

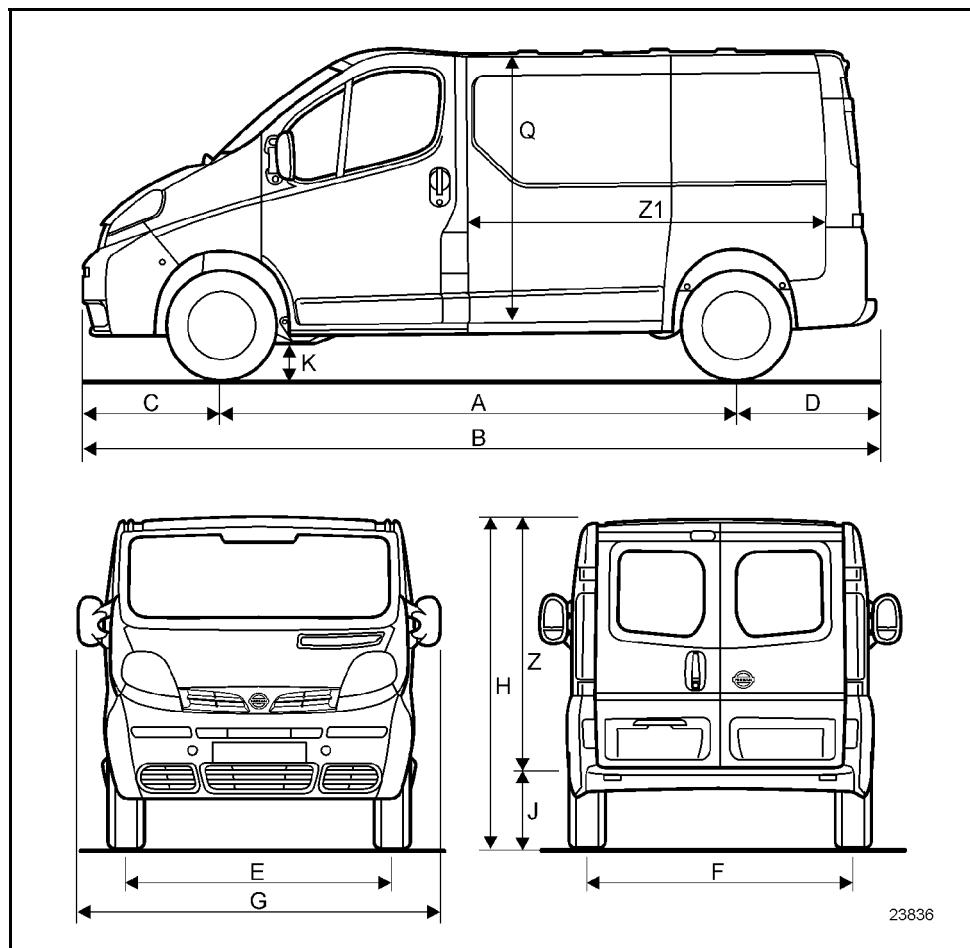
# SPECIFICATIONS

## Dimensions

01

C

Dimensions in metres.



(1) unladen  
(2) laden

| Version          | Van   |       | Combi |       |
|------------------|-------|-------|-------|-------|
|                  | Short | Long  | Short | Long  |
| A                | 3.098 | 3.498 | 3.098 | 3.498 |
| B                | 4.782 | 5.182 | 4.782 | 5.182 |
| C                | 0.833 |       | 0.833 |       |
| D                | 0.851 |       | 0.851 |       |
| E                | 1.615 |       | 1.615 |       |
| F                | 1.630 |       | 1.630 |       |
| G                | 2.232 |       | 2.232 |       |
| H <sup>(1)</sup> | 1.959 | 1.965 | 1.958 | 1.940 |
| J                | 0.543 | 0.549 | 0.542 | 0.521 |
| K <sup>(2)</sup> | 0.162 | 0.164 | 0.158 | 0.152 |
| Q                | 1.387 |       | 1.369 |       |
| Y                | 1.390 |       | 1.390 |       |
| Z                | 1.335 |       | 1.306 |       |
| Z1               | 2.380 |       | 2.780 | 0.790 |
|                  |       |       |       |       |
|                  |       |       |       |       |
|                  |       |       |       |       |

# SPECIFICATIONS

## Engine and equipment

01

C

| Vehicle type | Engine |                                   | Gearbox type |
|--------------|--------|-----------------------------------|--------------|
|              | Type   | Cubic capacity (cm <sup>2</sup> ) |              |
| XL0B         |        |                                   | PK5          |
| XL0C         | F9Q    | 1870                              | PK6          |

### VEHICLE IDENTIFICATION

Example: **FL0B**

**F** : Body type (Van)

**L** : Project code

**0B** : Engine suffix

| Vehicle   | Rim  | Tyres        | Tyre pressure when cold (in bar) (1) |      |
|-----------|------|--------------|--------------------------------------|------|
|           |      |              | Front                                | Rear |
| ALL TYPES | 6J16 | 195/65 R16 C | 3.2                                  | 3.6  |
|           |      | 205/65 R16 C | 3.6                                  | 4.1  |
|           |      | 215/65 R16 C | 3.0                                  | 3.4  |

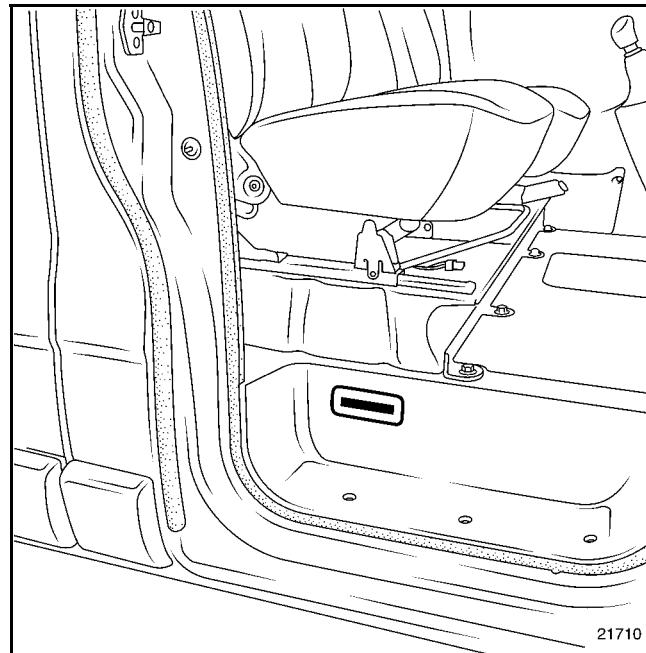
(1) With full load and on motorways.



Tightening torque of the wheel nuts: **14.2 daNm**

Rim run-out: **1.2 mm**

**COLD-MARKING OF THE BODY**

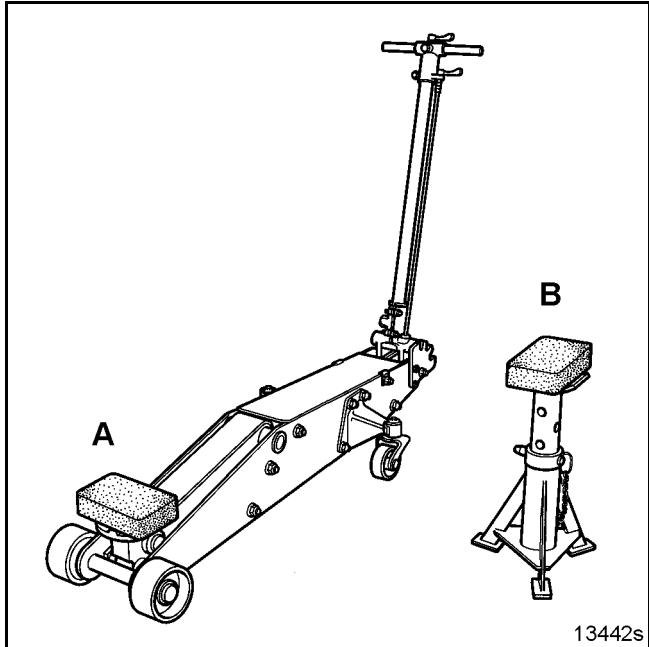


If the complete body is being replaced, it must be marked in compliance with the current regulations.

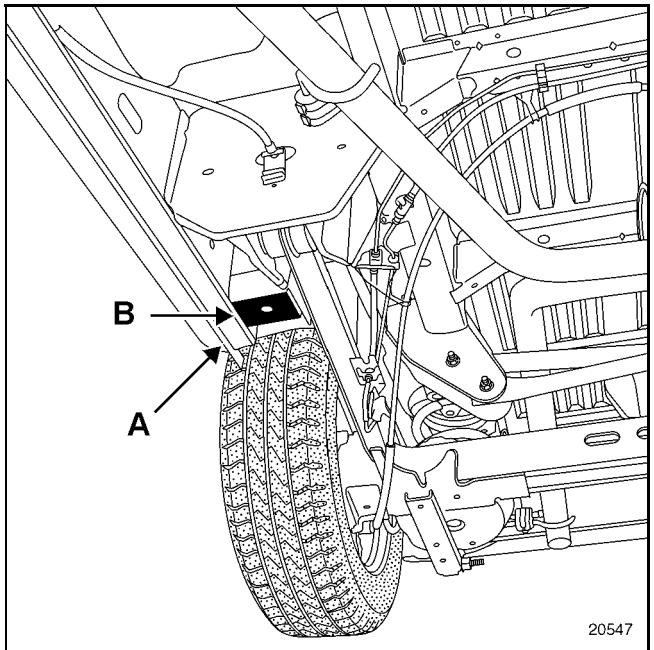
### TROLLEY JACK AND AXLE STAND LOCATIONS

**NOTE:**

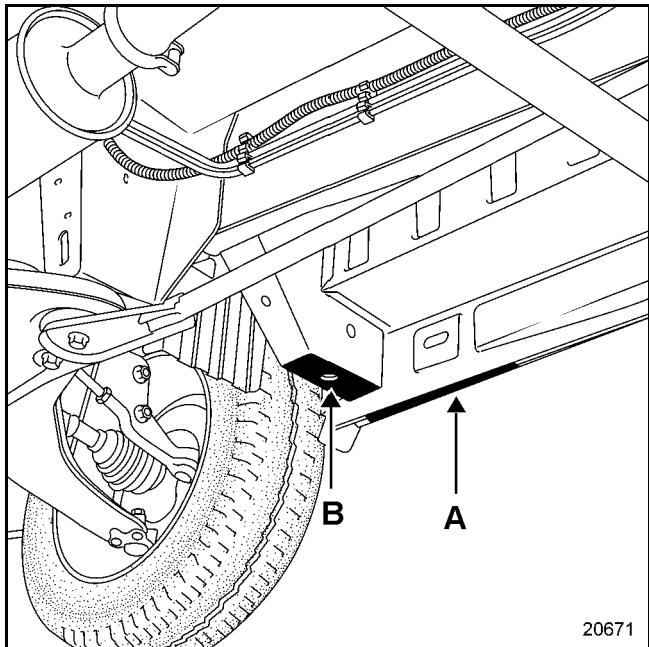
Only use the underbody flange for locating the axle stands.



### REAR



### FRONT



### UNDERBODY LIFT

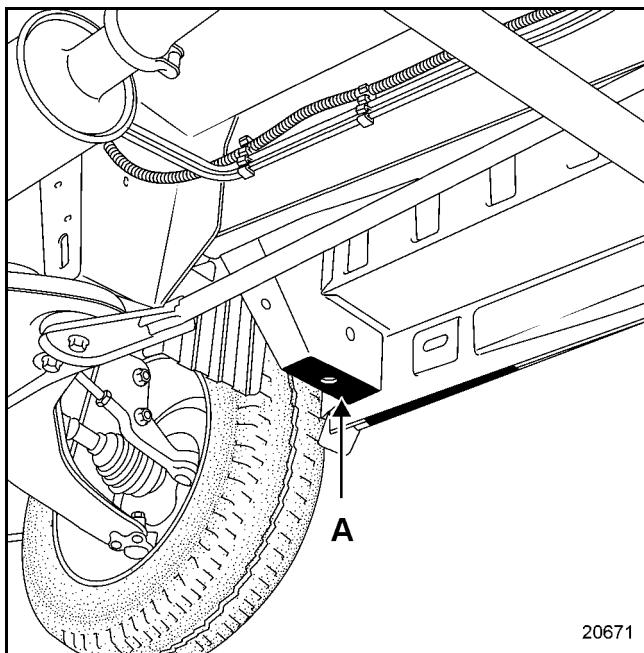
Various cases have to be considered:

#### 1 - REMOVING COMPONENTS

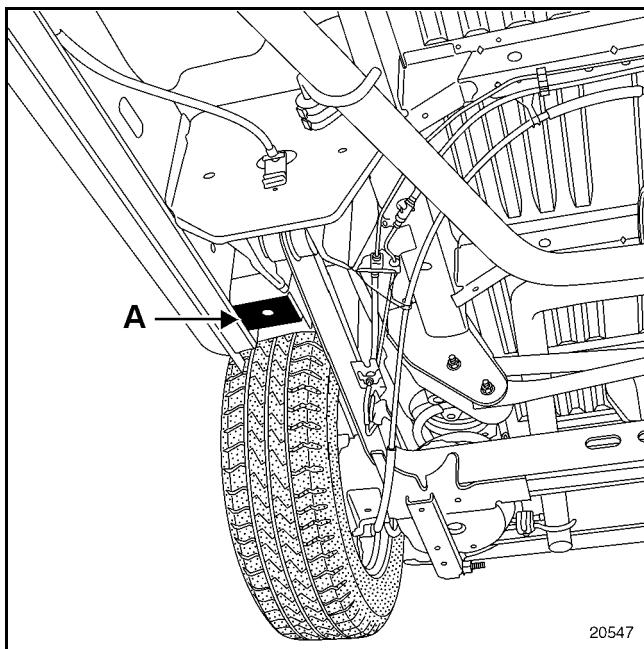
As a general rule, never use a two-post lift when a four-post lift can be used.

If this is not possible, place the lifting pads on the jack supports (A) as shown below:

**FRONT**



**REAR**



#### 2 - REMOVING AND REFITTING HEAVY COMPONENTS

##### **IMPORTANT:**

Always use a safety harness if using a two-post lift to remove heavy components.

For your safety, take care to ensure that the vehicle is balanced when placed on a two-post lift.

This is because removing heavy components (such as the engine and transmission assembly, rear axle or fuel tank, etc.), depending on:

- the vehicle load,
- its length,
- the position of the lifting pads,

may cause the vehicle to become unbalanced.

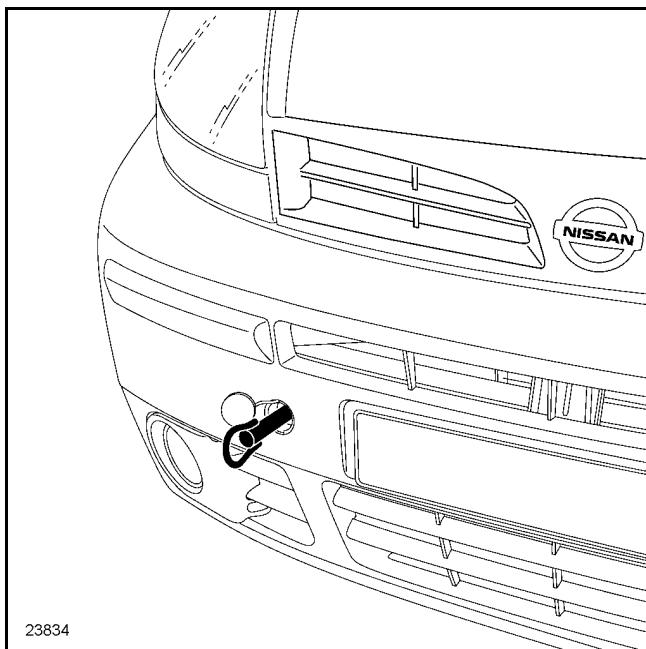
It is therefore essential to put a strap around or inside the bodywork and fix it to the arms of the lift between the pads.

**FOR TOWING, REFER TO THE LEGISLATION IN FORCE IN THE COUNTRY CONCERNED.**

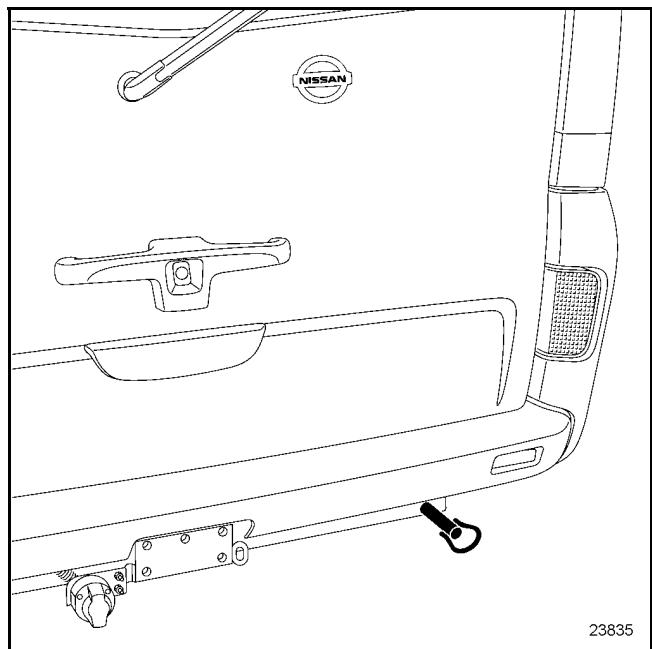
**NEVER USE THE DRIVESHAFTS AS AN ATTACHMENT POINT.**

The towing points may only be used for towing the vehicle on the road. They should never be used for removing the vehicle from a ditch or to lift the vehicle, either directly or indirectly.

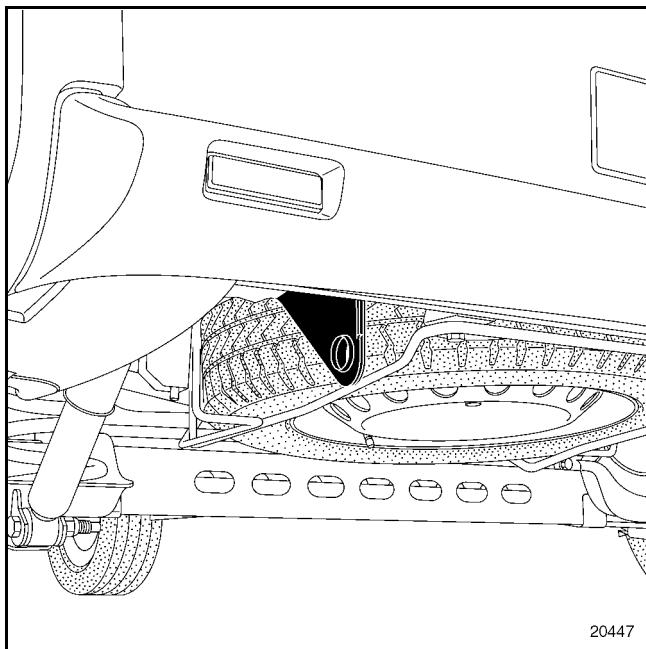
**FRONT**



**REAR (vehicle with towing equipment)**



**REAR (vehicle without towing equipment)**



# SPECIFICATIONS

## Sub-frame dimensions

01

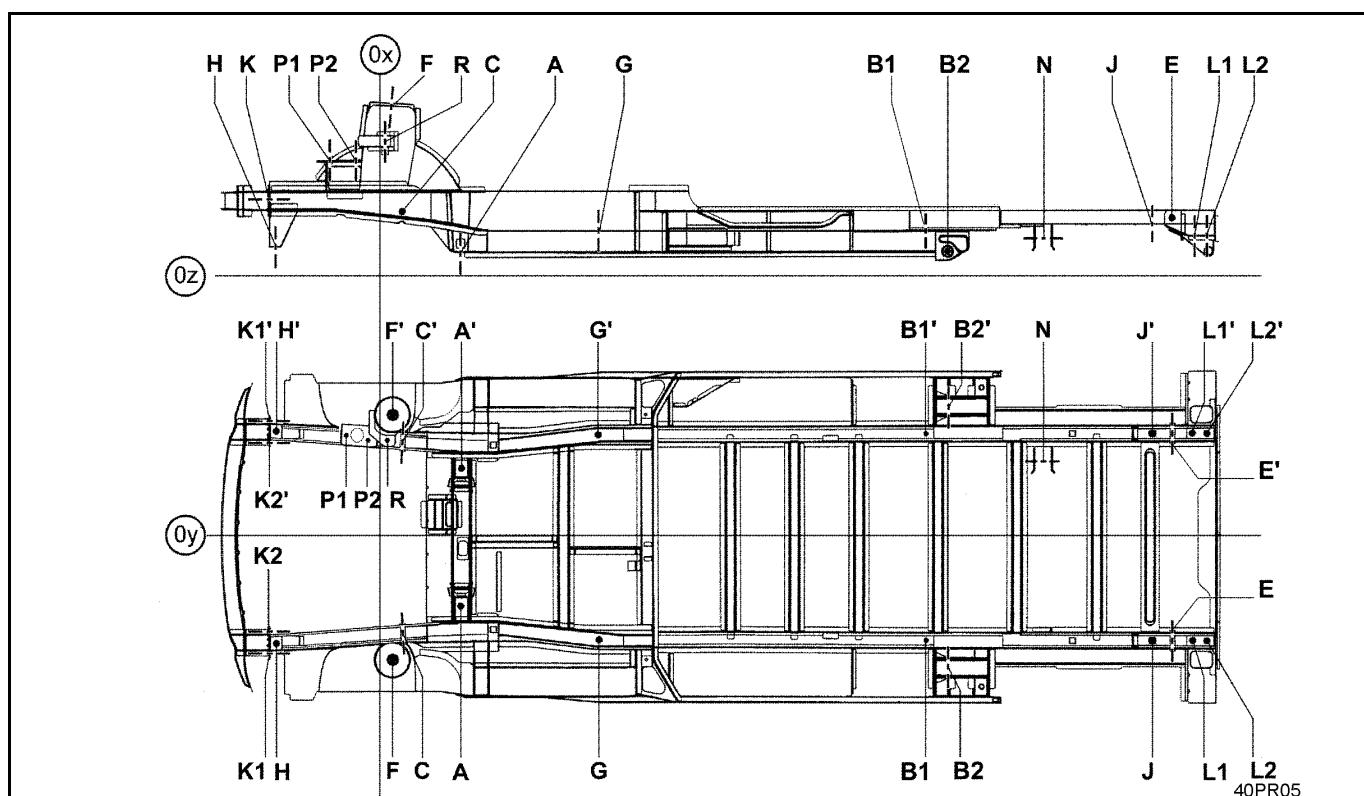
C

### SUB-FRAME DIMENSION

|           | DESCRIPTION   | DIMENSION X    | DIMENSION Y  | DIMENSION Z  | DIAMETER               | ANGLE%                      |
|-----------|---|----------------|--------------|--------------|------------------------|-----------------------------|
| <b>A</b>  | Front left-hand sub-frame rear mounting   | <b>390.2</b>   | <b>-337</b>  | <b>70</b>    | <b>Ø24.5; M12</b>      | <b>0</b>                    |
| <b>A'</b> | Front right-hand sub-frame rear mounting  | <b>390.2</b>   | <b>337</b>   | <b>70</b>    | <b>Ø24.5 x 30; M12</b> | <b>0</b>                    |
| <b>B1</b> | Rear axle leader pin  | <b>2321</b>    | <b>516</b>   | <b>176</b>   | <b>Ø20.5</b>           | <b>0</b>                    |
| B2        | Rear axle assembly front mounting   | <b>2441*</b>   | <b>654</b>   | <b>70</b>    | <b>Ø12.5</b>           | <b>0</b>                    |
| C         | Front sub-frame front mounting  | <b>91.6</b>    | <b>432.8</b> | <b>275</b>   | <b>Ø18.5</b>           | <b>4°</b>                   |
| E         | Rear shock absorber upper mounting  | <b>3575*</b>   | <b>465</b>   | <b>235</b>   | <b>Ø14.5</b>           | <b>90°</b>                  |
| F         | Front shock absorber upper mounting<br>(on the lowest section of the fallen edge) | <b>42.7</b>    | <b>614</b>   | <b>790.3</b> | <b>Ø42</b>             | <b>x = 3°30'<br/>y = 3°</b> |
| G         | Front side member rear leader pin   | <b>1240</b>    | <b>516</b>   | <b>174</b>   | <b>Ø14.5; M12</b>      | <b>0</b>                    |
| H         | Front side member front leader pin  | <b>543.4</b>   | <b>528.4</b> | <b>96.3</b>  | <b>Ø12.2; M10</b>      | <b>0</b>                    |
| J         | Rear side member rear leader pin  | <b>3466*</b>   | <b>516</b>   | <b>203</b>   | <b>30 x 30</b>         | <b>0</b>                    |
| K1        | Front end cross member (front panel)  | <b>570</b>     | <b>590.4</b> | <b>331.6</b> | <b>M8</b>              | <b>90°</b>                  |
| K2        | Front end cross member (front panel)  | <b>570</b>     | <b>466.4</b> | <b>331.6</b> | <b>M8</b>              | <b>90°</b>                  |
| L1        | Rear end cross member (end panel)   | <b>3685*</b>   | <b>516</b>   | <b>144</b>   | <b>Ø14.5; M10</b>      | <b>0</b>                    |
| L2        | Rear end cross member (end panel)   | <b>3740.5*</b> | <b>516</b>   | <b>144</b>   | <b>Ø14.5; M10</b>      | <b>0</b>                    |
| P1        | Engine mounting   | <b>301.4</b>   | <b>535</b>   | <b>534.6</b> | <b>Ø12.2; M10</b>      | <b>0</b>                    |
| P2        | Engine mounting   | <b>146.4</b>   | <b>513</b>   | <b>534.6</b> | <b>Ø12.2; M10</b>      | <b>0</b>                    |
| R         | Additional engine mounting (tie-rod)  | <b>22.9</b>    | <b>458.1</b> | <b>631.5</b> | <b>Ø12.2</b>           | <b>0</b>                    |
| N         | Additional rear axle mounting<br>(side tie-rod)                                   | <b>2933*</b>   | <b>455</b>   | <b>59</b>    | <b>Ø12.2</b>           | <b>90°</b>                  |

**A and B = vehicle trim-setting reference**

\* Add 400 mm for the L2 version



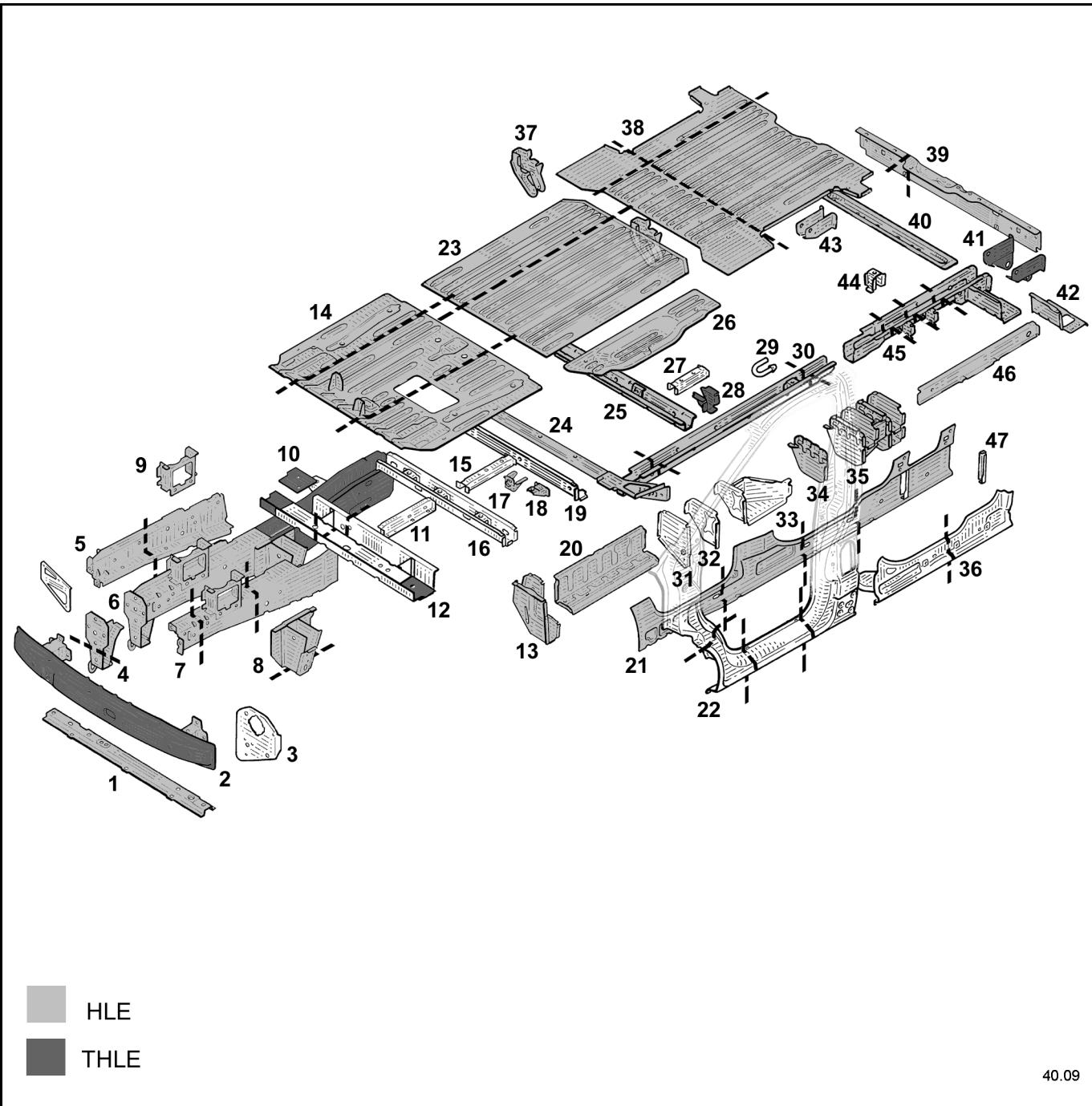
# SPECIFICATIONS

## Description of parts (exploded view)

01

C

### INTERNAL STRUCTURE



**NOTE:** all panels must be electrogalvanized before welding.

HTS: High Tensile Steel

VHTS: Very High Tensile Steel

# SPECIFICATIONS

## Description of parts (exploded view)

01

C

- 1 Radiator support cross member (41 B)
- 2 Front end lower cross member (41 A)
- 3 Front end side cross member (41 D)
- 4 Radiator cross member support (41 C)
- 5 Front side member closure panel (front section) (41 F)
- 6 Front side member (41 G)
- 7 Front section of front side member (41 E)
- 8 Front sub-frame rear mounting (41 I)
- 9 Engine mounting stiffener (41 H)
- 10 Front section of front side member rear reinforcement (41 J)
- 11 Cab floor stiffener (41 X)
- 12 Cab floor front cross member (41 W)
- 13 Front jack support (41 O)
- 14 Cab floor (41 V)
- 15 Front seat mounting reinforcement (41 Z)
- 16 Front cross member under front seat (41 Z)
- 17 Sleeve stop (41 AF)
- 18 Handbrake lever mounting stiffener (41 AE)
- 19 Rear floor front cross member lining (41 AD)
- 20 Front side step (41 P)
- 21 Inner sill panel (41 M)
- 22 Cab sill panel (41 K)
- 23 Rear floor, front section (41 AB)
- 24 Front cross member of rear floor, front section (41 AC)
- 25 Rear floor centre cross member (41 AK)
- 26 Rear side step (41 AA)
- 27 Rear seat mounting longitudinal reinforcement (41 AJ)
- 28 Rear floor centre cross member bracket (41 AL)
- 29 Exhaust mounting support (41 AH)
- 30 Front section of rear side member (41 AG)
- 31 Front side step rear closure panel (41 Q)
- 32 Inner sill panel reinforcement (41 R)
- 33 Runner housing (41 S)
- 34 Rear floor side cross member (41 T)
- 35 Rear axle mounting front housing (41 U)
- 36 Sill panel under rear side door (41 L)
- 37 Rear axle lateral tie-rod attachment (41 AI)
- 38 Rear floor, rear section (41 AS)
- 39 Rear end lower cross member (41 AU)
- 40 Rear floor rear cross member (41 AR)
- 41 Rear towing ring (41 AP)
- 42 Rear end lower cross member side closure panel (41 AT)
- 43 Rear shock absorber attachment (41 AQ)
- 44 Rear seat mounting bracket (41 AM)
- 45 Rear side member (41 AN)
- 46 Rear floor longitudinal reinforcement (41 AO)
- 47 Rear inner sill panel (41 N)

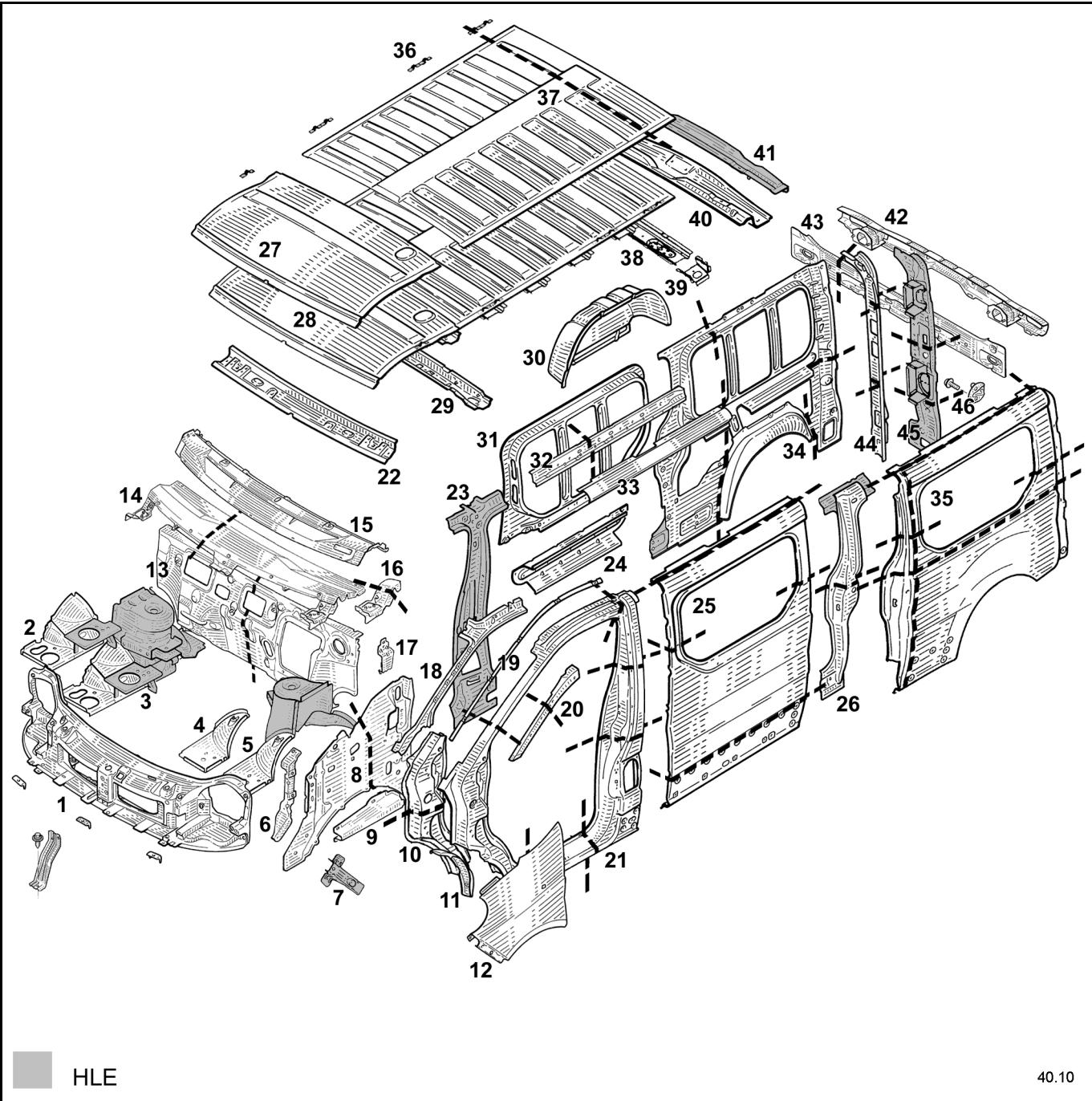
# SPECIFICATIONS

## Description of parts (exploded view)

01

C

### UPPER STRUCTURE



HLE

40.10

HTS: High Tensile Steel

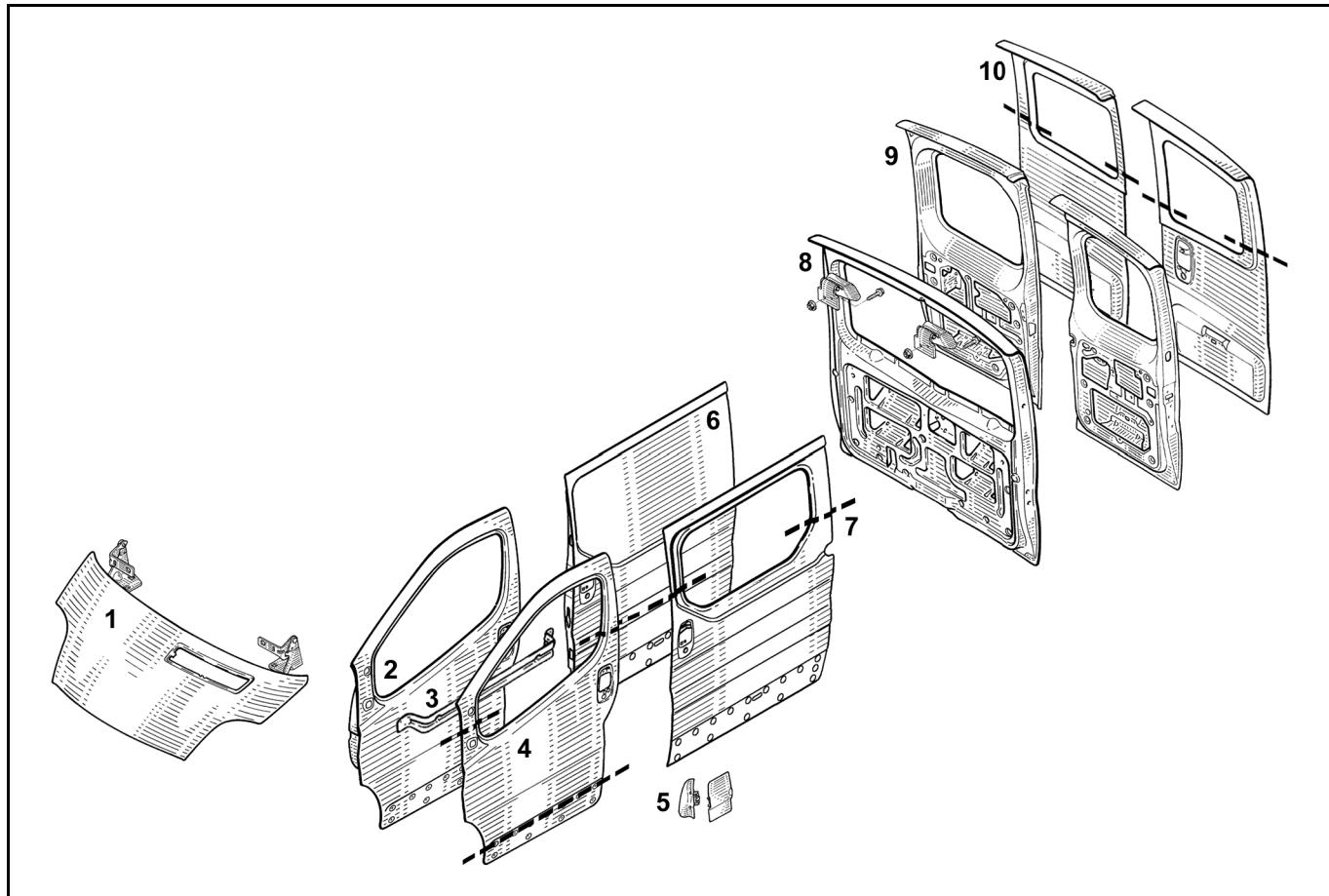
# SPECIFICATIONS

## Description of parts (exploded view)

01 C

- 1 Front (42 C)
- 2 Front section of front right wheel arch (42 I)
- 3 Front right wheel arch (42 J)
- 4 Front section of front left wheel arch (42 I)
- 5 Front left wheel arch (42 J)
- 6 Front side support (42 D)
- 7 Front wing lower mounting support (42 B)
- 8 Scuttle side panel (42 E)
- 9 Scuttle side panel upper reinforcement (42 F)
- 10 Cab A-pillar reinforcement (43 C)
- 11 Cab A-pillar closure panel (43 B)
- 12 Front wing (42 A)
- 13 Bulkhead (42 M)
- 14 Windscreen aperture lower cross member (42 K)
- 15 Windscreen aperture lower cross member reinforcement (42 L)
- 16 Bonnet hinge support (42 G)
- 17 Bonnet release control support (42 H)
- 18 Windscreen pillar lining (43 D)
- 19 Double seal lining (43 A)
- 20 Windscreen pillar lining reinforcement (43 E)
- 21 Cab side (43 I)
- 22 Cab roof front cross member (45 E)
- 23 Cab C-pillar lining (43 H)
- 24 Front section of side panel lower lining (44 C)
- 25 Front section of rear side panel lining (44 A)
- 26 Rear B-pillar (44 E)
- 27 Cab roof (45 A)
- 28 Roof (45 B)
- 29 Cab roof rear roof (45 F)
- 30 Rear wheel inner arch (45 F)
- 31 Front section of side panel upper lining (44 B)
- 32 Rear roof drip moulding lining (44 H)
- 33 Rear drip moulding (44 G)
- 34 Rear section of rear side panel lining (44 F)
- 35 Rear section of side panel (44 D)
- 36 Rack mounting bridge piece (45 D)
- 37 Rear section of rear roof (45 C)
- 38 Roof central cross member (45 G)
- 39 Rear side panel rain channel (45 H)
- 40 Roof rear cross member lining (45 J)
- 41 Rear roof rear cross member (45 I)
- 42 Rear bumper support cross member (44 N)
- 43 Rear end panel (44 M)
- 44 Rear section of rear side panel rain channel (44 K)
- 45 C-pillar (44 J)
- 46 Gas spring ball joint (44 L)

**OPENING ELEMENTS STRUCTURE**



- 1** Bonnet (48 A)
- 2** Front side door (47 A)
- 3** Front side door panel stiffener (47 C)
- 4** Front side door panel (48 A)
- 5** Fuel filler flap (47 D)
- 6** Sliding side door (47 E)
- 7** Sliding side door panel (47 F)
- 8** Tailgate (48 A)
- 9** Rear loading door (48 C)
- 10** Rear loading door panel (48 D)

Before carrying out repairs to the bodywork of a vehicle, even if the damage seems slight, it is necessary to carry out a series of tests:

### VISUAL INSPECTION

This inspection involves examining the sub-frame of the vehicle where mechanical components are mounted and in the crumple zones or vulnerable areas in order to detect creases where materials have been damaged.

### TRAMMEL GAUGE CHECK

The visual inspection may be completed using a trammel gauge which measures certain deformations by symmetrical comparisons (for more detail on each point to check, see the bodyjig bench paragraph below).

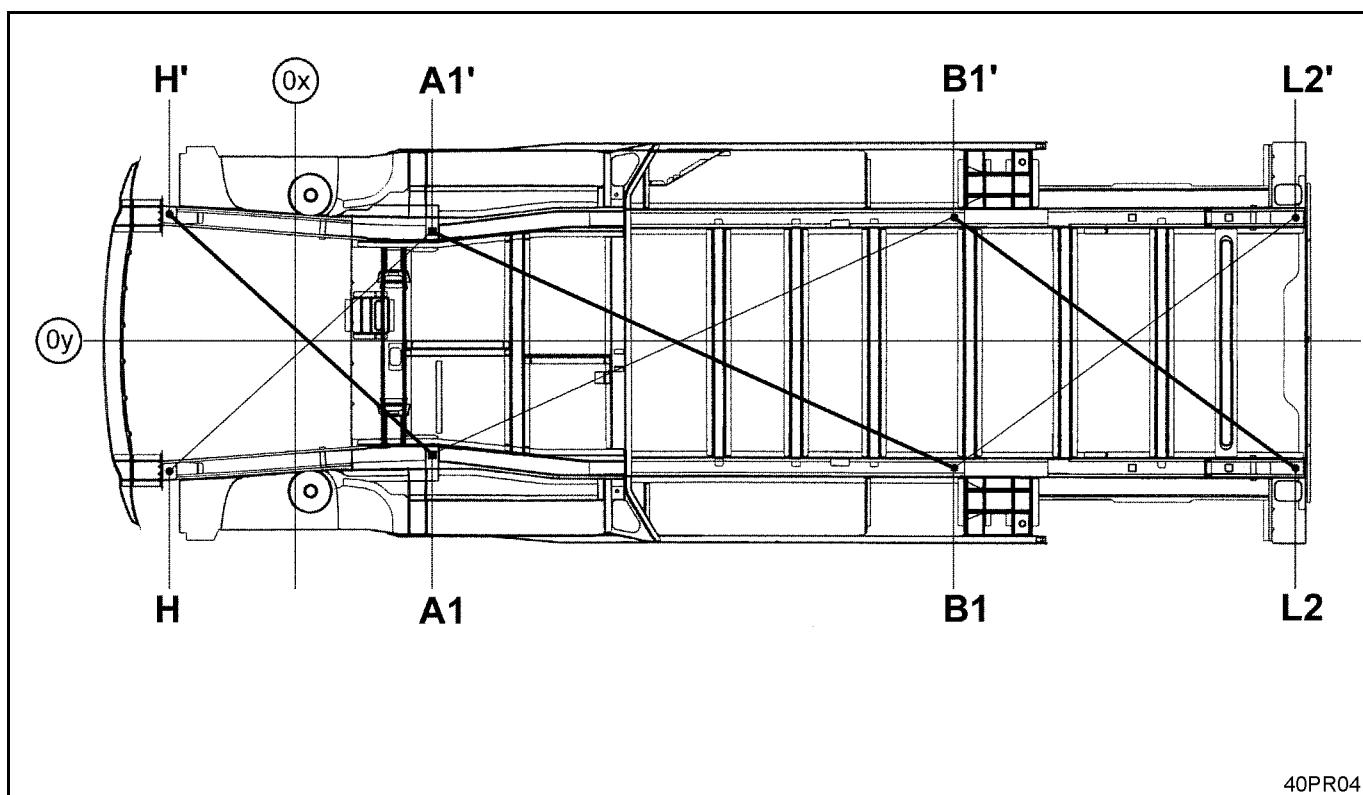
### CHECKING THE ANGLES OF THE RUNNING GEAR

This is the only check which determines whether the impact suffered by the vehicle has or has not affected its road holding.

#### IMPORTANT:

In borderline cases, it is essential not to neglect checking the axle assembly components which may also have been subject to deformation.

In principle, no welded component in the body shell may be replaced without ensuring that the sub-frame was not affected by the impact.



40PR04

#### Chronological order of checks:

##### *FRONT impact:*

1:  $B1 - A1' = B1' - A1$

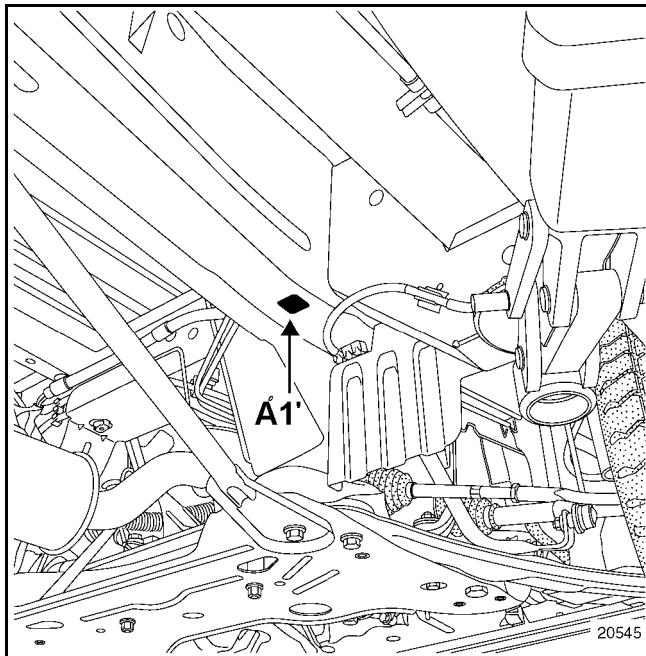
2:  $A1' - H = A1 - H'$

##### *REAR impact:*

1:  $A1' - B1 = A1 - B1'$

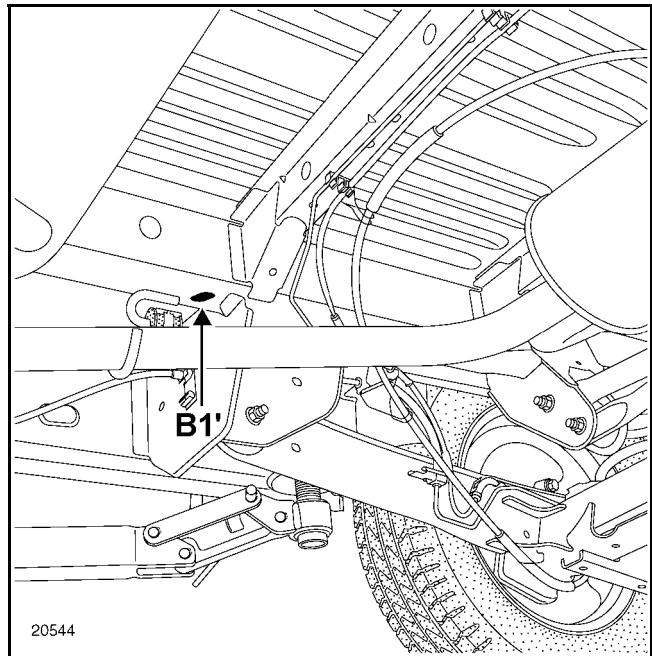
2:  $B1' - L2 = B1 - L2'$

**GAUGE POINTS**



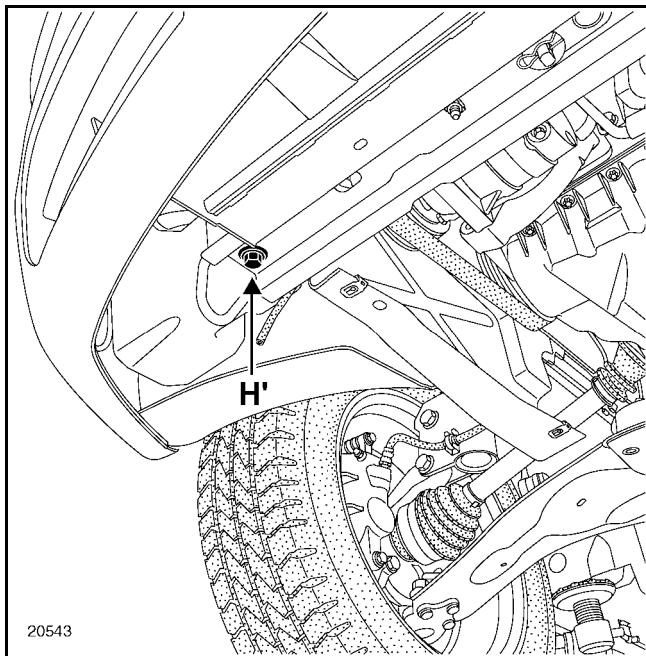
**Point A1'**

Front body reference point. Start reference point for checking points (H) and (H').



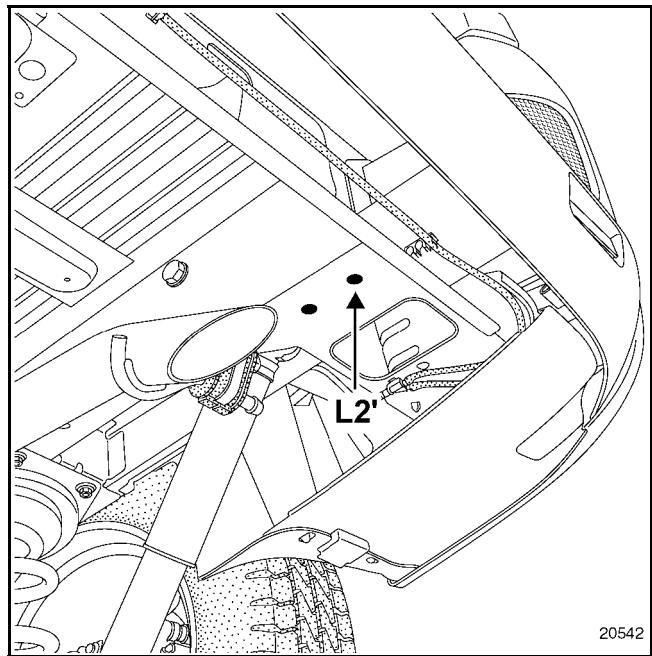
**Point B1'**

Rear axle assembly leader pin. Start reference point for checking points (L2) and (L2').



**Point H'**

Front end of front side member.



**Point L2'**

Rear end of rear side member.

**REMINDER:**

The gauge holes are fitted with blanking covers to ensure that all hollow sections are watertight.

After gauging, it will be necessary to fit them again or replace them if they are damaged to ensure protection of the sub-frame from corrosion.

# COLLISION

## Part combinations for impacts

03

B

### Replacement part combinations depending on impacts

*Without panelwork operations*

|              | Basic operations        | Additional operations<br>first degree | Additional operations<br>(second degree) |
|--------------|-------------------------|---------------------------------------|--|
| front impact |                         |                                       |  |
|              | stone shield            | bonnet<br>front                       | front                                    |
|              | bonnet                  | front                                 |  |
|              | wing                    | bonnet                                | front                                    |
| side impact  |                         |                                       |  |
|              | front door              | front wing                            | sliding side door                        |
|              | front door              | sliding side door                     |  |
| rear impact  |                         |                                       |  |
|              | stone shield            | tailgate or hinged door               |  |
|              | tailgate or hinged door |                                       |  |

*With panelwork operations*

|              | Basic operations   | Additional operations<br>first degree   | Additional operations<br>(second degree)   |
|--------------|--|---|--|
| front impact |  |   |  |
|              | <ul style="list-style-type: none"> <li>– Radiator cross member mounting</li> <li>– Front end side cross member</li> <li>– Front side member assembly</li> <li>– Scuttle side panel upper reinforcement</li> </ul>                            | <ul style="list-style-type: none"> <li>– Partial scuttle side panel, front section</li> <li>– Wheel arch, front section</li> <li>– Front side member, partial front section</li> <li>– Front side member closure panel</li> <li>– Engine support</li> <li>– Bonnet caliper mounting</li> <li>– Front sub-frame rear mounting</li> </ul> | <ul style="list-style-type: none"> <li>– Front side member, complete front section</li> <li>– Wheel arch, complete</li> <li>– Bulkhead</li> </ul>  |
| side impact  |  |   |  |
|              | <ul style="list-style-type: none"> <li>– Front door panel</li> <li>– A-pillar with reinforcement</li> <li>– Cab C-pillar with reinforcement</li> <li>– Cab side with reinforcements</li> <li>– Cab sill panel</li> <li>– Cab roof</li> </ul> | <ul style="list-style-type: none"> <li>– Windscreen pillar reinforcement</li> <li>– A-pillar reinforcement</li> <li>– Scuttle side panel upper reinforcement</li> <li>– Double seal support</li> <li>– Roof front cross members</li> <li>– Roof front cross members</li> </ul>  | <ul style="list-style-type: none"> <li>– A-pillar lining</li> <li>– Cab C-pillar lining</li> <li>– Sill panel lining</li> <li>– Windscreen aperture pillar lining</li> <li>– Rear screen aperture lower cross member</li> <li>– Bulkhead</li> <li>– Cab floor</li> <li>– Foot panel</li> <li>– Front side member assembly</li> </ul> |

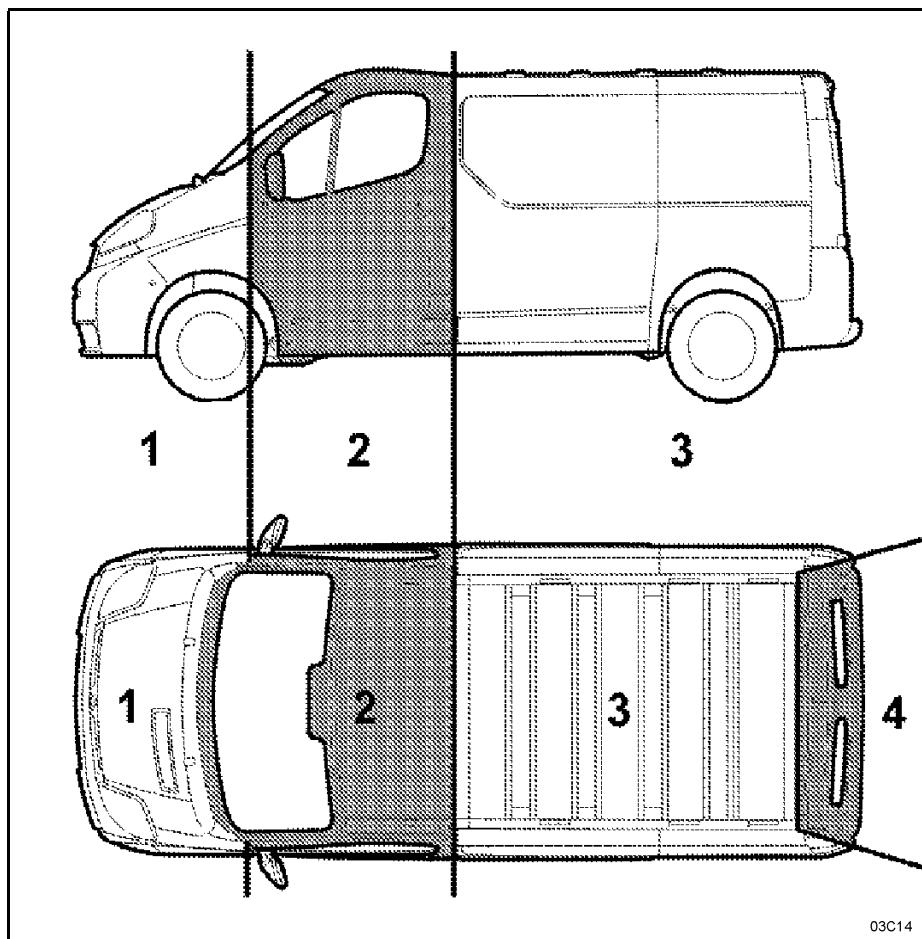
# COLLISION

## Part combinations for impacts

03

B

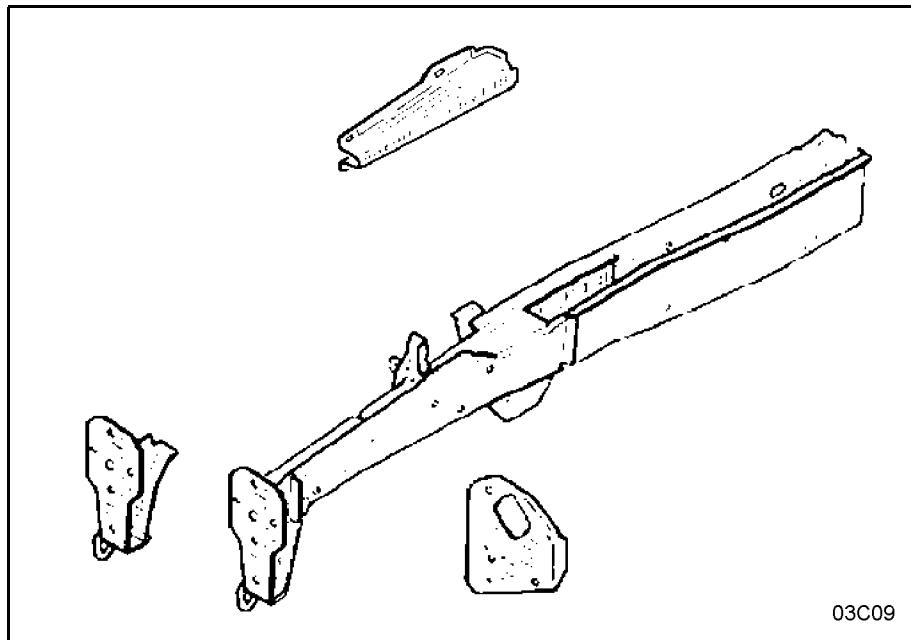
| rear impact |   |   |  |
|-------------|---|---|--|
| rear side   | <ul style="list-style-type: none"><li>– Side door panel</li><li>– Front side panel</li><li>– Rear side panel</li><li>– Load area roof</li></ul> | <ul style="list-style-type: none"><li>– B-pillar reinforcement.</li><li>– Outer rear wheel arch</li><li>– Rear panel</li><li>– Lining extension</li><li>– Upper rail</li></ul>  | <ul style="list-style-type: none"><li>– Inner wheel arch</li><li>– Panel lining</li><li>– Complete side member</li><li>– Rear floor unit</li><li>– Load floor</li><li>– Rear axle assembly mounting unit</li><li>– Side door runner housing</li><li>– Rear side cross member</li></ul> |
| rear        | <ul style="list-style-type: none"><li>– Rear skirt</li><li>– Rear door panel</li><li>– Rear roof</li></ul>                                      | <ul style="list-style-type: none"><li>– Partial rear floor</li><li>– Rear end cross member</li><li>– Rear shock absorber mounting unit</li><li>– Wing panel</li><li>– Partial lights support</li><li>– Partial rain channel</li><li>– Partial rear panel lining</li><li>– Partial centre roof</li></ul> | <ul style="list-style-type: none"><li>– Rear side member, rear section</li><li>– Rear floor cross member</li><li>– Rear side member, rear section</li></ul>  |



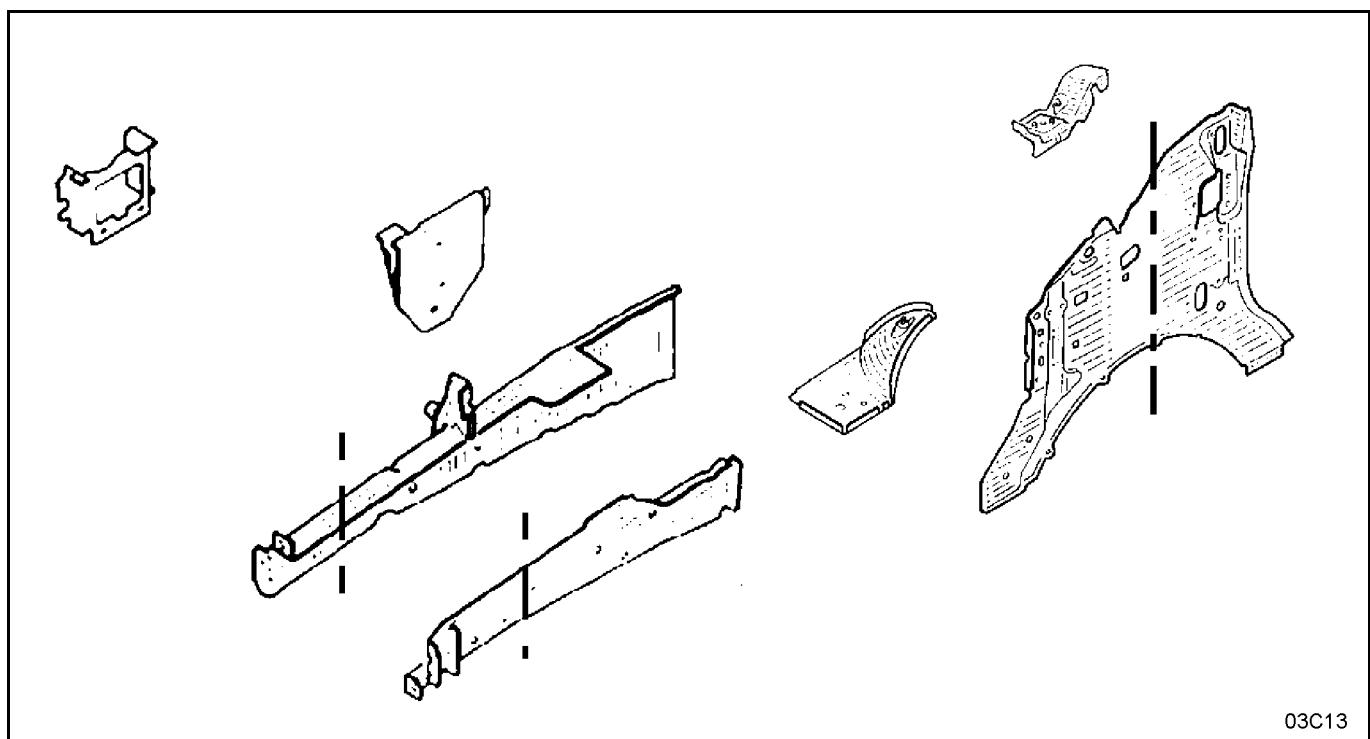
- 1 FRONT
- 2 CENTRE
- 3 REAR SIDE
- 4 REAR

**REAR IMPACT**

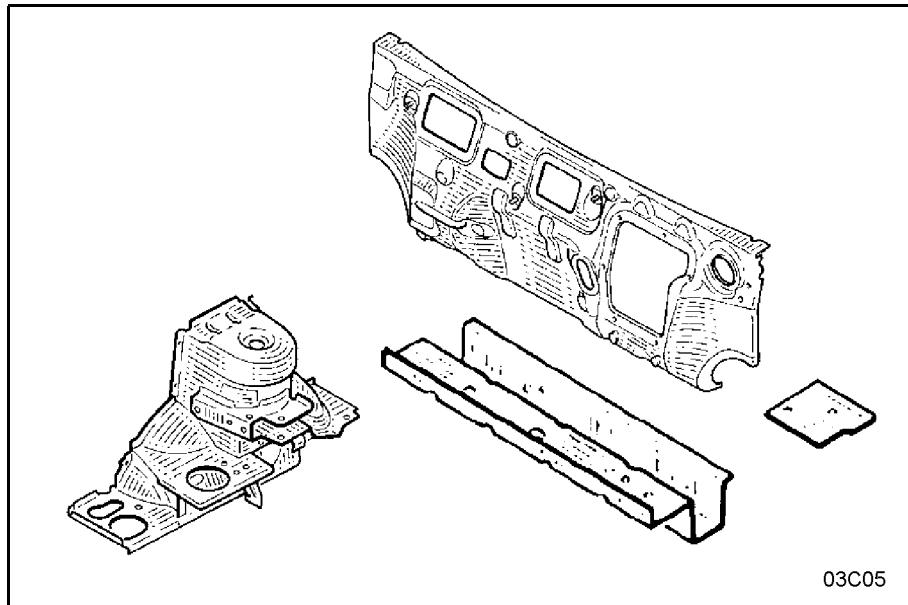
**BASIC OPERATION**



**ADDITIONAL OPERATIONS (FIRST DEGREE)**

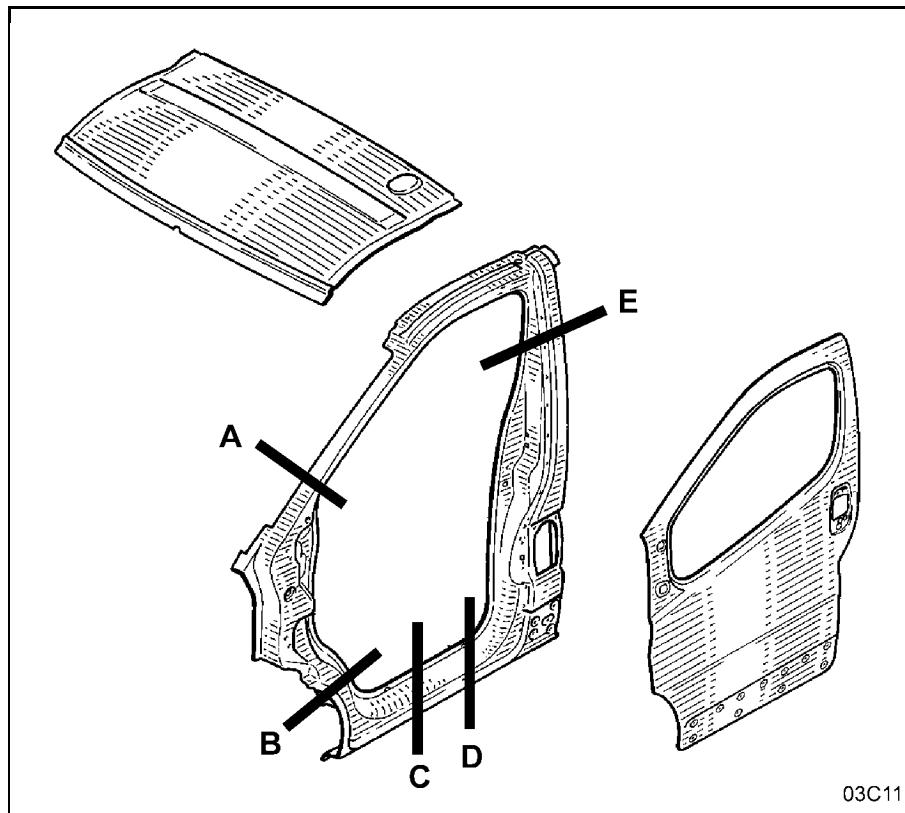


**ADDITIONAL OPERATIONS (SECOND DEGREE)**

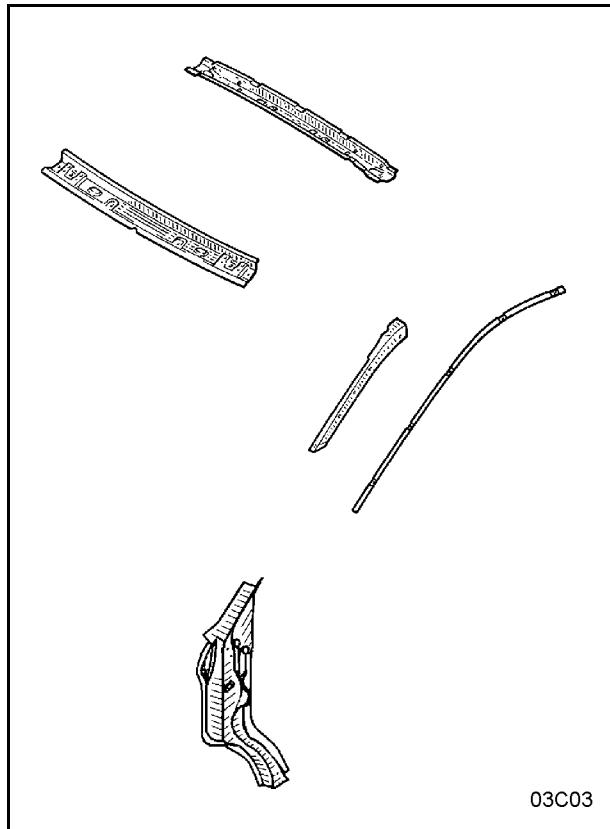


**SIDE IMPACT**

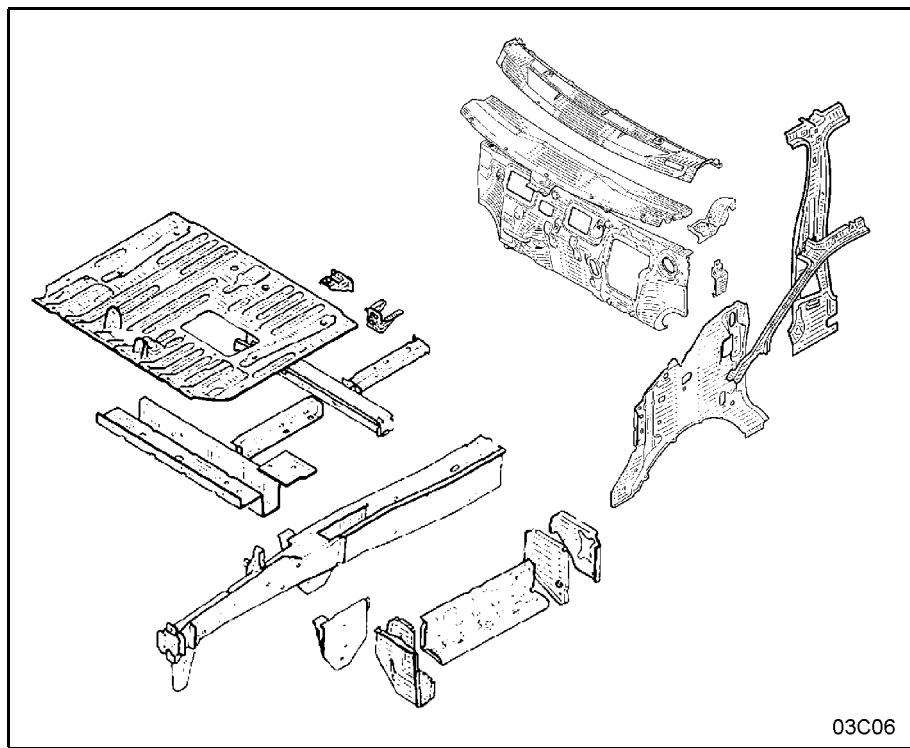
**BASIC OPERATION - SIDE IMPACT**



**ADDITIONAL OPERATIONS (FIRST DEGREE)**

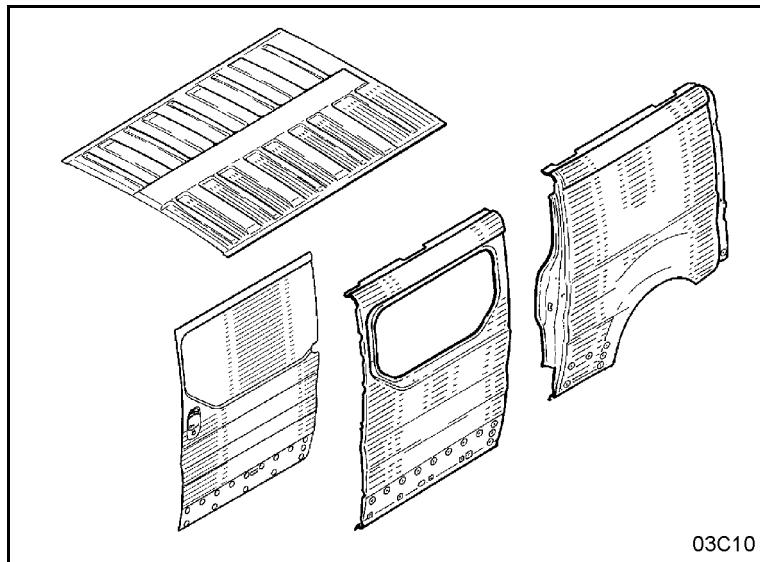


**ADDITIONAL OPERATIONS (SECOND DEGREE)**

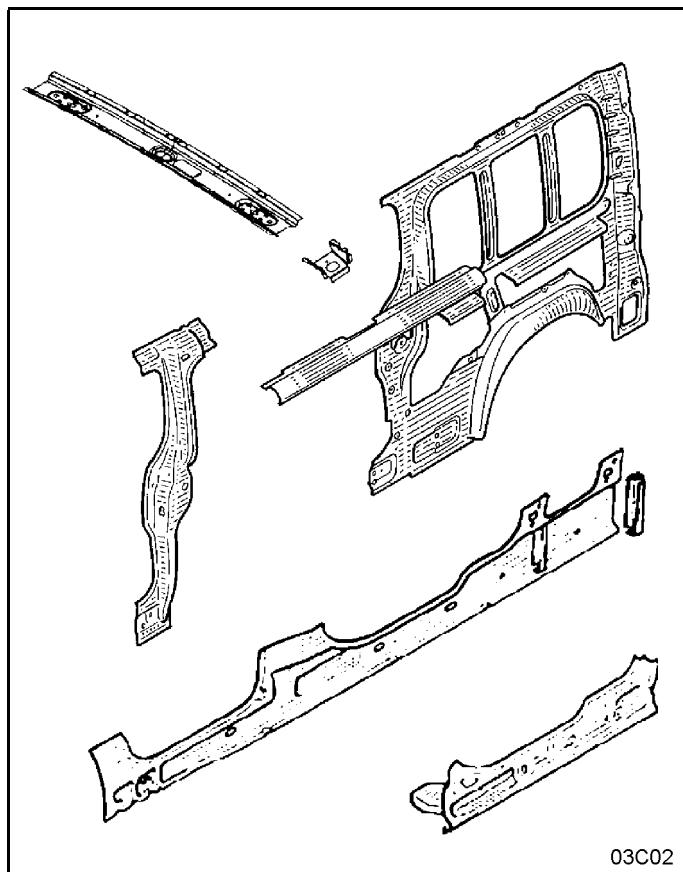


**REAR SIDE IMPACT**

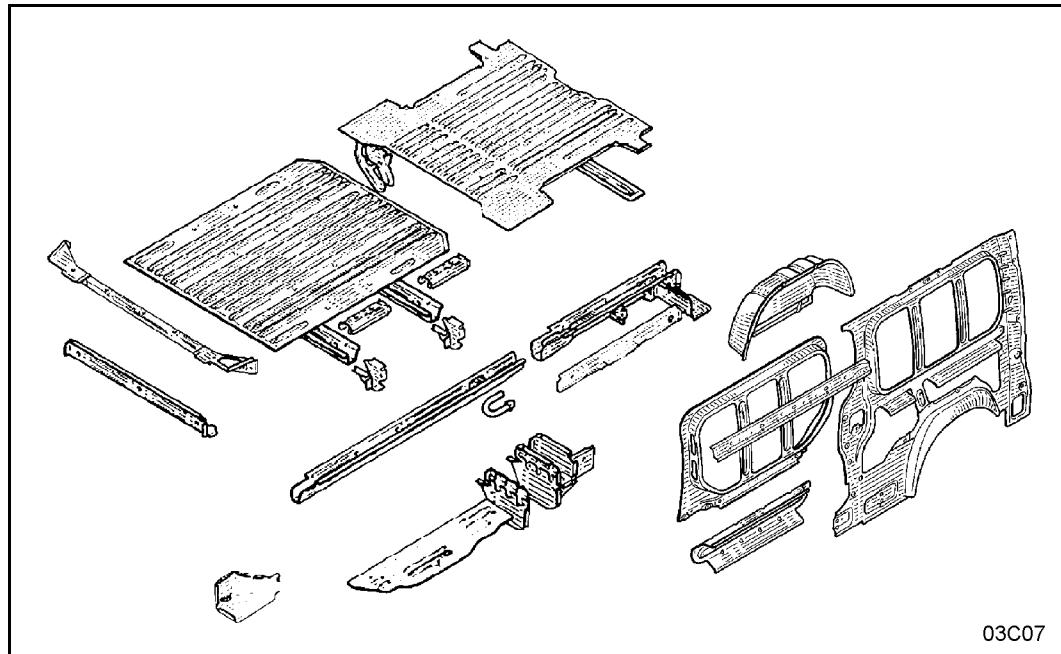
**BASIC OPERATION**



**ADDITIONAL OPERATIONS (FIRST DEGREE) - REAR SIDE IMPACT**

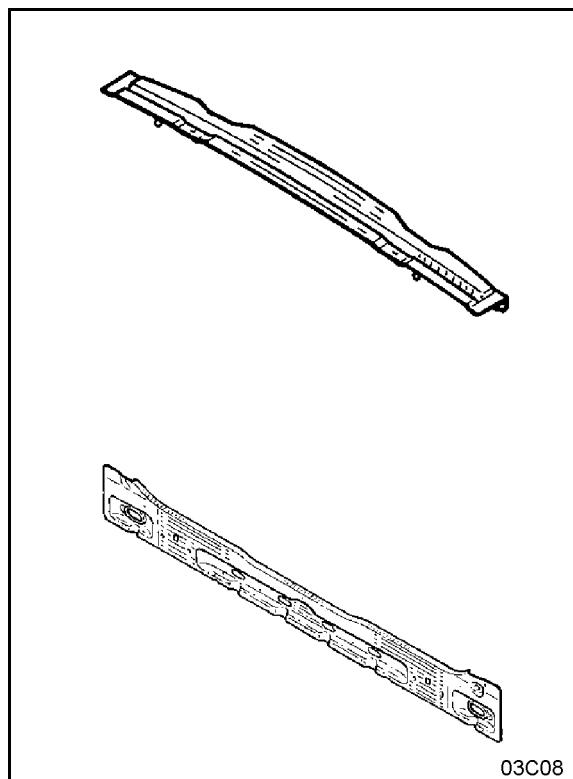


**ADDITIONAL OPERATIONS (SECOND DEGREE)**

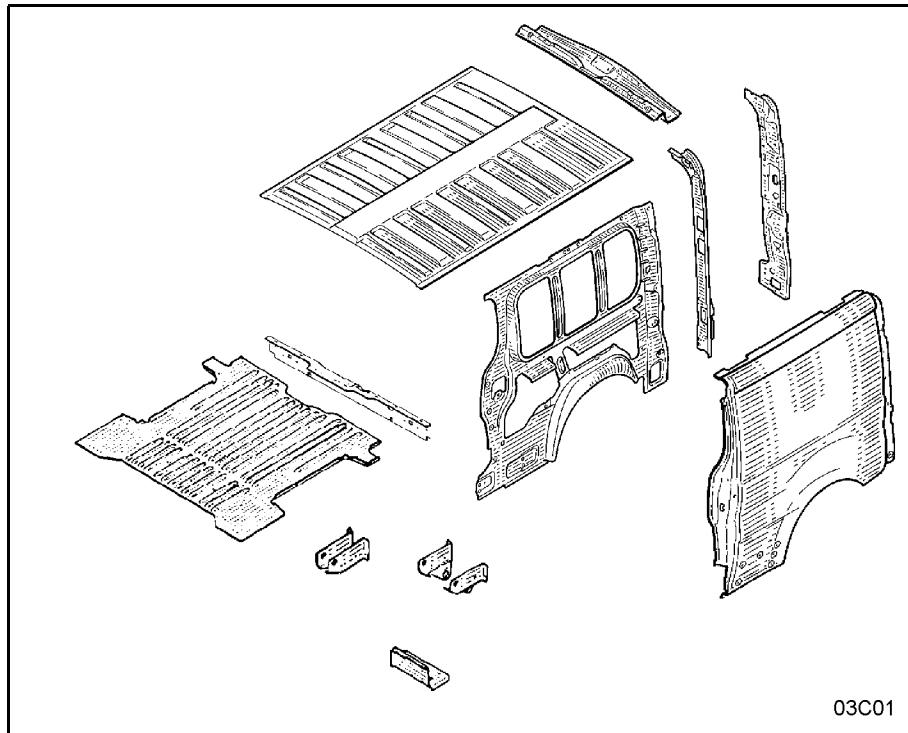


**REAR IMPACT**

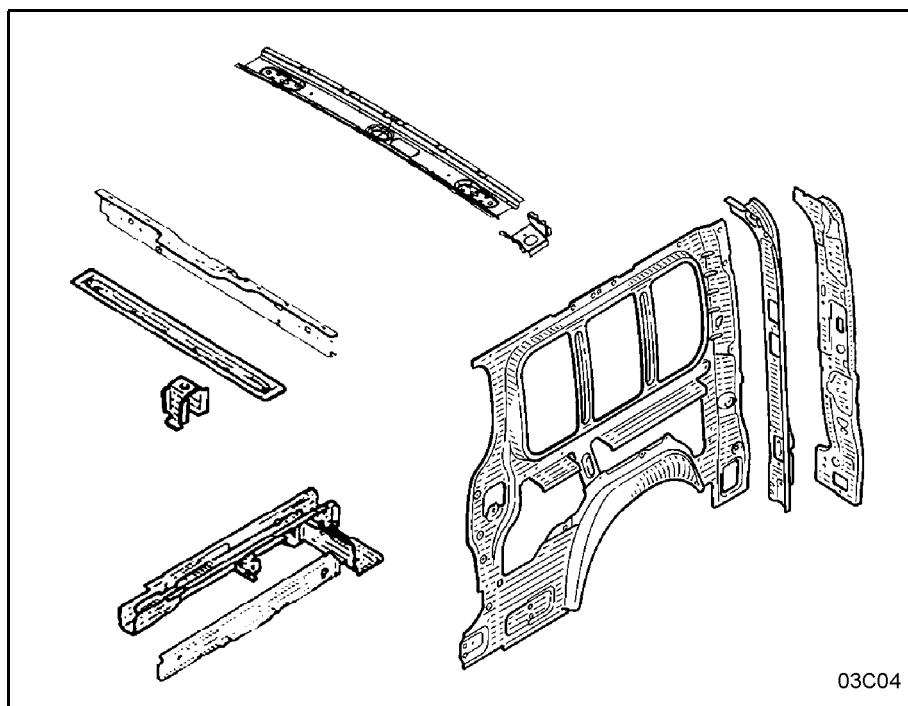
**BASIC OPERATION**



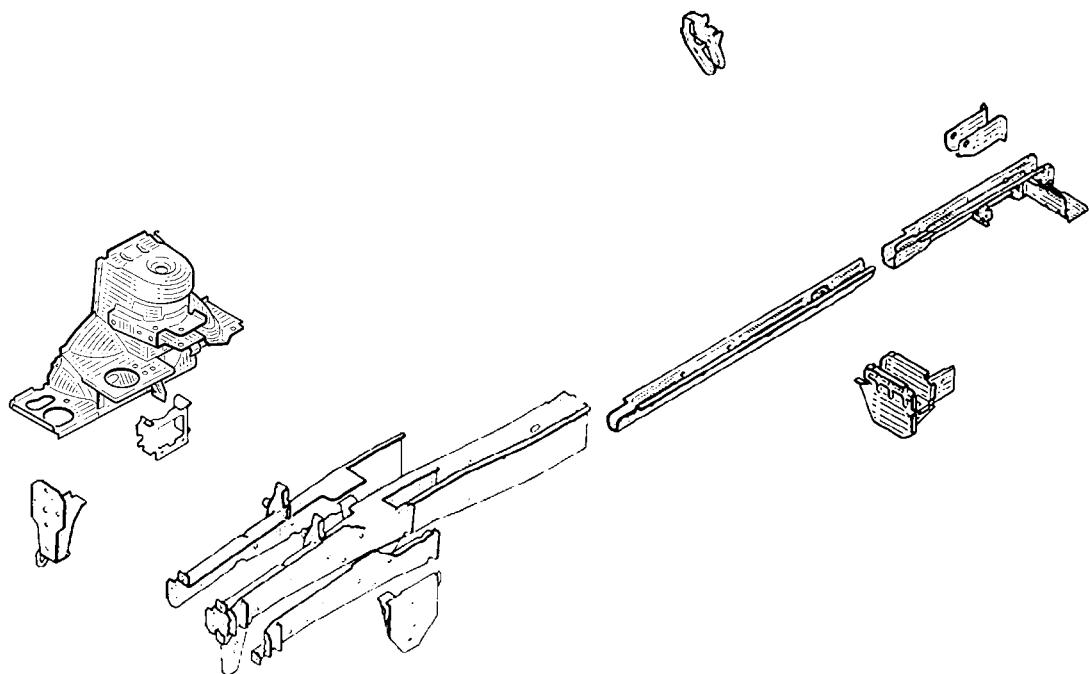
**ADDITIONAL OPERATIONS (FIRST DEGREE)**



**ADDITIONAL OPERATIONS (SECOND DEGREE)**



**PARTS REQUIRING A STRAIGHTENING PLATE**



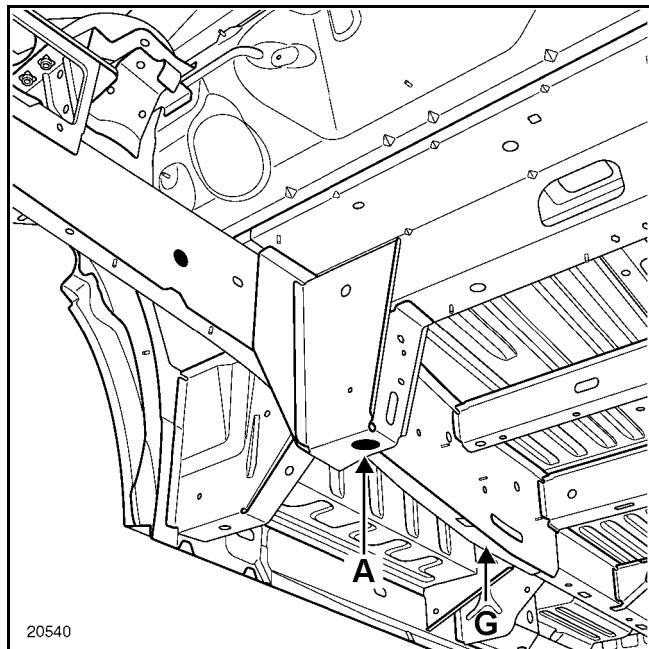
03C12

### POSITIONING REFERENCE POINTS

#### 1 - PRINCIPLE REFERENCE POINTS FOR SETTING VEHICLE ATTITUDE

##### A - FRONT SUB-FRAME REAR MOUNTING

This is the main front reference point for setting the vehicle attitude.

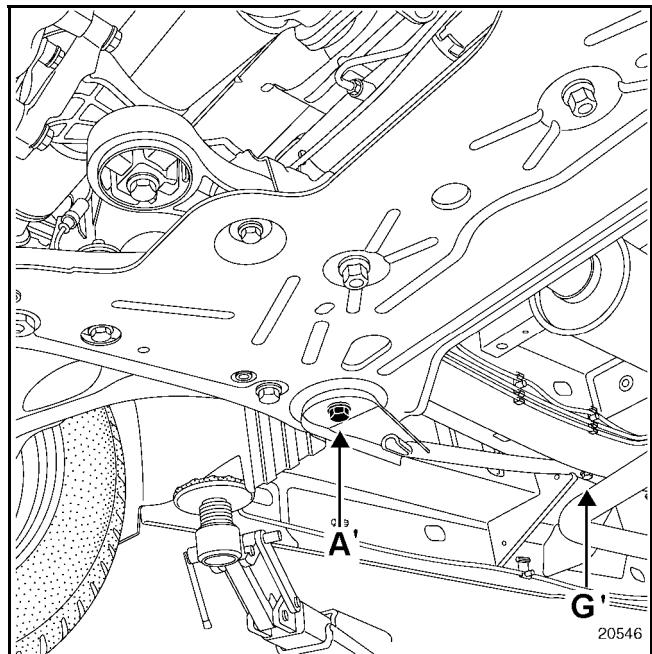


##### 1 - Front mechanical components removed

###### NOTE:

On the left-hand side the hole is round, on the right-hand side it is a slot.

If replacing the sub-frame rear support, this reference point is replaced temporarily by point (G), located on the rear part of the front side member, point (A) thus being used for positioning the replaced part.



##### 2 - Front mechanical components in place

The bracket covers the sub-frame mounting bolt.

###### Two possible cases can arise:

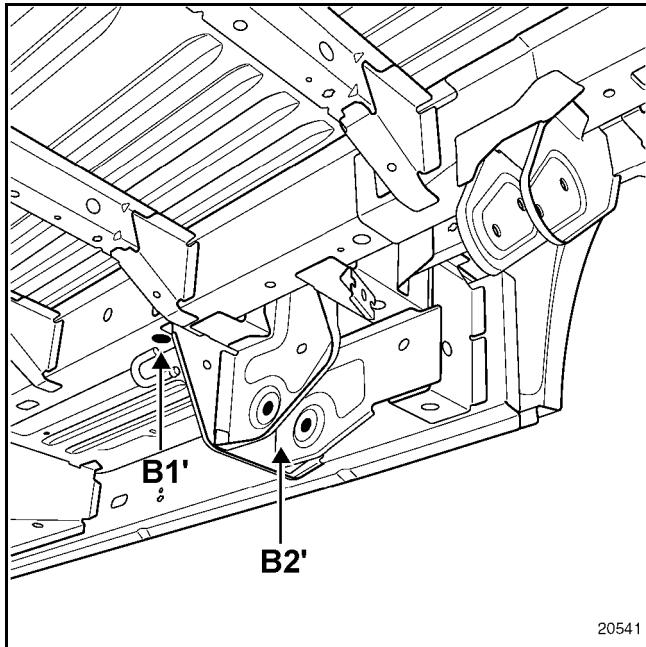
- 1 If the rear of the vehicle is being rebuilt, these two points alone may be used to align and support the front of the vehicle.
- 2 For a light frontal impact not requiring removal of the front axle sub-frame.

