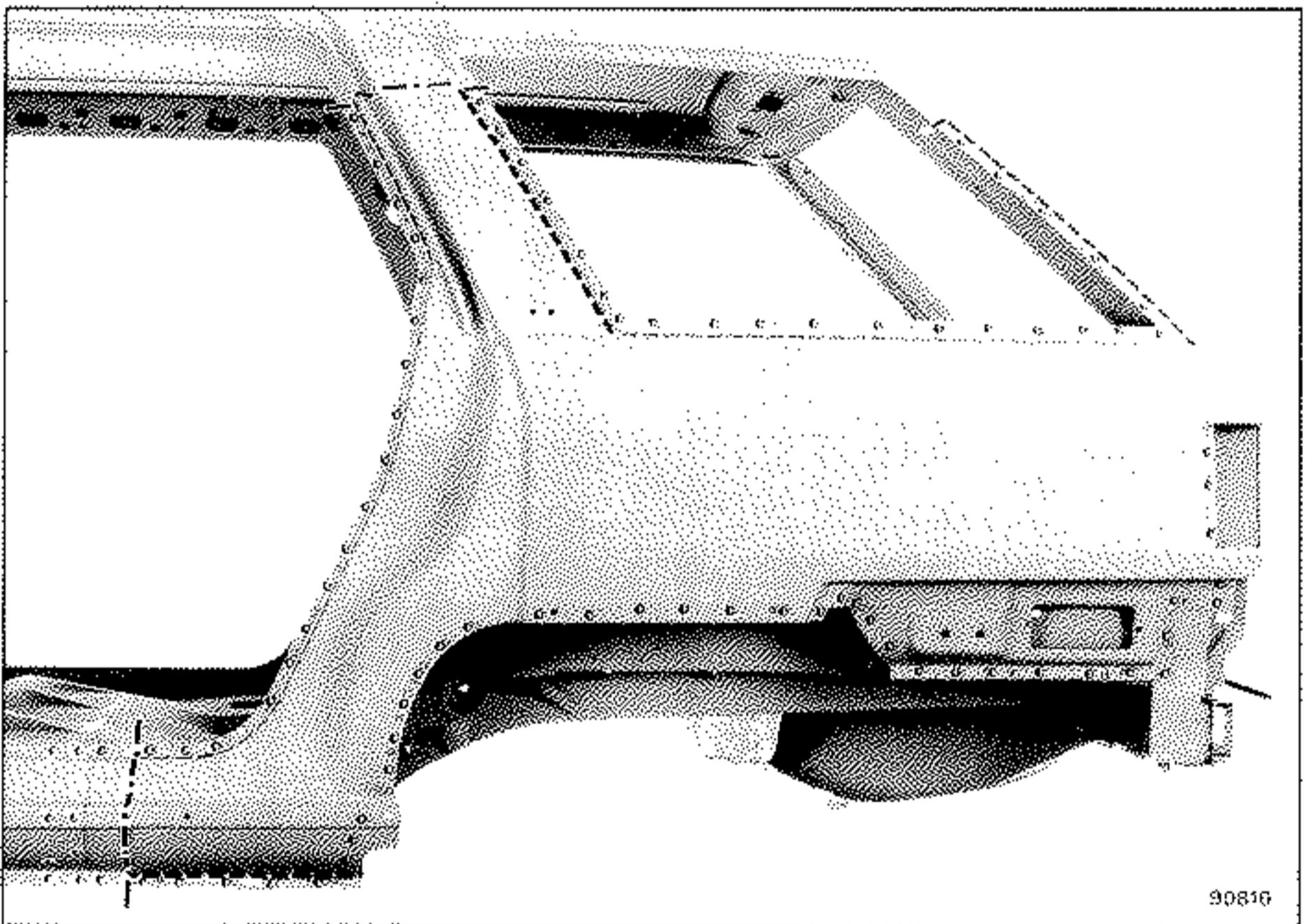


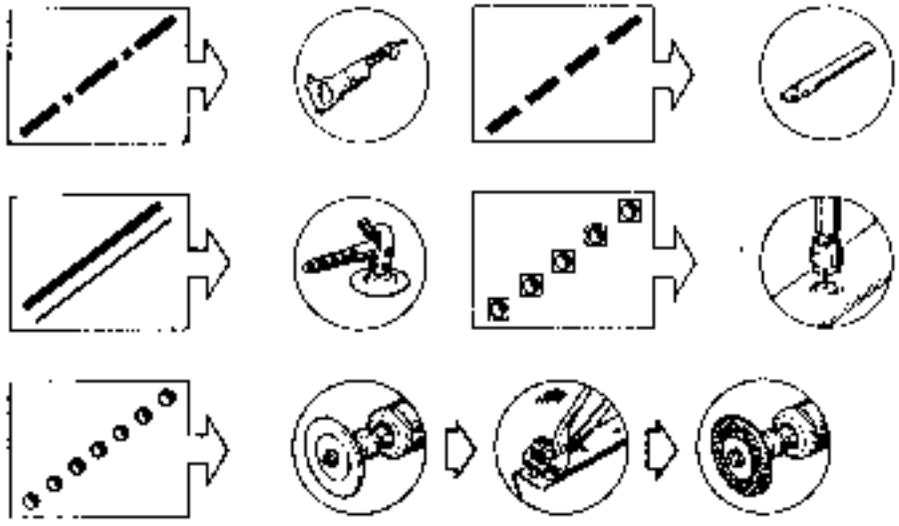
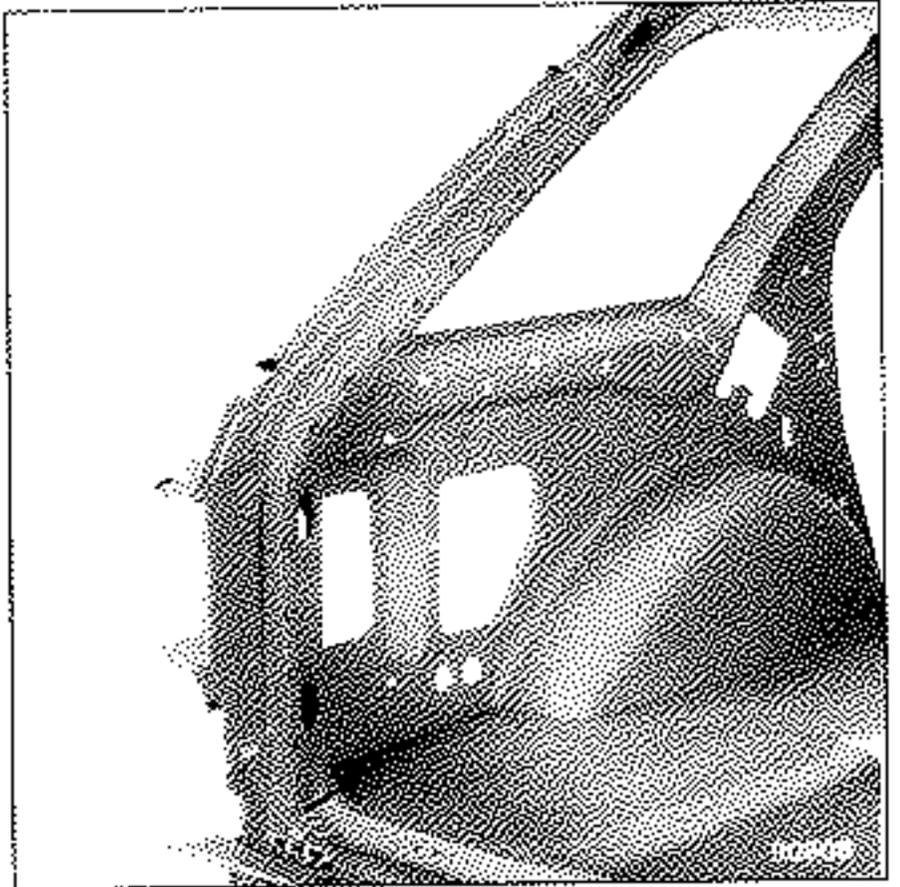
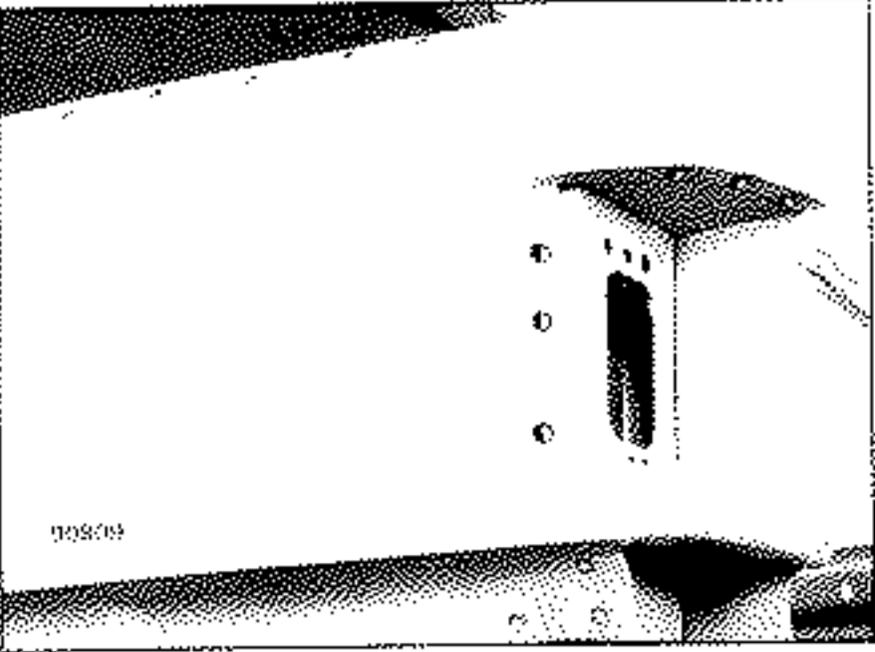
COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT.

Assembled part comprising:
side panel
shield mounting strengthener
striker plate strengthener

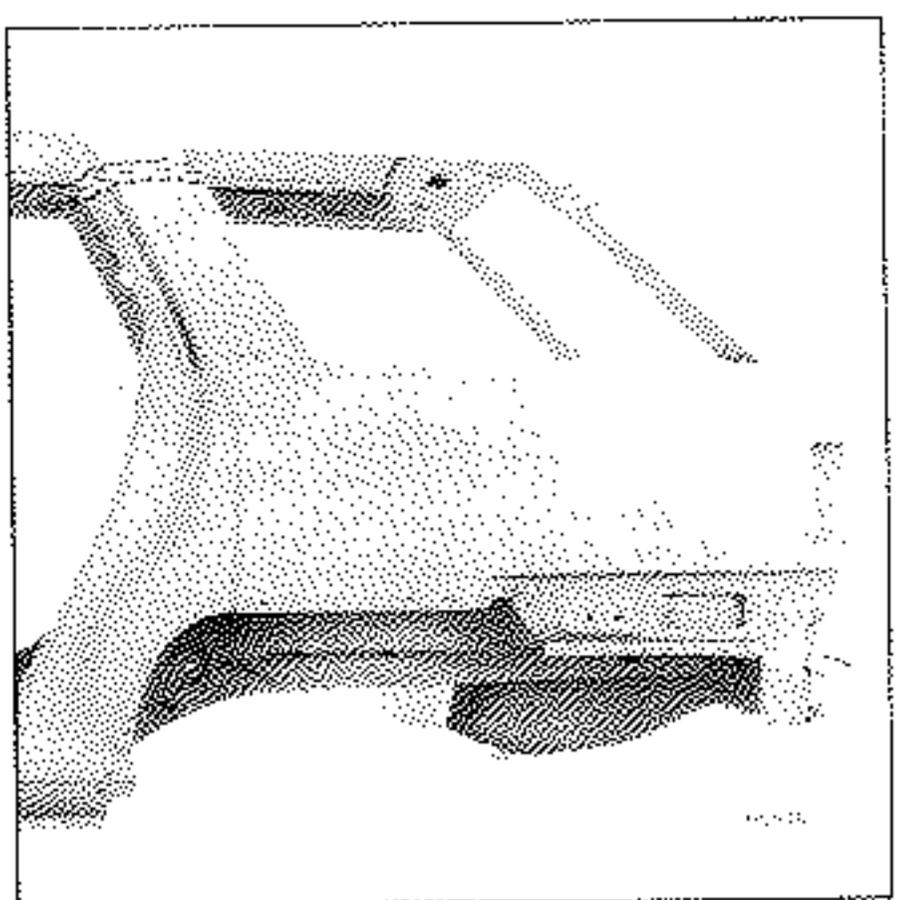
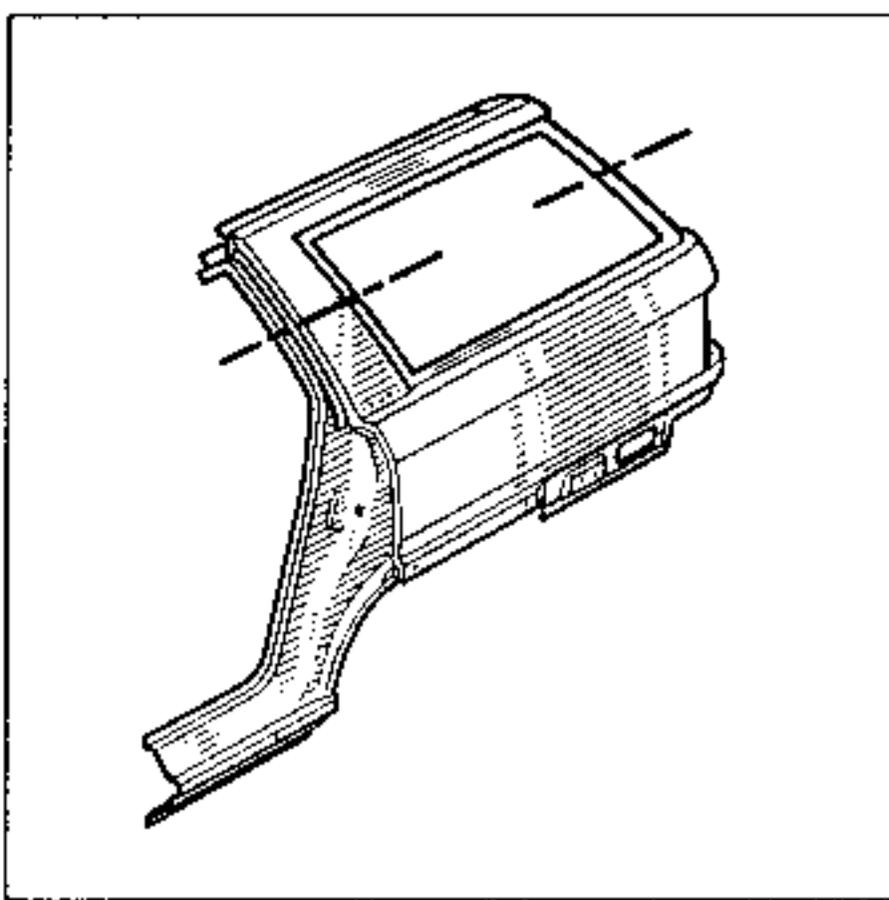


CUTTING OUT - UNPICKING

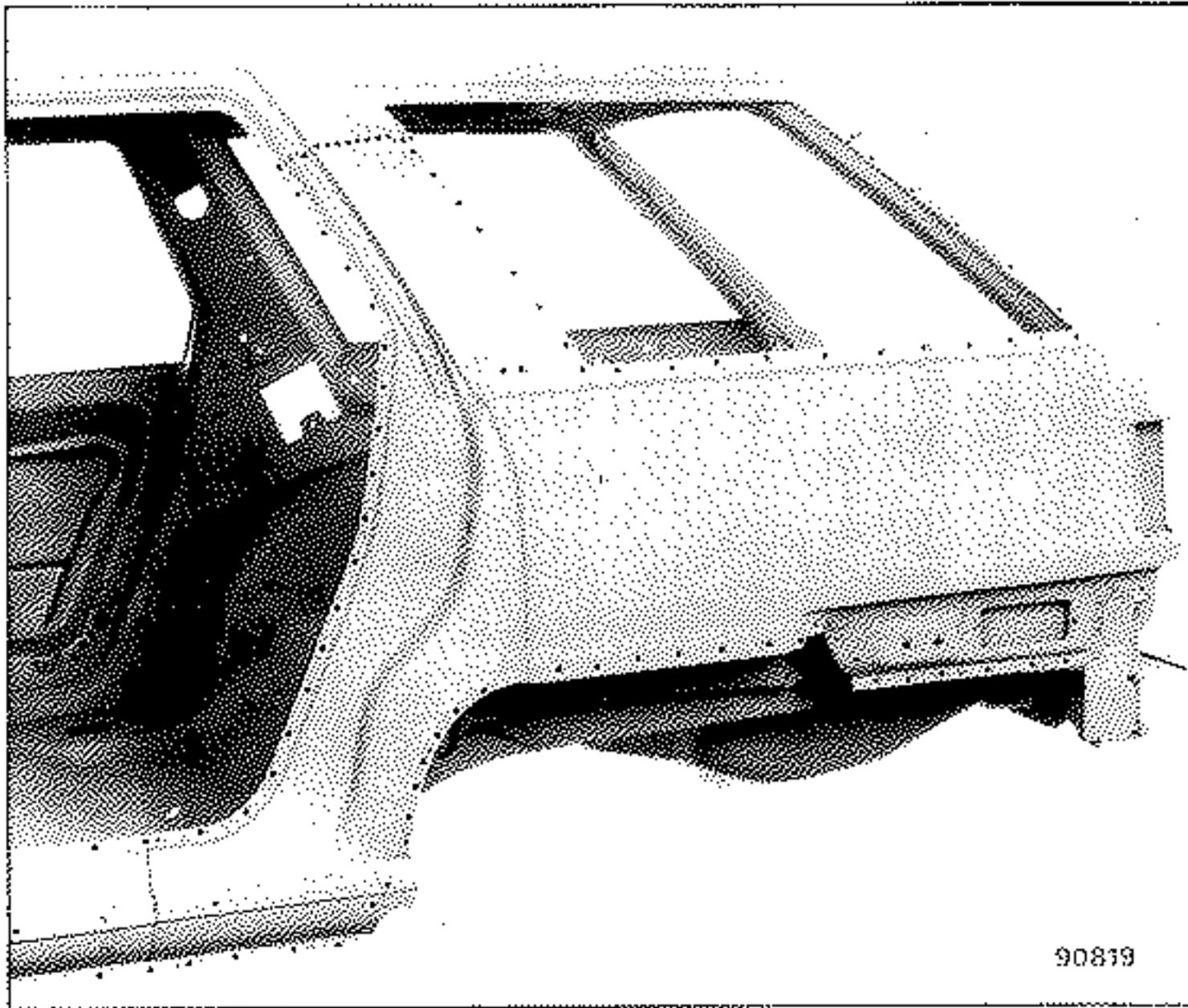




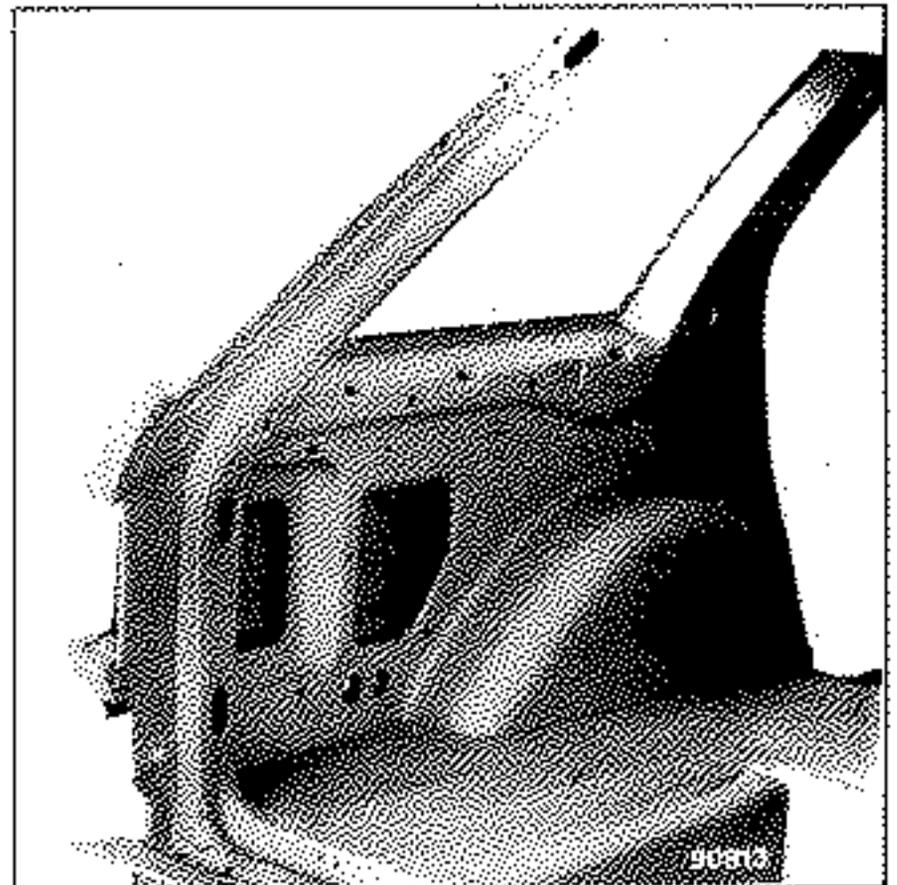
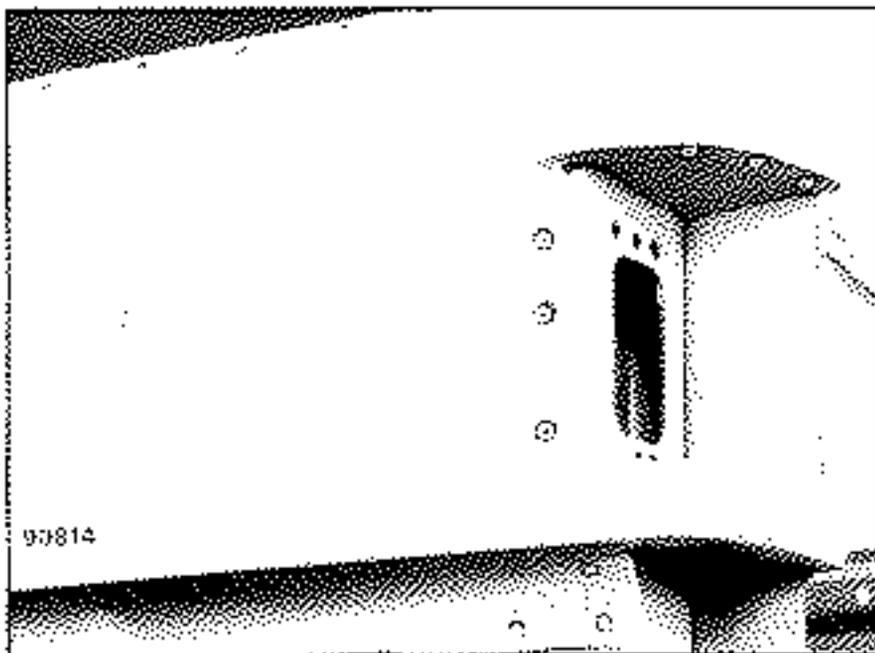
PREPARATION BEFORE WELDING



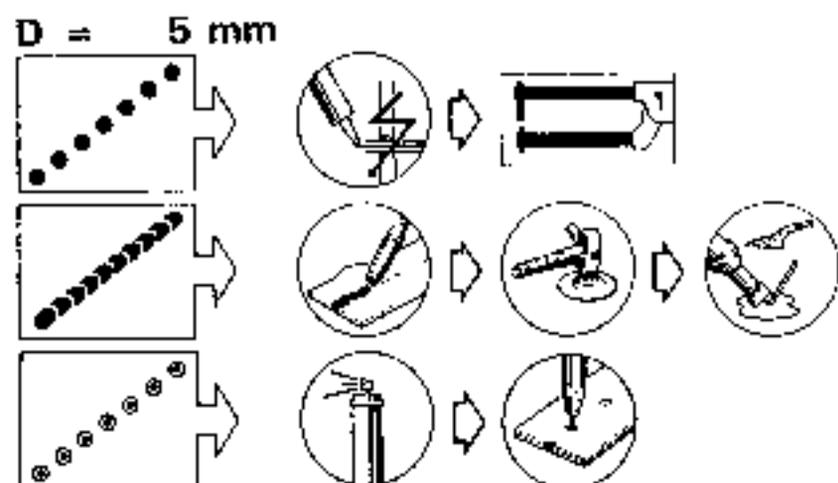
WELDING



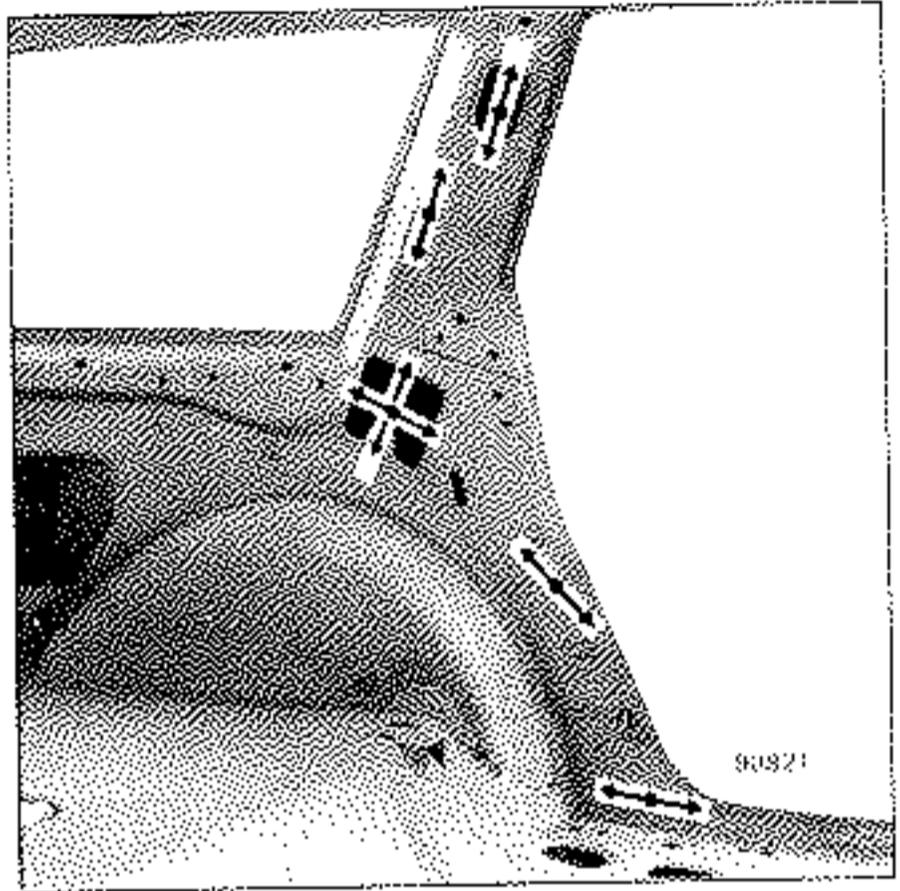
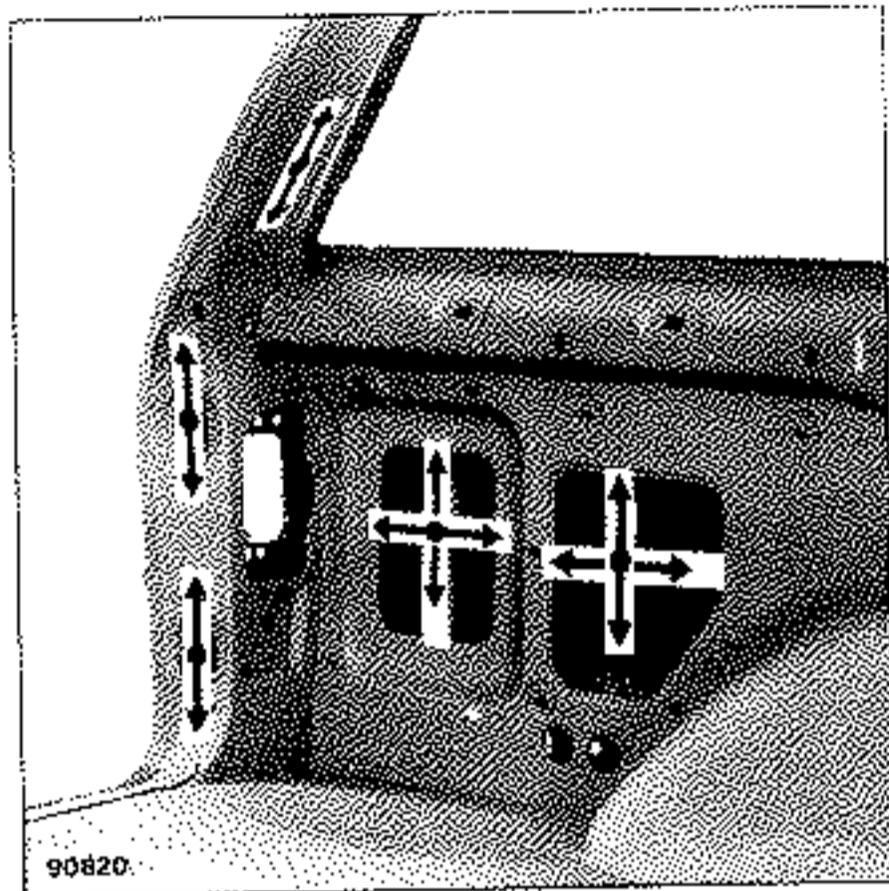
$e = 1,5 \text{ mm}$ $H = 30 \text{ mm}$ $D = 5 \text{ mm}$



$e = 1,5 \text{ mm}$ $H = 30 \text{ mm}$



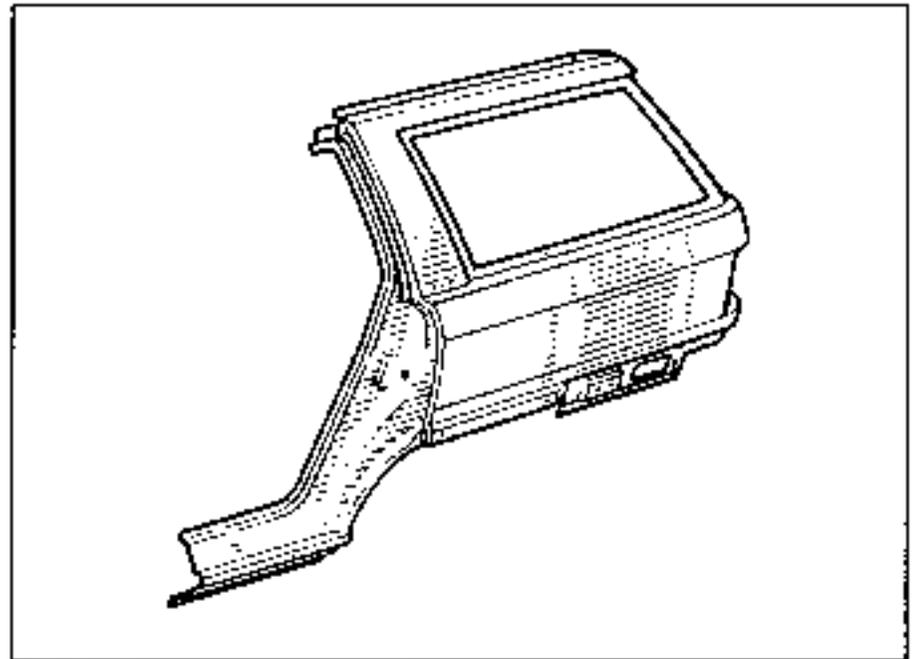
ANTI-CORROSION PROTECTION



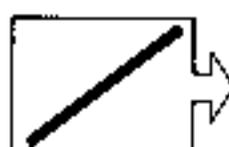
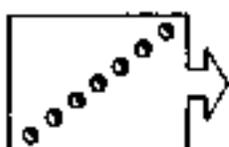
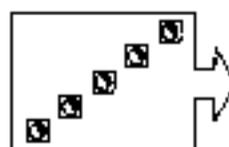
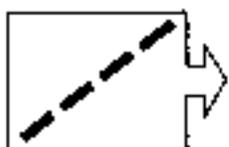
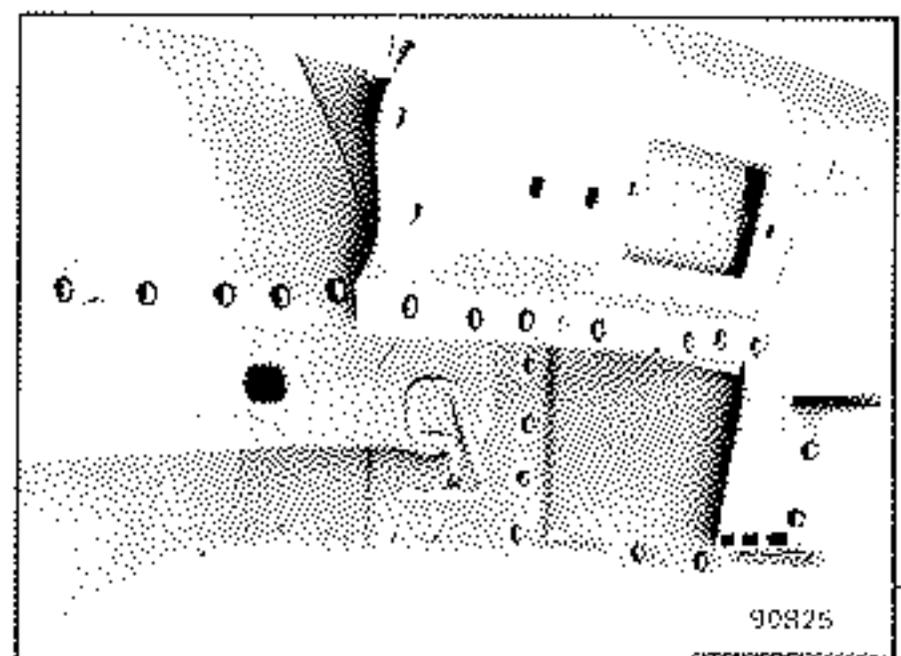
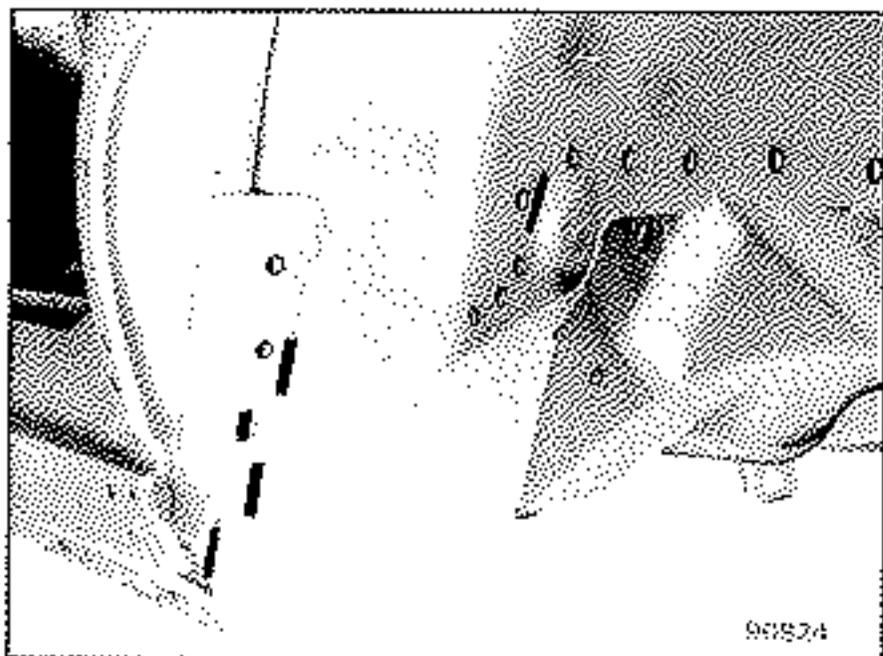
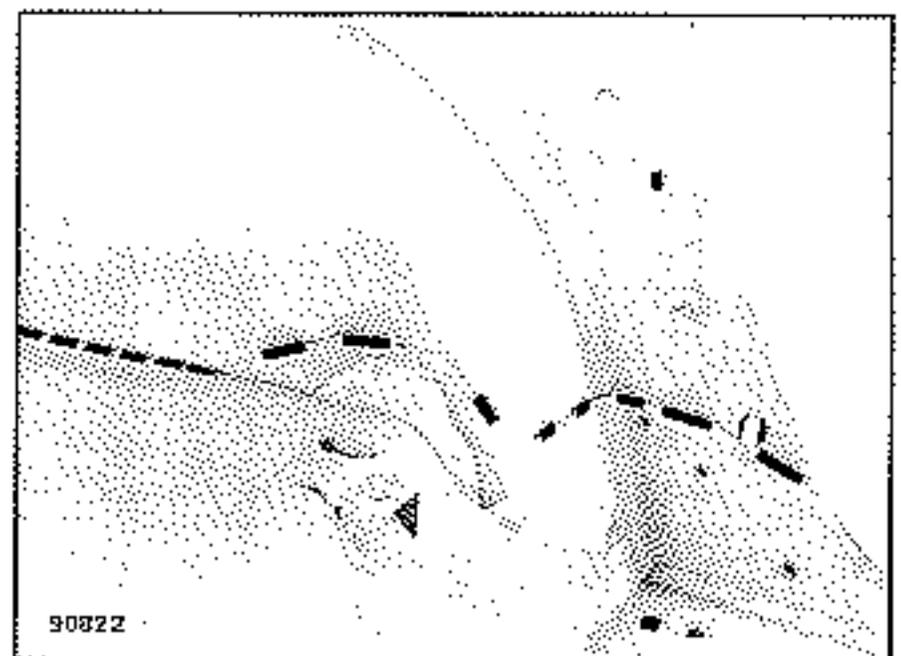
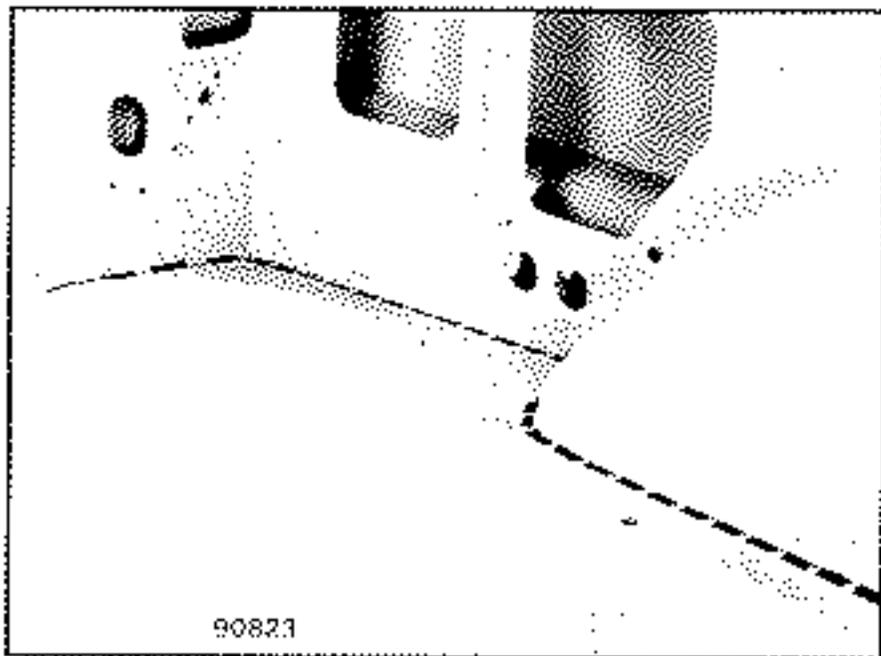
COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT.