###### IMPORTANT:

If in doubt about the damage to one of the main reference points (A or B), it is nevertheless advisable to use the two additional points located in the area not affected by the impact to confirm the trim level.

**B - REAR AXLE FRONT MOUNTING**

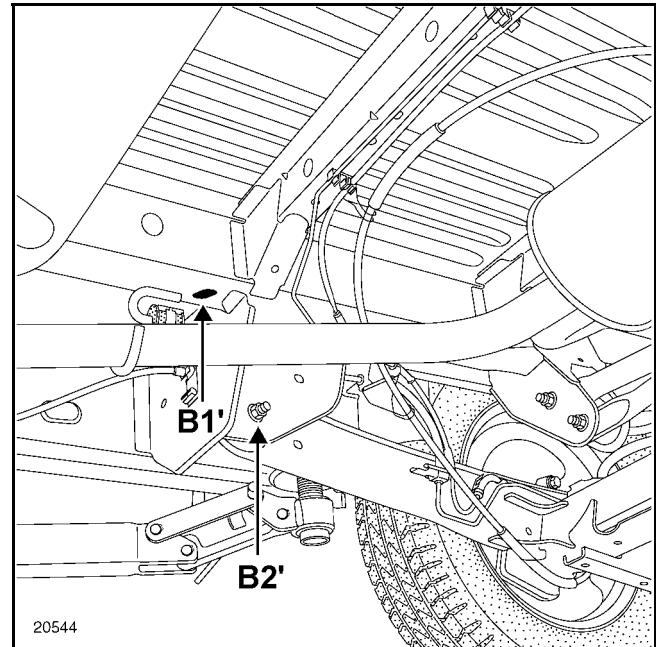
This is the main rear reference point for setting the attitude.



**1 - Rear mechanical components removed**

The bracket is bound into the rear axle mounting fork (B2') or centred in the axle pilot hole (B1').

If replacing the complete rear side member or the rear floor unit, this reference point is replaced by point (G) (see the previous page), located on the front side member, points (B) being used to position the replaced component.



**2 - Rear mechanical components in place**

The bracket is supported under the rear side member, centred in the axle pilot hole and covers the rear axle tie-rod mounting bolt.

### 2. ADDITIONAL REFERENCE POINTS FOR SETTING VEHICLE ATTITUDE

These are the provisional reference points which are used when the principle reference points have been affected by the impact.

These points allow additional vehicle support to the main reference point on the impact side, but allow only a roughly accurate vehicle alignment.

**IMPORTANT:**

These reference points should only be used in the cases mentioned above. They are not required when both the main reference points (points A and B) are correct.

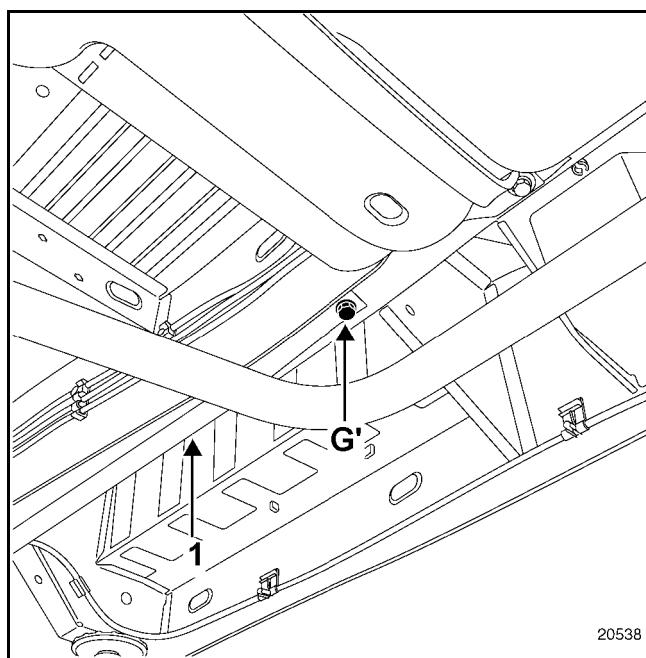
This additional reference function may also be fulfilled by the front side member end check points for a rear impact and vice versa.

**G - REAR END OF FRONT SIDE MEMBER**

This point is also used as a positioning reference when replacing a rear section of the front side member.

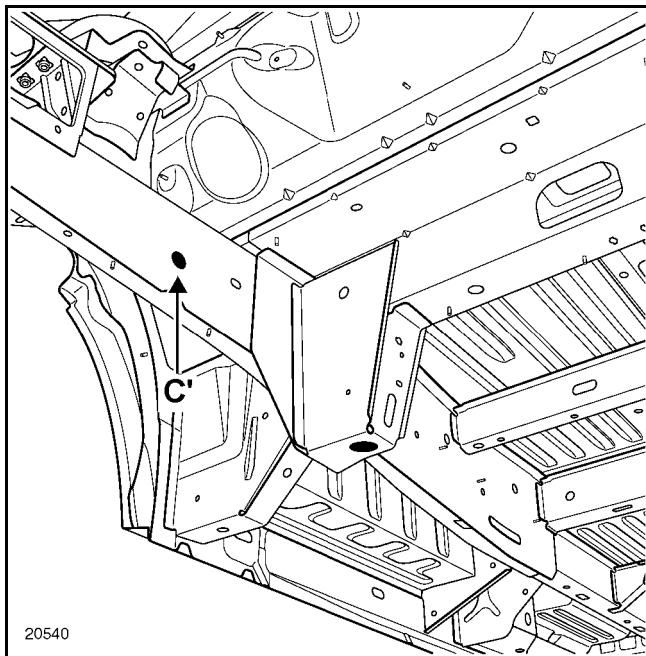
**NOTE:**

The tie-rod (1) must be removed to access the hole.



**3.REFERENCE POINTS FOR POSITIONING REPLACED PARTS**

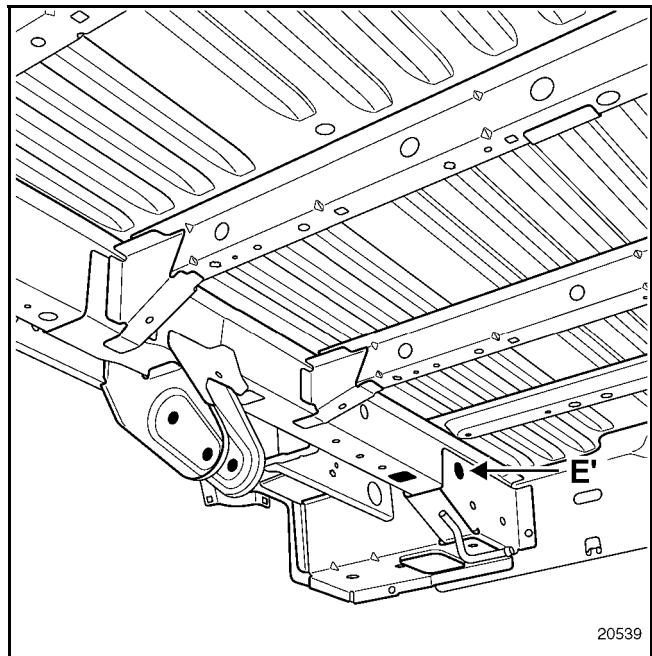
**C - FRONT SUB-FRAME FRONT MOUNTING**



The bracket is centred and attached inside the sub-frame mounting hole.

Use it when replacing part of or a complete front side member.

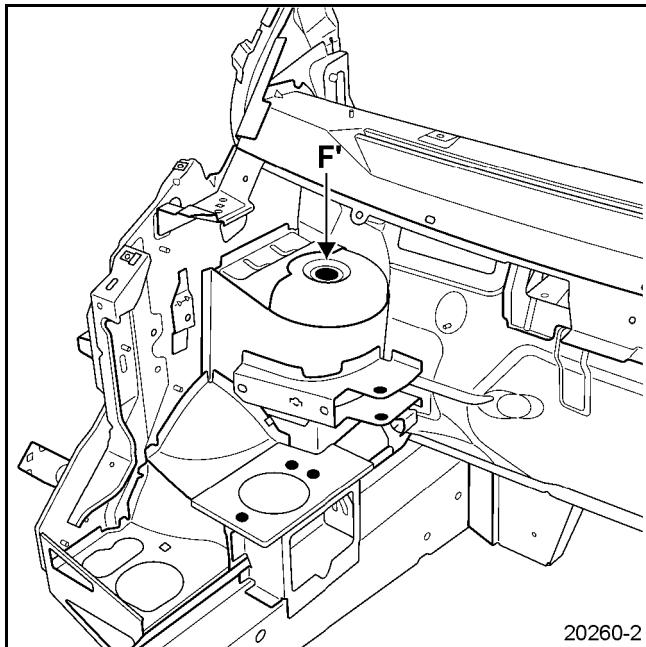
**E - REAR SHOCK ABSORBER MOUNTING**



The bracket is centred and attached inside the shock absorber shaft.

Use it when replacing part of or a complete front side member.

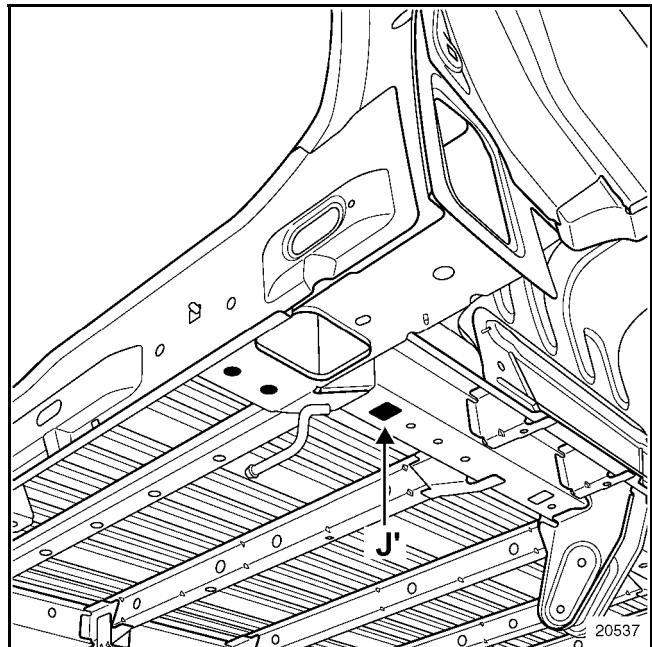
**F - FRONT SHOCK ABSORBER UPPER MOUNTING**



The bracket rests under the shock absorber cup and is centred in the shock absorber mounting hole.

Use it when replacing the wheel arch.

**J - REAR SIDE MEMBER END**

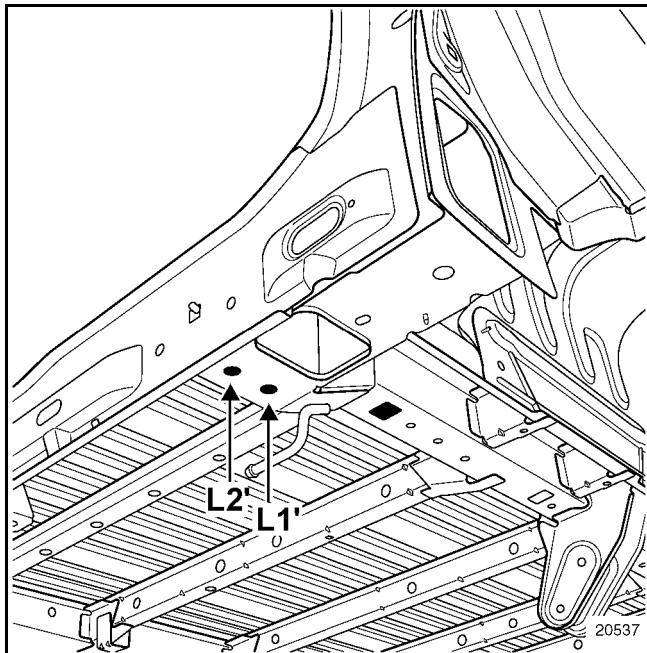


The bracket rests under the side member and is centred in the pilot hole.

It can only be used to realign the side member when the mechanical components are in place, but the shock absorber has to be removed for this operation.

It is also used with the mechanical parts removed, in the same conditions, to replace the side member.

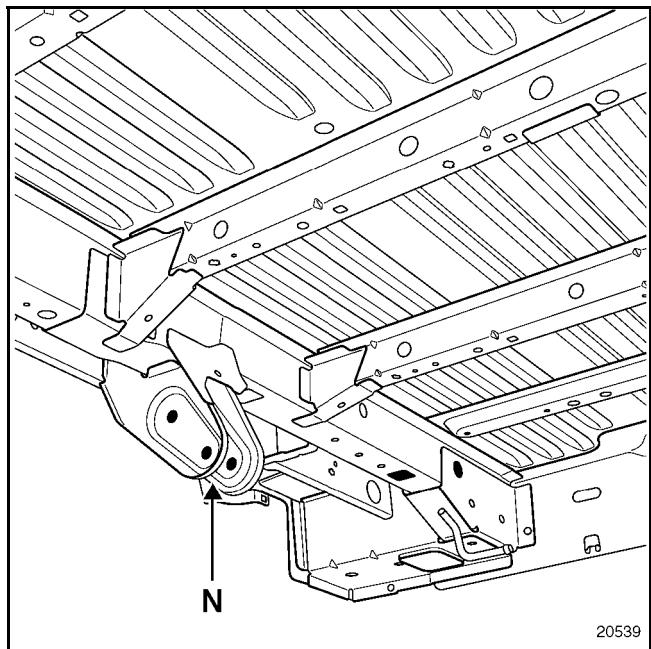
**L - REAR END CROSS MEMBER**



The bracket rests under the shock absorber mounting unit and is then centred in the towing hitch mounting holes.

It is used for replacing the rear end panel assembly, with or without mechanical components.

**N - REAR AXLE SIDE TIE-ROD MOUNTING**

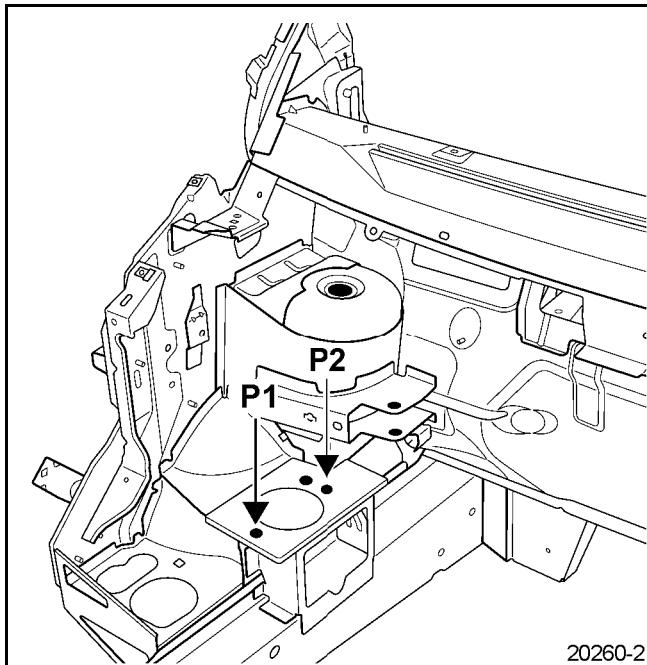


The bracket is centred in the rear axle side tie-rod shaft.

It is used when replacing:

- a partial or complete front side member,
- the tie-rod attachment.

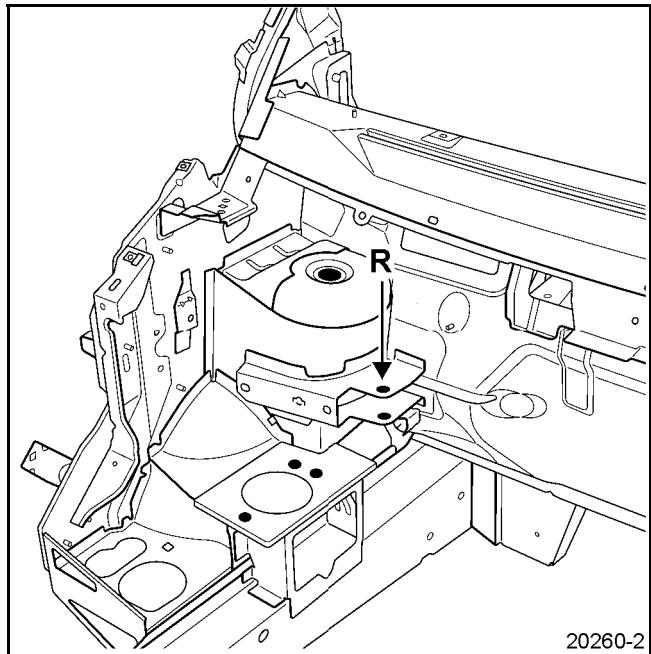
**P - ENGINE MOUNTING**



The bracket is positioned from above the engine mounting and is centred in the mounting holes of the pad.

It should be used with the mechanical components removed to replace a front half unit.

**R - ENGINE TIE-ROD MOUNTING**



The bracket is placed in the tie-rod yoke, and is fixed in place of the latter.

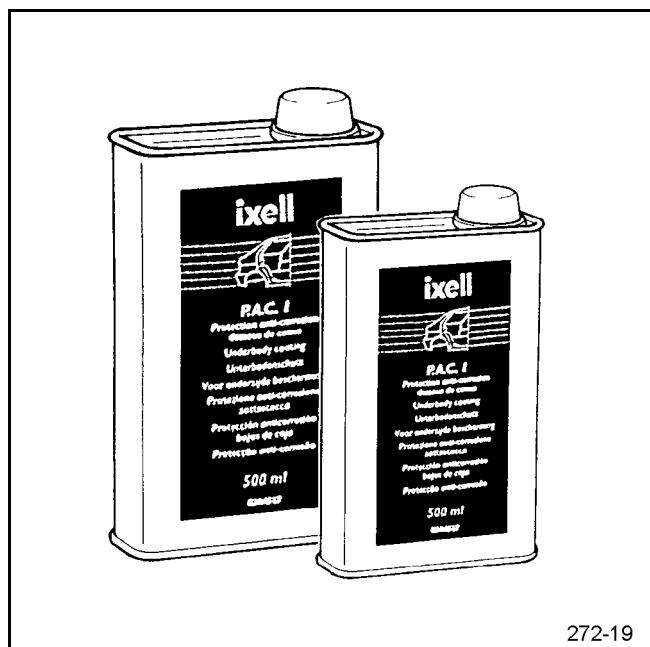
It is used for setting up the geometrical reference for the tie-rod yoke.

The hollow body parts of the structure of the vehicle are protected in the factory by injecting hot wax. To provide an equivalent level of protection after repair, two additional products must be injected in turn, available in the "PAC 1, PAC 2" kit.

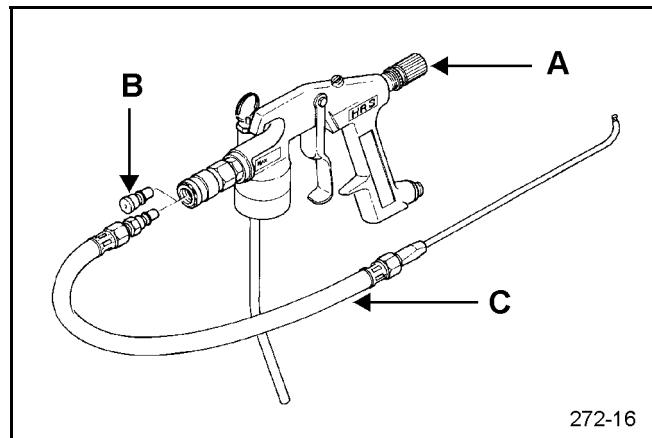
After injection, all the orifices must be covered using blanking covers moulded to fit each one.

The products and equipment required for carrying out this work are available from the Replacement Parts Central Store:

Product: **77 11 170 744**

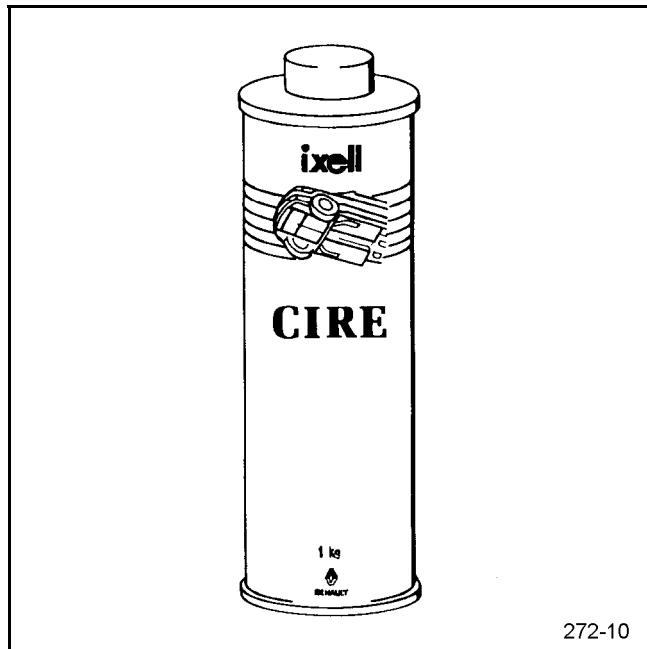


Equipment: nozzle assembly **77 11 172 528**  
empty cartridge: **77 11 172 625**



The blanking covers are available from the Parts Department.

In addition, the under-floor sub-frame is sprayed with a special wax: **77 11 172529**.

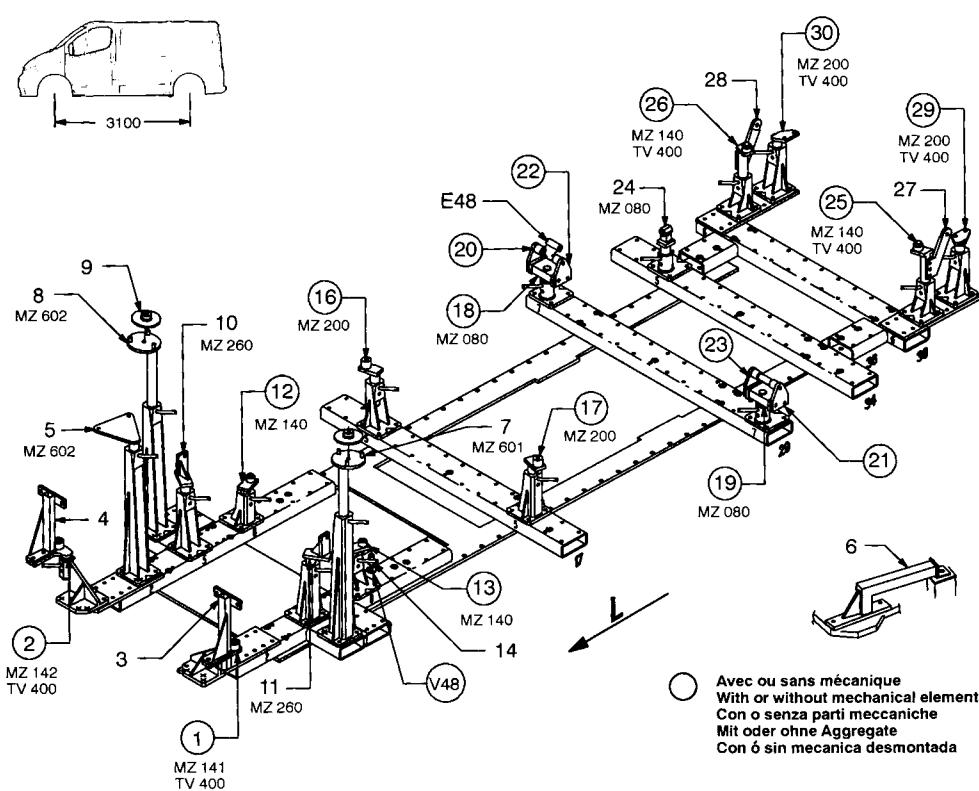
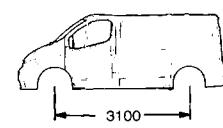


# EQUIPMENT AND TOOLING

## Repair bench

05

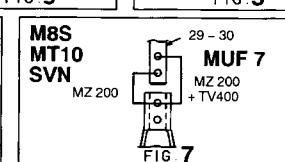
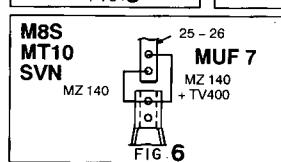
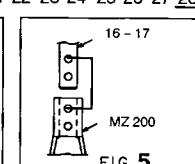
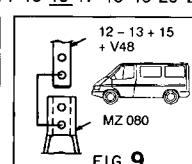
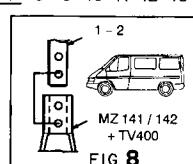
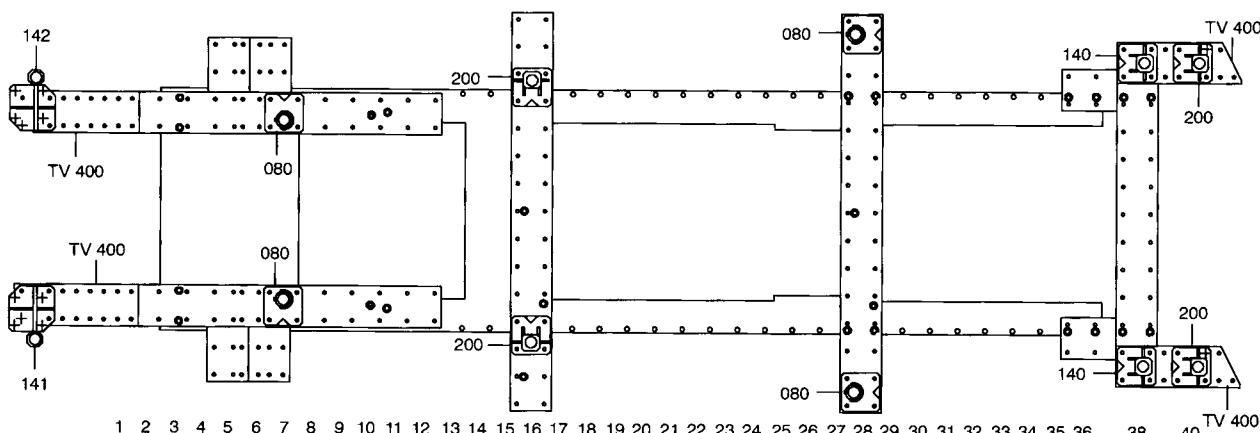
B



| REF. | REFERENCE | PDS | NB | MZ      |
|------|-----------|-----|----|---------|
| 1    | 874.7001  | 2,5 | 1  | 141     |
| 2    | 874.7002  | 2,5 | 1  | 142     |
| 3    | 874.7003  | 2,4 | 1  |         |
| 4    | 874.7004  | 2,4 | 1  |         |
| 5    | 874.7005  | 3,1 | 1  | 602     |
| 6    | 874.7006  | 1,4 | 1  |         |
| 7    | 874.7007  | 3,0 | 1  | 601     |
| 8    | 874.7008  | 3,0 | 2  | 602     |
| 9    | 874.7009  | 1,2 | 2  |         |
| 10   | 874.7010  | 2,2 | 1  | 260     |
| 11   | 874.7012  | 1,3 | 1  | 260     |
| 12   | 874.7013  | 1,3 | 1  | 140/080 |
| 13   | 874.7014  | 0,1 | 1  | 140/080 |
| 14   | 874.7015  | 0,1 | 1  |         |
| 15   | 874.7016  | 2,3 | 1  | 200/142 |
| 16   | 874.7017  | 2,3 | 1  | 200/141 |
| 17   | 874.7018  | 2,9 | 1  | 080     |
| 18   | 874.7019  | 2,9 | 1  | 080     |
| 19   | 874.7020  | 1,1 | 1  |         |
| 20   | 874.7021  | 1,1 | 1  |         |
| 21   | 874.7022  | 1,1 | 1  |         |
| 22   | 874.7023  | 1,1 | 1  |         |
| 23   | 874.7024  | 1,7 | 1  | 080     |
| 24   | 874.7025  | 1,7 | 1  | 140     |
| 25   | 874.7026  | 2,7 | 1  | 140     |
| 26   | 874.7027  | 1,4 | 1  |         |
| 27   | 874.7028  | 1,4 | 1  |         |
| 28   | 874.7029  | 1,6 | 1  | 200     |
| 29   | 874.7030  | 1,6 | 1  | 200     |
| 30   | 874.7031  | 1,0 | 1  | 200     |
| 31   | E48       | 0,1 | 2  |         |
|      | V48       | 0,1 | 2  |         |
|      | M 10-25   |     | 2  |         |
|      | M 10-30   |     | 4  |         |
|      | M 10-60   |     | 2  |         |
|      | M 12-20   |     | 1  |         |
|      | M 12-25   |     | 4  |         |
|      | M 12-30   |     | 10 |         |
|      | M 12-40   |     | 4  |         |
|      | M 12-60   |     | 1  |         |
|      | M 12-70   |     | 4  |         |
|      | M 12-130  |     | 2  |         |
|      | M 12-140  |     | 2  |         |
|      | M 14-130  |     | 2  |         |
|      | CHc 12-70 |     | 2  |         |
|      | M 12      |     | 8  |         |
|      | M 14      |     | 2  |         |

874.300

62 Kg 19.04.2001 427-D-28A



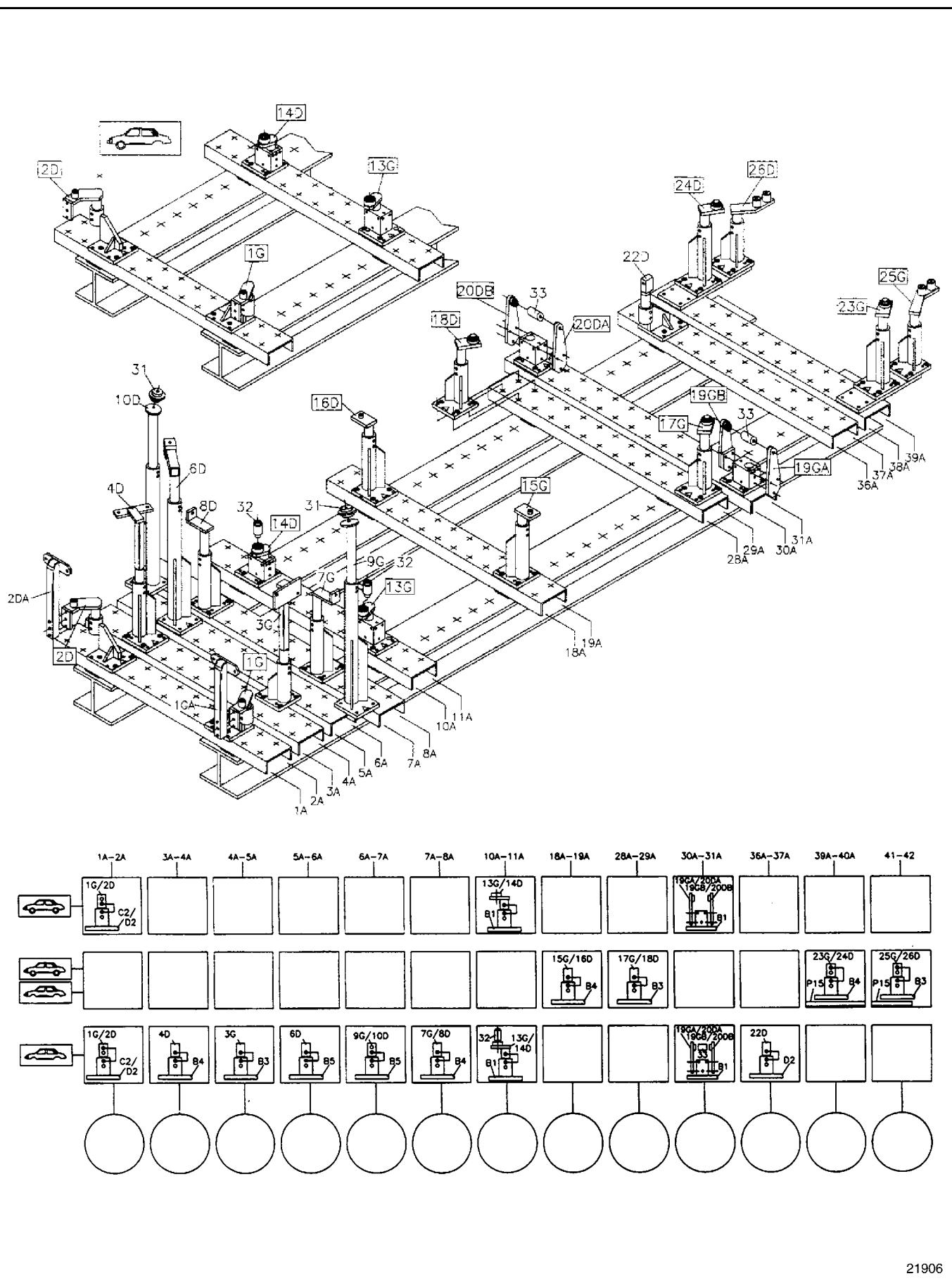
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## EQUIPMENT AND TOOLING

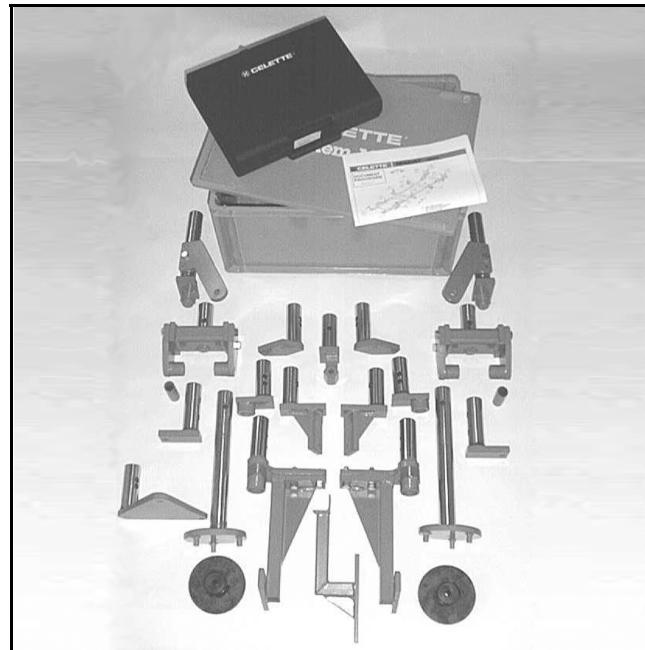
### Repair bench

05

B



**CELETTÉ**



Supplier parts

Special heads for **MZ System**

Order from:      CELETTÉ S.A.  
                            B.P.9  
                            38026 VIENNE (France)

**BLACKHAWK**

Special heads for **MS System**

Order from:      BLACKHAWK  
                         Centre Eurofret  
                         Rue de Rheinfeld  
                         67100 STRASBOURG (France)

These pages cover the changes made to the detailed description of the procedures.

### Fundamental repair rules

As a general rule, when replacing a welded bodywork part, the repair must be identical to the original as regards both the number of weld points and the type of welding used, for reasons of appearance and safety.

If this is not feasible, the replacement solutions will be shown in the repair steps described in the manuals.

These solutions ensure that the repairs have the required mechanical strength and release the repairer from liability.

Consequently, the repair steps will only describe the special welding characteristics which differ from the original, and the electrical resistance spot welds will not be shown on the drawings.

Most frequently encountered cases when replacing an electrical resistance weld:

- 1 Plug welding
- 2 Bead
- 3 Gluing
- 4 Riveting

The following will also be shown where necessary:

- the tools and equipment used for the operations,
- the cross sections of the specific panels requiring an explanation,
- the dimensions for positioning certain components,
- the location of the cutting lines for partial replacements,
- the location of the gluing areas specific to the repair.

### IMPORTANT:

when a part is symmetrical (left and right sides are identical), the repair procedure will only describe the procedure for one side (example: rear floor).

This means that the operations for the other side are the same (number of spot welds, etc.), unless specific indications to the contrary are given.

The repair steps are carried out on sheet bodies without doors and without mastic.

In the document, the drawings illustrate the replacement of the various parts as clearly as possibly following a typical impact described in each introduction.

However, some drawings do not follow this rule, in order to display the replaced part more clearly.

### Example of use of symbols in a part replacement operation

Explanations are shown in italics

#### UPPER FRONT STRUCTURE Wheel arch, front section

**42** **F**

The replacement of this part is a complementary operation to the replacement of a scuttle side panel following a side impact.

*This implies that there is a basic operation associated with the replacement of this part, in which the preliminary operations will be included.*

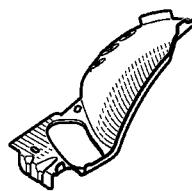
**Hence the following phrases:**

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective chapters (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



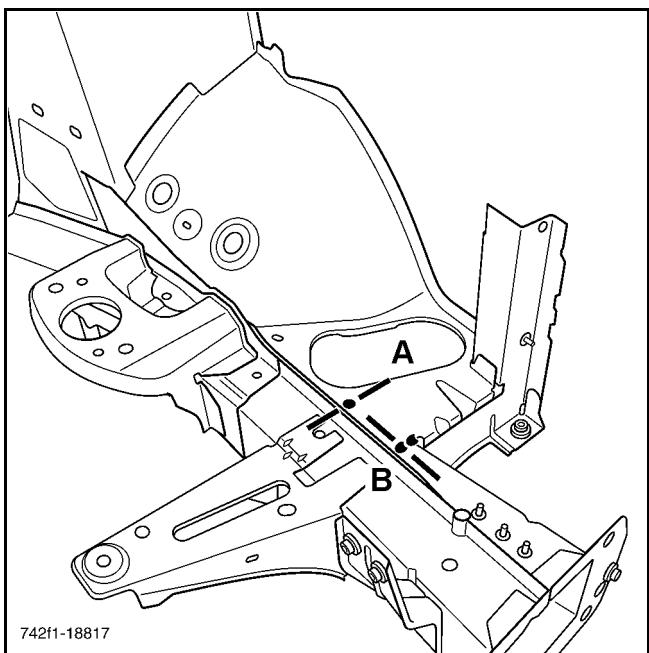
PR 1272 PI 42.301.5 n°6

#### PARTS CONCERNED (thickness in mm):

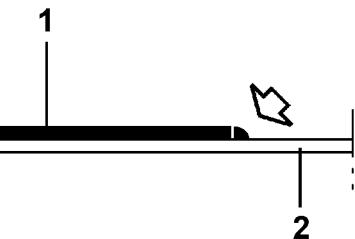
|   |                                 |         |
|---|---------------------------------|---------|
| 1 | Wheel arch, front section       | 0.8     |
| 2 | Front side member closure panel | 1.5/2.5 |
| 3 | Wheel arch                      | 2       |

*In the detailed procedure descriptions, where two panel thicknesses are shown for the same part, this means that the part consists of two original butt welded panels.*

*Thicknesses are represented from the outside edge of the part going towards the vehicle passenger compartment (direction of the impact).*



**B**

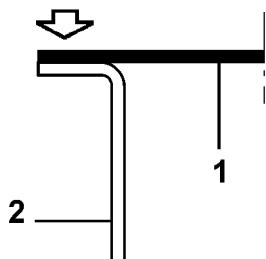


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*"L25" indicates the length in millimetres of the welding bead required for the connection concerned.*

**A**



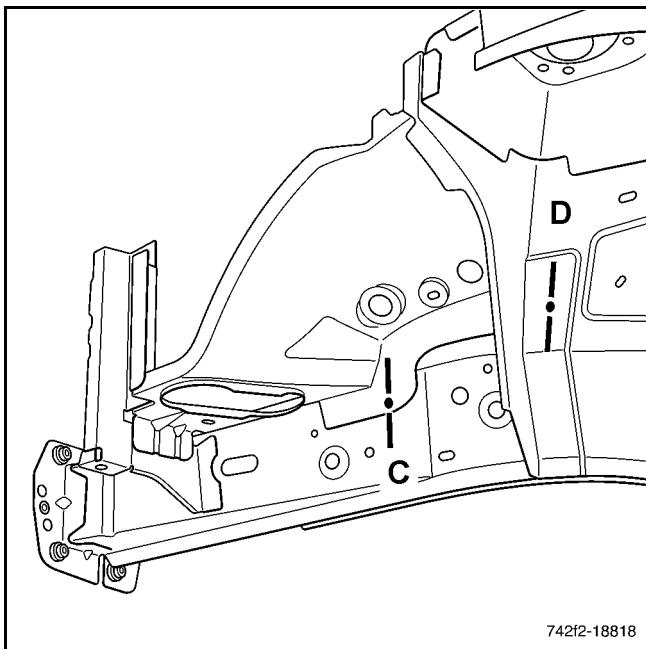
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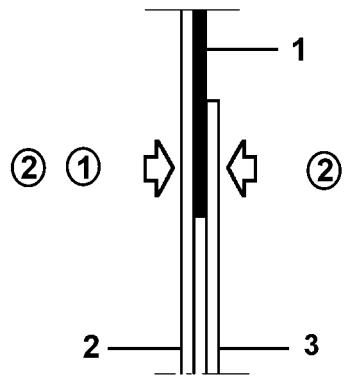
*"X3" specifies the number of spot welds required for the attachment concerned.*

**REMINDER:**

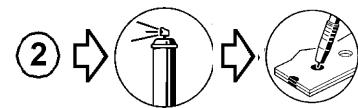
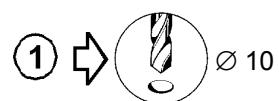
*the connection between the wheel arch and the shock absorber cup is not shown as the welds to be made are identical to those made during manufacture (and are therefore accessible with the spot welder)*



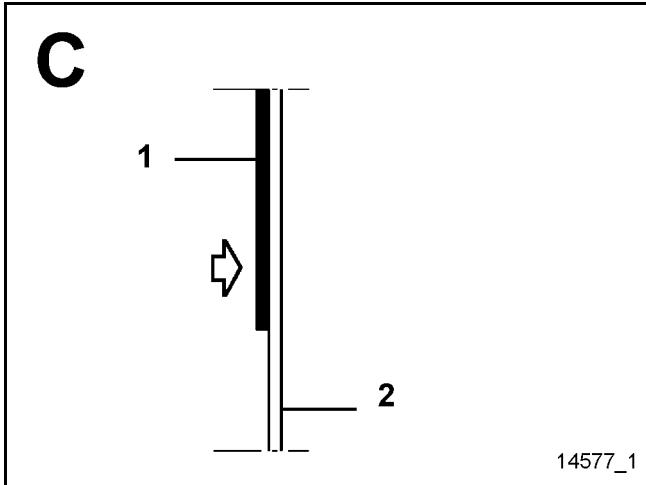
**D**



14613\_1



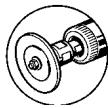
*"Ø 10" shows the drilling diameter in millimetres, if necessary, to be used for the relevant connection.*



## Key to the symbols used in the document



Chisel



Grind back beads or spot welds. Straight grinding wheel with 75 Ø bakelite disc, thickness 1.8 to 3.2 mm.



Grind back spot welds. 20 000 rpm straight grinder with Ø 10 or 16 mm milling cutter.



Drill the spot welds. Hardened steel bit. Speed of rotation 800 to 1000 rpm.



Drill &lt; Ø 8 mm. Steel drill bit. Speed of rotation 800 to 1000 rpm.



Drill &gt; Ø 8 mm. Tapered mill. Speed of rotation 800 to 1000 rpm.



Cutting with a saw. Pneumatic power hacksaw.



Cut out part by grinding off flange or grinding back remaining traces of spot weld. Finish surface after welding. Angle grinder fitted with a rubber pad and a 120 to 180 mm ØP36 grain fibre disc



Unsoldering

MAG stitch welding  
**Note:** for good quality welding, it is recommended that a gas composed of Argon + 15% CO<sub>2</sub>, which is considered to be an active gas, is used (MAG)

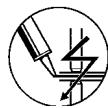
Resistance spot welding



Plug welding with MAG protective gas.



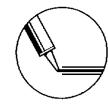
Crimping of exterior door panels.

Lead filler  
Hot air torch.  
Nozzle output temperature minimum. 600 °C Handle + 33% tin solder + tallow  
**Note:** to a large extent, body solder filling compensates for heat distortion caused by welding.

Application of weldable mastic. This mastic is an electrical conductor which is inserted between two sheets to be spot welded. It seals the sheets and prevents corrosion of the spot welds.



Application of aluminium paint. This is to be applied to the joint faces of each of the parts to be plug welded. This paint is conductive and can withstand high temperatures; it gives anti-corrosion protection around welds.

Apply a bead of extruded mastic  
● Manual or pneumatic spray gun.  
● One or two-pot mastic for crimped and butt joints.Apply mastic by spraying  
● Spray gun  
● Dual component anti-chipping and anti-corrosion mastic.Apply a bead of extruded adhesive mastic  
● Manual or pneumatic spray gun.  
● Adhesive mastic in one or two parts

Thermal cleaning of extruded or spray mastics

### INTRODUCTION

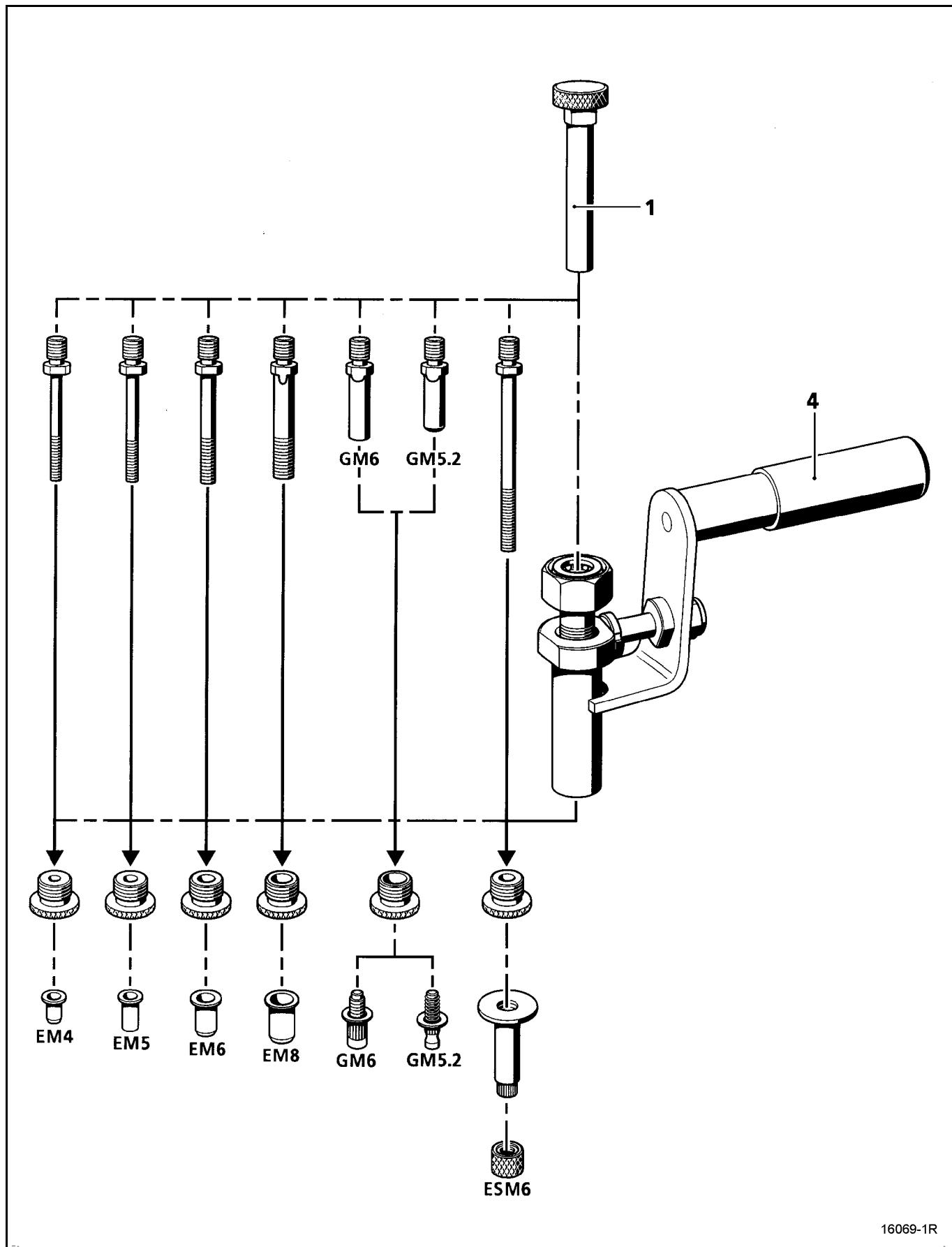
The **Car. 1504** tool is used to fit the following inserts:

- Nuts              EM4              part no. **77 01 047 924**  
                        EM5              part no. **77 01 047 685**  
                        EM6              part no. **77 03 043 020**  
                        EM8              part no. **77 01 047 925**
  
- Studs              GM6              part no. **77 01 047 926**  
                        GM5.2           part no. **77 01 047 927**

Below you will find the repair methods allowing you to fit the different inserts.

**COMPOSITION OF Car. 1504**

Parts Store reference:



16069-1R

# GENERAL INFORMATION

## Tooling

40

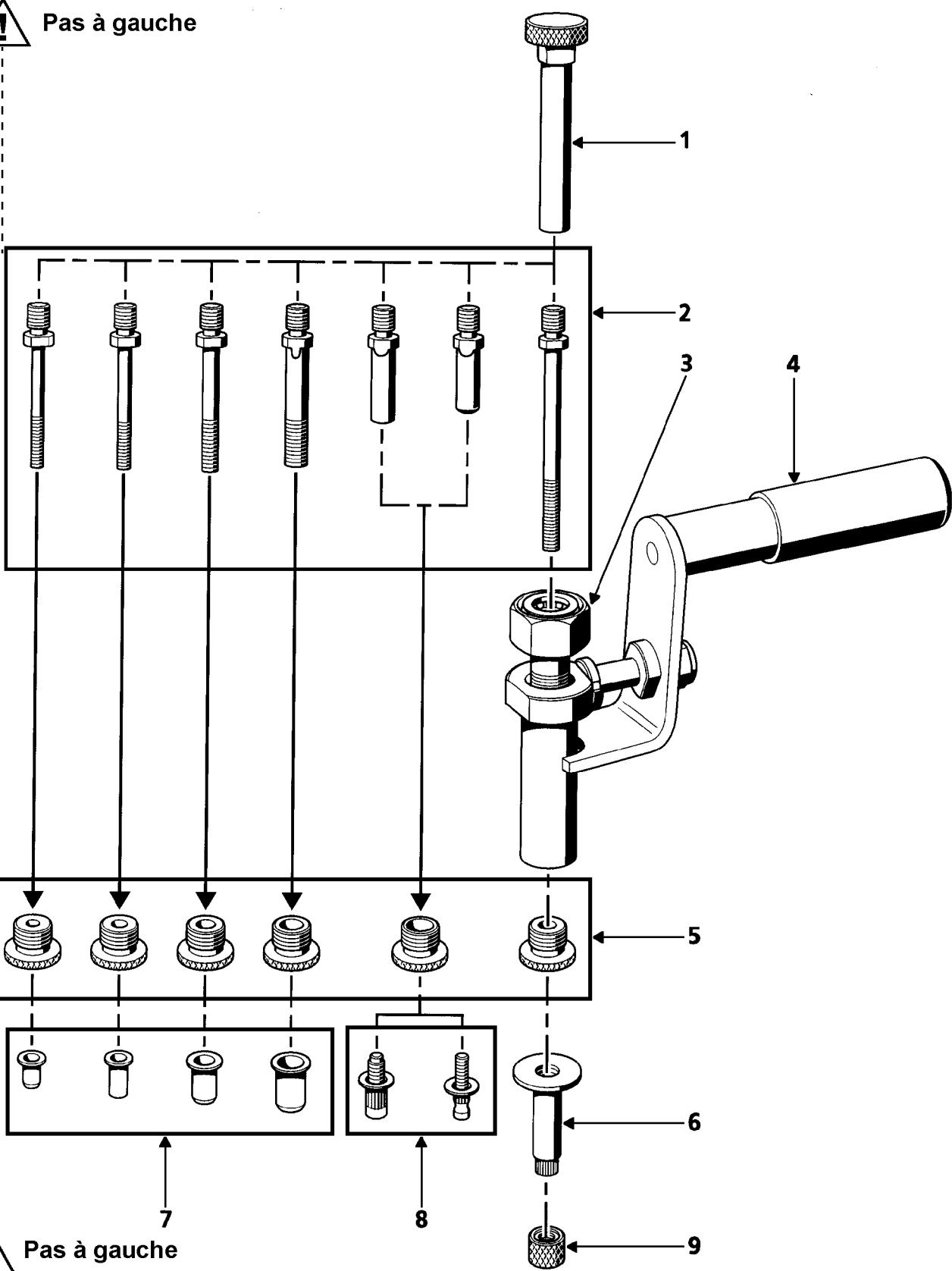
| NAME                                     | DESCRIPTION              | DRILL DIAMETER                       | PART NUMBER  | ADAPTED ANVIL            | ADAPTED TIE-ROD          |
|--|--------------------------|--------------------------------------|--|--------------------------|--------------------------|
| Nuts                                     | EM4<br>EM5<br>EM6<br>EM8 | 6. mm<br>7.1 mm<br>9.1 mm<br>11.1 mm | 77 01 047 924<br>77 01 047 685<br>77 03 043 020<br>77 01 047 925 | EM4<br>EM5<br>EM6<br>EM8 | EM4<br>EM5<br>EM6<br>EM8 |
| Studs:<br>"non-standard"<br>"non-coated" | GM6<br>GM5.2             | 9.2 mm<br>7.4 mm                     | 77 01 047 926<br>77 01 047 927                                   | G<br>G                   | GM9<br>GM5.2             |
| Special nut                              | EMS6                     | 9.2 mm                               | 77 03 043 083  | ES                       | ES<br>+ strut            |

1 Tie-rod mounting

4 Body



Pas à gauche



16069R

- 1 Tie-rod mounting
- 2 Tie-rods
- 3 Tightening nut
- 4 Body
- 5 Anvils
- 6 Special nut
- 7 Nuts
- 8 Studs
- 9 Thrust nut

### **PREPARATION OF Car. 1504**

- Select the assembly (tie-rod, anvil and insert) adapted for the crimping to be performed.
- Screw the tie-rod (2) into the tie-rod mounting (1) (left-hand thread).
- Tighten the nut (3) fully against the body (4) (left-hand thread).
- Screw the anvil (5) into the body (4) (left-hand thread).
- Insert the assembly (1) and (2) into the body of the tool.
- Screw the insert (right-hand thread) on to the pulling rod.

### **NOTE:**

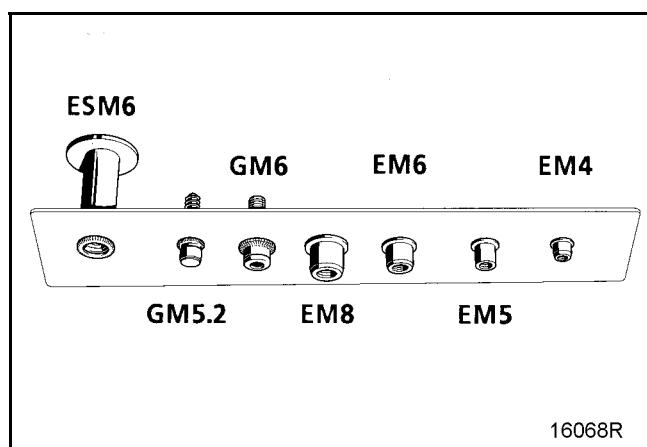
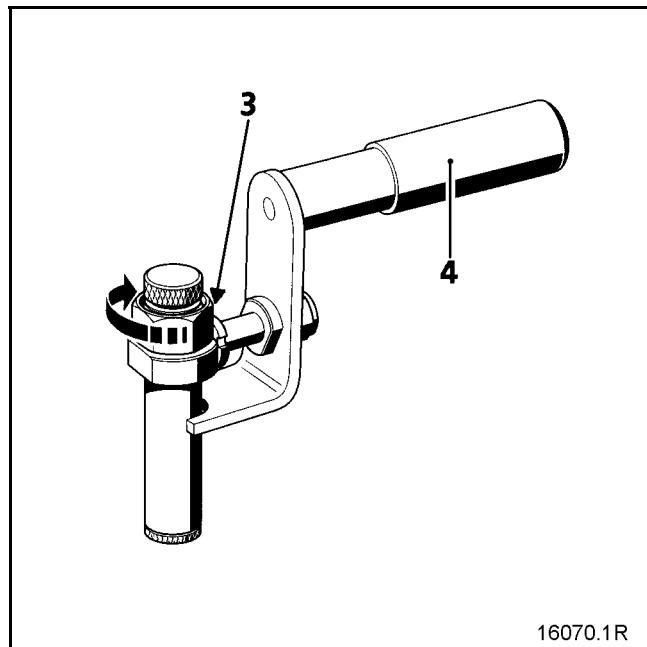
- To fit the special nut (6), the tie-rod passes through the crimping nut and is screwed to the thrust nut (9).
- After drilling and stripping the sheets, an anticorrosion protection operation will be necessary before painting. The anticorrosion protection should be applied using the following products:

1 Pre-treatment primer **77 01 423 933**

Reactive solvent **77 01 423 955**

2 Primer (maxima) **77 11 170 344**

### USING THE TOOL



While holding the body (4), turn the tightening nut (3) in the direction of the arrow shown in the drawing above.



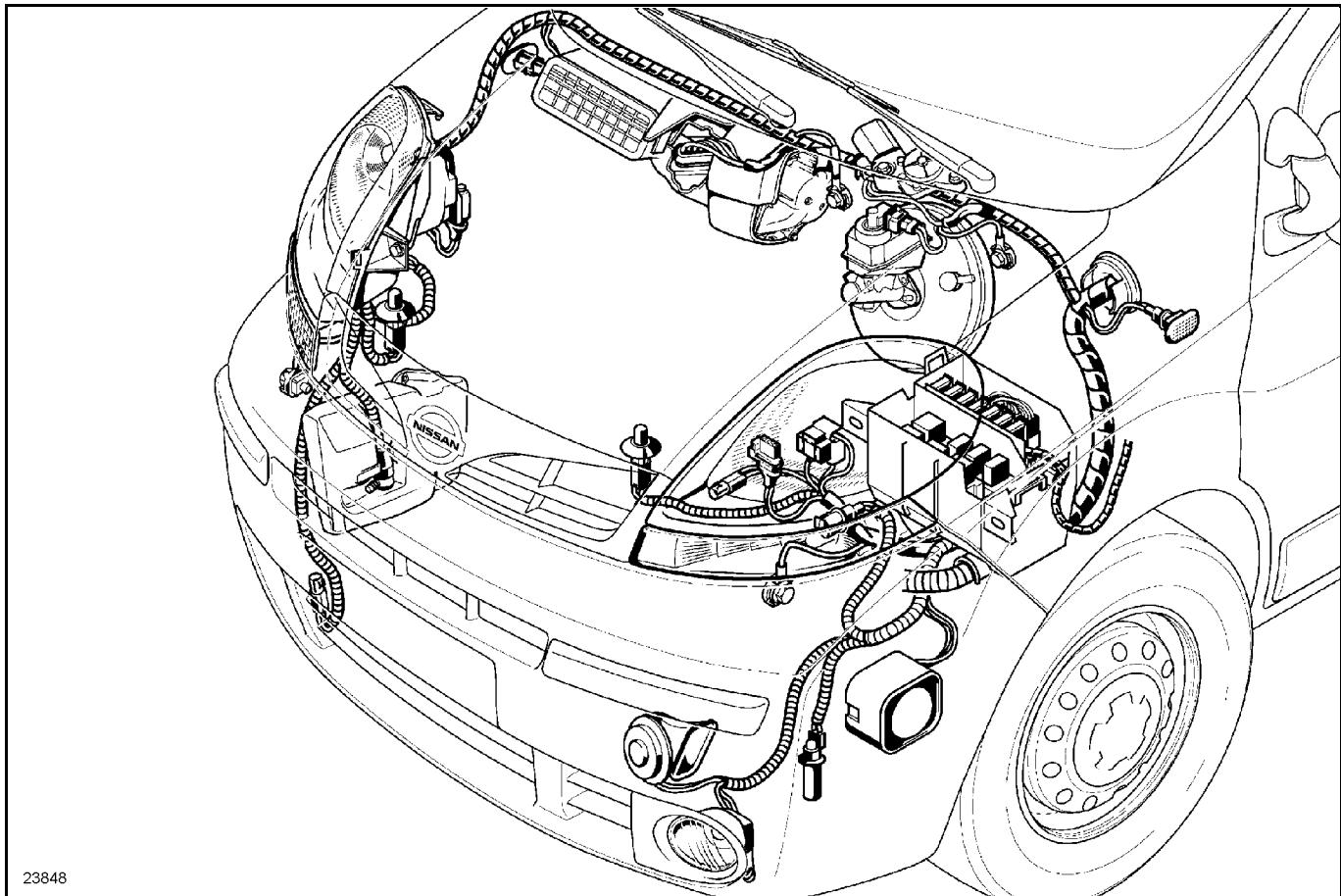
Completion of the crimping operation should be felt by the operator (increase in the tightening effort).

Crimping of the insert is correct when it no longer has any rotational play, this should be checked before removing the tool.

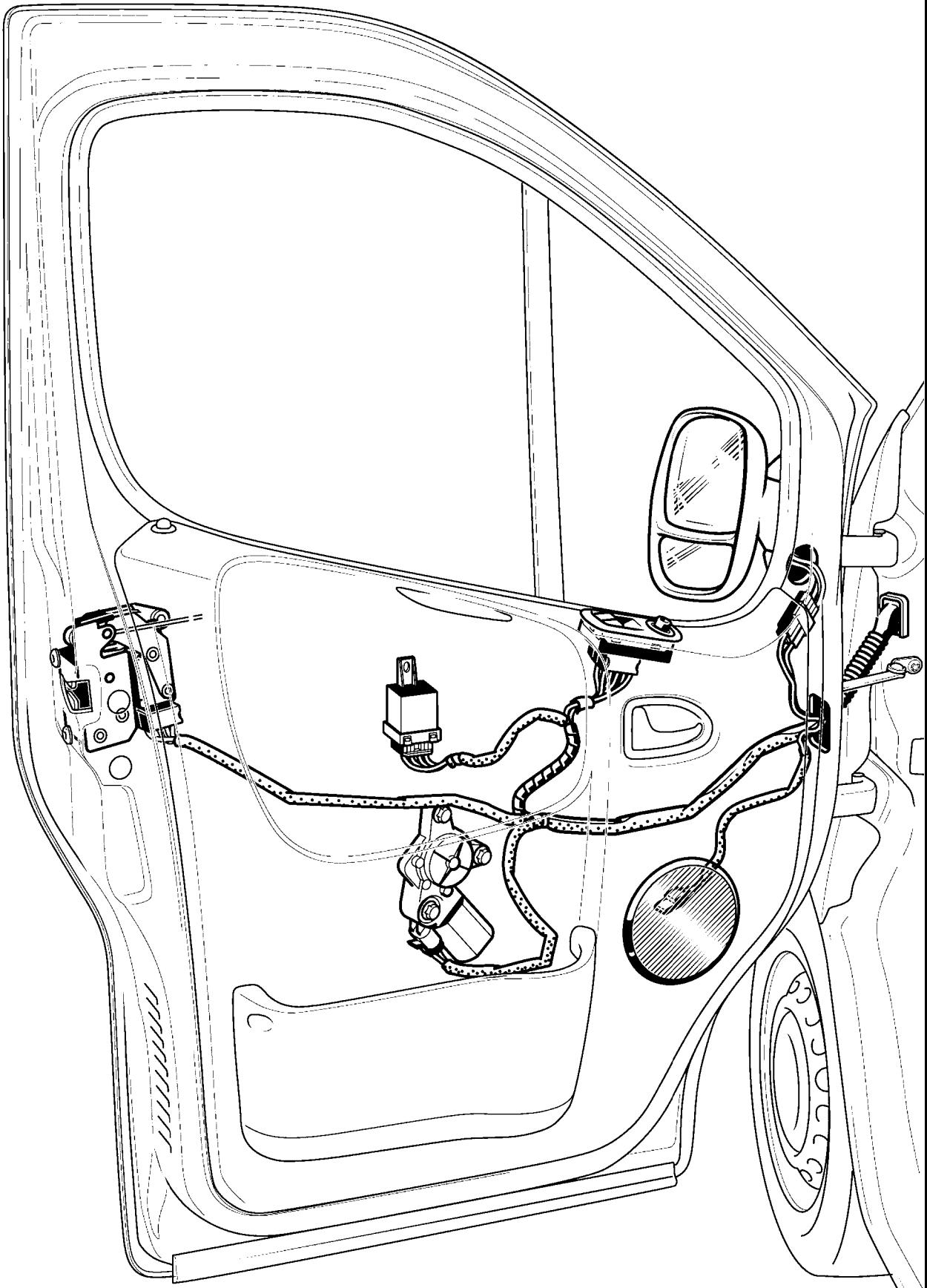
**NOTE:**

This checking procedure must be performed before unscrewing the pulling rod/tie assembly.

**FRONT UNIT**

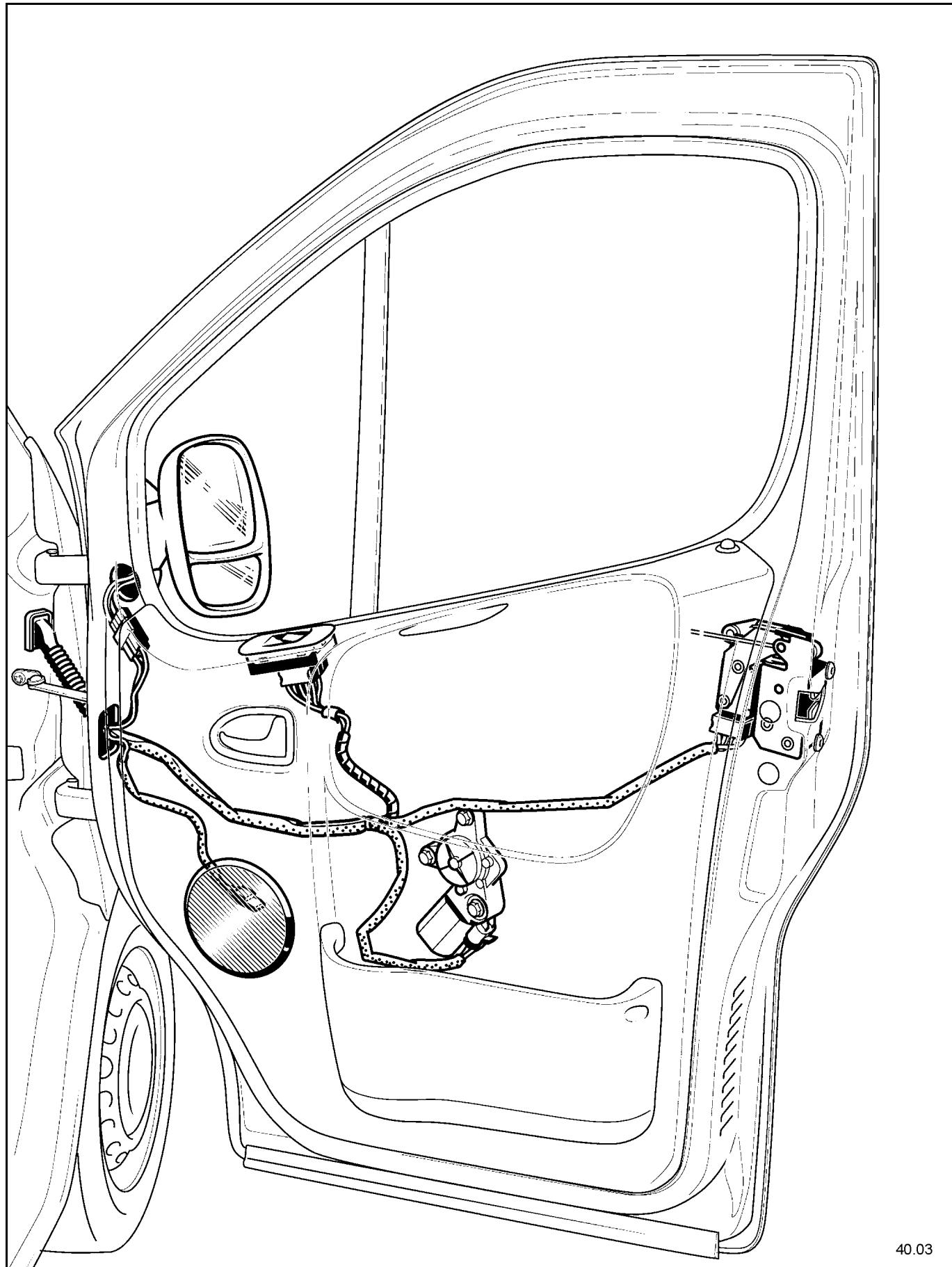


**FRONT LEFT SIDE DOOR**



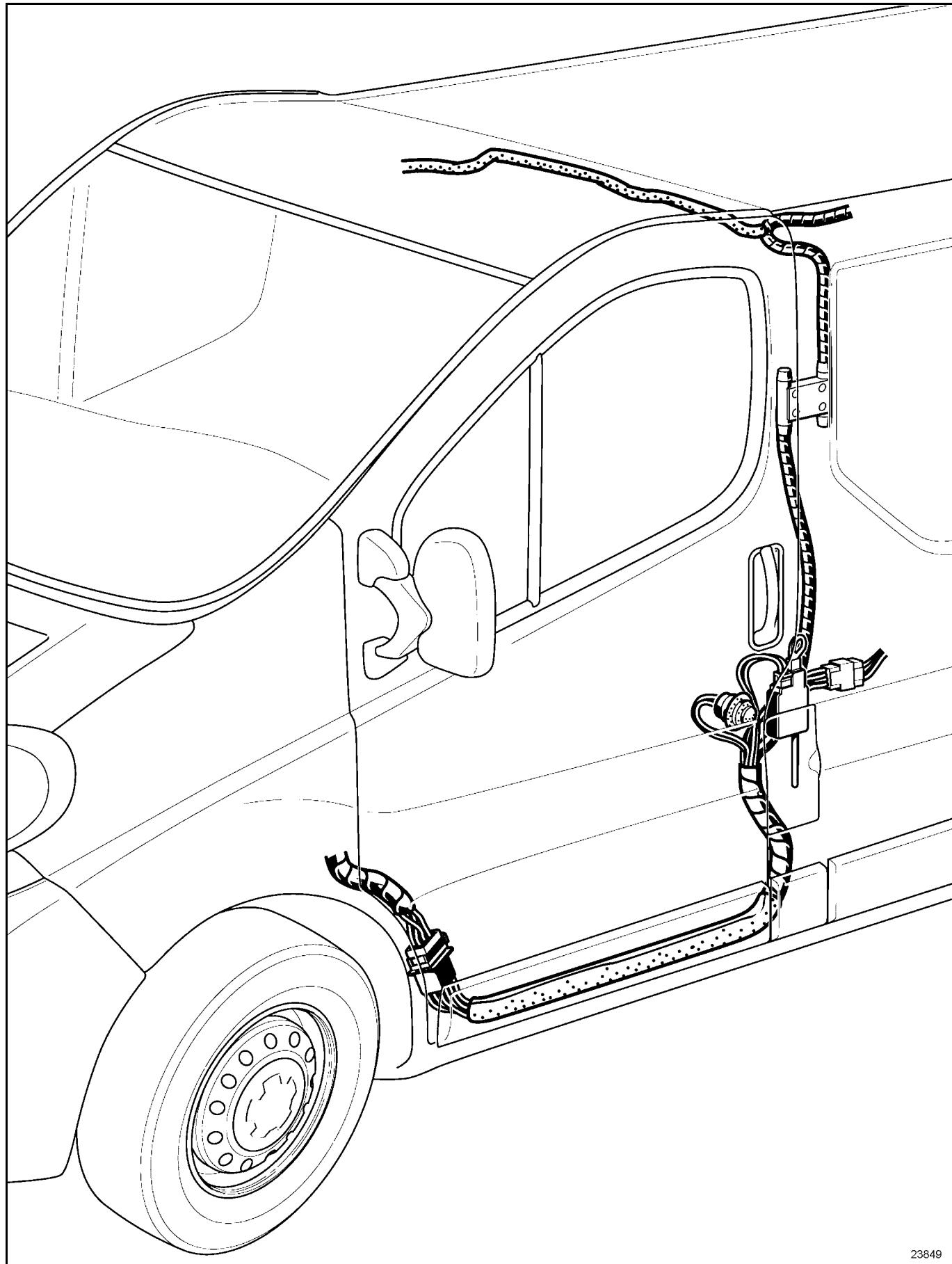
40.02

**FRONT RIGHT SIDE DOOR**



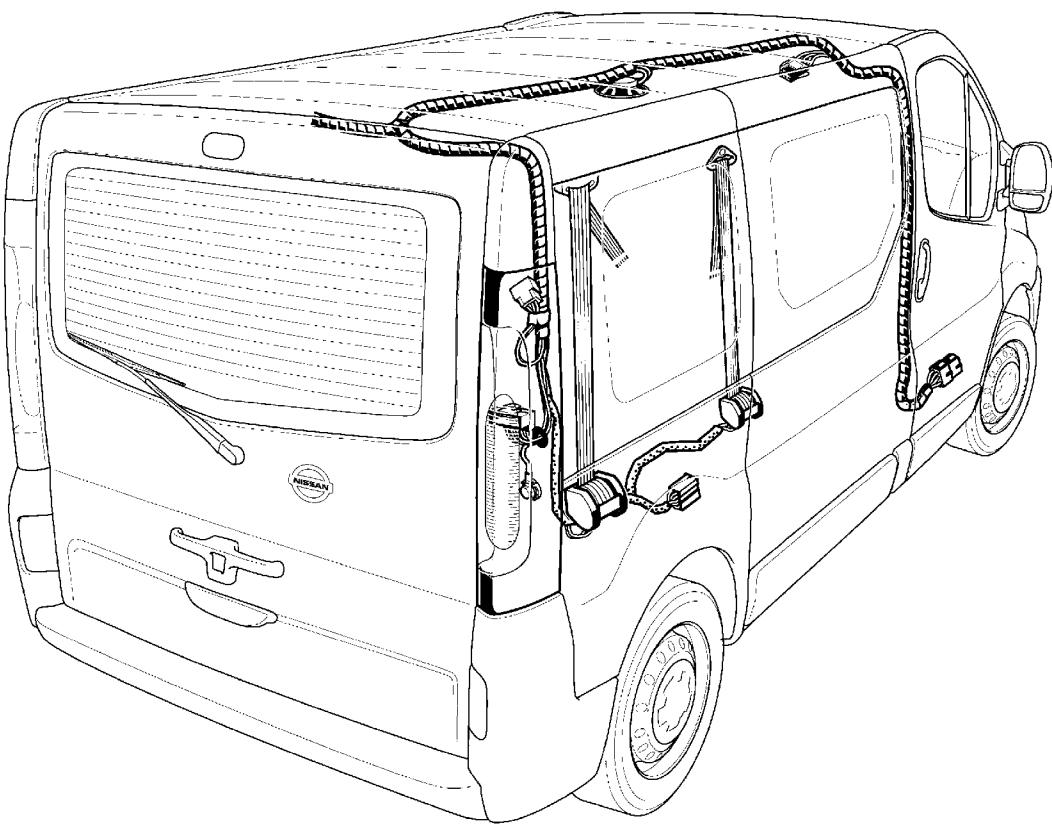
40.03

**CAB REAR PILLAR**



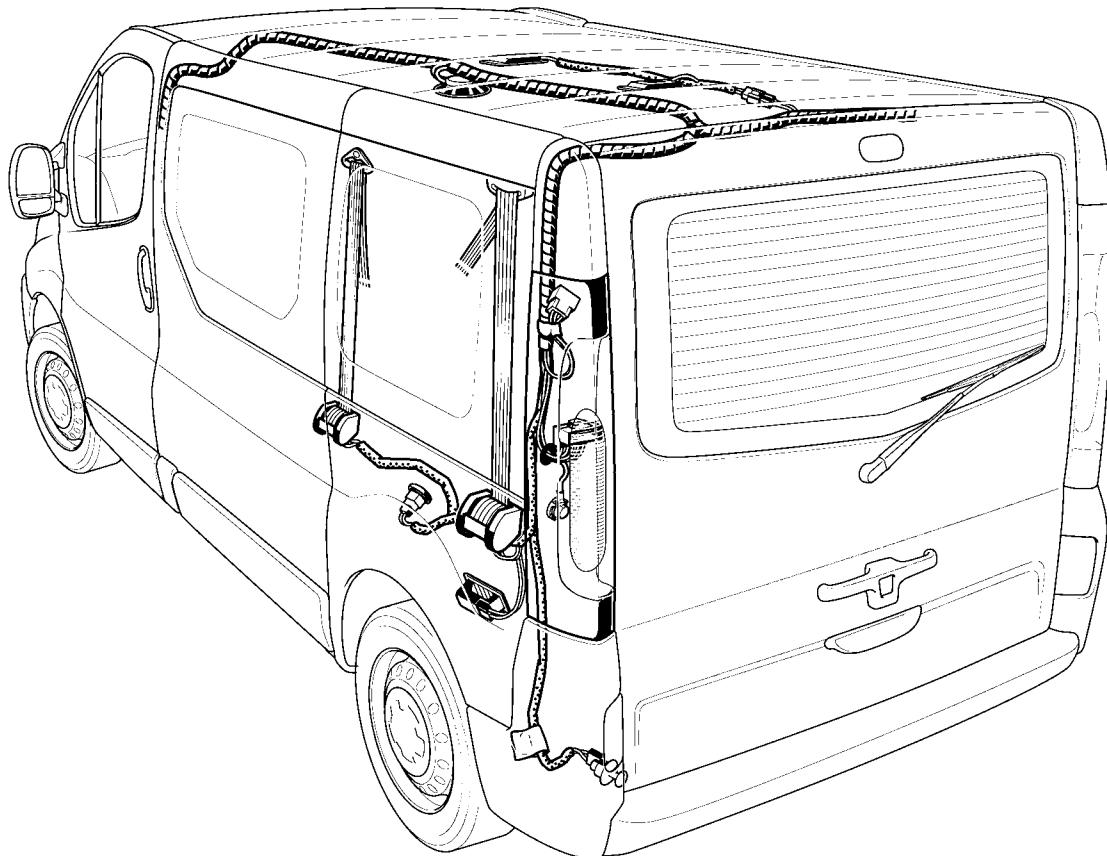
23849

**RIGHT HAND BODY SIDE**



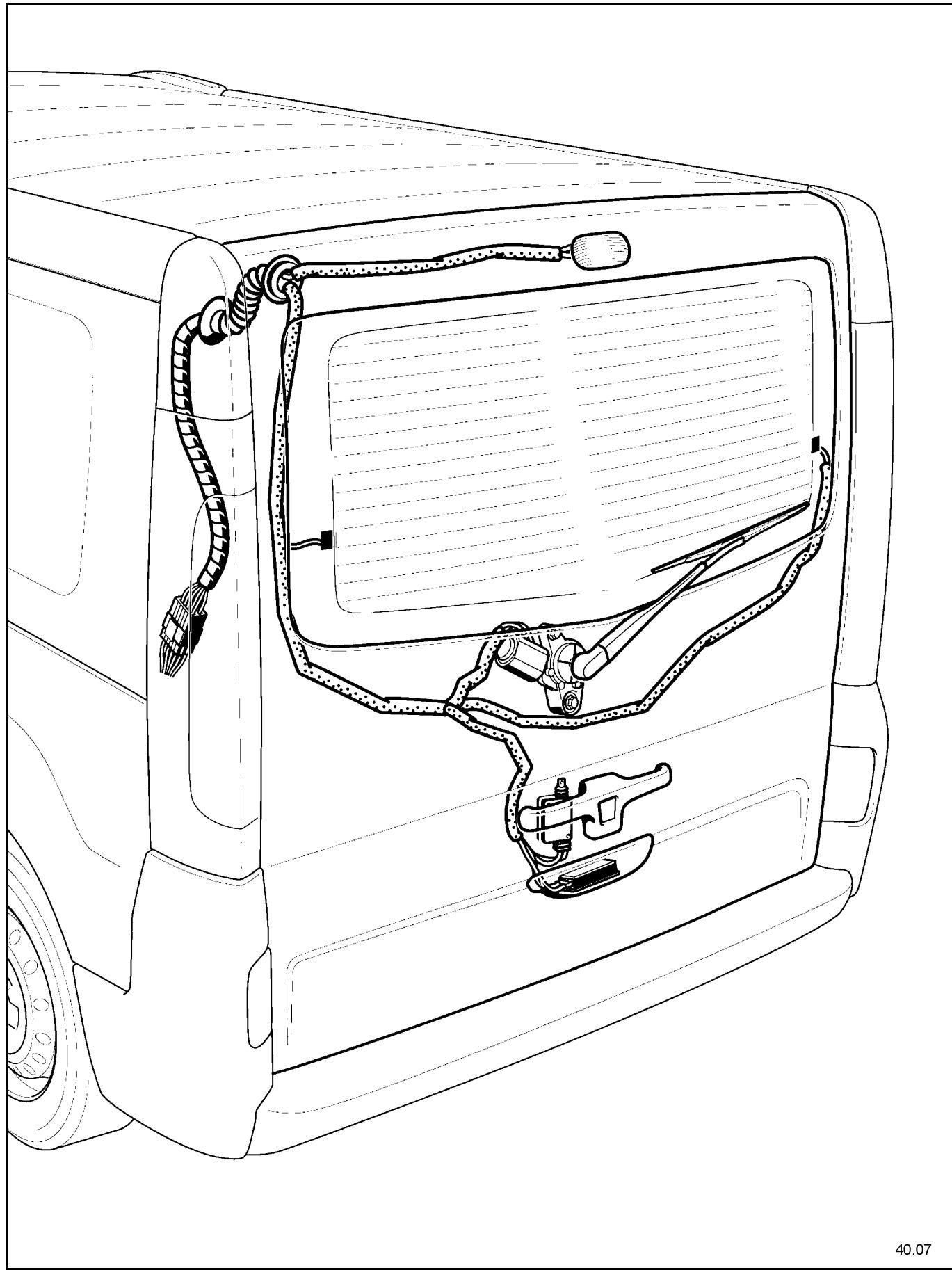
23850

**LEFT HAND BODY SIDE**



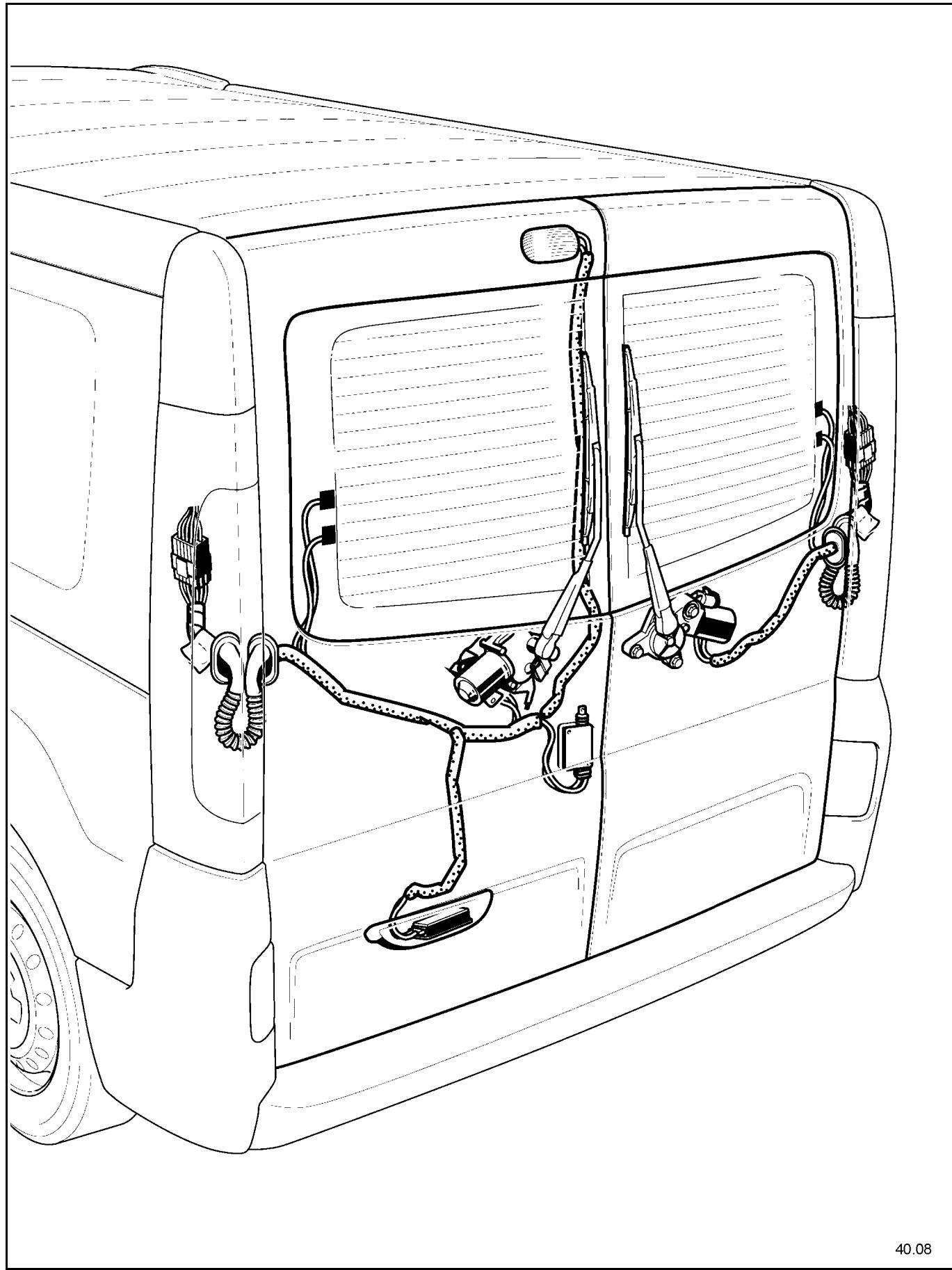
23851

**TAILGATE**



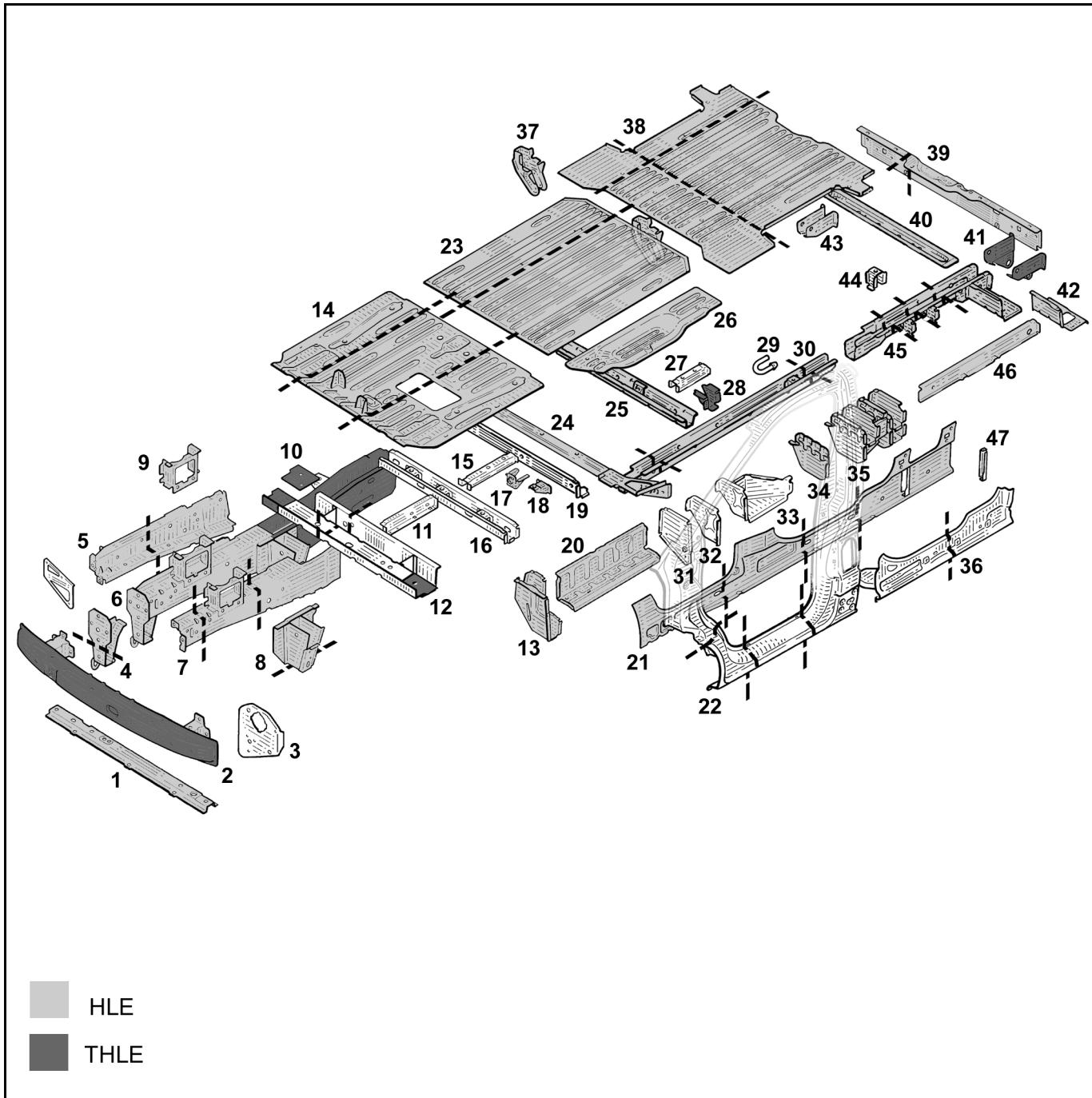
40.07

**REAR LOADING DOORS**



40.08

**LOWER STRUCTURE**



**NOTE:**

All the panels have to undergo electro-galvanisation in different areas.