Assembled part comprising:

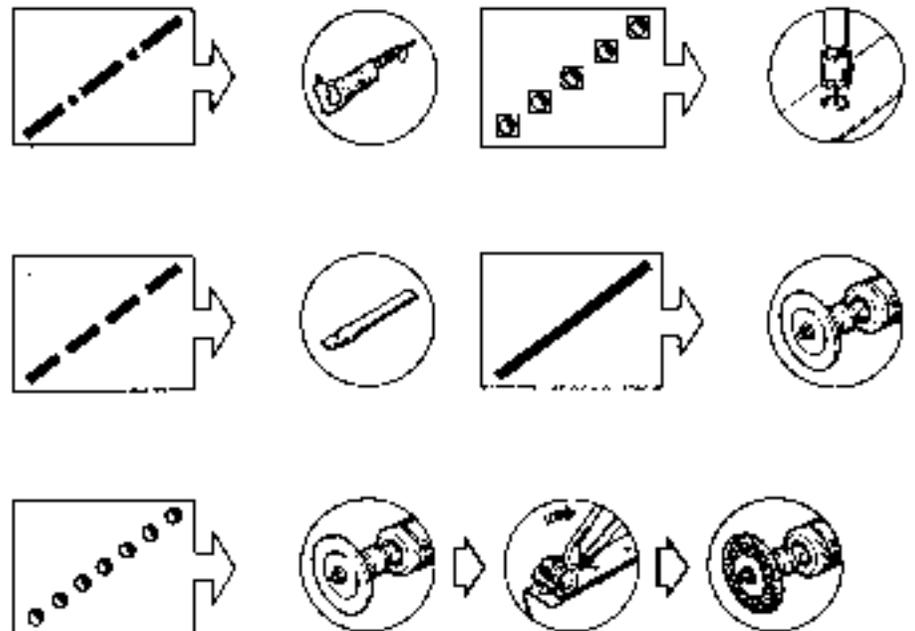
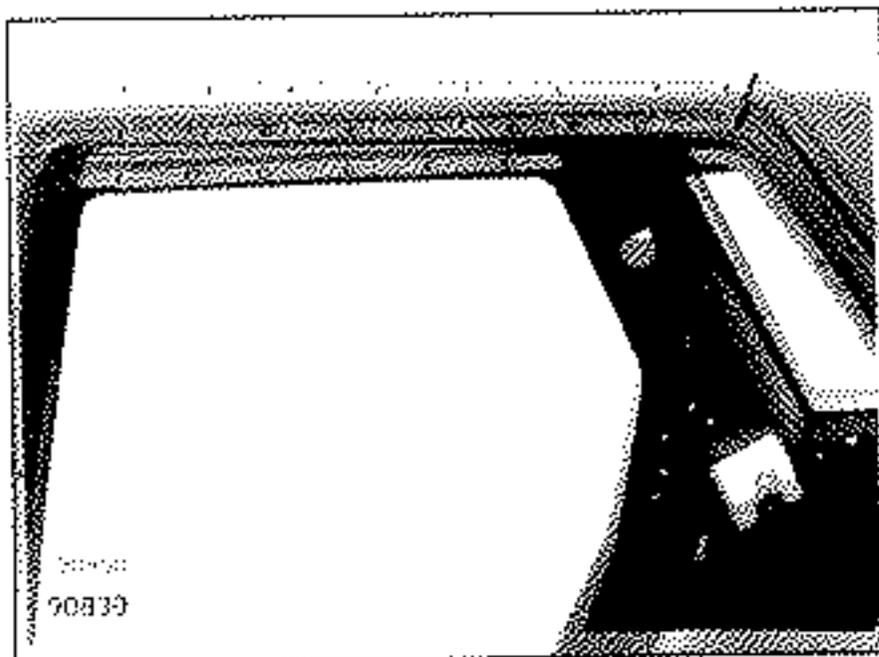
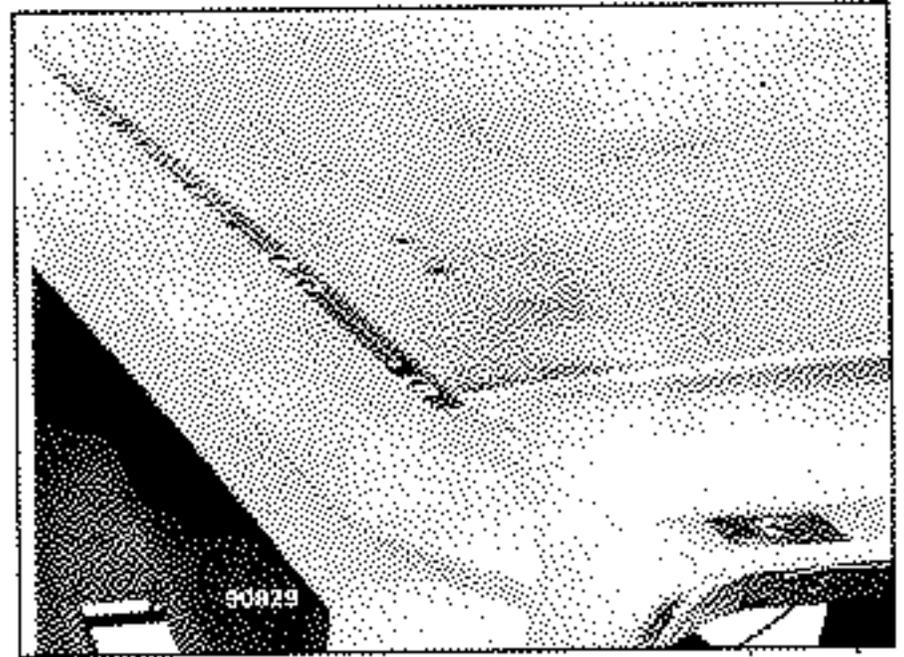
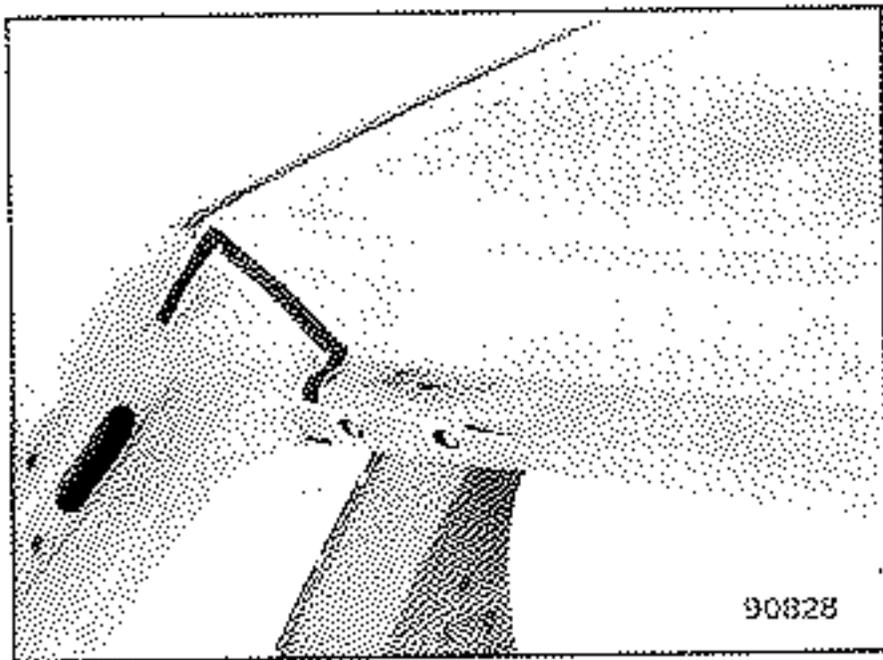
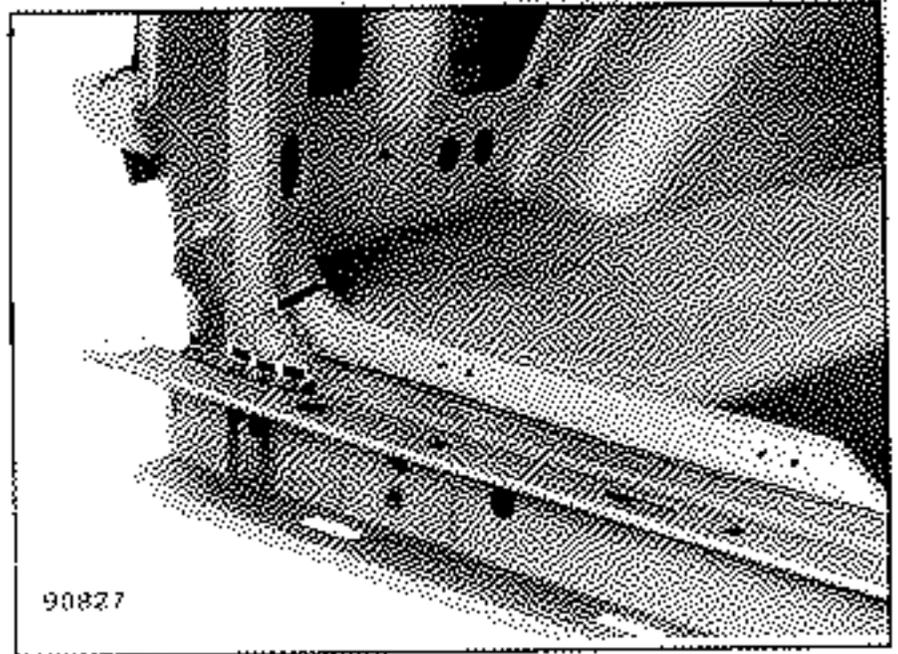
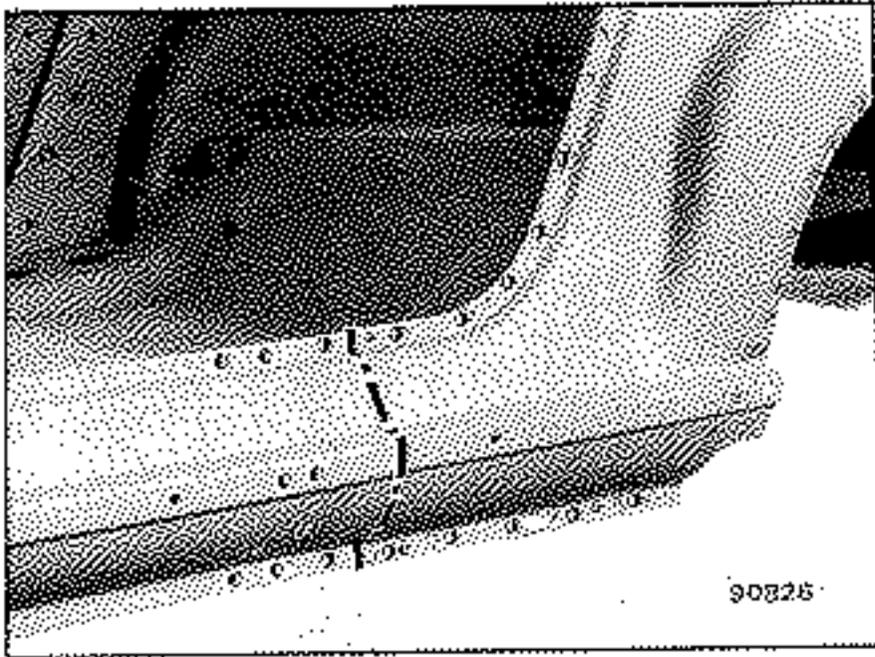
1. Wing panel assembly:
 - far rear pillar rain channel
 - far rear pillar lining
 - outer wheel arch assembly
 - inner wheel arch assembly
 - pillar lining strengthener
 - stretcher
 - stretcher recess
 - stretcher lining
2. Strengthener



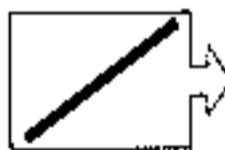
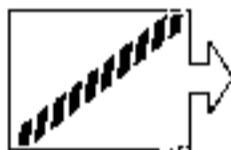
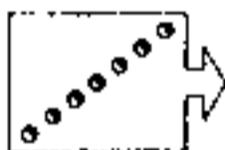
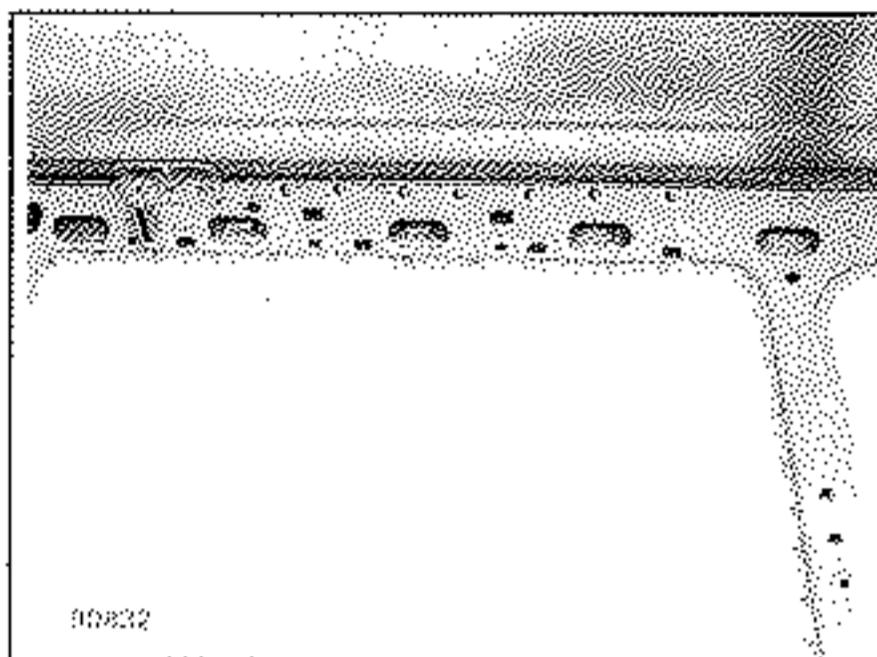
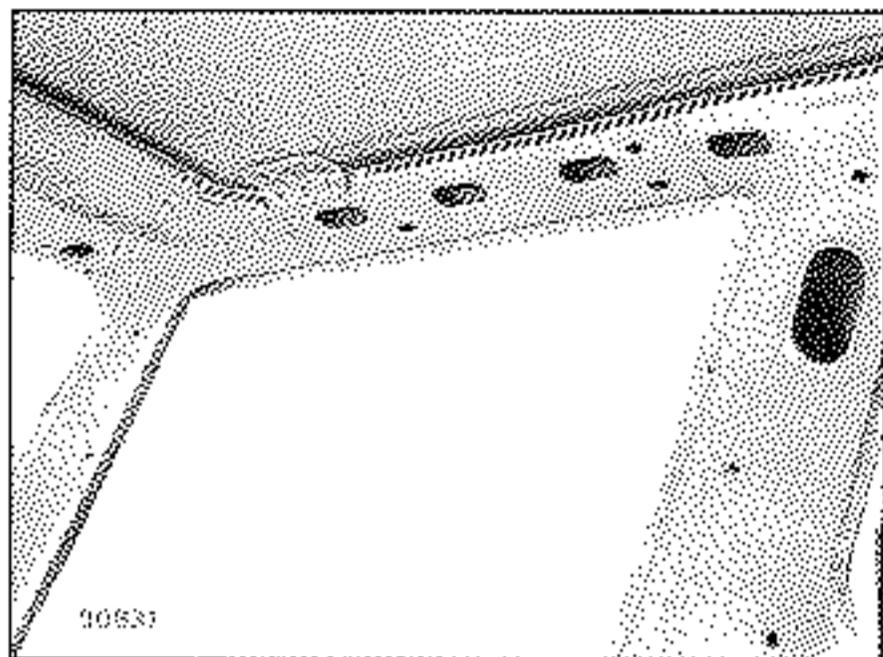
CUTTING OUT - UNPICKING