**High Elastic Limit Steel**

**Ultra High Elastic Limit Steel**

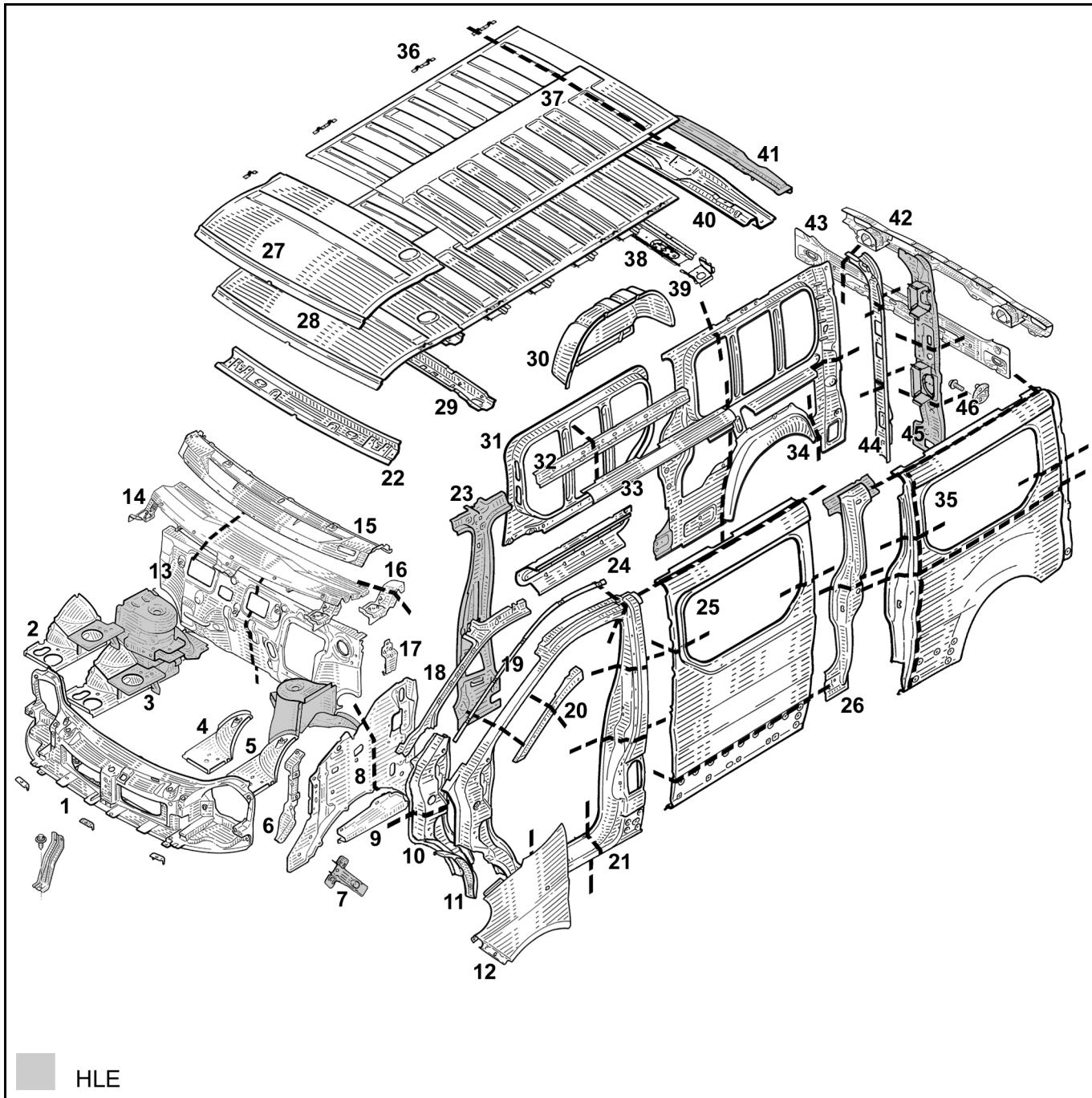
# GENERAL INFORMATION

## Description of parts (exploded view)

40

- 1 Radiator support cross member (41 B)
- 2 Front end lower cross member (41 A)
- 3 Front end side cross member (41 D)
- 4 Radiator cross member support (41 C)
- 5 Front side member closure panel (front section) (41 F)
- 6 Front side member (41 G)
- 7 Front section of front side member (41 E)
- 8 Front sub-frame rear mounting (41 I)
- 9 Engine mounting stiffener (41 H)
- 10 Front section of front side member rear reinforcement (41 J)
- 11 Cab floor stiffener (41 X)
- 12 Cab floor front cross member (41 W)
- 13 Front jack support (41 O)
- 14 Cab floor (41 V)
- 15 Front seat mounting reinforcement (41 Z)
- 16 Front cross member under front seat (41 Y)
- 17 Sleeve stop (41 AF)
- 18 Handbrake lever mounting stiffener (41 AE)
- 19 Rear floor front cross member lining (41 AD)
- 20 Front side foot panel (41 P)
- 21 Inner sill panel (41 M)
- 22 Cab sill panel (41 K)
- 23 Rear floor, front section (41 AB)
- 24 Front cross member of rear floor, front section (41 AC)
- 25 Rear floor front cross member (41 AK)
- 26 Rear side foot panel (41 AA)
- 27 Rear seat mounting transversal reinforcement (41 AJ)
- 28 Rear floor middle cross member bracket (41 AL)
- 29 Exhaust mounting support (41 AH)
- 30 Front section of rear side member (41 AG)
- 31 Front side foot panel rear closure panel (41 Q)
- 32 Inner sill panel reinforcement (41 R)
- 33 Runner housing (41 S)
- 34 Rear floor side cross member (41 T)
- 35 Rear axle mounting front housing (41 U)
- 36 Rear side door under sill panel (41 L)
- 37 Rear axle side tie-rod attachment (41 AI)
- 38 Rear floor, rear section (41 AS)
- 39 Rear end lower cross member (41 AU)
- 40 Rear floor rear cross member (41 AR)
- 41 Rear towing ring (41 AP)
- 42 Rear end lower cross member side closure panel (41 AT)
- 43 Rear shock absorber attachment (41 AQ)
- 44 Rear seat mounting bracket (41 AM)
- 45 Rear side member (41 AN)
- 46 Rear floor lengthways reinforcement (41 AO)
- 47 Rear inner sill panel (41 N)

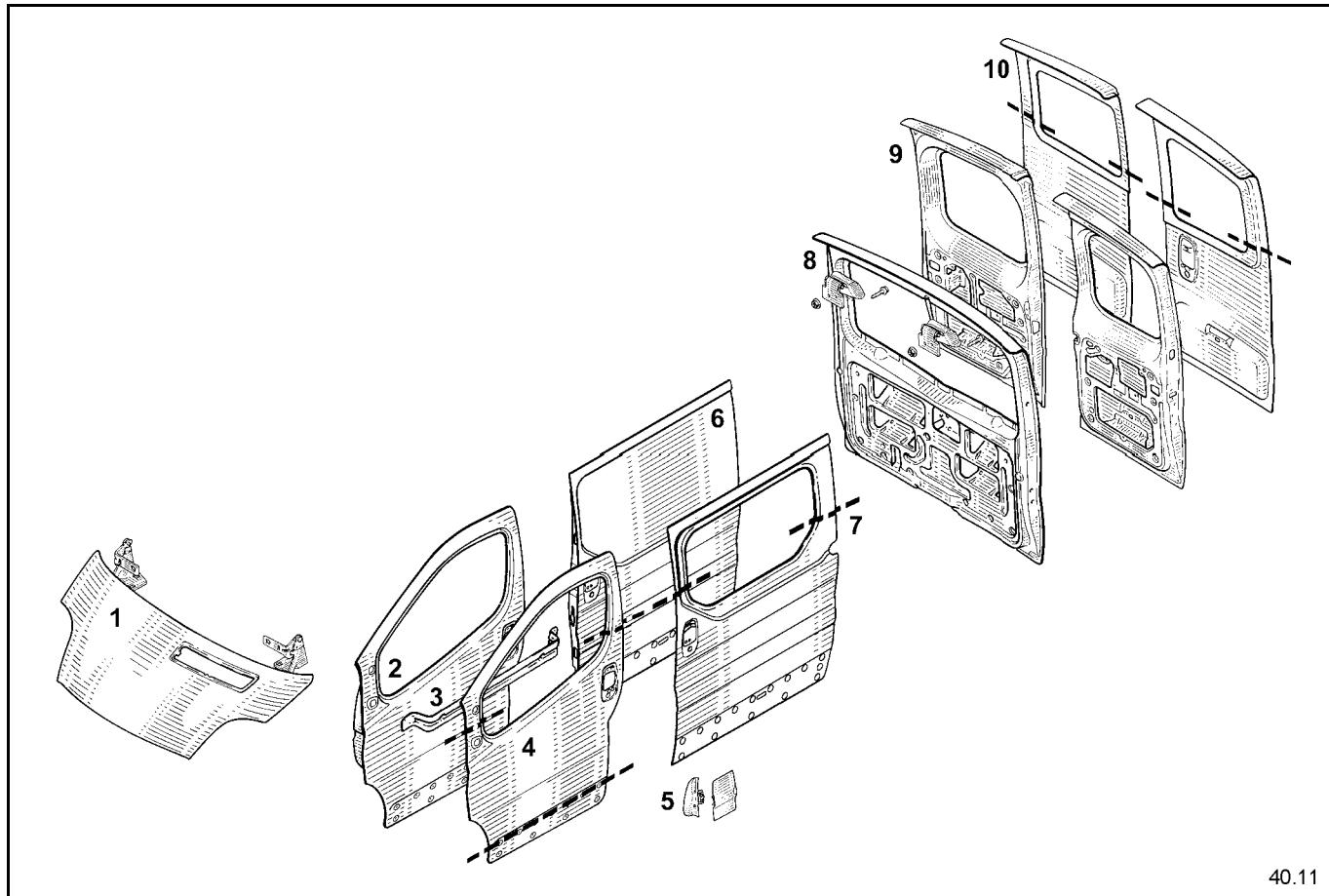
**UPPER STRUCTURE**



High Elastic Limit Steel

- 1** Front (42 C)
- 2** Front section of front right wheel arch (42 I)
- 3** Front right wheel arch (42 J)
- 4** Front section of front left wheel arch (42 I)
- 5** Front left wheel arch (42 J)
- 6** Front side mounting (42 D)
- 7** Front wing lower attachment mounting (42 B)
- 8** Scuttle side panel (42 F)
- 9** Scuttle side panel upper reinforcement (42 E)
- 10** Cab A-pillar reinforcement (43 C)
- 11** Cab A-pillar closure panel (43 B)
- 12** Front wing (42 A)
- 13** Bulkhead (42 M)
- 14** Windscreen aperture lower cross member (42 K)
- 15** Windscreen aperture lower cross member reinforcement (42 L)
- 16** Tailgate torque links support (42 G)
- 17** Bonnet release control mounting (42 H)
- 18** Windscreen pillar lining (43 D)
- 19** Front double seal support (43 A)
- 20** Windscreen pillar lining reinforcement (43 E)
- 21** Cab side (43 I)
- 22** Cab roof front cross member (45 E)
- 23** Cab C-pillar lining (43 H)
- 24** Front section of side panel lower lining (44 C)
- 25** Front section of rear side panel lining (44 A)
- 26** Rear B-pillar (44 E)
- 27** Cab roof (45 A)
- 28** Roof (45 B)
- 29** Cab roof rear cross member (45 F)
- 30** Inner rear wheel arch (44 I)
- 31** Front section of side panel upper lining (44 B)
- 32** Rear roof drip moulding lining (44 H)
- 33** Rear rail (44 G)
- 34** Rear section of rear side panel lining (44 F)
- 35** Rear side panel lining, rear section (44 D)
- 36** Rack mounting bridge piece (45 D)
- 37** Rear section of rear roof (45 C)
- 38** Roof central cross member (45 G)
- 39** Rear side panel rain channel (45 H)
- 40** Roof rear cross member lining (45 J)
- 41** Rear roof rear cross member (45 I)
- 42** Rear bumper support cross member (44 N)
- 43** Rear end panel (44 M)
- 44** Rear side panel rain channel, rear section (44 K)
- 45** C-pillar (44 J)
- 46** Gas strut ball joint (44 L)

**OPENING ELEMENTS STRUCTURE**

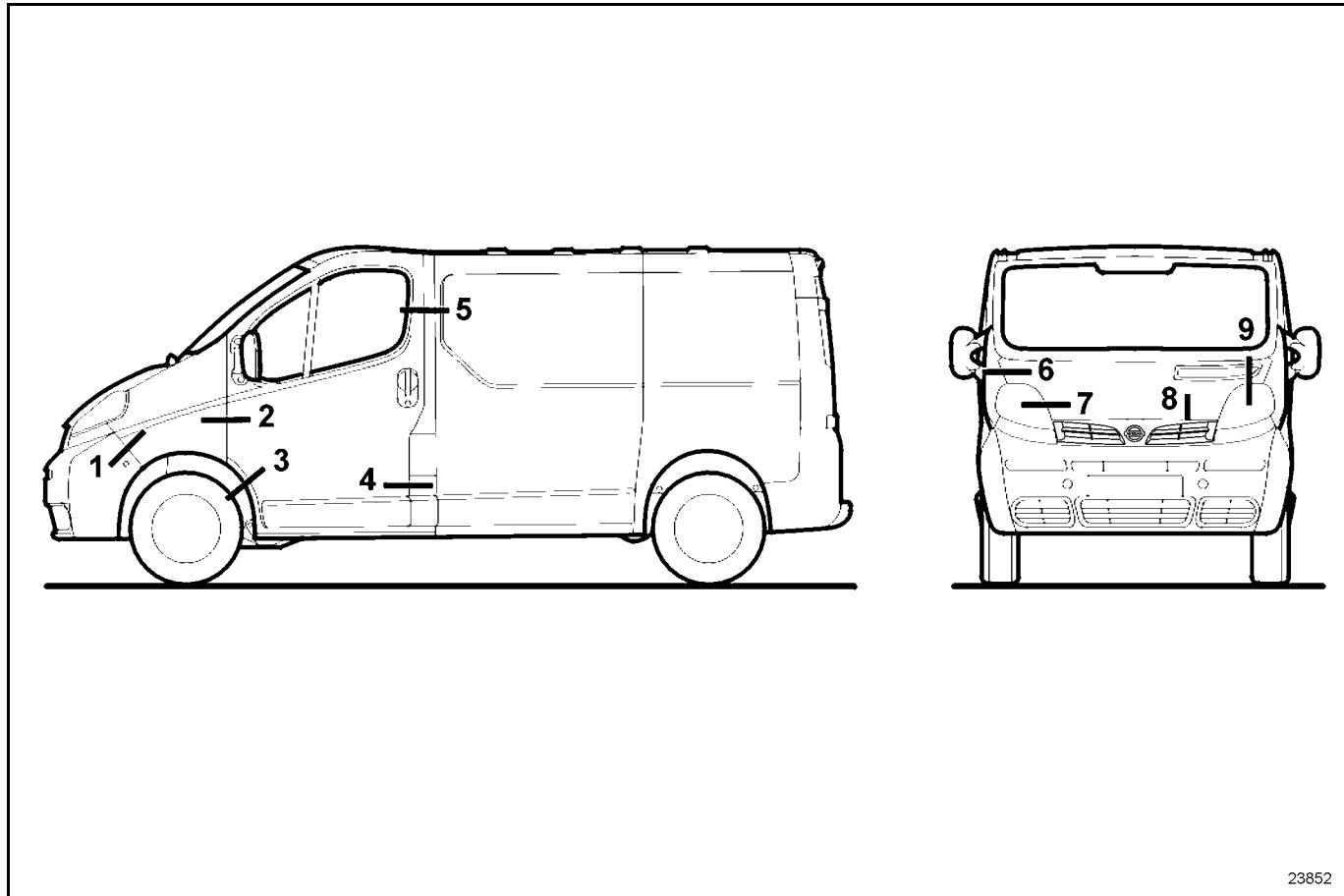


- 1 Bonnet (48 A)
- 2 Front side door (47 A)
- 3 Front side door panel stiffener (47 C)
- 4 Front side door panel (48 A)
- 5 Fuel filler flap (47 D)
- 6 Sliding side door (47 E)
- 7 Sliding side door panel (47 F)
- 8 Tailgate (48 A)
- 9 Rear loading door (48 C)
- 10 Rear loading door panel (48 D)

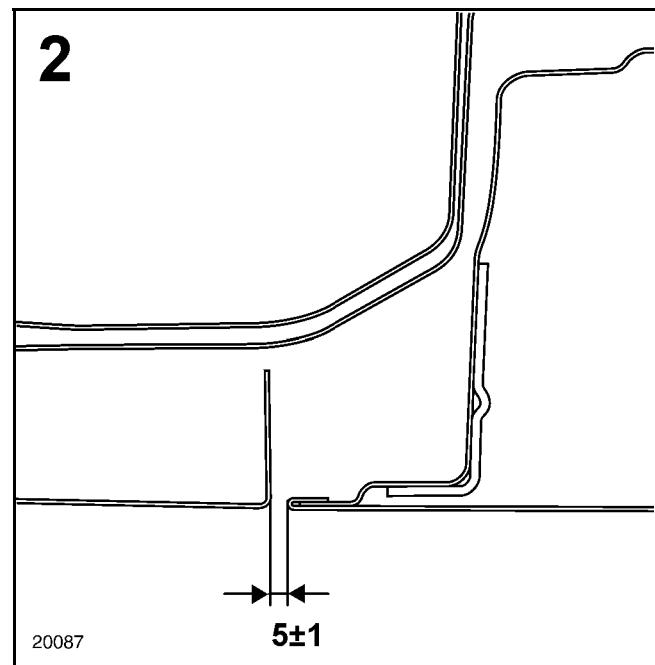
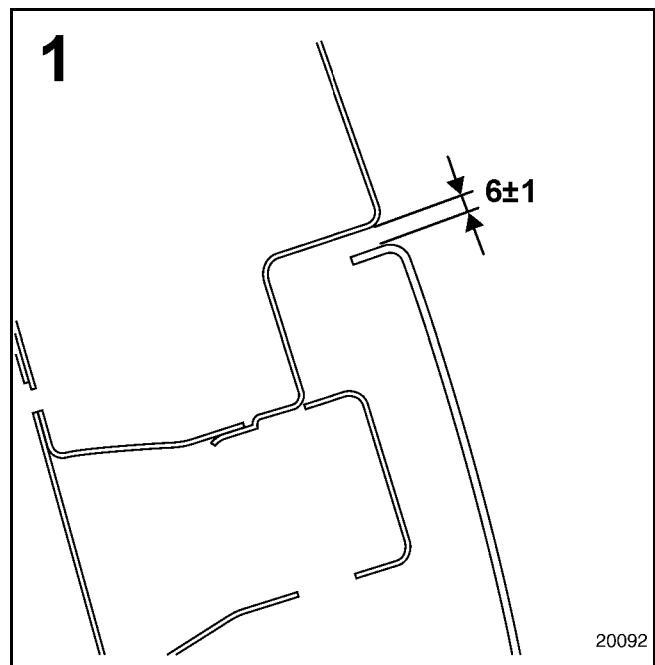
**IMPORTANT:**

The clearance values are given for information with their tolerance values.  
During adjustment, it is essential to follow certain rules in sequence:

- maintain symmetry with respect to the opposite side,
- ensure even door gaps and flushness,
- check correct operation of the opening, and water- and airtightness.

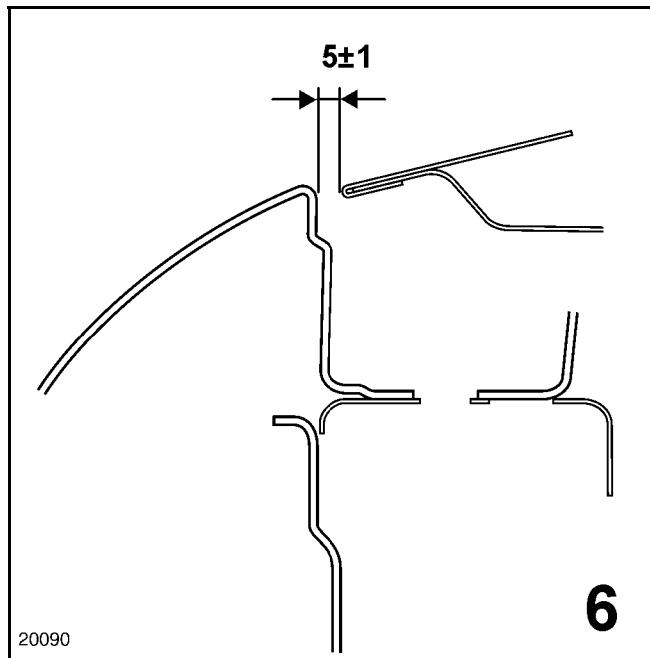
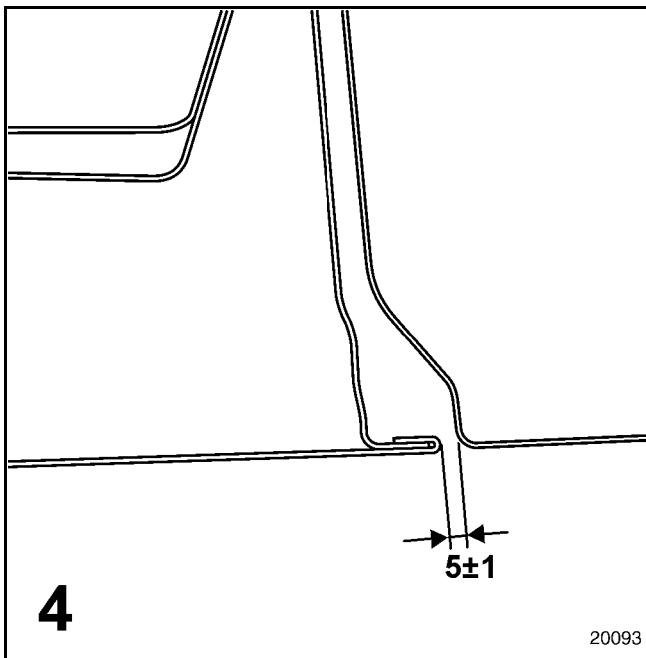
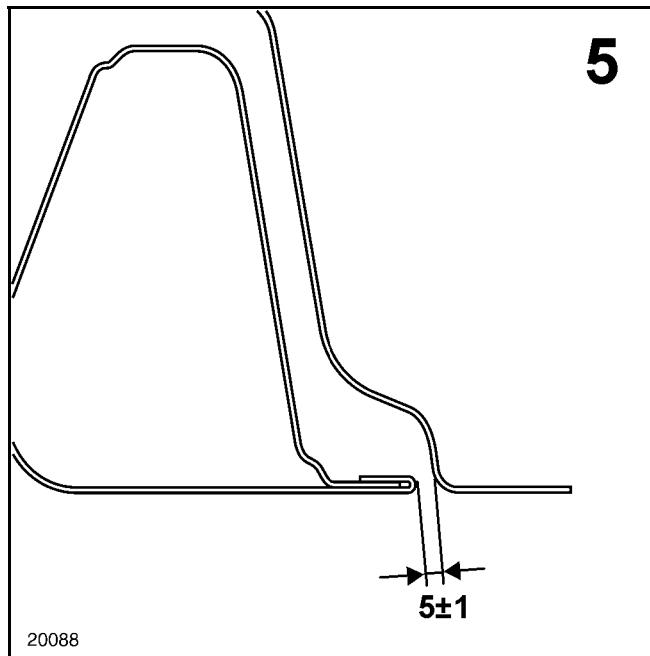
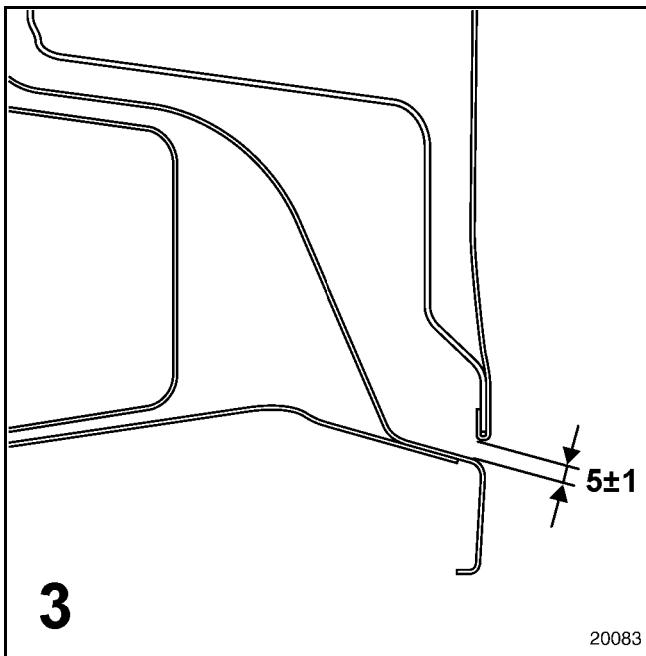


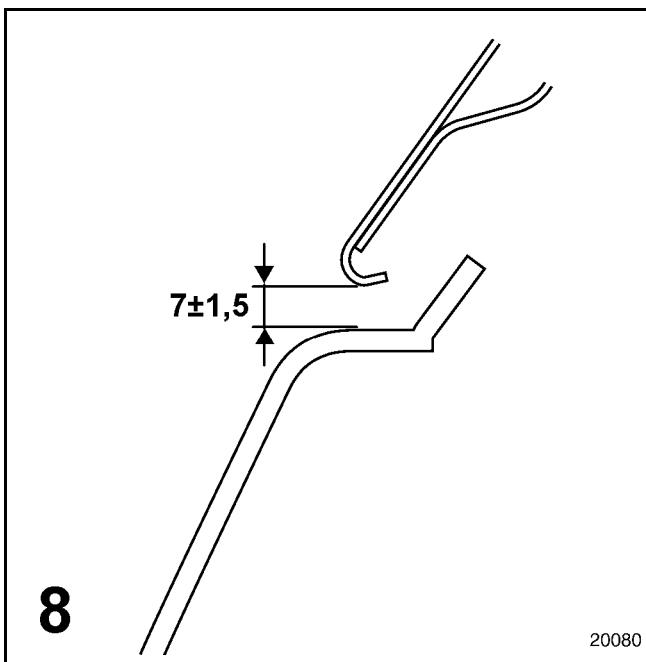
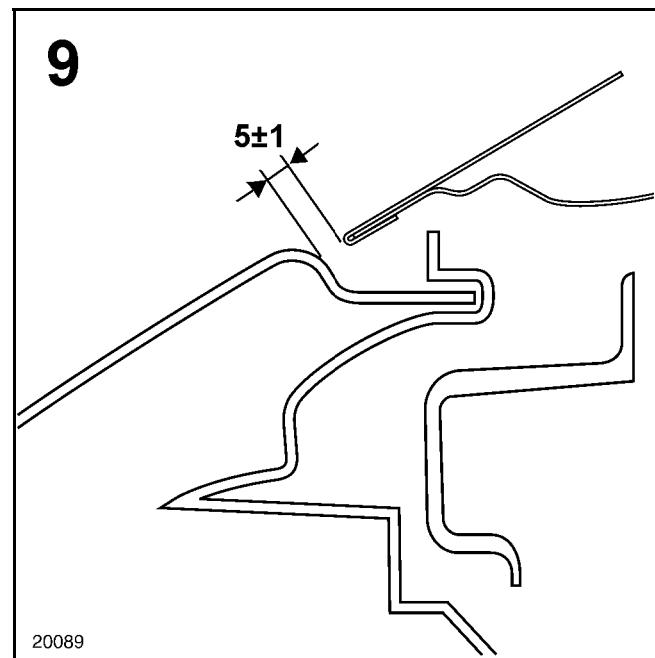
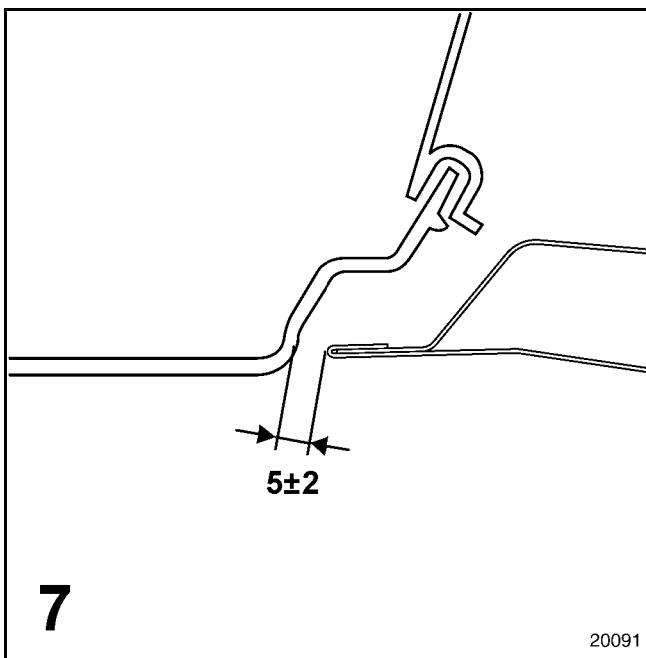
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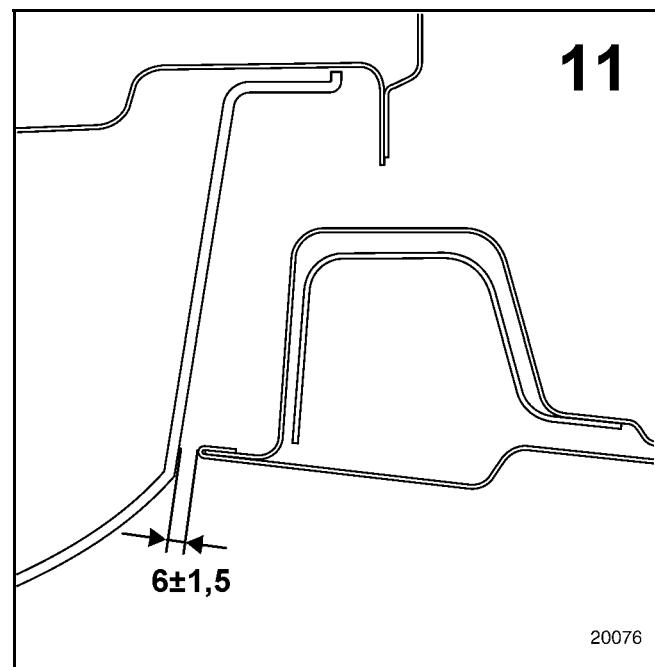
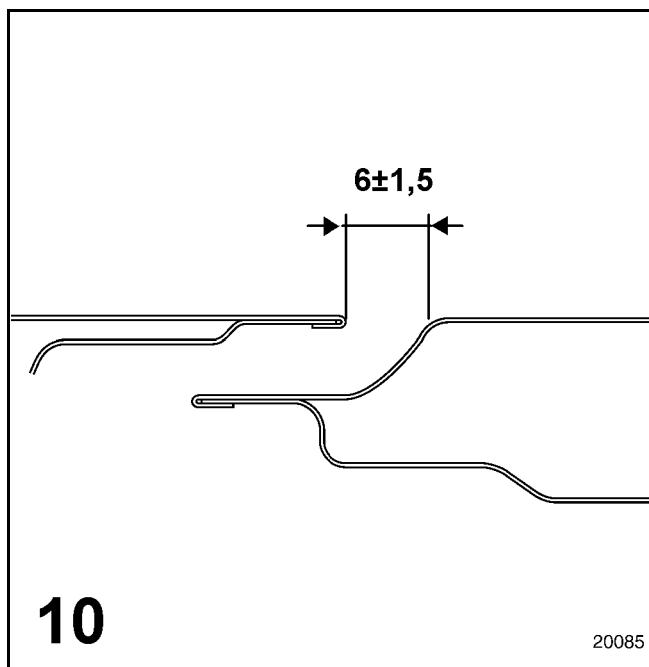
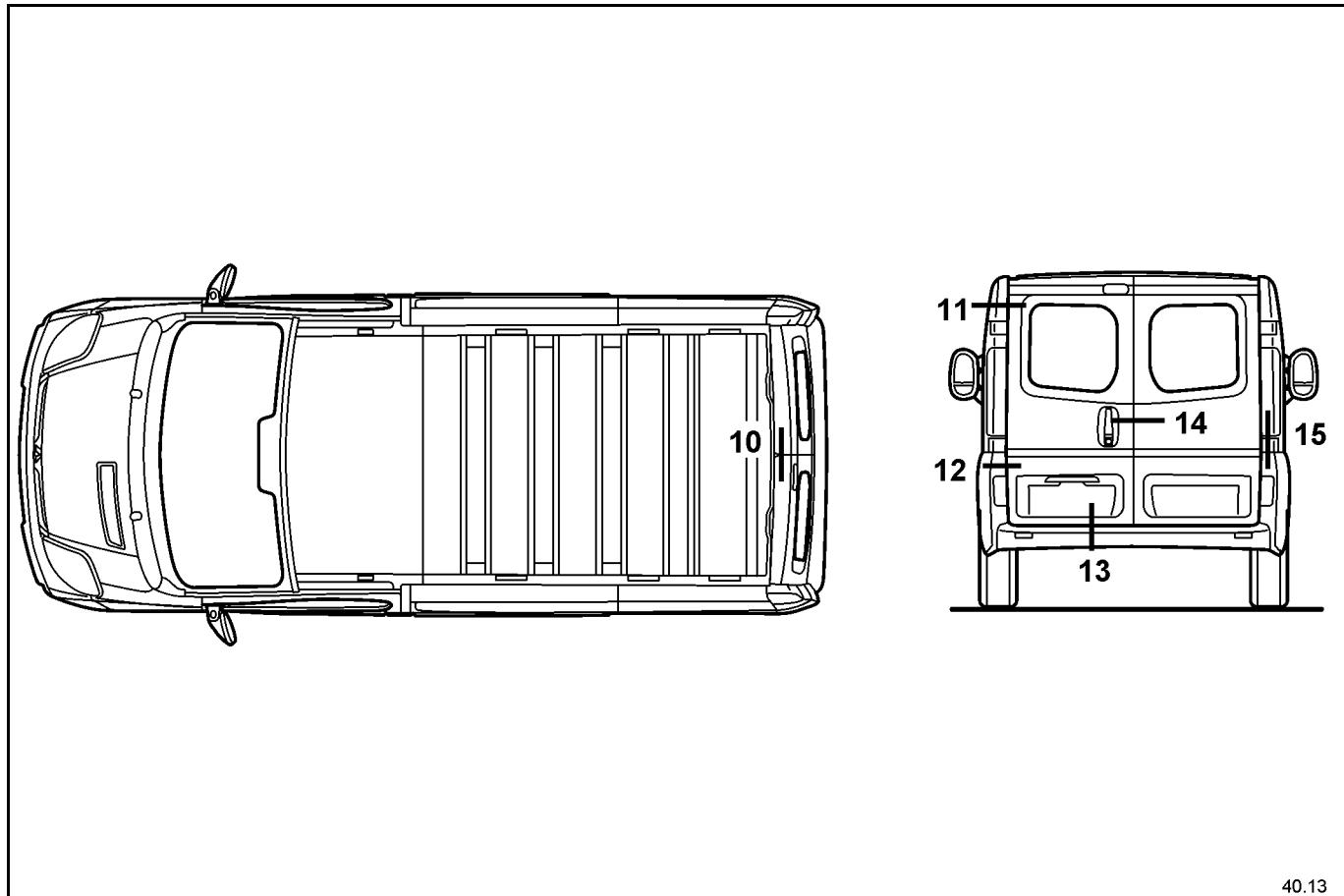


**GENERAL INFORMATION**  
**Opening clearances**

**40**

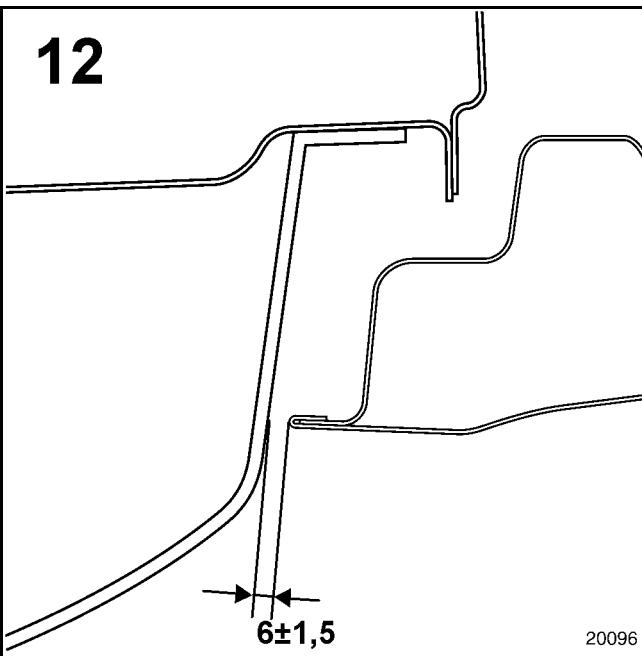




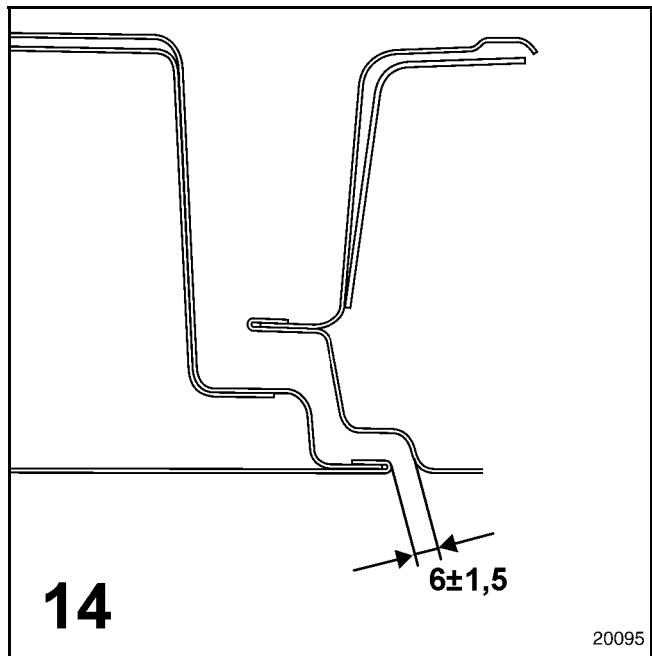


The measurement is made in the outer corner of the two doors.

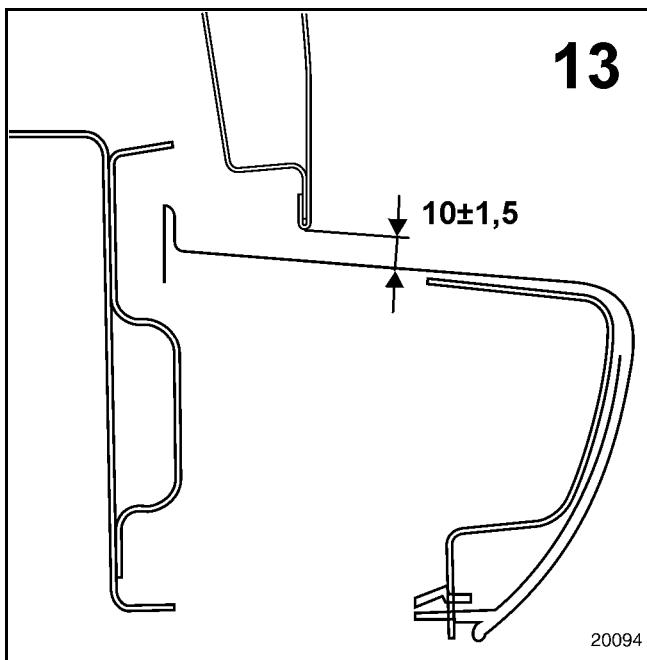
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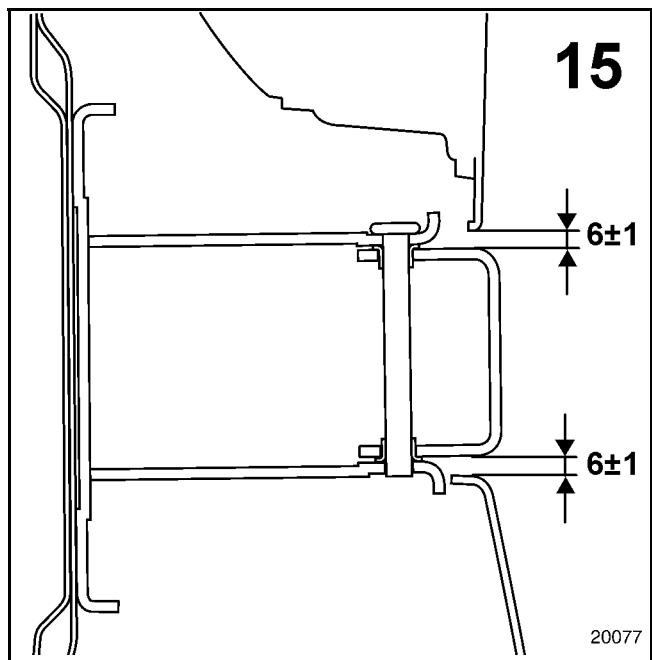
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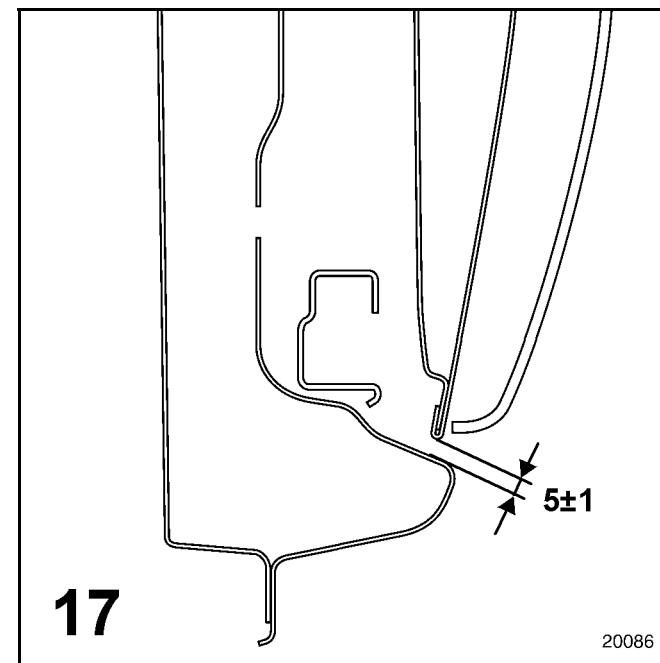
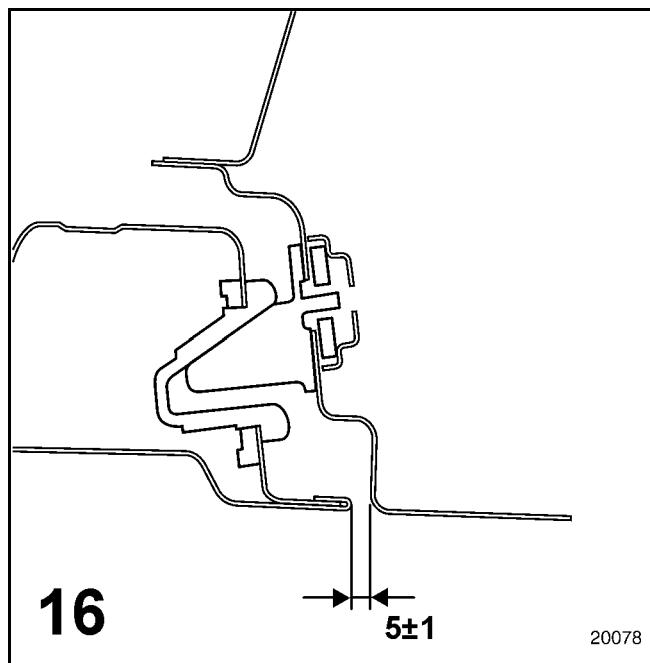
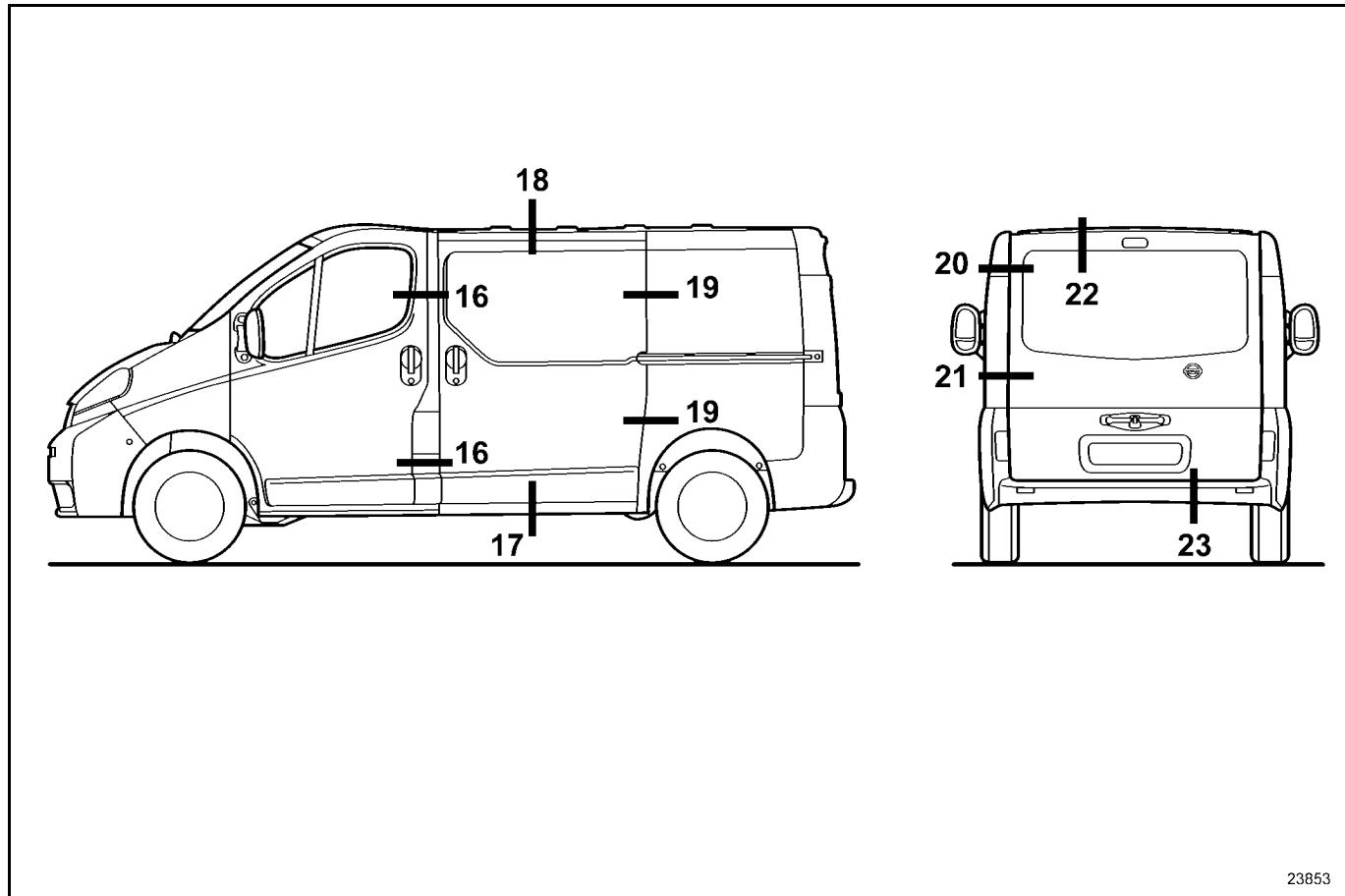


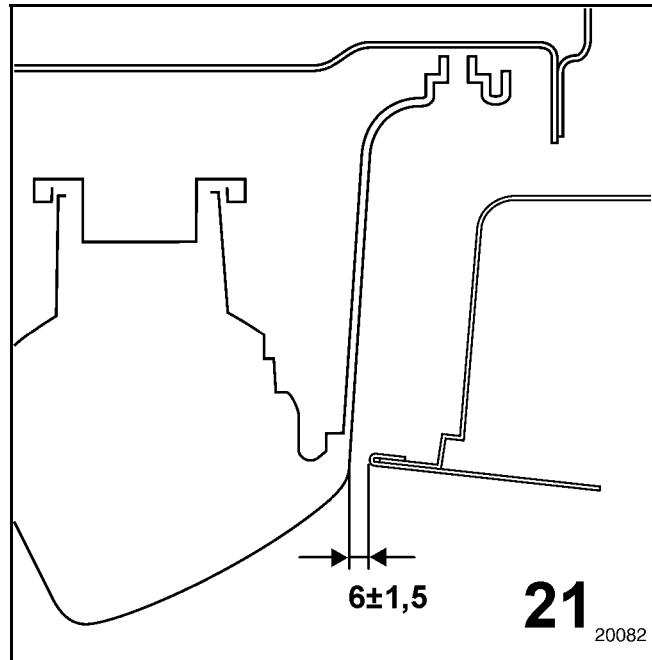
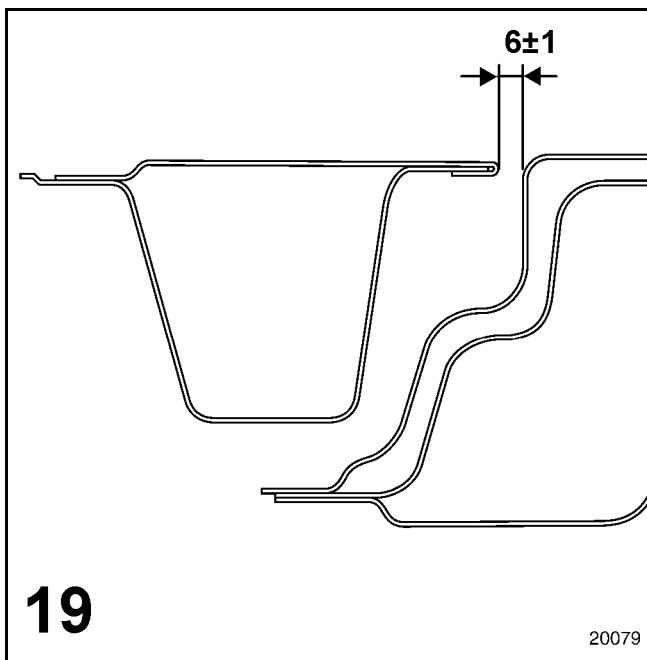
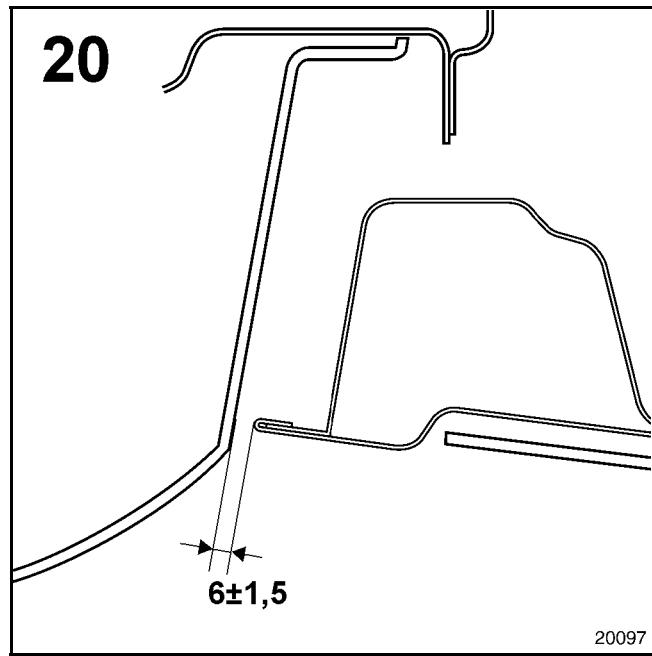
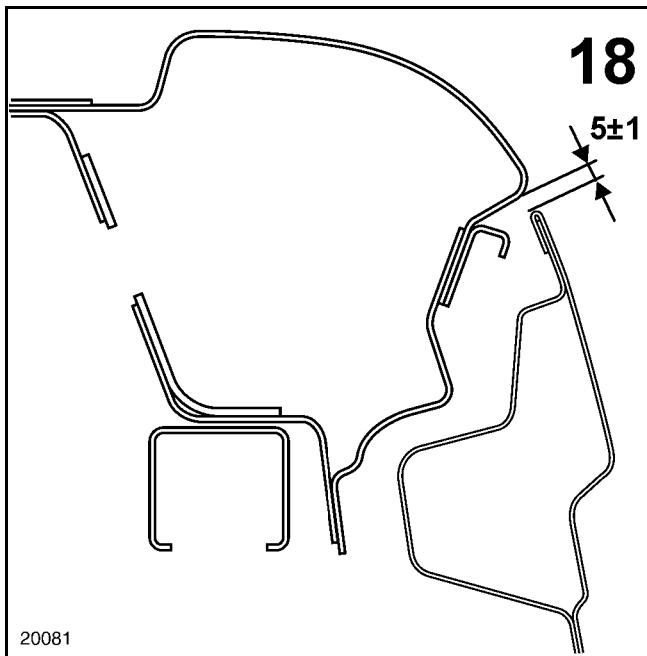
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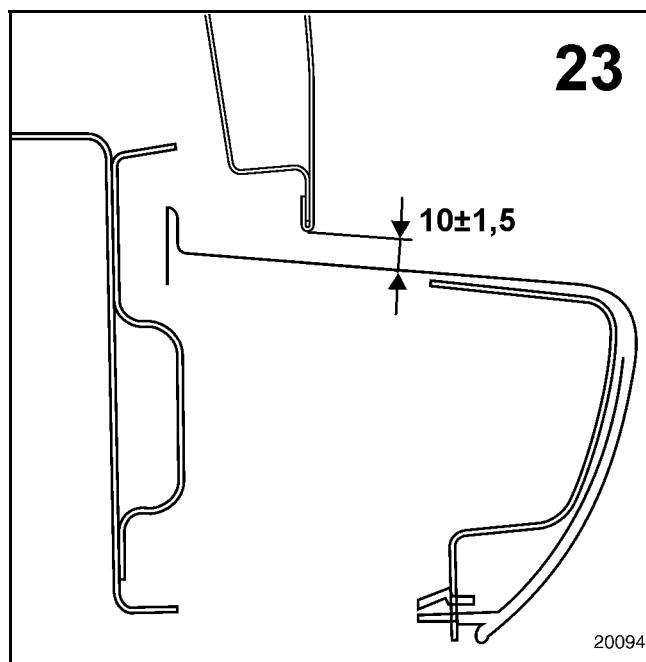
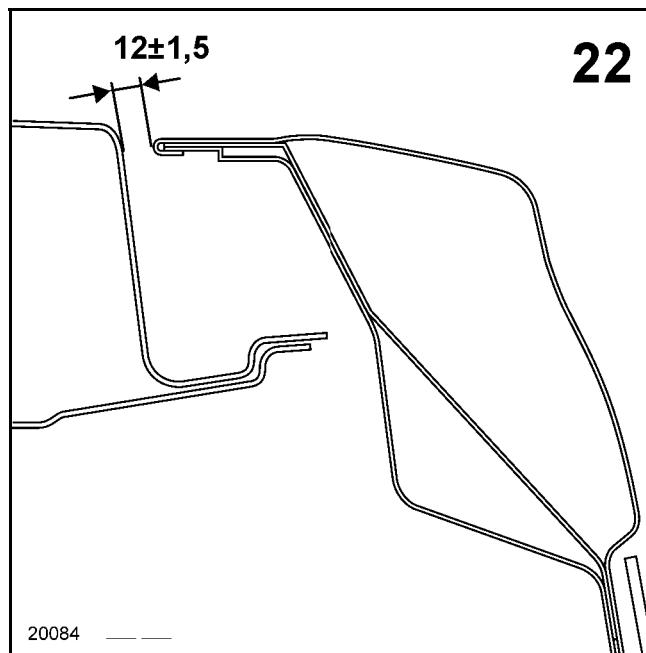


**15**









Before carrying out repairs to the bodywork of a car, even if the damage seems slight, it is necessary to carry out a series of tests:

### VISUAL INSPECTION

This inspection involves examining the sub-frame of the vehicle where mechanical components are mounted and in the crumple zones or vulnerable areas in order to detect creases where materials have been damaged.

### TRAMMEL GAUGE CHECK

The visual inspection may be completed using a trammel gauge which measures certain deformations by symmetrical comparisons (for more detail on each point to check, see the repair bench paragraph below).

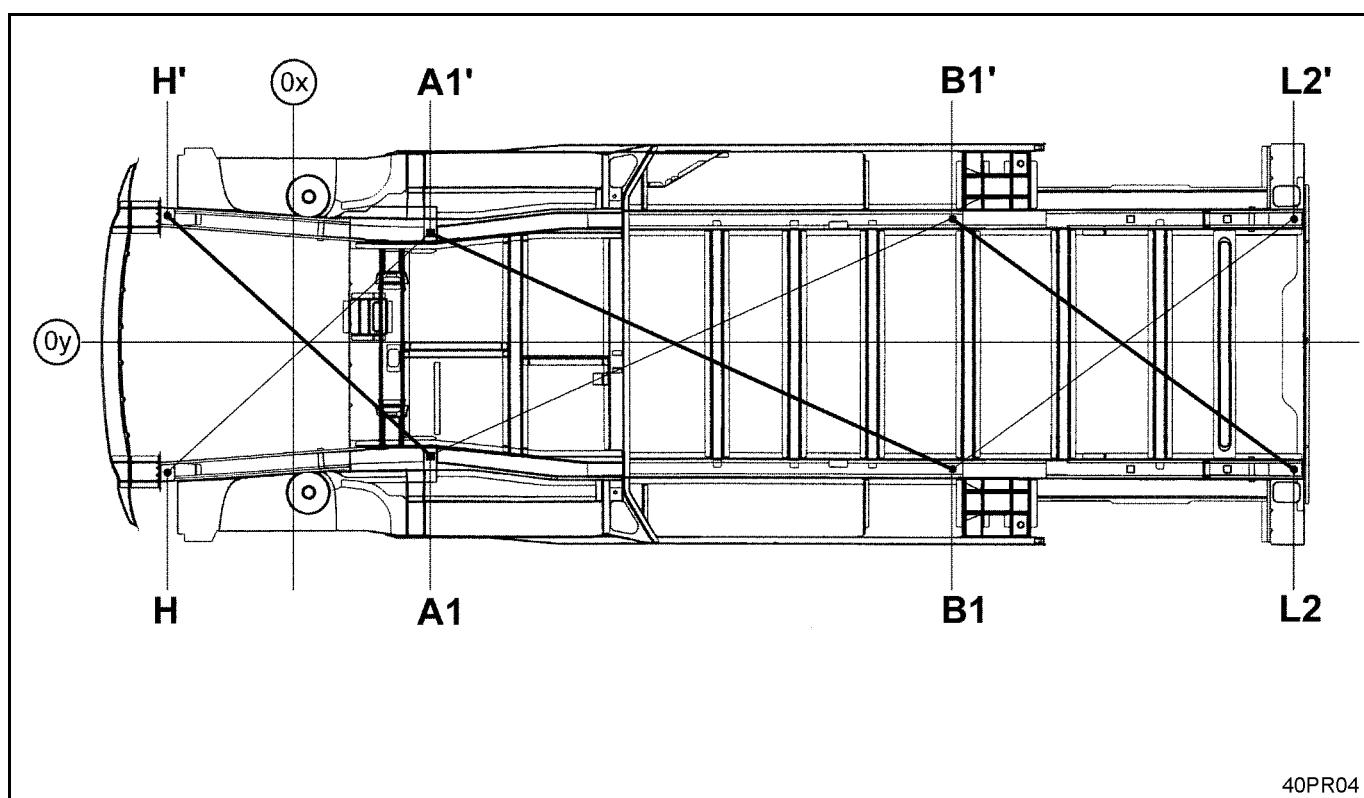
### CHECKING THE ANGLES OF THE RUNNING GEAR

This is the only check which determines whether the impact suffered by the vehicle has or has not affected its road holding.

#### IMPORTANT:

In borderline cases, it is essential not to neglect checking the axle assembly components which may also have been subject to deformation.

In principle, no welded component in the body shell may be replaced without ensuring that the sub-frame was not affected by the impact.



40PR04

#### Chronological order of checks:

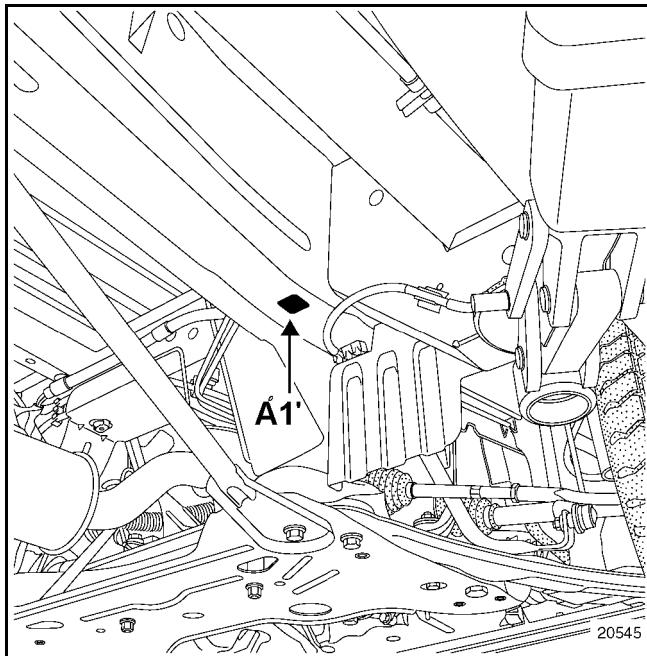
##### *FRONT impact:*

- 1:  $B1 - A1' = B1' - A1$
- 2:  $A1' - H = A1 - H'$

##### *REAR impact:*

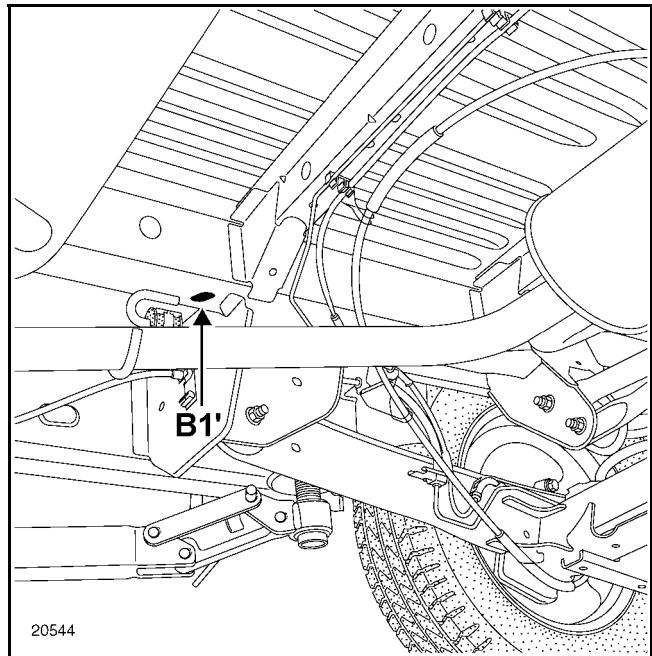
- 1:  $A1' - B1 = A1 - B1'$
- 2:  $B1' - L2 = B1 - L2'$

**GAUGE POINTS**



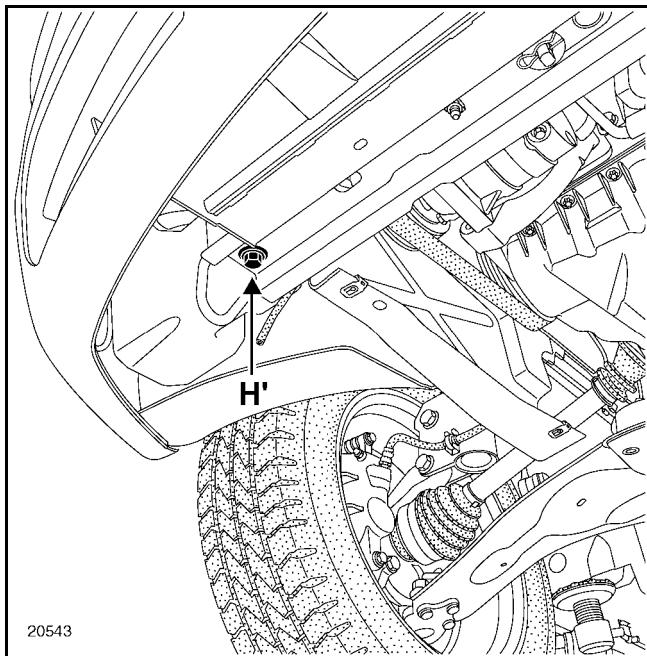
**Point A1'**

Front body reference. Start reference point for checking points (H) and (H').



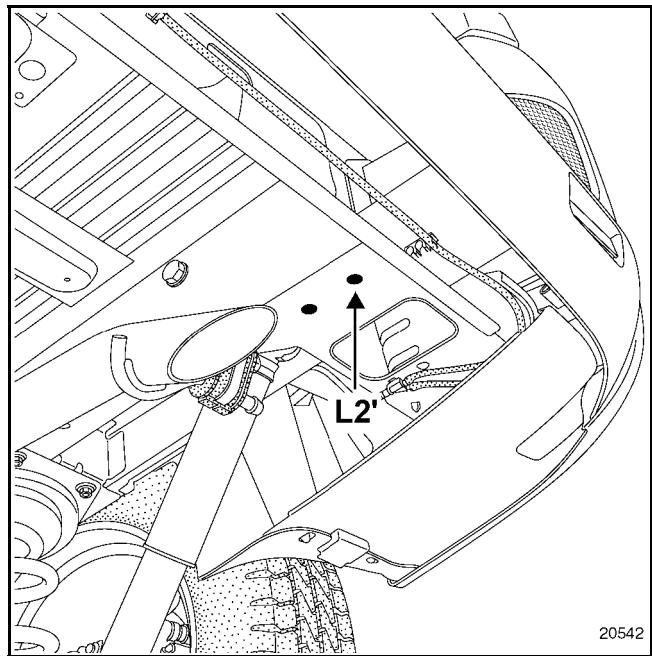
**Point B1'**

Rear axle assembly leader pin. Start reference point for checking points (L2) and (L2').



**Point H'**

Front end of front side member.



**Point L2'**

Rear end of rear side member.

**REMINDER**

The underbody holes are fitted with plastic blanking covers to ensure that all cavities are watertight.

Some of these blanking covers have to be removed during testing.

If any of the blanking covers are damaged, they must be replaced in order to maintain the vehicle's anti-corrosion warranty.

## GENERAL INFORMATION

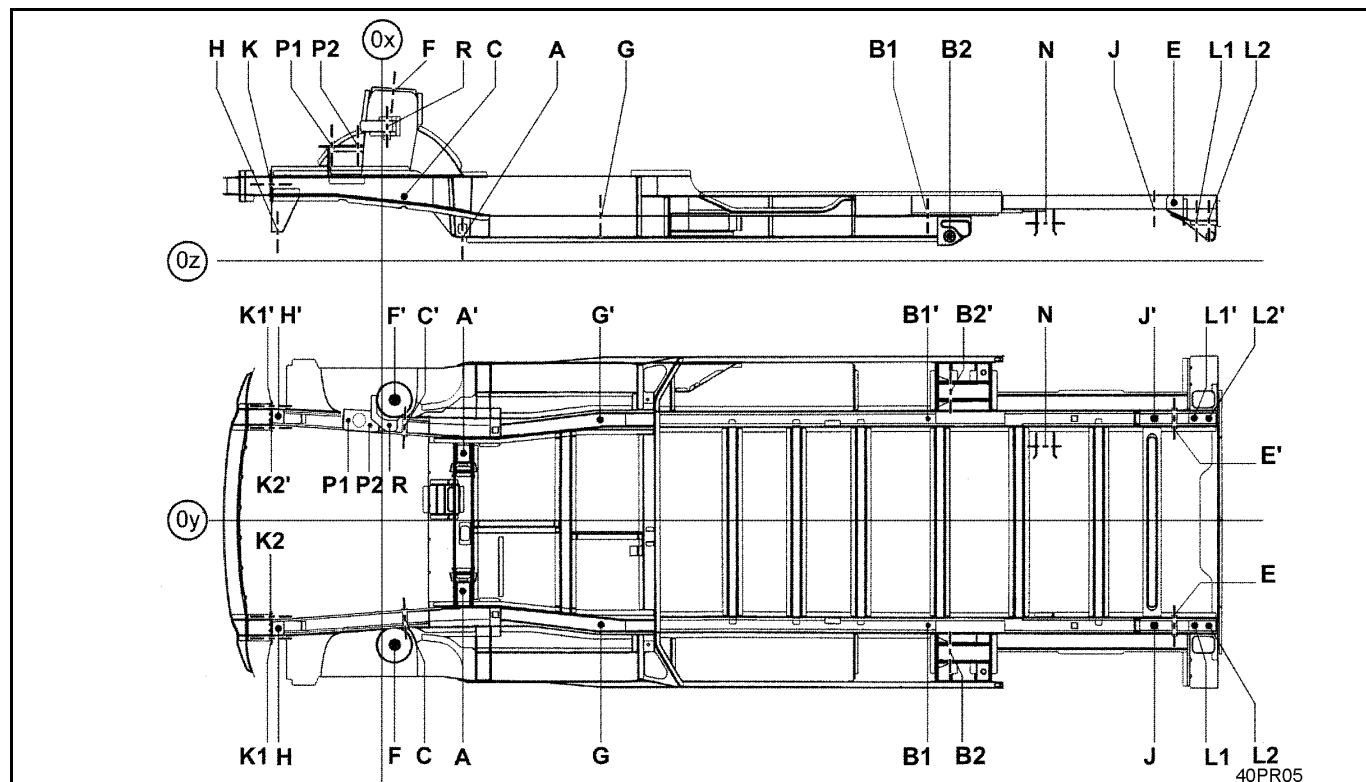
### Sub-frame dimensions

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|           | DESCRIPTION  | DIMENSI        | DIMENSI      | DIMENSI      | DIAMETER               | ANGLE%                      |
|-----------|--|----------------|--------------|--------------|------------------------|-----------------------------|
| <b>A</b>  | Front sub-frame rear mounting G  | <b>390.2</b>   | <b>-337</b>  | <b>70</b>    | <b>Ø24.5; M12</b>      | <b>0</b>                    |
| <b>A'</b> | Front sub-frame rear mounting D  | <b>390.2</b>   | <b>337</b>   | <b>70</b>    | <b>Ø24.5 x 30; M12</b> | <b>0</b>                    |
| <b>B1</b> | Rear axle leader pin   | <b>2321.2*</b> | <b>516</b>   | <b>176</b>   | <b>Ø20.5</b>           | <b>0</b>                    |
| <b>B2</b> | Rear axle assembly front mounting  | <b>2441*</b>   | <b>654</b>   | <b>70</b>    | <b>Ø12.5</b>           | <b>0</b>                    |
| <b>C</b>  | Front sub-frame front mounting   | <b>91.6</b>    | <b>432.8</b> | <b>275</b>   | <b>Ø18.5</b>           | <b>4°</b>                   |
| <b>E</b>  | Rear shock absorber upper mounting   | <b>3575*</b>   | <b>465</b>   | <b>235</b>   | <b>Ø14.5</b>           | <b>90°</b>                  |
| <b>F</b>  | Front shock absorber upper mounting (on the lowest section of the fallen edge) | <b>42.7</b>    | <b>614</b>   | <b>790.3</b> | <b>Ø42</b>             | <b>x = 3°30'<br/>y = 3°</b> |
| <b>G</b>  | Front side member rear leader pin  | <b>1240</b>    | <b>516</b>   | <b>174</b>   | <b>Ø14.5; M12</b>      | <b>0</b>                    |
| <b>H</b>  | Front side member front leader pin   | <b>543.4</b>   | <b>528.4</b> | <b>96.3</b>  | <b>Ø12.2; M10</b>      | <b>0</b>                    |
| <b>J</b>  | Rear side member rear leader pin   | <b>3466*</b>   | <b>516</b>   | <b>203</b>   | <b>Ø30 x 30</b>        | <b>0</b>                    |
| <b>K1</b> | Front end cross member (front panel mounting)                                  | <b>570</b>     | <b>590.4</b> | <b>331.6</b> | <b>ØM8</b>             | <b>90°</b>                  |
| <b>K2</b> | Front end cross member (front panel mounting)                                  | <b>570</b>     | <b>466.4</b> | <b>331.6</b> | <b>ØM8</b>             | <b>90°</b>                  |
| <b>L1</b> | Rear end cross member (end panel)  | <b>3685*</b>   | <b>516</b>   | <b>144</b>   | <b>Ø14.5; M10</b>      | <b>0</b>                    |
| <b>L2</b> | Rear end cross member (end panel)  | <b>3740.5*</b> | <b>516</b>   | <b>144</b>   | <b>Ø14.5; M10</b>      | <b>0</b>                    |
| <b>P1</b> | Engine mounting  | <b>301.4</b>   | <b>535</b>   | <b>534.6</b> | <b>Ø12.2; M10</b>      | <b>0</b>                    |
| <b>P2</b> | Engine mounting  | <b>146.4</b>   | <b>513</b>   | <b>534.6</b> | <b>Ø12.2; M10</b>      | <b>0</b>                    |
| <b>R</b>  | Additional engine mounting (tie-rod)   | <b>22.9</b>    | <b>458.1</b> | <b>631.5</b> | <b>Ø12.2</b>           | <b>0</b>                    |
| <b>N</b>  | Additional rear axle mounting (side tie-rod)                                   | <b>2933*</b>   | <b>455</b>   | <b>59</b>    | <b>Ø12.2</b>           | <b>90°</b>                  |

## **A and B = vehicle trim-setting reference**

\* Add 400 mm for the L2 version

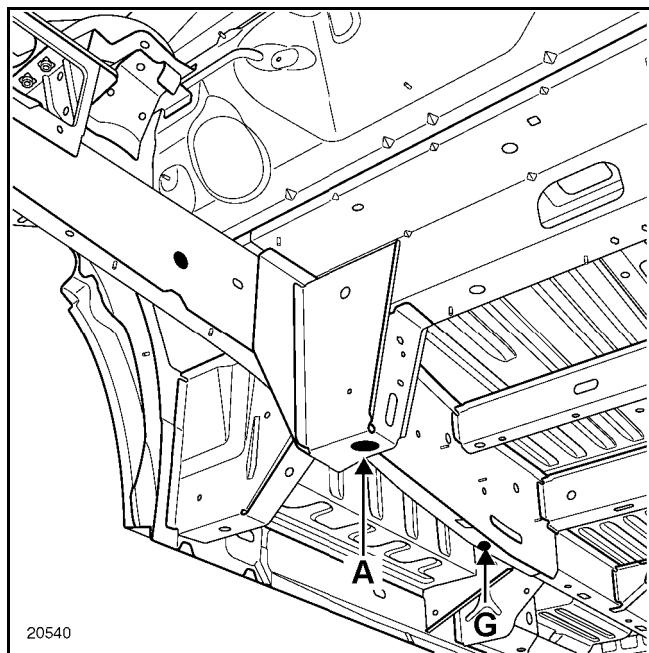


### POSITIONING REFERENCE POINTS

#### 1 - PRINCIPLE REFERENCE POINTS FOR SETTING VEHICLE TRIM LEVEL

##### A - FRONT SUB-FRAME REAR MOUNTING

This is the main front reference point for setting the vehicle trim level.

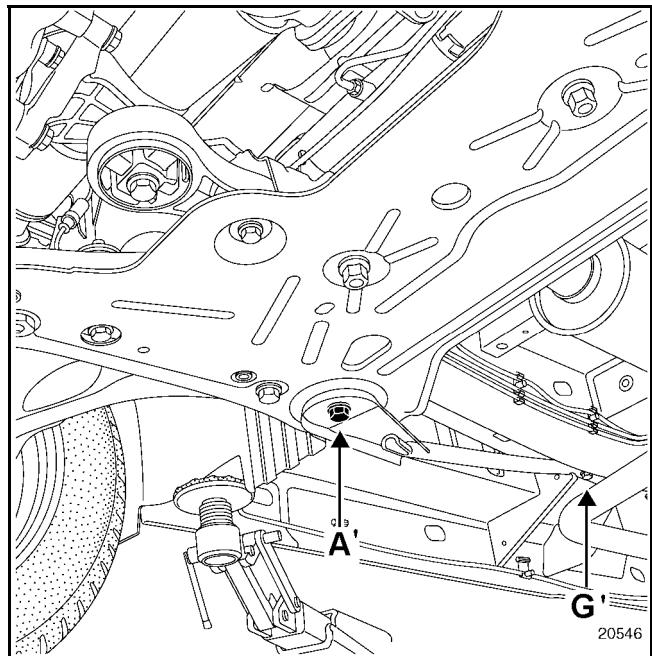


##### 1 - Front mechanical components removed

###### NOTE:

on the left-hand side the hole is round, on the right-hand side it is a slot.

If replacing the sub-frame rear support, this reference point is replaced temporarily by point (G), located on the rear part of the front side member, point (A) thus being used for positioning the replaced part.



##### 2 - Front mechanical components in place

The bracket covers the sub-frame mounting bolt.

###### Two possible cases can arise:

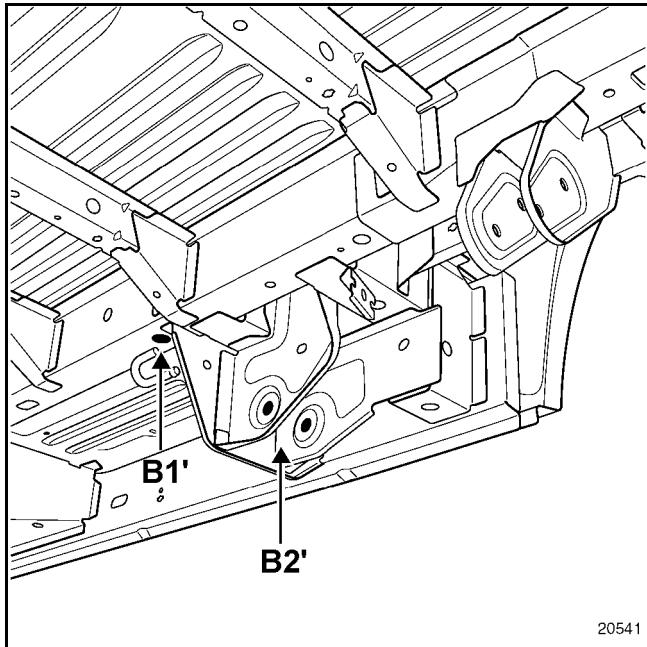
- 1 If the rear of the vehicle is being rebuilt, these two points alone may be used to align and support the front of the vehicle.
- 2 For a light frontal impact not requiring removal of the front axle sub-frame.

###### IMPORTANT:

If in doubt about the damage to one of the main reference points (A or B), it is nevertheless advisable to use the two additional points located in the area not affected by the impact to confirm the trim level.

### B - REAR AXLE FRONT MOUNTING

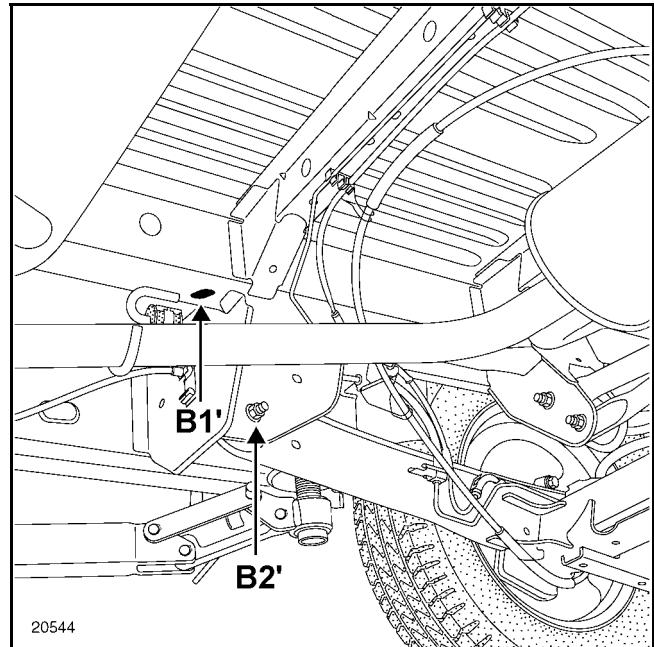
This is the main rear reference point for setting the trim level.



#### 1 - Rear mechanical components removed

The bracket is bound into the rear axle mounting fork (B2') or centred in the axle pilot hole (B1').

If the complete rear side member is being replaced, this reference point is replaced by point (G), located on the rear section of the front side member, point (B) being used to position the replaced component.



#### 2 - Rear mechanical components in place

The bracket is supported under the rear side member, centred in the axle pilot hole and covers the rear axle tie-rod mounting bolt.

### 2. ADDITIONAL REFERENCE POINTS FOR SETTING VEHICLE TRIM LEVEL

These are the provisional reference points which are used when the principle reference points have been affected by the impact.

These points allow additional vehicle support to the main reference point on the impact side, but allow only a roughly accurate vehicle alignment.

#### IMPORTANT:

These reference points should only be used in the cases mentioned above. They are not required when both the main reference points (points A and B) are correct.

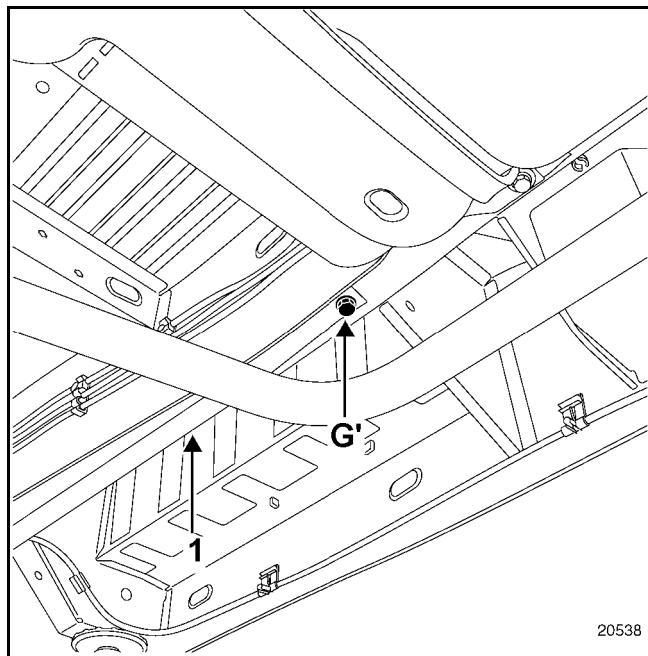
This additional reference function may also be fulfilled by the front side member end check points for a rear impact and vice versa.

#### G - REAR END OF FRONT SIDE MEMBER

This point is also used as a positioning reference when replacing a rear section of the front side member.

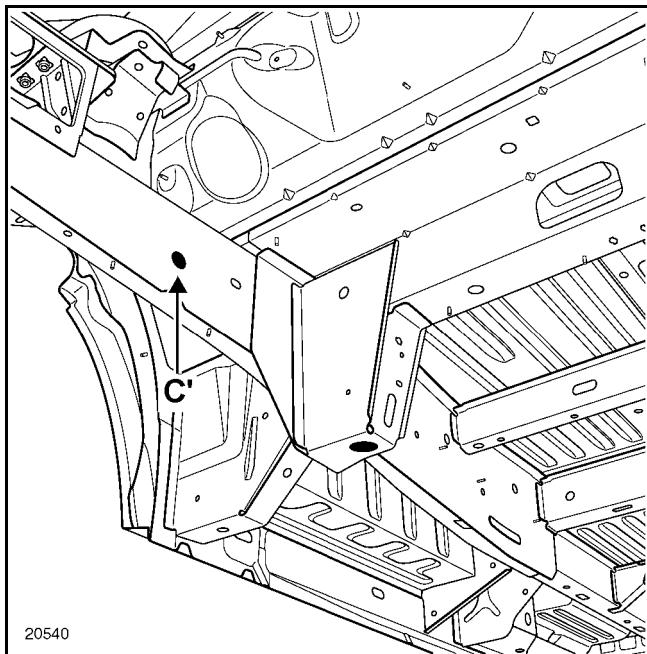
#### NOTE:

The tie-rod (1) must be removed to access the hole.



### 3. REFERENCE POINTS FOR POSITIONING REPLACED PARTS

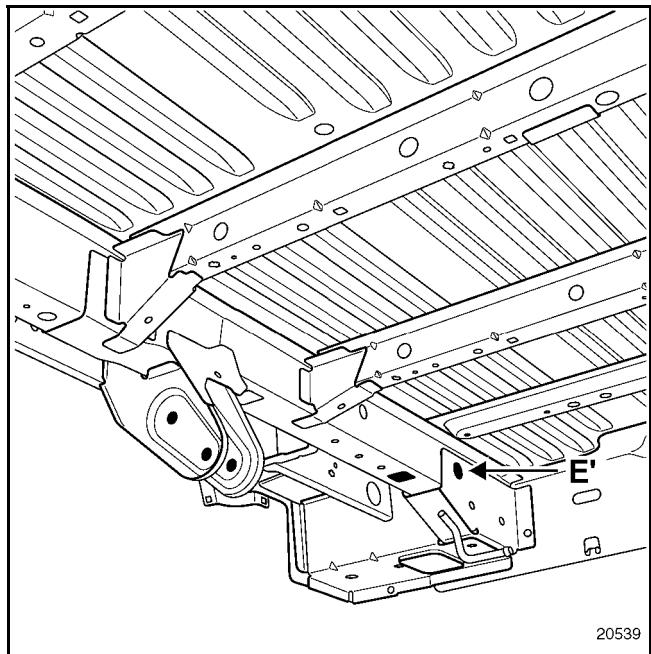
#### C - FRONT SUB-FRAME FRONT MOUNTING



The bracket is centred and attached inside the sub-frame mounting hole.

Use it when replacing part of or a complete front side member.

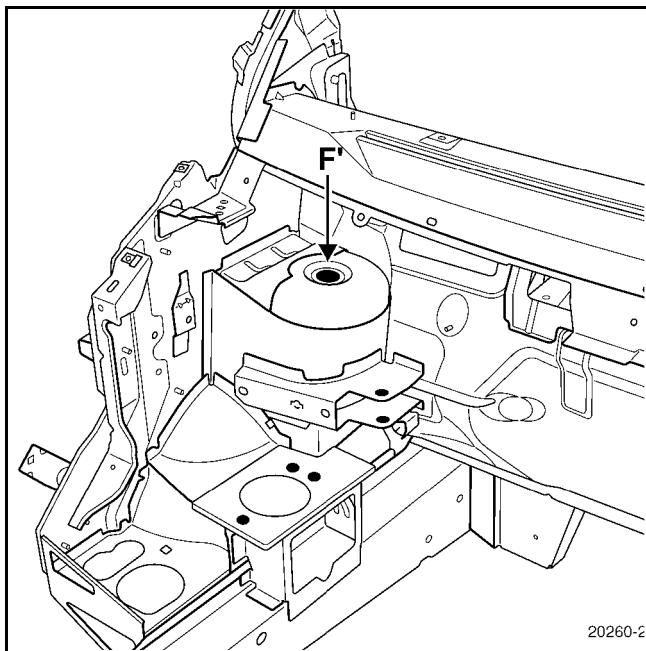
#### E - REAR SHOCK ABSORBER MOUNTING



The bracket is centred and attached inside the shock absorber shaft.

Use it when replacing part of or a complete front side member.

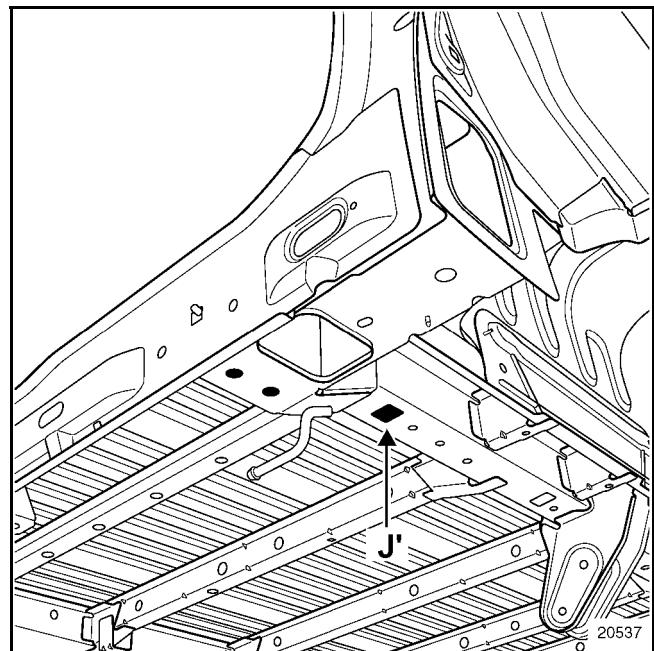
### F - FRONT SHOCK ABSORBER UPPER MOUNTING



The bracket rests under the shock absorber cup and is centred in the shock absorber mounting hole.

Use it when replacing the wheel arch.

### J - REAR SIDE MEMBER END

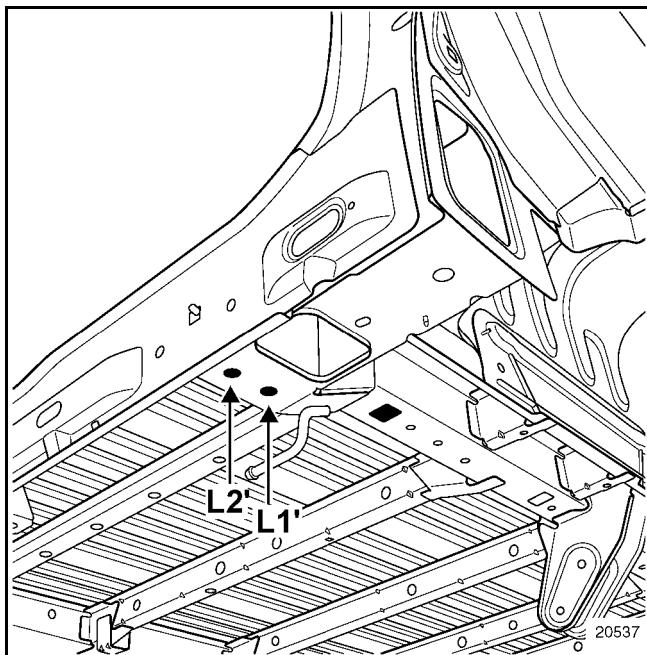


The bracket rests under the side member and is centred in the pilot hole.

It can only be used to realign the side member when the mechanical components are in place, but the shock absorber has to be removed for this operation.

It is also used with the mechanical parts removed, in the same conditions, to replace the side member.

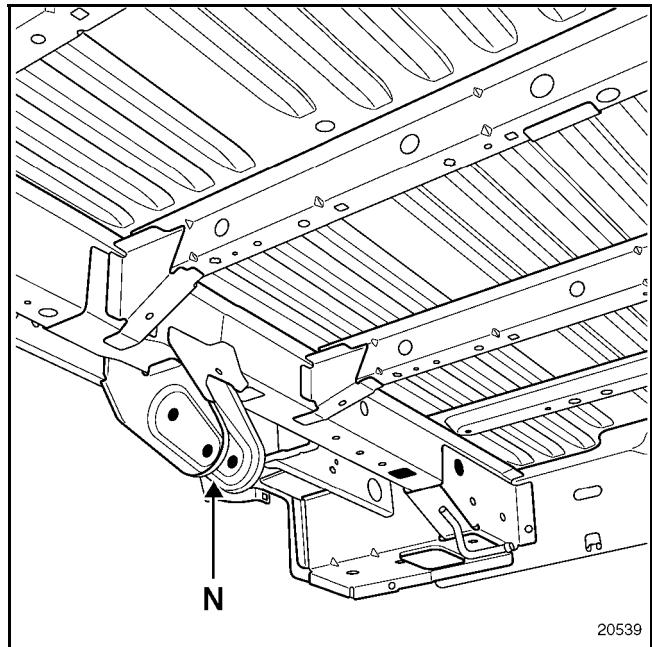
### L - REAR END CROSS MEMBER



The bracket rests under the shock absorber mounting unit and is then centred in the towing hitch mounting holes.

It is used for replacing the rear end panel assembly, with or without mechanical components.

### N - REAR AXLE SIDE TIE-ROD MOUNTING

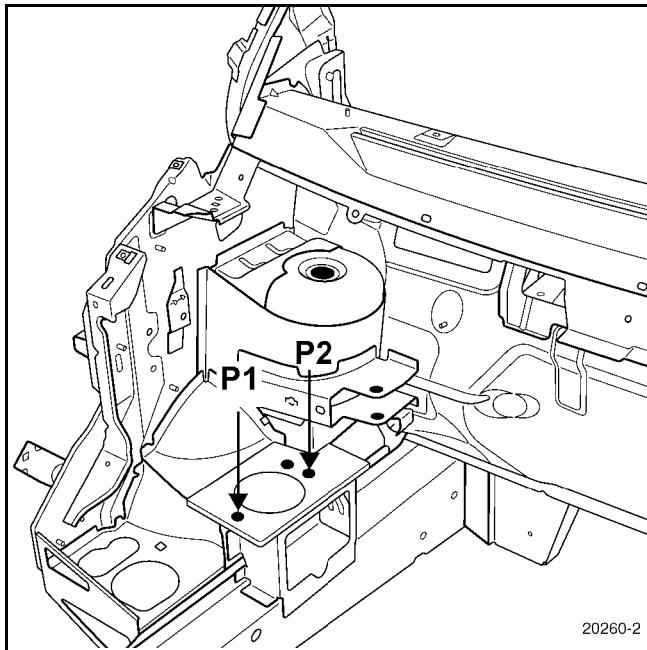


The bracket is centred in the rear axle side tie-rod shaft.