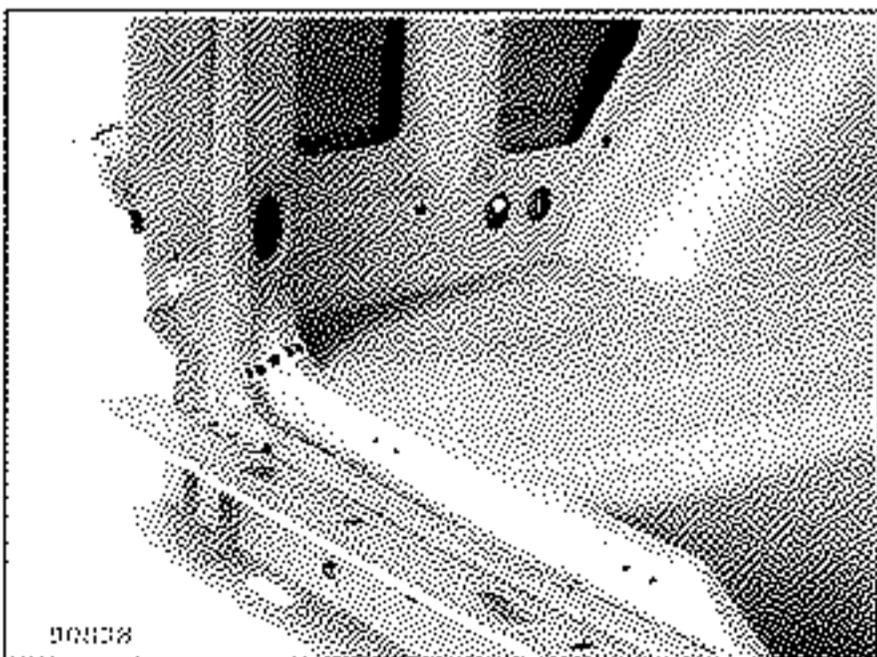
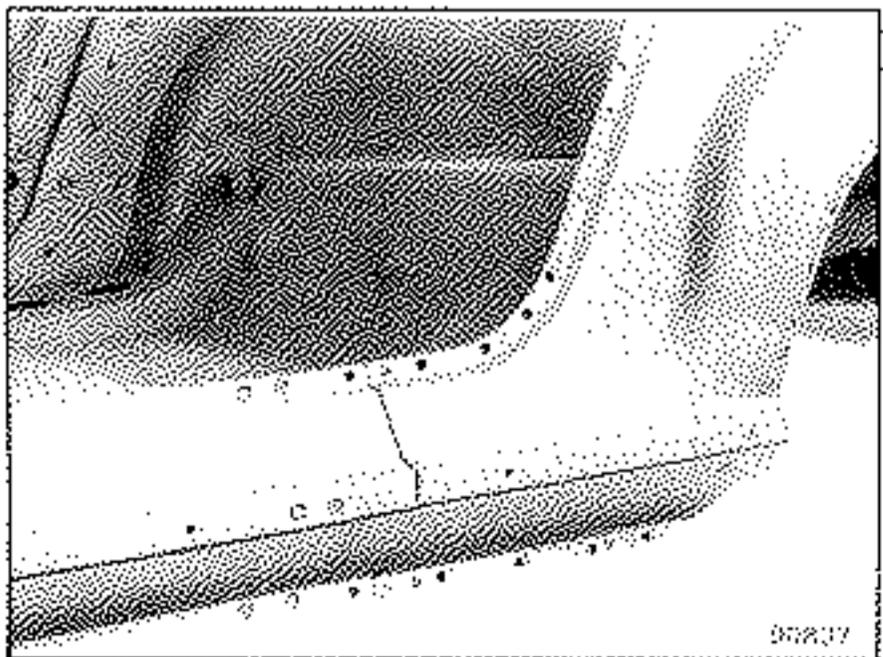
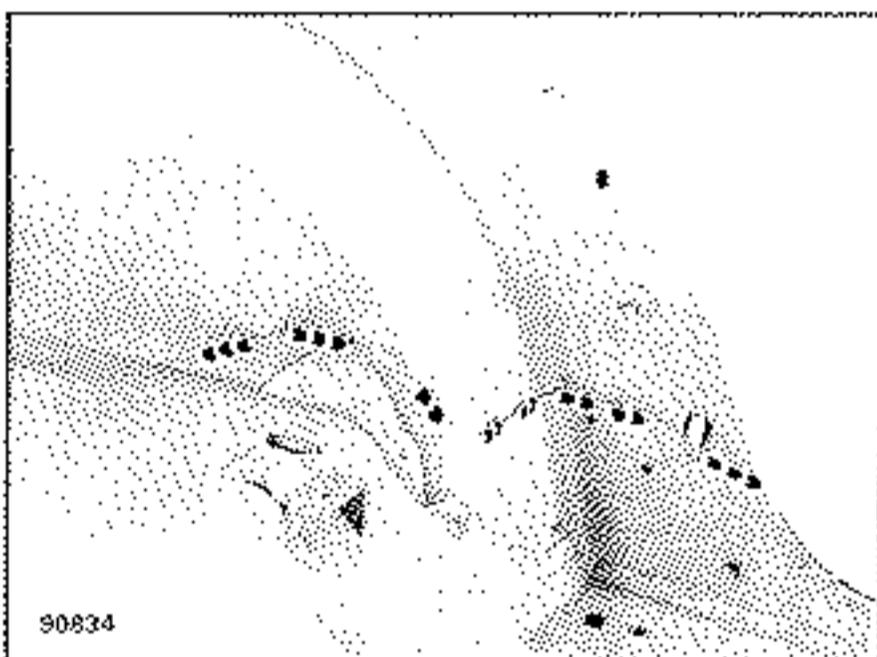
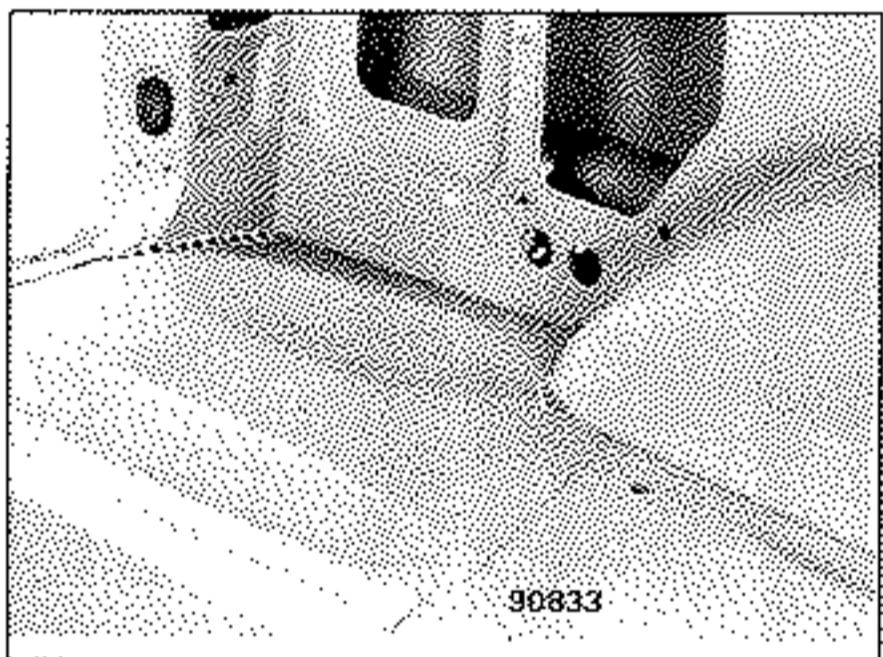
CUTTING OUT - UNPICKING (continued)



CUTTING OUT - UNPICKING (continued)



WELDING



e = 2 mm

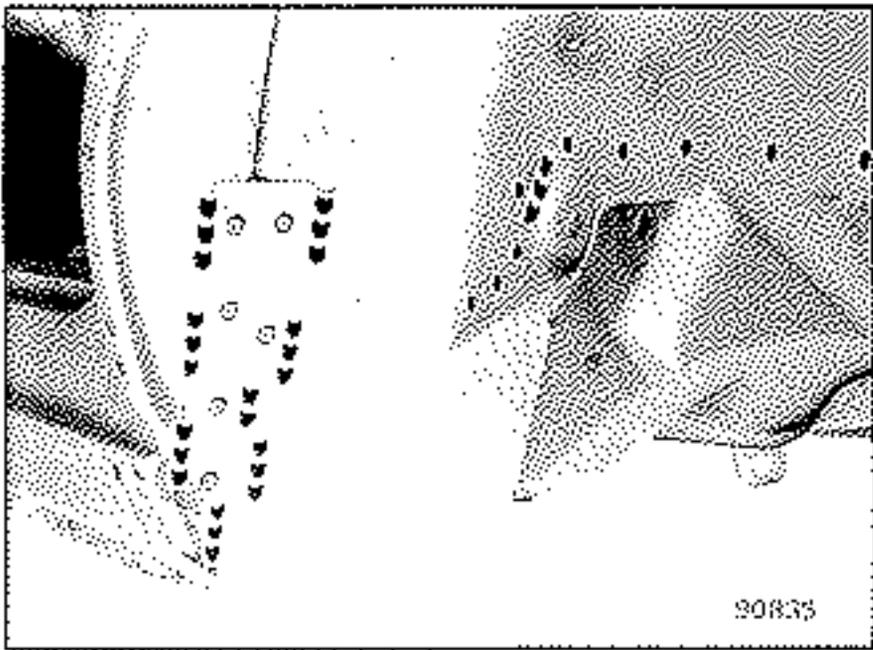
H = 30 mm

∅ = 4,5 mm

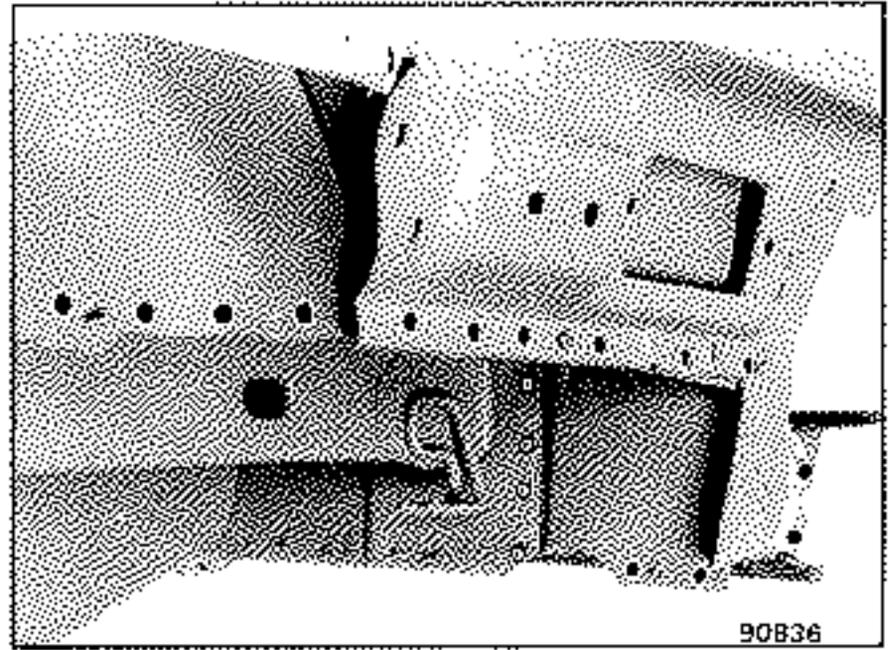
e = 2 mm

H = 30 mm

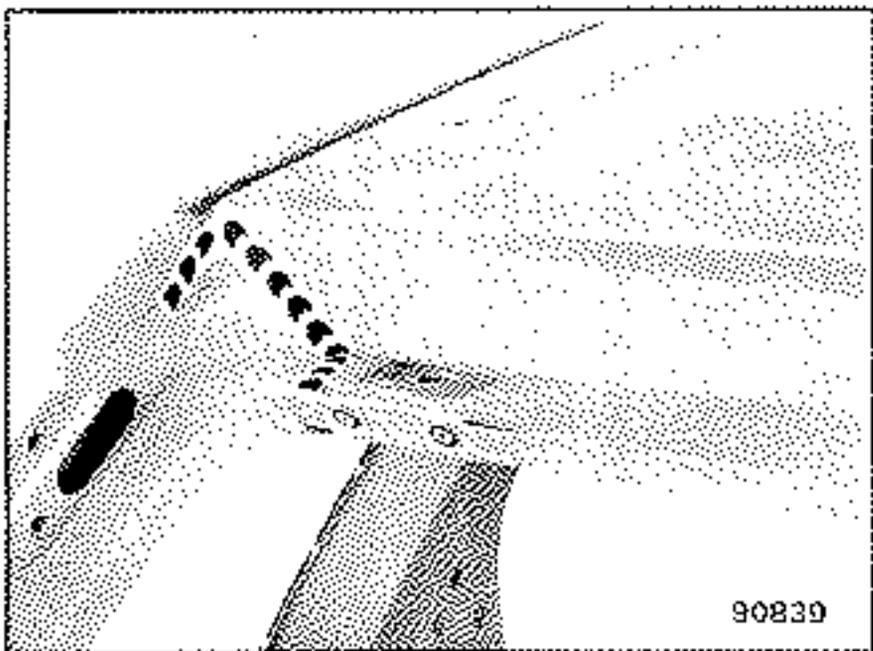
WELDING (continued)



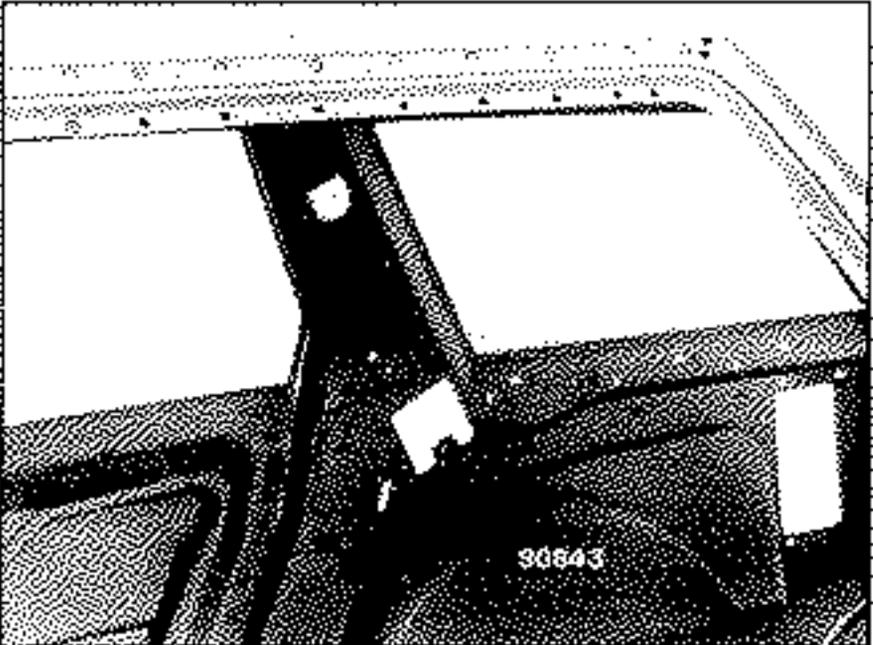
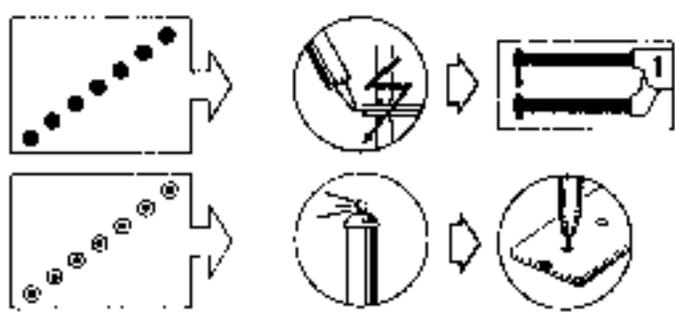
$e = 1,5 \text{ mm}$ $H = 30 \text{ mm}$