It is used when replacing:

- a partial or complete front side member,
- the tie-rod attachment.

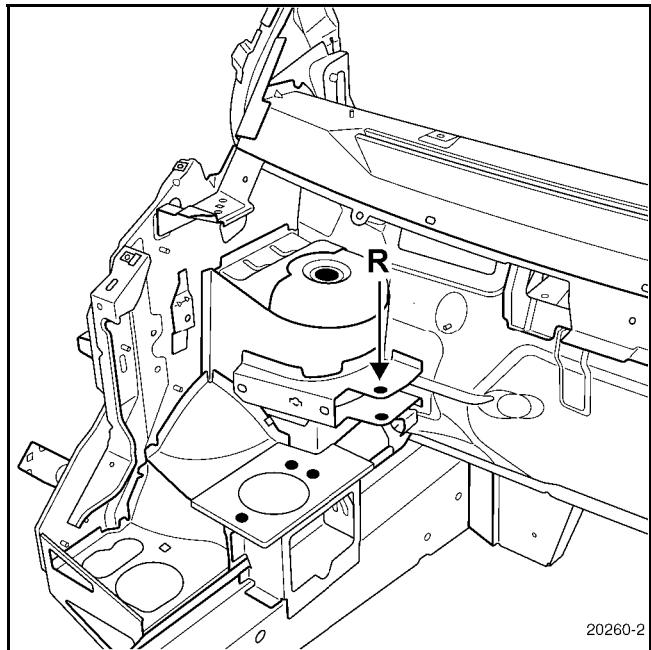
### P - ENGINE MOUNTING



The bracket is positioned from above the engine mounting and is centred in the mounting holes of the pad.

It should be used with the mechanical components removed to replace a front half unit.

### R - ENGINE TIE-ROD MOUNTING



The bracket is placed in the tie-rod fork, and is fixed in place of the latter.

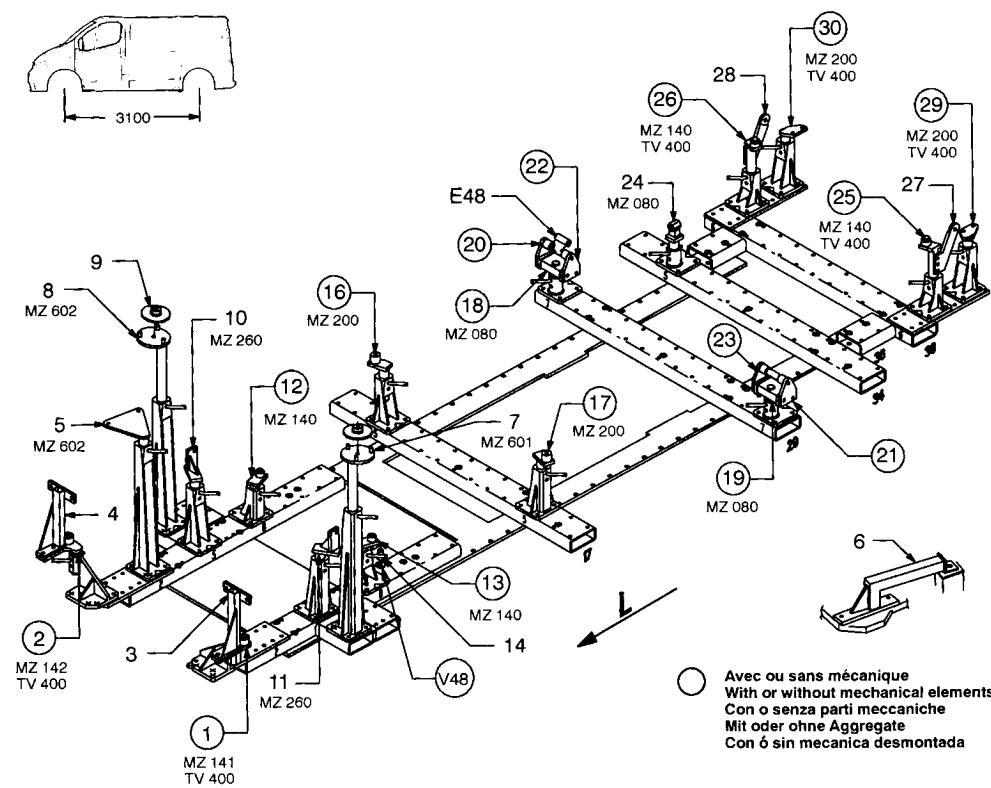
It is used for setting up the geometrical reference for the tie-rod fork.

# GENERAL INFORMATION

## Rebuilding of sub-frame

40

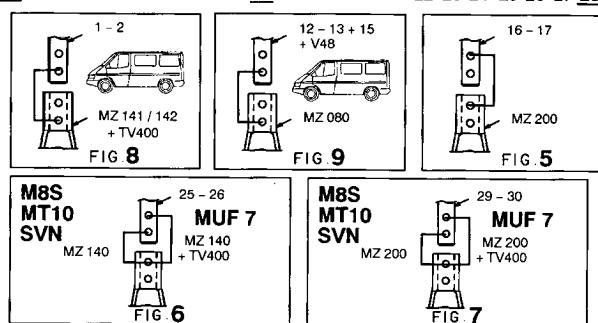
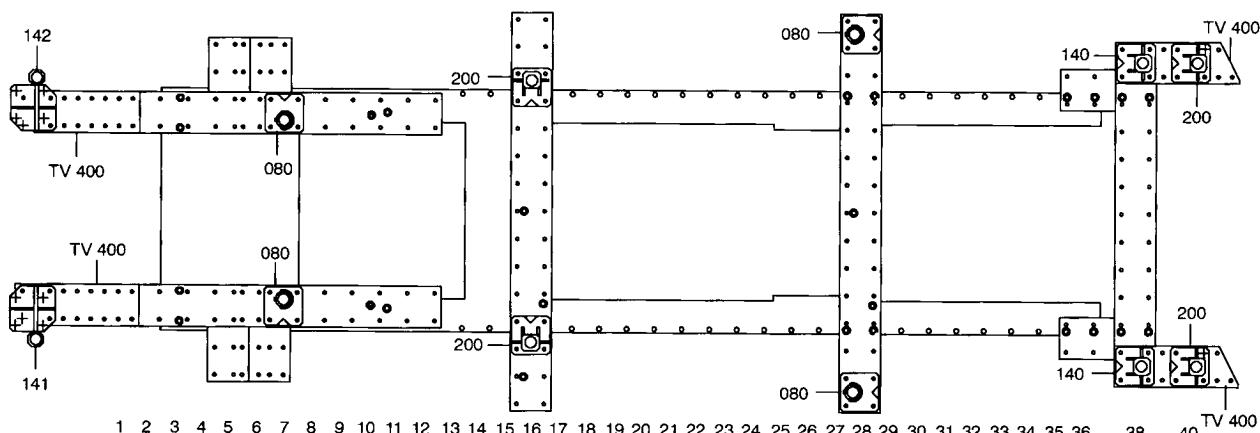
### Celette sheet



| REP. | REFERENCE | PDS | NB | MZ      |
|------|-----------|-----|----|---------|
| 1    | 874.7001  | 2,5 | 1  | 141     |
| 2    | 874.7002  | 2,5 | 1  | 142     |
| 3    | 874.7003  | 2,4 | 1  |         |
| 4    | 874.7004  | 2,4 | 1  |         |
| 5    | 874.7005  | 3,1 | 1  | 602     |
| 6    | 874.7006  | 1,4 | 1  |         |
| 7    | 874.7007  | 3,0 | 1  | 601     |
| 8    | 874.7008  | 3,0 | 1  | 602     |
| 9    | 874.7009  | 1,2 | 2  |         |
| 10   | 874.7010  | 2,2 | 1  | 260     |
| 11   | 874.7011  | 2,2 | 1  | 260     |
| 12   | 874.7012  | 1,3 | 1  | 140/080 |
| 13   | 874.7013  | 1,3 | 2  | 140/080 |
| 14   | 874.7014  | 0,1 | 2  |         |
| 15   | 874.7015  | 0,1 | 1  |         |
| 16   | 874.7016  | 2,3 | 1  | 200/142 |
| 17   | 874.7017  | 2,3 | 1  | 200/141 |
| 18   | 874.7018  | 2,9 | 1  | 080     |
| 19   | 874.7019  | 2,9 | 1  | 080     |
| 20   | 874.7020  | 1,1 | 1  |         |
| 21   | 874.7021  | 1,1 | 1  |         |
| 22   | 874.7022  | 1,1 | 1  |         |
| 23   | 874.7023  | 1,1 | 1  | 080     |
| 24   | 874.7024  | 1,1 | 1  | 140     |
| 25   | 874.7025  | 2,7 | 1  | 140     |
| 26   | 874.7026  | 2,7 | 1  | 140     |
| 27   | 874.7027  | 1,4 | 1  |         |
| 28   | 874.7028  | 1,4 | 1  |         |
| 29   | 874.7029  | 1,6 | 1  | 200     |
| 30   | 874.7030  | 1,6 | 1  | 200     |
| 31   | 874.7031  | 1,0 | 1  |         |
| E48  |           | 0,1 | 2  |         |
| V48  |           | 0,1 | 2  |         |
|      | M 10-25   |     | 2  |         |
|      | M 10-30   |     | 4  |         |
|      | M 10-60   |     | 2  |         |
|      | M 12-20   |     | 1  |         |
|      | M 12-25   |     | 4  |         |
|      | M 12-30   |     | 10 |         |
|      | M 12-40   |     | 4  |         |
|      | M 12-60   |     | 1  |         |
|      | M 12-70   |     | 4  |         |
|      | M 12-130  |     | 2  |         |
|      | M 12-140  |     | 2  |         |
|      | M 14-130  |     | 2  |         |
|      | Chc 12-70 |     | 2  |         |
|      | M 12      |     | 8  |         |
|      | M 14      |     | 2  |         |

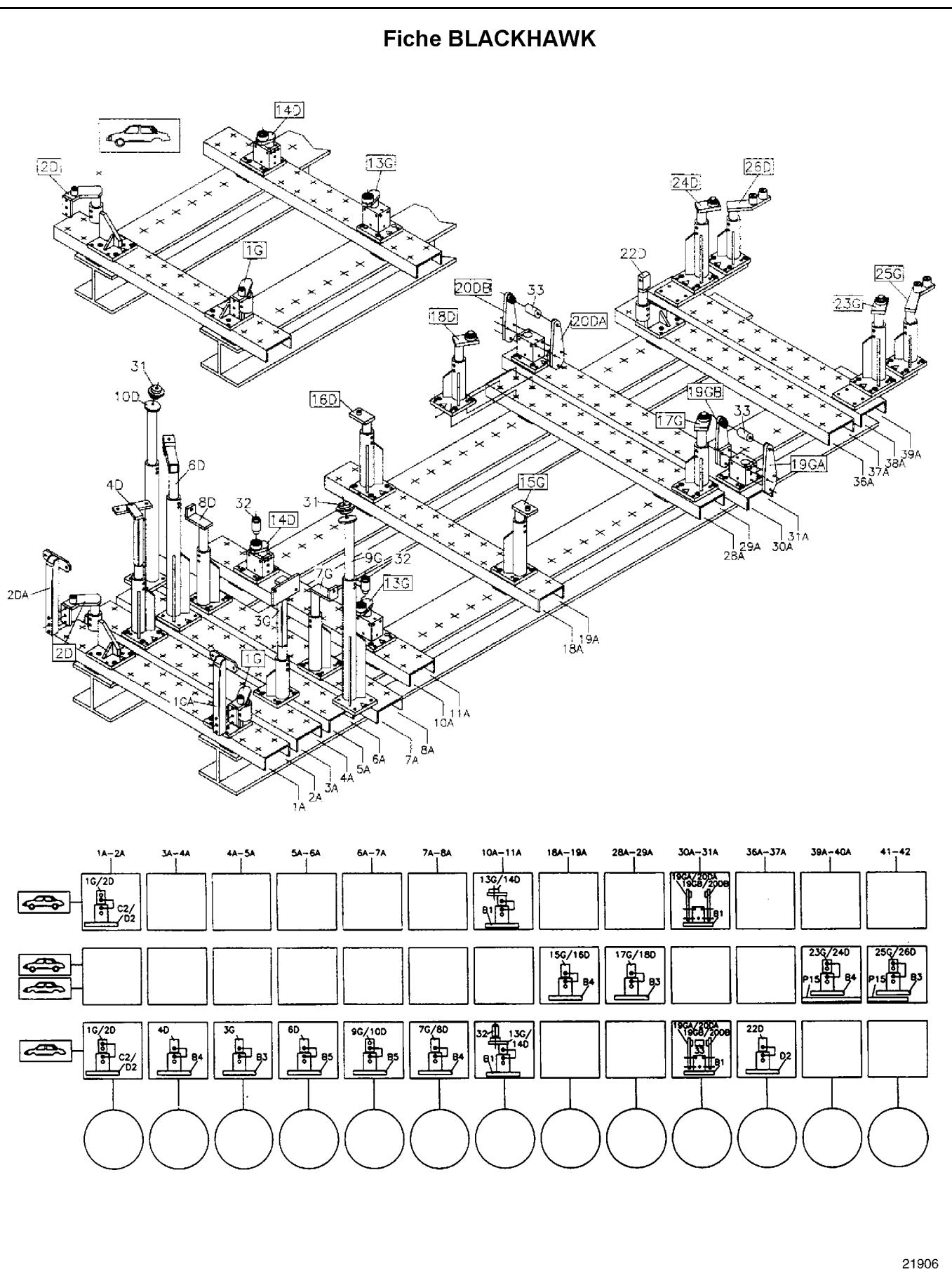
874.300

62 Kg 19.04.2001 427-D-28A



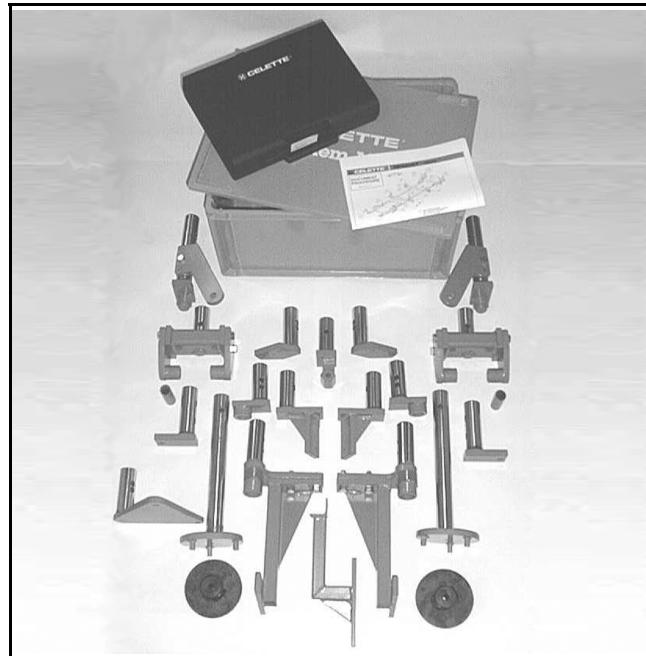
23847

## Fiche BLACKHAWK



**4. SPECIAL TOOLING PART NUMBERS**

**CELETTÉ**



Vendor-supplied parts

Special heads for **MZ System**

Order from:      CELETTÉ S.A.  
                          B.P.9  
                          38026 VIENNE (France)

**BLACKHAWK**

Vendor-supplied parts

Special heads for **MS System**

Order from:      BLACKHAWK  
                         Centre Eurofret  
                         Rue de Rheinsfeld  
                         67100 STRASBOURG (France)

The replacement of this part is a basic operation for a frontal impact.

The door is a removable component.

In the procedure described below, you will only find descriptions of the connections which are specific to the part concerned.

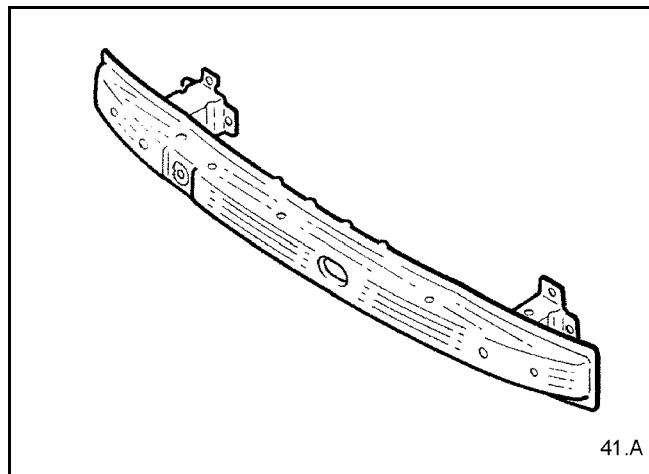
The information on the additional parts will be dealt with in the respective sections (refer to contents).

### NOTE:

When replacing the cross member only, a bead of M.J. Pro type mastic (part no.: 77 11 172 676) must be applied at the interface with the side member in order to ensure anti-corrosion protection of the coupling. The part supplied by the Spare Parts Dept is black and does not need painting when fitted.

### COMPOSITION OF THE REPLACEMENT PART

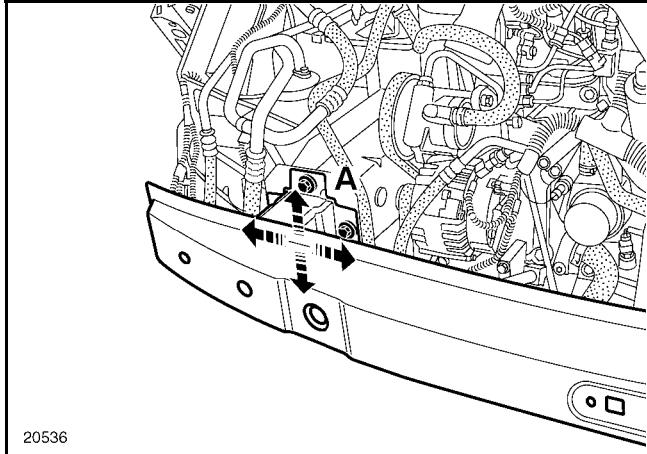
Part supplied with:  
 Front cross member  
 Shock absorbing pads  
 Towing ring mounting  
 Threaded ring  
 Towing ring mounting reinforcement  
 Closure panel component.  
 Nuts



### TIGHTENING TORQUE (in daNm)

Cross member bolt

4.4



### REMOVAL

Removal is by way of the mounting bolts (A) (four on each side).

### REFITTING

If the operation is performed with the engine in place, it will be necessary to ease the engine away from its support points in order to replace the cross member bolts.

### IMPORTANT:

The cross member contributes to the rigidity of the engine compartment structure. Therefore, after any work on it, it is essential to tighten mounting bolts (A) to the correct torque values.

The replacement of this part is a additional operation to the replacement of the front end lower cross member following a frontal impact.

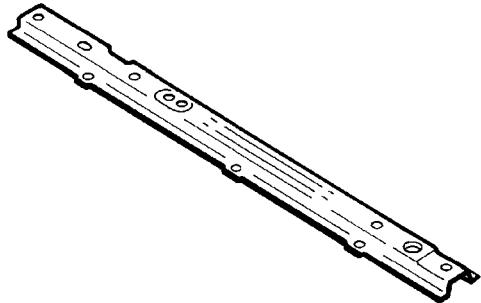
The door is a removable component.

In the procedure described below, you will only find descriptions of the connections which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

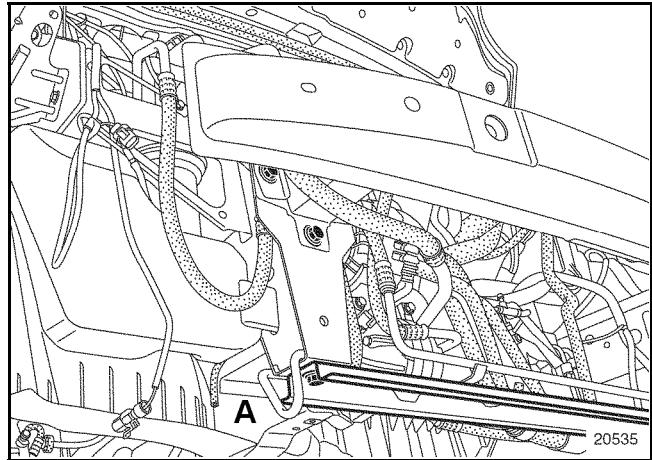
#### **COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



41.B

| <b>TIGHTENING TORQUE (in daNm)</b> |            |
|------------------------------------|------------|
| <b>Cross member bolt</b>           | <b>2.2</b> |



#### **REMOVAL - REFITTING**

The removal is carried out by undoing mounting bolts (A) after having released the mechanical components (radiator, etc...).

The replacement of this part is a basic operation for a frontal impact.

There are two procedures for carrying out this operation:

- complete,
- partial, using cut **A**.

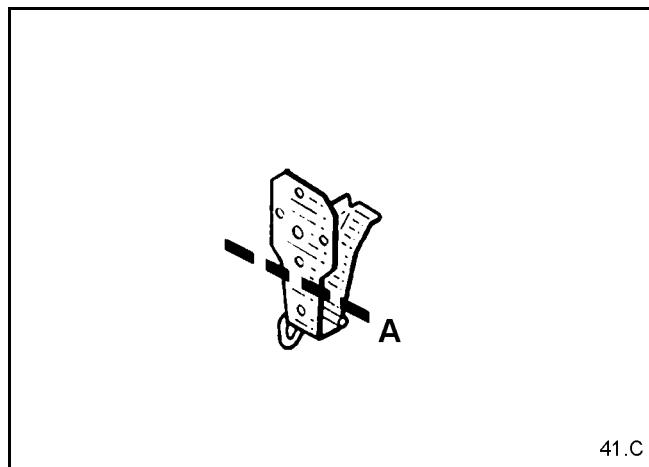
In the procedure described below, you will only find descriptions of the connections which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

#### **COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

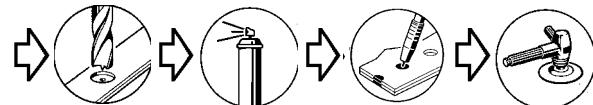
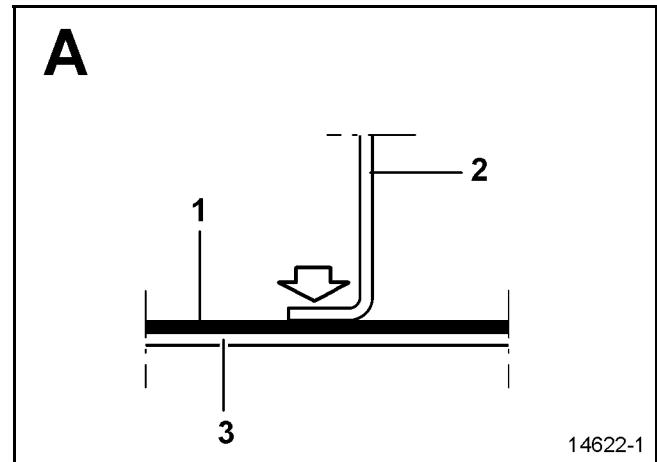
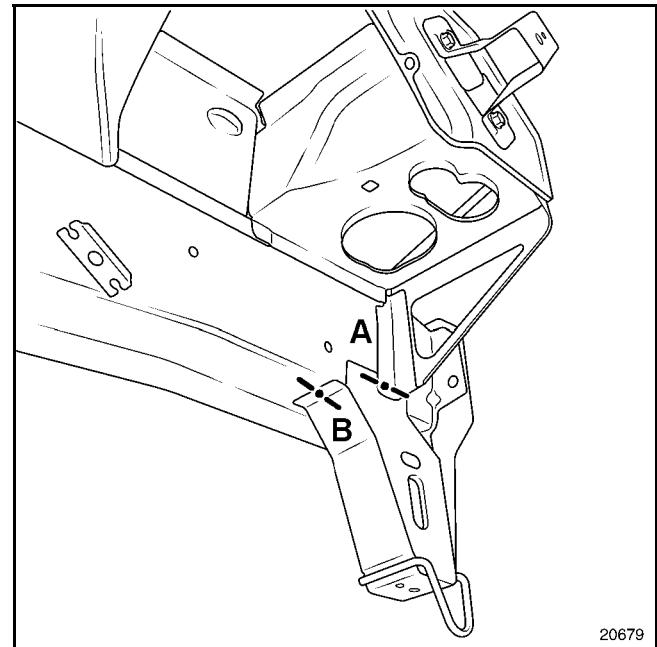
Closure panel component  
Towing ring (right-hand side)



#### **PARTS CONCERNED (thickness in mm):**

|          |                                |     |
|----------|--------------------------------|-----|
| <b>1</b> | Radiator cross member mounting | 2   |
| <b>2</b> | Front side member              | 2.5 |
| <b>3</b> | Front end side cross member    | 1.5 |

#### **Complete replacement**



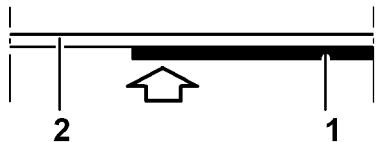
# LOWER STRUCTURE

## Radiator cross member mounting

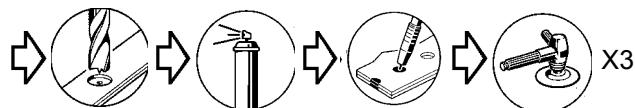
41

C

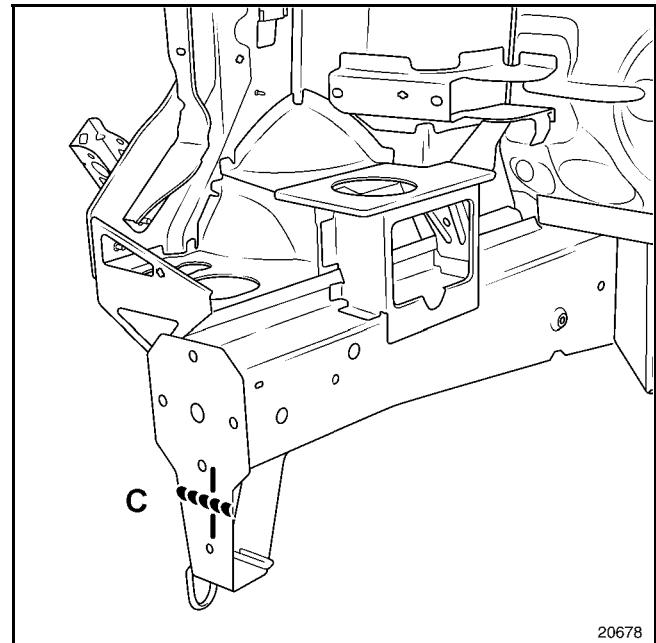
**B**



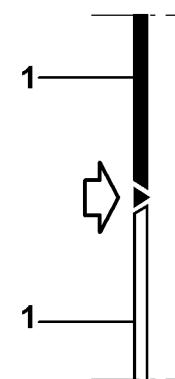
14577.1



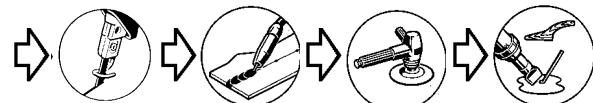
Partial replacement



**C**



14586



The replacement of this part is a basic operation for a frontal impact.

In the procedure described below, you will only find descriptions of the connections which are specific to the part concerned.

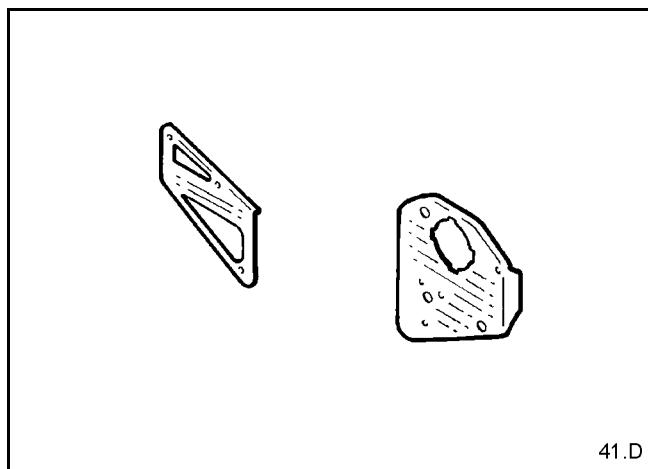
**NOTE:**

The right-hand part has a different shape but the procedure is the same.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

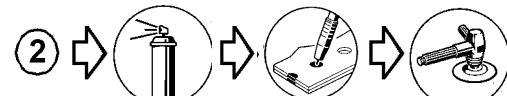
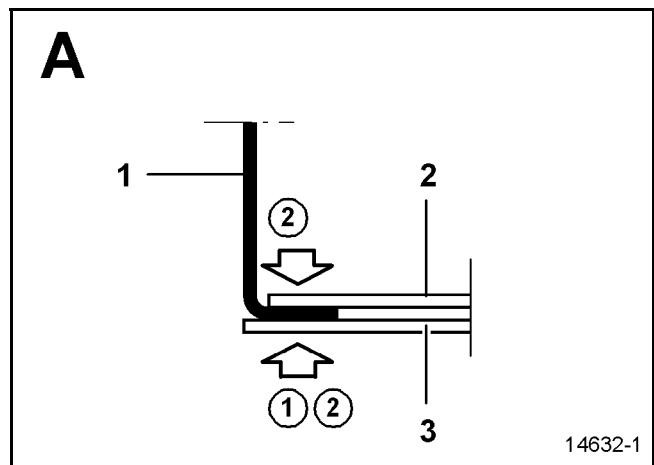
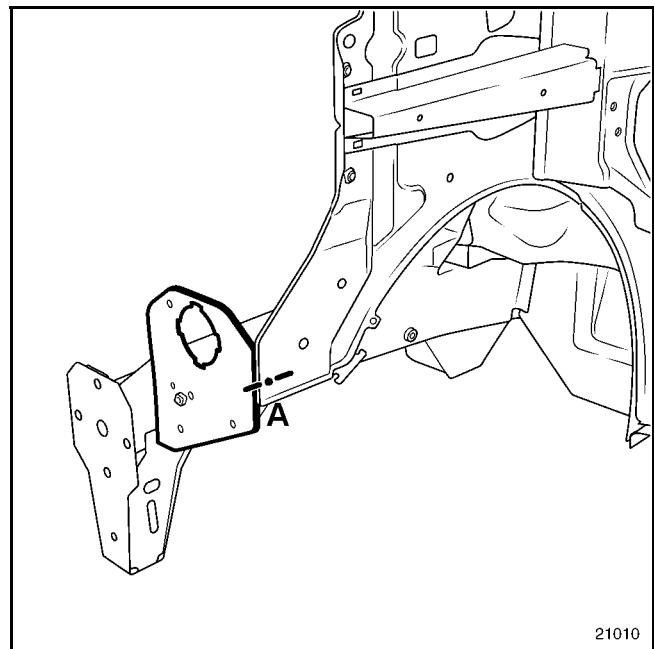
**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



**PARTS CONCERNED (thickness in mm):**

|   |                                 |     |
|---|---------------------------------|-----|
| 1 | Front end side cross member     | 1.5 |
| 2 | Front wheel arch, front section | 1   |
| 3 | Scuttle side panel              | 1   |



The replacement of this part is a complementary operation to the support of the radiator cross member for a frontal impact.

There are two procedures for carrying out this operation:

- partial, using cut **A**,
- partial, using cut **B**.

**IMPORTANT:**

The use of the body jig bench is essential except for the partial replacement along cut **A**.

In the following procedure you will only find the special notes for cuts.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

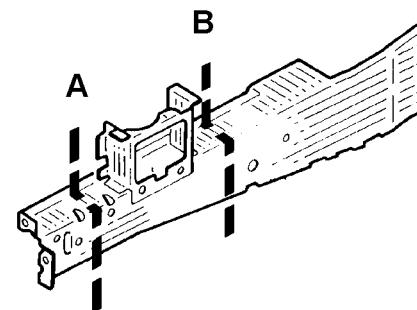
Side member reinforcement

Engine mounting pad spacer

Welded spacer

Cup spacer angle bracket (left-hand side)

Mounting pads (left-hand side)

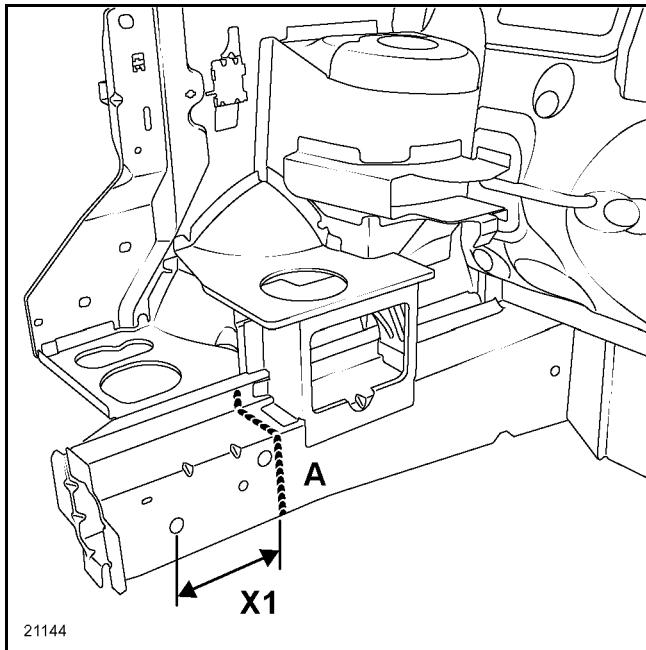


41.E

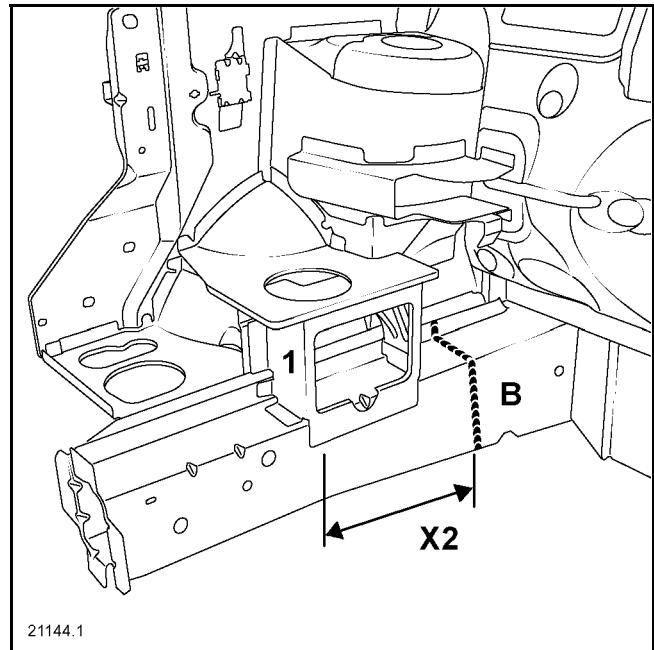
**PARTS CONCERNED (thickness in mm):**

|   |                                  |     |
|---|----------------------------------|-----|
| 1 | Front side member, front section | 2.5 |
|---|----------------------------------|-----|

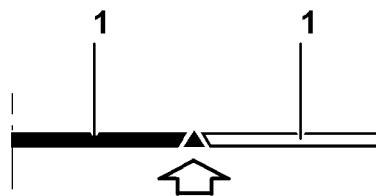
**Replace cut A**



**Partial replacement using cut B**



**AB**



14586

**NOTE:**

This operation can be carried out without using the repair bench.

The front end lower cross member can be used as a gauge for aligning the replaced section.

**IMPORTANT:**

The cut is made in area **X1**, but must never be located on a guide hole or on a crumple zone.

**IMPORTANT:**

The cut is made in area **X2**.

**NOTE:**

It is possible to make the cut under the engine mounting stiffener, but in this case it will be necessary to unclip it to make the work easier. For this reason it is recommended that you order an additional new stiffener.

The welds of the stiffener on the side member will be plug welds.

The replacement of this part is connected to the partial replacement of the front side member front section.

This operation is additional to the support of the radiator cross member for a frontal impact and to the front wheel arch front section for a front side impact.

Partial replacement can be performed using cut A.

**NOTE:**

The complete replacement of this part is possible, this being additional to the replacement of the side member front section, you will find the procedure for replacement described in that for the replacement of the front side member.

**IMPORTANT:**

In the event that side member and its closure panel are simultaneously partially replaced, the cuts for each part will have to be **offset in order to avoid creating a weakened area**.

This operation can be carried out without using the repair bench.

The front end lower cross member can be used as a guide for aligning the replaced section.

You will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

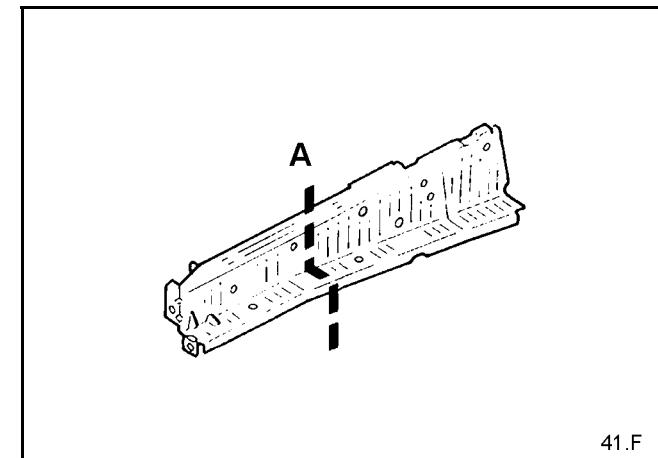
Part assembled with:

Front end side cross member angle bracket

Mounting pads

Brake pipe angle bracket

Welded studs



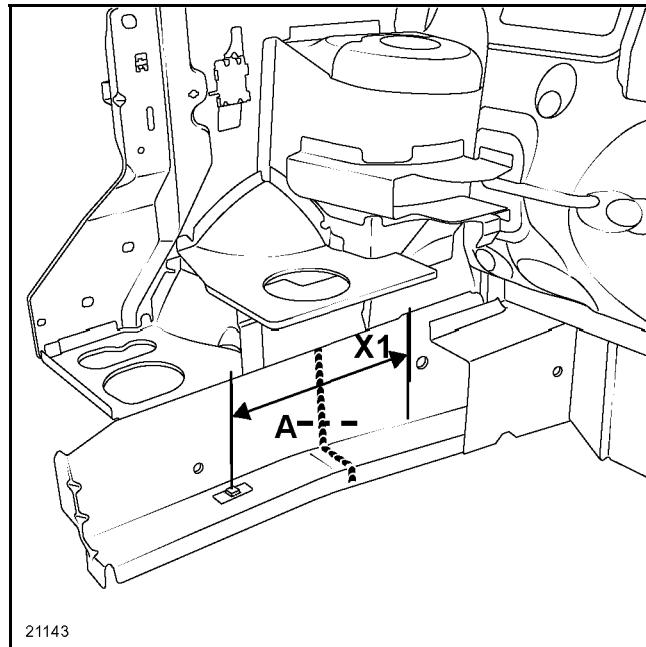
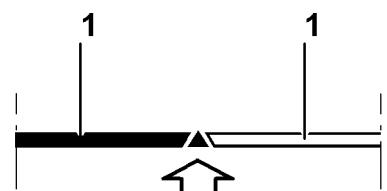
41.F

**PARTS CONCERNED (thickness in mm):**

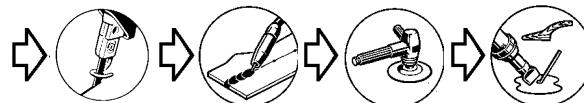
1 Front section of front side member closure panel

2.5

### Partial replacement

**A**

14586

**IMPORTANT:**

The cut is made in area X1, but must never be located on a guide hole or on a crumple zone.

The replacement of this part is a basic operation for a frontal impact.

The repair bench must be used.

It will be necessary to unfasten several additional components to be able to remove the complete side member:

- cab floor partially,
- side section of cab floor front cross member,
- front section of front side member rear stiffener,
- front sub-frame rear mounting.

There are two procedures for carrying out this operation:

- complete,
- partial, front section only. The rear section must be released from the replacement part.

**NOTE:**

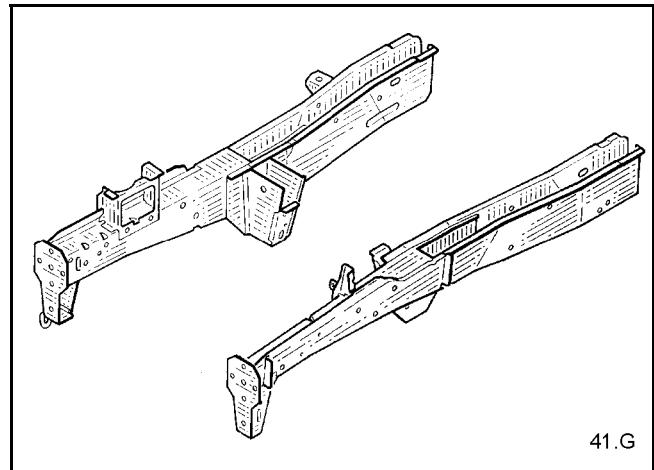
In the procedure described below, you will only find descriptions of and joins involved in the partial replacement at the fitting of the side member with the passenger compartment.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

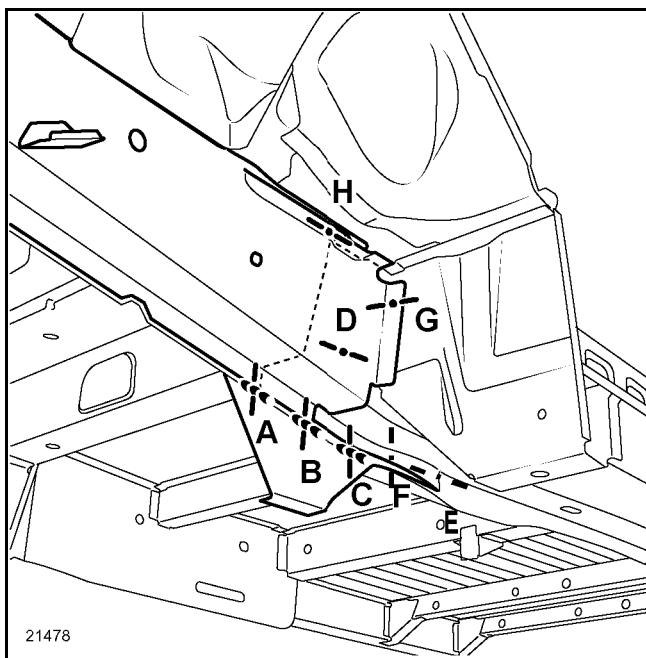
Part assembled with:

- Mounting pad
- Spacer angle bracket
- Sub-frame rear mounting
- Sub-frame rear interior mounting
- Side member front section
- Side member closure panel
- Side bracket
- Pipe angle bracket
- Side member reinforcement
- Inner reinforcement
- Radiator cross member mounting
- Radiator cross member mounting closure panel
- Towing ring (right-hand side)
- Engine mounting stiffener (right-hand side)
- Welded studs
- Sub-frame mounting spacer
- Welded nuts

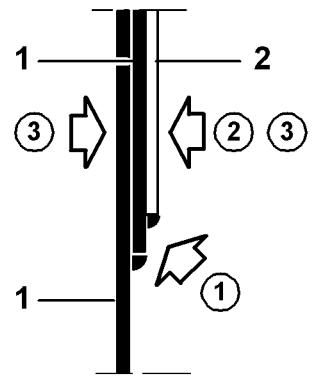


### PARTS CONCERNED (thickness in mm):

|   |   |     |
|---|---|-----|
| 1 | Front side member                         | 2.5 |
| 2 | Front side member, rear section           | 2   |
| 3 | Jack support                              | 1.2 |
| 4 | Cab floor front cross member              | 1.5 |
| 5 | Front side member stiffener, rear section | 1   |



**C**



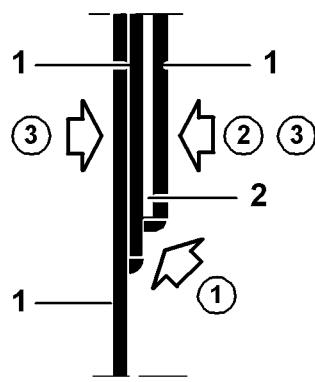
21362-1

① L40 X2

② Ø 10

③ X2

**AB**



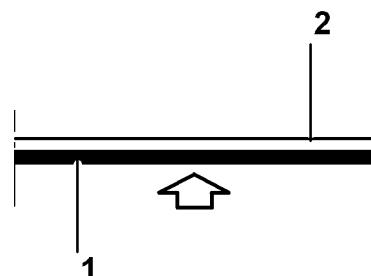
21361

① L40 X2

② Ø 10

③ X2

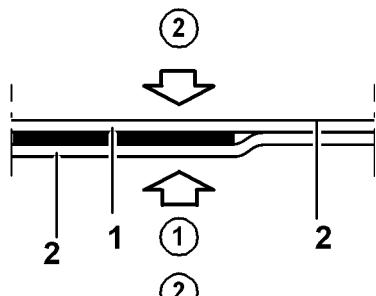
**D**



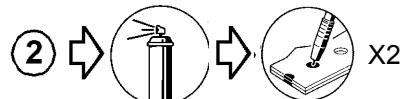
14576

X17

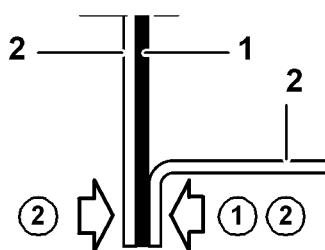
**E**



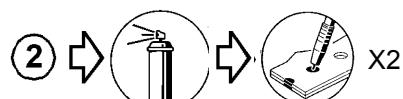
21358.1



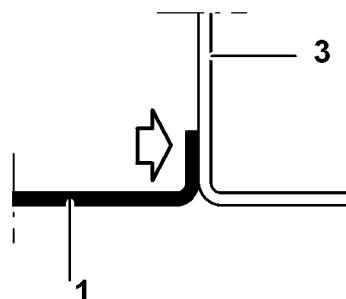
**F**



14634.1



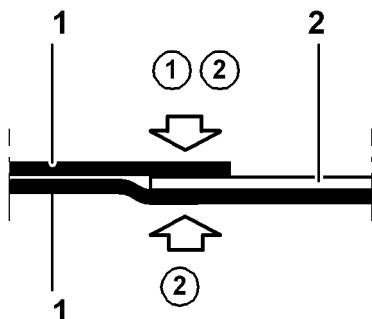
**G**



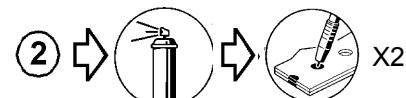
14603.1

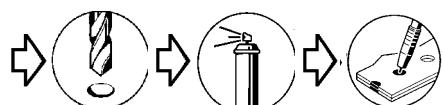
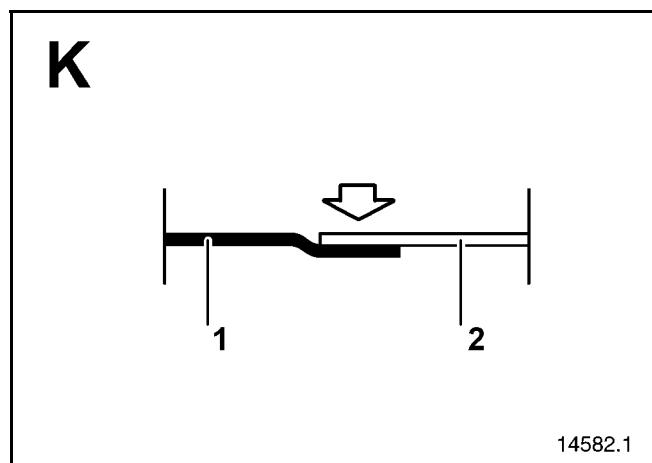
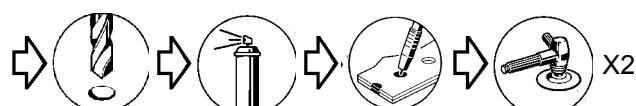
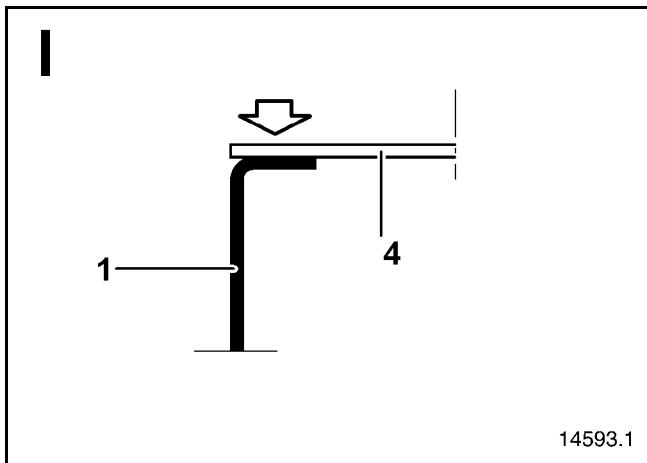
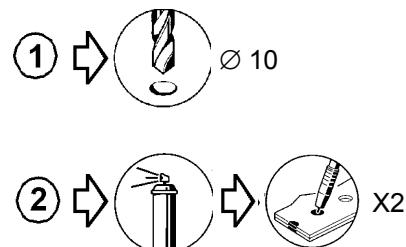
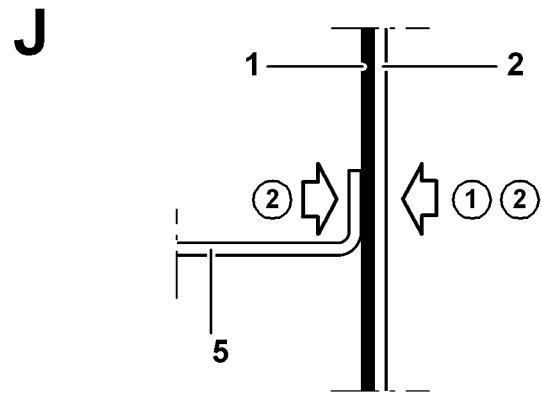
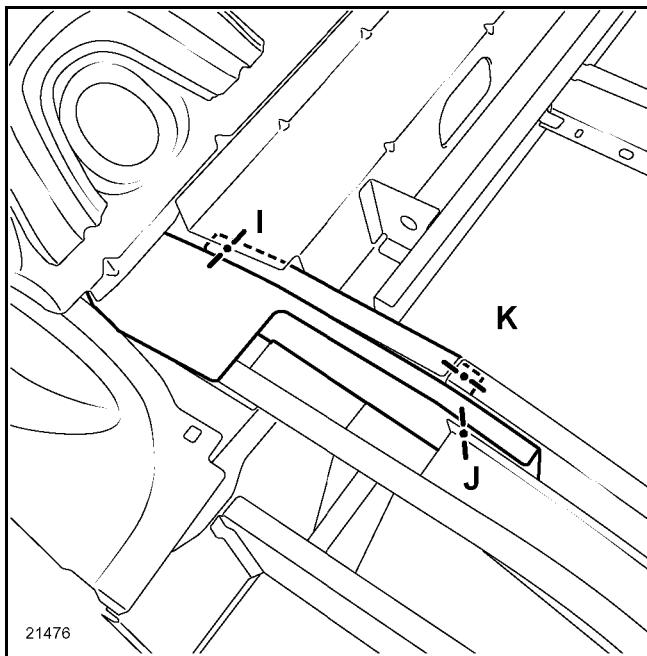


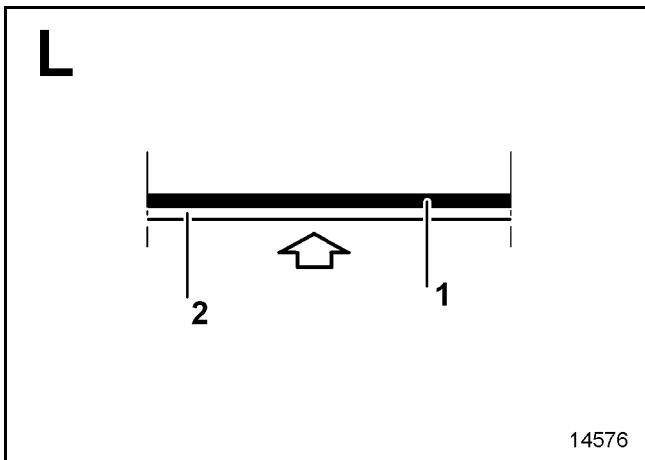
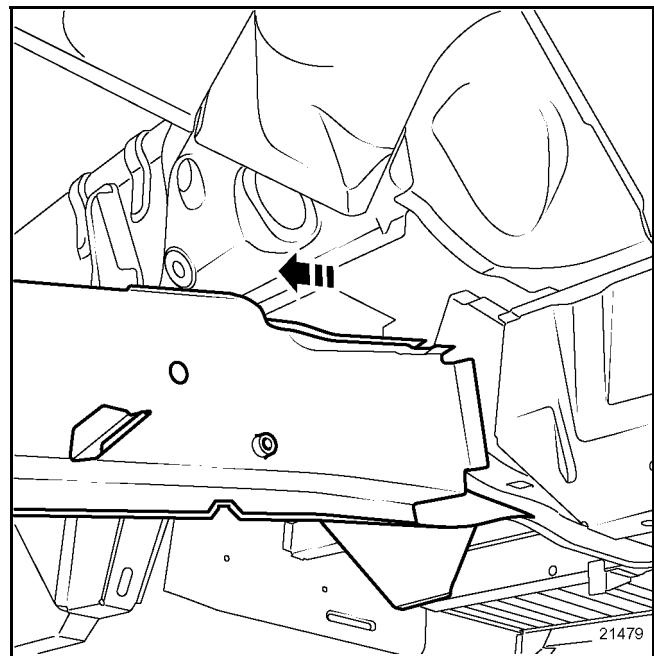
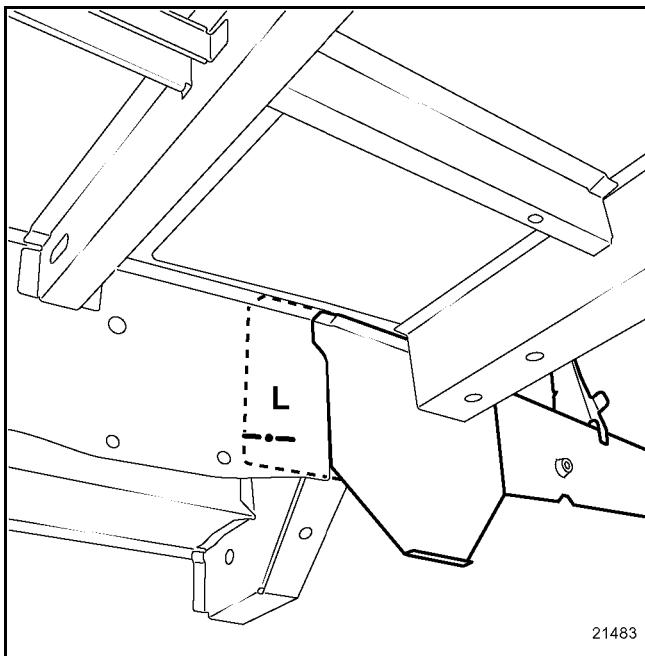
**H**



21357-5







**IMPORTANT:**

The weight of the side member is considerable (assembly of very thick panels).

Take the necessary precautions for removing/refitting operations.

**Complete replacement**

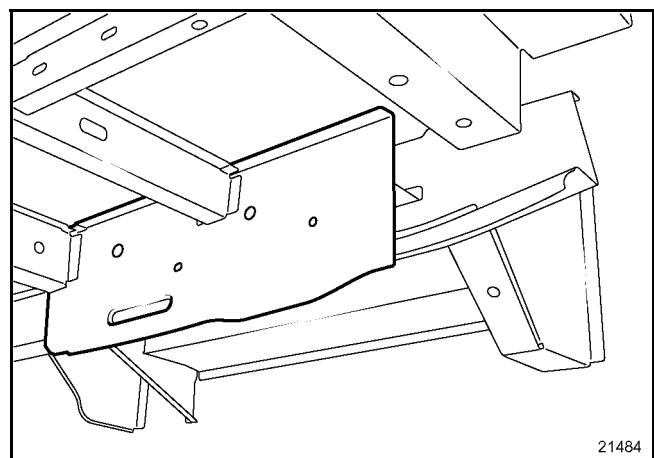


Diagram for information

**NOTE:**

The complete replacement of the side member requires the rear section of the front side member to be unclipped.

The replacement of this part is an additional operation to the front wheel arch front section or to the half unit for a frontal impact.

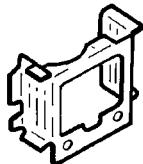
The body jig bench must be used.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

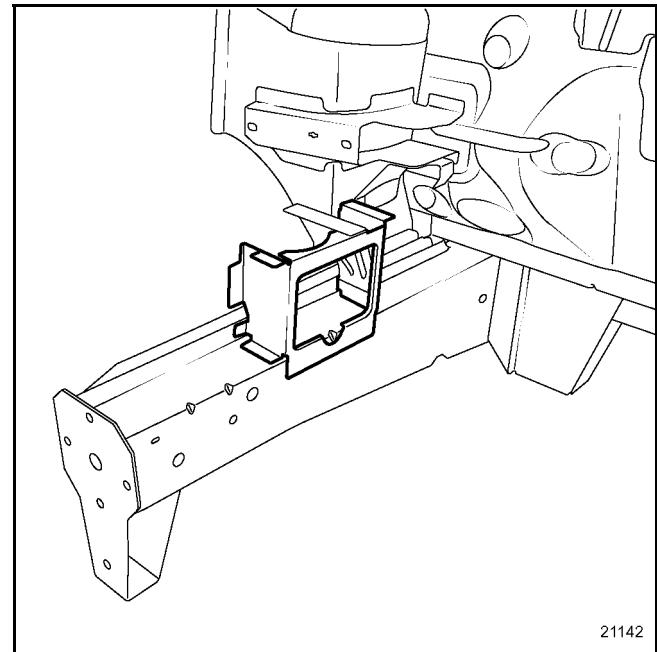
The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



41.H



#### NOTE:

The spot welds on the side member and the suspension turret must be carried out with plug welds.

The replacement of this part is an operation linked to the replacement of the front sub-frame for a frontal impact to the wheel.

There are two procedures for carrying out this operation:

- complete,
- partial, using cut **A**.

The repair bench must be used.

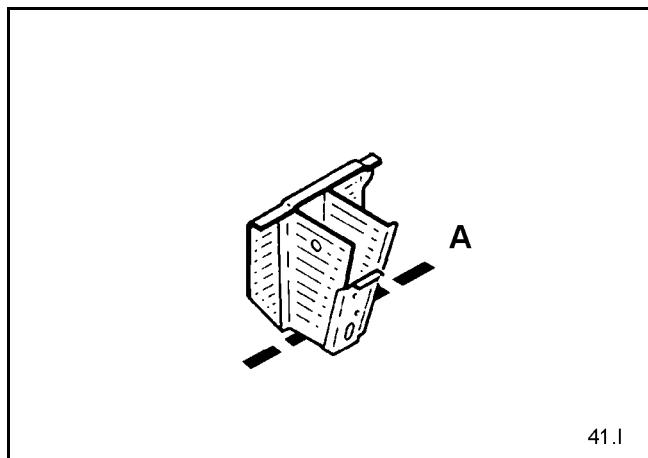
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

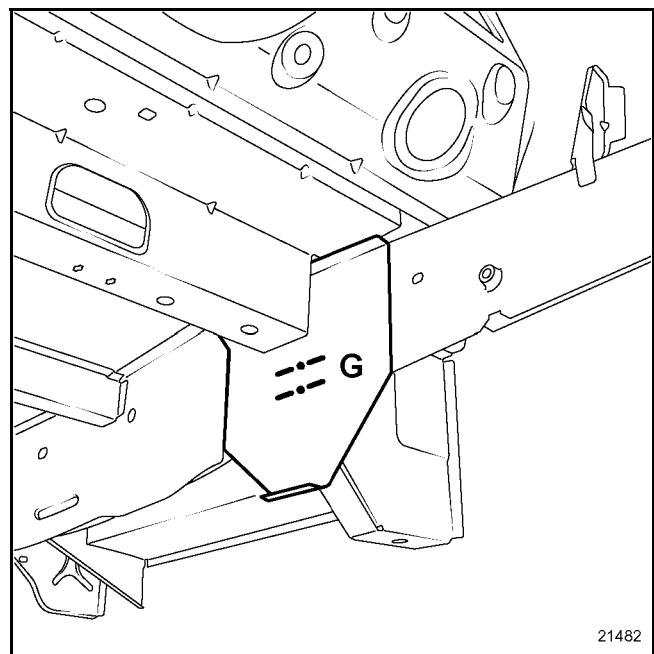
- Inner support
- Mounting pad



### PARTS CONCERNED (thickness in mm):

|          |                                  |     |
|----------|----------------------------------|-----|
| <b>1</b> | Front sub-frame rear mounting    | 1.5 |
| <b>2</b> | Cab floor front cross member     | 1.5 |
| <b>3</b> | Front side member, front section | 2.5 |
| <b>4</b> | Front side member, rear section  | 2   |

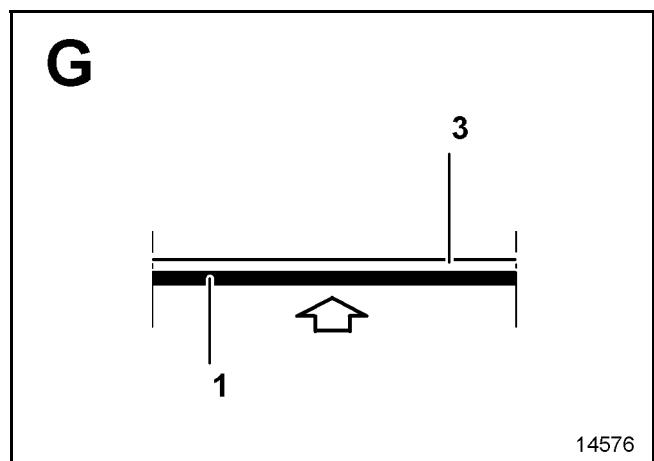
### Complete replacement



21482

### NOTE:

The complete replacement requires partial unpicking of the part as indicated above to enable access to the two points **G**.

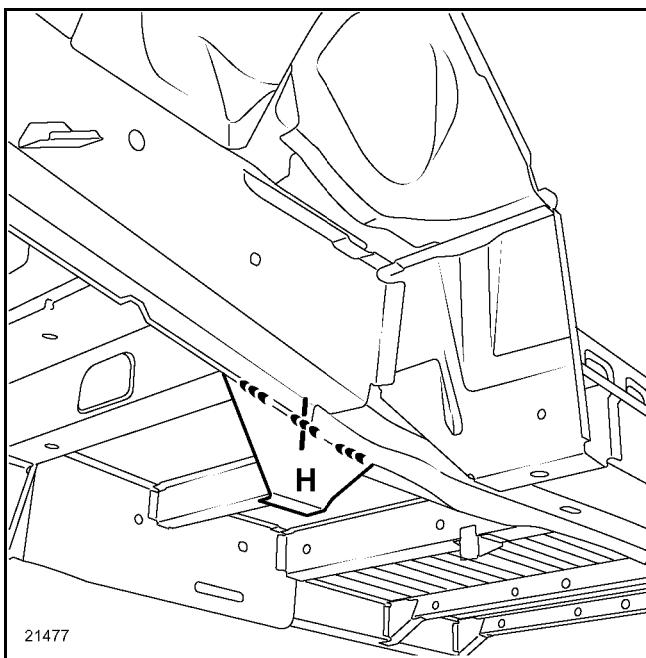


14576

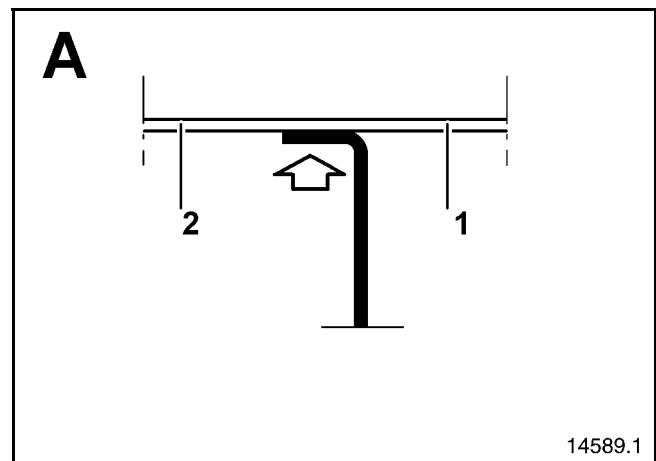
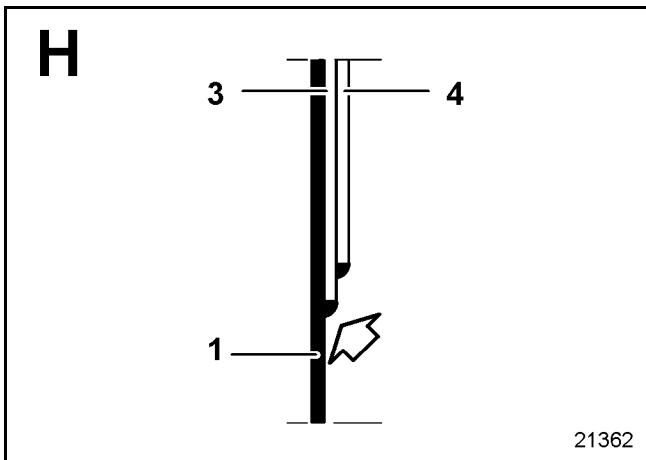
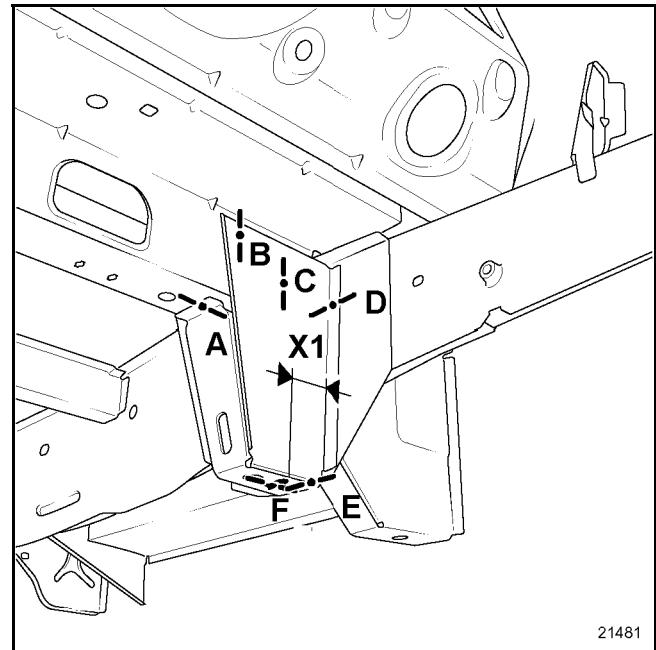


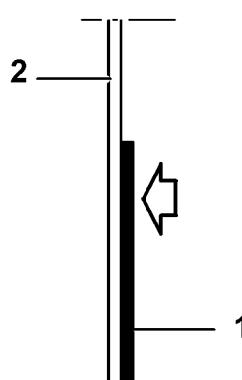
### NOTE:

All the remaining welds must be plug welds.

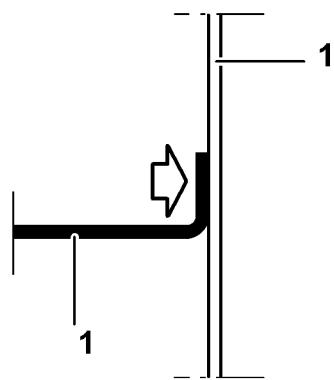


Partial replacement

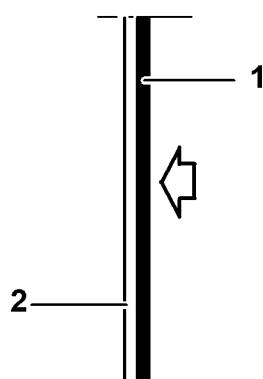


**B**

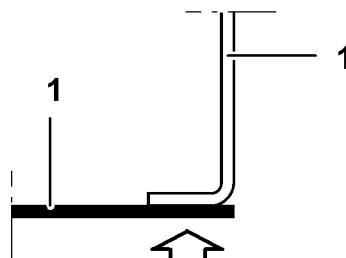
14577-1

**D**

14589.1

**C**

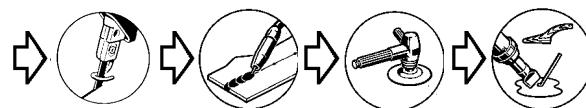
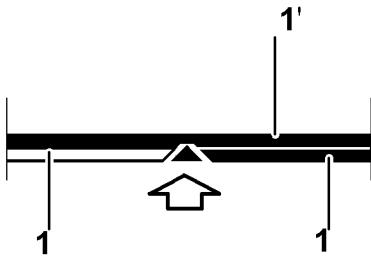
14576

**NOTE:**Welds **B**, **C** and **D** should be made on both sides.**E**

14593



**F**



**NOTE:**  
**X1 = 40 mm**

**WARNING:**  
Keep section 1' when making the cut.

The replacement of this part is an operation associated with the replacement of the front side member for a frontal impact.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

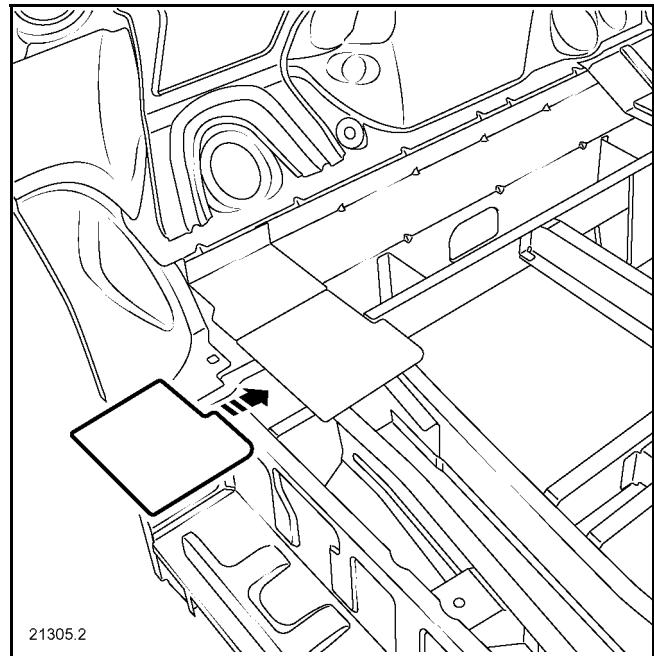
The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



41.J



#### NOTE:

All the welding must be by plug welds.

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

There are two procedures for carrying out this operation:

- partial under the door, cutting out the section **A-B**,
- partial, cutting out the section **A-C**.

**IMPORTANT:**

The sill panel should be cut on the cab side, the cut sections given in the repair step may be offset depending on the level of impact.

**NOTE:**

To carry out the partial operation along cuts A-C, it will also be necessary to order the pillar reinforcement expanding insert.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Frame drip moulding

Striker stiffener.

Striker plate

Centring stiffener

Wing mounting angle bracket

Pillar reinforcement

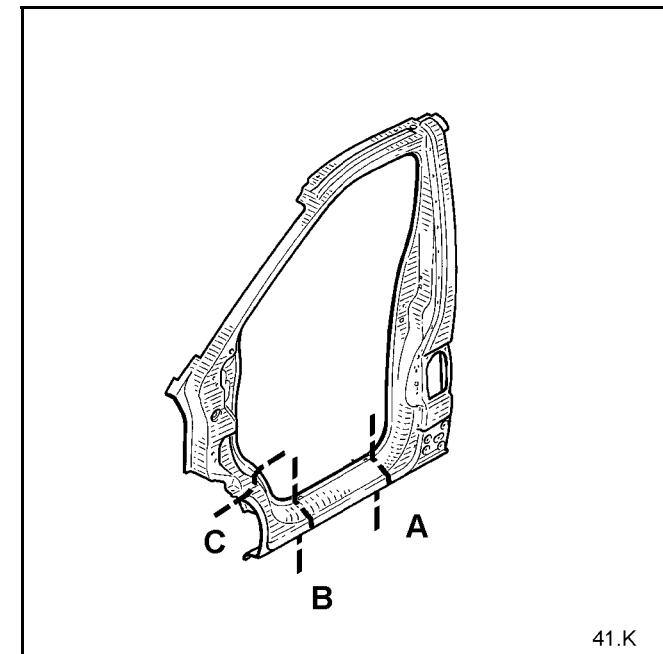
Door stop reinforcement

Hinge reinforcement

Pillar upper frame

Pillar lower frame

Welded nuts

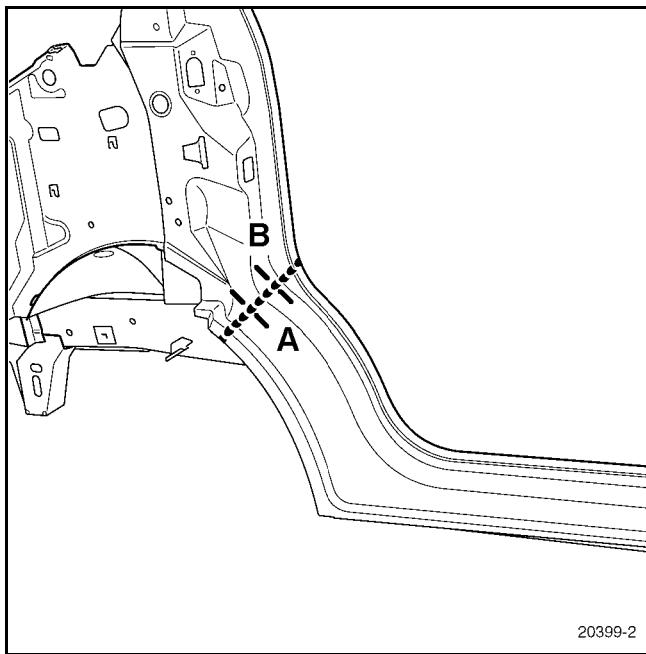


41.K

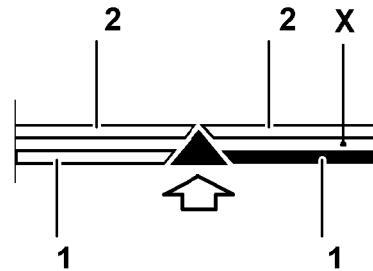
**PARTS CONCERNED (thickness in mm):**

|   |                      |     |
|---|----------------------|-----|
| 1 | Sill panel           | 0.9 |
| 2 | Pillar reinforcement | 1.2 |

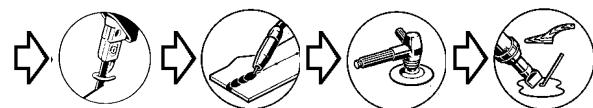
**Partial replacement**



**B**



19171



**IMPORTANT**

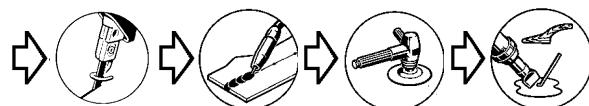
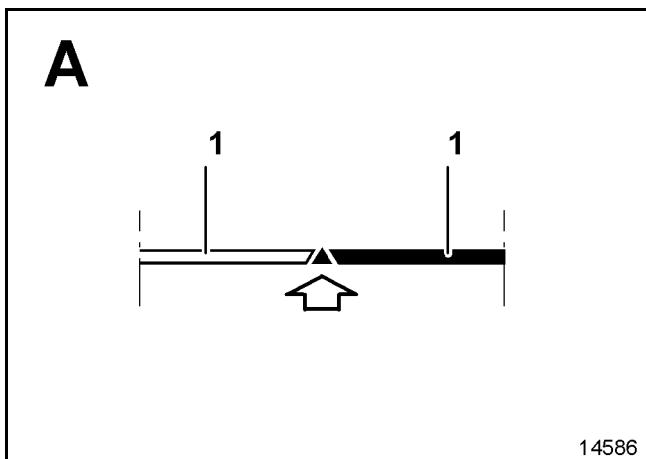
When performing the cutting operation, take care not to damage the pillar reinforcement (2).

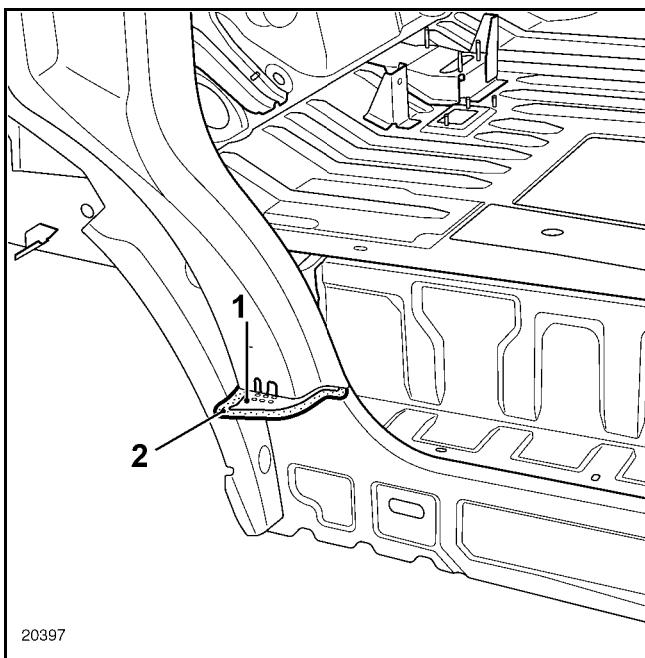
In the case of even the slightest cut-out in the pillar reinforcement, it must be re-welded before fitting the new sill panel.

It will also be necessary to unfasten the pillar reinforcement from the replacement part, before refitting the sill panel on the vehicle.

**NOTE:**

Area X is empty.



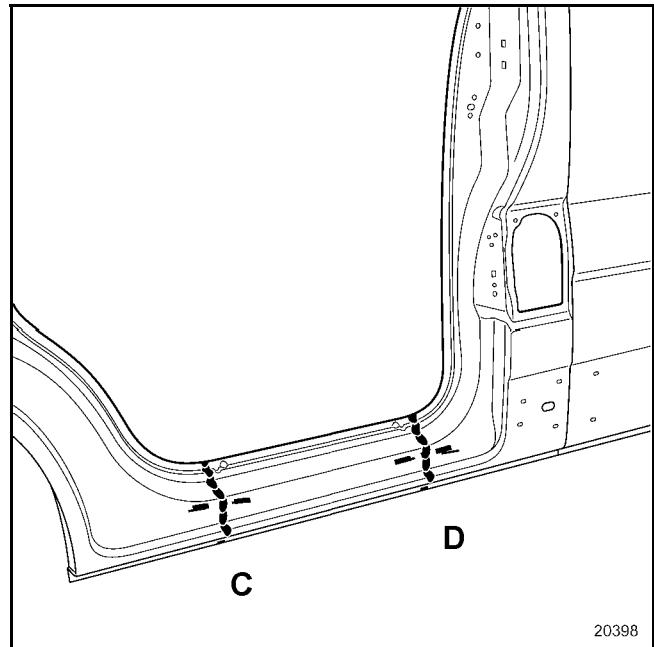


**REMINDER**

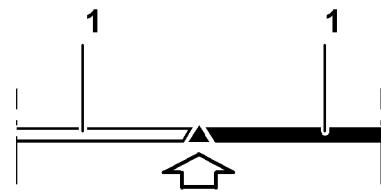
The expanding inserts react to temperature when the body is immersed in the cataphoresis baths during manufacture. During repairs, these conditions cannot be reproduced, therefore when replacing an insert it will be necessary to carry out the following operations in order to ensure sealing and soundproofing of the vehicle:

- 1 Clean the bonding surfaces with heptane
- 2 Seal the holes in the insert by cutting out a piece of soundproofing pad (part no. **77 01 423 546**)
- 3 Apply lining sealing mastic (2) (part no. **77 01 423 330**) to the periphery of the insert (1).
- 4 Fit the insert by compressing the mastic.

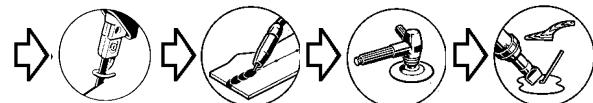
**Partial replacement under door**



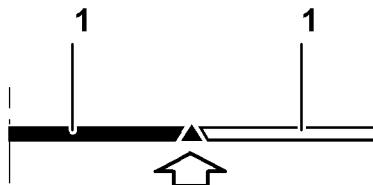
**C**



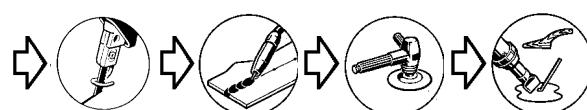
14586



**D**



14586



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

Complete replacement is an additional operation when replacing the rear panel, rear section, or cab C-pillar.

There are two procedures for carrying out this operation:

- complete,
- partial front or rear (using cut **A**).

**NOTE:**

The cut shown below may be offset depending on the level of impact.

Complete replacement is not described in the repair step.

If necessary, depending on the choice of cut, also order the sill panel expanding insert.

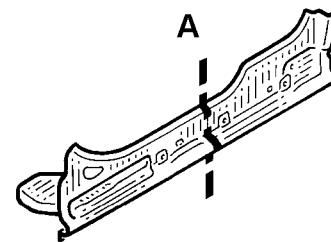
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Runner housing  
Runner housing closure panel  
Mounting angle bracket  
Door stop reinforcement  
Welded nuts

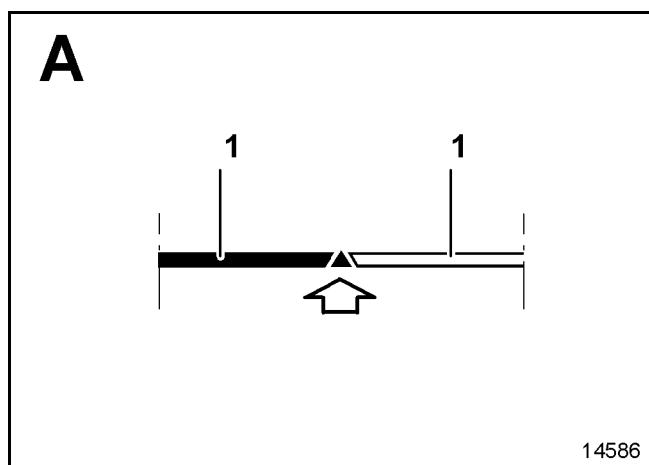
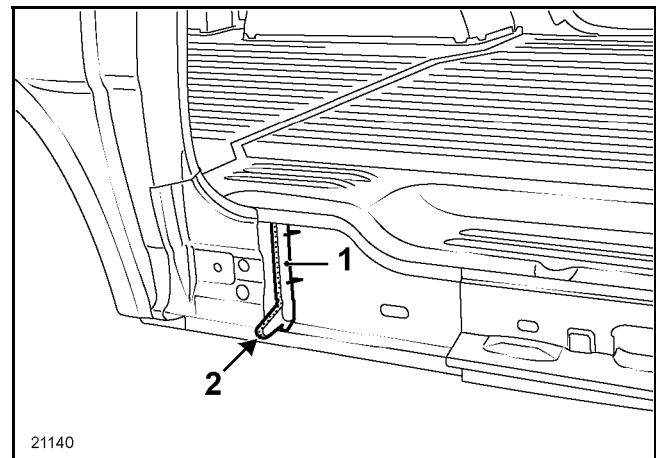
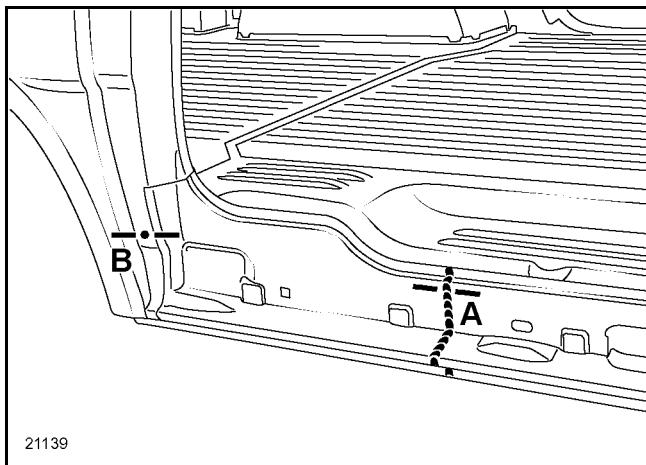


41.L

**PARTS CONCERNED (thickness in mm):**

|   |                                 |     |
|---|---------------------------------|-----|
| 1 | Sill panel under side door      | 0.9 |
| 2 | Rear section of rear side panel | 0.8 |
| 3 | Cab C-pillar                    | 0.9 |
| 4 | Cab C-pillar lining             | 1   |

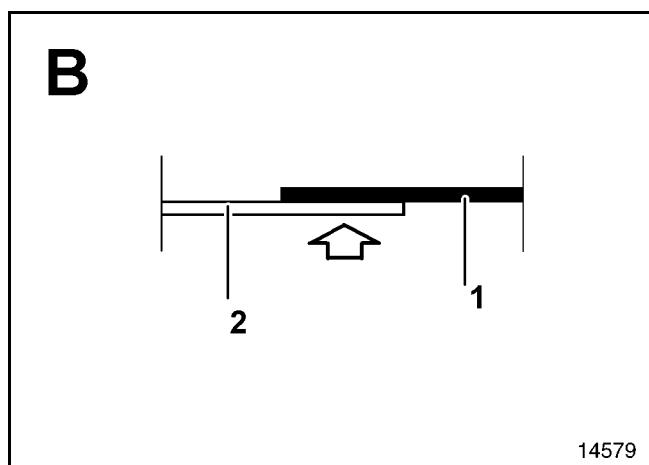
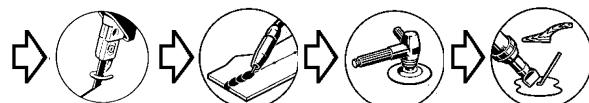
**Partial replacement of the rear section**



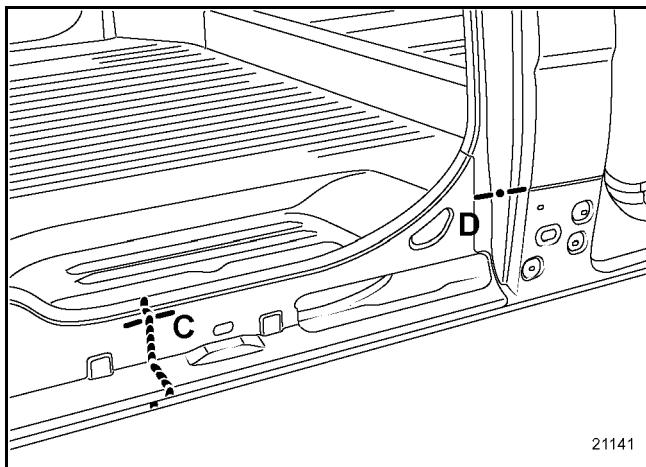
**REMINDER**

The expanding inserts react to temperature when the body is immersed in the cataphoresis baths during manufacture. During repairs, these conditions cannot be reproduced, therefore when replacing an insert it will be necessary to carry out the following operations in order to ensure leaktightness and soundproofing of the vehicle:

- 1 Clean the bonding surfaces with heptane.
- 2 Seal the holes in the insert by cutting out a piece of soundproofing pad (part no. **77 01 423 546**).
- 3 Apply lining sealing mastic (2) (part no. **7701 423 330**) to the periphery of the insert (1).
- 4 Fit the insert by compressing the mastic.



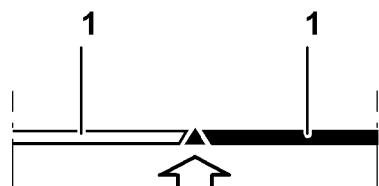
**Partial front replacement**



**NOTE:**

Fitting the replacement part requires moving aside the cab pillar panel edge.

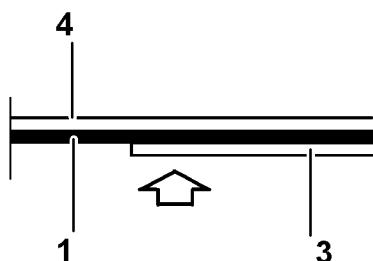
**C**



14586



**D**



14609.1



This operation can be carried out partially in three ways:

- Partial - front section (along cut **A**),
- Partial - centre section (along cut **B**),
- Partial - rear section (along cut **C**).

Depending on the section replaced, this part is in addition to:

- the cab A-pillar reinforcement, cut (**A**) front section,
- the cab C-pillar lining, cut (**B**) centre section,
- the rear side panel lining, rear section, cut (**C**).

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**NOTE:**

For standardisation reasons, the Parts Department will only supply a single part corresponding to the long wheelbase version.

For short versions, it will be necessary to cut the sill panel closure panel and to weld the rear closure panel (see repair step ) which must also be ordered.

This operation must be carried out before painting.

### COMPOSITION OF THE REPLACEMENT PART

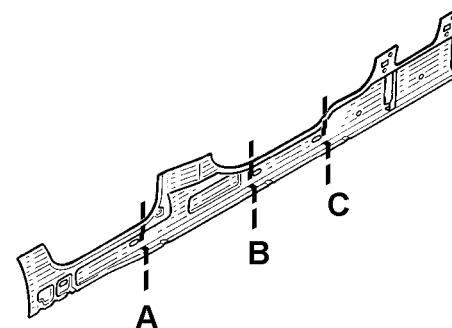
Part assembled with:

Closure panel component.

Inner sill panel rear closure panel

Closure panel reinforcement (side with sliding side door)

Welded nuts

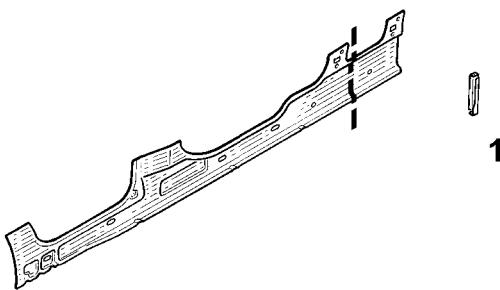


41.M

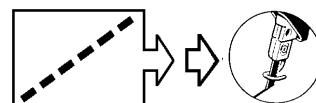
### PARTS CONCERNED (thickness in mm):

|   |                    |     |
|---|--------------------|-----|
| 1 | Sill panel closure | 0.9 |
|---|--------------------|-----|

### Adaptation for short versions



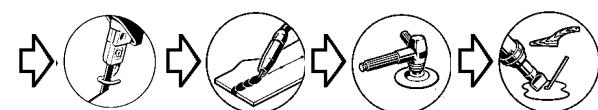
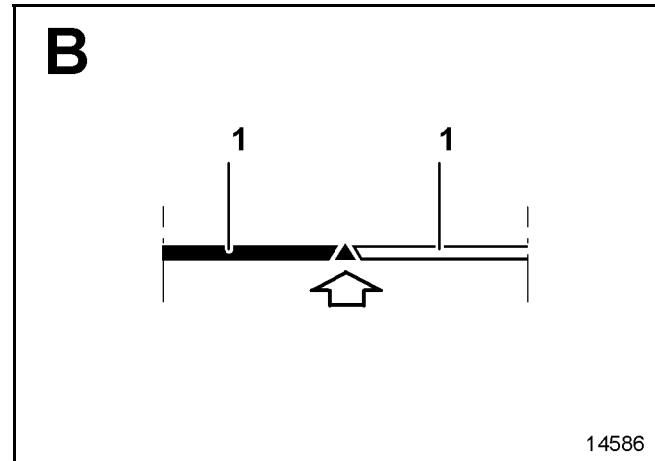
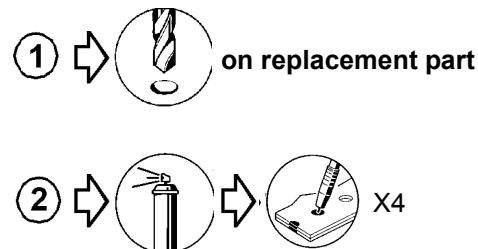
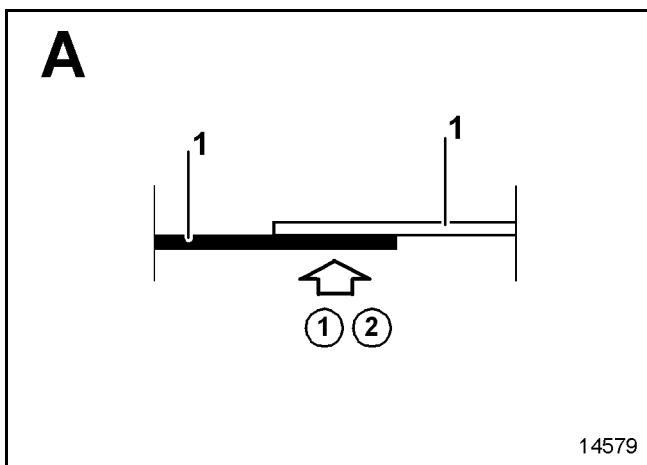
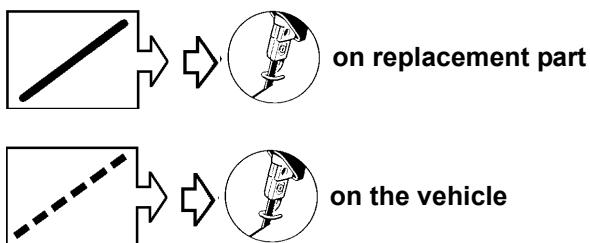
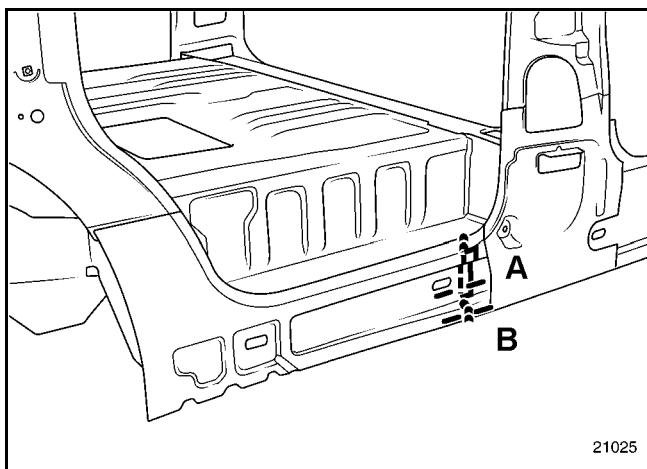
41.M n°.2



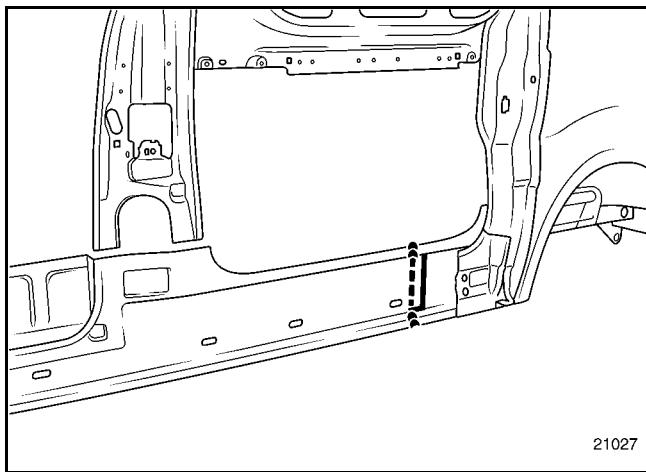
### REMINDER:

For the short wheelbase versions, it will be necessary to cut the sill panel closure panel as shown in the diagram and to weld the sill panel rear closure panel (1).

**Partial front replacement**



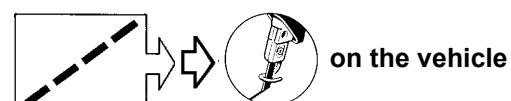
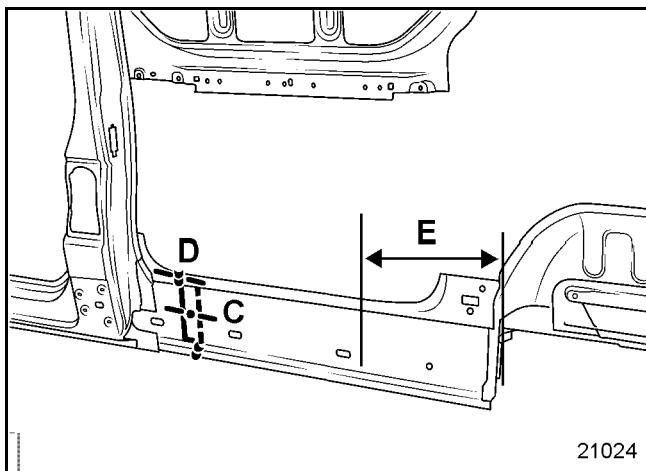
**Partial replacement of the centre section**



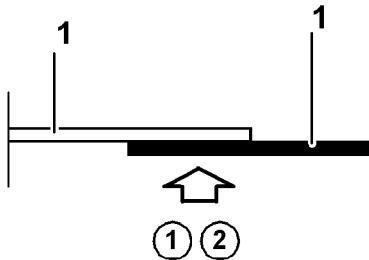
**NOTE:**

The operations are identical to those described in the front section partial cut, only the position of the cut is shown.

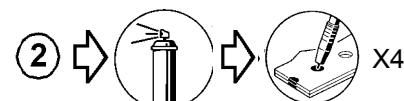
**Partial replacement of the rear section**



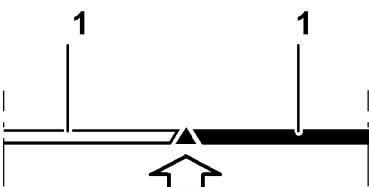
**C**



14579



**D**



14586



**NOTE:**

In the rear section, the sill panel closure panel is welded to the rear axle assembly mounting unit. These welds can be made using electrical welding, but the use of plug welds on the closure panel side (zone E) is recommended instead.

The replacement of this part is an operation associated with replacement of a rear side panel lining, front section.

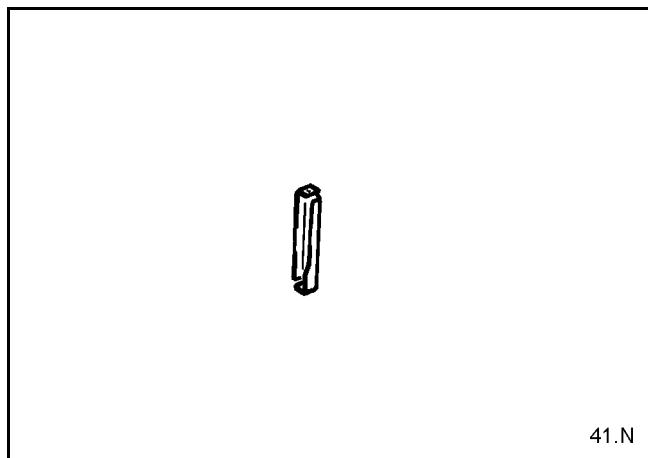
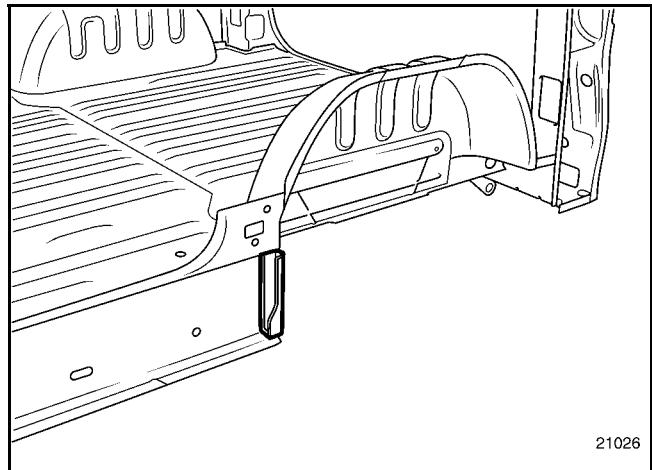
The procedure for replacing this part has no special procedures, and joints can all be made as originally.

Below is a view of the part in its correct position on the vehicle, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



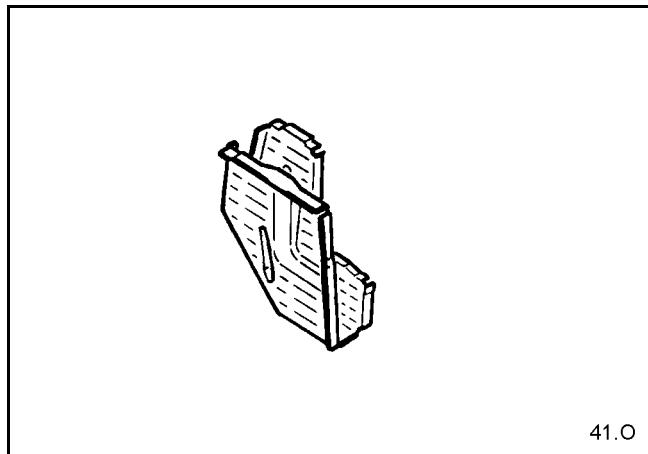
The replacement of this part is an additional operation to the replacement of a sill panel for a front side impact.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

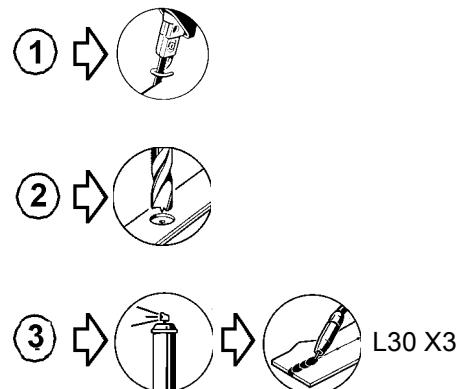
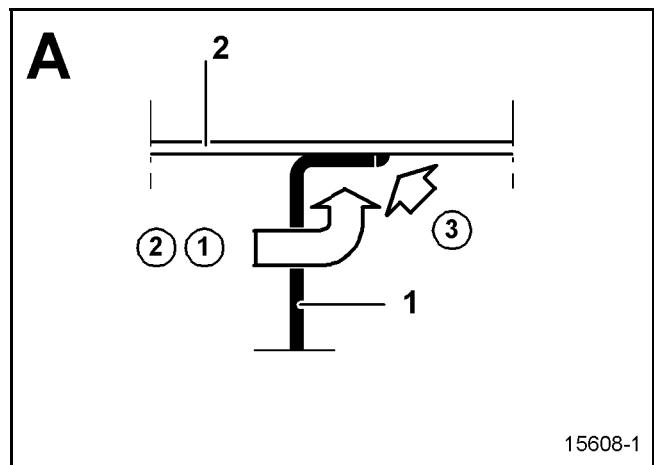
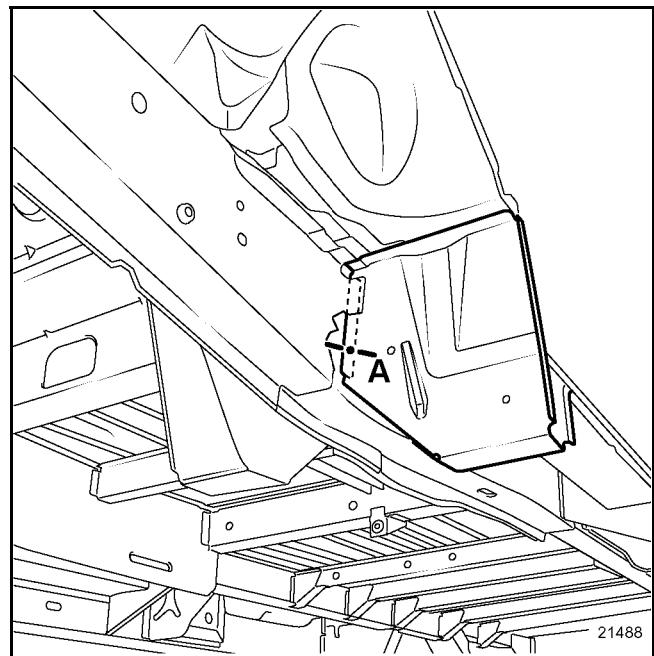
### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:  
Jacking point stiffener



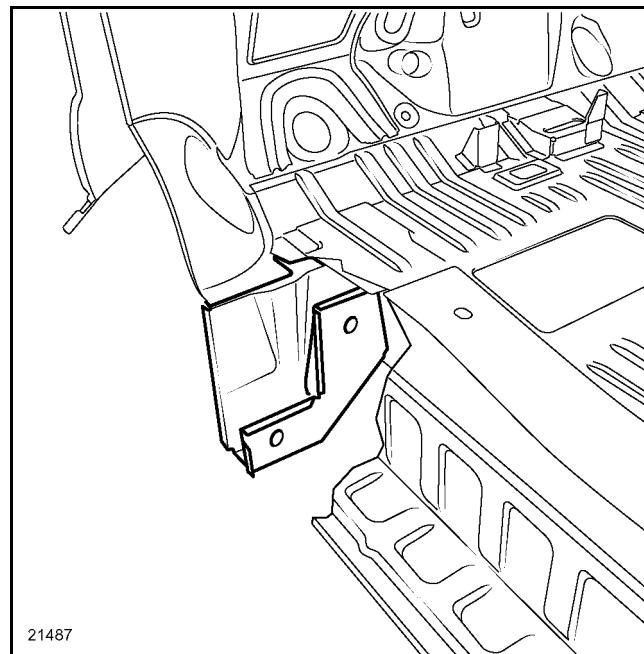
### PARTS CONCERNED (thickness in mm):

|   |                                 |     |
|---|---------------------------------|-----|
| 1 | Front jack support              | 1.2 |
| 2 | Front side member, rear section | 2   |



**LOWER STRUCTURE**  
**Front jack support**

**41** **O**



21487

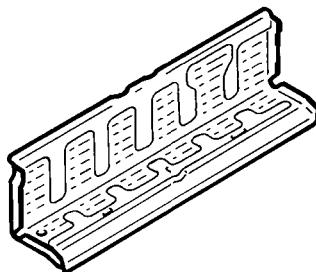
The replacement of this part is a complementary operation to the replacement of the inner sill panel for a side impact.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

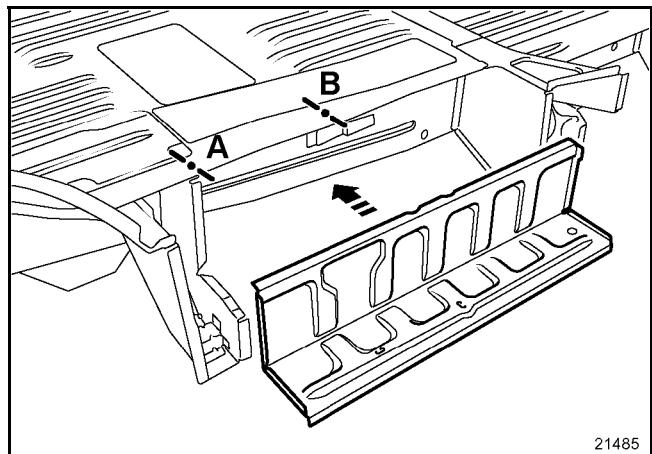
The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

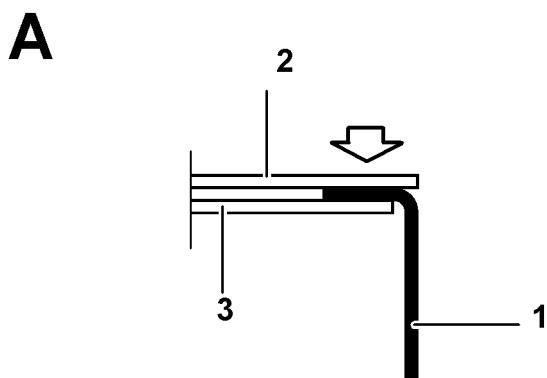
Part supplied on its own.



41.P



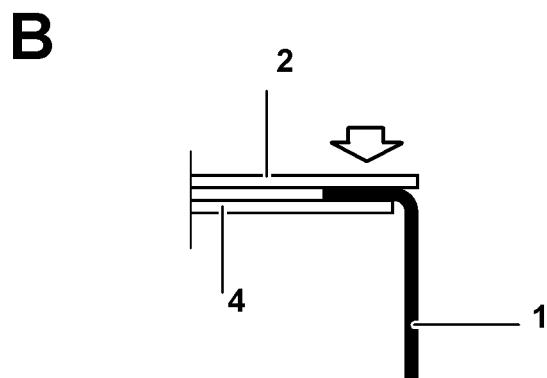
21485



14632-1

### PARTS CONCERNED (thickness in mm):

|   |                          |     |
|---|--------------------------|-----|
| 1 | Front side foot panel    | 0.8 |
| 2 | Cab floor                | 0.8 |
| 3 | Front jack support       | 1.2 |
| 4 | Seat attachment mounting | 2   |



14632-1



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

**NOTE:**

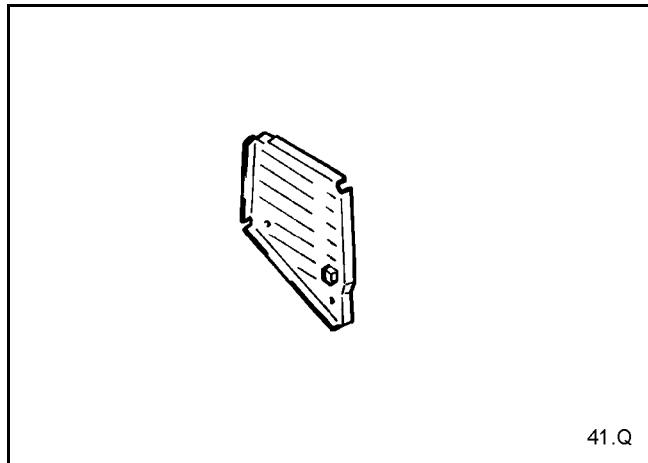
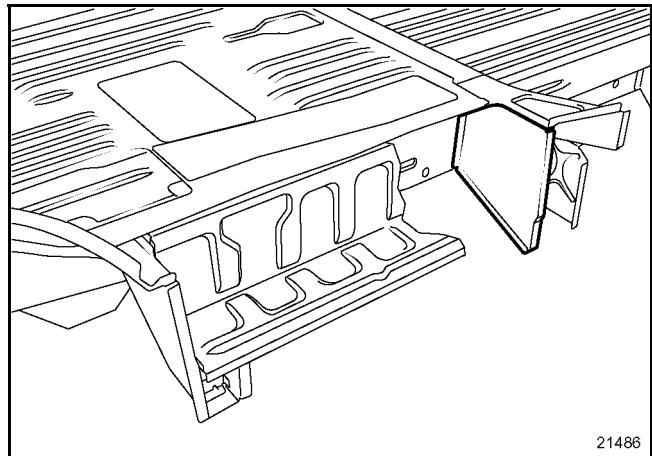
There are no special notes for replacing this part, and joints can all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

Below is a view of the part in position, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



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

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

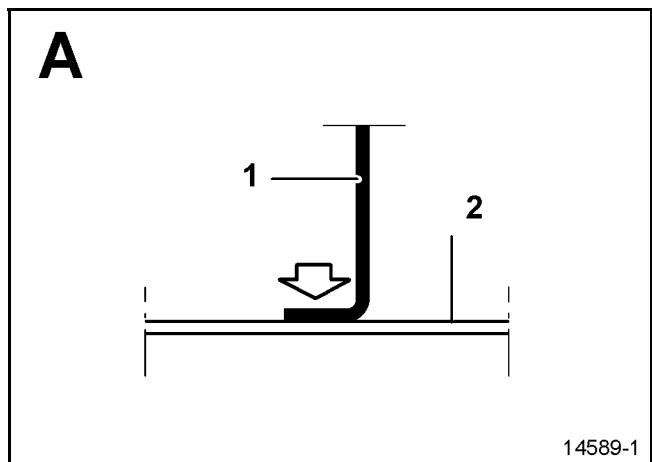
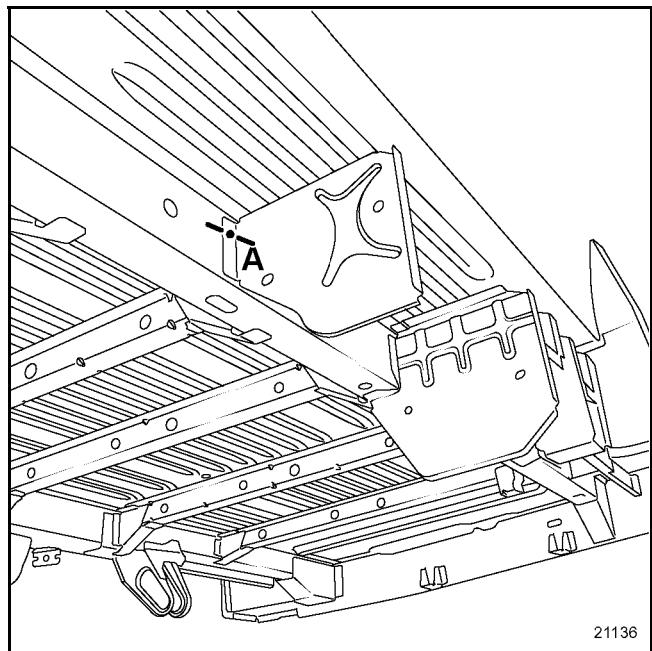
Part supplied on its own.



41.R

#### PARTS CONCERNED (thickness in mm):

|   |  |     |
|---|--|-----|
| 1 | Inner sill panel closure panel reinforcement | 1.5 |
| 2 | Rear side member, front section              | 1.5 |



The replacement of this part is an additional operation to the replacement of the sill panel for a front side impact.

**NOTE:**

There are no special notes for replacing this part, and joints can all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

Below is a diagram of the part in position, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

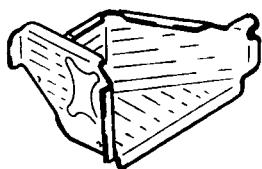
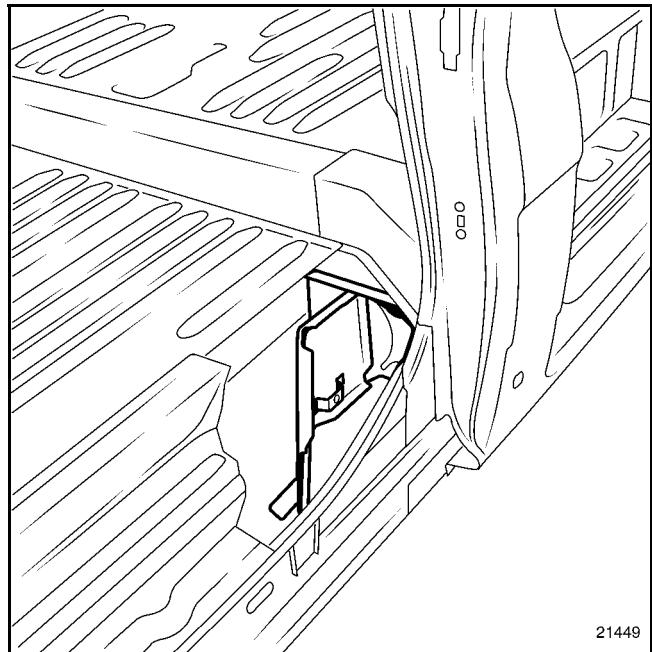
**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Closure panel

Housing mounting bridge piece

Welded nut



41.S

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

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

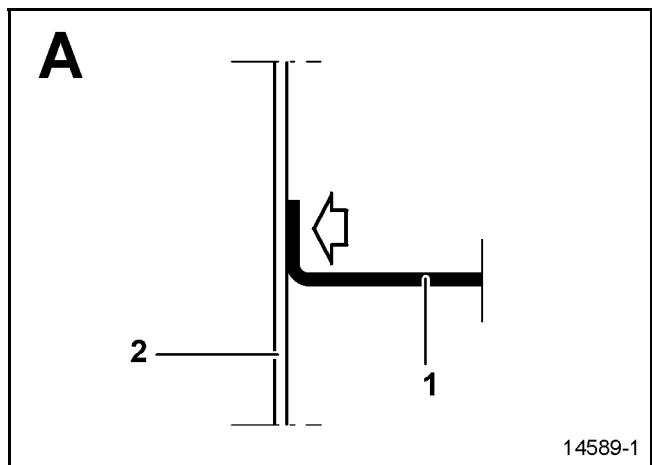
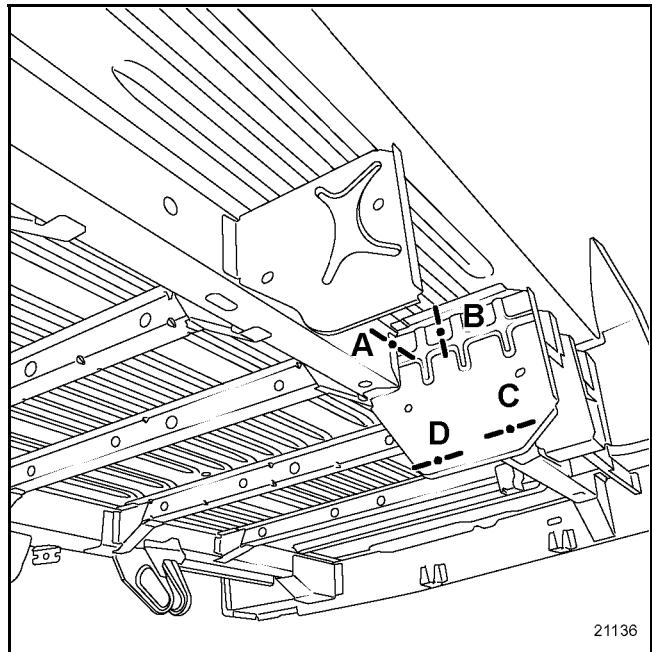
Part supplied on its own.



41.T

**PARTS CONCERNED (thickness in mm):**

|          |                                 |     |
|----------|---------------------------------|-----|
| <b>1</b> | Rear floor side cross member    | 2   |
| <b>2</b> | Rear axle mounting front unit   | 2   |
| <b>3</b> | Rear side member, front section | 1.5 |

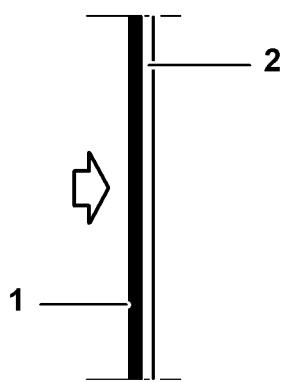


**LOWER STRUCTURE**  
**Rear floor side cross member**

**41**

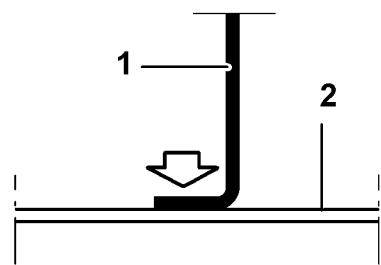
**T**

**B**



14576

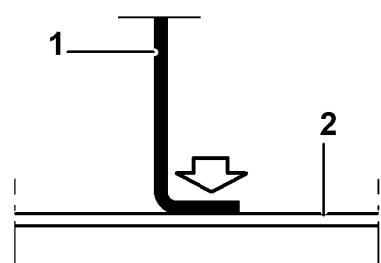
**D**



14589-1



**C**



14589-1



The replacement of this part is an additional operation to the replacement of the sill panel for a front side impact.

**NOTE:**

There are no special notes for replacing this part, and joints can all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

The repair bench must be used.

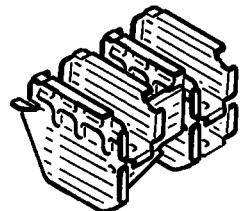
Below are diagrams of the part in its correct position on the body, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

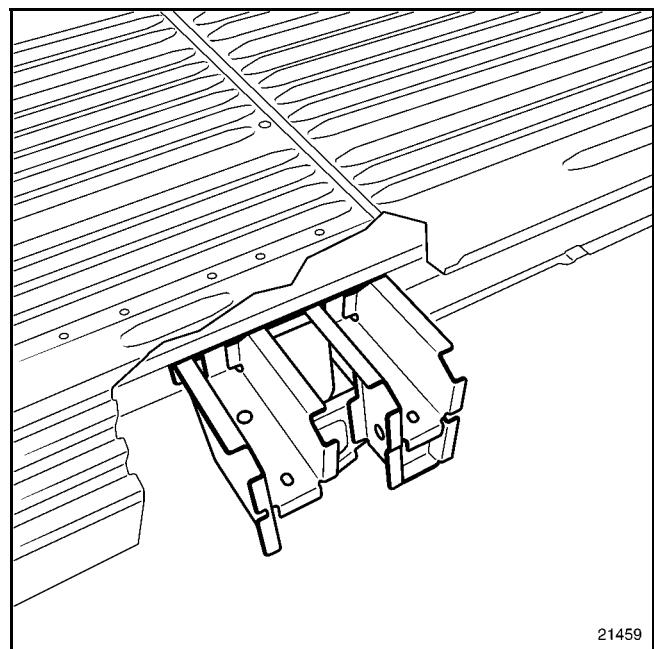
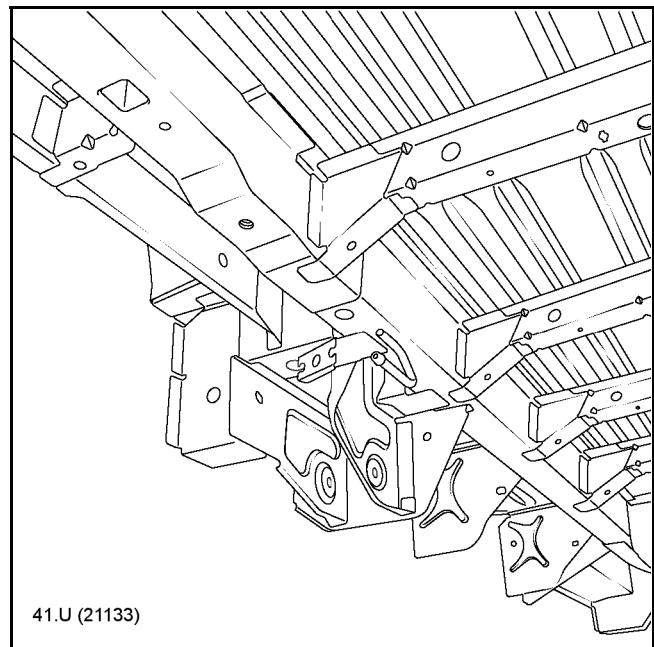
**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Mounting cross member  
 Connecting angle bracket  
 Mounting connecting arch  
 Brake cable flexible angle bracket  
 Jacking point stiffener  
 Outer bracket  
 Connecting flange  
 Reinforcement



41.U



The replacement of this part is an additional operation to the replacement of a front side sill for a frontal side impact or associated with the replacement of a front side member.

This operation can be carried out in several ways:

- partial, using cut A,
- partial, using cut B,
- or complete.

**IMPORTANT:**

The cut positions are given as indications, they can be offset depending on the deformation due to impact.

In the procedure described below, you will only find descriptions and connections which are specific to the part concerned during partial cuts.

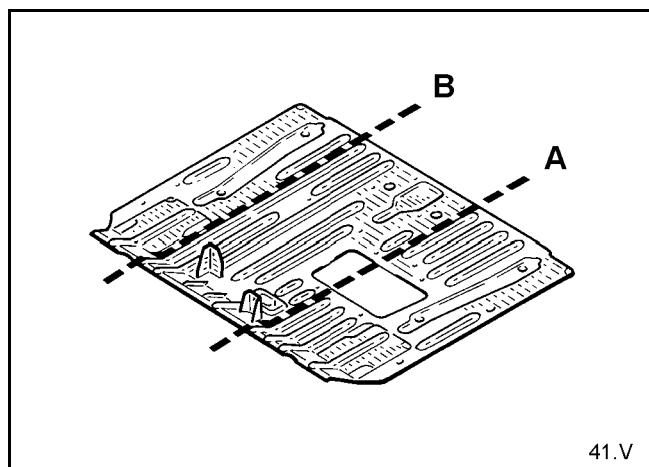
Below is a diagram of the part in position, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

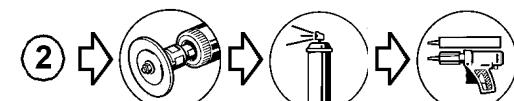
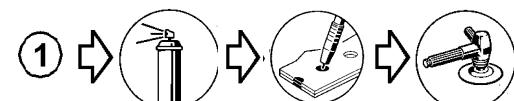
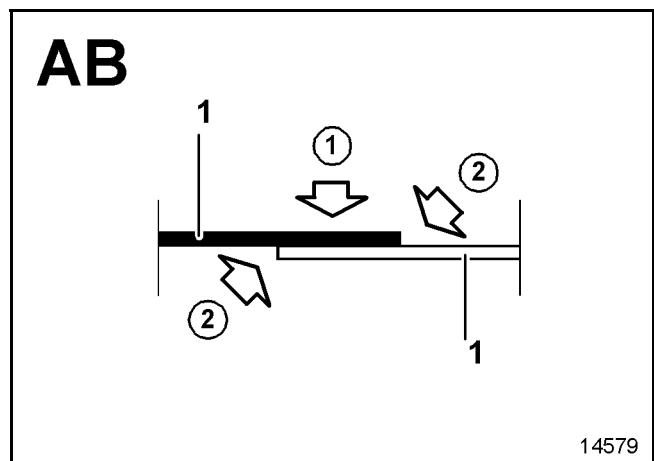
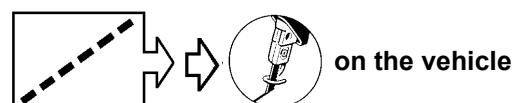
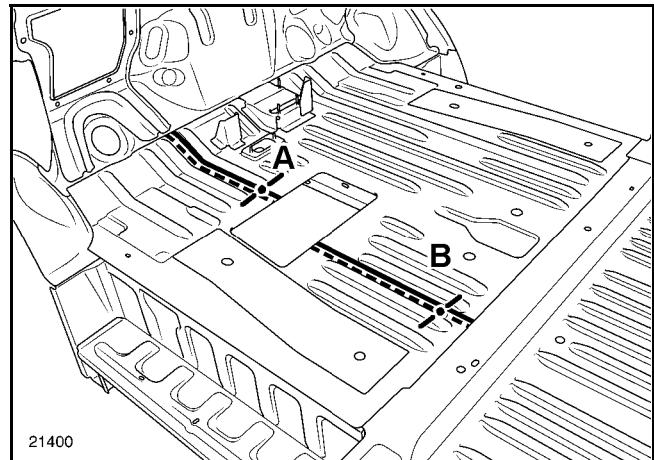
Battery flap reinforcement  
Control mounting reinforcement  
Housing mounting  
Welded bolts  
Mounting angle bracket  
Mounting reinforcement  
Welded studs  
Floor reinforcement



### PARTS CONCERNED (thickness in mm):

|             |     |
|-------------|-----|
| 1 Cab floor | 0.8 |
|-------------|-----|

### Partial replacement using cut A



**NOTE:**

the number of plug welds is not specified in the procedure.

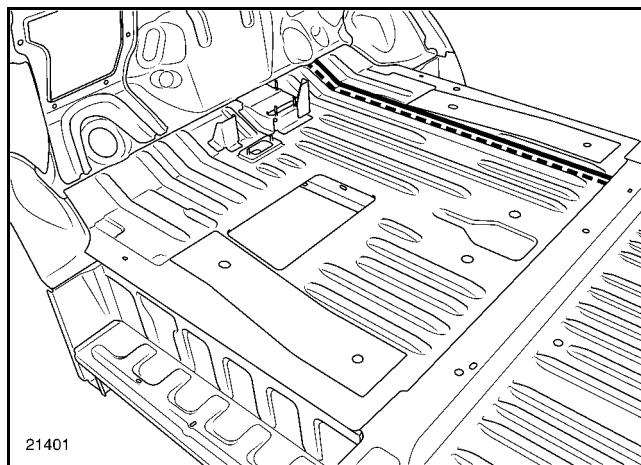
A distance of approximately **50 mm** must be maintained between the welds.

After welding, apply a bead of glue in the flange to ensure leaktightness. Use M.J.Pro type glue (part number: **77 11 172 676**)

The remaining welds are plug welds.

**NOTE:**

When carrying out cutting operations on the vehicle, take care not to damage the cross members and the stiffeners.

**Partial replacement using cut B****NOTE:**

This partial replacement avoids numerous spot welds on the side member on the side opposite the impact.

The procedure is identical to the short partial replacement, only the position of the cut changes.

The replacement of this part is an additional operation to the replacement of the sub-frame rear mounting for a frontal side impact.

This operation can be carried out in several ways:

- short partial,
- partial, using cut A.

**NOTE:**

The position of the cut cannot be altered, it is given according to the position of the stiffeners and apertures in the cross members.

It can be performed symmetrically depending on the side or the extent of the impact.

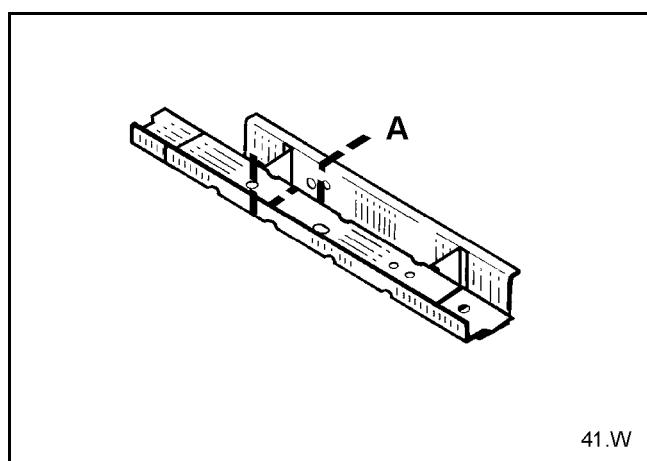
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

Cross member compartment  
Anti-intrusion side cross members  
Welded stud

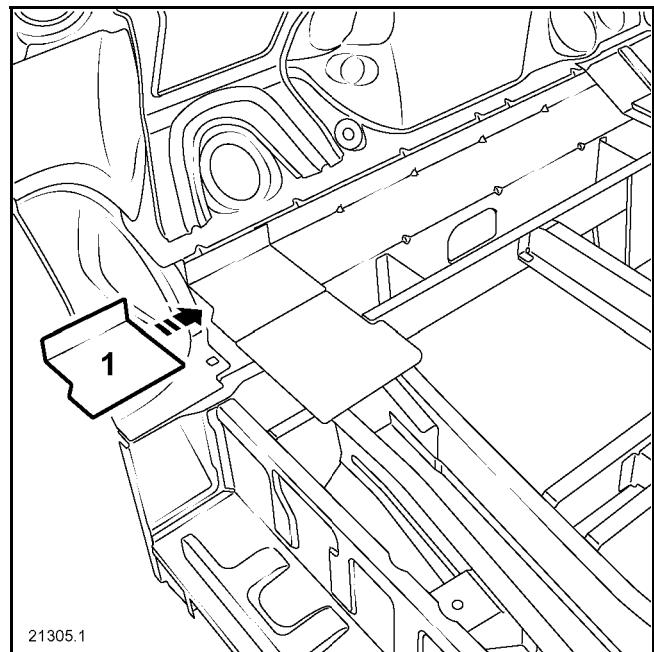


41.W

### PARTS CONCERNED (thickness in mm):

|   |           |     |
|---|-----------|-----|
| 1 | Cab floor | 1.5 |
|---|-----------|-----|

### Short partial replacement



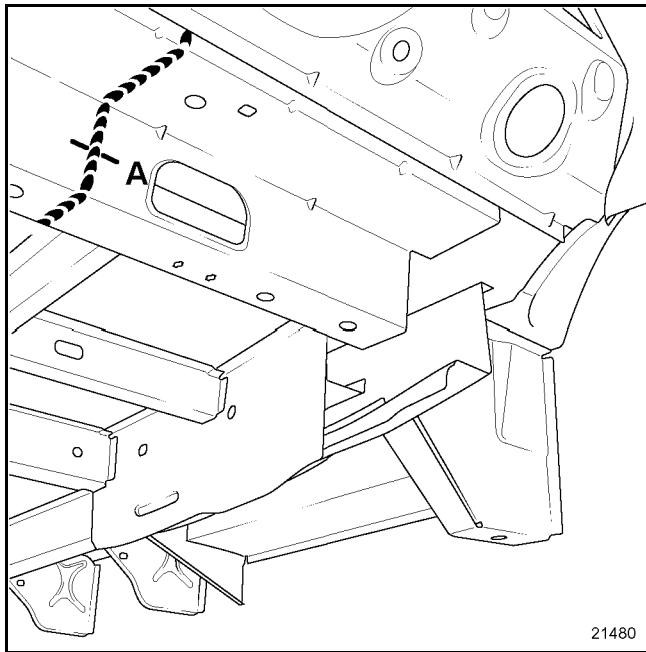
**NOTE:**

This operation is associated with replacement of a front side member.

Only the side section 1 of the cross member is unfastened.

All the welding must be by plug welding.

**Partial replacement using cut A**

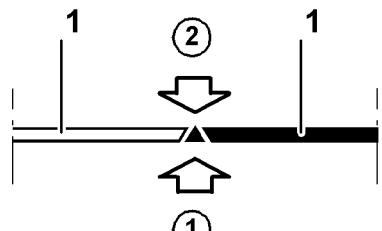


**NOTE:**

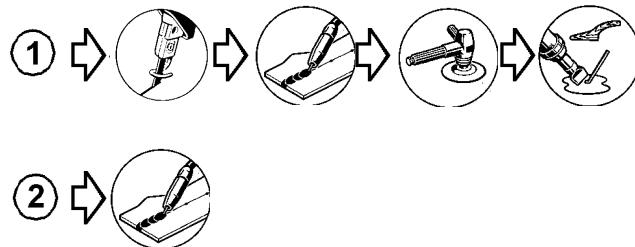
Partial replacement using cut **A** avoids unpicking on the opposite side at the sub-frame rear mounting.

Complete replacement of the part is possible, in this case it will be necessary to replace both sub-frame mountings.

**A**



14586



**IMPORTANT:**

It will be necessary to repeat the welding bead inside the cross member after applying the outside bead.

Replacement of this part is a complementary operation to replacing the cab floor.

**NOTE:**

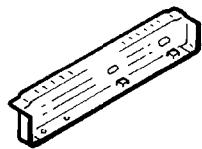
There are no special notes for replacing this part, and joints can all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

The repair procedure contains a diagram of the part in its correct position on the vehicle, for information.

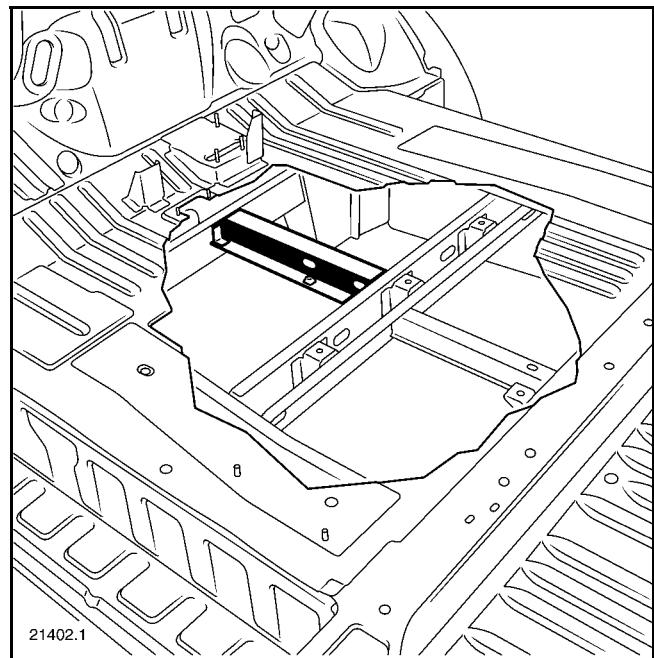
The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



41.X



Replacement of this part is an operation associated with replacement of the cab floor for a frontal side impact.

**NOTE:**

There are no special notes for replacing this part, and joints can all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

The repair procedure contains a diagram of the part in its correct position on the vehicle, for information.

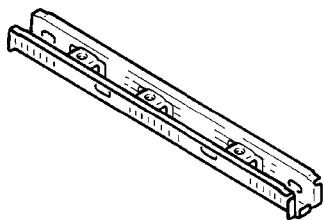
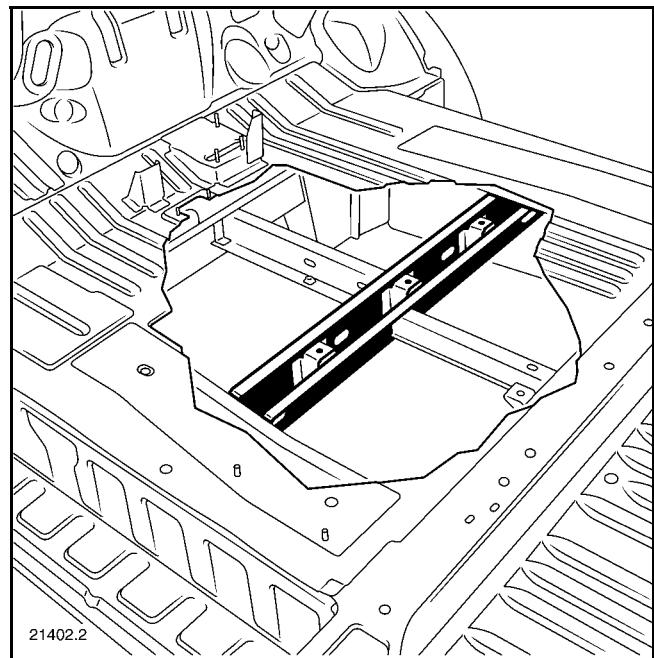
The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied with:

Mounting brackets

Welded studs



41.Y

Replacement of this part is an operation associated with replacement of the cab floor for a frontal side impact.

**NOTE:**

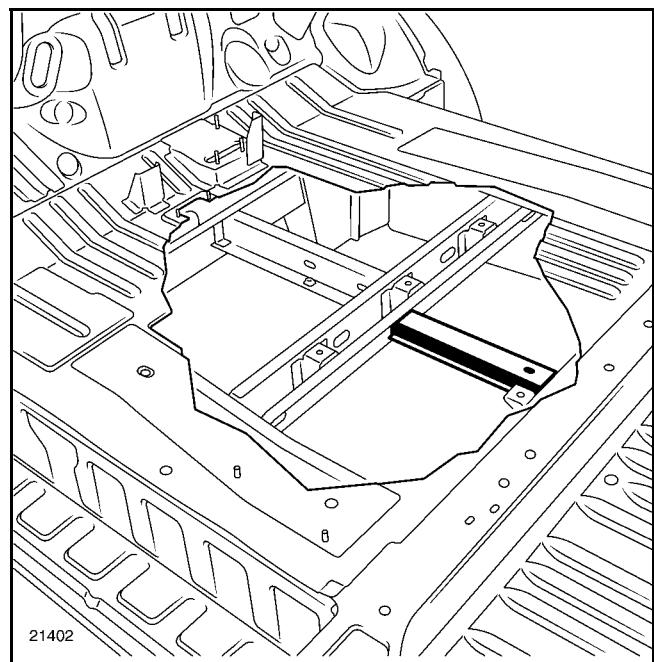
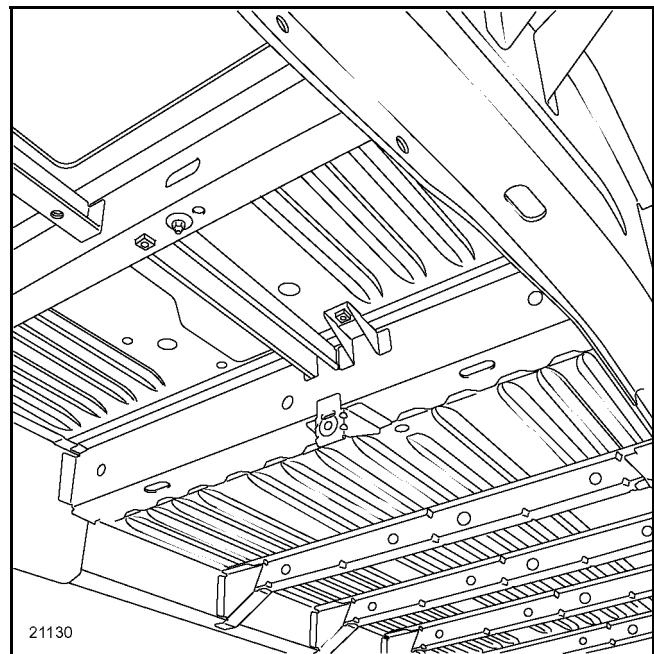
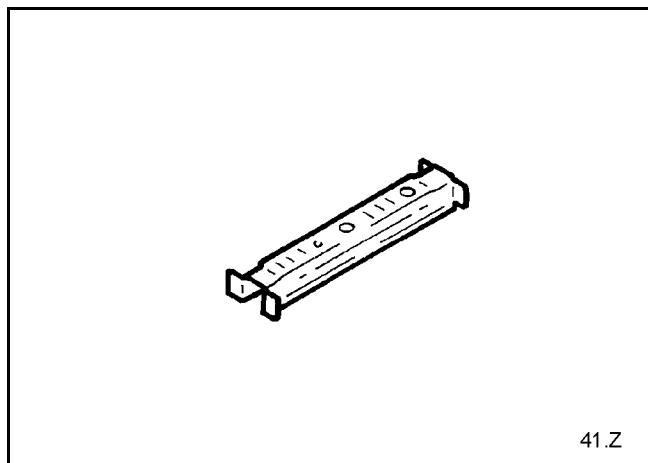
There are no special notes for replacing this part, and joints can all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

The repair procedure contains a diagram of the part in its correct position on the vehicle, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



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

**NOTE:**

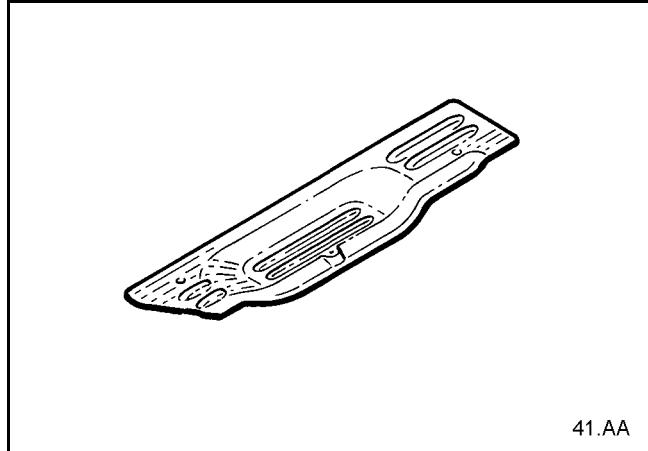
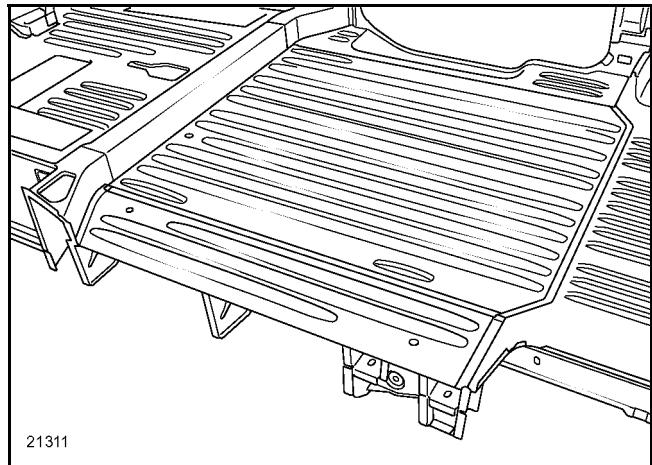
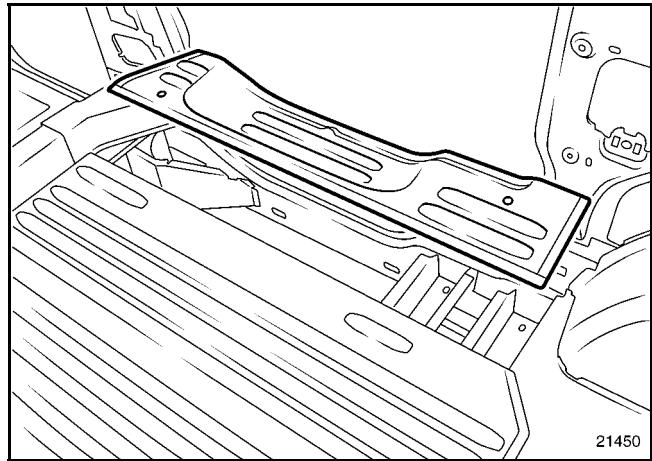
There are no special notes for replacing this part, and joints can all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

The repair procedure contains a diagram of the part in its correct position on the vehicle, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.

**Side without sliding side door****Side with sliding side door**

The replacement of this part is an additional operation to the replacement of the rear side sill for a rear impact.

There are two procedures for carrying out this operation:

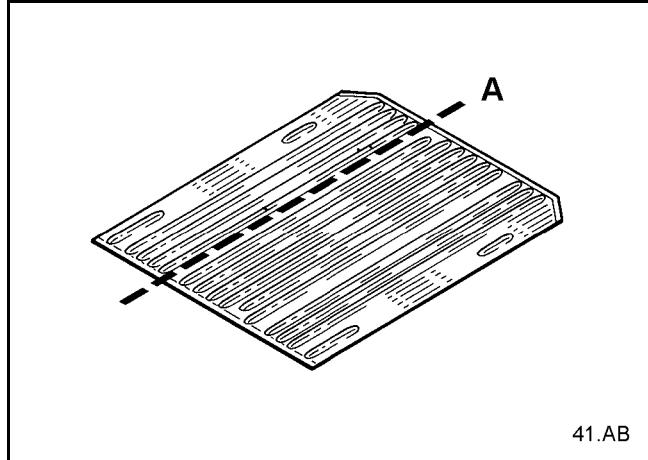
- partial, using cut A,
- or complete.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

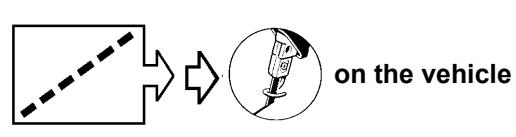
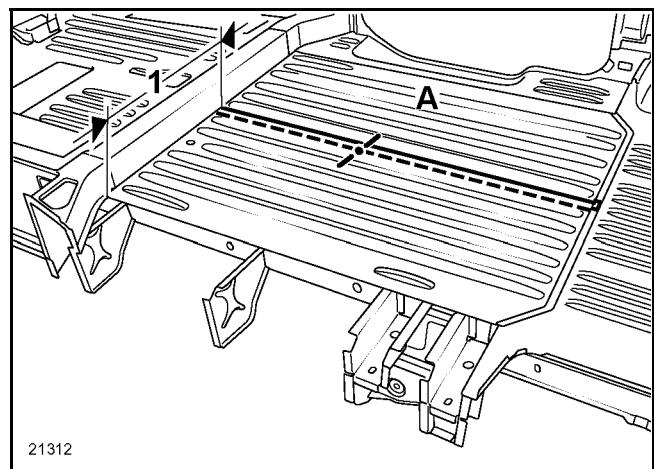
Part supplied on its own.



### PARTS CONCERNED (thickness in mm):

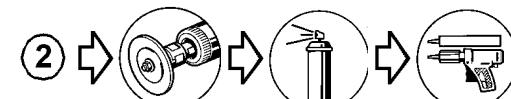
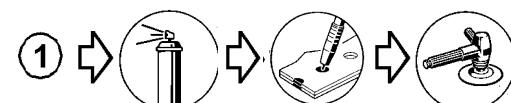
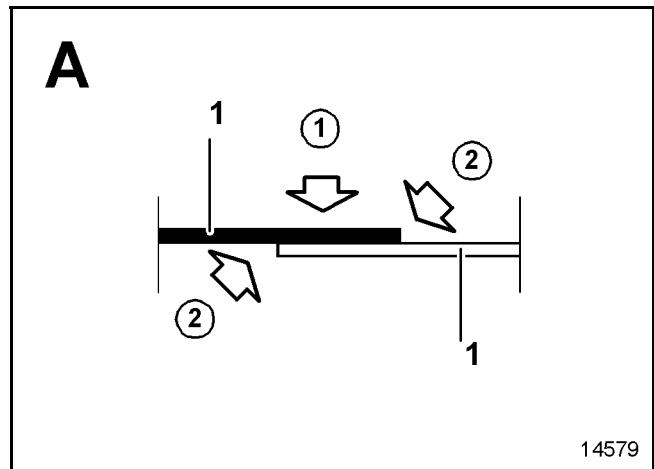
|   |                           |     |
|---|---------------------------|-----|
| 1 | Rear floor, front section | 0.8 |
|---|---------------------------|-----|

### Partial replacement using cut A



#### NOTE:

Beyond area 1, complete replacement is recommended.



**NOTE:**

The number of plug welds is not specified in the procedure.

A distance of approximately **50 mm** must be maintained between the welds.

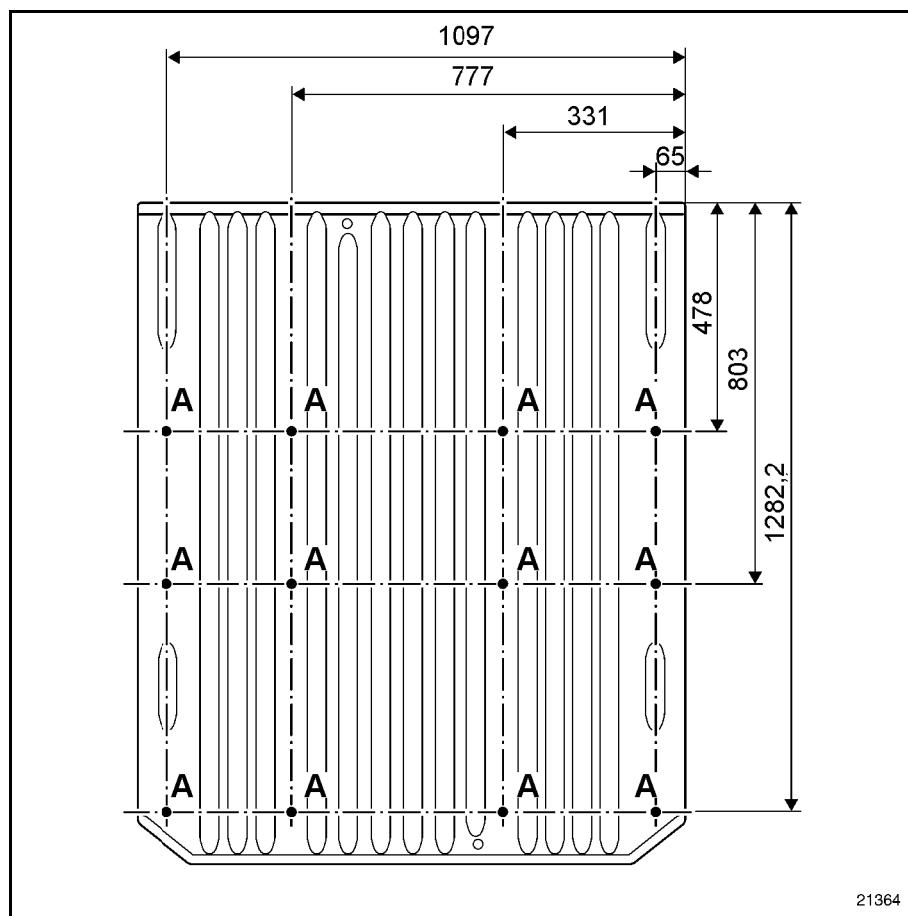
After welding, apply a bead of glue in the flange to ensure leaktightness.

Use M.J.Pro type glue (**part number: 77 11 172 676**)

**IMPORTANT:**

When carrying out the cutting operation, take care not to damage the various cross members and stiffeners.

### Adaptations for versions with seats



For standardisation reasons, the Parts Store only supplies floors for the van version (without holes).

For the bus and combi versions, it will be necessary to drill the replacement floor for the seat attachments.

This operation must be carried out before painting.

**IMPORTANT:**

The dimensions are given for information, you are advised to check the position of the holes by a trial assembly before welding the floor.

The replacement of this part is an additional operation to the replacement of a cab C-pillar lining for a side impact.

There are two procedures for carrying out this operation:

- complete,
- partial, side section only.

**NOTE:**

The side section must be unpicked on the replacement part.

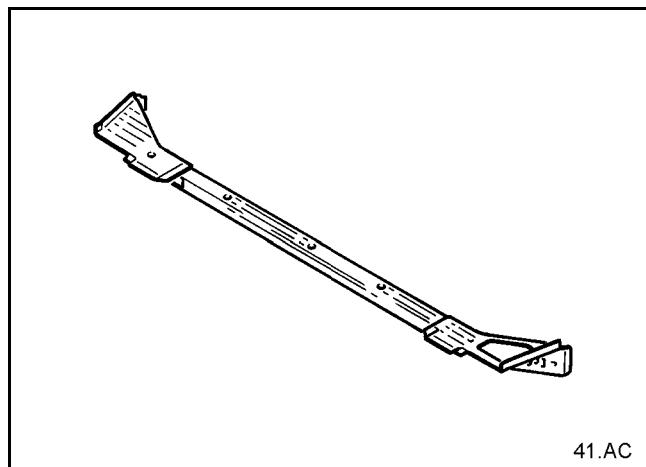
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied with:

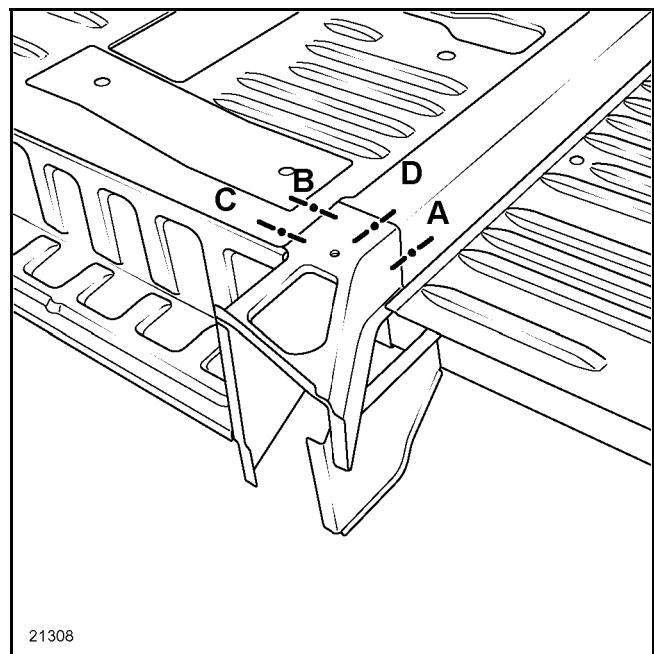
Cross member  
Side cross members  
Welded nuts  
Side brackets  
Mounting pads



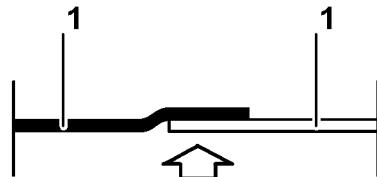
**PARTS CONCERNED (thickness in mm):**

|          |                               |     |
|----------|-------------------------------|-----|
| <b>1</b> | Rear floor front cross member | 1.5 |
| <b>2</b> | Cab floor                     | 0.8 |
| <b>3</b> | Front side member             | 2   |
| <b>4</b> | Front side foot panel         | 0.8 |

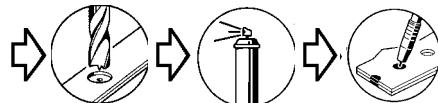
**Partial replacement**



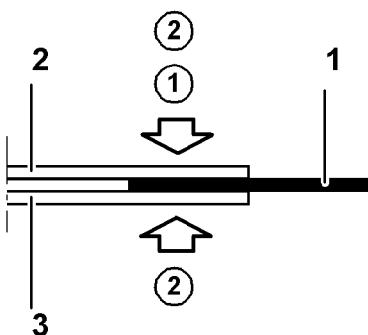
**A**



14582-1



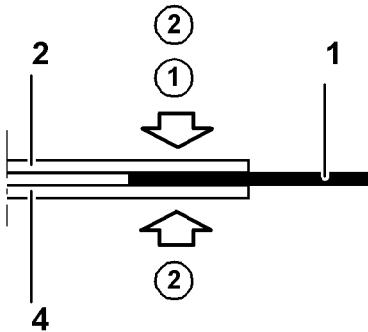
**B**



14616-1



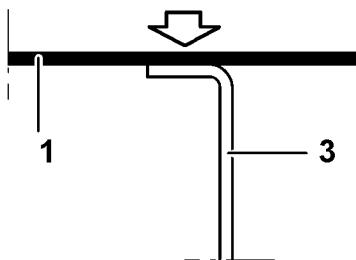
**C**



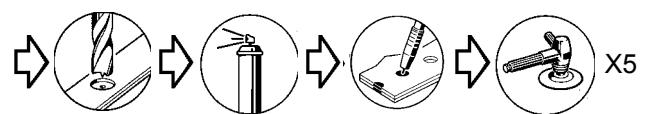
14616-1



**D**



14589



Complete replacement

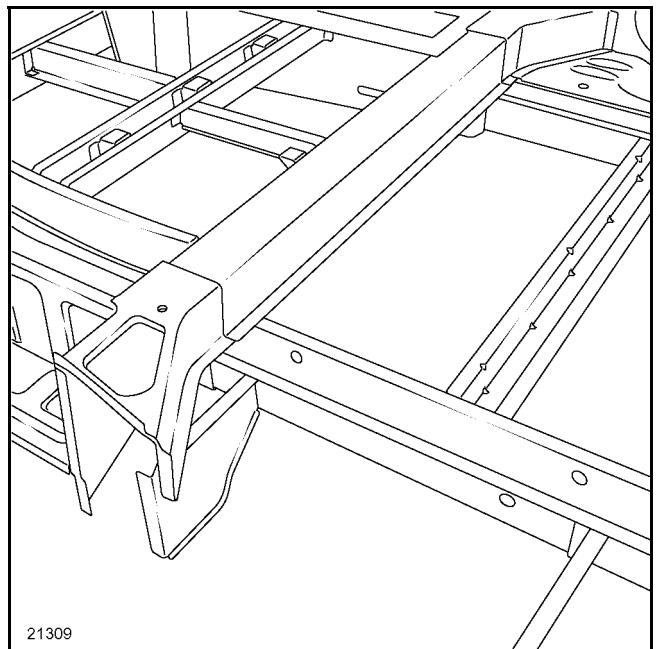


Diagram for information only

The replacement of this part is an additional operation to the replacement of the cab floor for a side impact.

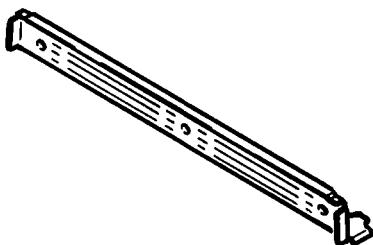
The repair procedure contains a diagram of the part in its correct position, for information.

The welding to be used is preferably resistance welding as originally or alternatively plug welding depending on the equipment used and the type of impact.

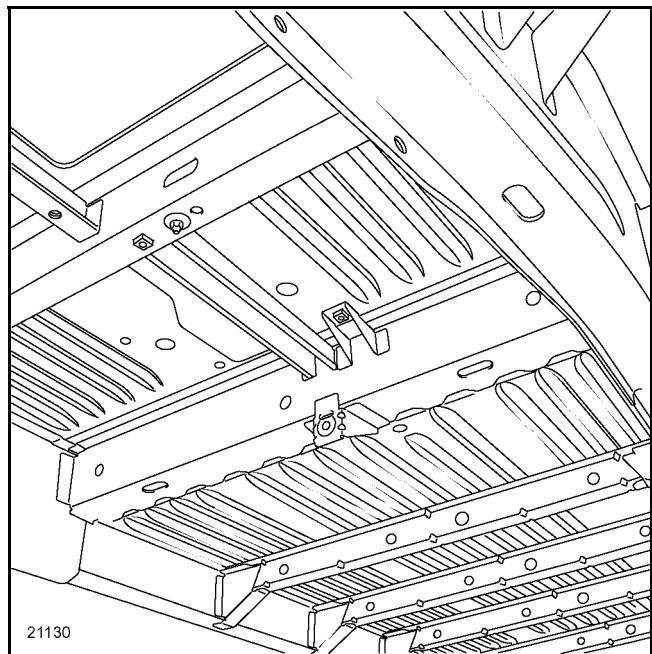
The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



41.AD



# LOWER STRUCTURE

## Handbrake lever mounting stiffener

41

AE

Replacement of this part is a basic operation associated with a fault.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

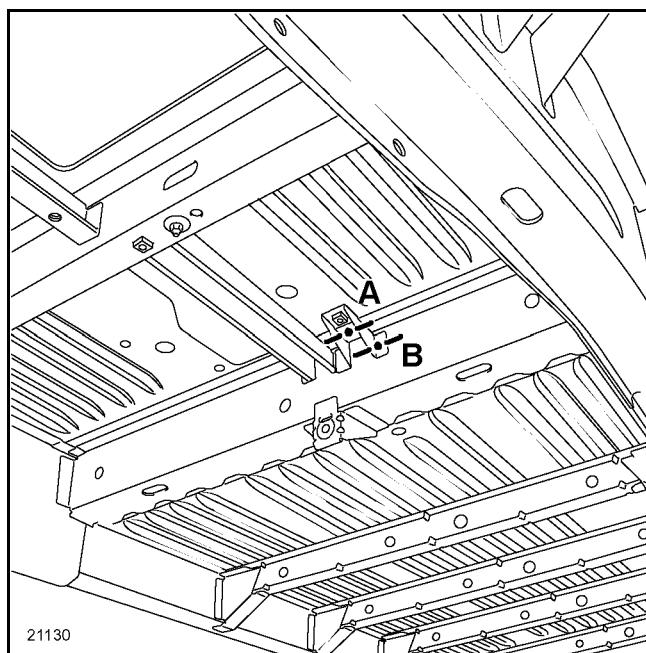
### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.

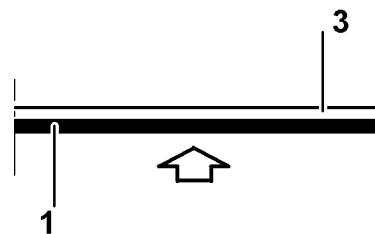


### PARTS CONCERNED (thickness in mm):

|   |                                      |     |
|---|--------------------------------------|-----|
| 1 | Sleeve stop                          | 2   |
| 2 | Rear floor front cross member lining | 1.2 |



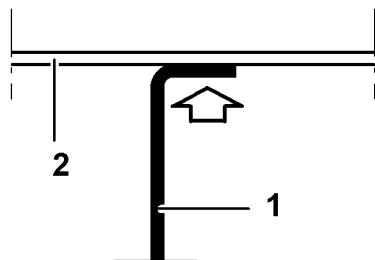
A



14576



B



14589-1



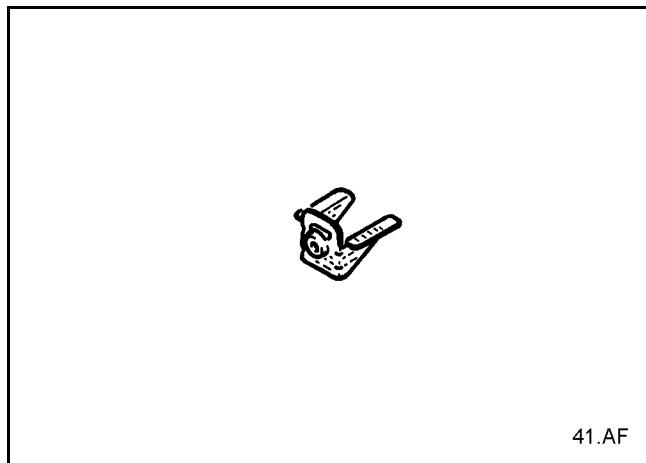
Replacement of this part is a basic operation associated with an accident.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

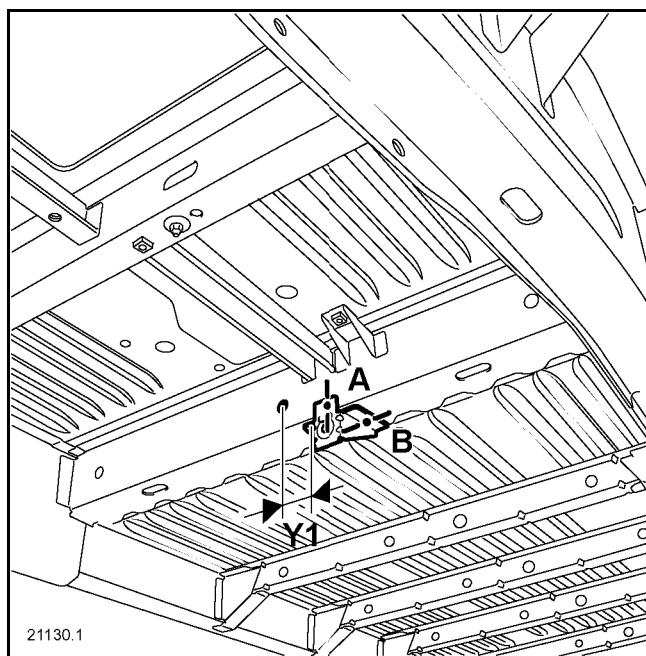
Part supplied on its own.



41.AF

### PARTS CONCERNED (thickness in mm):

|   |                                      |     |
|---|--------------------------------------|-----|
| 1 | Sleeve stop                          | 2   |
| 2 | Rear floor front cross member lining | 1.2 |

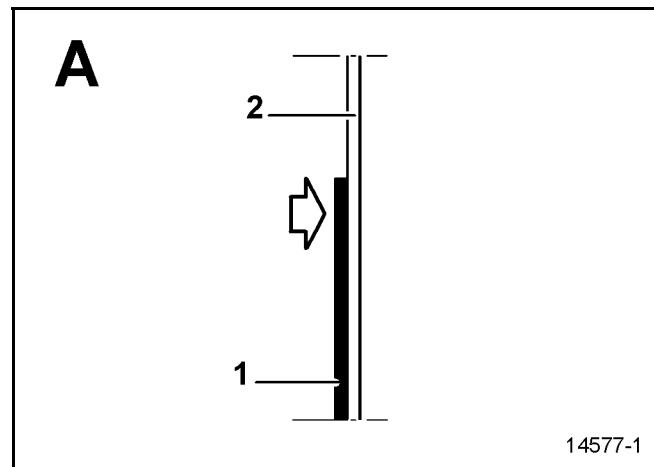


21130.1

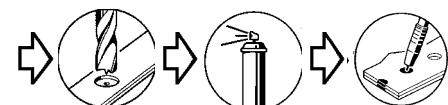
**Y1 = 53 mm**

### NOTE:

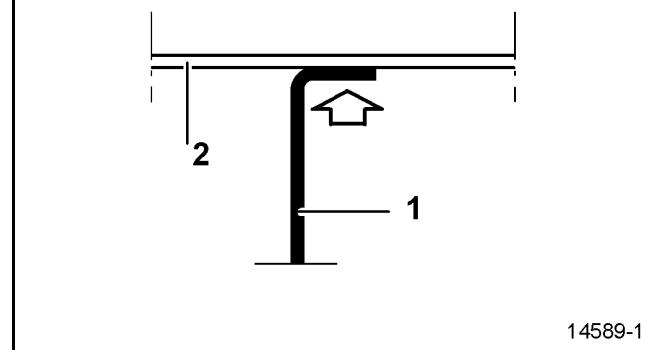
The dimension is given for information purposes.



14577-1



### B



14589-1



X4

The replacement of this part is an additional operation to the replacement of the rear floor, front section.

There are two procedures for carrying out this operation:

- complete,
- partial, using cut **A** or **B**.

**IMPORTANT:**

Cut **B** is to be used for a frontal impact.

Cut **A** is to be used for a rear impact.

**NOTE:**

In the procedure described below you will find only the cut positions for partial replacement.

For standardisation reasons, the Parts Store will only supply a single part corresponding to the long wheelbase version.

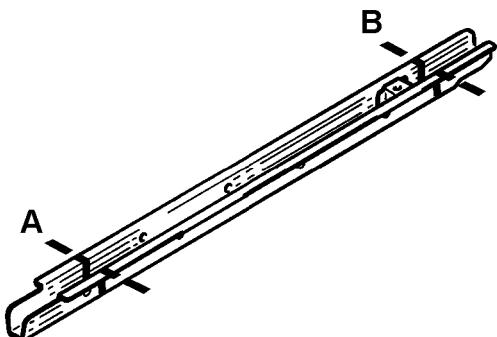
For the short versions, it will be necessary to cut the replacement part.

This operation must be carried out before painting.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.

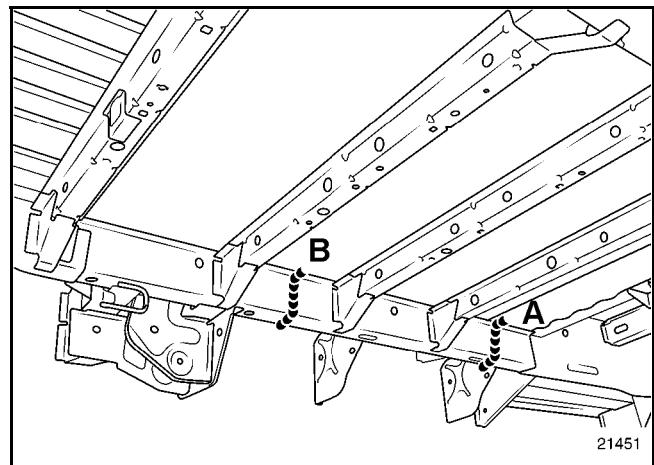
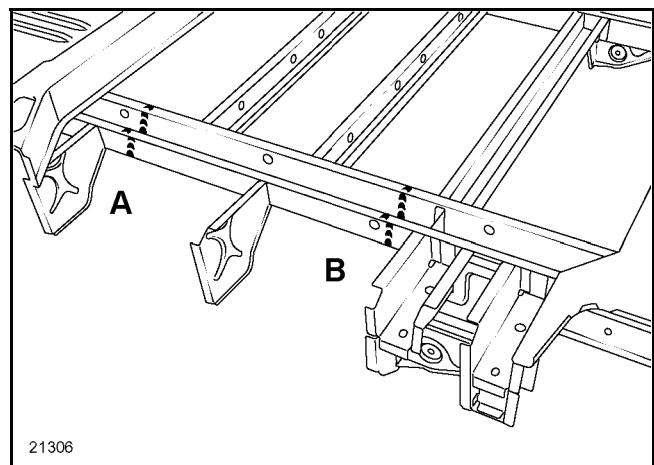


41.AG

### PARTS CONCERNED (thickness in mm):

|   |                                 |     |
|---|---------------------------------|-----|
| 1 | Rear side member, front section | 1.5 |
|---|---------------------------------|-----|

### Partial replacement



**NOTE:**

Cuts **A** and **B** avoid unpicking at the side member fitting.

**REMINDER:**

Cut **B** is to be used for a frontal impact.

Cut **A** is to be used for a rear impact.

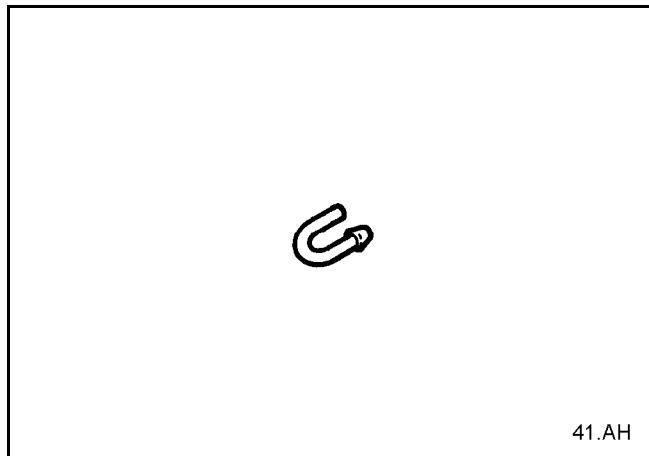
The replacement of this part is an additional operation to the replacement of a rear side member, centre section, or associated with an accident.

The Spares Department will deliver the side member without the exhaust attachment mountings which must be welded in position using the procedure described below.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

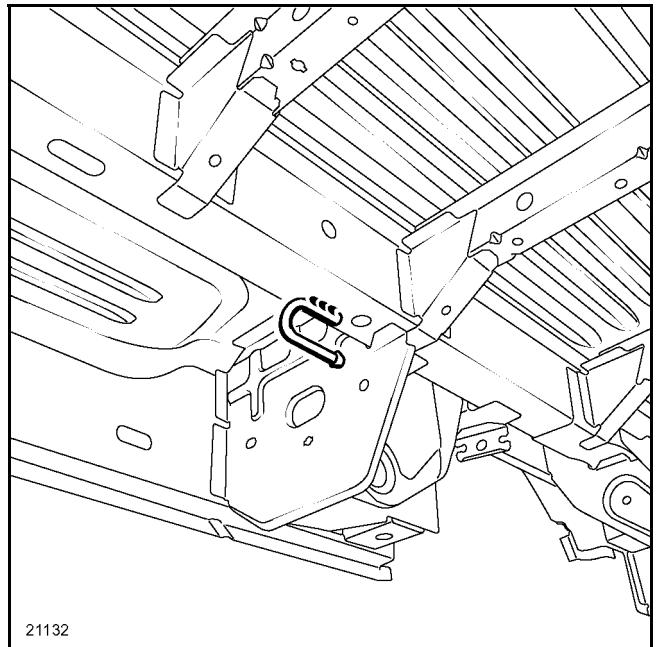
**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.

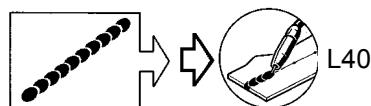


41.AH

**Right-hand side**

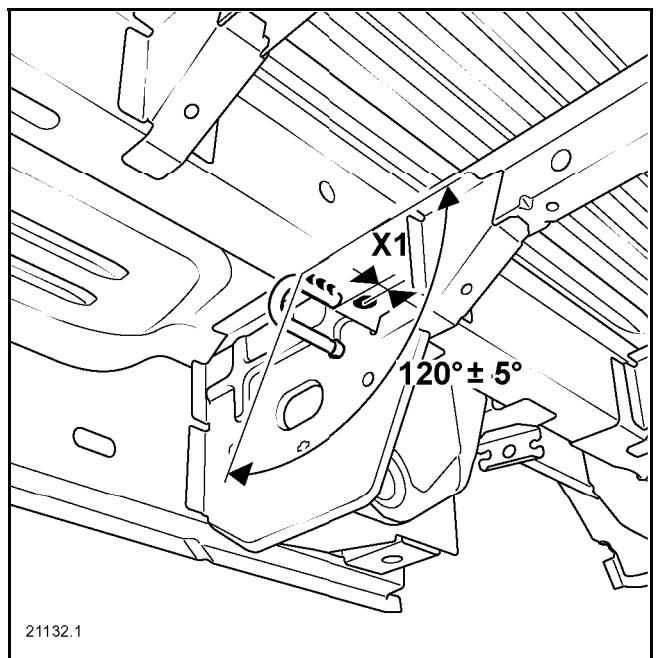


21132



**NOTE:**

The bead is applied on both sides.

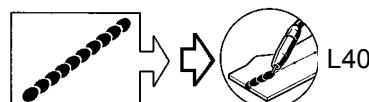
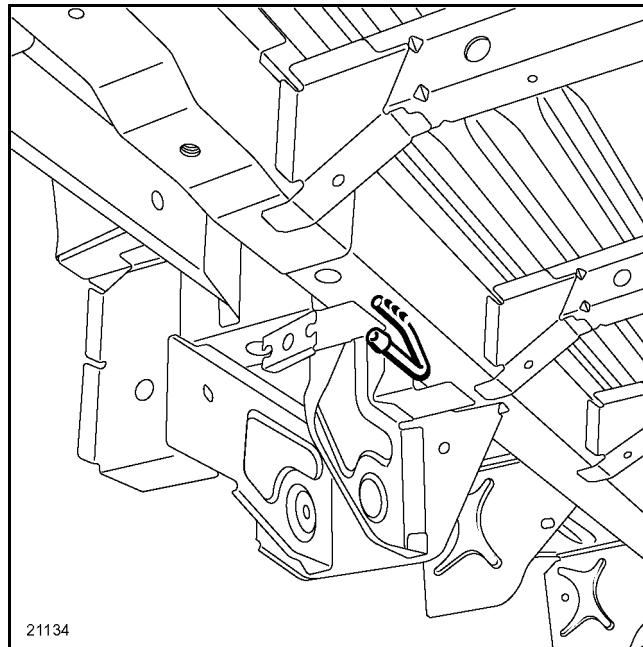


**NOTE:**

**X1 = 25 mm**

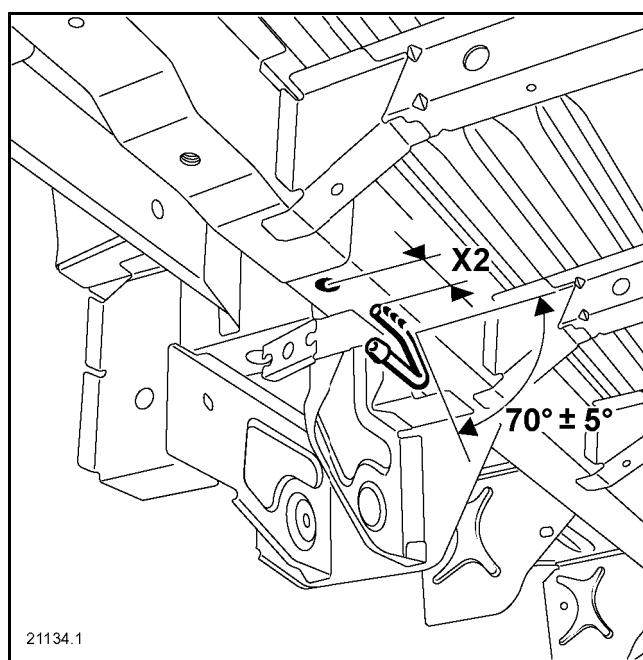
the dimensions are given for information.

**Left-hand side**



**NOTE:**

The bead is applied on both sides.



**NOTE:**

**X2 = 55 mm**

the dimensions are given for information.

Replacement of this part is a basic operation on the rear axle mechanical parts.

**NOTE:**

The procedure does not present any particular difficulty.

The repair bench must be used.

The repair step contains two views of the part in position on the vehicle, for information.

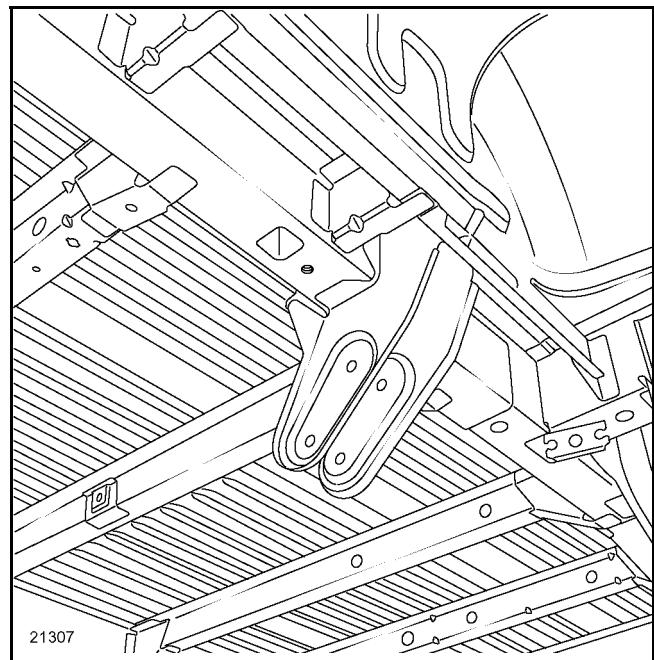
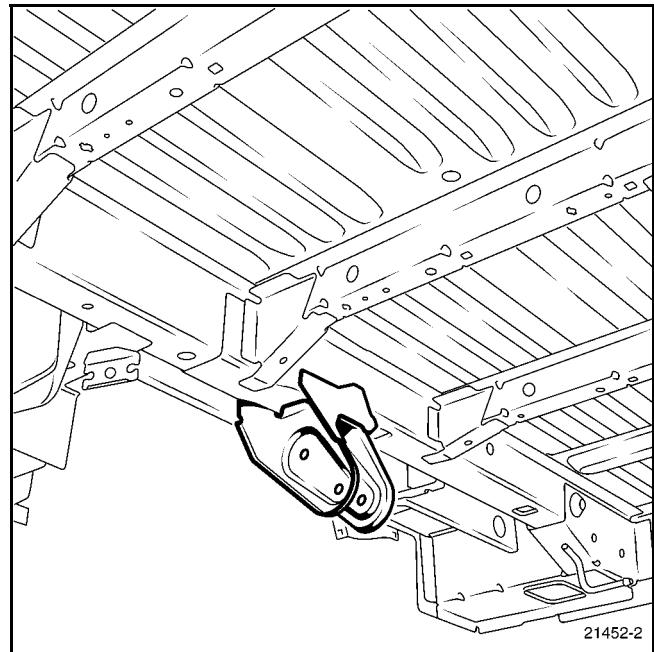
The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



41.AI



**NOTE:**

All the welds are made using plug welding.

Replacement of this part is an operation associated with replacement of a rear floor for a side impact.

**NOTE:**

There are no special notes for replacing this part, and joints can all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

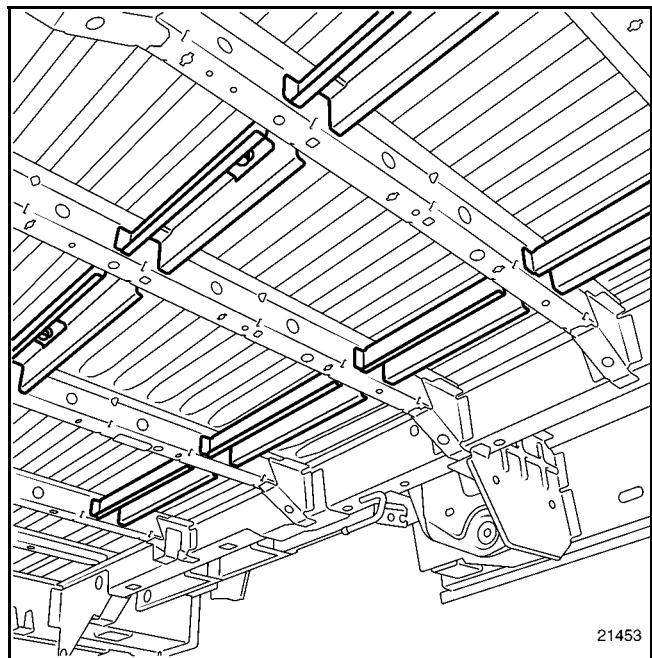
The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Assembled part with mounting pad.