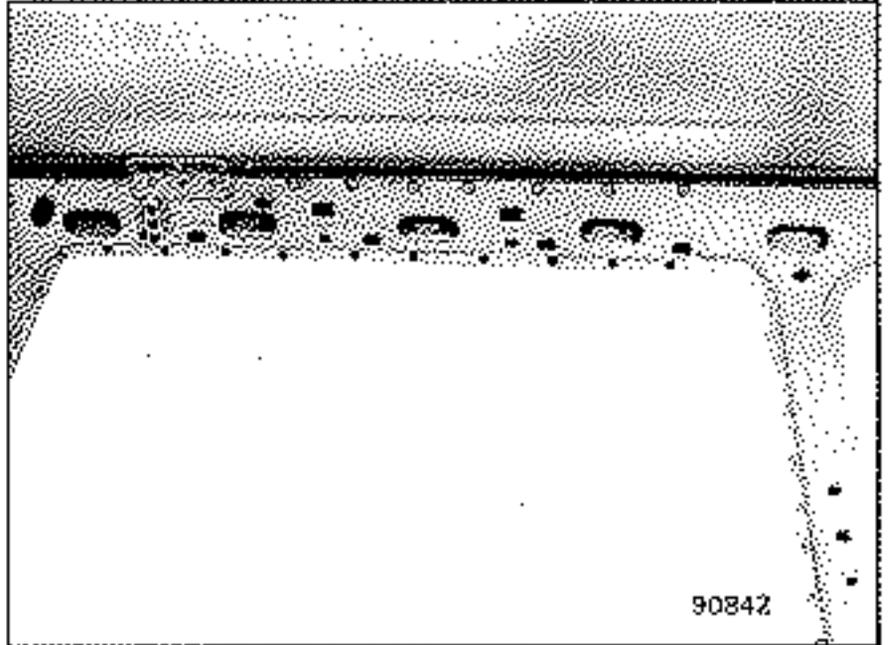
$e = 2 \text{ mm}$ $H = 30 \text{ mm}$



$e = 1,4 \text{ mm}$ $H = 30 \text{ mm}$

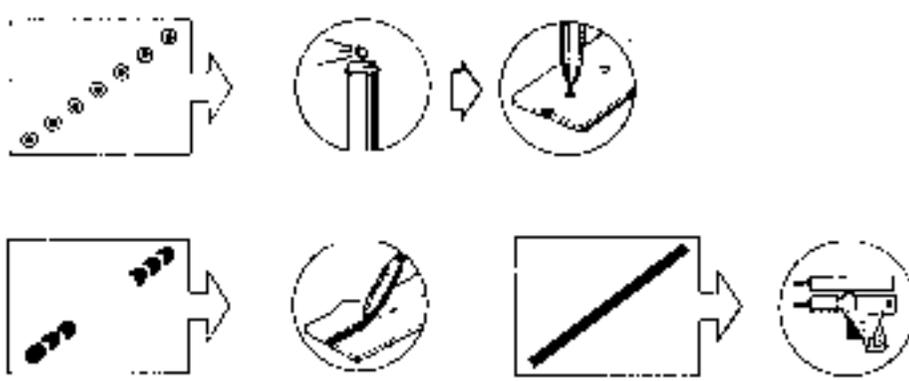
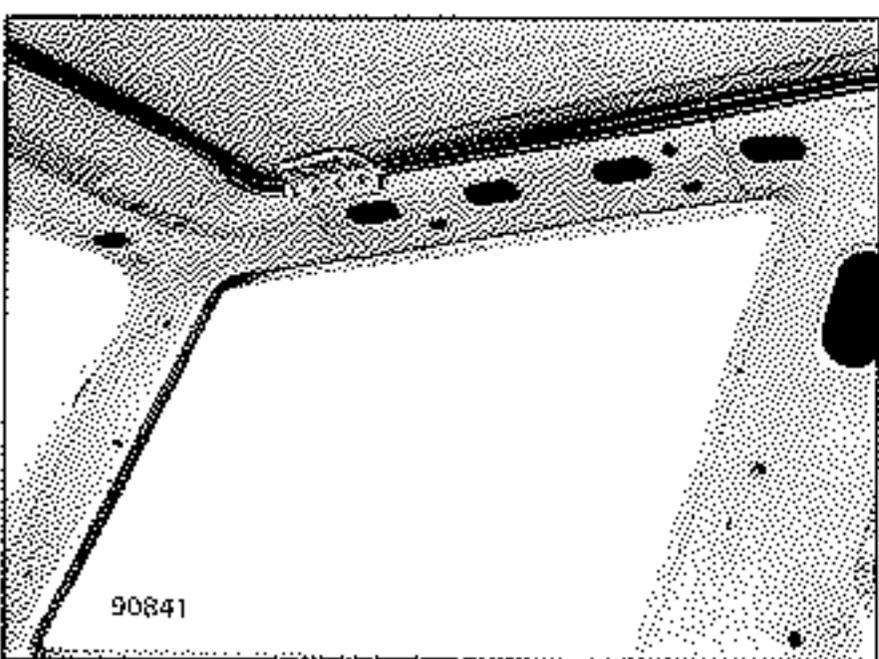


$e = 1,4 \text{ mm}$ $H = 30 \text{ mm}$

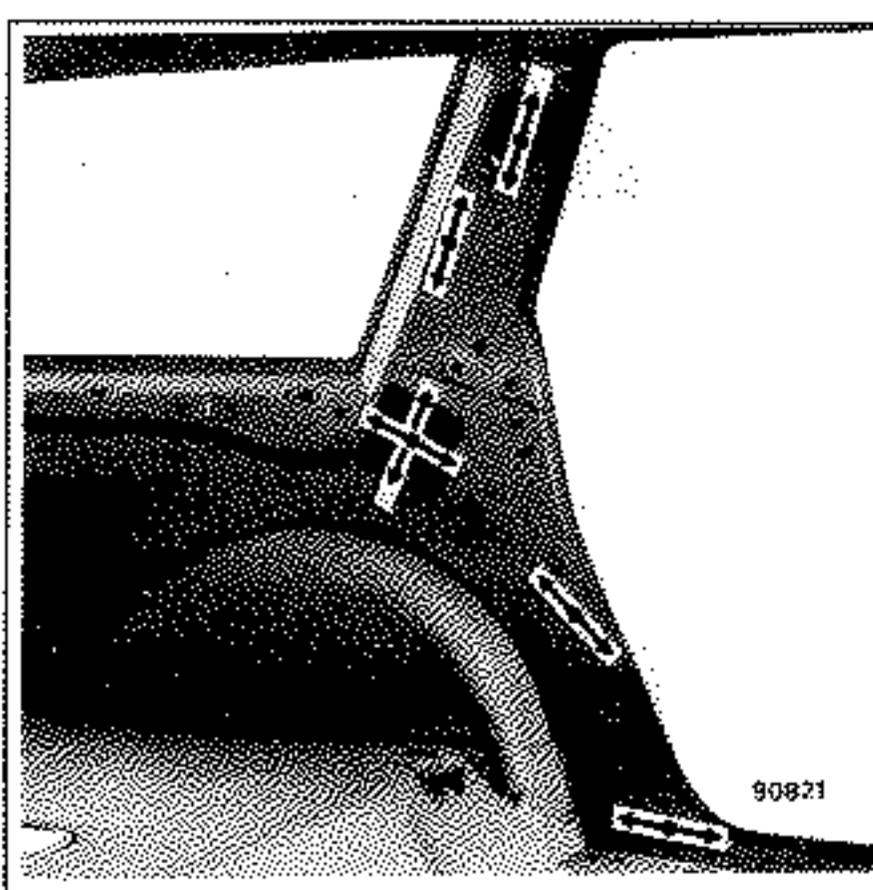
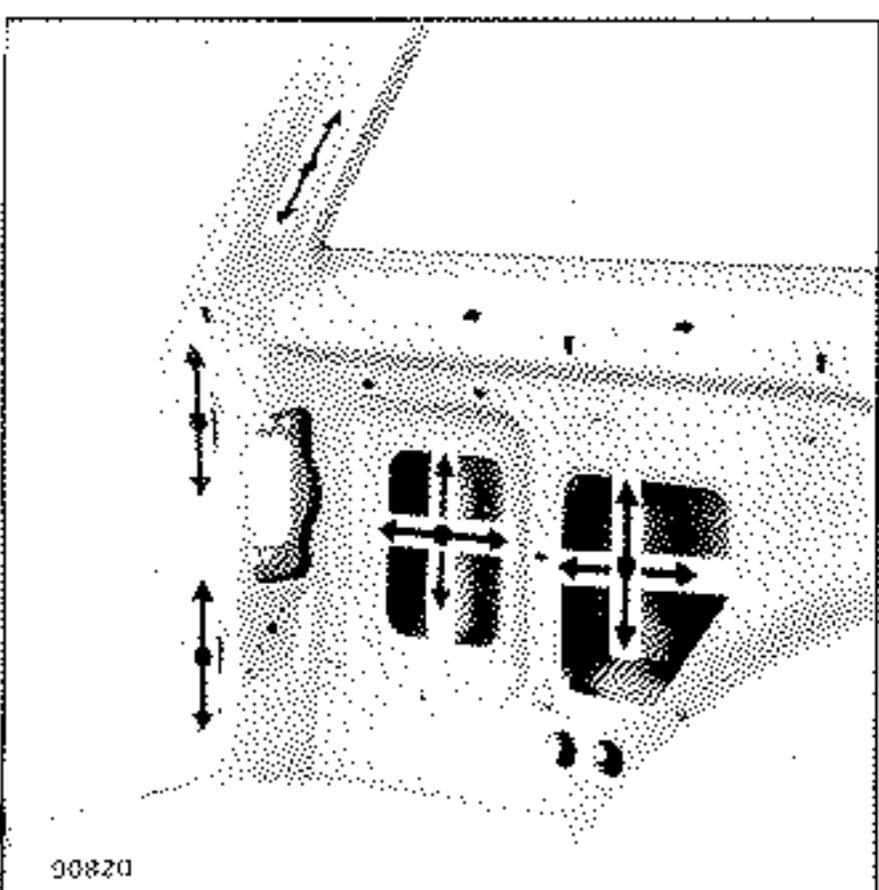
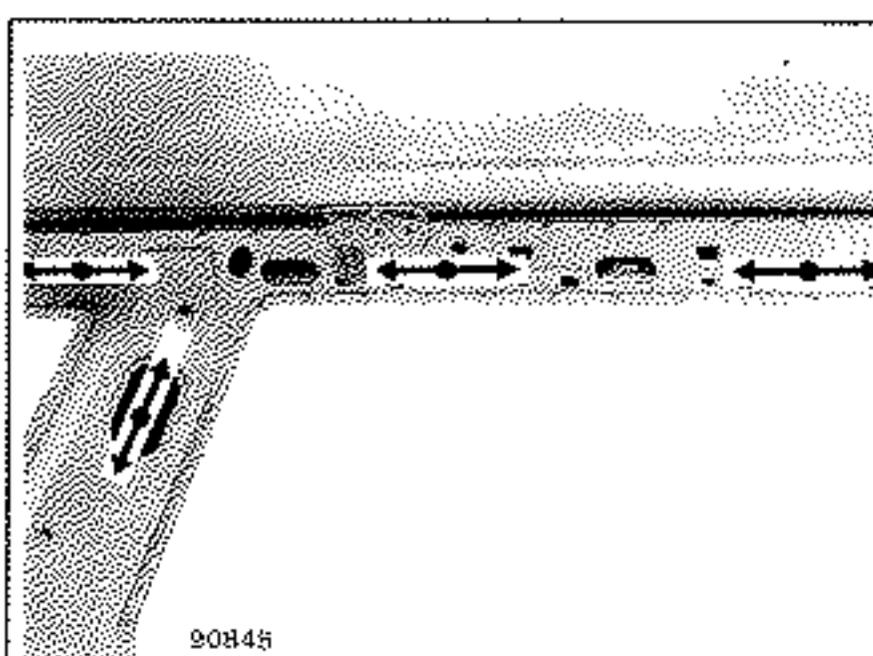
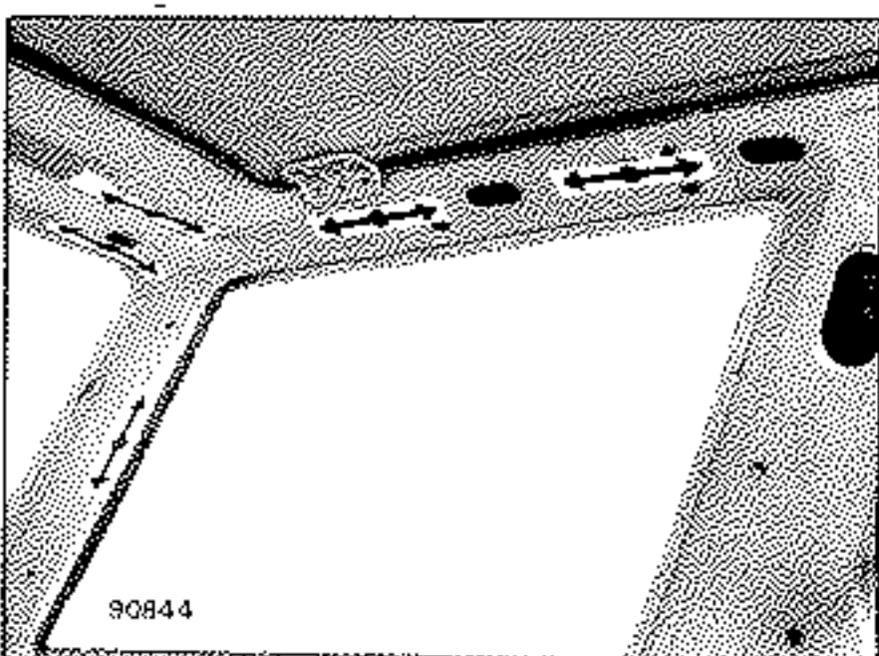


$e = 1,4 \text{ mm}$ $H = 30 \text{ mm}$

WELDING (continued)



ANTI-CORROSION PROTECTION

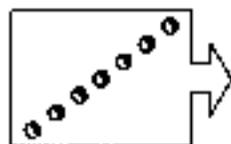
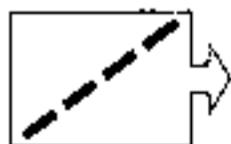
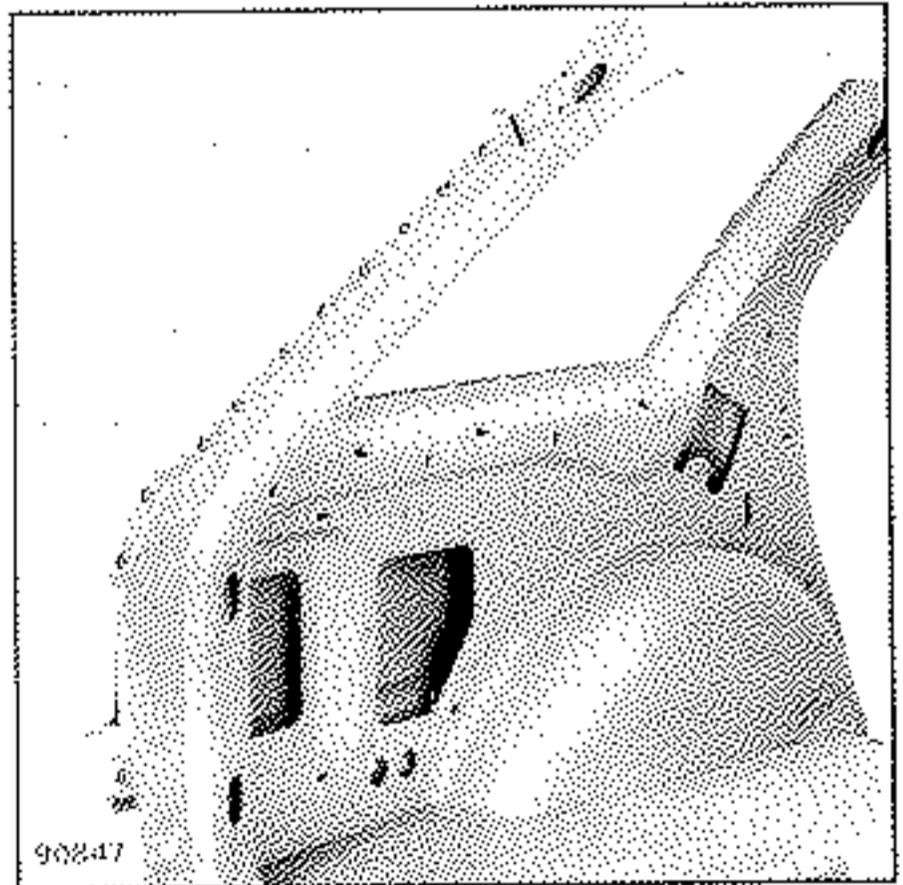
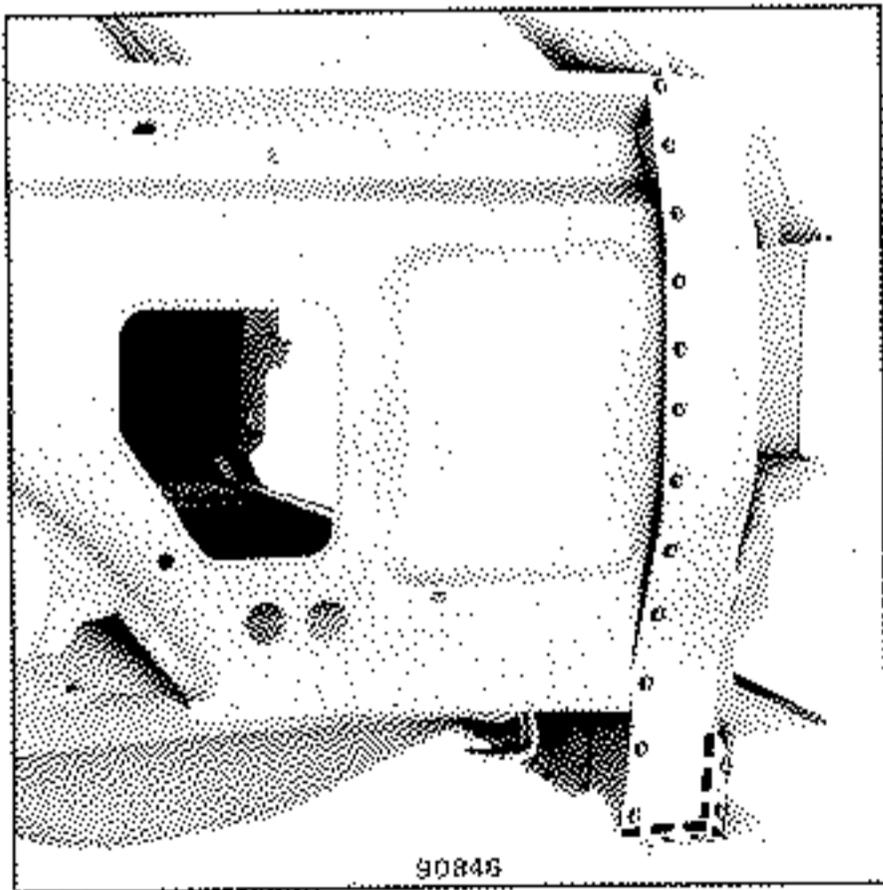
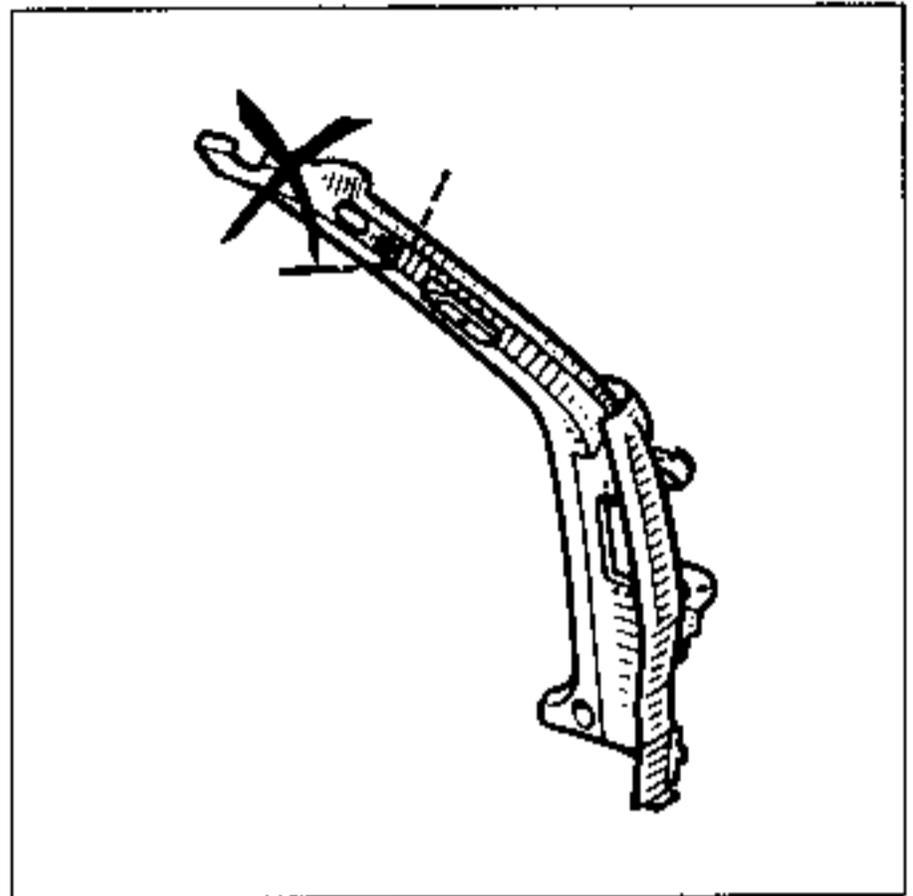


COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT.

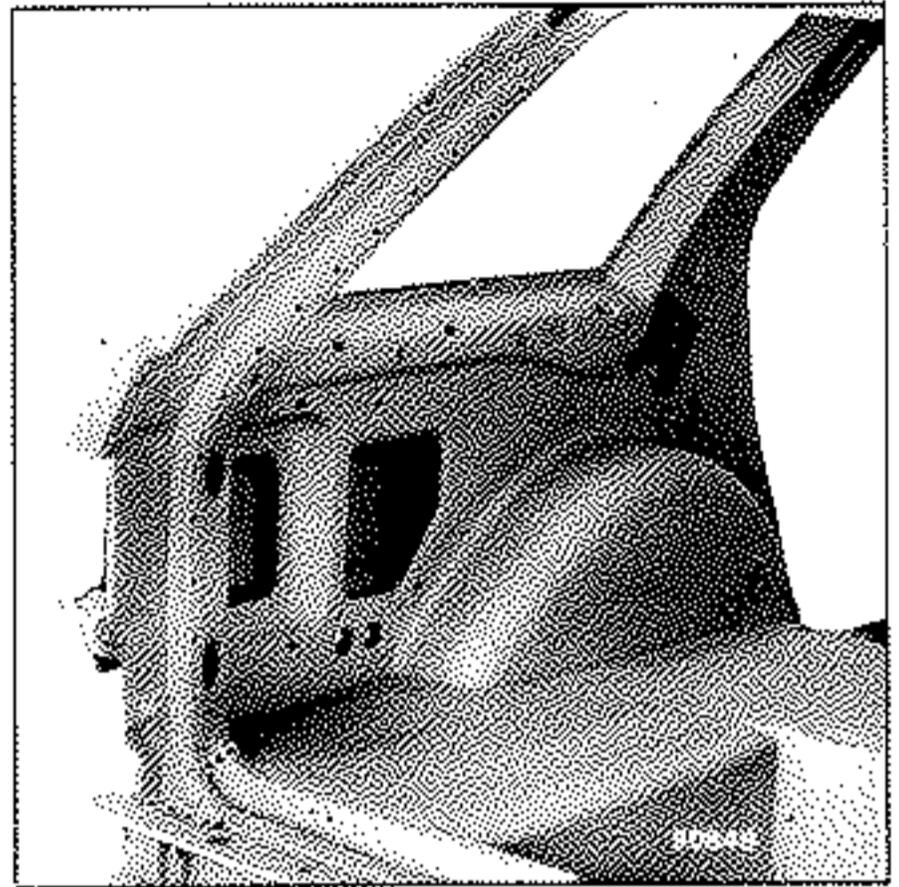
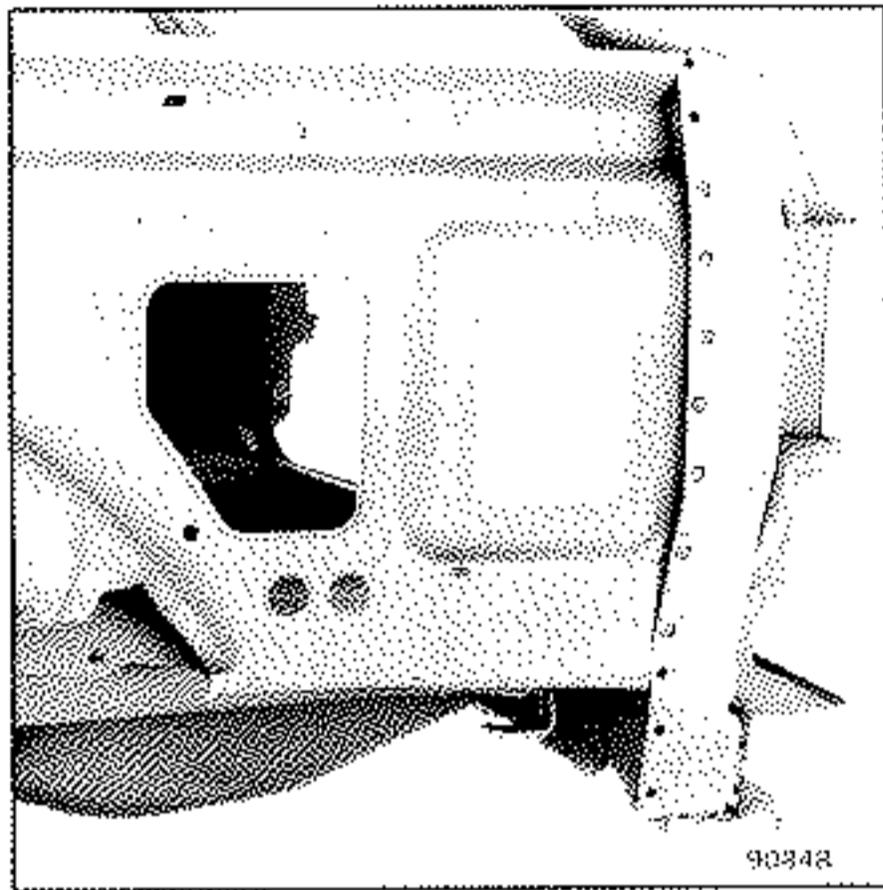
Assembled part comprising:
rain channel
light unit mounting component
light unit lower and upper gussets
rain channel upper gusset
pillar lining strengthener with safety belt mounting.

NOTE: On the service exchange part unpick the lining upper strengthener.

CUTTING OUT - UNPICKING



WELDING



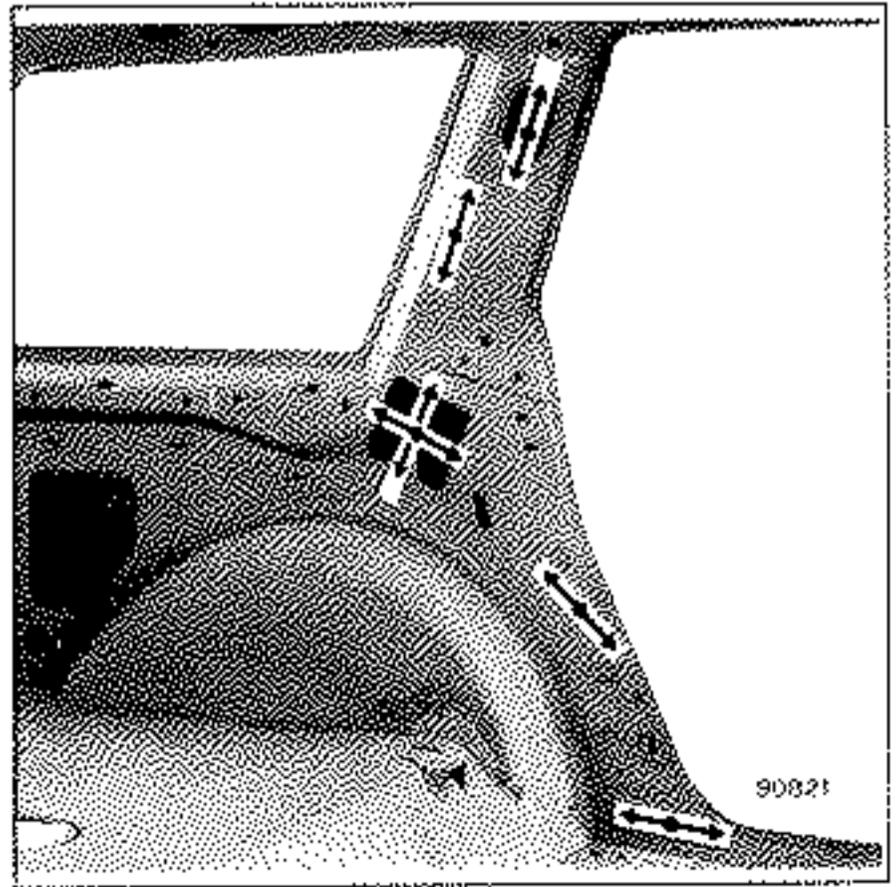
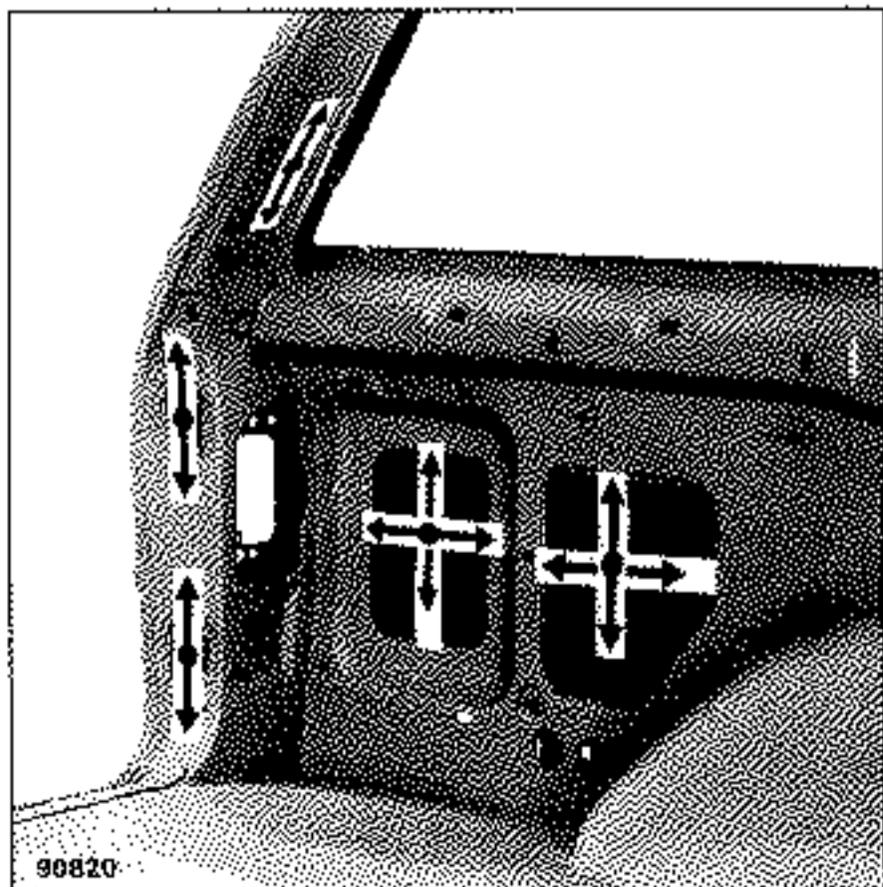
$\varnothing = 5 \text{ mm}$

$e = 1,5 \text{ mm}$

$H = 30 \text{ mm}$



ANTI-CORROSION PROTECTION



COMPOSITION OF PARTS AS SUPPLIED BY THE PARTS DEPARTMENT:

The roof is supplied bare, without cross-members and stretchers.

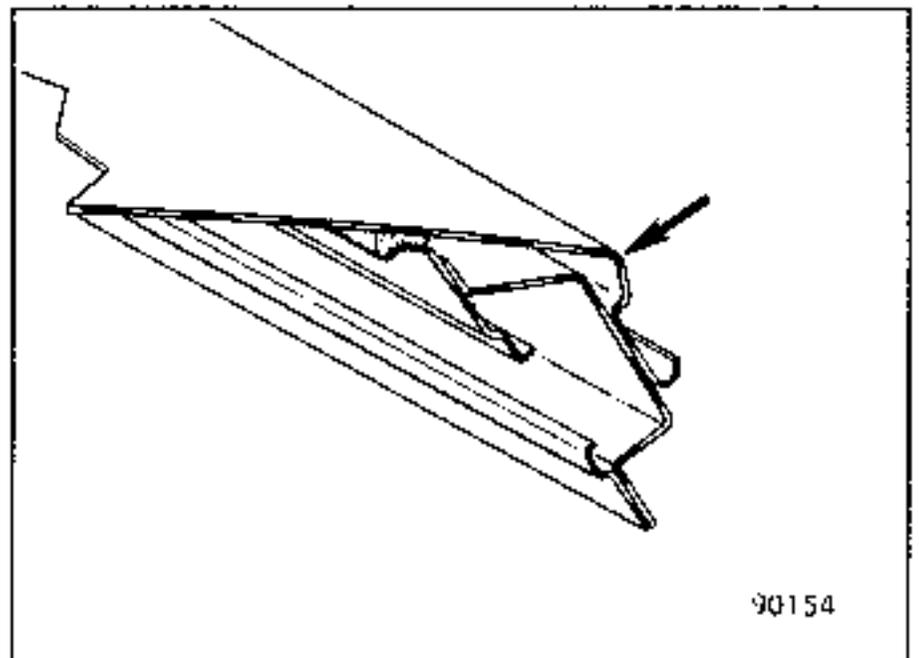
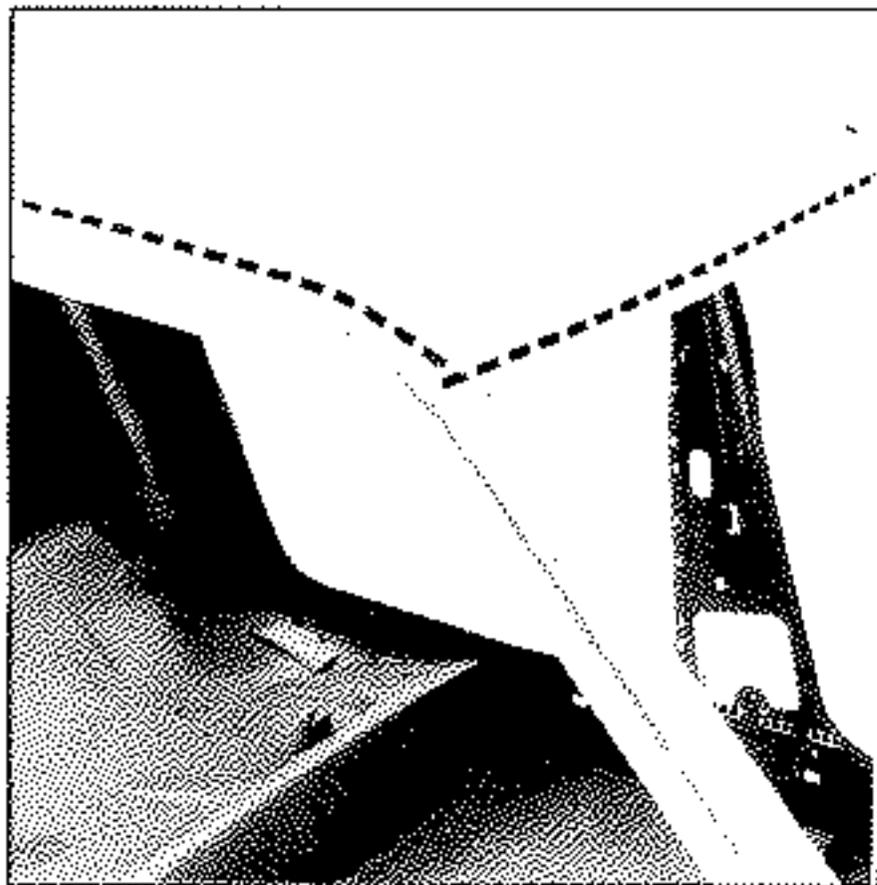
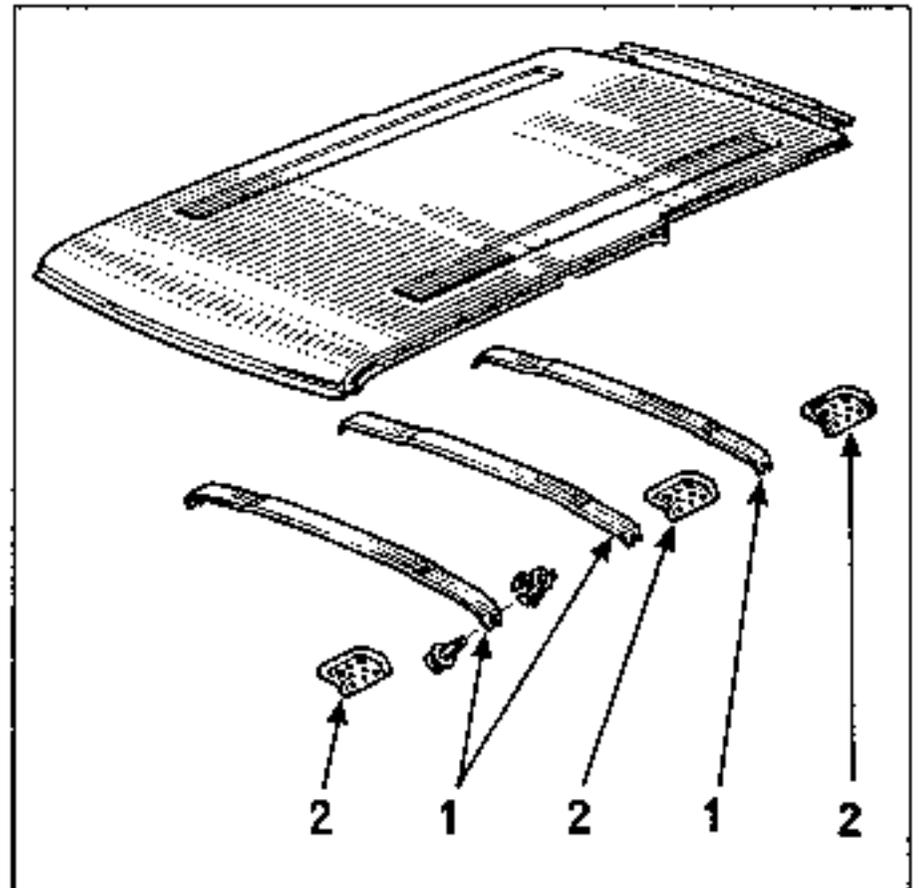
Parts (1) and (2) may be partially recovered.