41.AJ



21453

**NOTE:**

The seat frames can be used as a template for positioning the stiffeners.

The replacement of this part is an additional operation to the replacement of a rear floor for a rear impact.

**NOTE:**

The procedure does not present any particular difficulty.

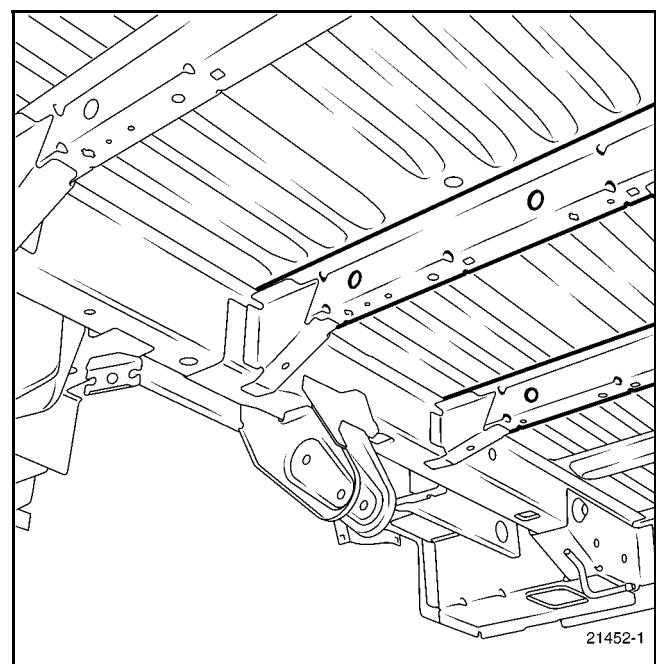
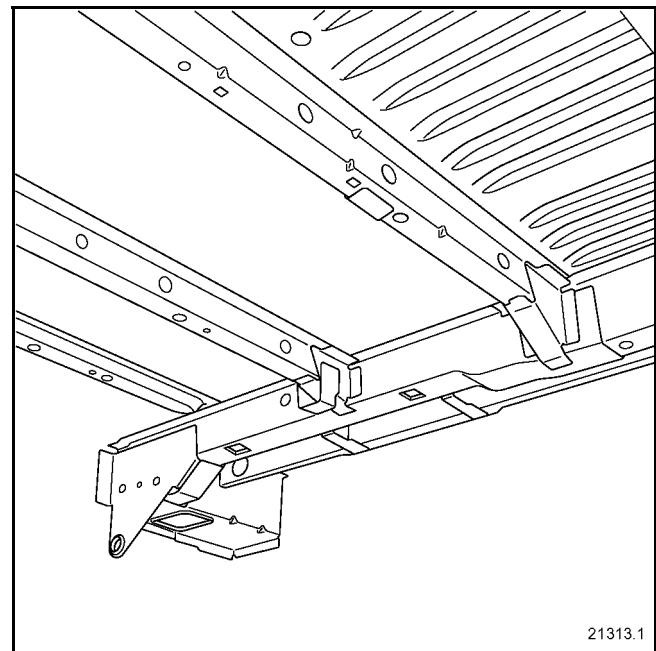
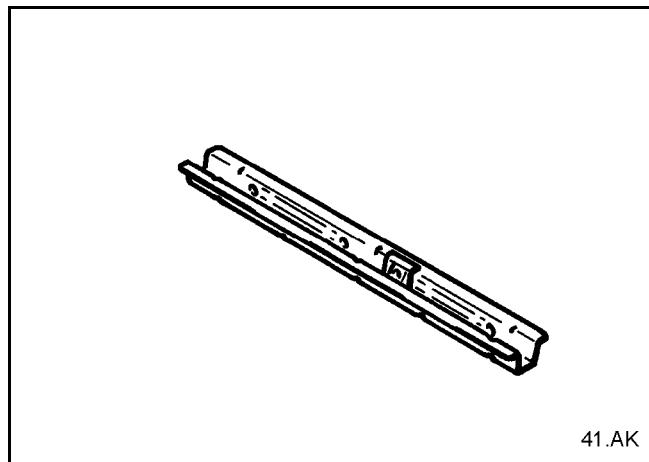
For this operation, the welds can all be plug welds.

The repair step contains two views of the part in position on the vehicle, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with welded nuts.



Replacement of this part is an operation linked to replacement of a rear floor centre cross member or a rear side member, front section, for a rear impact.

**NOTE:**

The procedure does not present any particular difficulty.

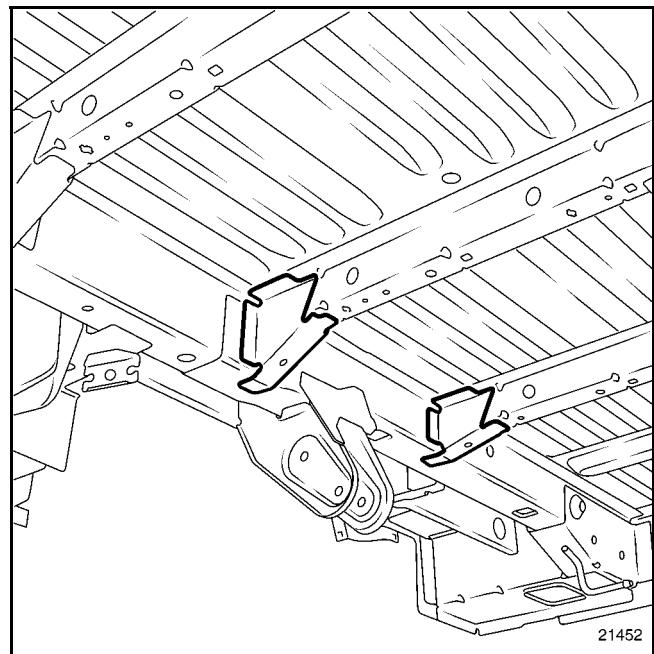
For this operation, the welds can all be plug welds.

The repair step contains two views of the part in position on the vehicle, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



41.AL

# LOWER STRUCTURE

## Rear seat mounting bracket

41 AM

Replacement of this part is associated with replacement of a rear floor, rear section, for a rear impact.

**NOTE:**

This part is only used on long wheelbase versions.

There is no specific repair procedure for this part.

### COMPOSITION OF THE REPLACEMENT PART

Assembled part with mounting pad.



41.AM

The replacement of this part is a complementary operation to the replacement of the rear end cross member for a rear impact

There are two procedures for carrying out this operation:

- complete,
- partial, using cuts **A**, **B** or **C**.

**IMPORTANT:**

The cut positions shown below cannot be offset, they are given according to the positions of the inner stiffeners and holes in the various parts.

The repair bench must be used.

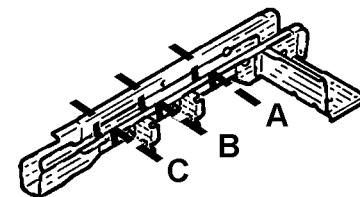
In the procedure described below, you will only find descriptions for partial cuts and joining of the side member.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

Rear end lower cross member side closure panel  
 Cross member brackets  
 Exhaust attachment mounting (right-hand side)  
 Cup reinforcements  
 Side member reinforcement  
 Shock absorber mounting spacer  
 Rear axle side tie-rod mounting (right-hand side)  
 Attachment closure panel of rear axle side tie-rod (right-hand side)  
 Rear shock absorber attachment  
 Towing ring (left-hand side)

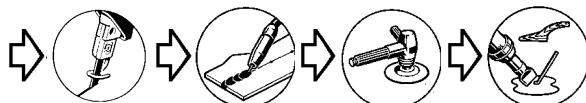
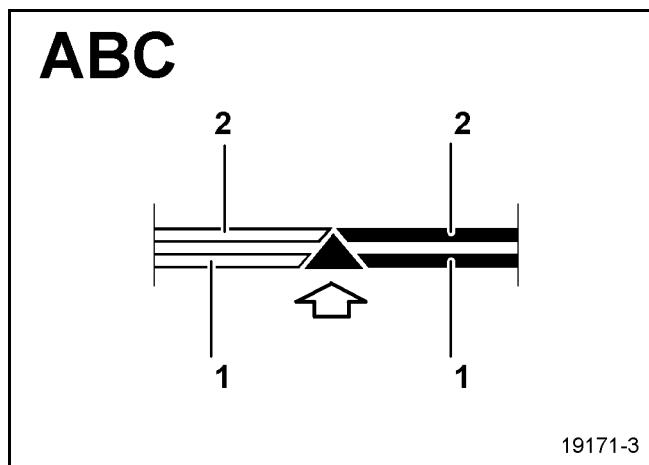
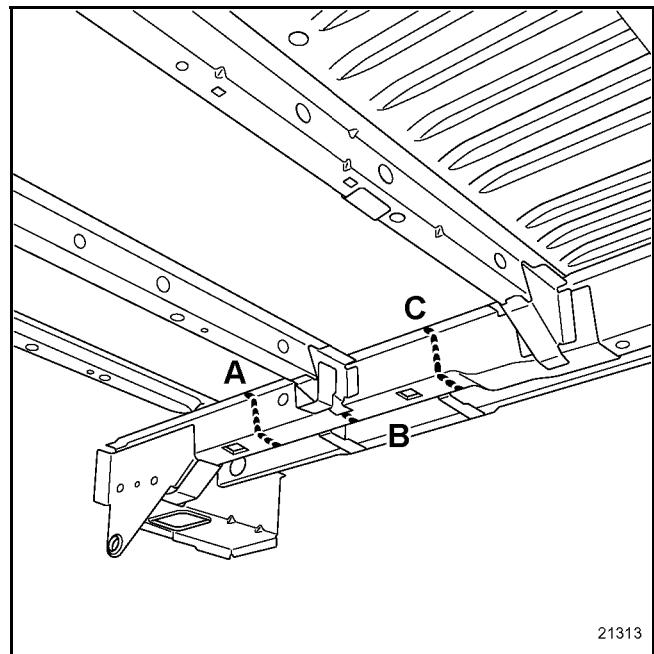
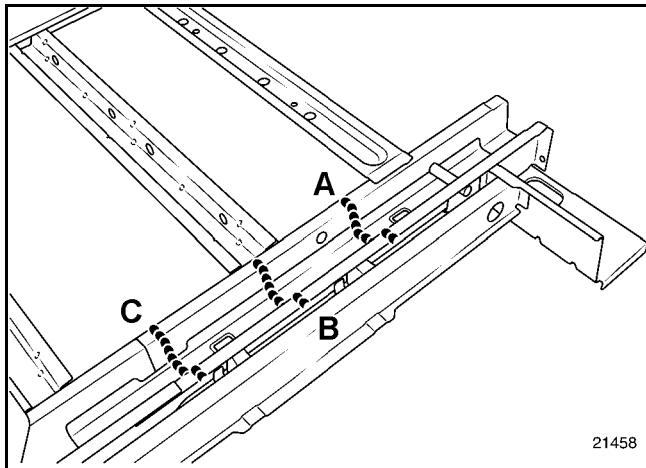


41.AN

### PARTS CONCERNED (thickness in mm):

|   |                            |     |
|---|----------------------------|-----|
| 1 | Rear side member           | 2   |
| 2 | Rear side member stiffener | 1.5 |

**Partial replacement**



**IMPORTANT:**

The cuts are made simultaneously on the side member and its stiffener.

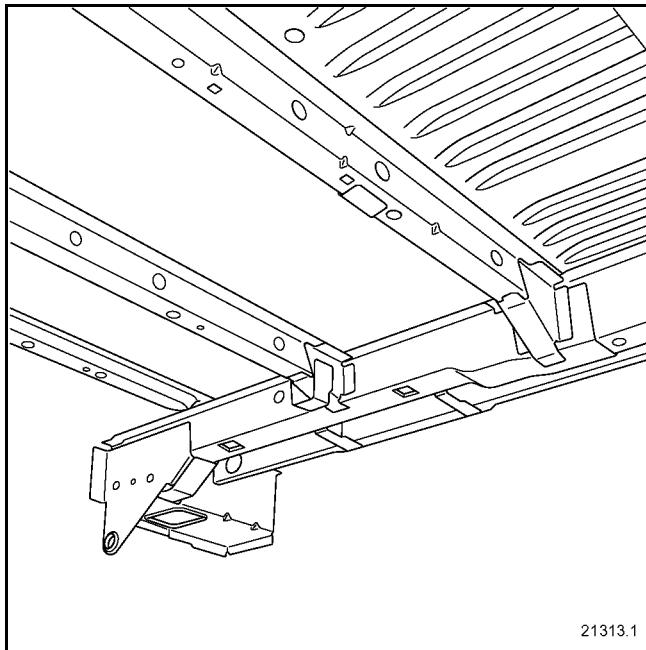
**NOTE:**

The three possible cuts **A**, **B** and **C** for partial replacement are shown in the diagrams.

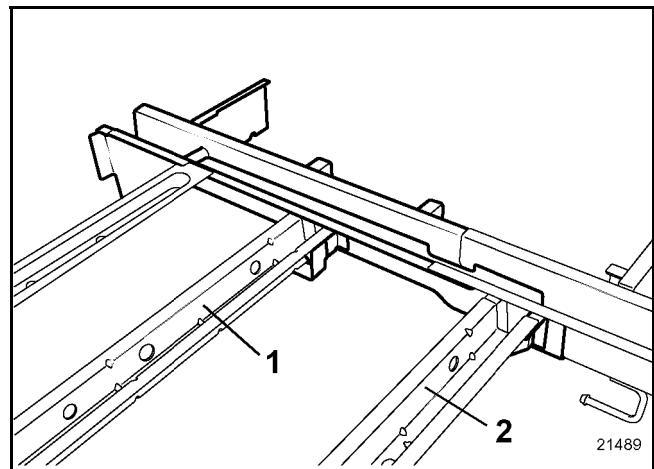
**REMINDER:**

The cut positions shown in the procedure cannot be offset.

**Complete replacement**



21313.1

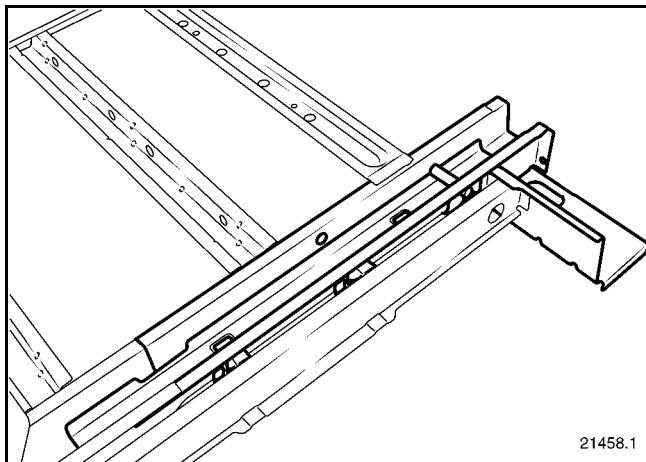


**NOTE:**

The side member inner stiffener is used as a guide for assembly on the vehicle.

To carry out this operation, it is necessary to slightly raise the floor rear cross members **1** and **2** to ensure the passage of the brackets welded to the side member.

If this operation cannot be performed, it will be necessary to unpick the brackets on the replacement part.



21458.1

Replacement of this part is an operation associated with replacement of a rear side member for a rear impact.

**NOTE:**

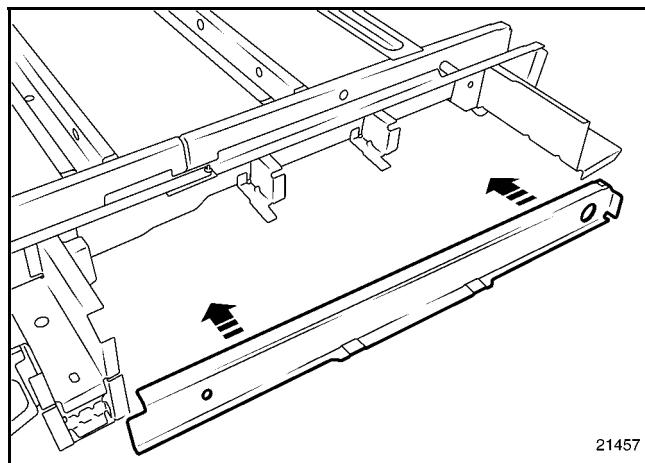
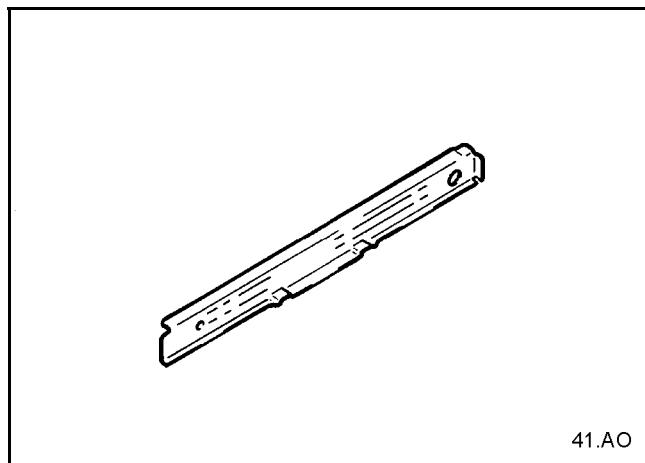
There are no special notes for replacing this part, and joints can all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

Below is a diagram of the part in its correct position on the body, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



The replacement of this part is a complementary operation to the replacement of the rear end lower cross member for a rear impact.

This operation can only be carried out by partial replacement.

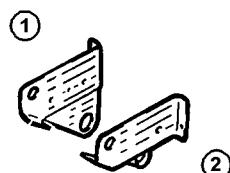
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied in two sections:

- ① Towing eye reinforcement
- ② Towing eye bracket

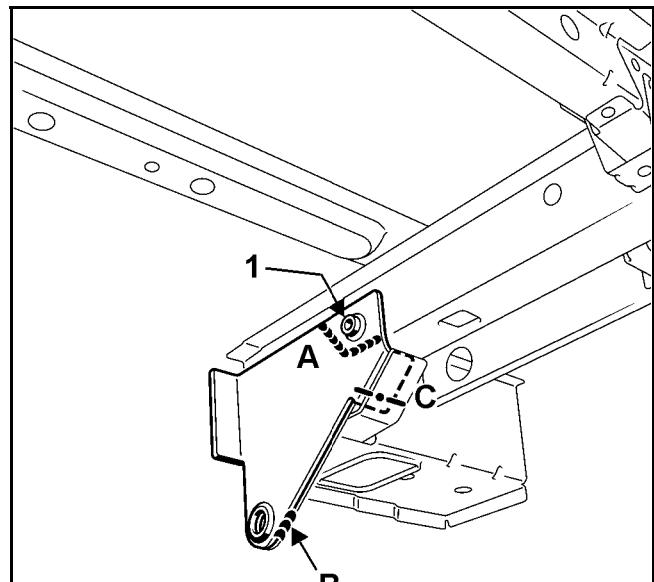


41.AP

### PARTS CONCERNED (thickness in mm):

|   |                          |     |
|---|--------------------------|-----|
| 1 | Towing eye reinforcement | 2.5 |
| 2 | Towing eye bracket       | 2.5 |
| 3 | Rear side member         | 2   |

### Partial replacement of the towing ring bracket only

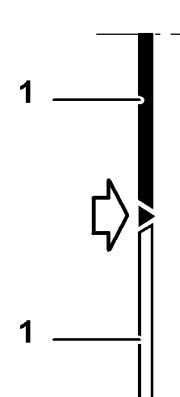


21454

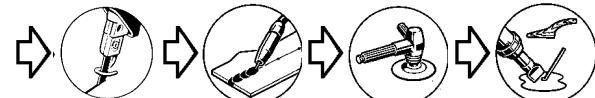
### NOTE:

All the welds are made using plug welding.

A

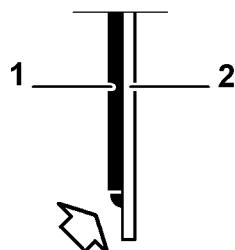


14586



### NOTE:

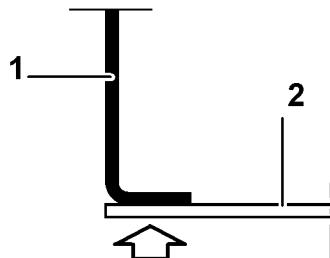
This cutting line avoids shock absorber mounting spacer 1 and avoids use of the jig bench.

**B**

18016-1



X3L30

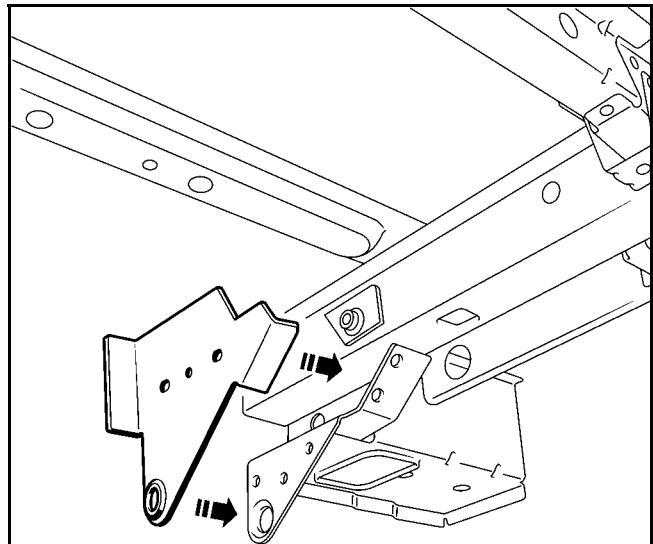
**C**

14593.1



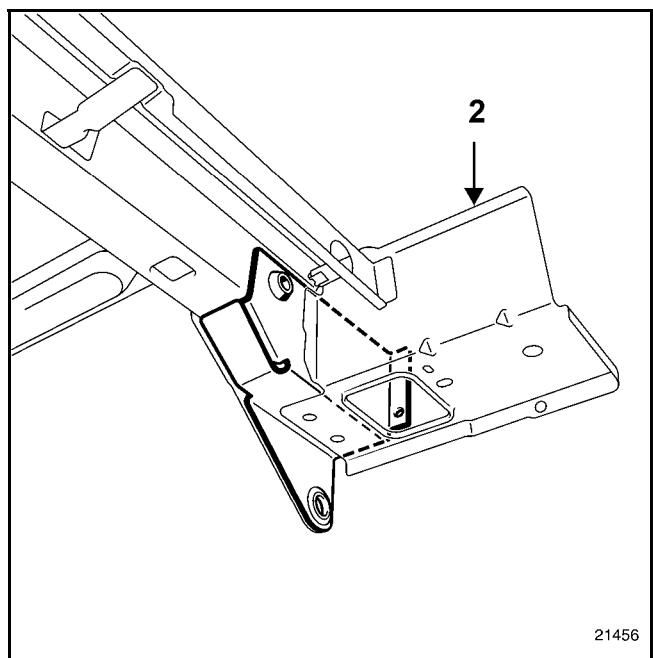
X2

Preparation of the replacement part



21455

Complete replacement with towing ring reinforcement



21456

**NOTE:**

Complete replacement (with reinforcement) requires unpicking of the side closure panel of the rear end lower cross member (2).

**REMINDER:**

This operation is possible, but it is more appropriate to perform a partial replacement of the rear side member.

The replacement of this part is a complementary operation to the replacement of the rear end lower cross member for a rear impact.

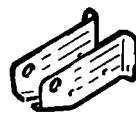
This operation is carried out in a similar way to the replacement of the towing ring.

There is no advantage in replacing the whole part, in this case replacement of the partial rear section of the side member is more appropriate.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



41.AQ

Replacement of this part is associated with replacement of a rear floor, rear section, for a rear impact.

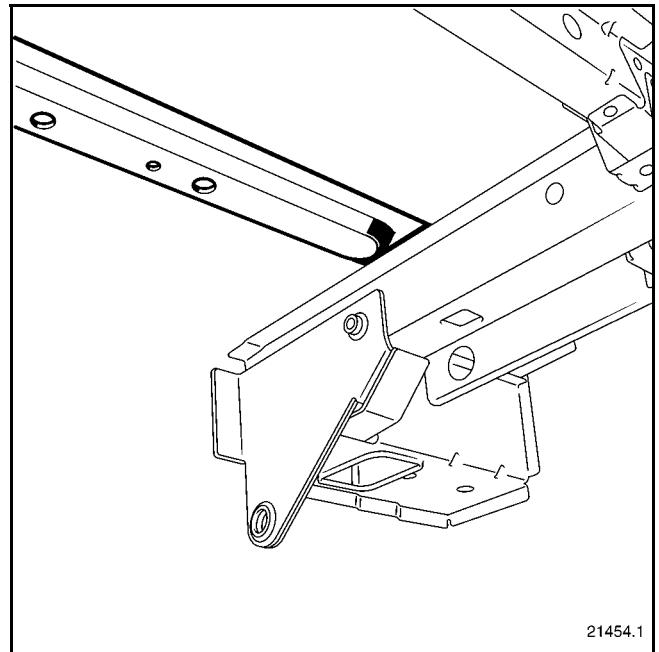
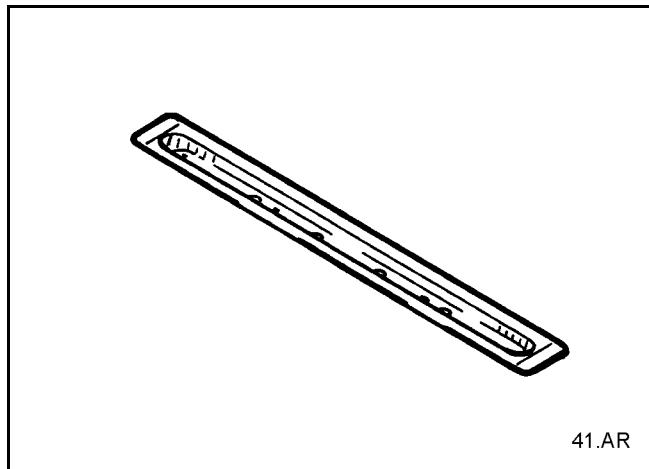
The procedure for replacing this part has no specific notes, and joints can all be made as originally.

Below is a diagram of the part in its correct position on the body, for information.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

#### **COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



The replacement of this part is a complementary operation to the replacement of the rear end cross member for a rear impact

This operation may be carried out in several ways:

- partial, using cuts **A** and **B**,
- or complete.

The position of the cuts can be altered according to the level of impact.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

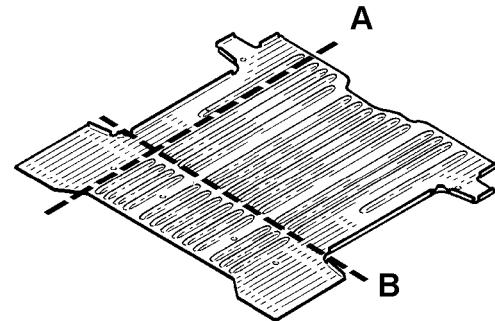
For standardisation reasons, the Parts Store only supplies floors for the van version (without holes).

### NOTE:

For short floors, it will be necessary to cut the replacement floor as shown in the repair step. For the bus and combi versions, it will also be necessary to drill the holes for the seat attachments. This operation must be carried out before painting.

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.

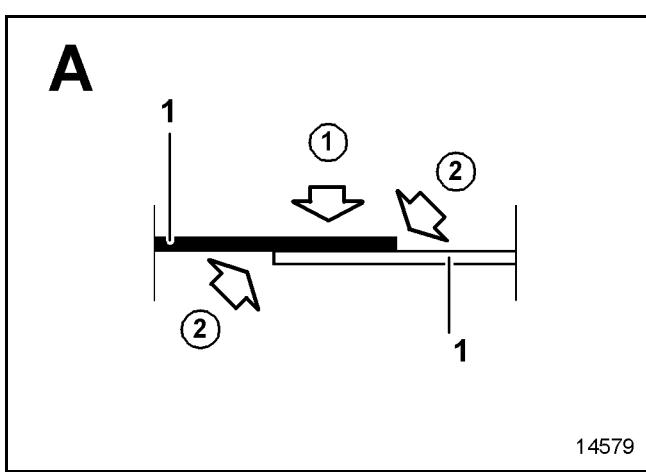
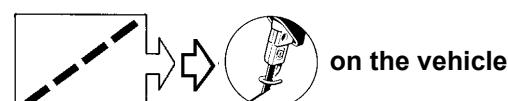
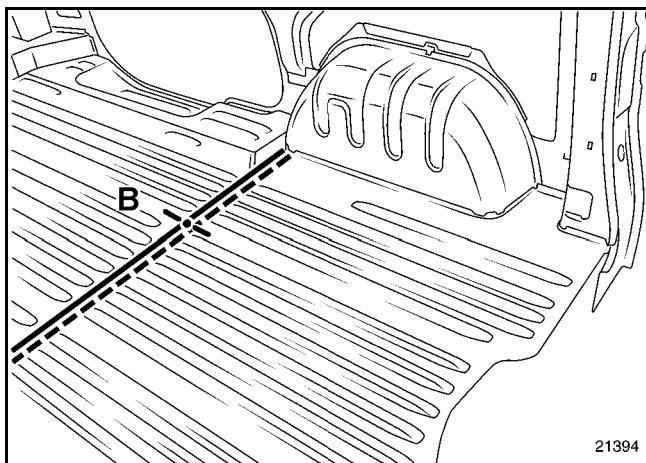
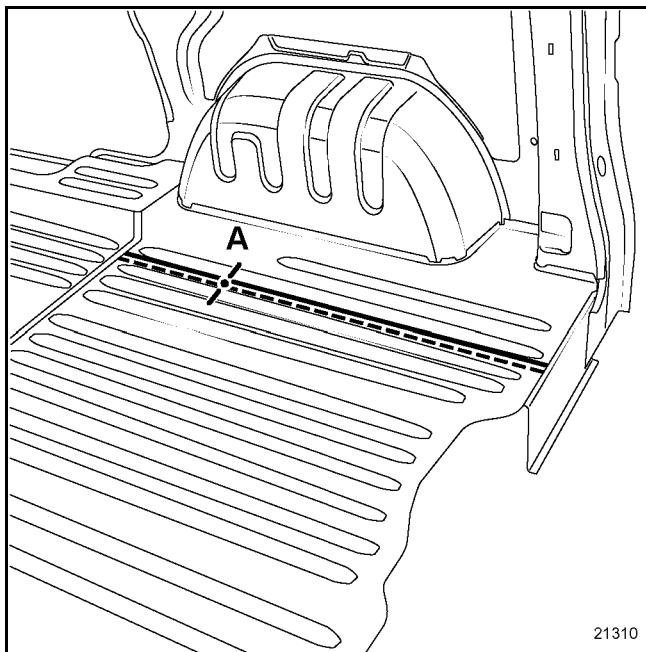


41.AS

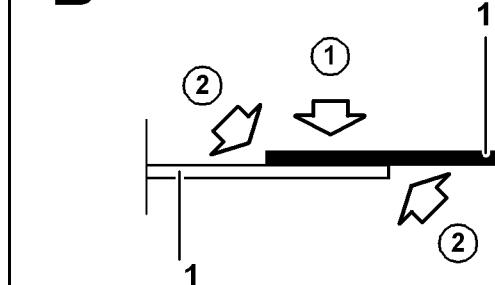
### PARTS CONCERNED (thickness in mm):

|   |                         |     |
|---|-------------------------|-----|
| 1 | Rear floor rear section | 0.8 |
|---|-------------------------|-----|

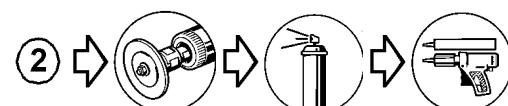
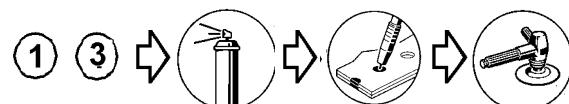
Partial replacement using cuts A, B



**B**



14579



**NOTE:**

The number of plug welds is not specified in the procedure.

A distance of approximately **50 mm** must be maintained between the welds.

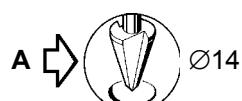
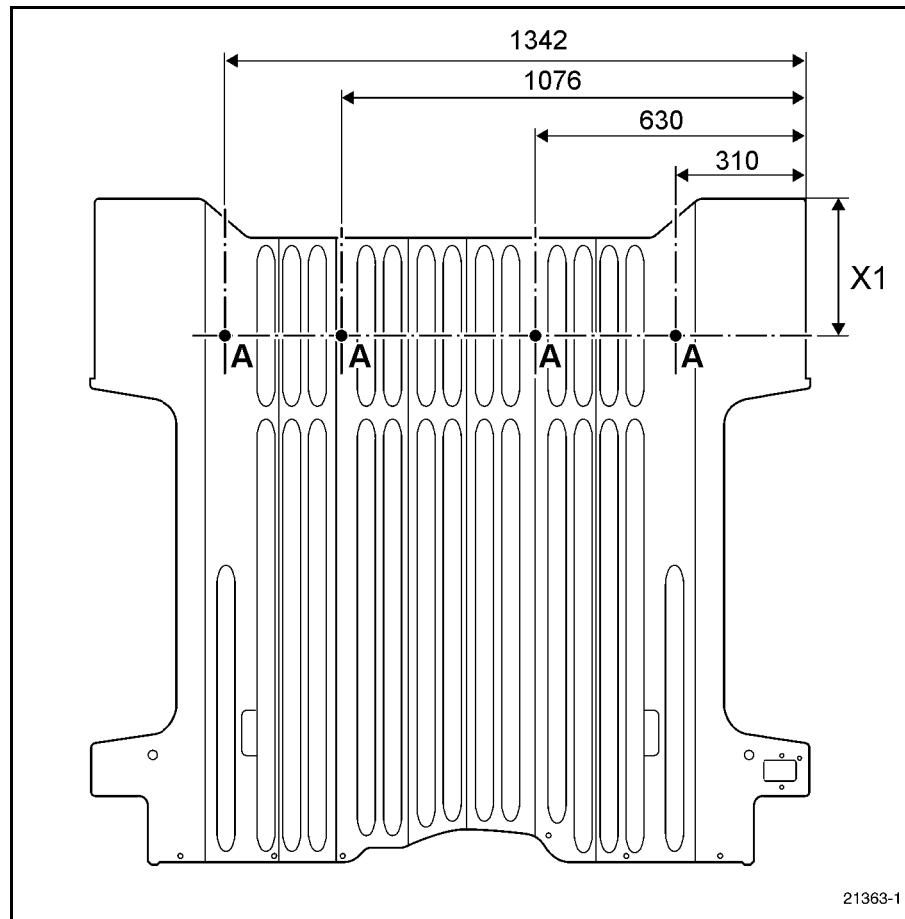
After welding, apply a bead of M.J.Pro mastic (part number: **77 11 172 676**) in the flange to ensure leaktightness.

The remaining welds are plug welds.

**REMINDER:**

The position of the cuts can be altered according to the level of impact.

**Adaptations for versions with seats**



**REMINDER:**

For standardisation reasons, the Parts Store only supplies floors for the van version (without holes).

For the bus and combi versions, it will be necessary to drill the holes for the seat attachments.

These holes must be drilled in accordance with the marks (bulges) on the replacement part.

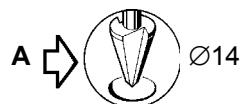
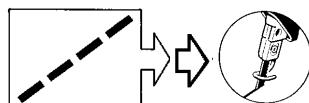
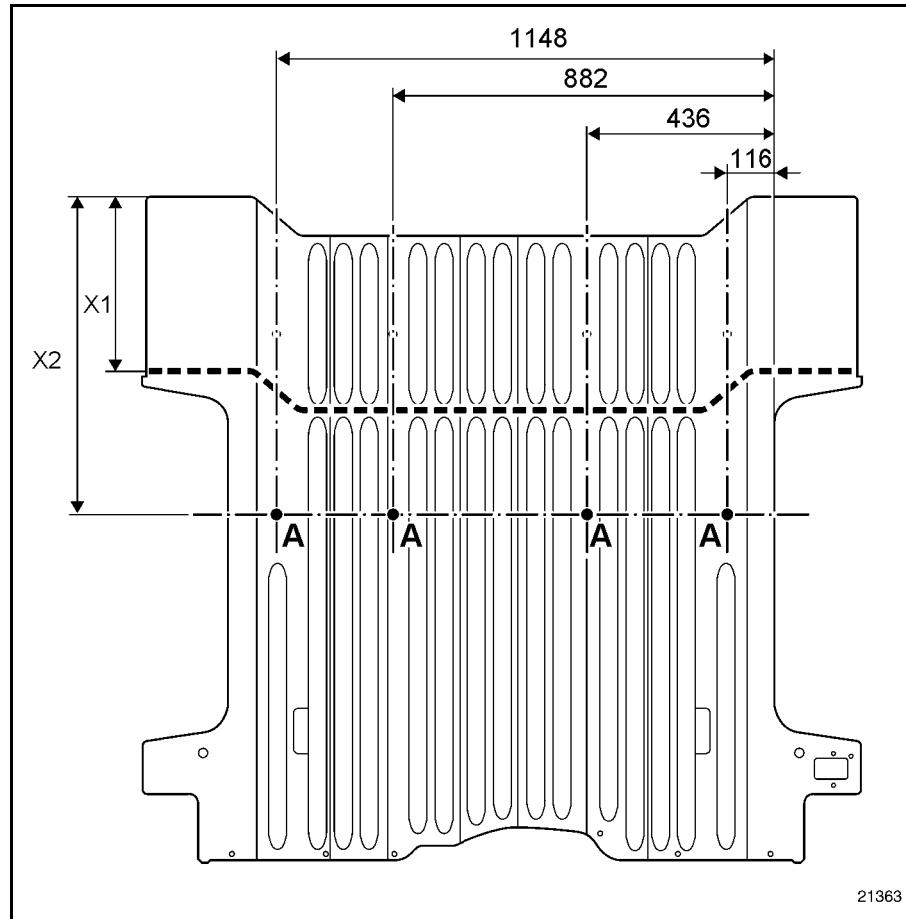
This operation must be carried out before painting.

**WARNING:**

The dimensions are given for information only.

The dimension X1 is measured on the vehicle.

**Adaptations for short floors**



**REMINDER:**

For short floors, it will be necessary to cut the replacement floor as shown in the diagram.

For the bus and combi versions, it will also be necessary to drill the holes for the seat attachments.

**WARNING:**

The dimensions are given for information only.

The dimensions X1 and X2 are measured on the vehicle.

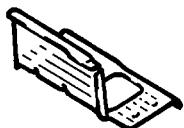
The replacement of this part is an additional operation to the replacement of the rear side panel rain channel.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

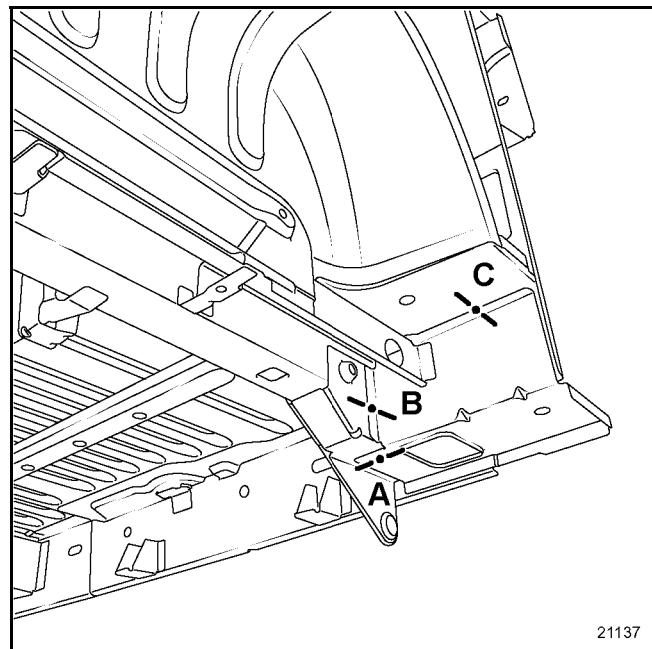
Part supplied on its own.



41.AT

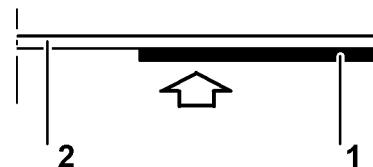
### PARTS CONCERNED (thickness in mm):

|   |  |     |
|---|--|-----|
| 1 | Rear end lower cross member side closure panel | 1.5 |
| 2 | Rear towing ring                               | 2.5 |
| 3 | Rear floor rear section                        | 0.8 |



21137

A



14577.1



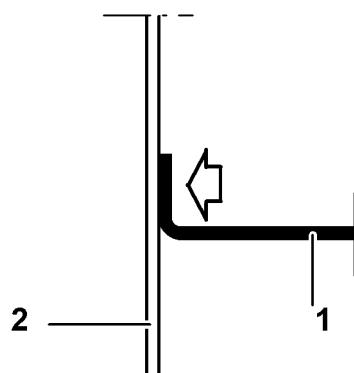
# LOWER STRUCTURE

## Rear end lower cross member side closure panel

**41**

**AT**

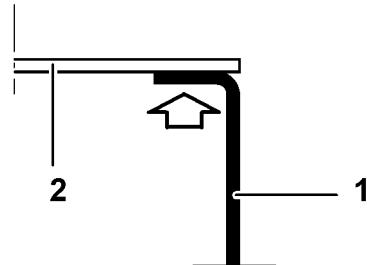
**B**



14589-1



**C**



14593-1



The replacement of this part is an additional operation to the replacement of the rear end panel for a rear impact.

There are two procedures for carrying out this operation:

- complete,
- partial.

**NOTE:**

The procedure for replacing this part has no specific notes, and joints can all be made as originally.

In the procedure described below you will only find the cut position for partial replacement.

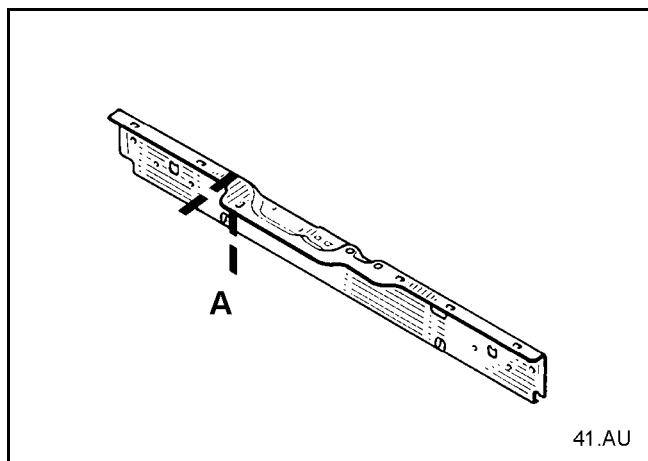
The cut position shown below cannot be altered, it is given according to the positions of the inner stiffeners and holes in the various parts.

It can be performed symmetrically depending on the side or the extent of the impact.

The information on the additional parts will be dealt with in the respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.

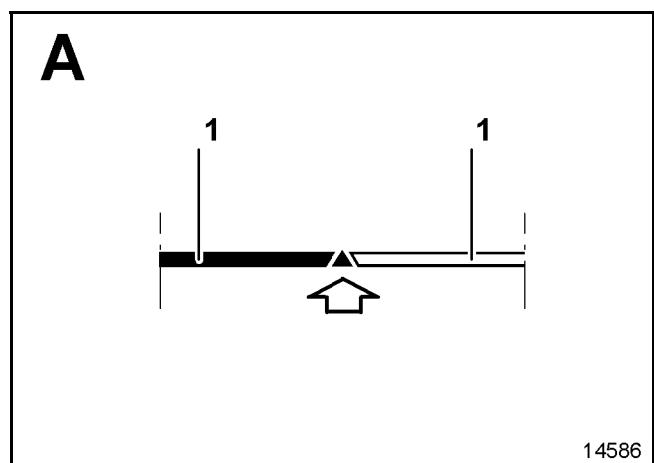
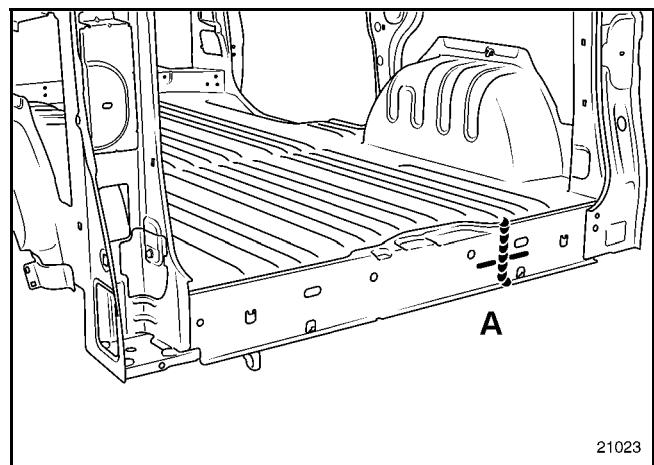


41.AU

### PARTS CONCERNED (thickness in mm):

|   |                             |     |
|---|-----------------------------|-----|
| 1 | Rear end lower cross member | 1.5 |
|---|-----------------------------|-----|

### Partial replacement



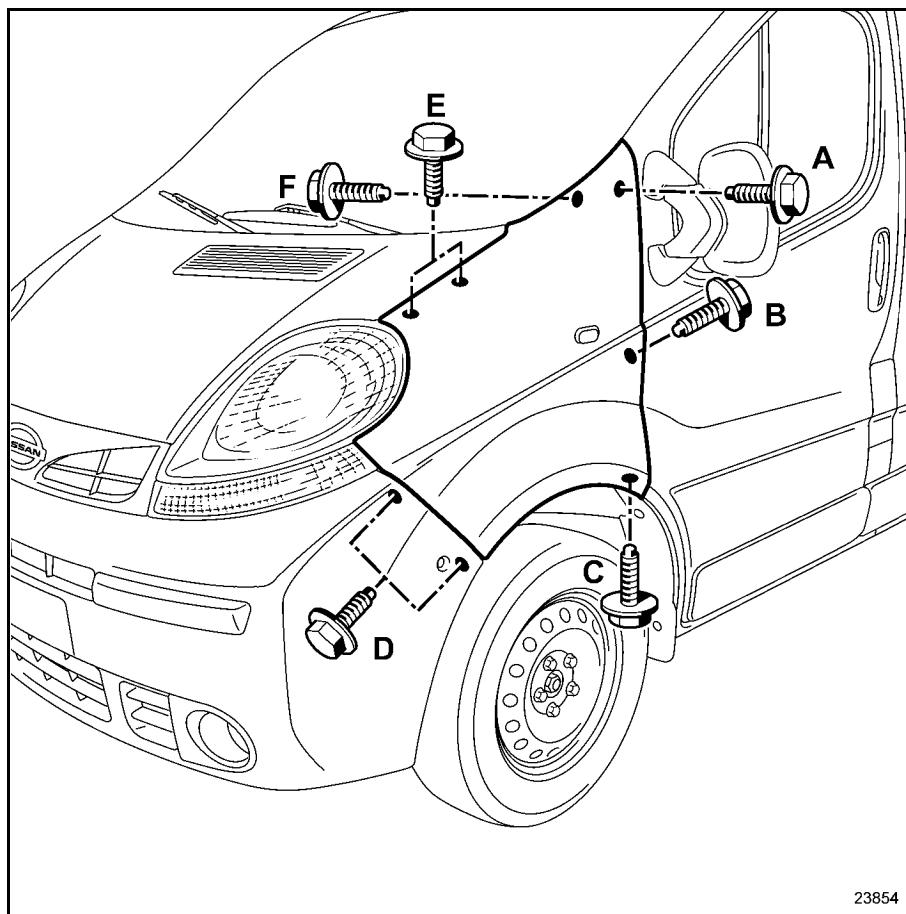
**IMPORTANT:**

To improve holding, it is advisable to make several additional plug welds at the rear side member mating surfaces.

The replacement of this part is a basic operation for a frontal and side impact. The door is a removable component.

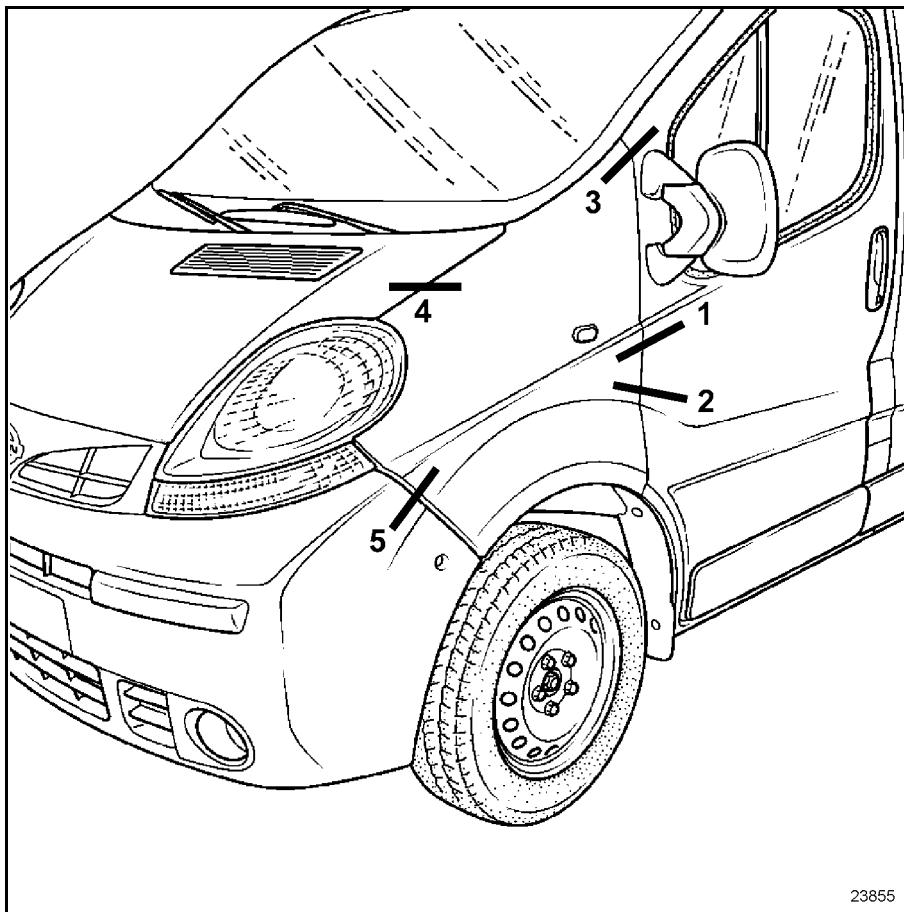
In the procedure described below, you will only find the positions of mountings which are specific to the part concerned together with the adjustment operations.

The information on the additional parts will be dealt with in the appropriate sections.

**NOTE:**

To access the wing mountings, it will be necessary to remove the following:

- the side section of the scuttle grille,
- the lamp unit,
- the radiator grille,
- the complete mudguard,
- part of the front bumper.



**ADJUSTMENT**

Fit all the clips onto the component.

Position the wing on the vehicle.

Finger tighten all mountings without tightening them.

**REMINDER:**

All clearances are given in Section 40.

**ADJUSTMENT SEQUENCE:**

**1 Wing/door adjustment:**

Ensure correct clearances and flushness in zone 1 (bolt B).

Align the edge of the wing in relation to the door (bolt B)

Check the adjustment and clamp the area.

**2 Wing/door adjustment, upper and lower sections:**

Ensure the correct clearances and flushness of areas 2 and 3 (bolts A and C).

Check the adjustment and clamp the area (bolts A, C and F).

**3 Wing/bonnet adjustment**

Ensure flushness and even clearances in area 4 (bolt E first), if necessary adjust bonnet.

**4 Wing/light/bumper adjustment**

Ensure correct clearances and flushness in area 5 (bolt D).

If necessary, adjust the bumper.

**NOTE:**

The lamp unit cannot be adjusted, it is fitted into the front panel.

| TIGHTENING TORQUE (in daNm) |     |
|-----------------------------|-----|
| Wing bolt                   | 0.8 |



|           |     |
|-----------|-----|
| Wing bolt | 0.8 |
|-----------|-----|

|           |     |
|-----------|-----|
| Wing bolt | 0.8 |
|-----------|-----|

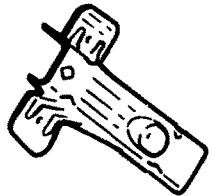
The door is a removable component. This part is changed in addition to changing a wing or front bumper for a frontal impact.

In the procedure described below, you will only find the positions of mountings which are specific to the part concerned together with the possible adjustment operations.

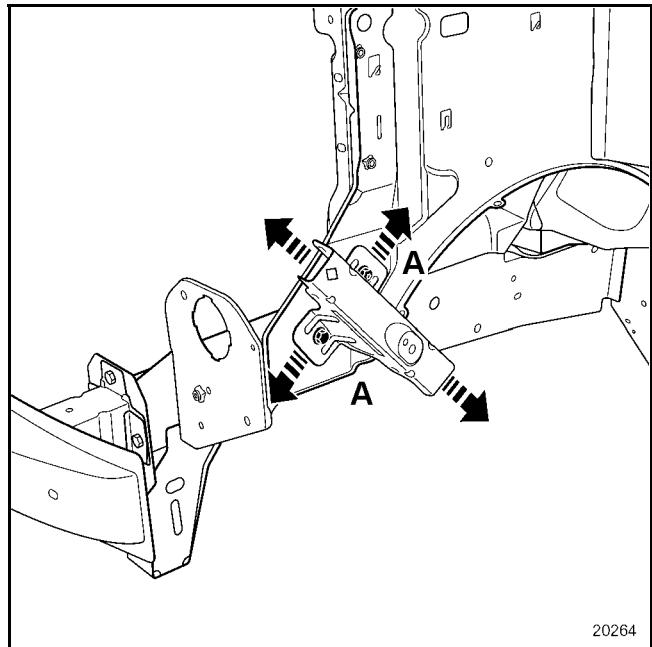
The information on the additional parts will be dealt with in their respective sections (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



42.B



OX and OZ adjustment is made using bolts (A).

The door is a removable component. It is made of composite plastic material (polypropylene).

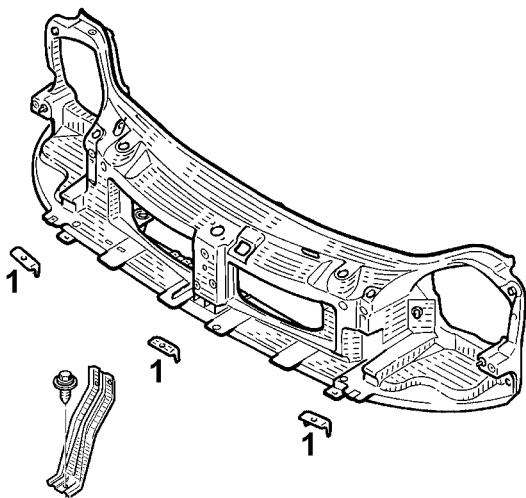
This part is changed in addition to changing the bumper or bonnet for a frontal impact.

In the procedure described below, you will only find the positions of mountings which are specific to the part concerned together with the possible adjustment operations.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



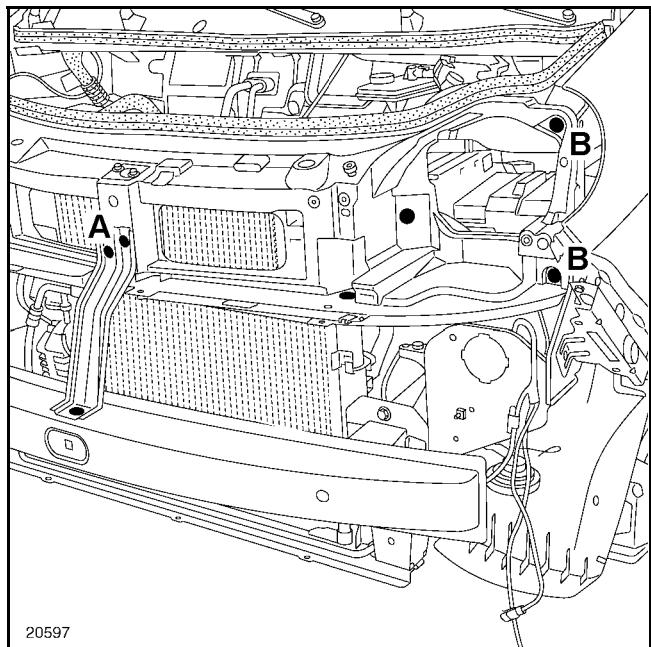
42.C

#### NOTE:

To access the front surface mountings, it is necessary to remove the following:

- the lamp units,
- the radiator grille,
- part of the front bumper,
- the bonnet catch,
- and to remove the various mechanical components (radiator, air conditioning hoses, etc.).

### REMOVAL



#### Remove:

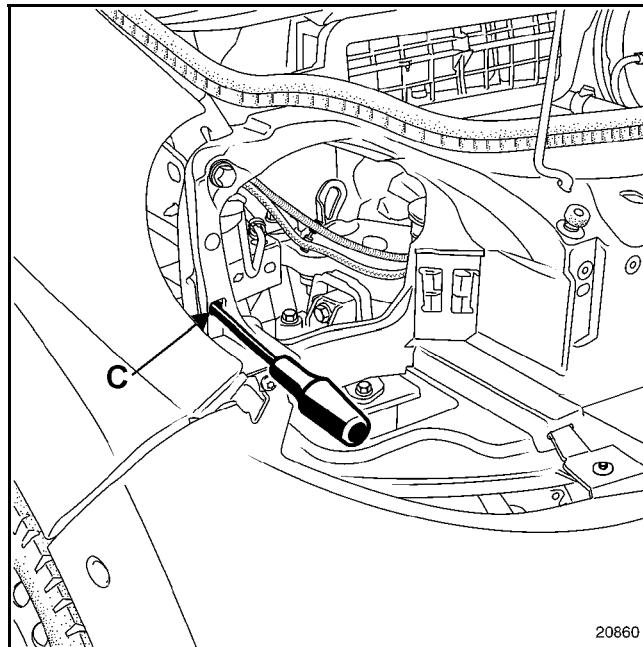
- the side mounting bolts (B) (two on each side).
- the central attachment bolts (A).

### REPAIR

To avoid completely replacing the front surface, it is possible to use repair clamps (1).

These clamps are positioned on the bumper mounting brackets.

REFITTING



Refitting is carried out in the reverse order to removal.

**NOTE:**

The right-hand side mounting of the fascia is used in the factory as a reference to position the surface by aligning it with **pilot hole (C) Ø 8 mm**.

You are advised to use this guide hole to centre the side member, using a screwdriver for example.

Additional adjustments of the front surface in height (OZ) and depth (OY) are possible at the side mountings.

| TIGHTENING TORQUE (in daNm) |  |  |
|-----------------------------|--|---|
| Side mounting bolt          |  | 2.1   |

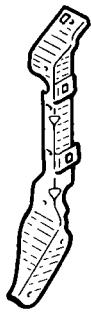
The door is a removable component.  
This part is changed in addition to changing the front fascia.

In the procedure described below, you will only find the positions of mountings which are specific to the part concerned together with the possible adjustment operations.

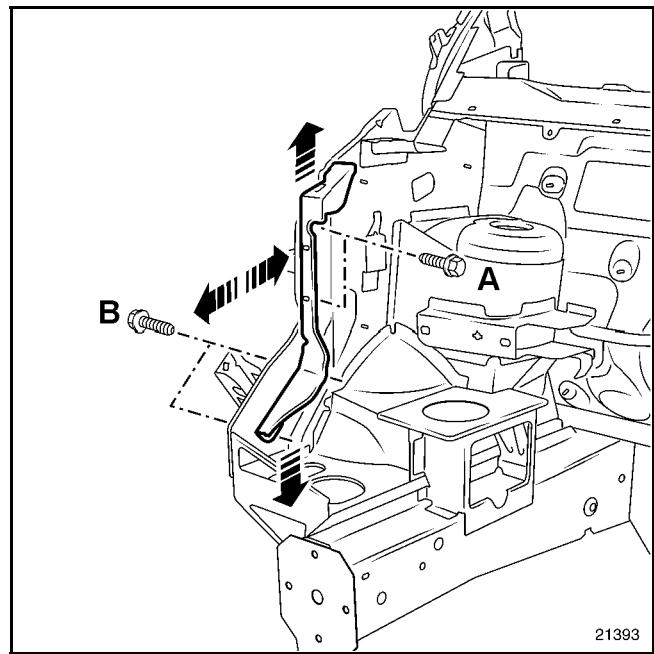
The information on the additional parts will be dealt with in their respective sections (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



42.D



OX and OZ are adjusted with bolts (A) and (B).

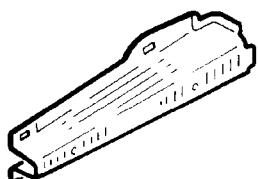
The replacement of this part is a basic operation for a frontal impact.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

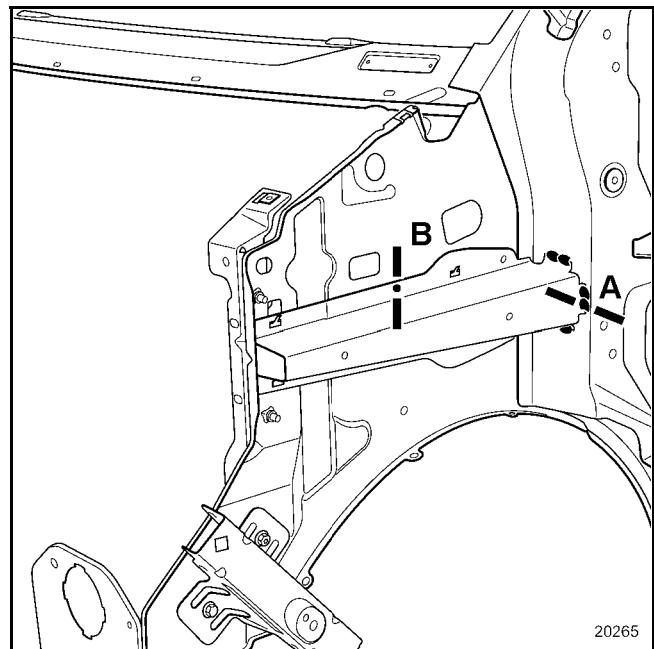
The information on the additional parts will be dealt with in their respective sections (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



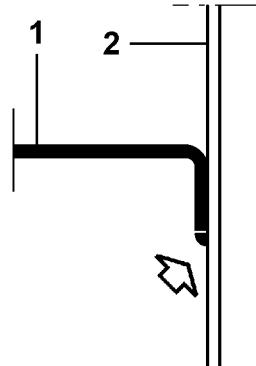
42.E



#### PARTS CONCERNED (thickness in mm):

|                                |     |
|--------------------------------|-----|
| 1 Scuttle side panel stiffener | 1.5 |
| 2 Cab A-pillar                 | 0.9 |
| 3 Scuttle side panel           | 1   |

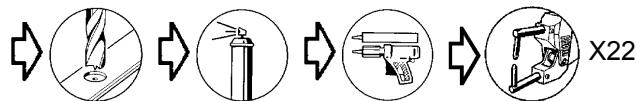
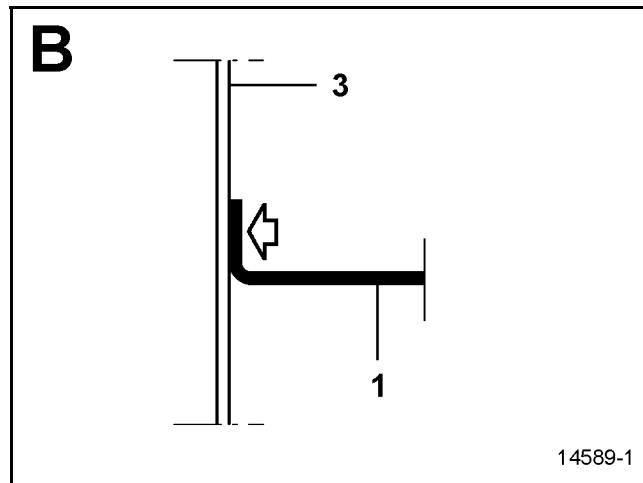
A



15608-1



X3L40



**NOTE:**

It is necessary to use setting adhesive M.J.Pro  
(part number: 77 11 172 676 on interfaces).

**IMPORTANT:**

Where certain spot welds cannot be made with the  
spot welder, they can be replaced by plug welds.

In this case, leave a reserve (absence of adhesive) in  
the welding areas.

Replacement of this part requires removal of the scuttle side panel reinforcement and is complementary to replacement of the cab A-pillar for a side impact.

This operation may be carried out in two ways (refer to the procedure below):

- complete (complementary to the cab A-pillar),
- partial, using cut A,

### NOTE:

The scuttle side panel stiffener needs to be ordered additionally.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

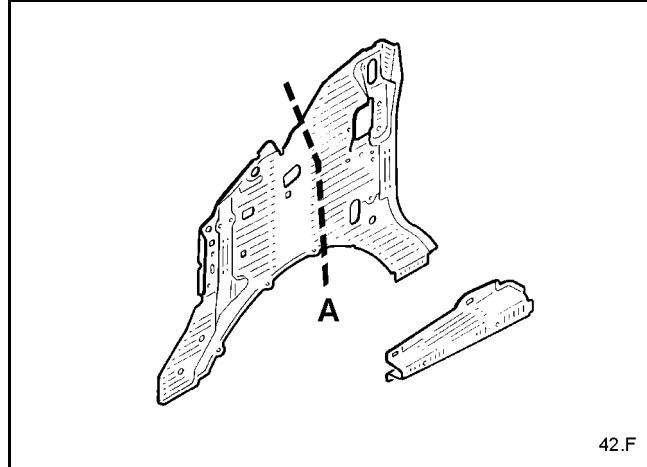
### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

Welded nut.

Welded stud.

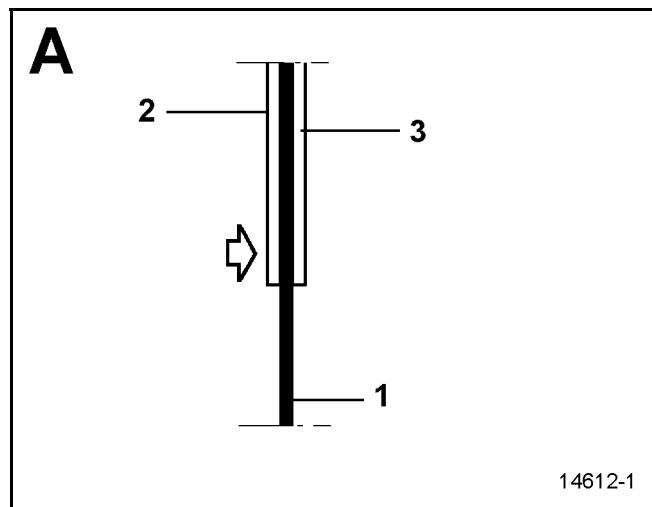
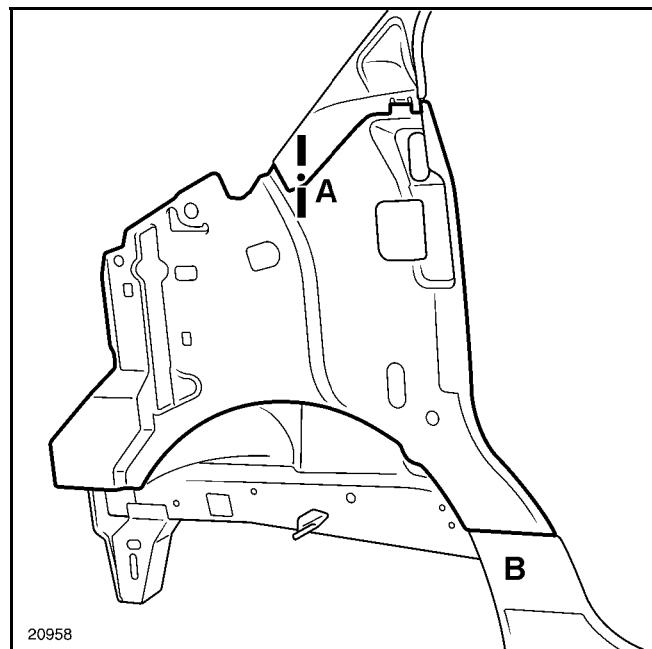
Fuel filter mounting (right-hand side).



### PARTS CONCERNED (thickness in mm):

|  |     |
|--|-----|
| 1 Scuttle side panel                                   | 1   |
| 2 Windscreen pillar lining                             | 1   |
| 3 Windscreen aperture lower cross member               | 0.9 |
| 4 Sill panel closure panel                             | 1.2 |
| 5 Front wheel arch, rear section                       | 1.2 |
| 6 Windscreen aperture lower cross member reinforcement | 0.9 |

### Complete replacement

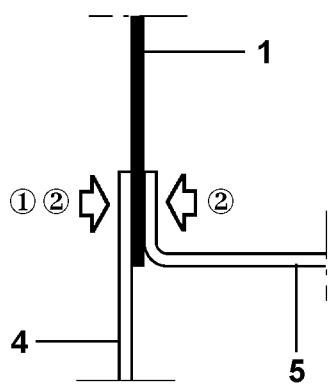


**UPPER FRONT STRUCTURE**  
**Scuttle side panel**

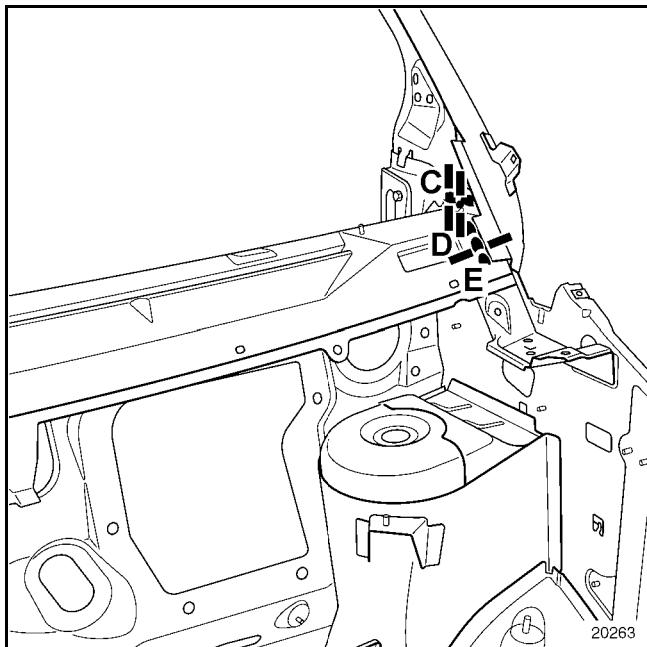
**42**

**F**

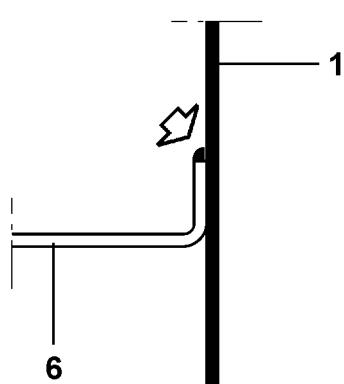
**B**



14631-1



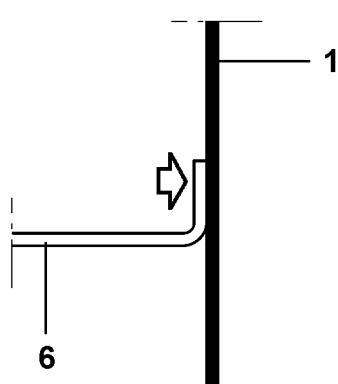
**C**



15608



**D**



14589

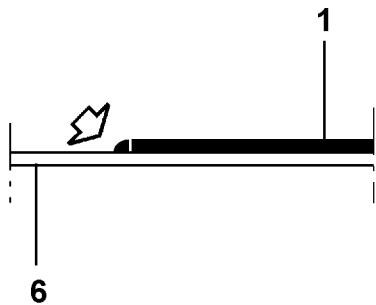


**UPPER FRONT STRUCTURE**  
**Scuttle side panel**

**42**

**F**

**E**

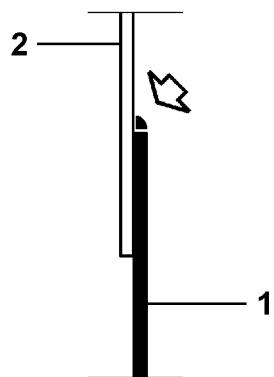


14578-1

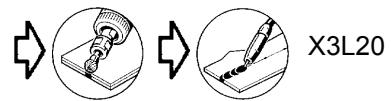


L65

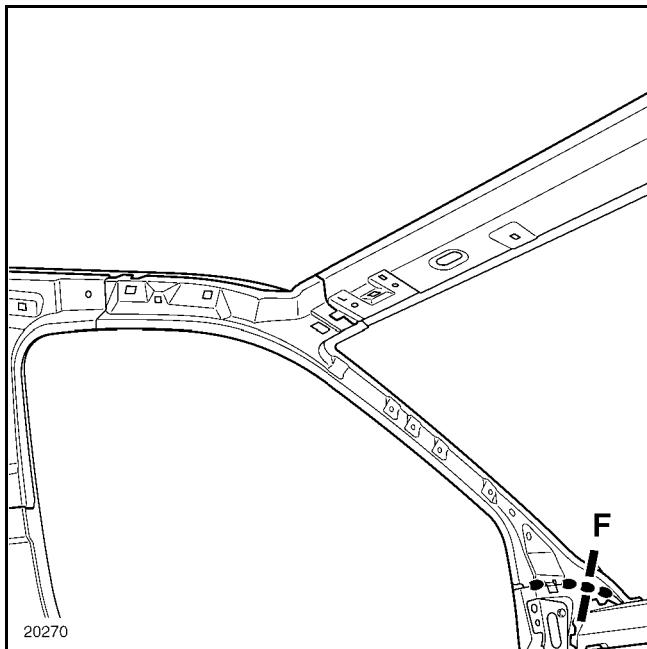
**F**



14580.1

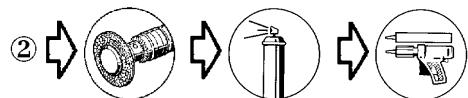
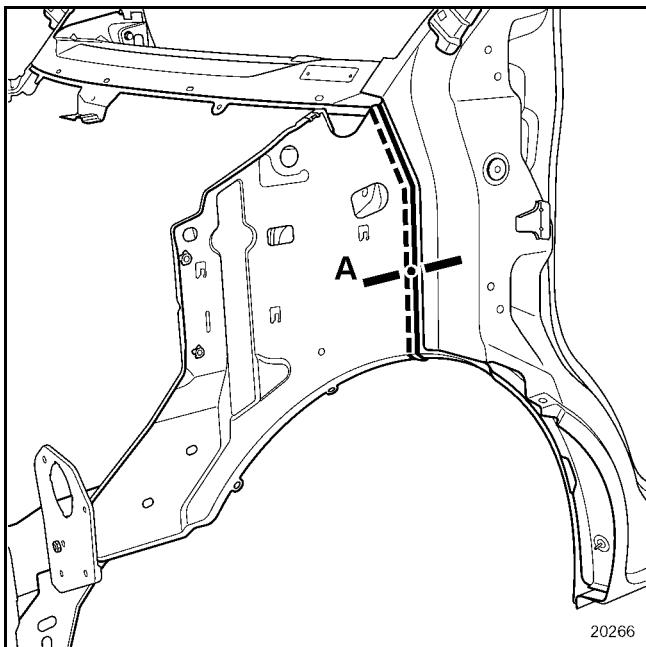


X3L20



20270

Partial replacement



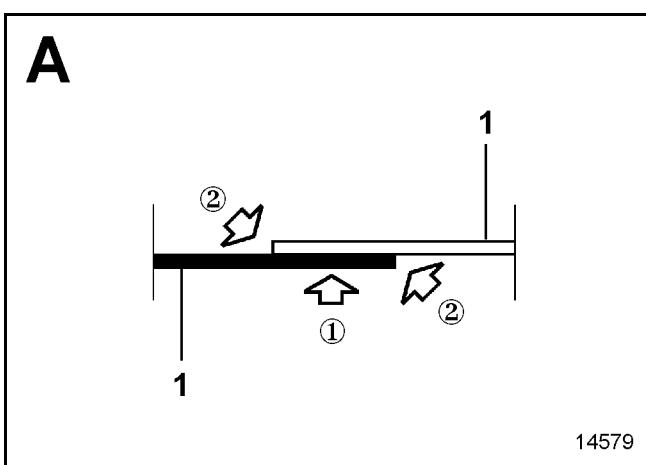
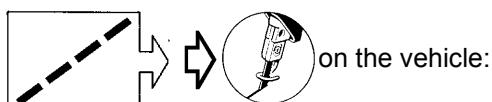
**NOTE:**

The number of plug welds is not specified in the procedure.

You should:

- leave a distance of approximately **50 mm** between the welds,
- after welding, apply a bead of adhesive to the inner and outer side of the flange, to ensure sealing.

Use M.J.Pro type adhesive (part no.: 77 11 172 676).



The replacement of this part is an additional operation to the replacement of:

- the A-pillar for a side impact,
- the bonnet for a frontal impact.

This operation may be carried out in two ways (refer to the procedure below):

- complete (complementary to the cab A-pillar),
- partial using cut A, complementary to replacement of the bonnet.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

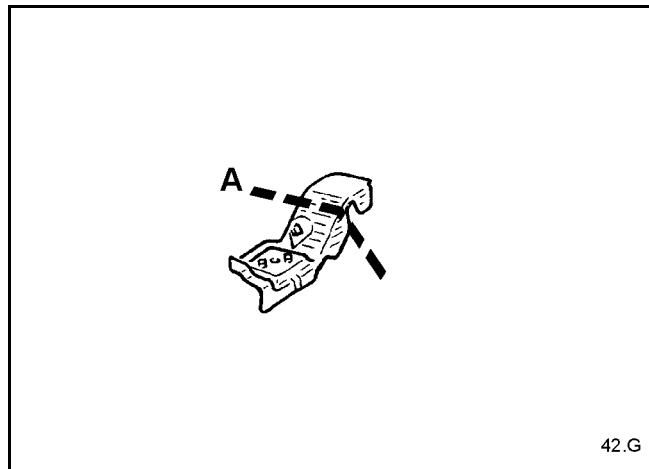
### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

Welded nut

Welded stud

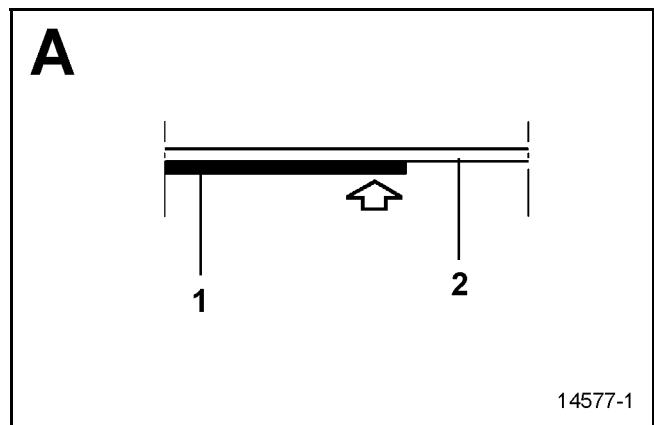
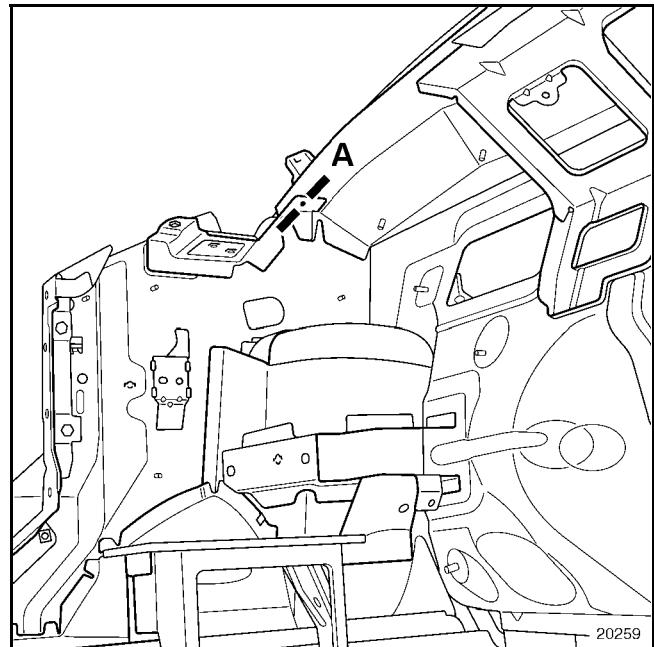
Fuel filter mounting (right-hand side)



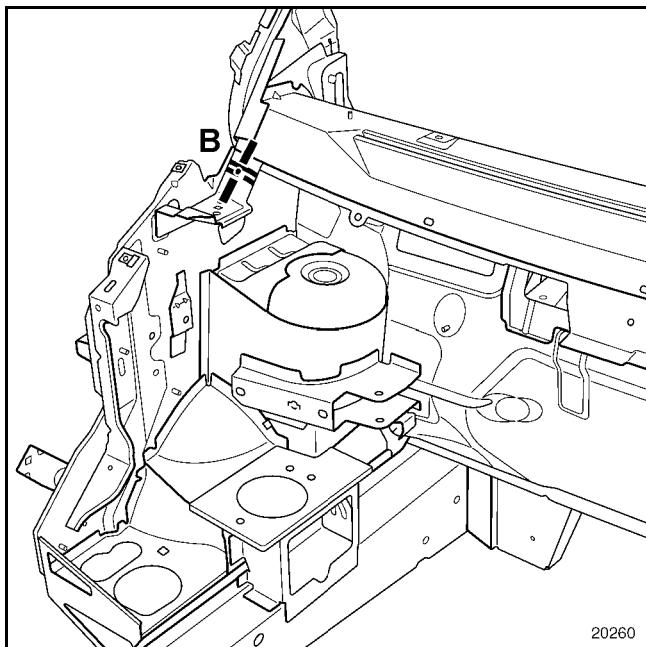
### PARTS CONCERNED (thickness in mm):

|  |     |
|--|-----|
| 1 Bonnet lid strut mounting              | 1.2 |
| 2 Windscreen aperture lower cross member | 0.9 |

### Complete replacement



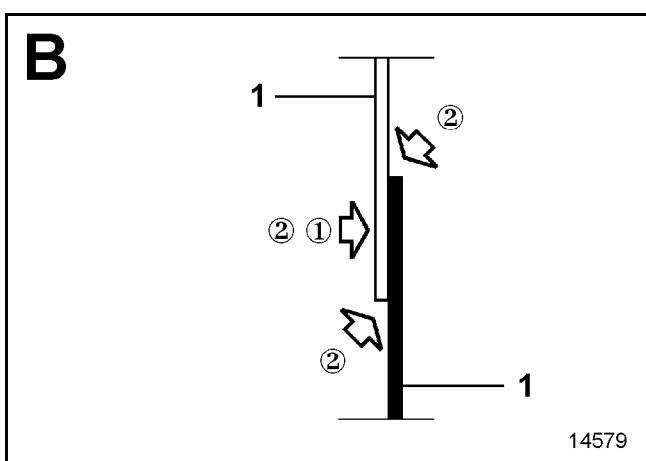
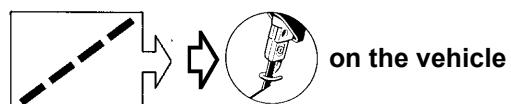
Partial replacement



**REMINDER:**

After welding it will be necessary to apply an extruded bead of mastic to the mating faces to ensure sealing.

Use M.J.Pro type adhesive  
(part number: 77 11 172 676)



The door is a removable component.  
Replacement of this part is associated with  
replacement of the scuttle side panel for a side impact.

In the procedure described below, you will only find the  
attachment positions for the part concerned.

The information on the additional parts will be dealt  
with in their respective sections (refer to contents).

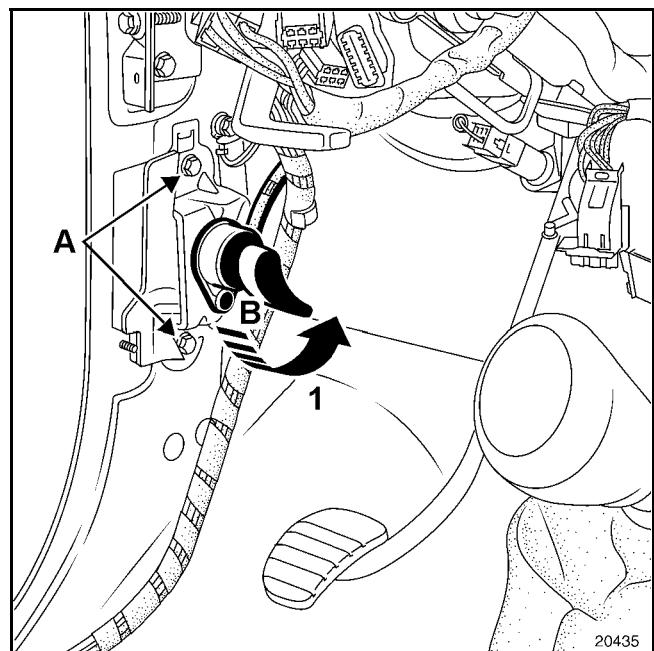
#### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



42.H

#### REMOVAL



20435

#### Release:

- the retaining pin (B),
- the opening control by turning it a quarter turn  
(arrow 1).

The bonnet opening control mounting plate is removed  
using bolts (A).

This part is changed in addition to changing the scuttle side panel for a front side impact or associated with partial replacement of the front side member for a frontal impact.

This operation may be carried out in two ways (refer to the procedure given below):

- complete,
- partial, right-hand side (depending on the level of impact).

**NOTE:**

There is no specific procedure for replacing this part, and joints can usually be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Front wheel arch

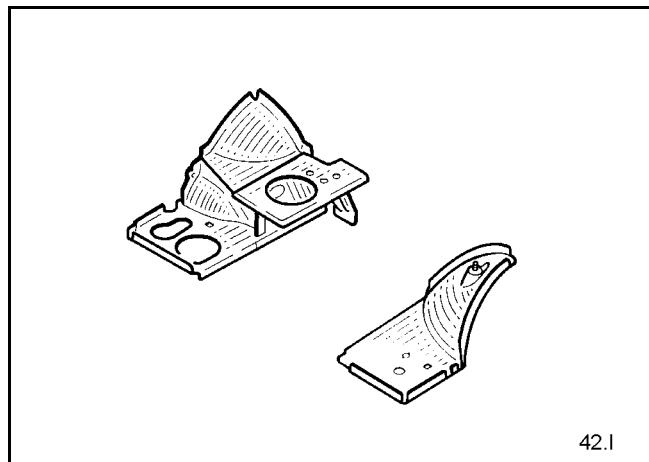
Lower connecting component (right-hand side)

Upper connecting component (right-hand side)

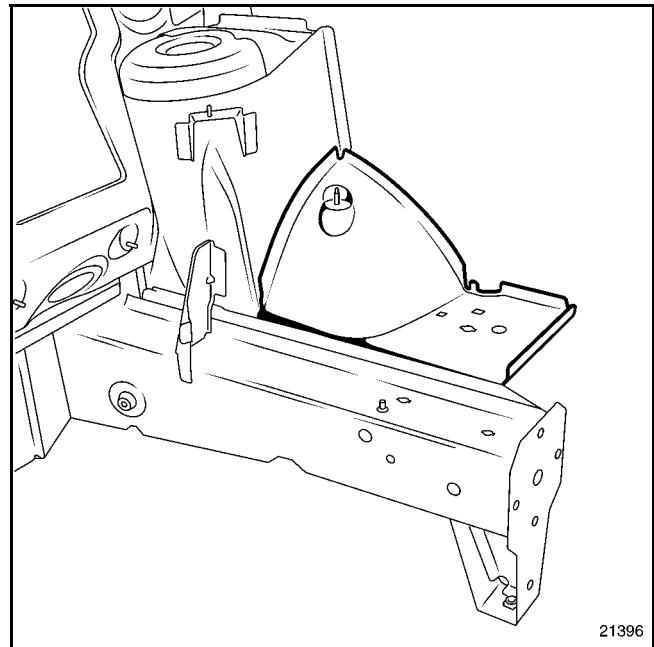
Bracket

Engine mounting pad support (right-hand side)

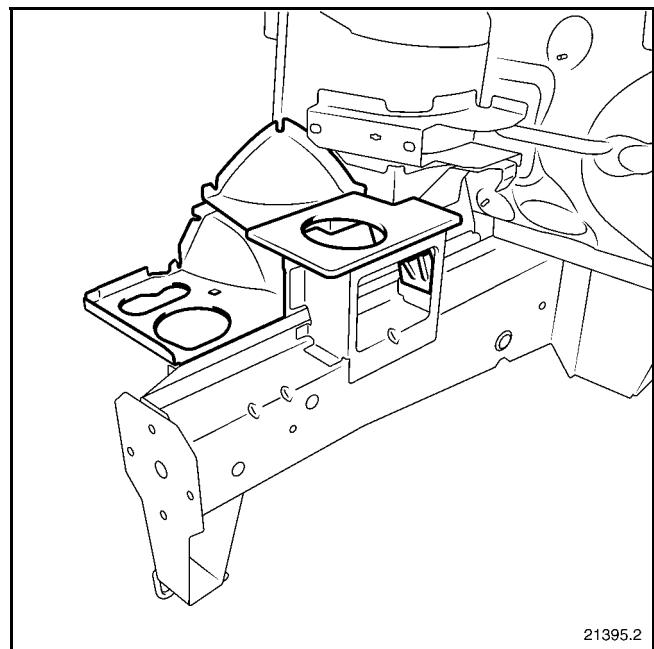
Engine tie-bar mounting reinforcement (right-hand side)



**Left-hand side**



**Right-hand side**



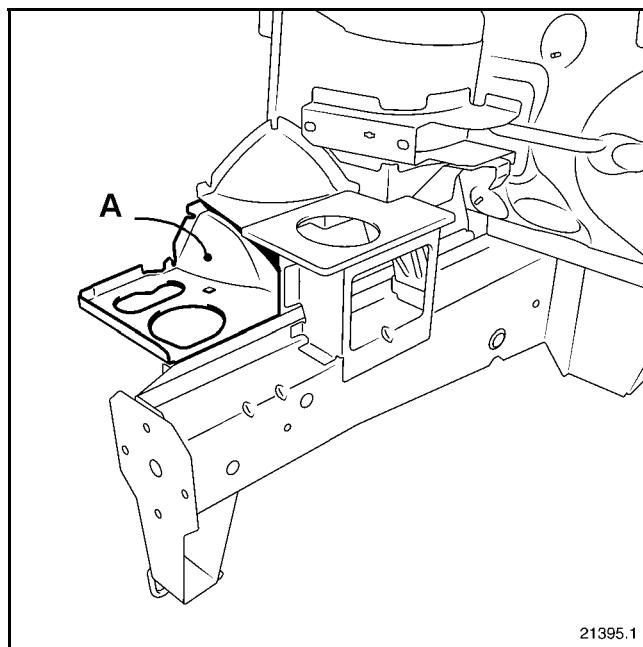
**Partial replacement (right-hand side only)**

**NOTE:**

Depending on the level of impact, it is possible to replace the damaged parts of the front section of the front wheel arch only.

Below you will find an example of replacing the front lower section (**A**) of the wheel arch only.

This part is not available separately, it will be necessary to unfasten it from the wheel arch assembly supplied by the Parts Department.



This part is changed in addition to changing the scuttle side panel for a front side impact or associated with partial replacement of the front side member for a frontal impact.

**NOTE:**

There is no specific procedure for replacing this part, and joints can usually all be made as originally. However, it is possible to use plug welds at places which are difficult for the spot welder to access, and at the shock absorber turret.

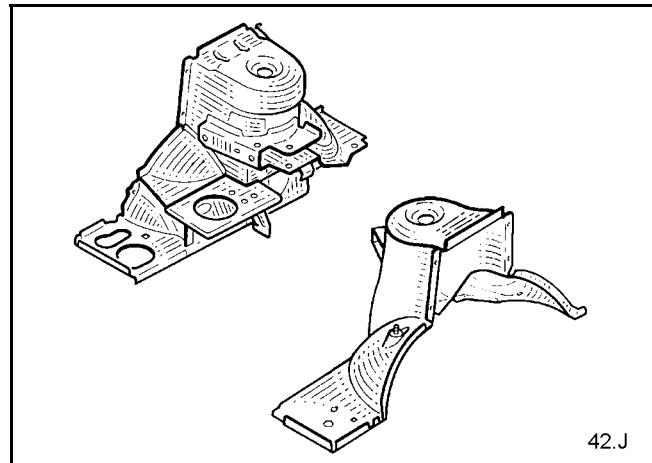
The repair bench must be used.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Front wheel arch  
 Lower connecting component (right-hand side)  
 Upper connecting component (right-hand side)  
 Bracket  
 Engine mounting pad support (right-hand side)  
 Engine block mounting reinforcement (right hand side)  
 Engine tie-bar mounting (right-hand side)  
 Engine tie-bar mounting reinforcement (right-hand side)  
 Shock absorber cup  
 Shock absorber cup height adjuster  
 Height adjuster blanking plate  
 Unit mounting angle bracket (left-hand side)  
 Mounting

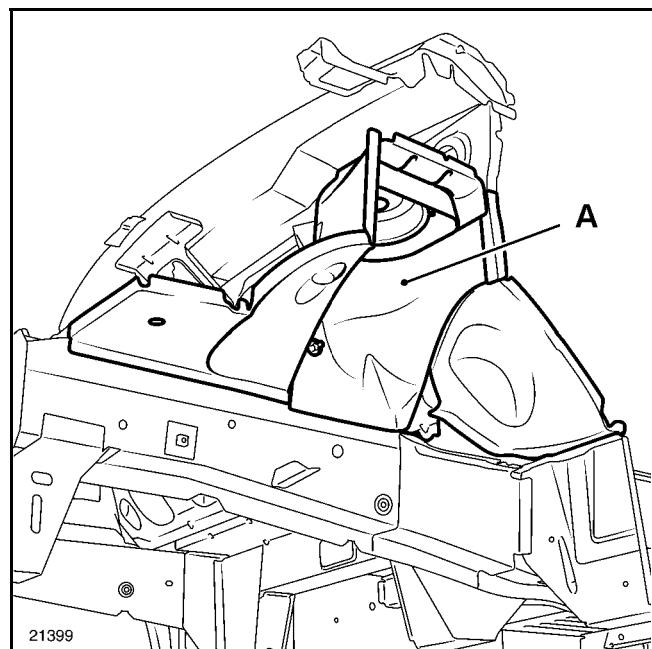


42.J

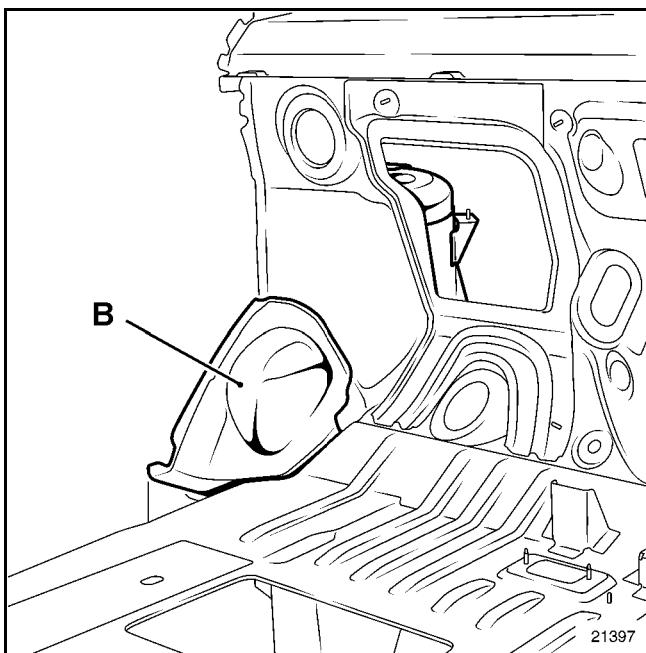
**PARTS CONCERNED (thickness in mm):**

|   |  |     |
|---|--|-----|
| 1 | Front wheel arch                       | 1   |
| 2 | Windscreen pillar lining               | 1   |
| 3 | Windscreen aperture lower cross member | 0.9 |
| 4 | Sill panel closure panel               | 1.2 |
| 5 | Front wheel arch, rear section         | 1.2 |

**Left-hand side**



**REMINDER:** it is advisable to apply the plug welds to the shock absorber cup (A).

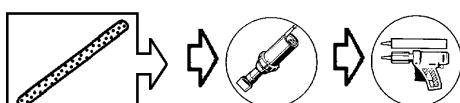
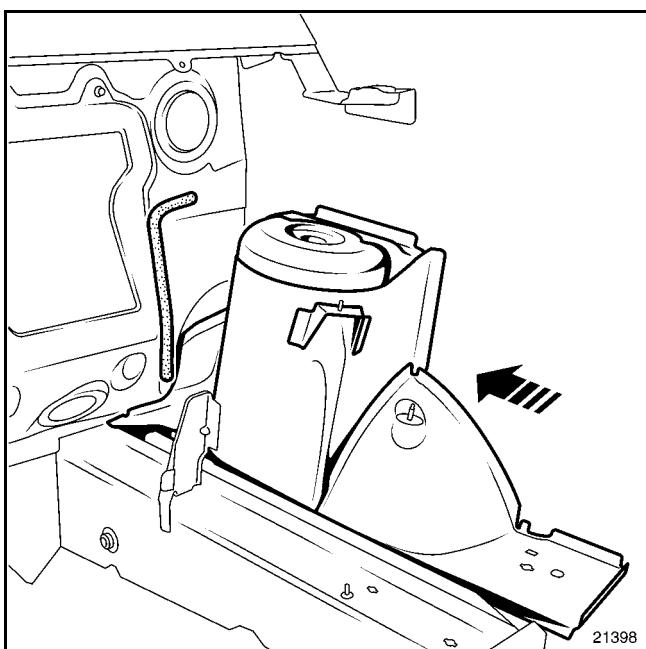


**NOTE:**

Depending on the level of impact, it is possible to replace only the damaged parts.

For example, the wheel arch, rear section (**B**) can remain in position.

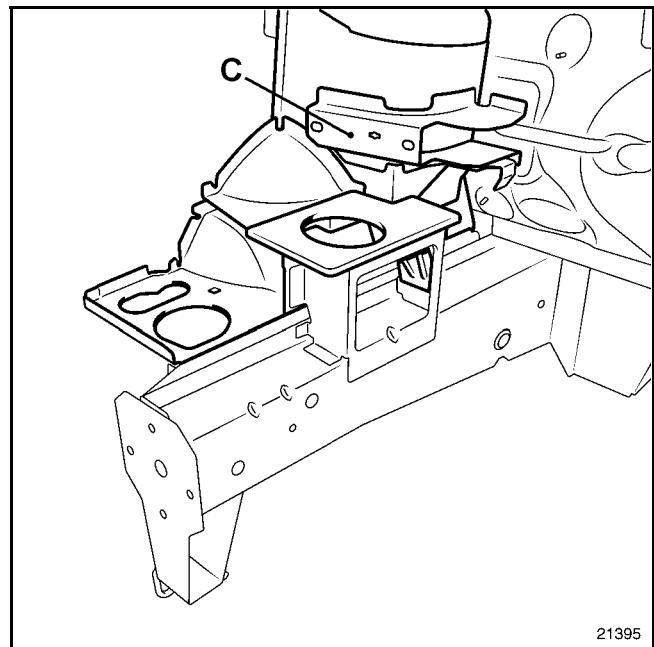
This part is not available separately, it will be necessary to unfasten it from the wheel arch assembly supplied by the Parts Department.



**IMPORTANT:**

It is necessary to use M.J.Pro type setting adhesive (part no.: 77 11 172 676) on the mating face with the bulkhead.

*Right-hand side*



**NOTE:**

The replacement procedure is the same for the left-hand side.

Only the tie-rod mounting (**C**) is additional, this should be plug welded to the bulkhead.

This part is changed in addition to changing the windscreen aperture lower cross member reinforcement for a side impact.

This operation may be carried out in two ways (refer to the procedure below):

- complete,
- partial, using cut **A**,

In the procedure described below, you will only find the descriptions and the joints which are specific to partial replacement.

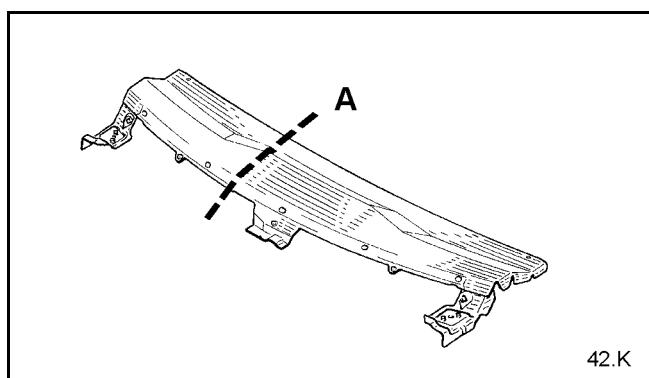
Complete replacement does not present any particular difficulty.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

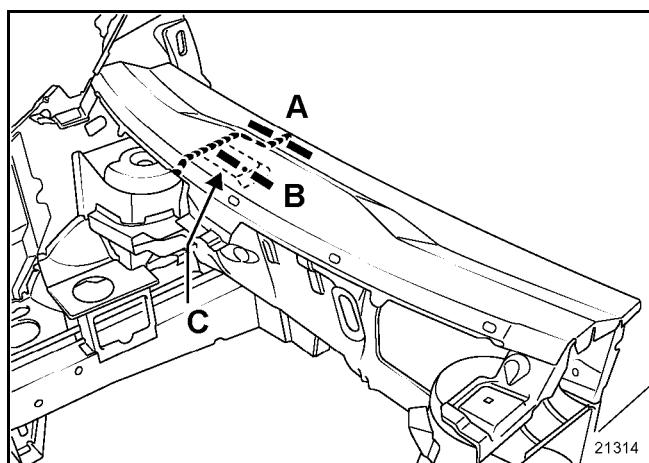
Part supplied with:

- Bonnet strut mounting
- Cross member
- Welded studs

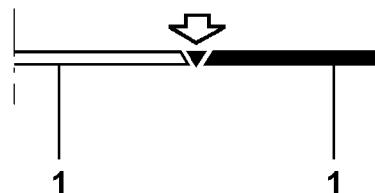


#### PARTS CONCERNED (thickness in mm):

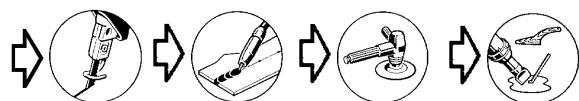
|   |     |
|---|-----|
| 1 Windscreen aperture lower cross member  | 0.9 |
| 2 Windscreen wiper mounting reinforcement | 1   |



**A**



14586

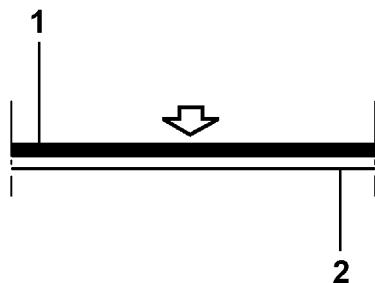


#### IMPORTANT:

The cut is made on the wiper mounting stiffener (**C**), indicated by the dotted line on the diagram.

Do not damage the reinforcement during the cutting operation.

**B**



14576



This part is changed in addition to changing the complete wheel arch for a frontal impact and of the A-pillar for a side impact.

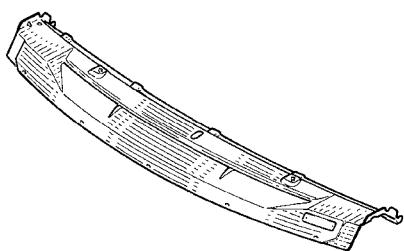
There is no advantage in performing a partial replacement of this part.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

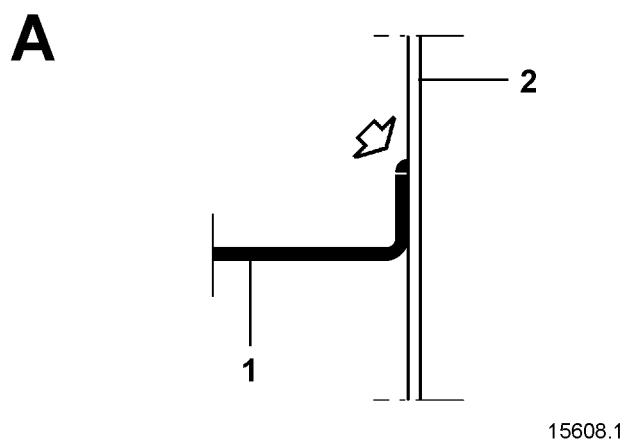
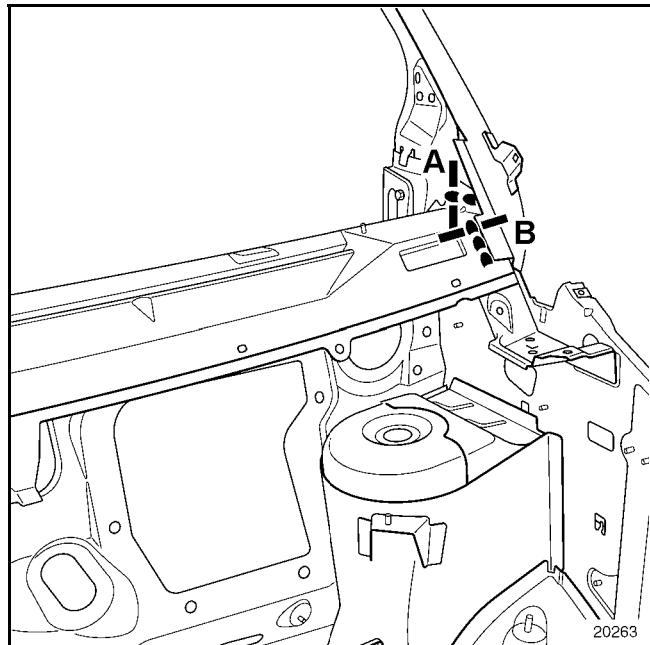
The information on the additional parts will be dealt with in their respective sections (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

Part supplied with:  
Welded nuts

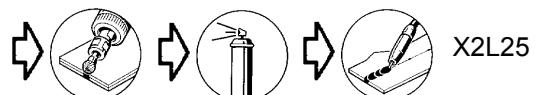


42.L



#### PARTS CONCERNED (thickness in mm):

|  |     |
|--|-----|
| 1 Windscreen aperture lower cross member reinforcement | 0.9 |
| 2 Scuttle side panel                                   | 1   |
| 3 Windscreen pillar lining                             | 1   |



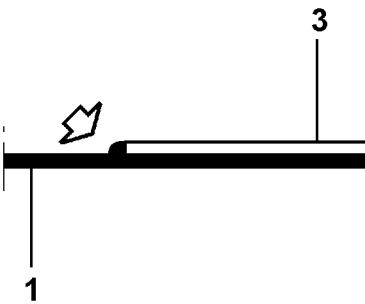
# UPPER FRONT STRUCTURE

Windscreen aperture lower cross member reinforcement

42

L

B



14578



This part is changed in addition to changing the front half unit for a frontal impact, or of the scuttle side panel for a side impact.

There are two methods of carrying out this operation:

- complete,
- partial, using cut A,

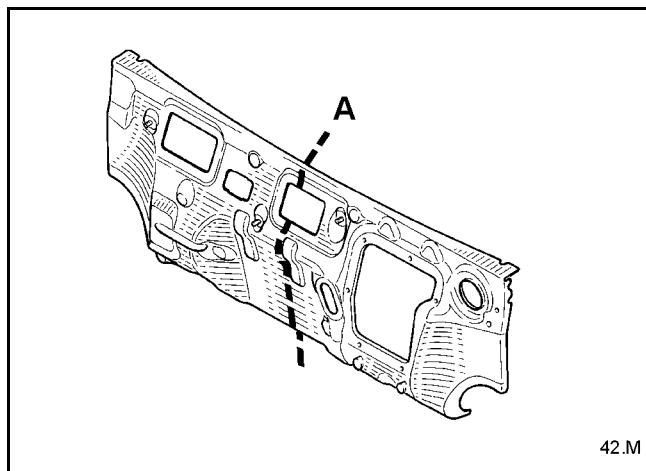
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied with:

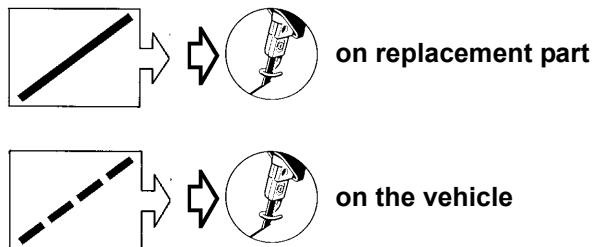
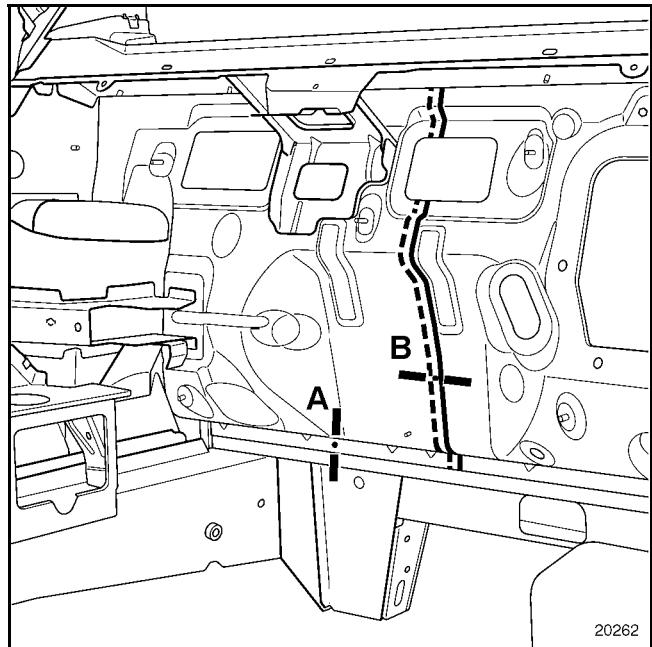
Bulkhead stiffener  
 Pedal mounting reinforcement  
 Windscreen wiper mounting centre reinforcement  
 Welded bolts  
 Welded studs  
 Welded nuts



### PARTS CONCERNED (thickness in mm):

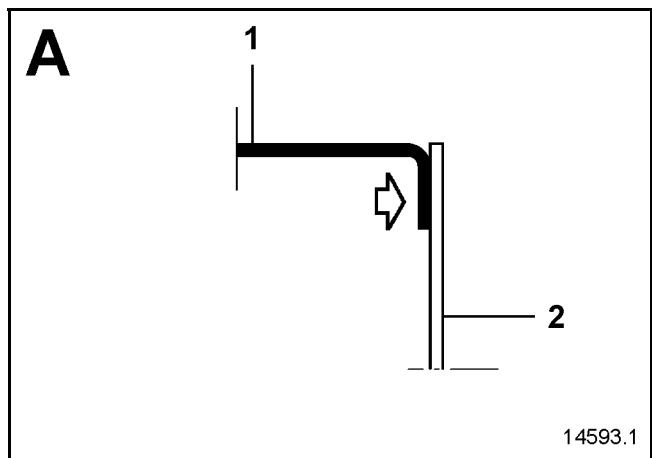
|                                    |     |
|------------------------------------|-----|
| 1 Bulkhead                         | 1   |
| 2 Central floor front cross member | 1.5 |
| 3 Impact detector mounting         | 1.5 |
| 4 Cab floor                        | 0.8 |

### Partial replacement (right-hand side)

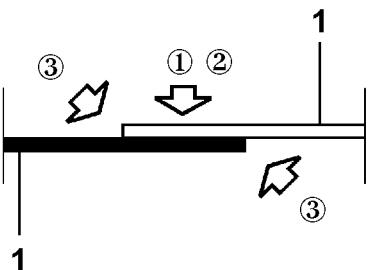


### NOTE:

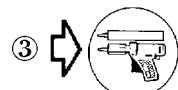
It is necessary to apply the plug welds to the mating face with the wiper mounting centre stiffener.



**B**



14579



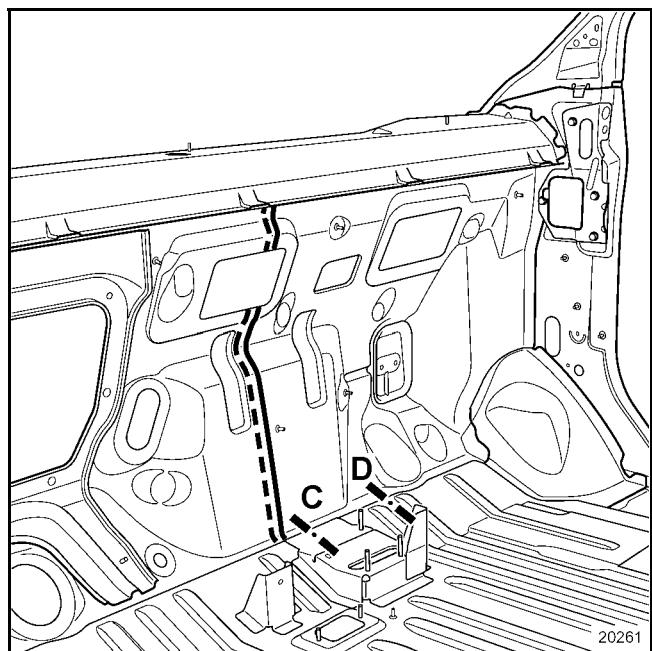
**NOTE:**

The number of plug welds is not specified in the procedure.

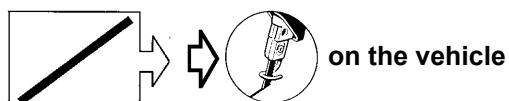
You should:

- leave a distance of approximately **60 mm** between the welds,
- after welding, apply a bead of adhesive to ensure sealing (operation ③).

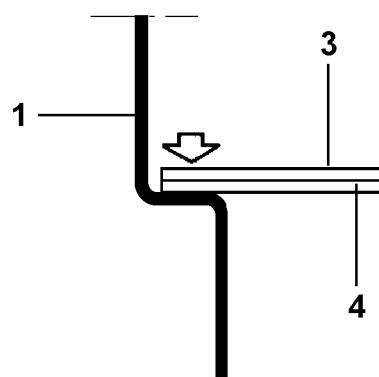
Use MJP type adhesive (part no.: **77 11 172 676**)



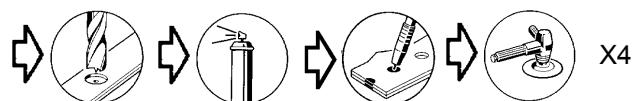
20261

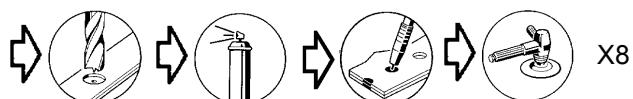
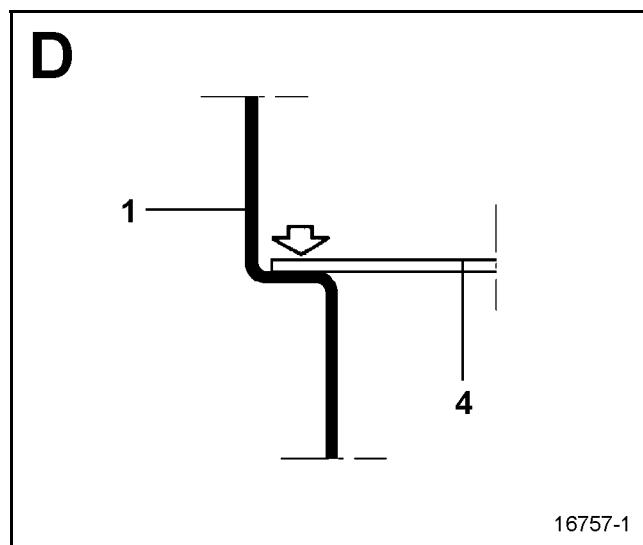


**C**



16759-2





**NOTE:**

The cut is made in the same place for replacement on the left-hand side.

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

To perform this operation, the following must also be ordered:

- double seal mounting rivets,
- double seal mounting,
- the three cab side expanding inserts,
- the cab pillar reinforcement (for cuts **B-C** only),
- scuttle side panel reinforcement.

**NOTE:**

For reasons of standardization at the Spare Parts Department, the A-pillar of the cabin must be cut in the cabin side, the latter covering several sales modes (e.g., A-pillar, sill panel, C-pillar, etc.).

This operation can be carried out partially in two ways:

- using cuts **A-C**,
- under the upper hinge of the door, using cuts **A-B** or **B-C**.

**IMPORTANT:**

The positions of the cuts given in the procedures cannot be altered, they are determined according to the positions of the linings and reinforcements, except for cut **C** which can be altered along the deformation caused by impact.

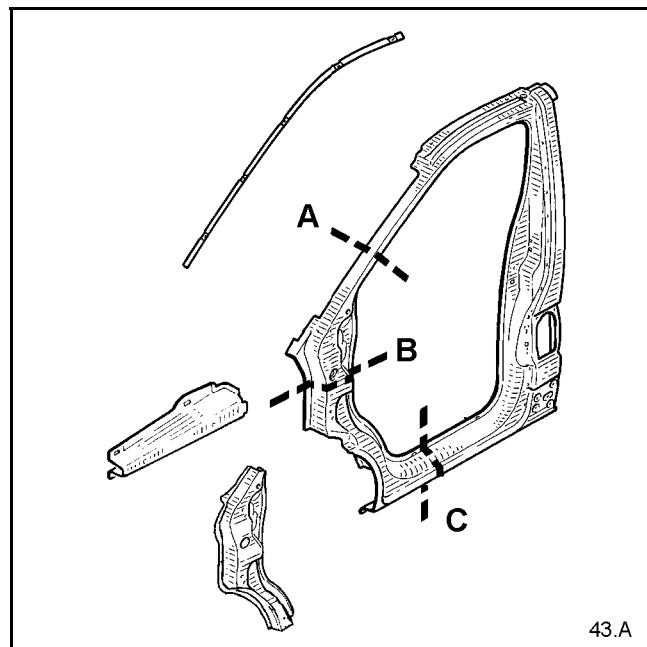
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied with:

- Frame drip moulding
- Frame stiffener
- Striker stiffener
- Striker plate
- Centring stiffener
- Wing mounting angle bracket
- Pillar reinforcement
- Door stop reinforcement
- Hinge reinforcement
- Pillar upper frame
- Pillar lower frame
- Welded nuts

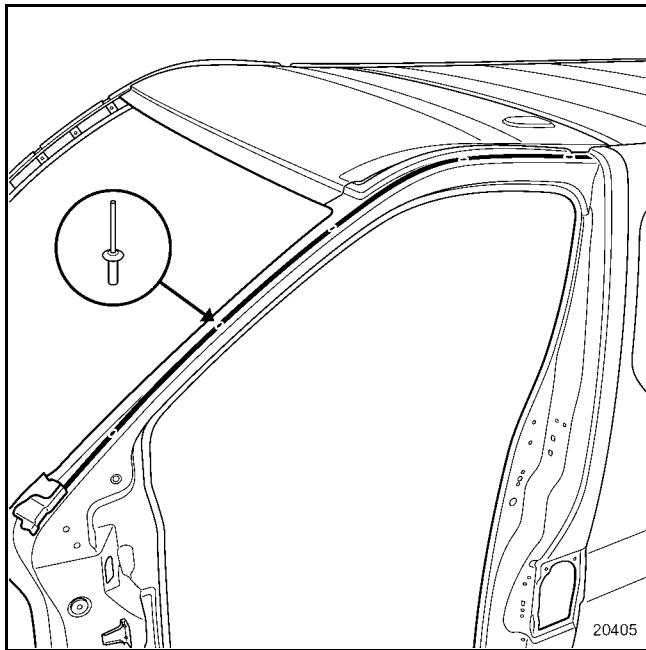


43.A

### PARTS CONCERNED (thickness in mm):

|                        |     |
|------------------------|-----|
| 1 Cab A-pillar         | 0.9 |
| 2 Pillar reinforcement | 1.2 |

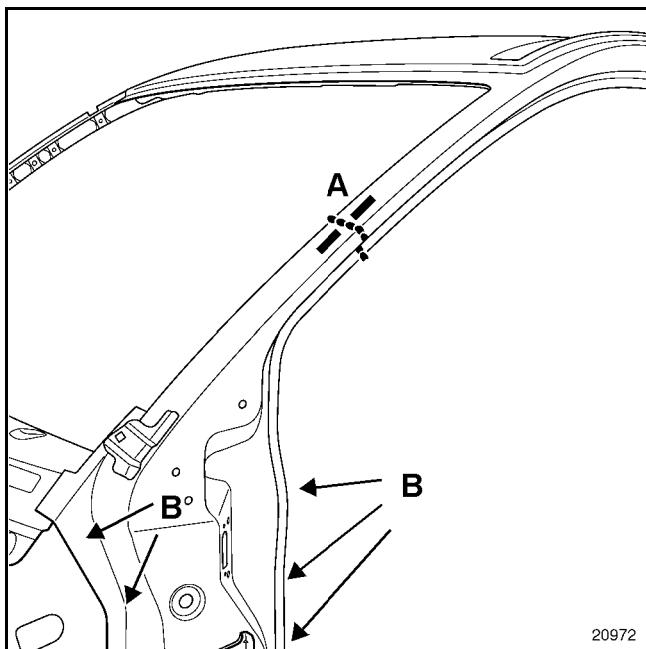
Partial replacement using cuts A-B



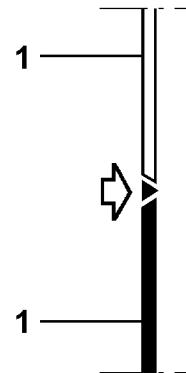
**IMPORTANT:**

To carry out this operation it is necessary to remove the seal mounting beforehand.

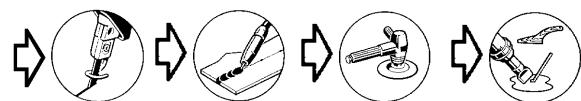
To refit use rivets of  $\varnothing 4.8 \text{ mm}$ , and head length of **12 mm**.



**A**



14586



**REMINDER:**

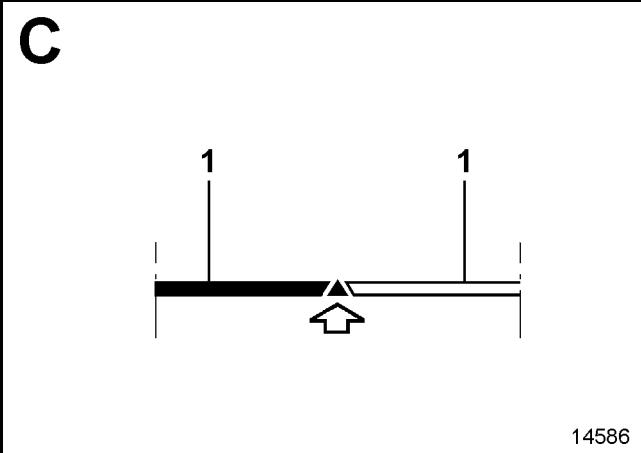
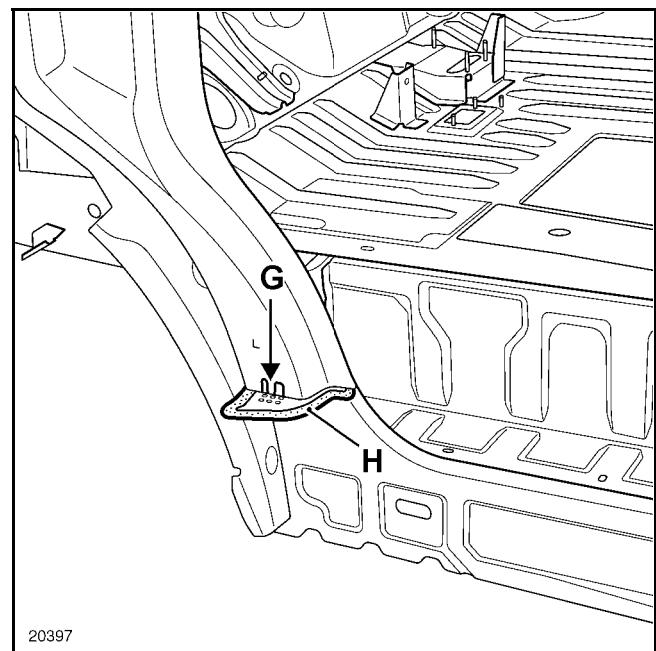
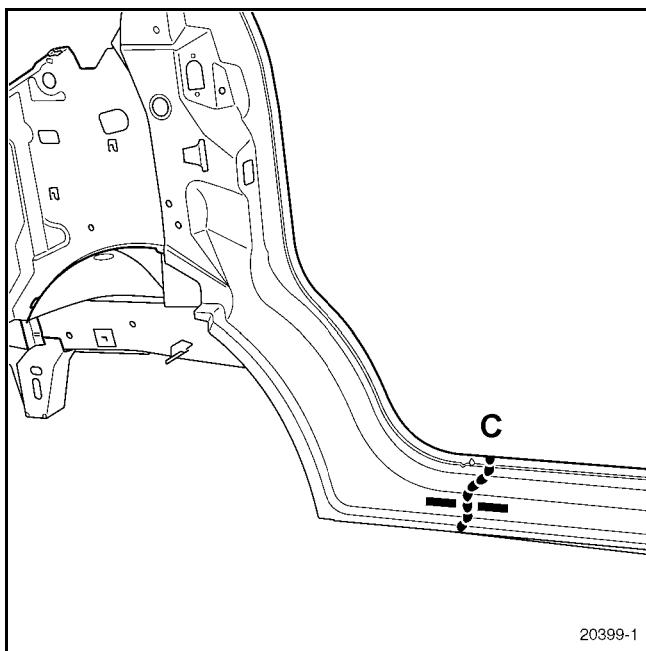
Cut A should be carried out above the A-pillar reinforcement.

**IMPORTANT:**

This part is within an area of bodywork that sustains a considerable amount of stress.

the spot welds not shown in the repair procedure can be made as originally.

However, for safety reasons, it is advisable to make additional plug welds in zone (B) to maintain its mechanical properties.



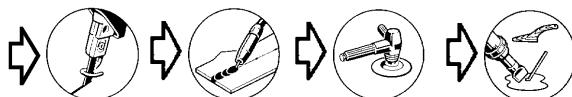
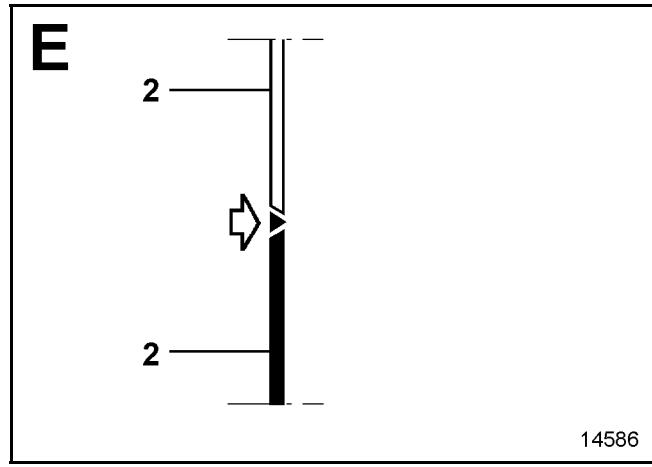
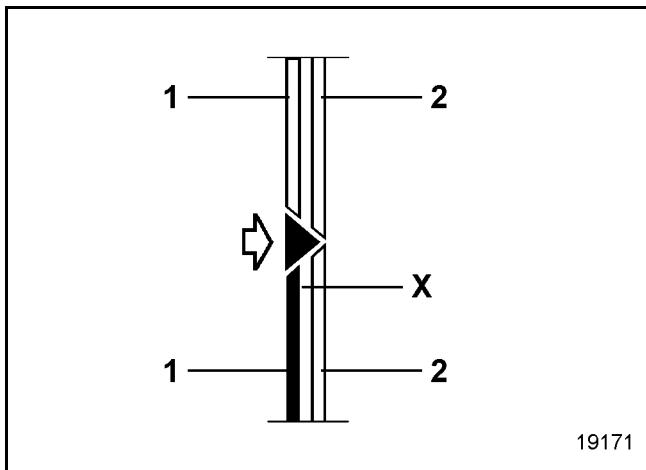
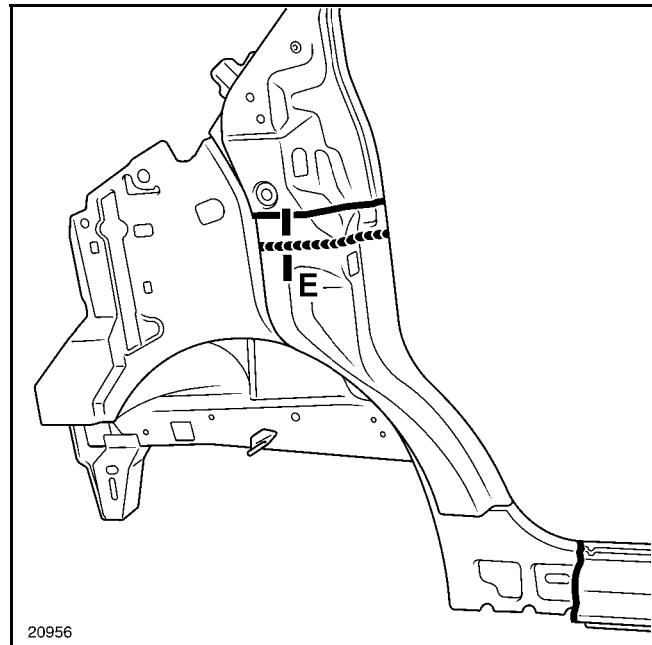
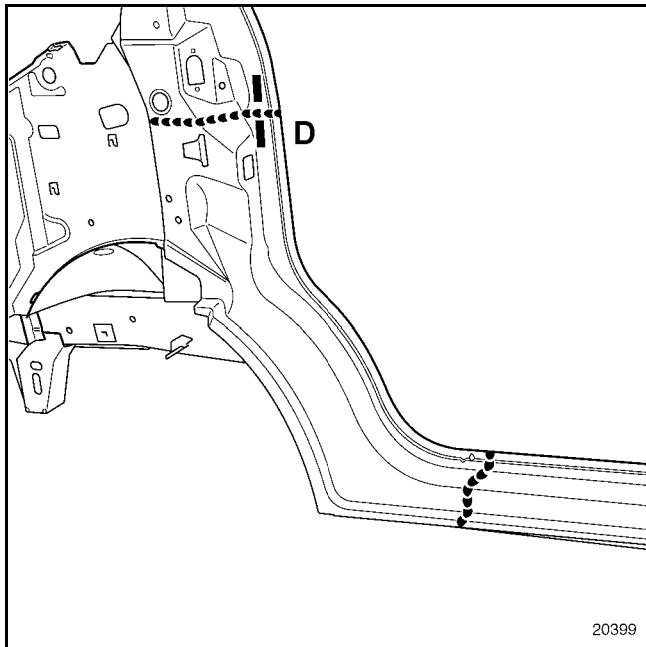
**REMINDER:**

The expanding inserts react to temperature when the body is immersed in the cataphoresis baths during manufacture.

When repairing, it is impossible to reproduce these conditions. It is therefore necessary to perform the following operations when replacing an insert to ensure optimum sealing and guarantee vehicle soundproofing:

- 1 Clean the bonding surfaces with heptane.
- 2 Seal the holes in the insert by cutting out a piece of soundproofing pad (**part number: 77 01 423 546**)
- 3 Apply lining sealing mastic (**H**) (**part number: 77 01 423 330**) to the periphery of the insert (**G**).
- 3 Fit the insert by compressing the mastic.

Partial replacement under upper hinge of door using cut B-C



**NOTE:**

Area X is empty.

The lower cut is not specified, it is identical to the long partial replacement (see section C).

**IMPORTANT:**

When performing the cutting operation take care **not to damage pillar reinforcement (2)**.

**NOTE:**

For every altered cut, it is essential to:

- unpick the pillar reinforcement from the replacement part,
- unpick the pillar reinforcement on the vehicle,
- also order a separate replacement part reinforcement.

**IMPORTANT:**

It is not advisable to re-use the reinforcement once removed.

This part is replaced in addition to changing the cab A-pillar for a side impact.

**IMPORTANT:**

This part is within an area of bodywork that sustains a considerable amount of stress.

the spot welds not shown in the repair procedure can be made as originally.

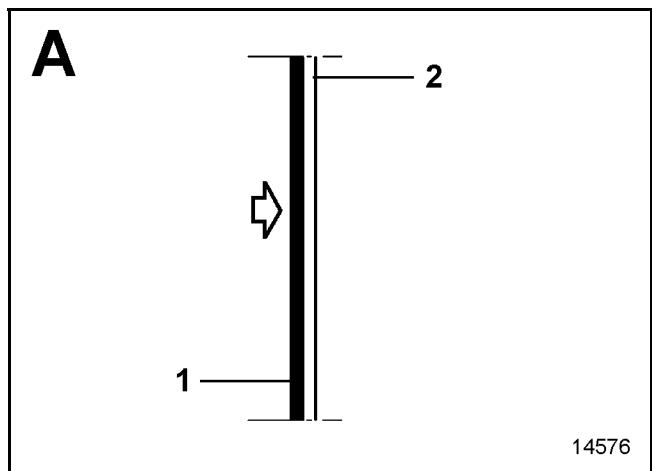
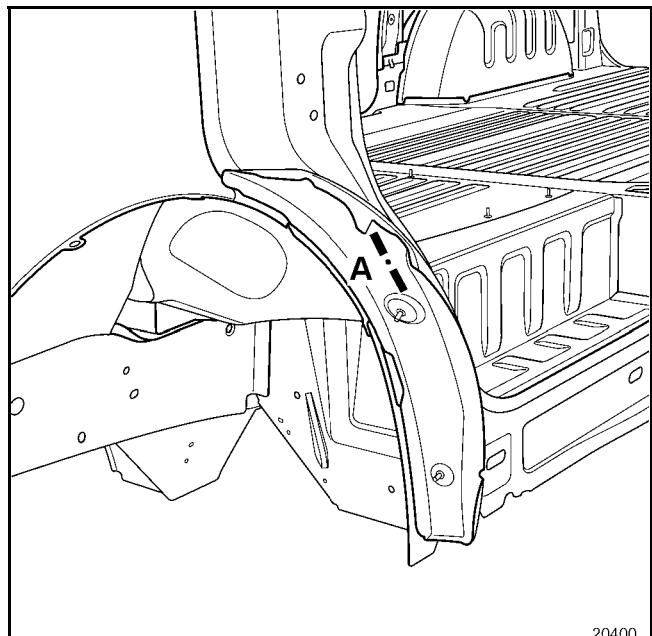
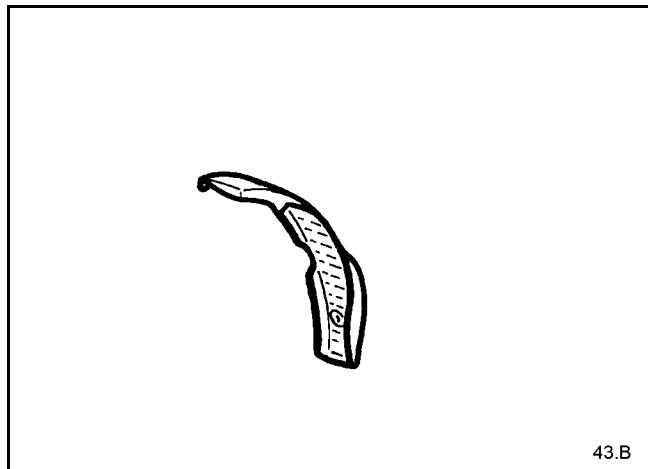
However, for safety reasons, it is advisable to make additional plug welds to maintain the mechanical properties.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



**PARTS CONCERNED (thickness in mm):**

|                              |     |
|------------------------------|-----|
| 1 Cab A-pillar closure panel | 0.9 |
| 2 Pillar reinforcement       | 1.2 |

Replacement of this part is an operation associated with partial replacement of the cab A-pillar for a side impact.

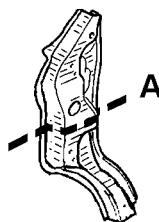
This operation is only performed in a partial replacement using cut **A**.

There is no advantage in replacing the complete part, replacement of the cab A-pillar is more appropriate.

For more detail, refer to the method of replacing the cab A-pillar.

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



43.C

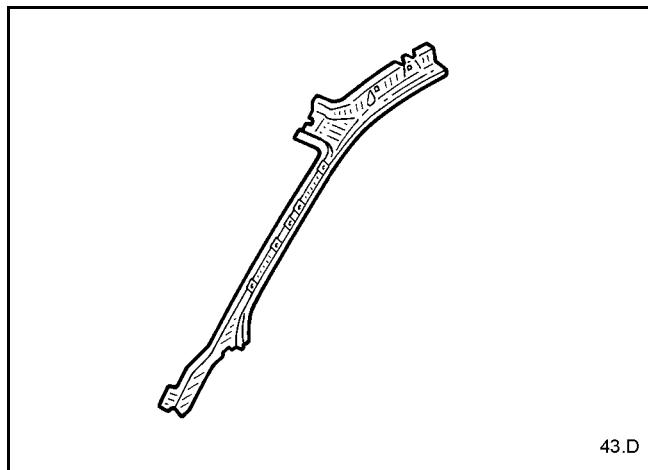
This part is changed in addition to changing the cab A-pillar for a side impact.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

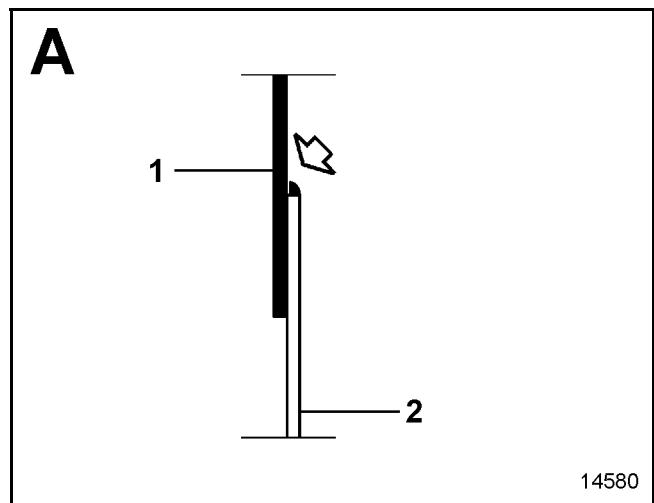
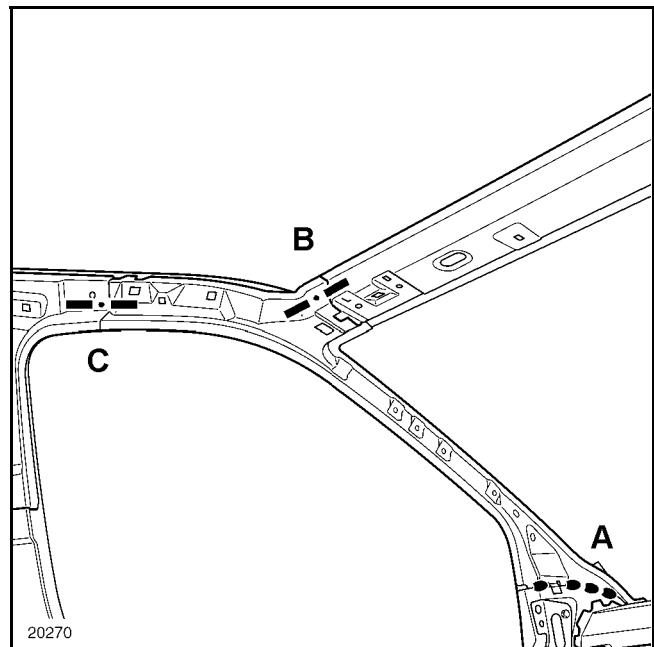
**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



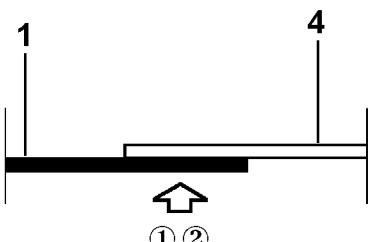
**PARTS CONCERNED (thickness in mm):**

|   |                          |     |
|---|--------------------------|-----|
| 1 | Windscreen pillar lining | 1   |
| 2 | Scuttle side panel       | 1   |
| 3 | Centre pillar lining     | 1   |
| 4 | Roof front cross member  | 0.8 |



Special notes with cab roof in position

**B**



14579



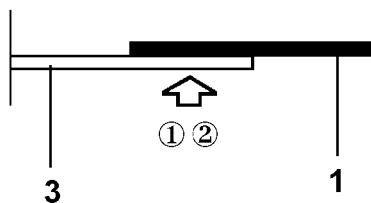
① on replacement part



X4

Special notes with cab top in position

**C**



14579



① on replacement part



X4

This part is replaced in addition to replacing the cab side front section for a side impact.

There are two methods of carrying out this operation:

- complete,
- partial, using cut A,

The procedure for replacing this part has no special notes, and joints can all be made as originally.

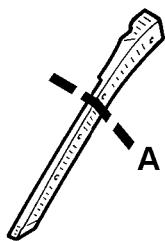
In the step described below you will only find the cut position for partial replacement.

Partial unpicking of this part may be useful for smoothing the windscreen pillar lining when straightening.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

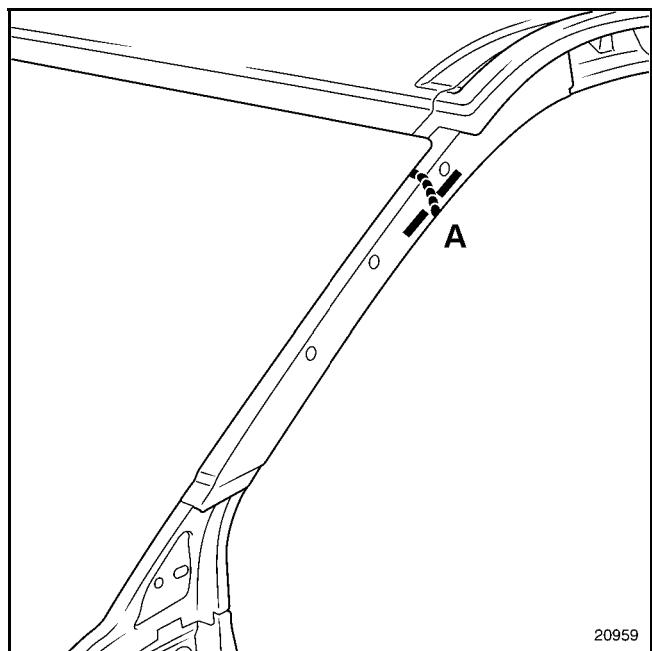
#### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.

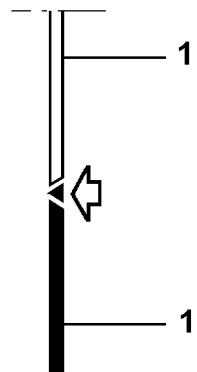


43.E

#### Partial replacement



A

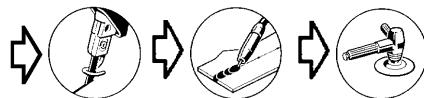


14586

#### PARTS CONCERNED (thickness in mm):

1 Windscreen pillar lining reinforcement

0.8



Replacement of this part can only be performed after removing the rear side panel, front section, and the cab roof.

To carry out this operation, it will be necessary to also order the rivets for the double seal mounting.

**NOTE:**

For reasons of standardization at the Spare Parts Department, the A-pillar of the cabin must be cut in the cabin side, the latter covering several sales modes (e.g., A-pillar, sill panel, C-pillar, etc.).

This operation can be carried out partially in two ways:

- using cuts **A-B**,
- using cuts **A-C**.

Only the special features of the partial cut **A-C** are shown, the method for cut **B** is identical to that for cut **C**.

**IMPORTANT:**

the positions of the cuts given in the procedures cannot be altered, they are determined according to the positions of the linings and reinforcements.

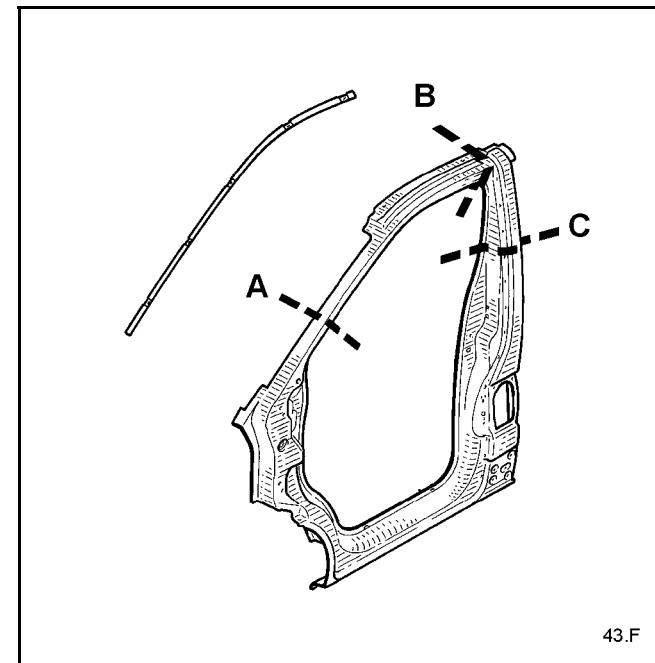
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Frame drip moulding  
Frame stiffener  
Striker stiffener  
Striker plate  
Centring stiffener  
Wing mounting angle bracket  
Pillar reinforcement  
Door stop reinforcement  
Hinge reinforcement  
Pillar upper frame  
Pillar lower frame  
Welded nuts

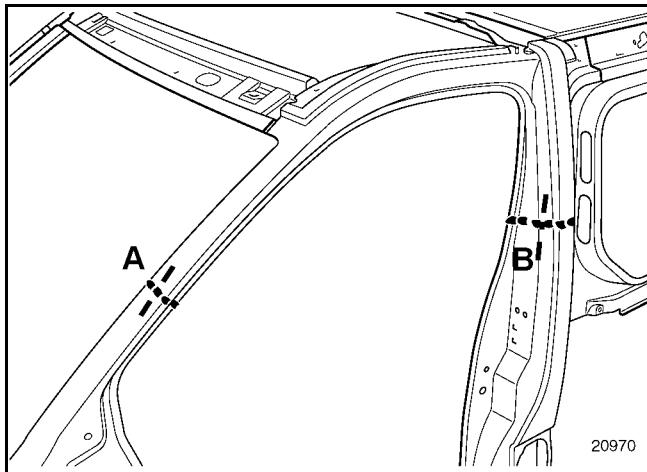


43.F

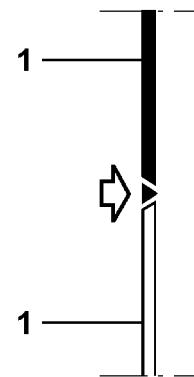
**PARTS CONCERNED (thickness in mm):**

|           |     |
|-----------|-----|
| 1 Cab top | 0.9 |
|-----------|-----|

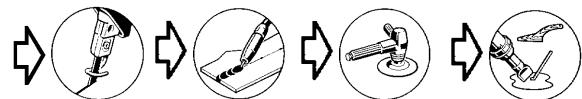
Partial replacement using cut A-C



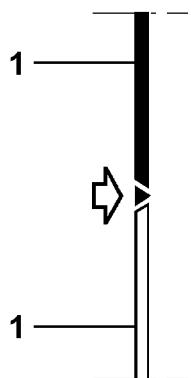
B



14586



A



14586

**IMPORTANT:**

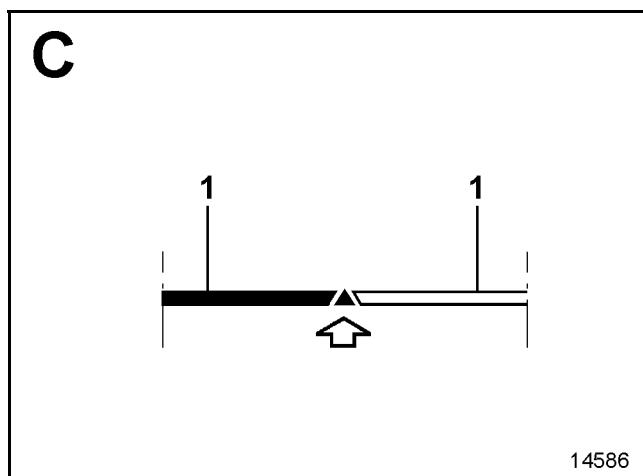
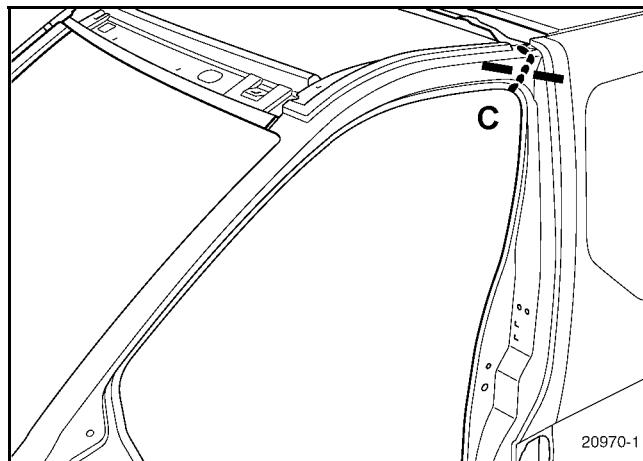
The position of the cut must be more than 150 mm from the seat belt mounting bolt.



**IMPORTANT:**

Cut A should be carried out above the A-pillar reinforcement.

Partial replacement using cut A-B



**NOTE:**

The partial replacement of **C** allows you to avoid unclipping the front section of the rear side panel.

**REMINDER:**

As with the previous operation, cut **A** must be made above the A-pillar reinforcement.

Replacement of this part can only be performed after removing the rear side panel, front section.

To perform this operation, the two side expanding inserts must also be ordered.

**NOTE:**

For reasons of standardization at the Spare Parts Department, the A-pillar of the cabin must be cut in the cabin side, the latter covering several sales modes (e.g., A-pillar, sill panel, C-pillar, etc.).

This operation can be carried out partially in two ways:

- using cuts **A-B**,
- using cuts **A-C**.

Only the special notes for the partial cut **A-C** are shown, the method for cut **B** is identical to that for cut **C**.

**IMPORTANT:**

The positions of the cuts are given for information purposes and can be altered according to deformation caused by impact, except for cut **C** which must be observed exactly.

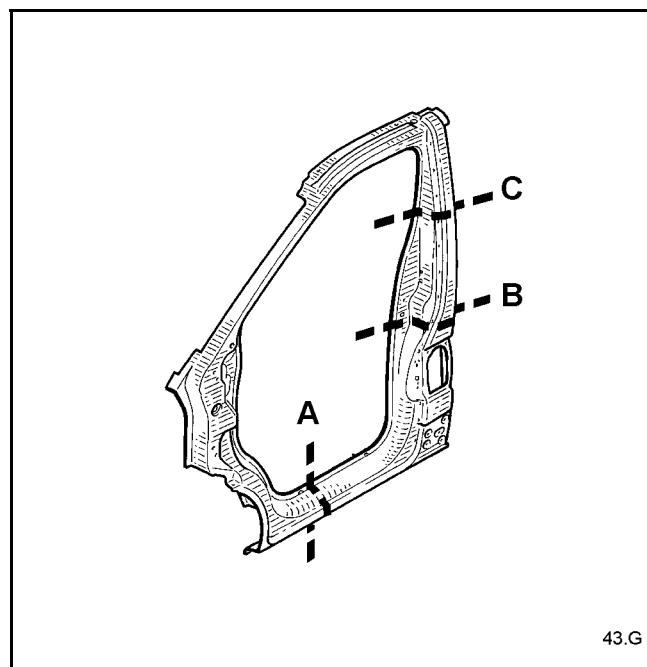
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

Frame drip moulding  
Frame stiffener  
Striker stiffener  
Striker plate  
Centring stiffener  
Wing mounting angle bracket  
Pillar reinforcement  
Door stop reinforcement  
Hinge reinforcement  
Pillar upper frame  
Pillar lower frame  
Welded nuts



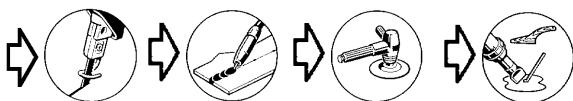
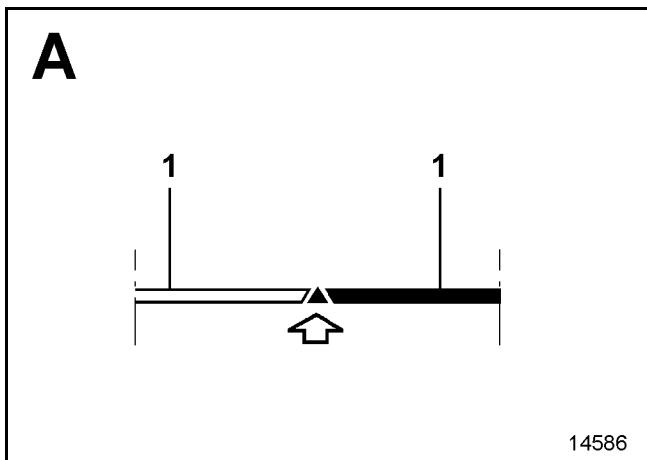
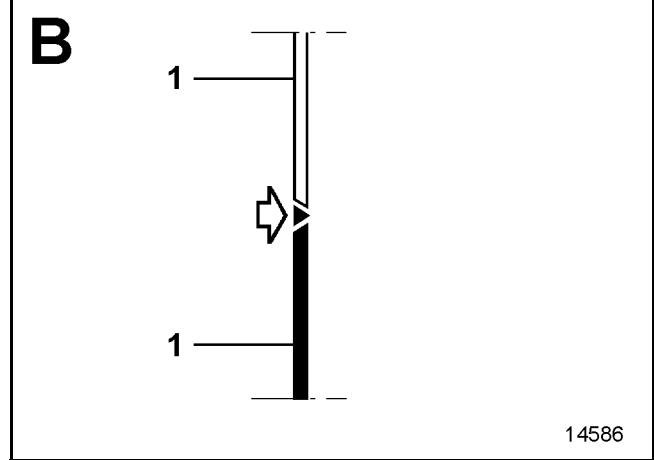
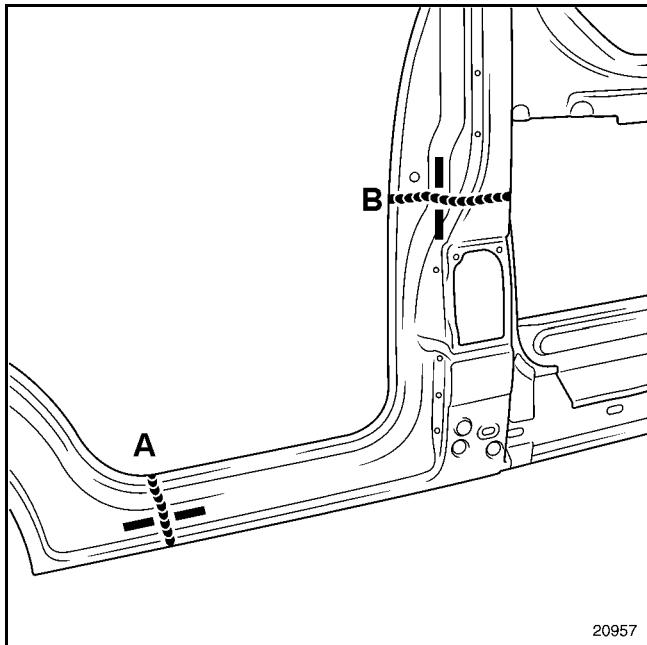
43.G

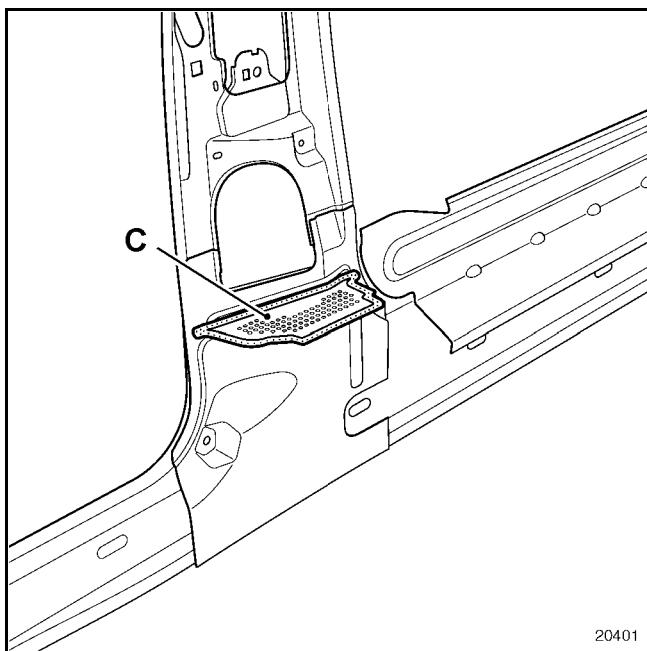
### PARTS CONCERNED (thickness in mm):

1 Cab C-pillar

0.9

Partial replacement using cut A-B



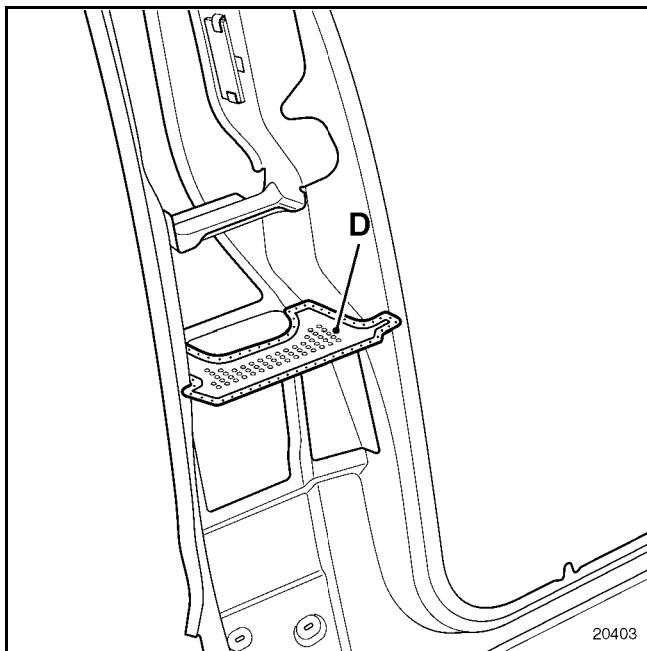


**REMINDER:**

The expanding inserts react to temperature when the body is immersed in the cataphoresis baths during manufacture.

When repairing, it is impossible to reproduce these conditions. It is therefore necessary to perform the following operations when replacing an insert to ensure optimum sealing and guarantee vehicle soundproofing:

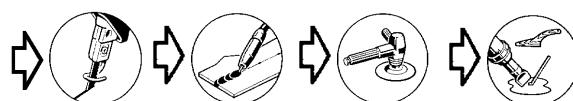
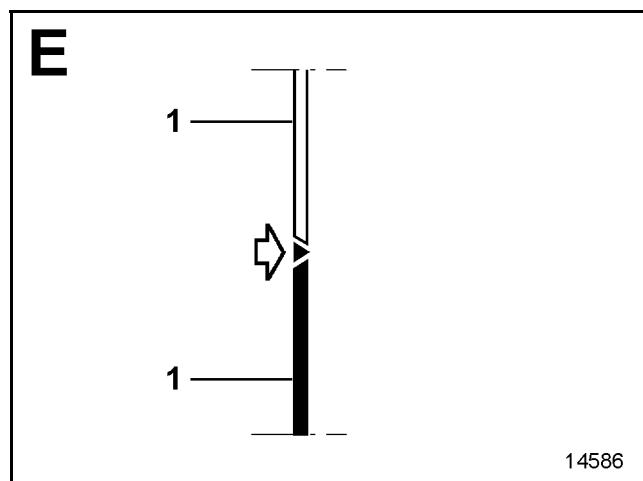
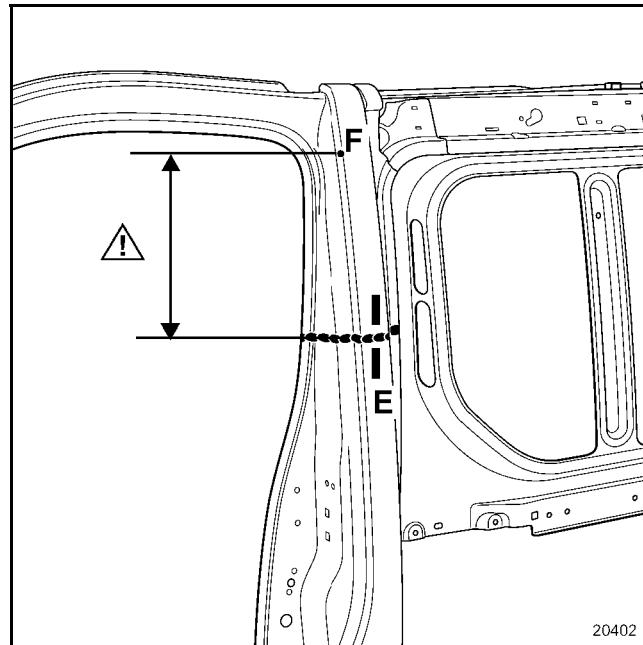
- 1 Clean the bonding surfaces with heptane.
- 2 Seal the holes in the insert by cutting out a piece of soundproofing pad (**part number: 77 01 423 546**)
- 3 Apply lining sealing mastic (**part number: 77 01 423 330**) to the periphery of the insert.
- 4 Fit the insert by compressing the mastic.



**NOTE:**

Insert (D) must be positioned on the replacement part before welding (left-hand side only).

Partial replacement using cut A-C



**IMPORTANT:**

The position of cut C must be observed exactly, and made at more than **150 mm** from the seat belt anchoring bolt (F).

This part is changed in addition to changing the cab C-pillar following a side impact.

The procedure for replacing this part has no specific features, and joints can all be made as originally.

**NOTE:**

The cab C-pillar lining is composed of three parts:

- seat belt shoulder harness reinforcement (**A**),
- pillar lining (**B**),
- pillar lower lining (**C**).

It is possible to replace each of these parts separately depending on the impact.

For example, in the procedure described below, you will find the replacement of the lower section of the pillar lining.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

Pillar lining 1.2

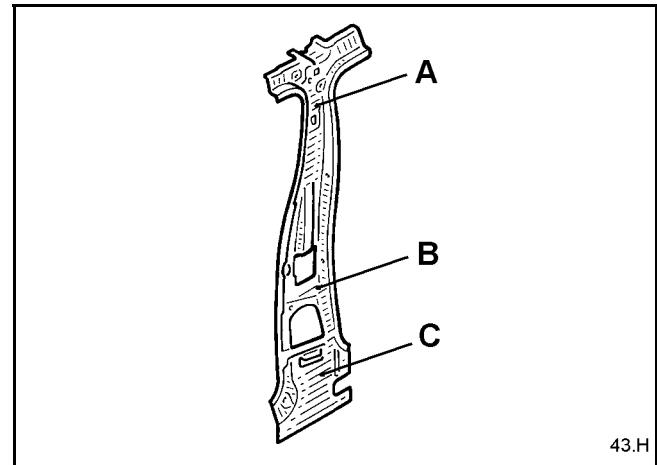
Adjustment pad

Inertia reel reinforcement

Shoulder harness reinforcement

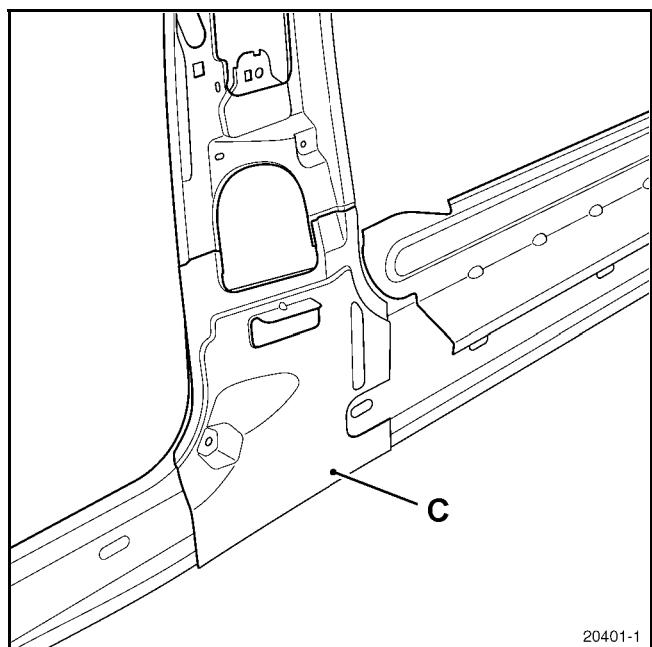
Pillar lower lining

Welded nuts



43.H

### Replacement of the lower section



20401-1

**NOTE:**

The damaged part (**C**) will be unclipped from the lining supplied by the Spare Parts Department.

Replacement of this part can only be performed after removing the rear side panel, front section, and the scuttle side panel stiffener.

To perform this operation, the following must also be ordered:

- double seal mounting rivets,
- double seal mounting,
- the three cab side expanding inserts.

Partial replacement is performed using cuts **A-B**.

**IMPORTANT:**

the positions of the cuts given in the procedures cannot be altered, they are determined according to the positions of the linings and reinforcements.

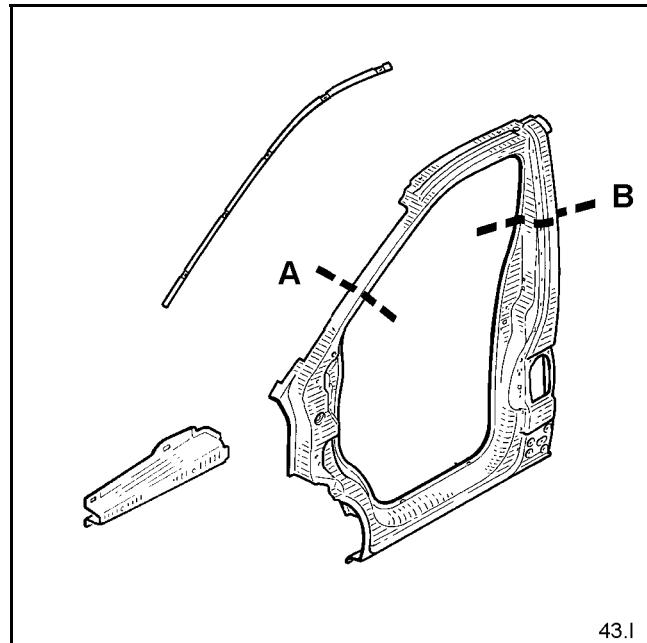
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

- Frame drip moulding
- Frame stiffener
- Striker stiffener
- Striker plate
- Centring stiffener
- Wing mounting angle bracket
- Pillar reinforcement
- Door stop reinforcement
- Hinge reinforcement
- Pillar upper frame
- Pillar lower frame
- Welded nuts

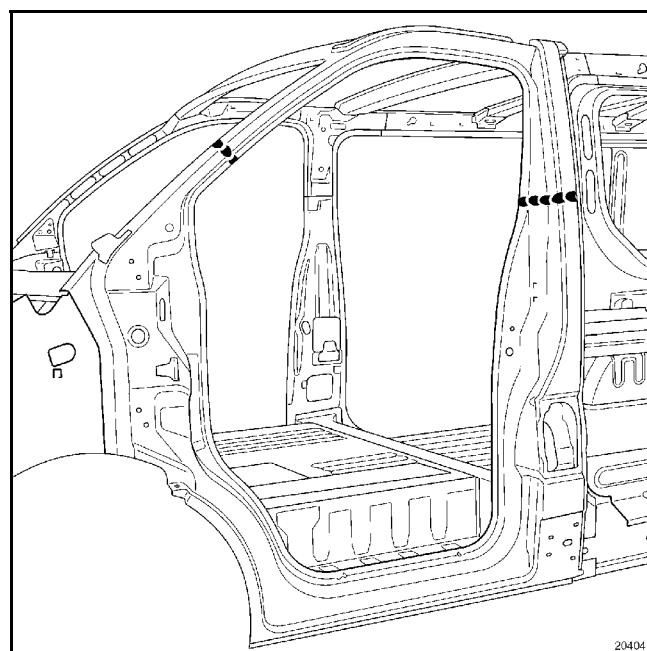


43.1

### PARTS CONCERNED (thickness in mm):

|                                |     |
|--------------------------------|-----|
| 1 Cab A-pillar                 | 0.9 |
| 2 Roof drip moulding stiffener | 0.9 |

### Partial replacement



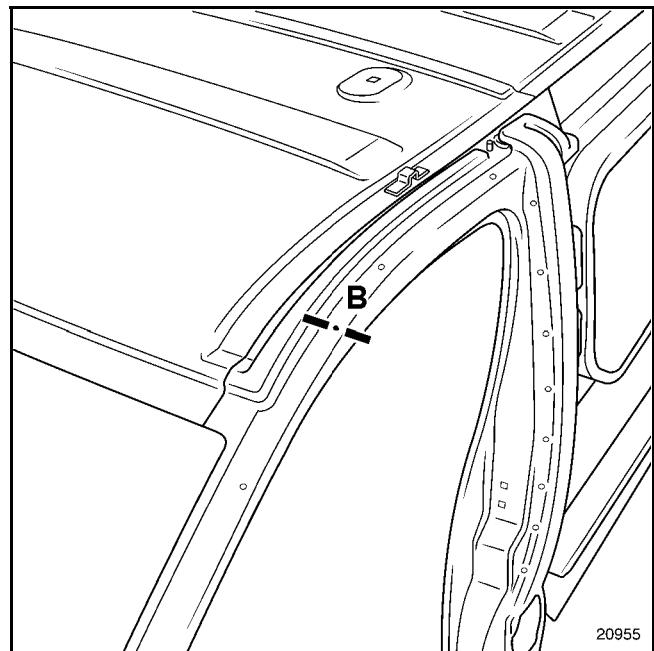
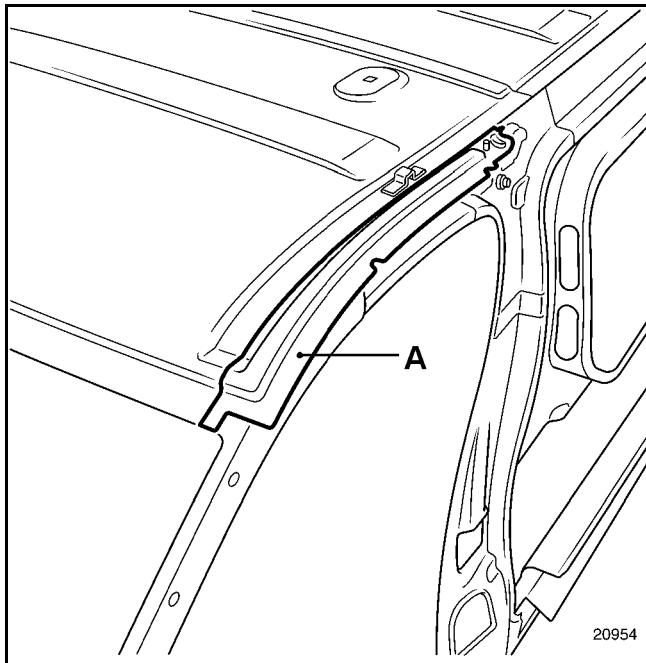
20404

### NOTE:

The position of the cuts is given for information in the diagram.

For the operations to be performed, repeat the method of replacing the cab A-pillar and the cab C-pillar.

Special feature of complete replacement



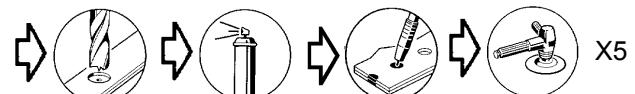
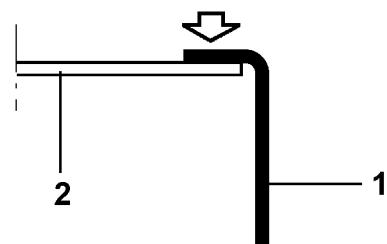
**NOTE:**

There is no specific method for the complete replacement and unclipping of the cab roof.

It is nevertheless possible to completely replace the cab side at the roof drip moulding reinforcement to avoid unpicking the cab roof.

In this case, it will be necessary to leave the roof drip moulding reinforcement (A) in position on the vehicle and unpick the roof drip moulding reinforcement on the side of the cab where the replacement part is to be fitted.

**B**



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

In all cases, it will also be necessary to order the expanding insert located in the rear lower section.

This operation may be carried out in two ways (refer to the procedure given below):

- complete (additional to roof replacement),
- partial upper, using cut **A**,
- partial lower, using cut **C**,
- partial, specific to the glazed panel, using cuts **B**.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

For the bonded sections, it will be necessary to use M.J.Pro type setting mastic (Part No.: 77 11 172 676).

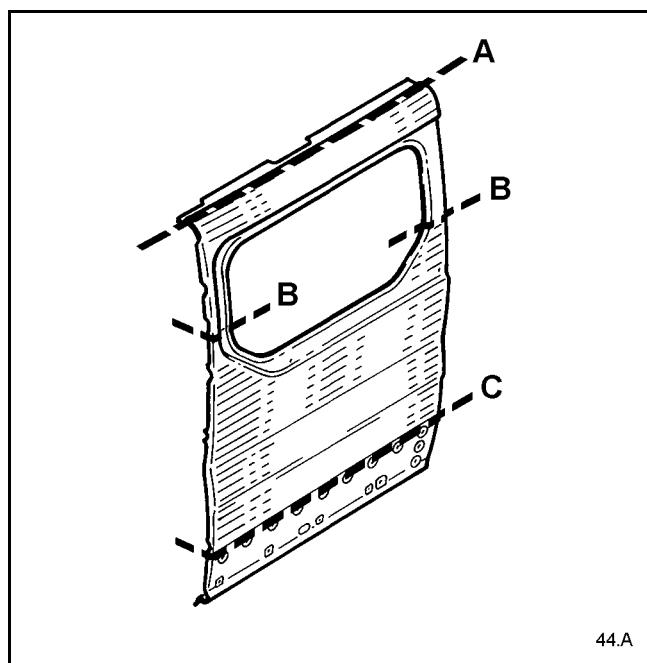
The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

Panel tensioner

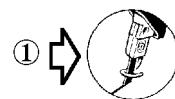
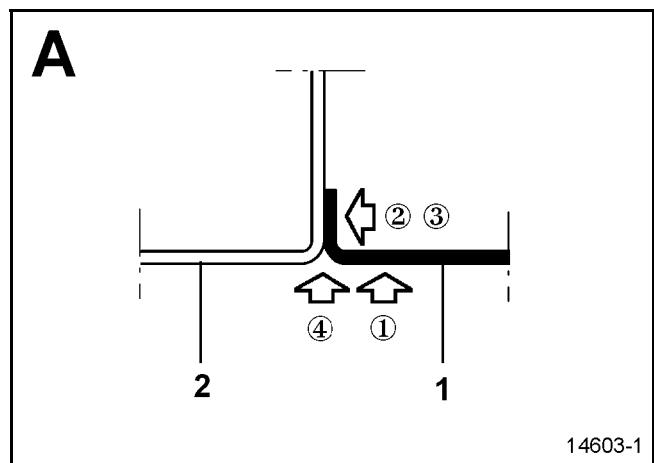
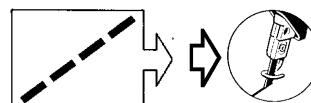
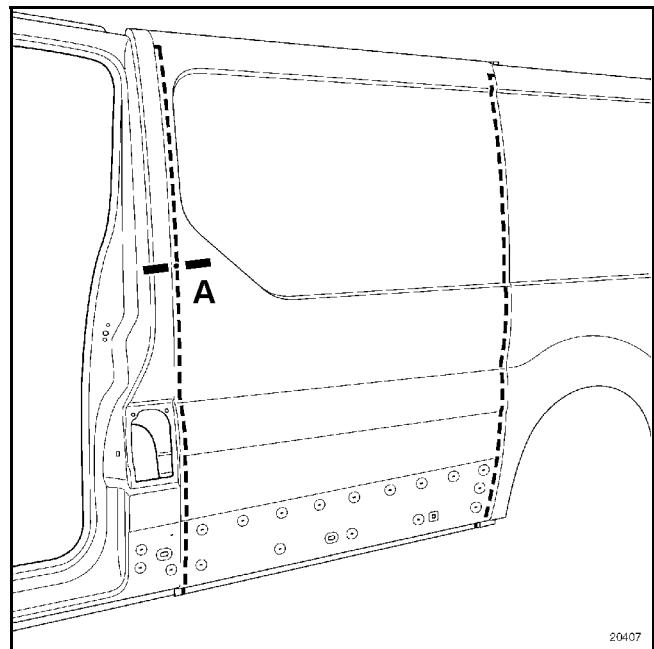
Damper (panel version)



### PARTS CONCERNED (thickness in mm):

|                                  |     |
|----------------------------------|-----|
| 1 Rear side panel, front section | 0.8 |
| 2 Cab side                       | 0.9 |
| 3 Rear side panel, rear section  | 0.8 |

### Complete replacement





② → on the vehicle



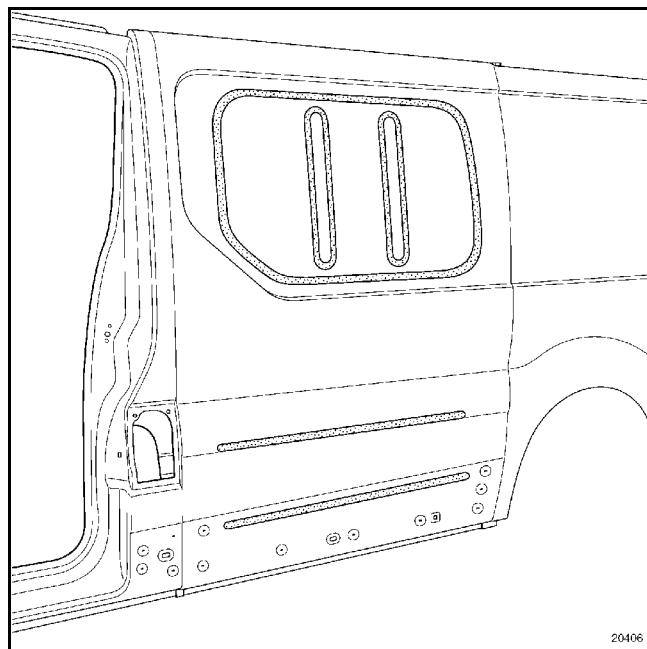
③ → → → replacement part



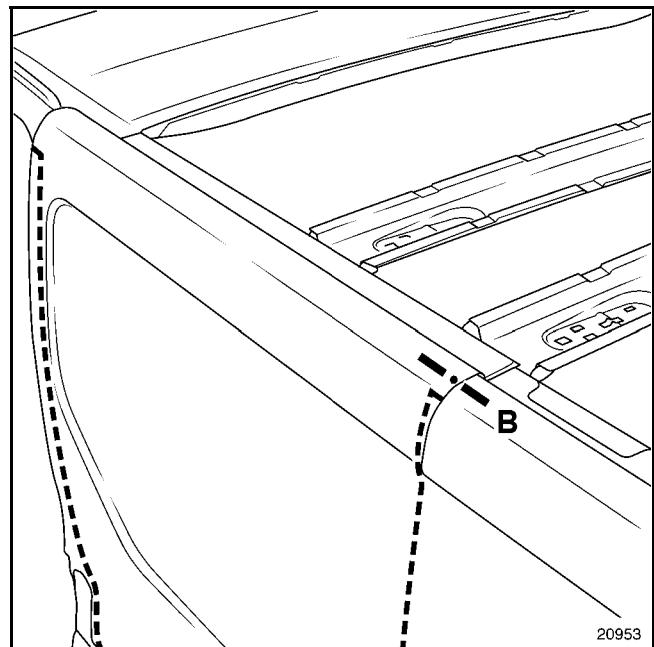
**NOTE:**

The number of plug welds is not specified in the procedure. A distance of approximately **70 mm** must be used between the welds.

At places where plug welds are not possible, it will be necessary to apply welding beads to the outer side of the vehicle.

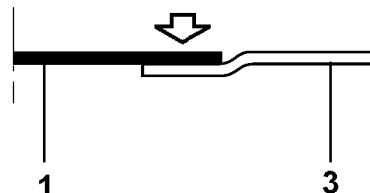


20406



20953

**B**



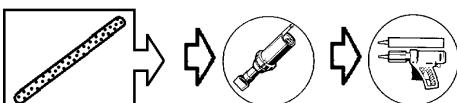
14582

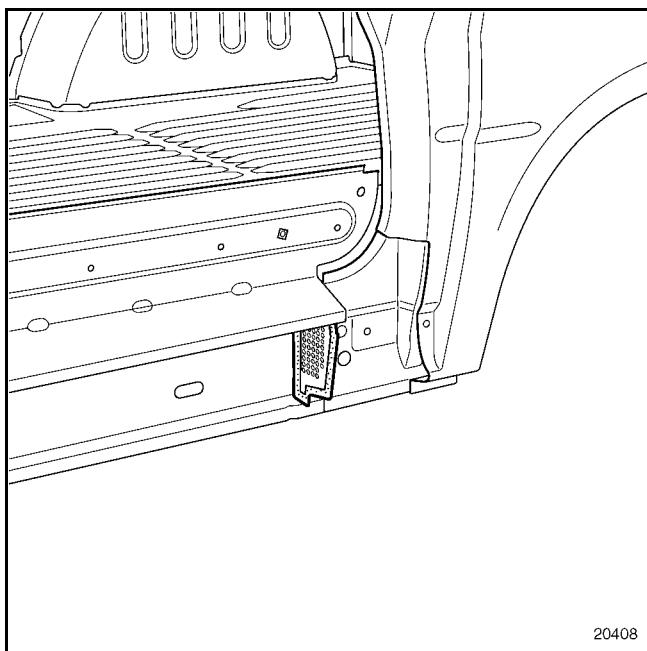


X2

**NOTE:**

The two plug welds must be applied on each side.

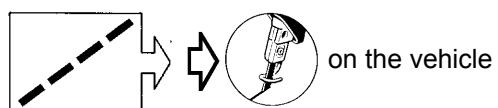
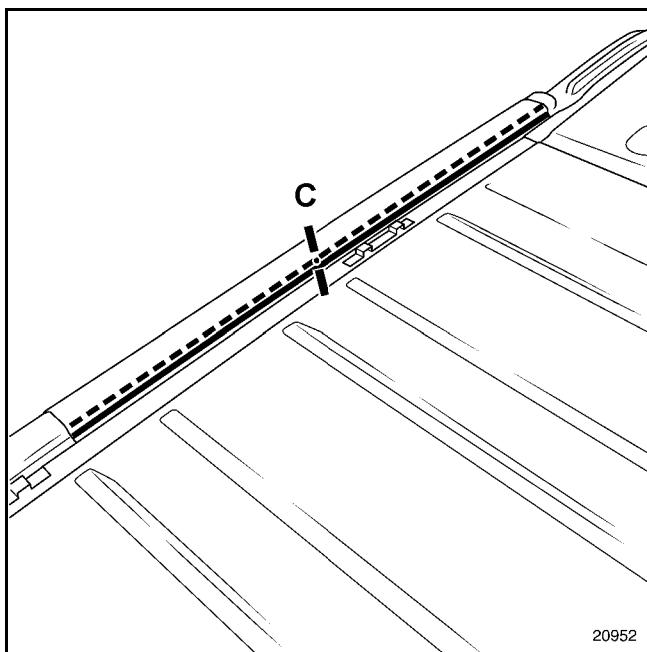




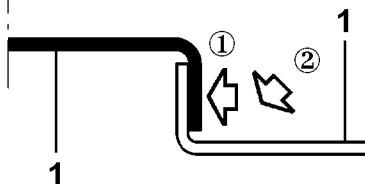
**REMINDER:**

Refer to the method described in Vehicle Innovations for replacement of the expanding insert.