NOTE:

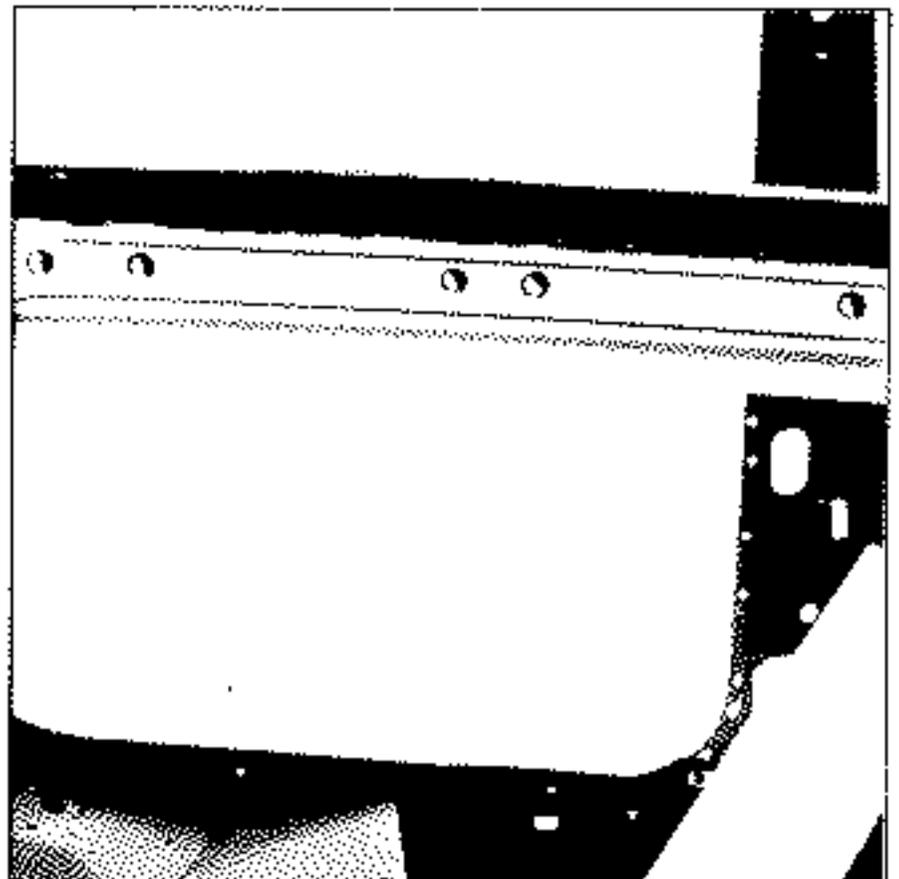
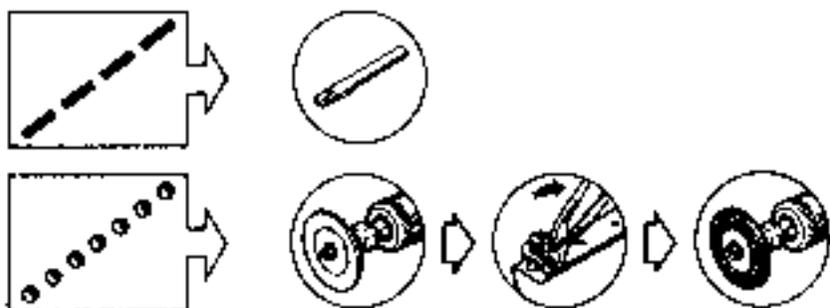
Parts (1) are bonded with adhesive mastic for windows (MCV);
Parts (2) are specific to vehicles fitted with a roof-rack.

CUTTING OUT - UNPICKING

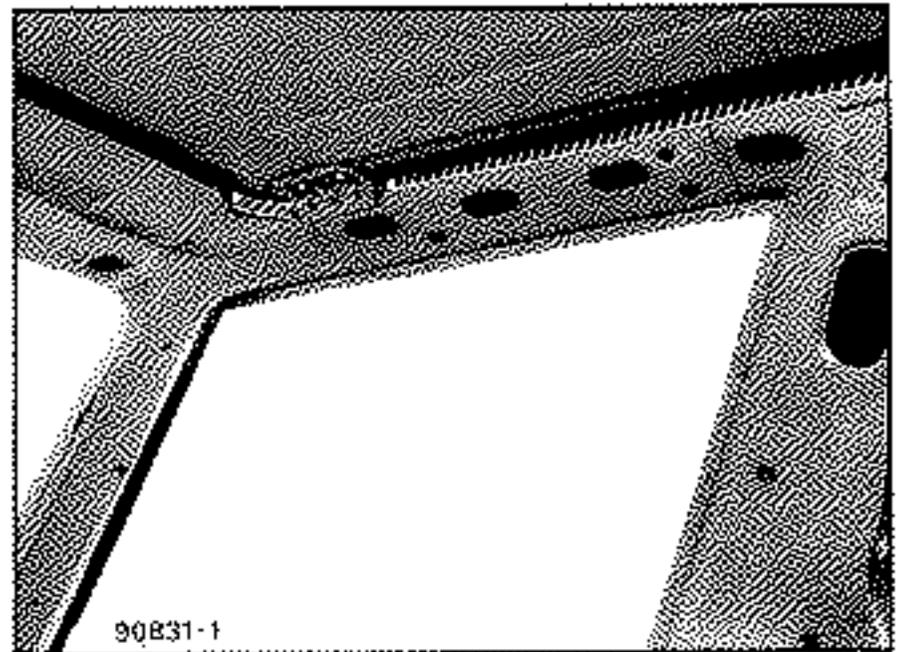
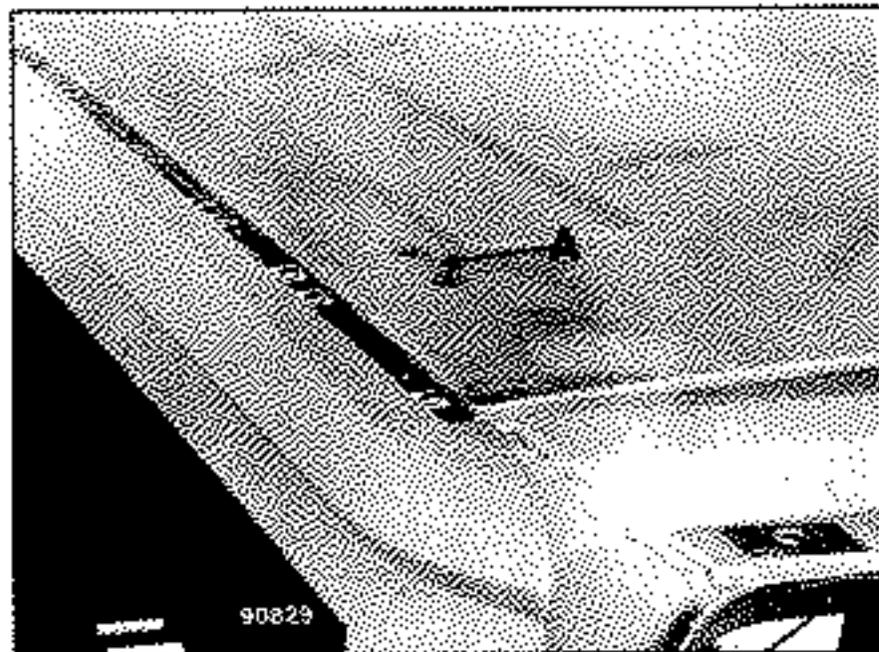
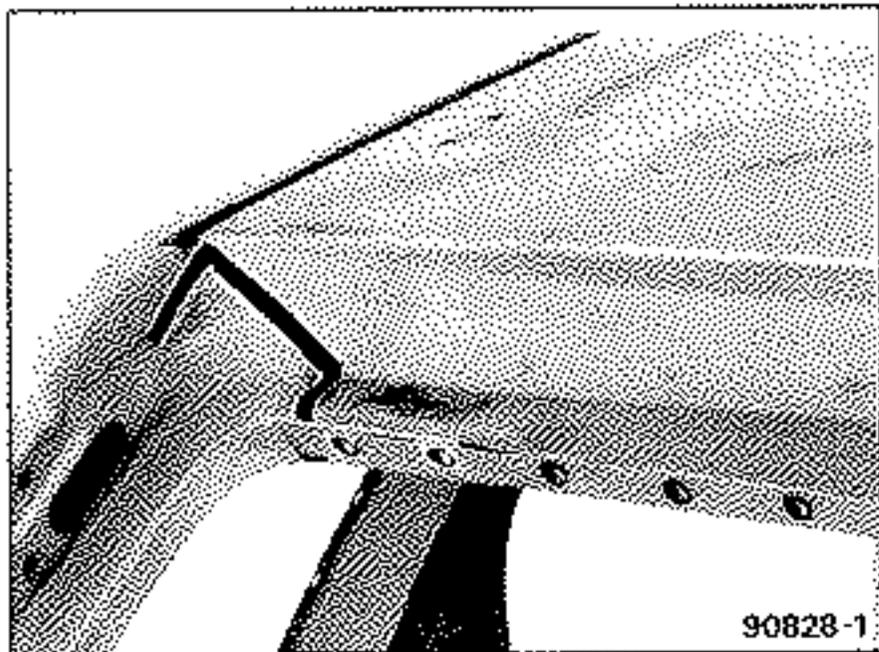
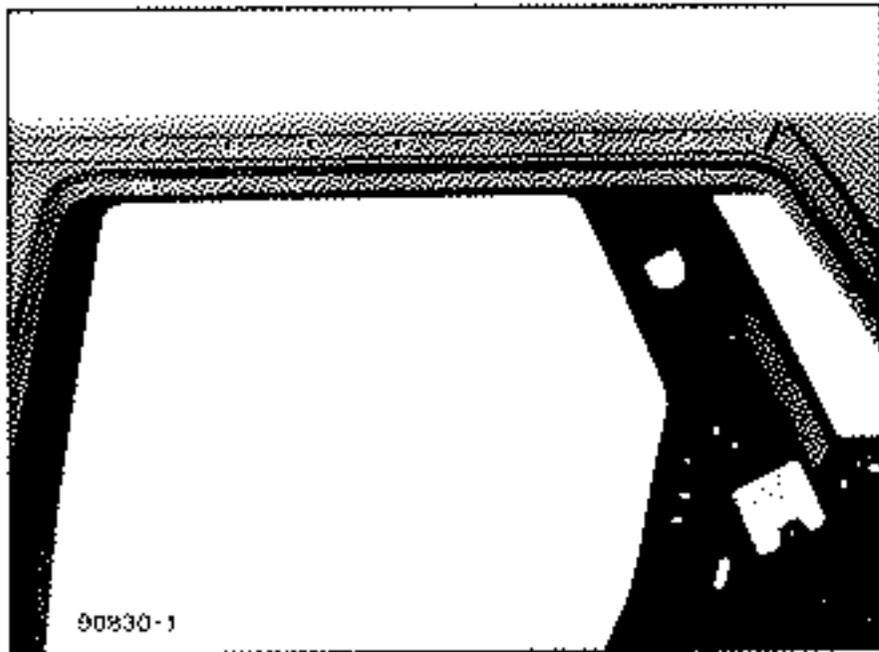
A - Front section



90154



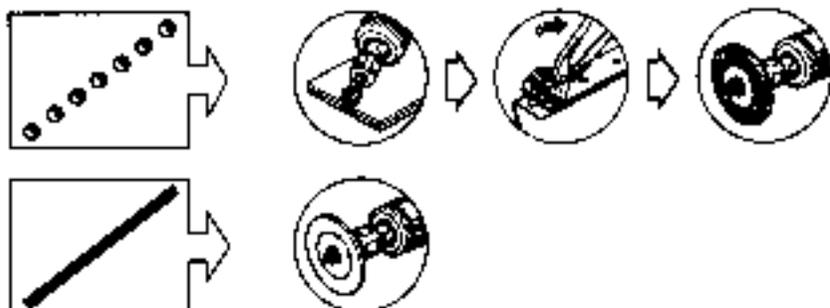
B - Rear section



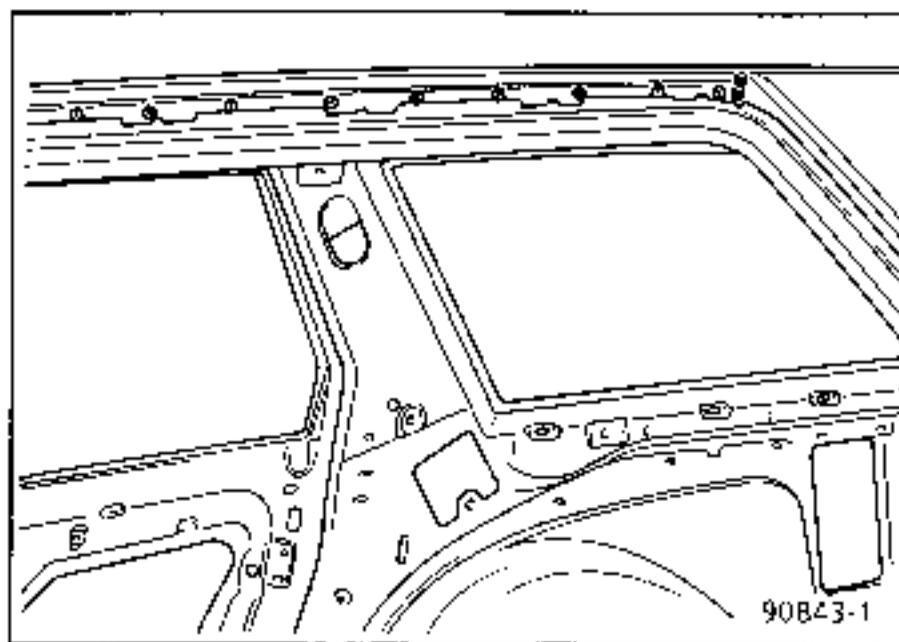
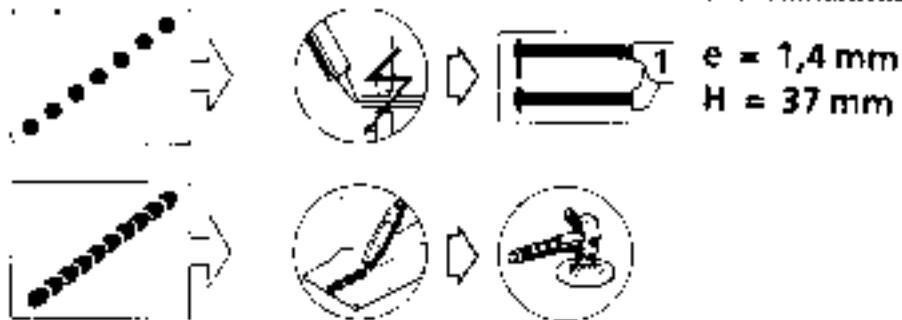
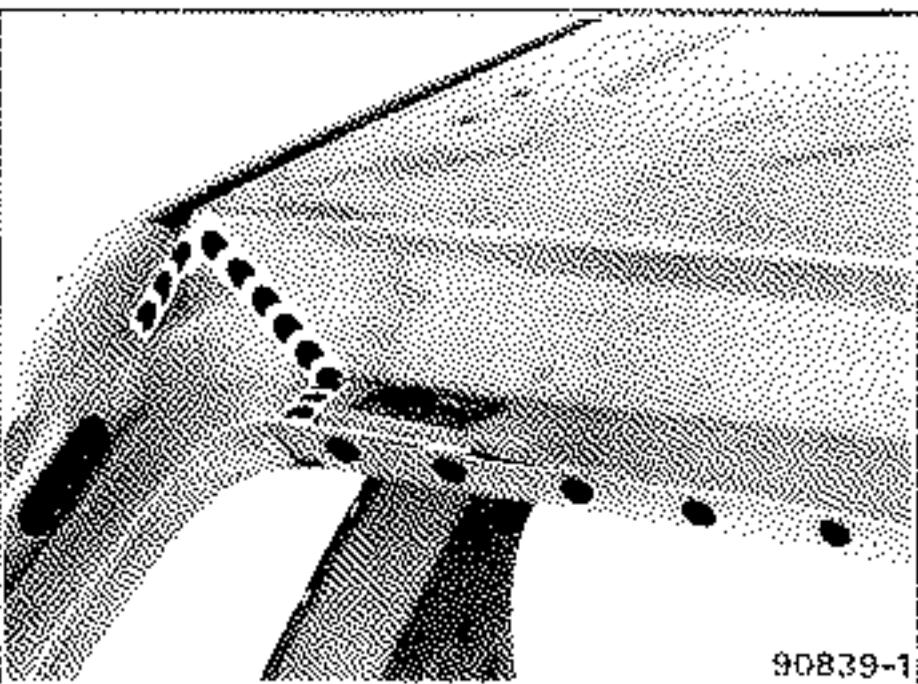
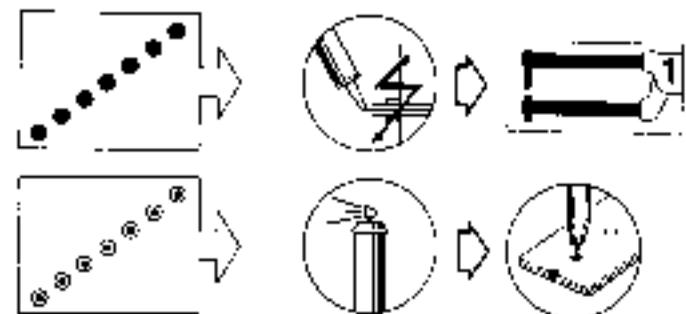
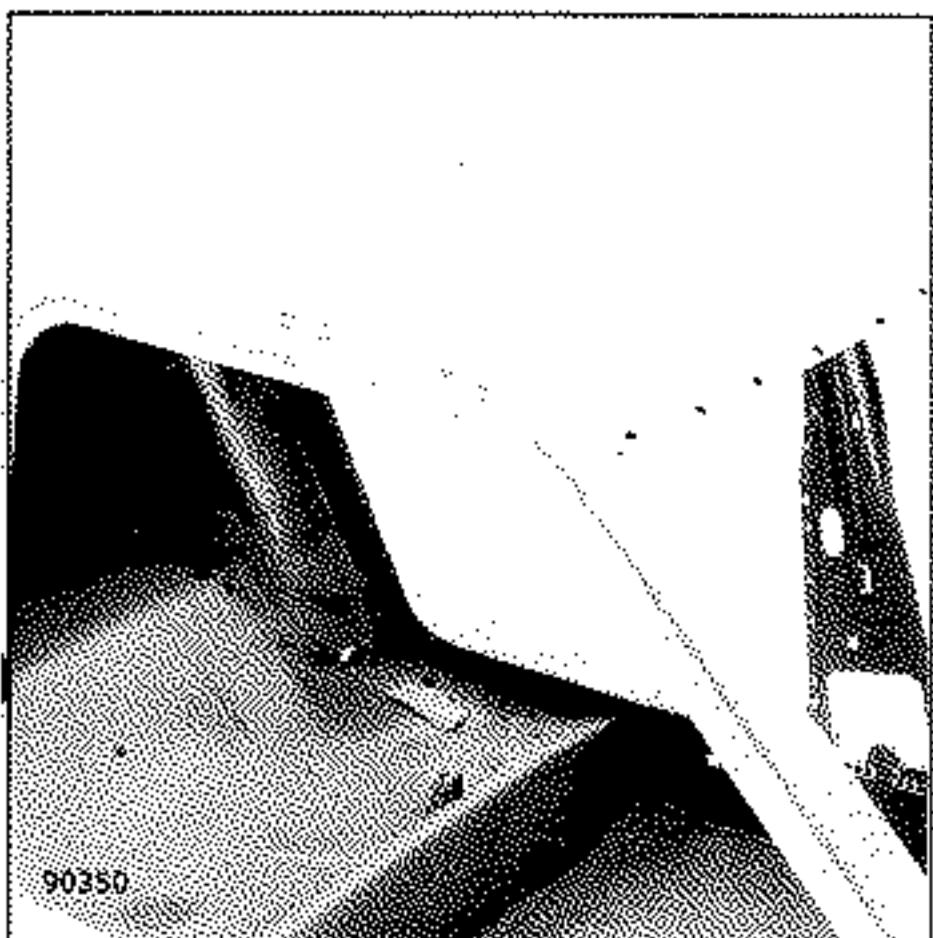
Remove the damaged part, following the instructions in the above diagrams.

Smooth down any parts of the unpicked spot welds remaining on the support panels.

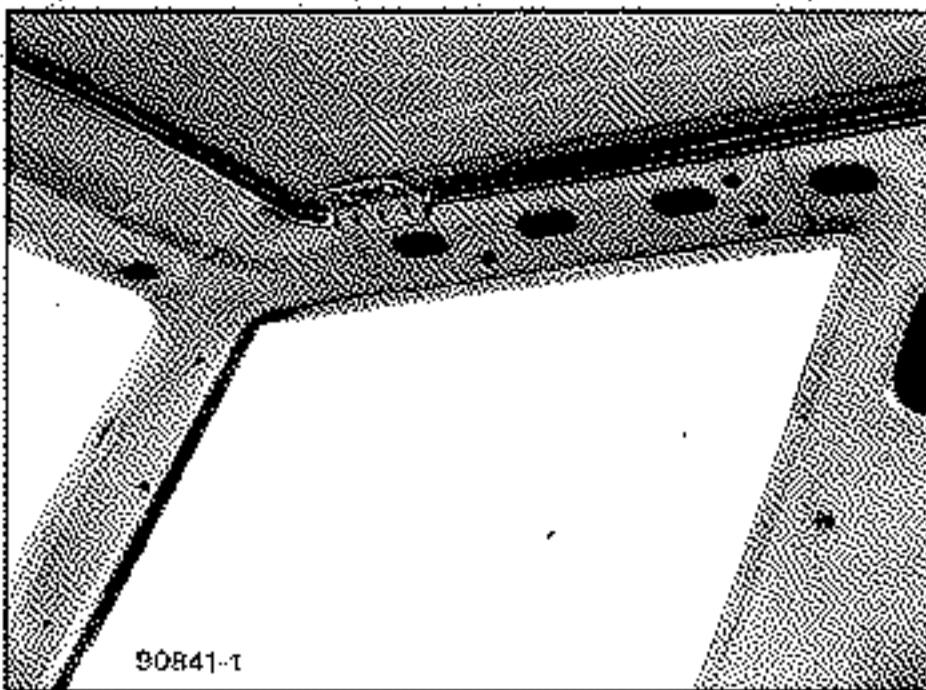
NOTE: On vehicles equipped with a roof-rack, points (A) located at the roof-rack mounting locations, will have to be unpicked.



WELDING

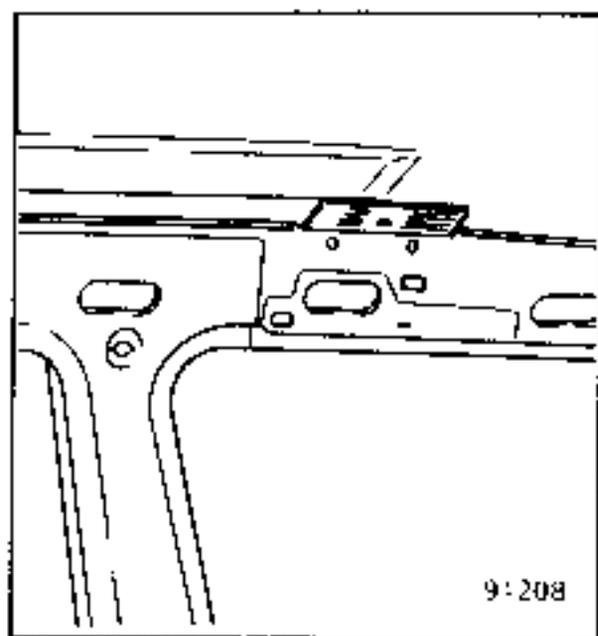


D = 4,5 mm

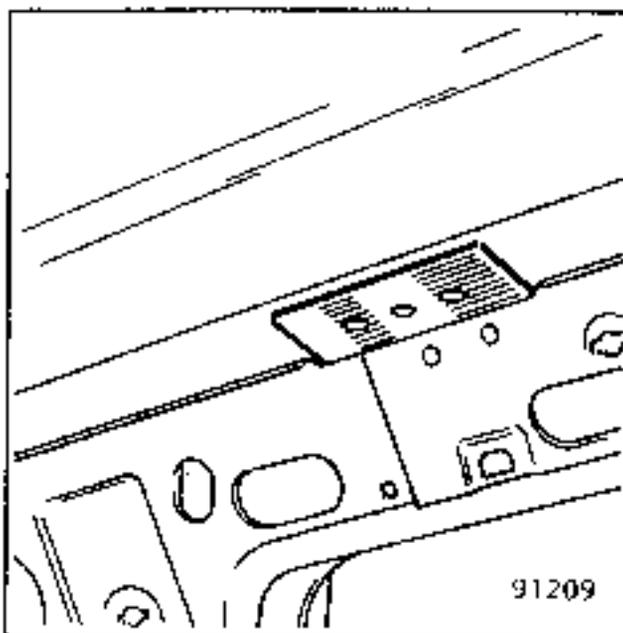


After welding, apply a bead of bonding mastic (MCT) to the following connections:
Roof - body side, roof - cross-members

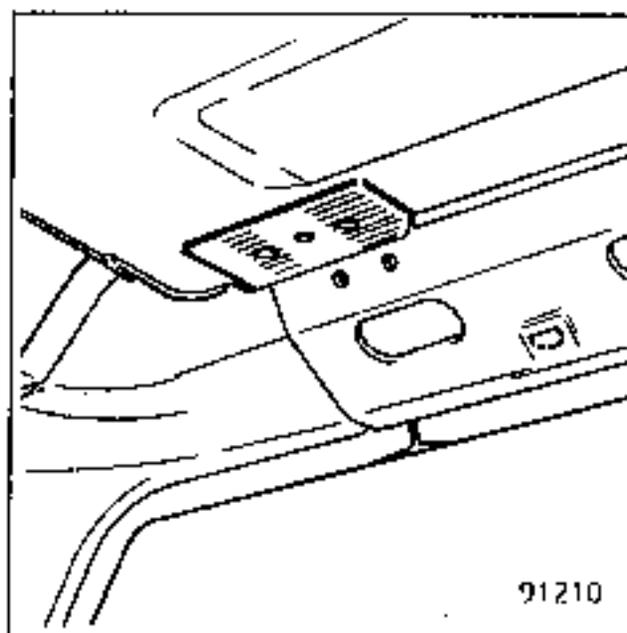
For vehicles equipped with a roof-rack:



91208



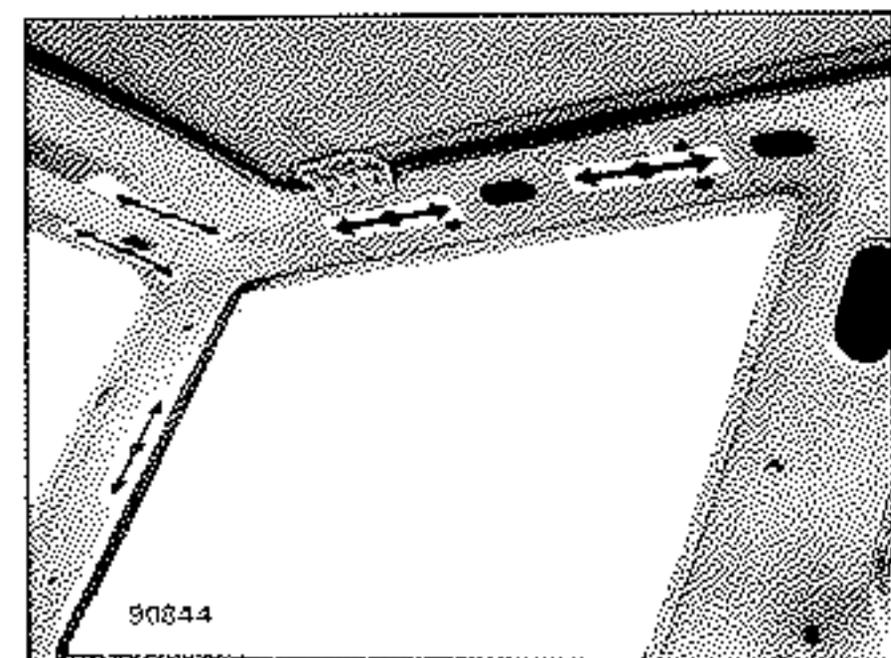
91209



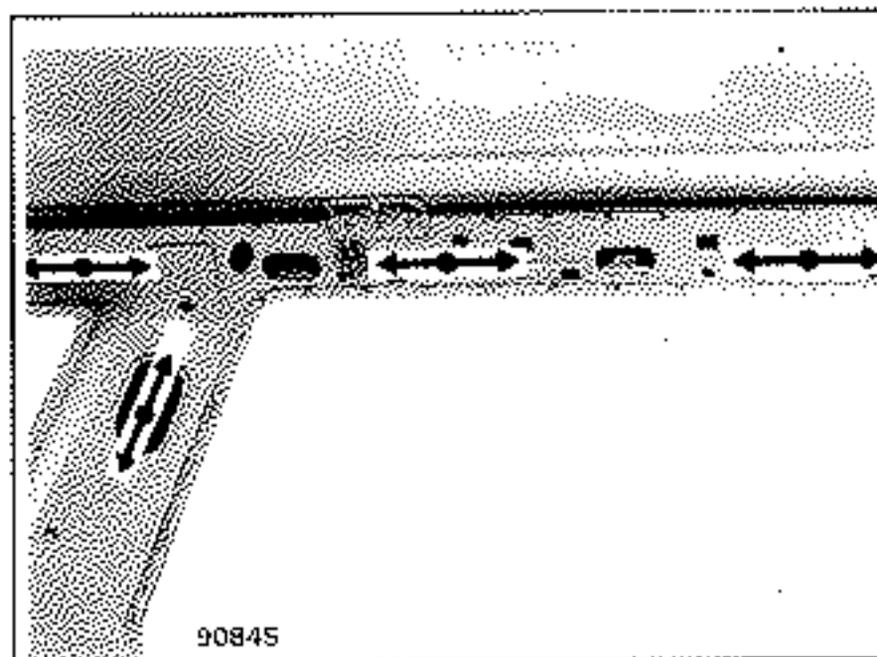
91210

Front mounting strengthener Central mounting strengthener Rear mounting strengthener

ANTI-CORROSION PROTECTION



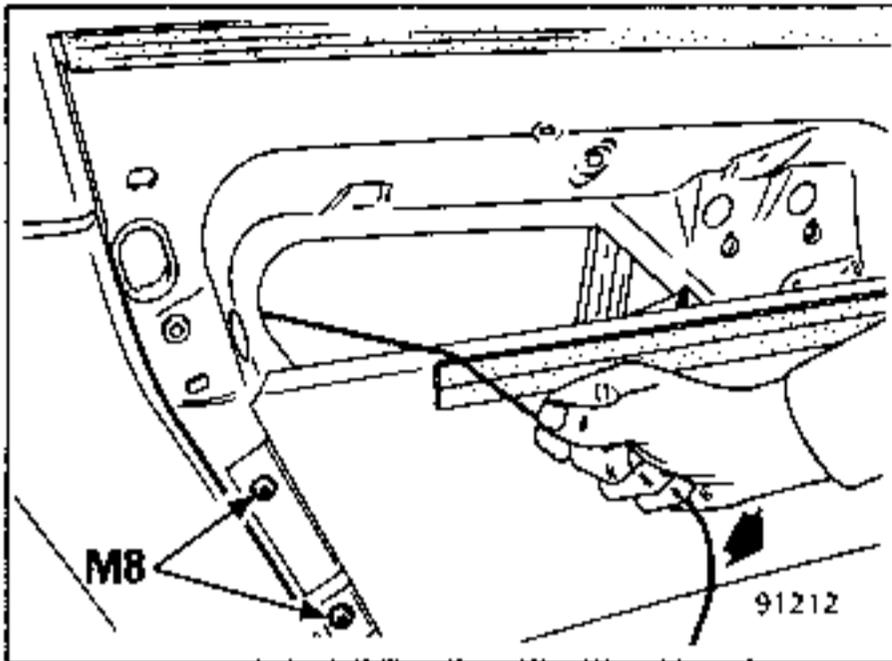
90844



90845



After painting and before re-fitting the trim, inject a product for protecting hollow sections.



BLANKING OFF THE DOOR FITTED IN PRODUCTION

The door is blanked off on the side bulkhead using a M8 Torx type screw, which is rendered useless by spot facing.

OPENING THE DOOR

These screws may be unscrewed by plug welding a nut to their head under a protective gas envelope.

Recover the string connected to the lock and pull downwards to open the door.