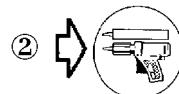
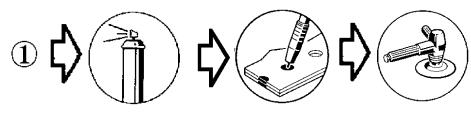
**Upper partial replacement**



C



14606

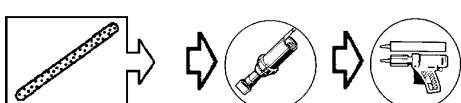
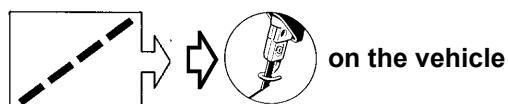
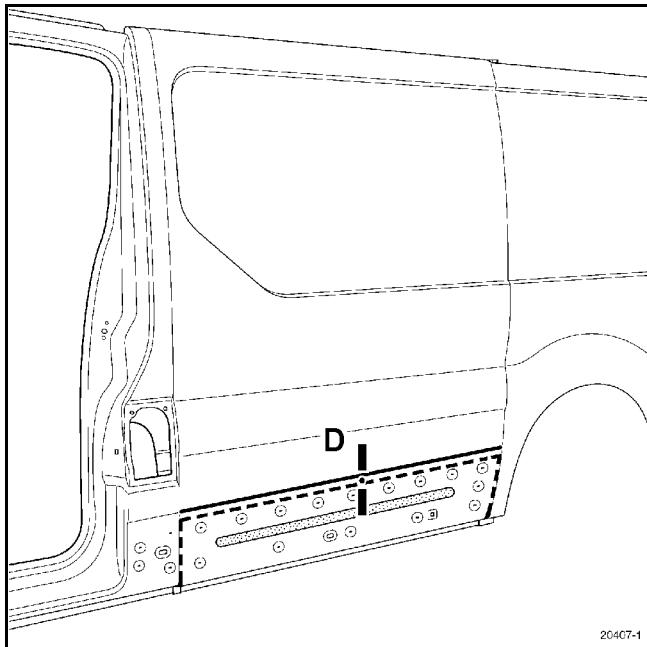


**NOTE:**

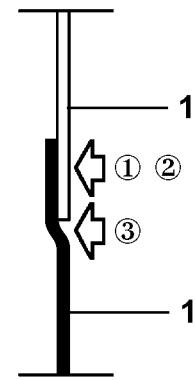
The number of plug welds is not specified. It will be necessary to leave a gap of approximately **60 mm** between the welds, then after welding, apply a bead of mastic in the flange to ensure leaktightness.

Use M.J.Pro type mastic (Part No.: 77 11 172 676)

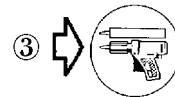
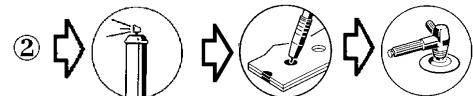
Lower partial replacement



D



14582-1



NOTE:

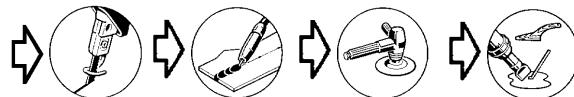
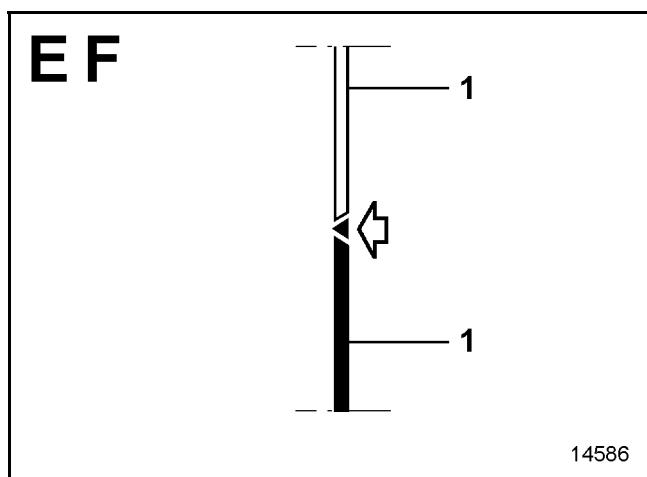
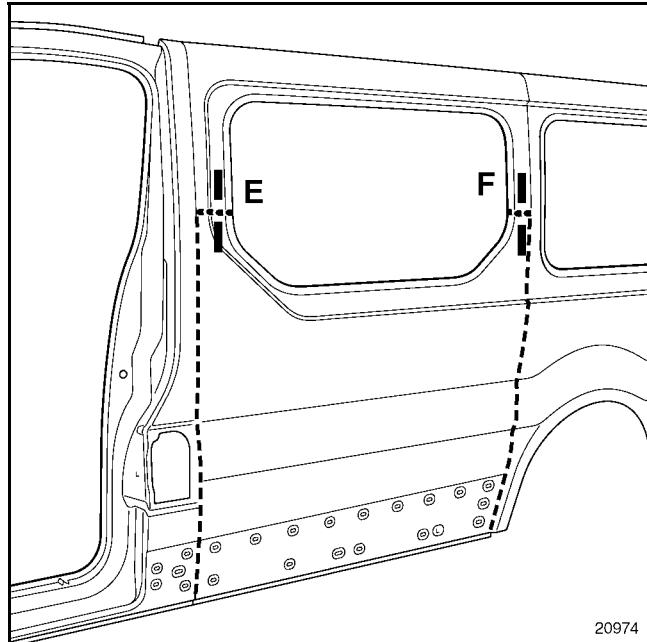
The number of plug welds is not specified. It will be necessary to leave a gap of approximately **60 mm** between the welds, then after welding, apply a bead of mastic in the flange to ensure leaktightness.

Use M.J.Pro type mastic (Part No.: 77 11 172 676)

Partial replacement (FOR GLAZED VERSION  
ONLY)

**NOTE:**

In the repair procedure, you will only find special notes  
concerning the cuts, the rest being identical to the  
panel version.



This part is replaced in addition to replacing the rear side panel, front section.

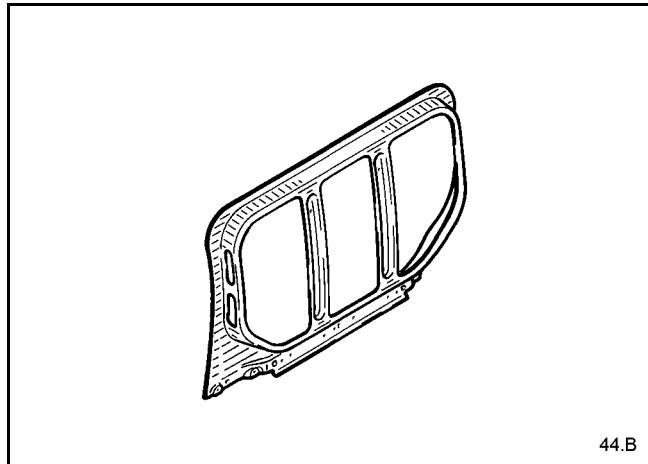
The procedure for replacing this part has no specific features, and joints can all be made as originally.

In the procedure described below, you will only find adaptations to be made according to the vehicle version.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

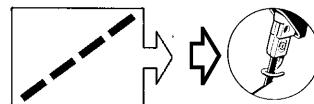
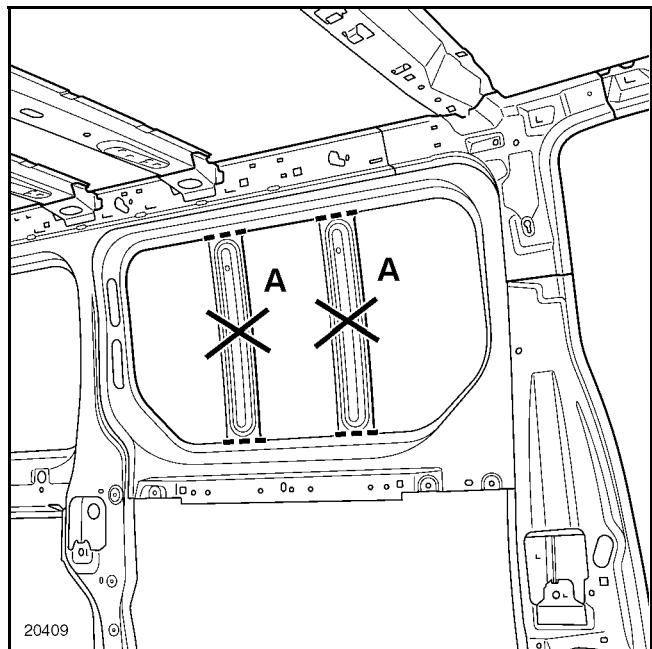
#### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



44.B

#### Adaptation for glazed versions



For reasons of standardisation, the Parts Store will supply one part for all versions.

For glazed versions, it will be necessary to cut the panel stiffeners (A) as shown in the diagram.

This operation must be carried out before painting.

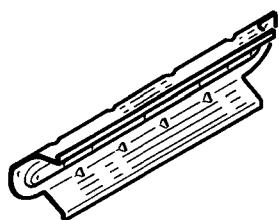
This part is replaced in addition to replacing the rear side panel, front section.

The procedure for replacing this part has no specific features, and joints can all be made as originally.

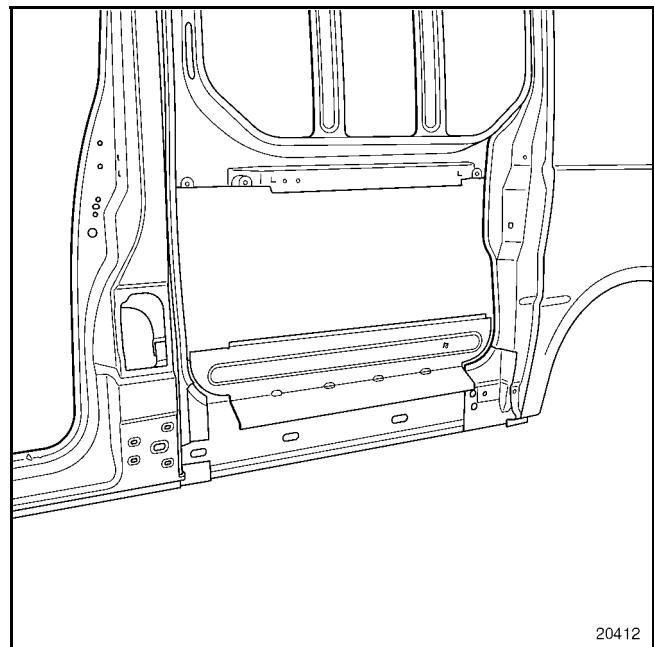
The information on the additional parts will be dealt with in their respective sections (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



44.C



#### NOTE:

It is possible to unpick the lining only, when straightening the lower section of the side panel.

In this particular case, spot welds must be replaced by plug welds and it will be necessary to also order the expanding insert (see procedure for the panel version).

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

In all cases, it will also be necessary to order the expanding insert located in the rear lower section.

This operation may be carried out in two ways (refer to the procedure given below):

- complete (in addition to replacement of the roof and rear side panel, front section),
- partial side, using cut **B**,
- partial upper, using cut **A**,
- partial under rail, using cut **C**,
- partial, specific to the glazed panel, using cuts **D**.

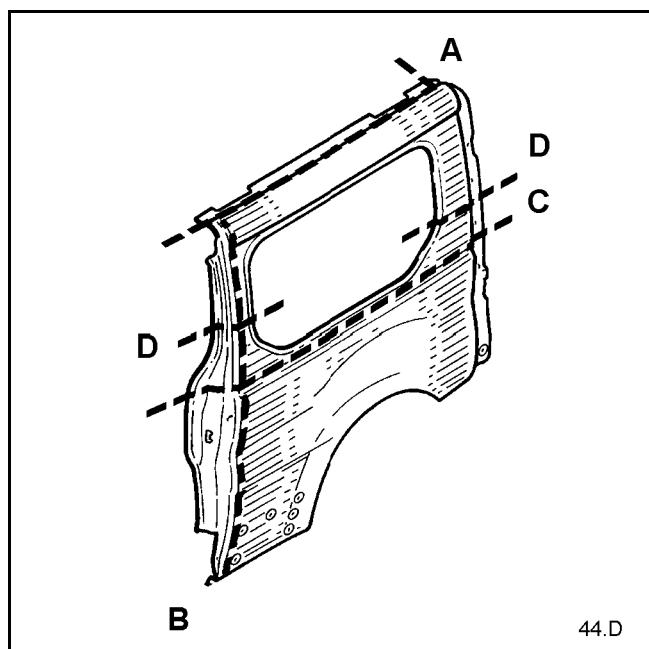
In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

For the bonded sections, it will be necessary to use M.J.Pro type setting mastic (Part No.: 77 11 172 676).

The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

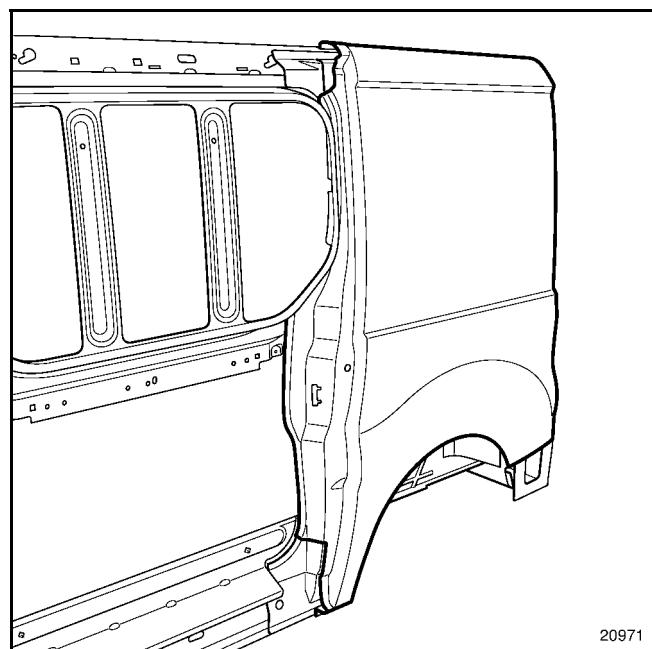
Part supplied on its own.



### PARTS CONCERNED (thickness in mm):

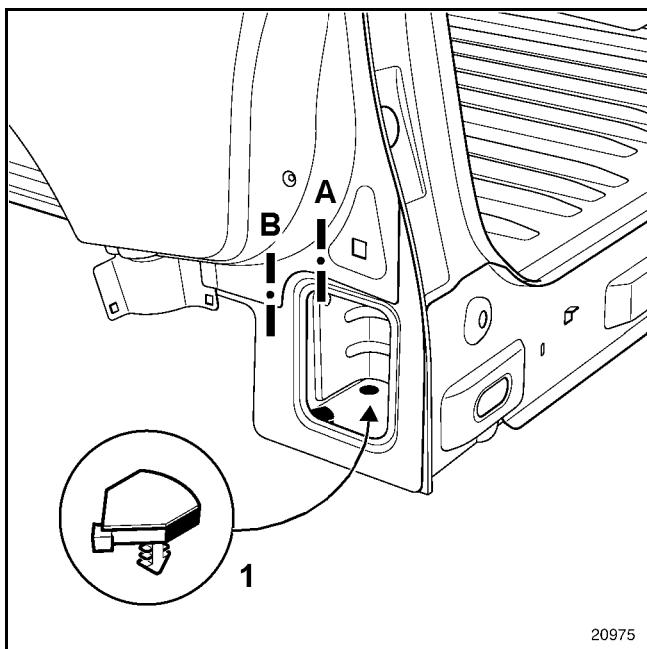
|                                  |     |
|----------------------------------|-----|
| 1 Rear side panel, rear section  | 0.8 |
| 2 Lining of rear side panel      | 0.7 |
| 3 Floor                          | 0.8 |
| 4 Rear side panel, front section | 0.8 |
| 5 Roof rear cross member         | 1   |
| 6 Rail attachment reinforcements | 1.2 |
| 7 Rear roof drip moulding lining | 0.8 |

### Complete replacement

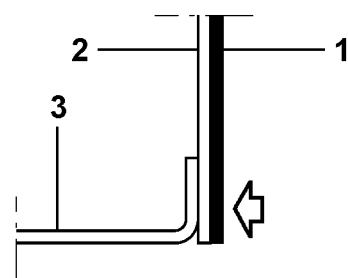


### NOTE:

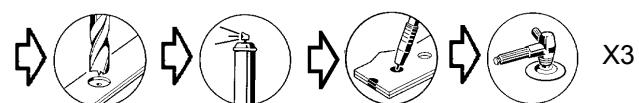
The component must be replaced completely in addition to replacement of the rear side panel, front section, as required by the vehicle design.



B

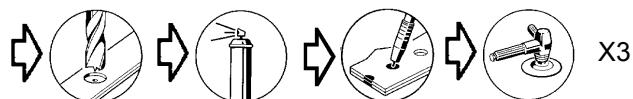
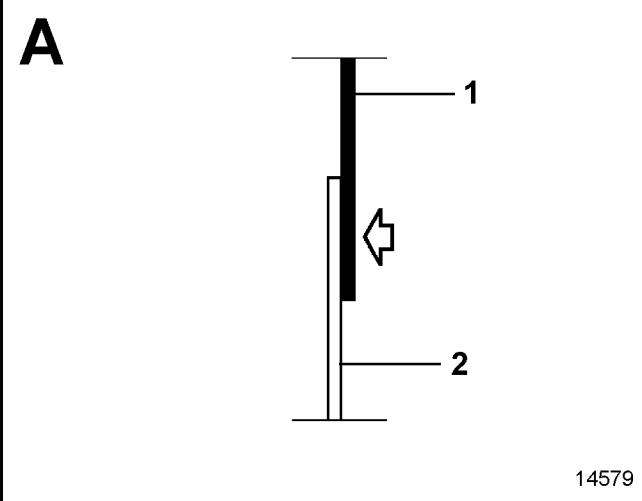


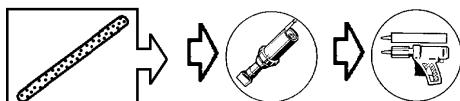
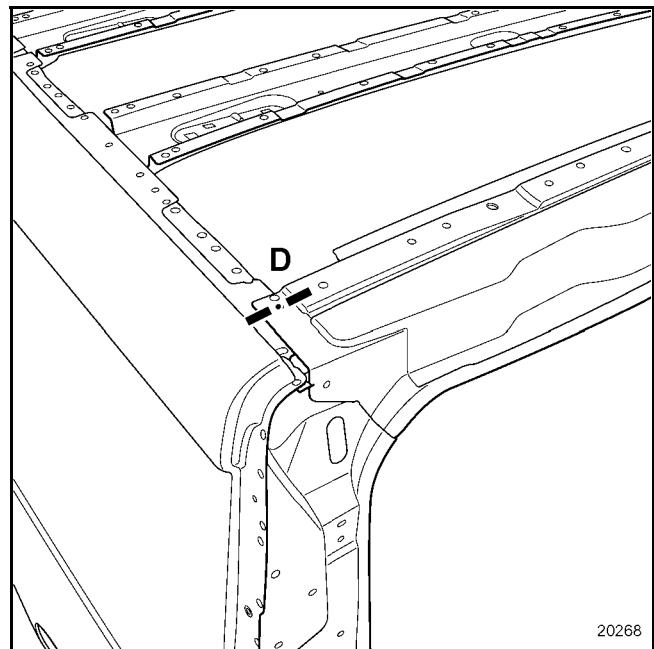
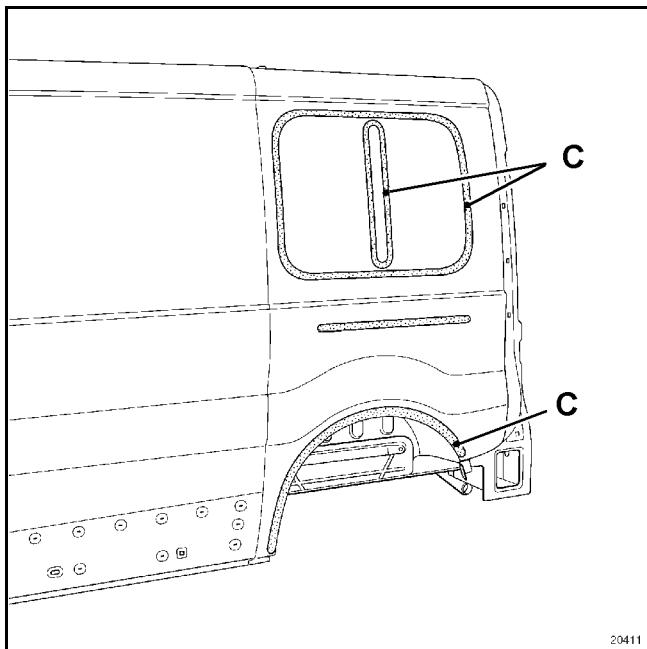
14635



**REMINDER:**

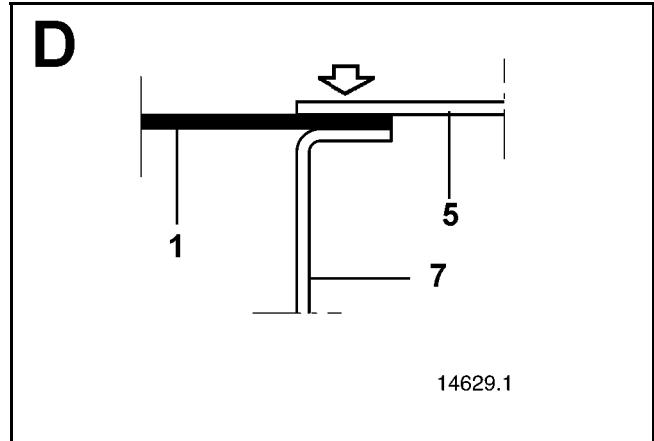
For the replacement of the expanding inserts (1) refer to the procedure described in the replacement of the side panel lining, rear section.



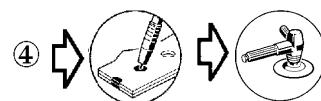
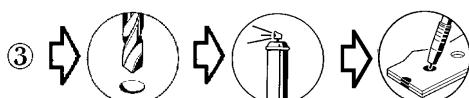
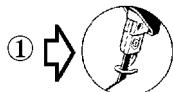
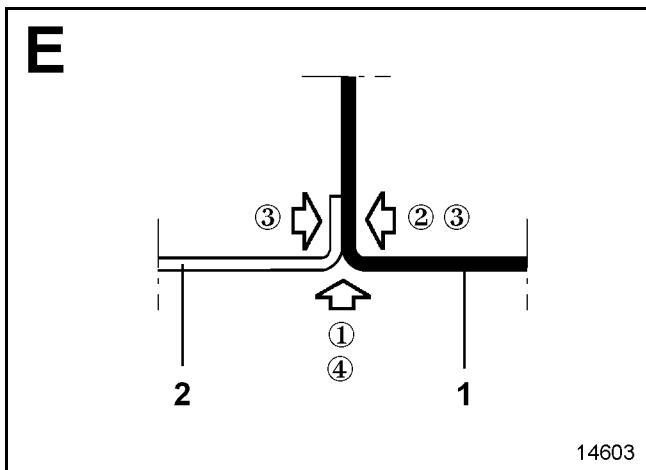
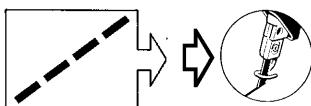
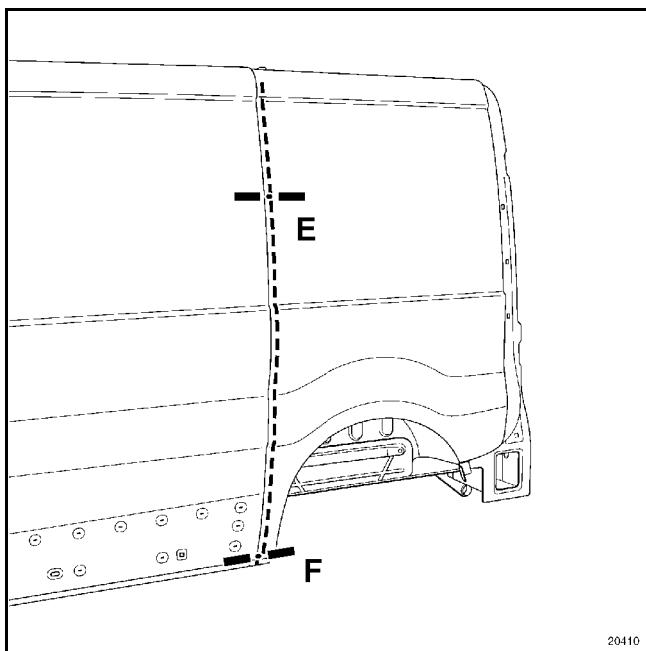


**IMPORTANT:**

A structural adhesive (MCT 514,  
Part No.: 77 11 172 674 type) must be used for  
bonding areas C.



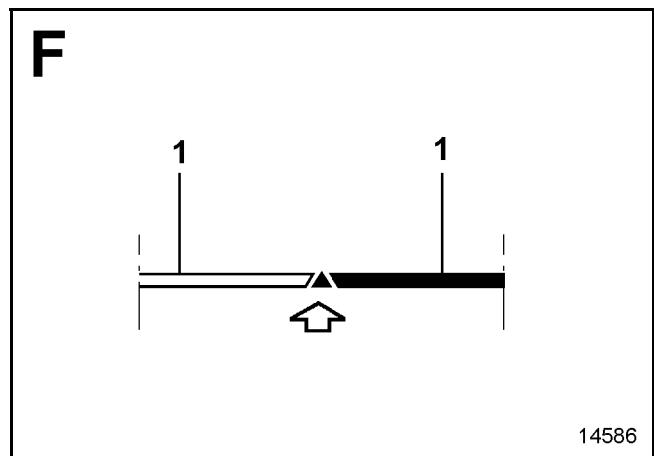
## Side partial replacement



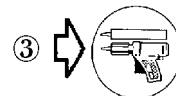
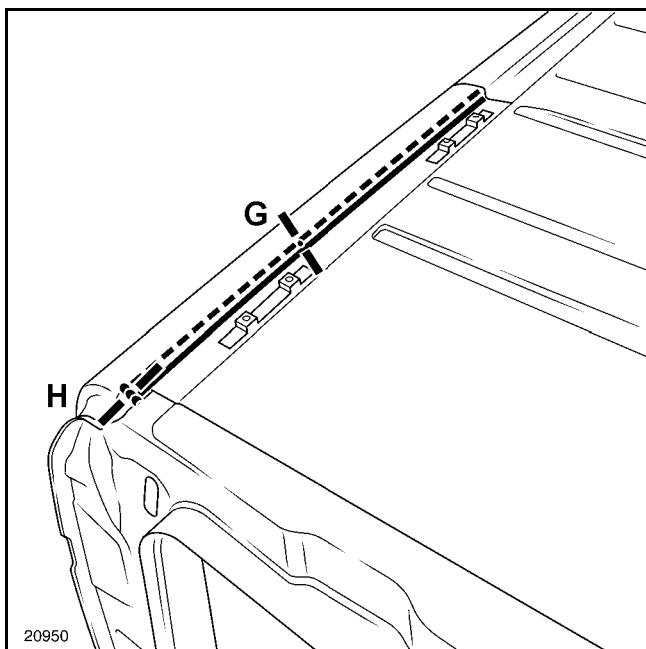
**NOTE:**

The number of plug welds is not specified in the procedure, it will be necessary to leave a gap of approximately **70 mm** between the welds.

At places where plug welds are not possible, apply welding beads to the outer side of the vehicle.



Upper partial replacement

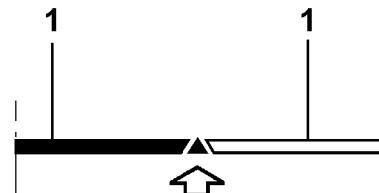


NOTE:

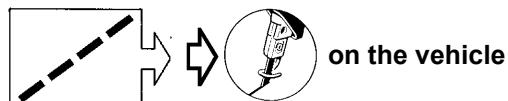
The number of plug welds is not specified, it will be necessary to leave a gap of approximately 60 mm between the welds and then, after welding, to apply a mastic bead to the edge to ensure sealing.

Use M.J.Pro type mastic (Part No.: 77 11 172 676)

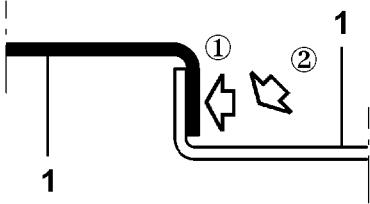
H



14586



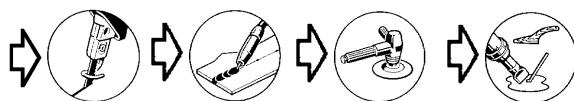
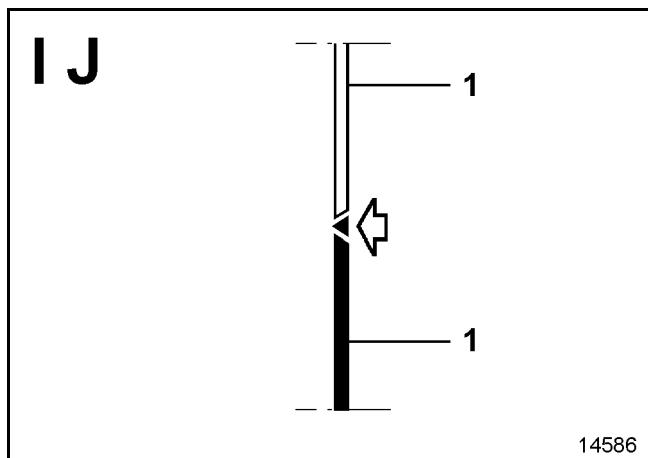
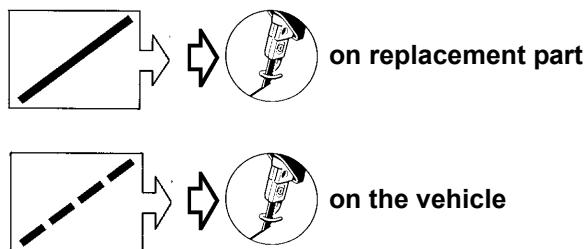
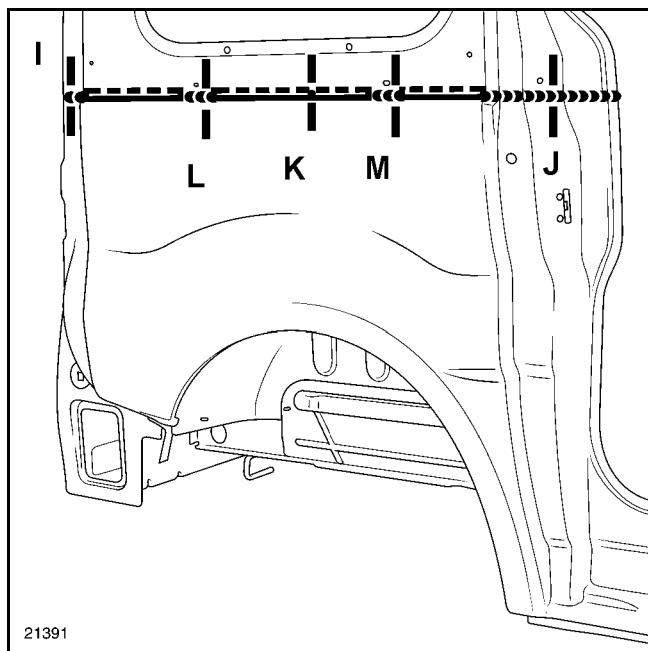
G



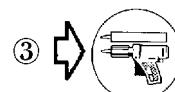
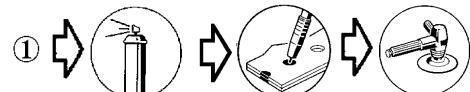
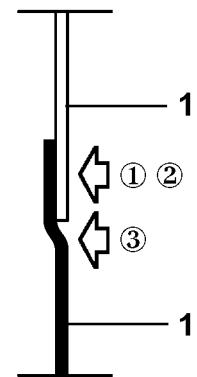
14606



Partial replacement under rail



K



NOTE:

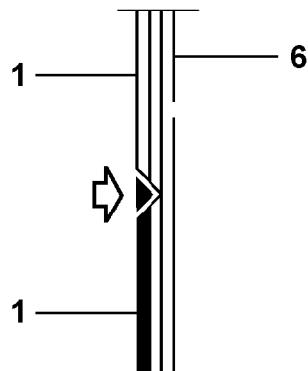
The number of plug welds is not specified, it will be necessary to leave a gap of approximately **60 mm** between the welds, then after welding, apply a bead of smooth mastic to the edge.

Use M.J.Pro type mastic (Part No.: 77 11 172 676)

IMPORTANT:

Partial replacement under the rail is particularly recommended for the glazed versions.  
This avoids removing the quarter window.

LM



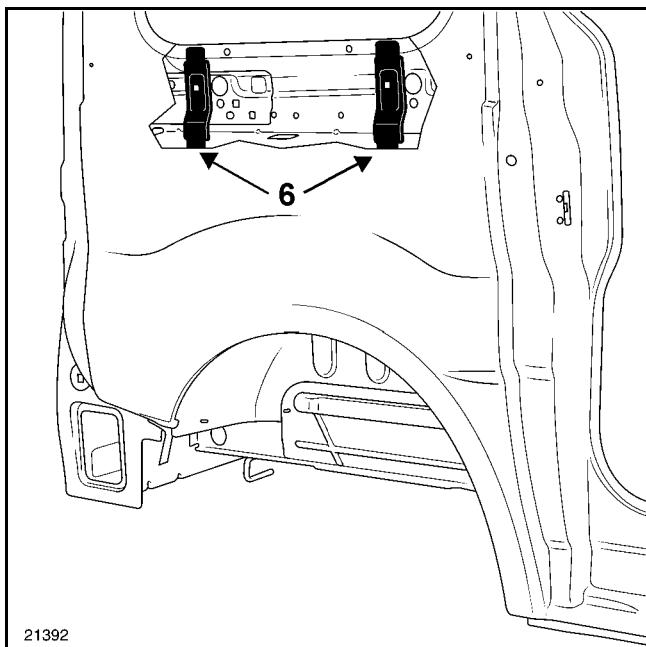
19170



X2 L20

**IMPORTANT:**

It is not possible to apply plumping to stiffeners (6), it will be necessary to apply a welding bead to the edge.

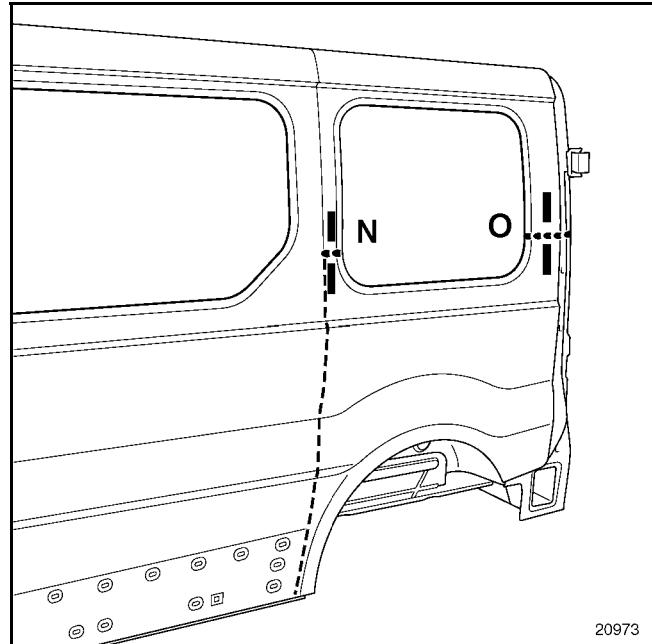


21392

Partial replacement (FOR GLAZED VERSION ONLY)

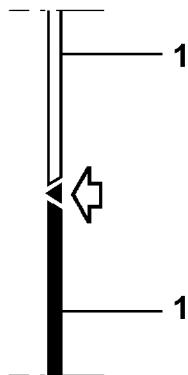
**NOTE:**

In the repair procedure, you will only find special notes concerning the cuts, the rest being identical to the panel version.



20973

NO



14586



Replacement of this part is additional to replacement of the rear panels, front and rear sections, for a side impact.

This operation may be carried out in two ways:

- complete,
- partial, using cut A.

**IMPORTANT:**

The cutting positions given in the procedures cannot be altered, they are determined according to the positions of the linings and stiffeners.

**NOTE:**

For the glazed versions, partial replacement avoids completely unpicking the side panels if these are partially replaced by cutting the window pillars.

The procedure for replacing this part has no specific features, and joints can all be of original manufacture type.

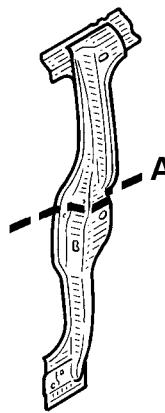
In the step described below you will only find the cut position for partial replacement.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Shoulder harness reinforcement  
Inertia reel reinforcement  
Plate cage  
Striker plate  
B-Pillar  
Welded nuts



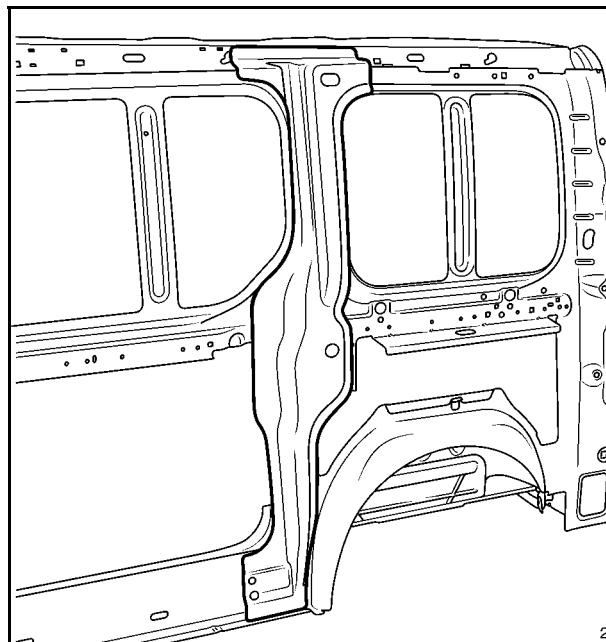
44.E

**PARTS CONCERNED (thickness in mm):**

1 B-Pillar

1

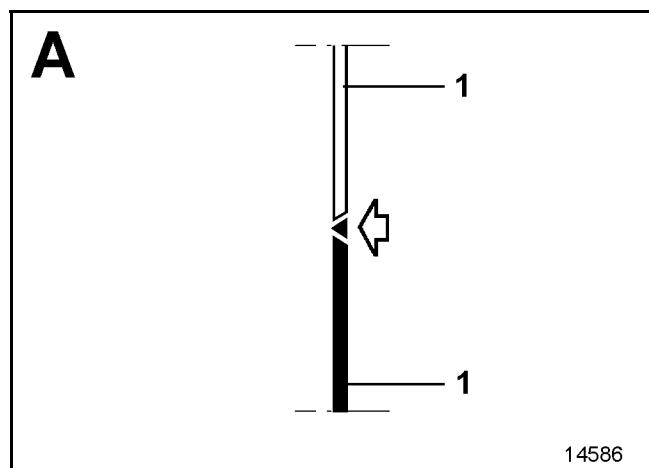
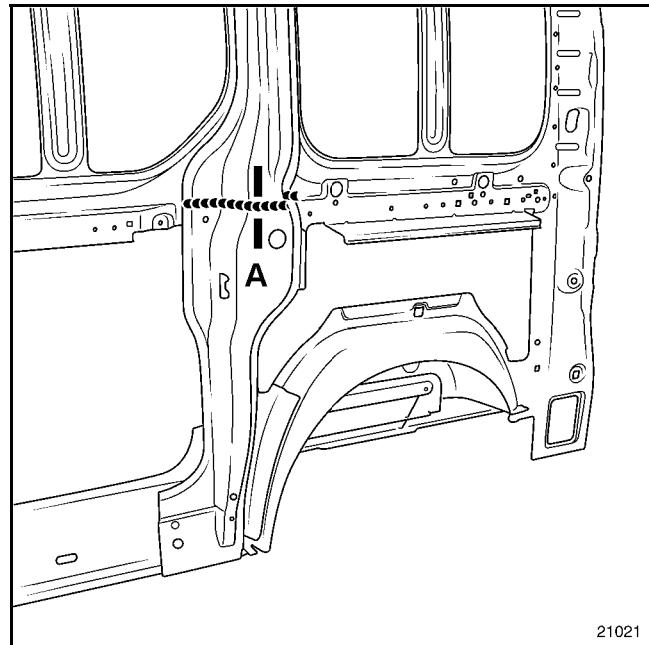
**Complete replacement**



21017

Diagram for information

Partial replacement



Depending on the impact location, replacement of this part may be additional to replacement of the rear side panels, rear section and front section, or of a C-pillar.

This operation may be carried out in several ways depending on the case in question (see procedure below):

- complete, additional to pillar or rear panels,
- partial, using cuts **A**, **B** and **C**, additional to rear panel, rear section, without unpicking of the rear panel, front section,
- partial, of outer wheel arch, using cuts **C** and **D**, additional to rear panel, rear section,
- partial, of rear corner (using cuts **D** and **E**).

In certain cases, it will also be necessary to order the four expanding inserts for the C-pillars.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

#### NOTE:

For the long wheelbase versions, the cuts are located at the same place as for the basic version.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

Inertia reel reinforcement

C-Pillar stiffener

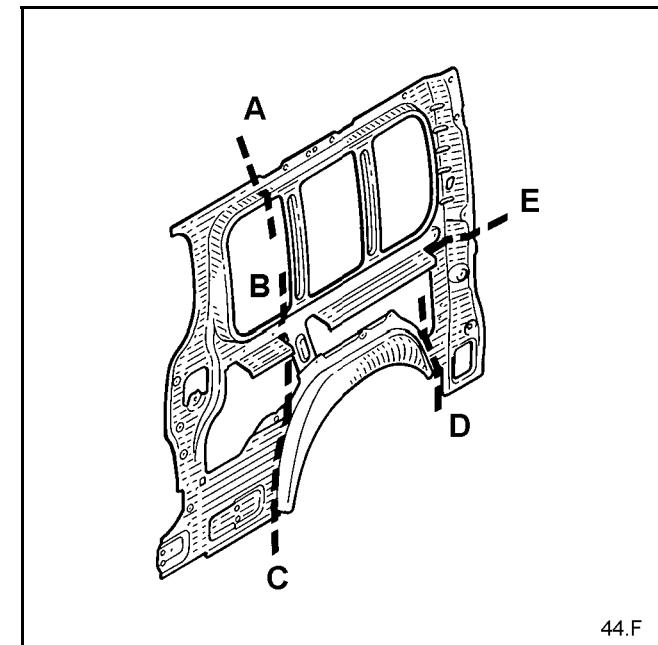
Parcel shelf stiffener

Seat belt shoulder harness reinforcement

Rail stiffener

Mounting reinforcement

Seat belt nut



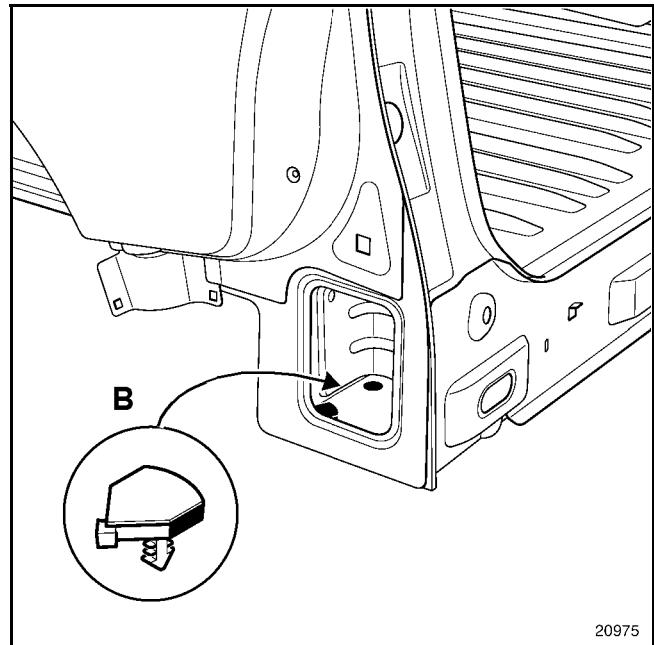
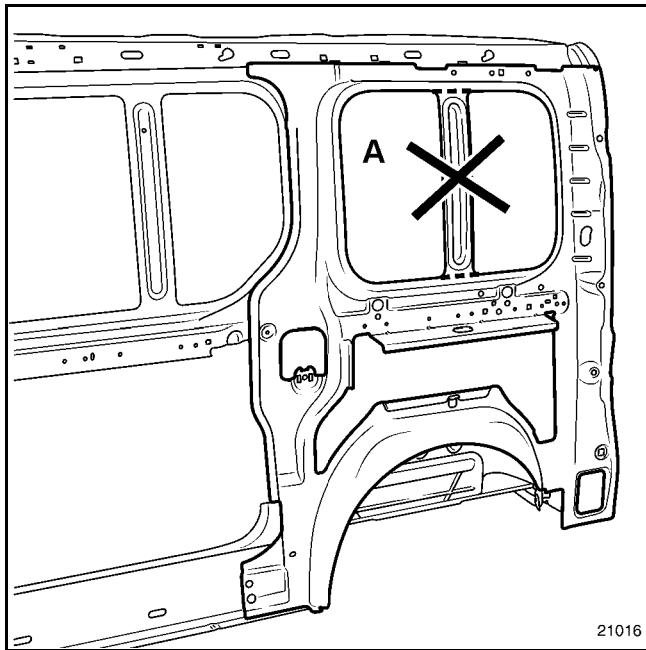
44.F

#### PARTS CONCERNED (thickness in mm):

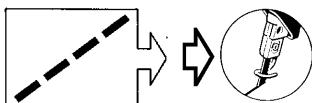
1 Lining of rear side panel

0.7

Complete replacement



Adaptation for glazed versions



NOTE:

For reasons of standardisation the Parts Department will only supply the part for the panel version, therefore for the glazed version it will be necessary to cut panel stiffener (A) as shown in the diagram (for the long wheelbase versions, there are two stiffeners to cut).

This operation must be carried out before painting.

REMINDER:

The expanding inserts react to temperature when the body is immersed in the cataphoresis baths during manufacture.

When repairing, it is impossible to reproduce these conditions. It is therefore necessary to perform the following operations when replacing an insert to ensure optimum leaktightness and guarantee vehicle soundproofing:

- 1 Clean the bonding surfaces with heptane.
- 2 Apply lining sealing mastic (Part No.: 77 01 423 330) to the periphery of the inserts (B).
- 3 Fit the insert by compressing the mastic.

NOTE:

For the four pillar inserts, at the end of the operation it will be necessary to apply beads of smooth mastic in each corner, using a brush. Use M.J.Pro type mastic (Part No.: 77 11 172 676).

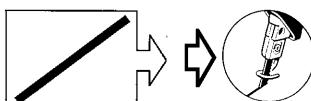
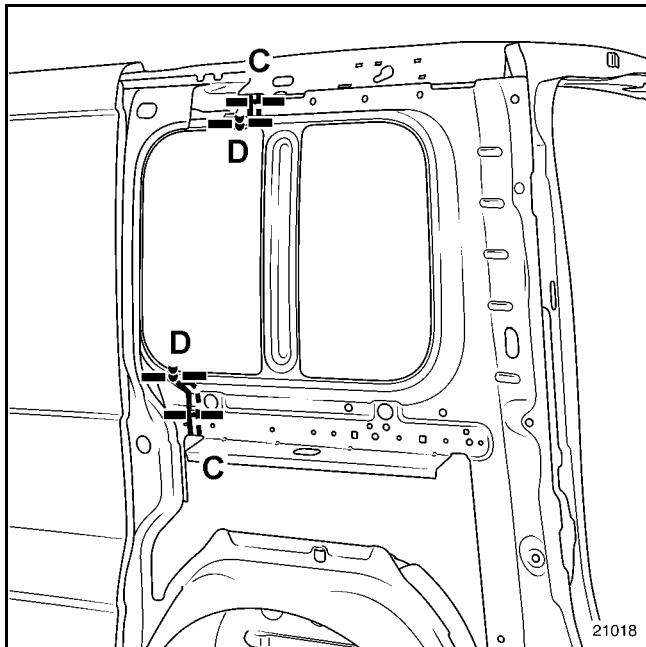
# UPPER REAR STRUCTURE

## Rear section of rear side panel lining

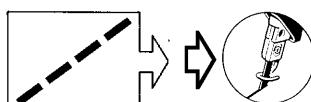
44

F

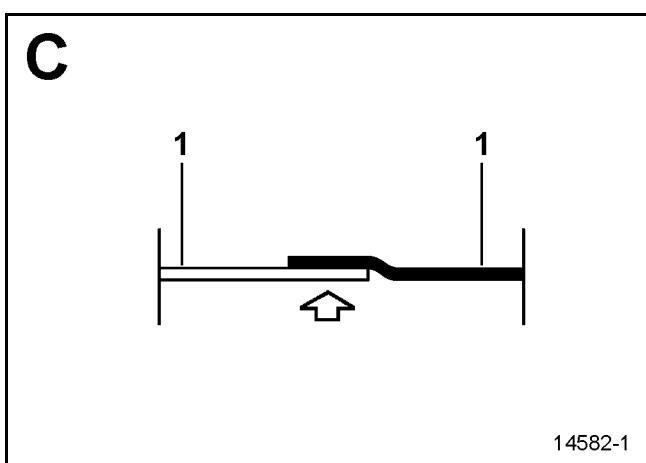
Partial replacement using cuts A, B, C



on replacement part



on the vehicle

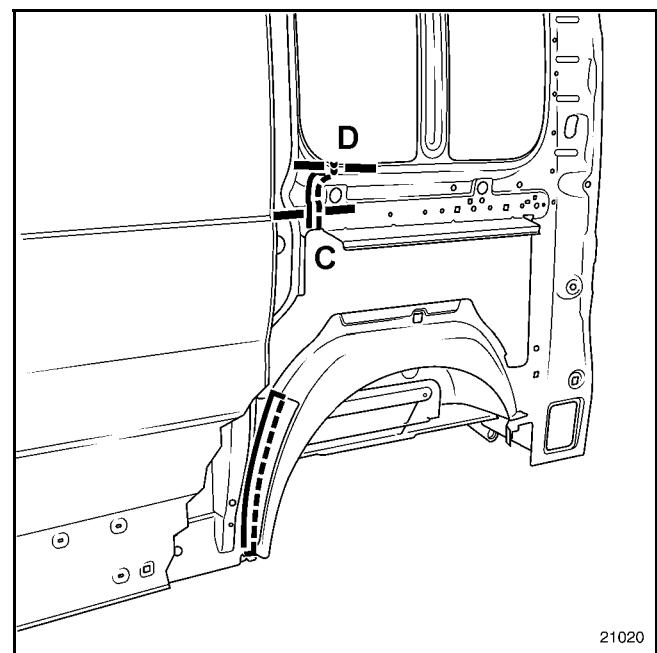
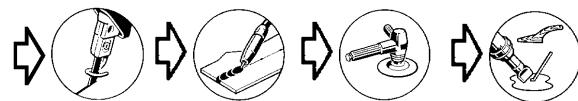
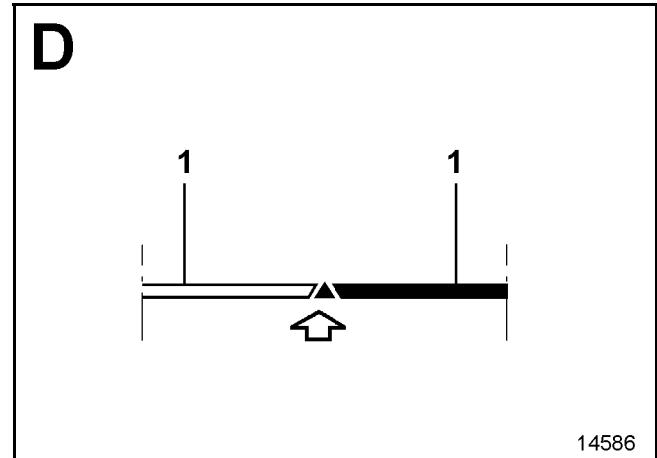


on replacement part



### NOTE:

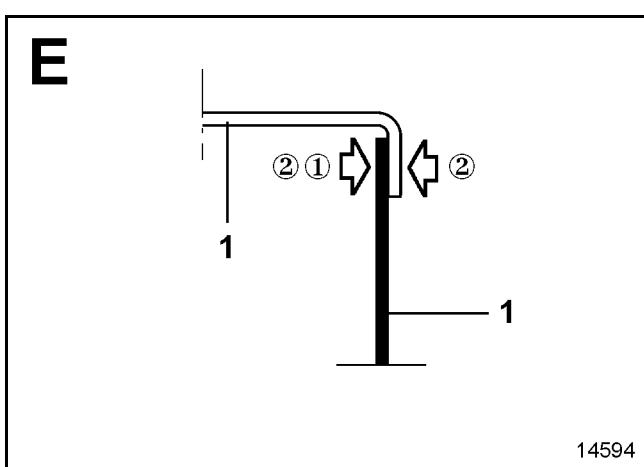
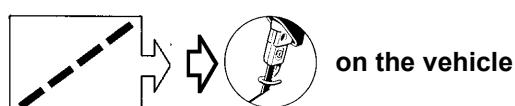
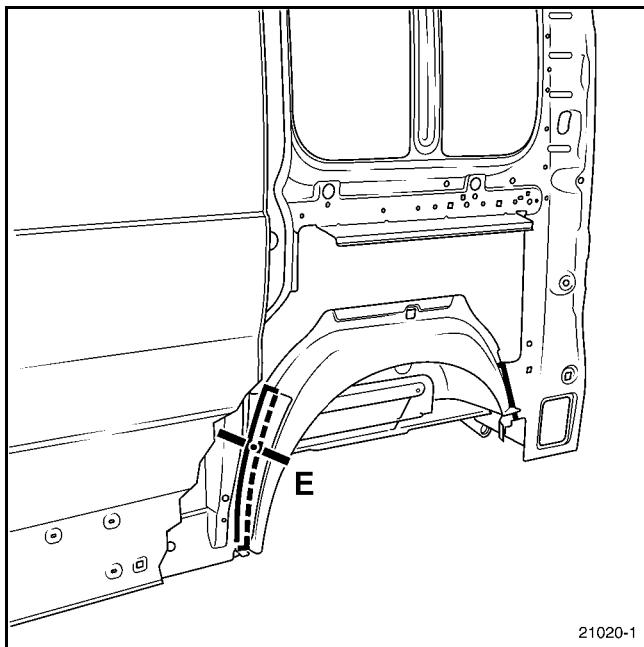
The number of plug welds is not specified, it will be necessary to leave a gap of approximately **40 mm** between the welds.



### NOTE:

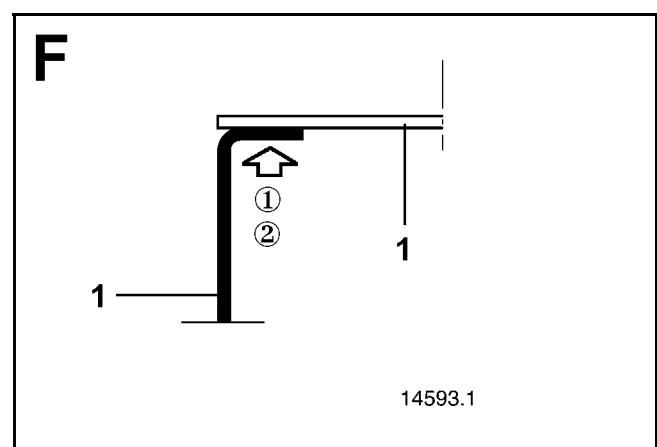
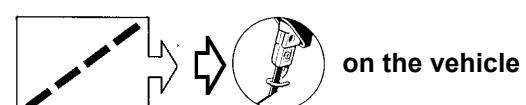
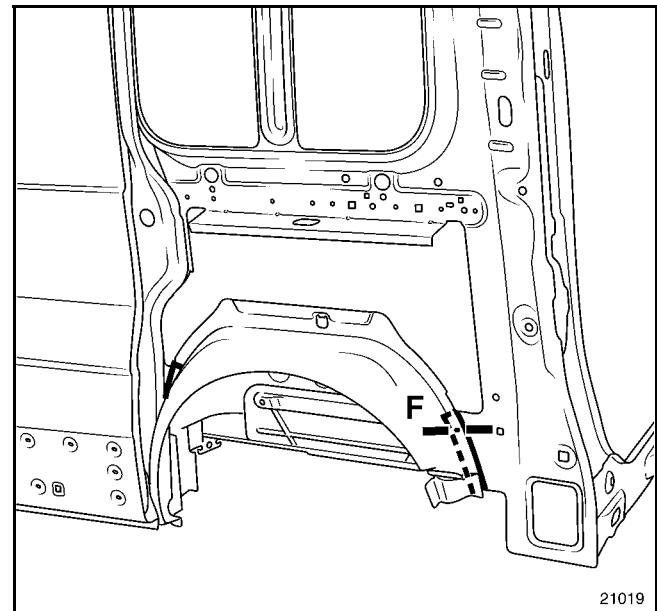
For details of the lower cut refer to partial replacement of the wheel arch below.

## Partial replacement of the outer wheel arch

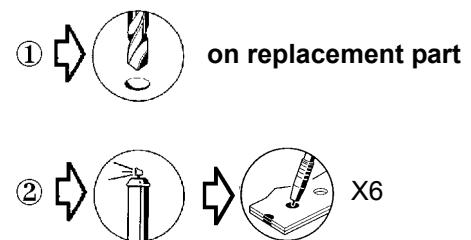
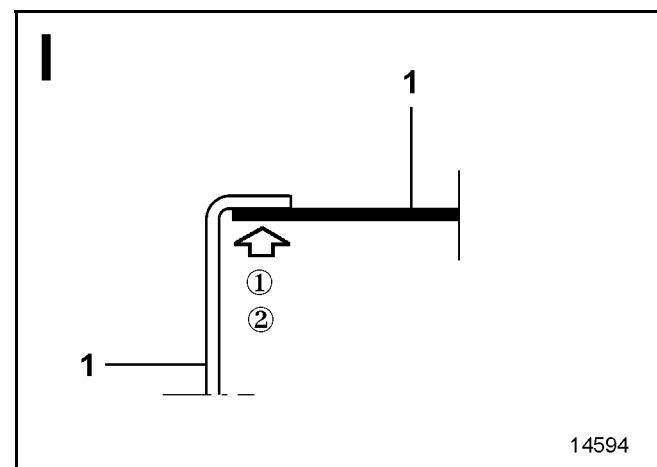
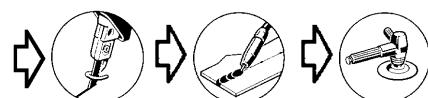
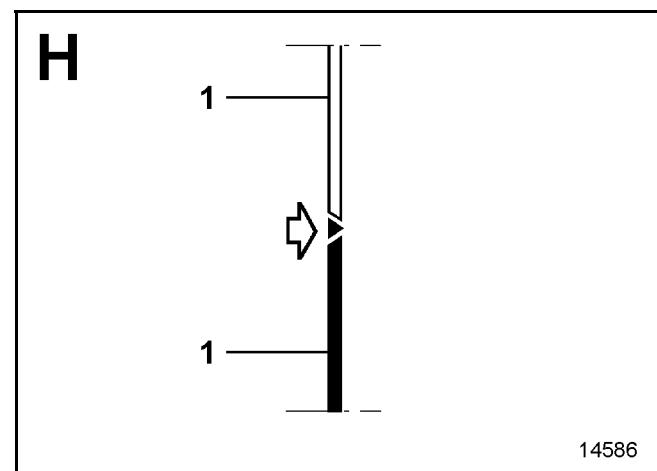
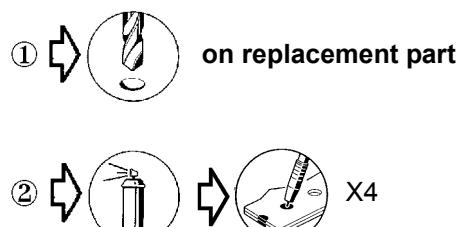
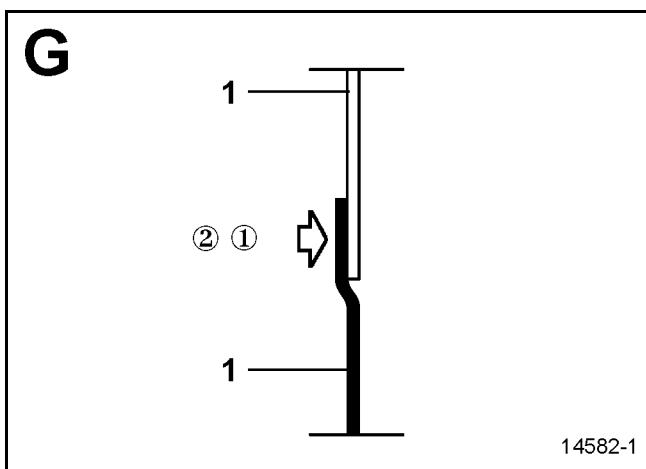
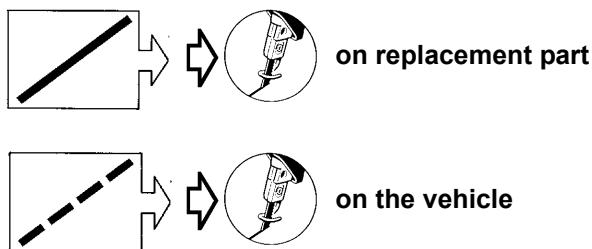
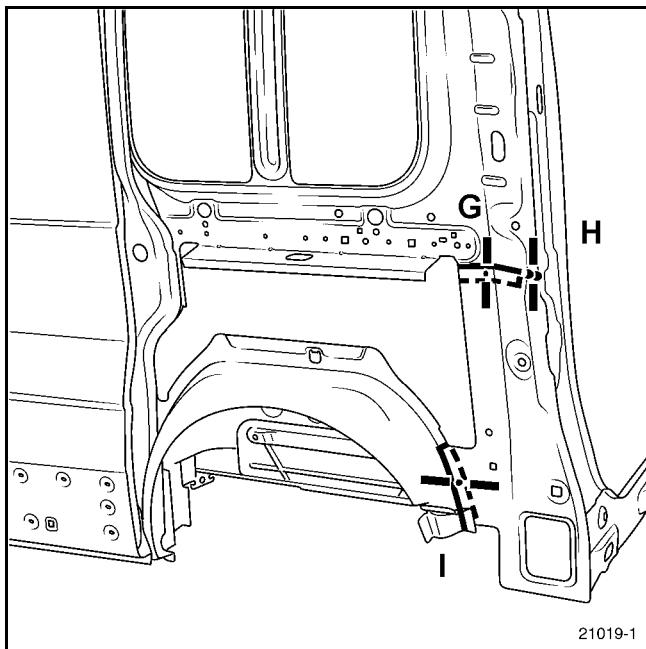


## NOTE:

The number of plug welds is not specified, it will be necessary to leave a gap of **40 mm** between the welds.



## Partial replacement of the rear corner



The replacement of this part is an additional operation to the roof.

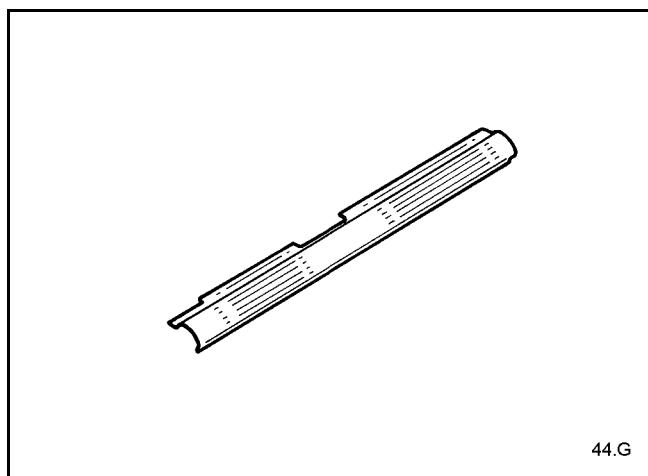
The information on the additional parts will be dealt with in their respective sections (refer to contents).

#### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

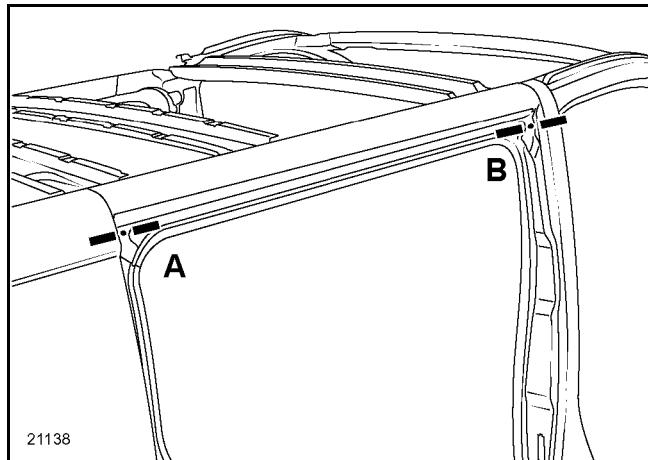
Double seal support

Roof drip moulding closure panel

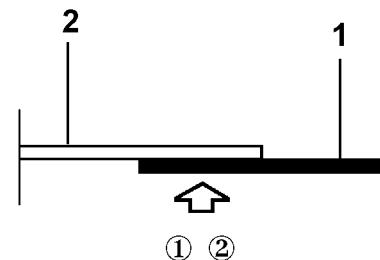


#### PARTS CONCERNED (thickness in mm):

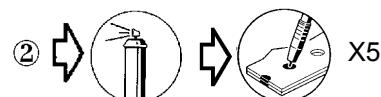
|                                 |     |
|---------------------------------|-----|
| 1 Rear roof drip moulding       | 0.8 |
| 2 Cab side                      | 0.9 |
| 3 Rear side panel, rear section | 0.8 |



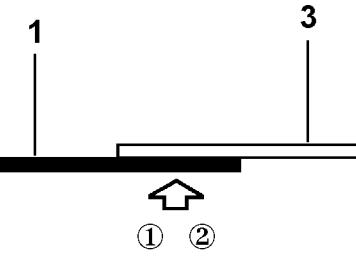
**A**



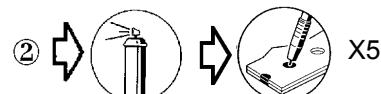
14579



**B**



14579



Replacement of this part is additional to replacement of the roof, rear roof drip moulding or rear side panels.

There are two methods of carrying out this operation:

- complete,
- partial, using cut **A** (edge to edge).

**NOTE:**

The replacement procedure for this part is not specified, it depends on the type of impact.

Depending on accessibility, it will be necessary to use the original spot welds, otherwise these can be replaced by plug welds.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Double seal support

Roof drip moulding closure panel

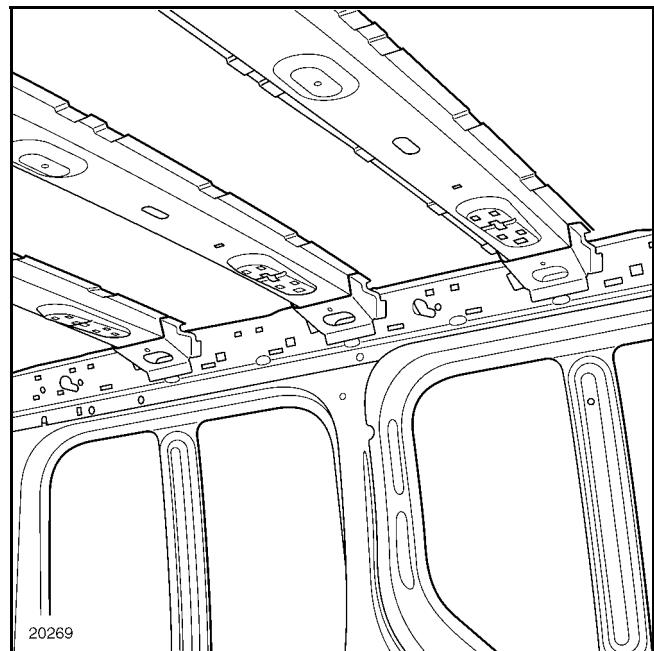
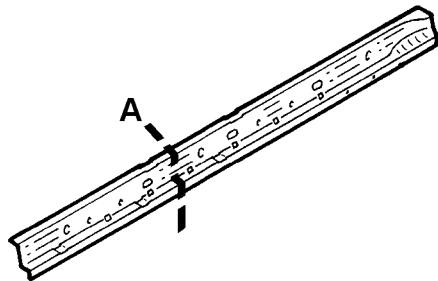


Diagram for information

**IMPORTANT:**

The position of cut **A** may vary depending on the section to be replaced, but it must not be made across a slot or a stamped section.



44.H

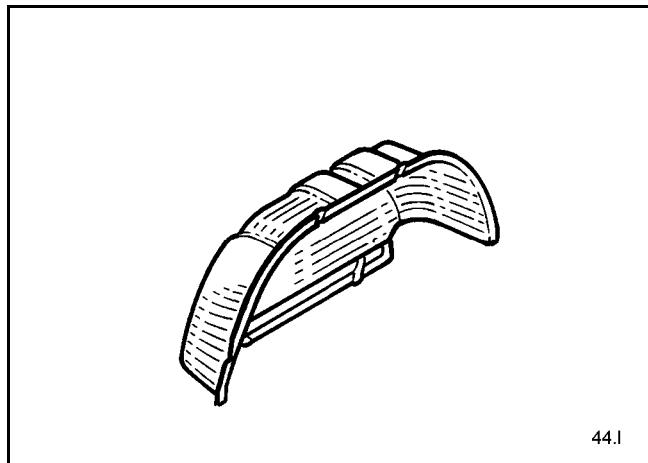
Replacement of this part is additional to replacement of the lining of the rear panel, rear section, for a rear impact.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

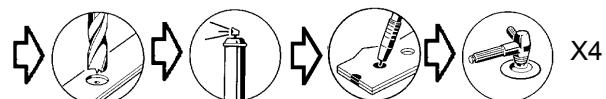
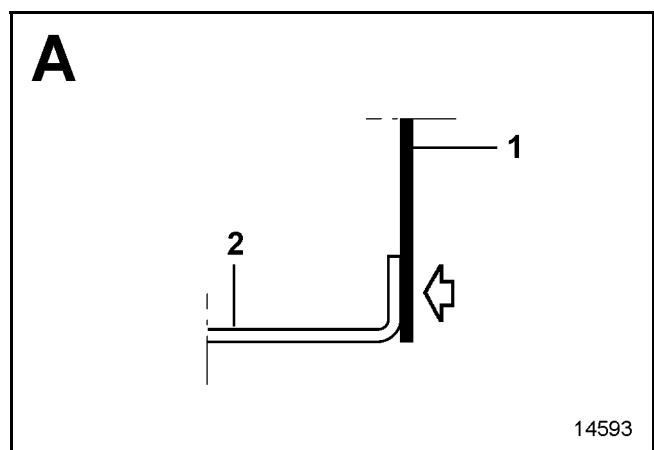
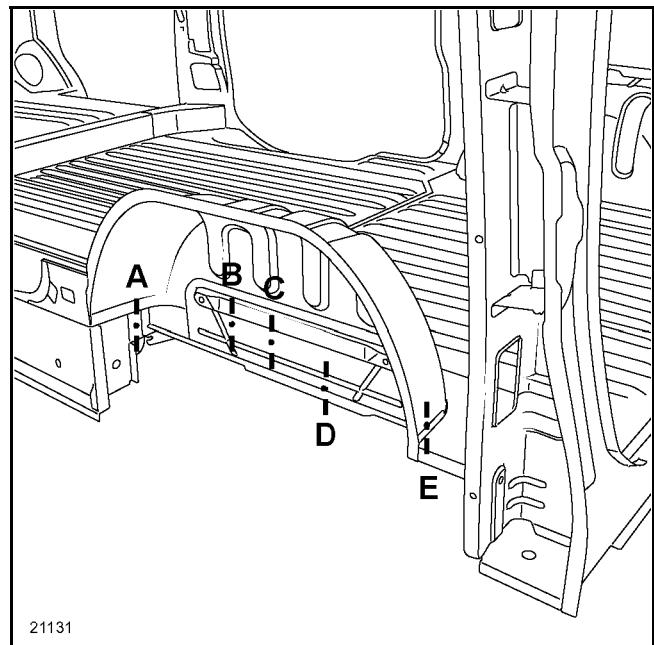
#### COMPOSITION OF THE REPLACEMENT PART

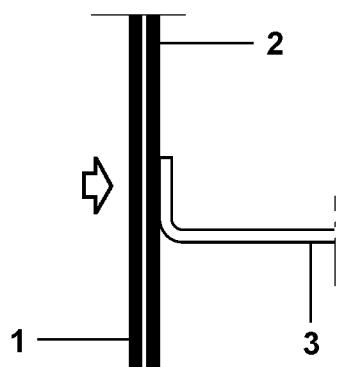
Part assembled with:  
Wheel arch stiffener  
Welded studs



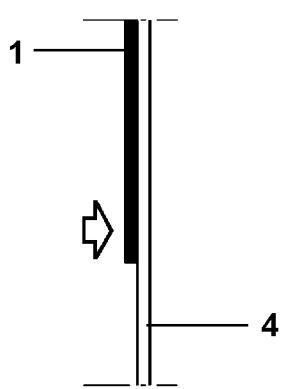
#### PARTS CONCERNED (thickness in mm):

|   |                              |     |
|---|------------------------------|-----|
| 1 | Rear inner wheel arch        | 1   |
| 2 | Wheel arch stiffener         | 1.5 |
| 3 | Rear floor, rear section     | 0.8 |
| 4 | Longitudinal floor stiffener | 2   |

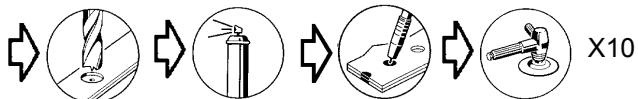
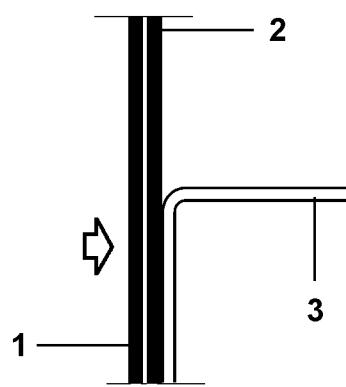


**B**

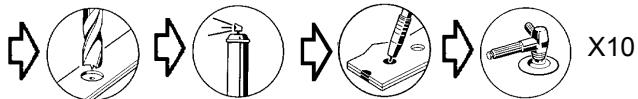
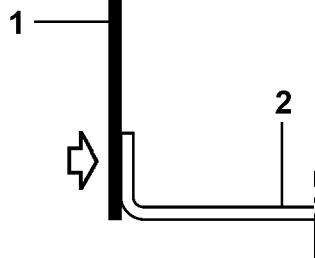
14622-3

**D**

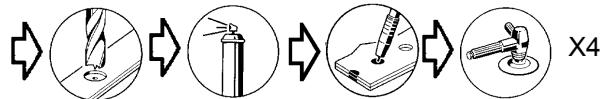
14577-1

**C**

19172-3

**E**

14593



Replacement of this part is additional to replacement of the rear panel rain channel, rear section, for a rear impact.

There are three methods of carrying out this operation:

- complete,
- partial, using cut **A**,
- partial, using cut **B**.

**IMPORTANT:**

The cutting positions given in the procedures cannot be altered, they are determined according to the positions of the linings and stiffeners.

**NOTE:**

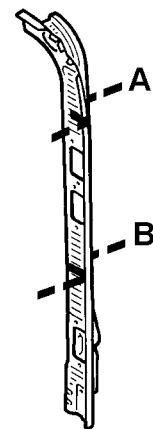
The procedure for replacing this part has no specific features, and joints can all be made as originally.

In the step described below you will only find the cut positions for partial replacements.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:  
 Gas strut reinforcement  
 Towing eye reinforcements

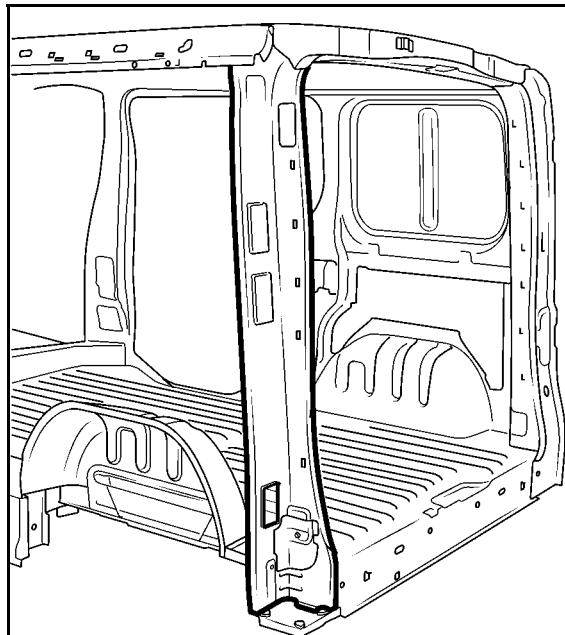


44.J

### PARTS CONCERNED (thickness in mm):

1 C-Pillar 1

### Complete replacement

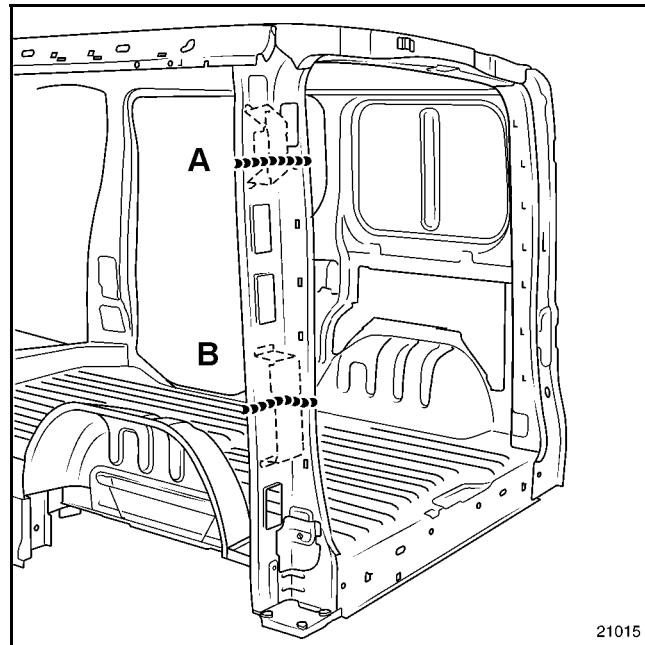


21014

**NOTE:**

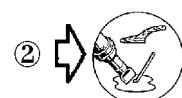
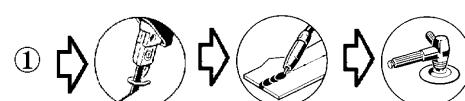
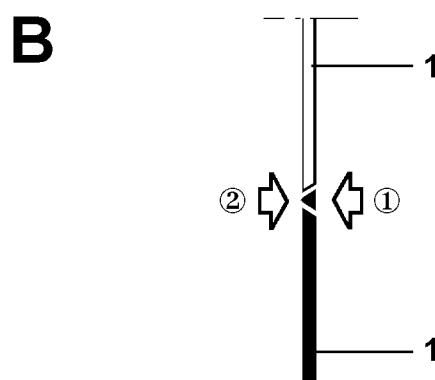
The part is supplied without hinge reinforcements.

Partial replacement, using cut A or B



**NOTE:**

The cuts must be made under the hinge reinforcements, after unpicking them beforehand.



Replacement of this part is additional to replacement of the rear panel lining, rear section, and the rear end panel for a rear impact.

There are three methods of carrying out this operation:

- complete,
- partial upper, using cut **A**,
- partial lower, using cut **B**.

**IMPORTANT:**

The cutting positions given in the procedures cannot be altered, they are determined according to the positions of the linings and stiffeners.

**NOTE:**

The procedure for replacing this part has no specific features, and joints can all be made as originally.

In the step described below you will only find the cut positions for partial replacements.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

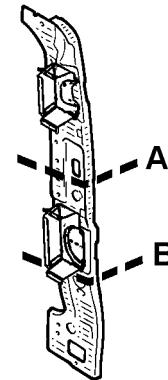
**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Welded studs

Hinge reinforcements

Welded nuts

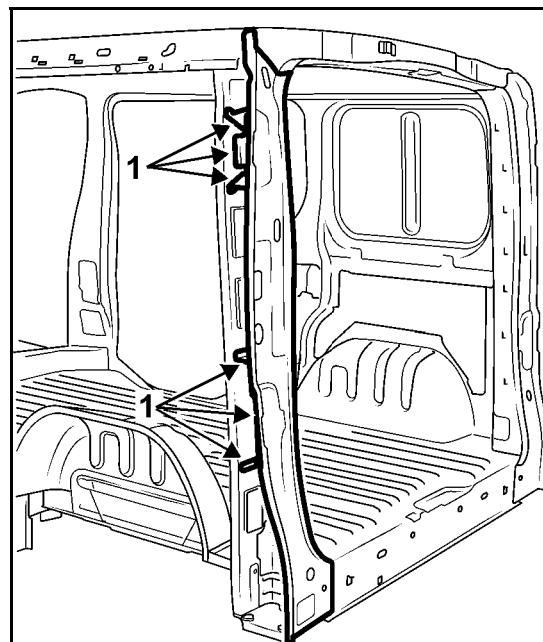


44.K

**PARTS CONCERNED (thickness in mm):**

|                           |     |
|---------------------------|-----|
| 1 Side panel rain channel | 1.2 |
| 2 Hinge reinforcement     | 1.5 |

**Complete replacement**



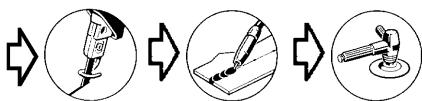
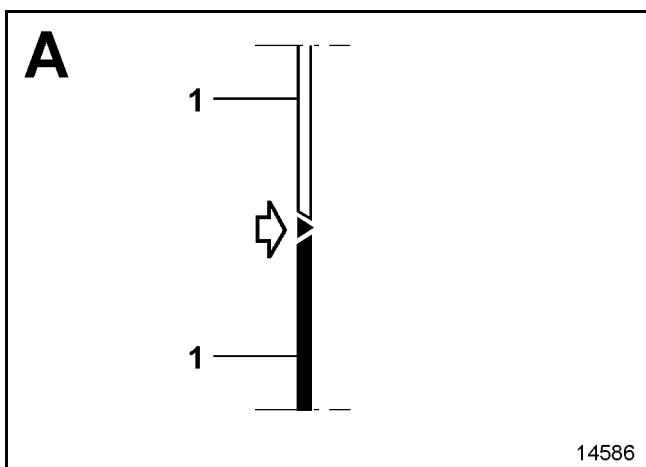
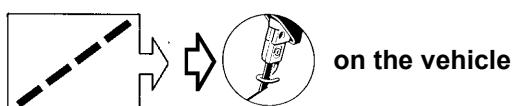
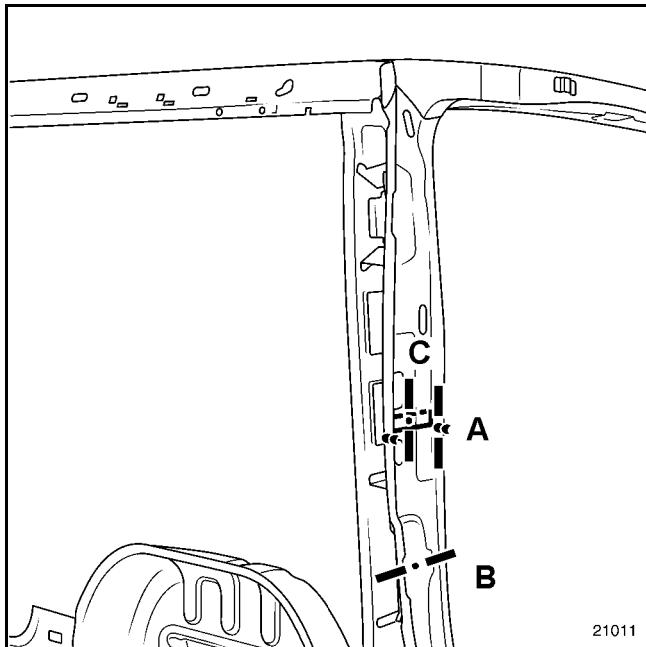
21013

**NOTE:**

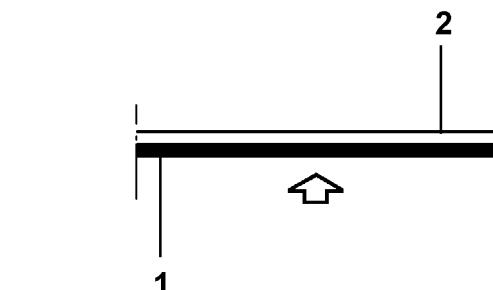
The part is supplied with hinge reinforcements.

It will be necessary to apply additional welding beads at the junction of the stiffeners with the lining, as shown by the arrows (1).

## Upper partial replacement



B



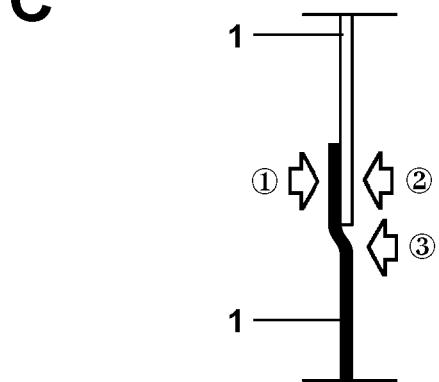
14576



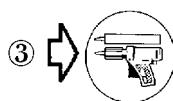
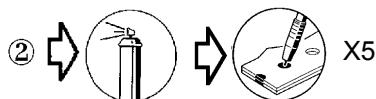
## NOTE:

It is possible to leave the hinge reinforcement on the C-pillar, in which case it will be necessary to unpick it from the replacement part.

C

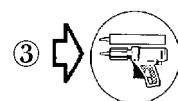
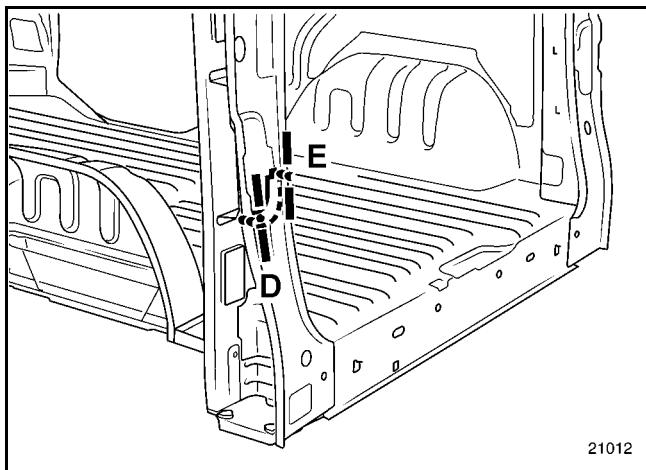
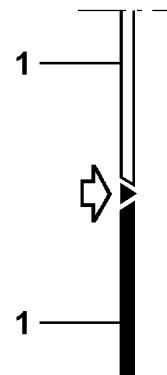


14582-1

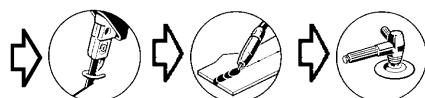


**NOTE:**

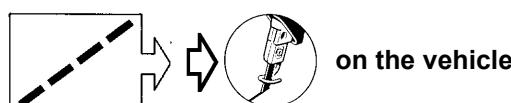
For this operation, it will be necessary to use M.J.Pro type setting adhesive (Part No.: 77 11 172 676).

**Lower partial replacement****E**

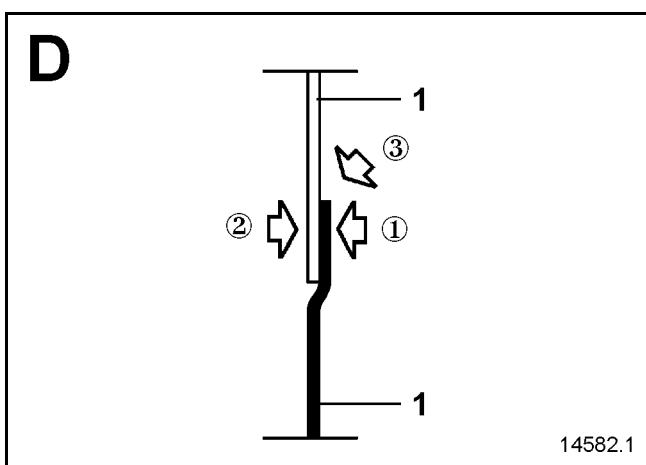
14586



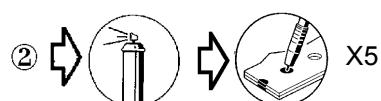
on replacement part



on the vehicle



on replacement part



X5

Replacement of this part is associated with an incident, when removing the ball joint base.

If the removal is done at the attachment thread, it is possible to replace the original thread with a castellated security nut, refer to the method for replacing inserts described in **section 40**.

The door is a removable component.

In the procedure described below, you will only find positions of the mountings specific to the component.'

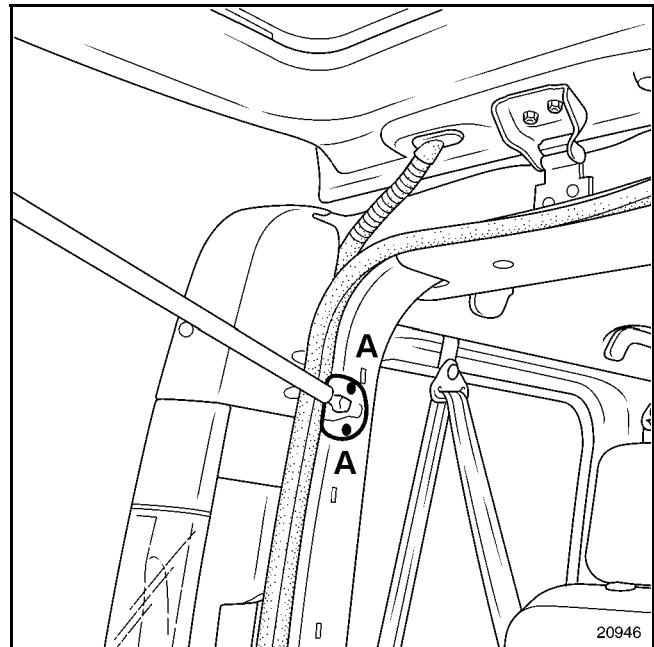
The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



44.L



20946

Wedge the tailgate in the open position.

Remove:

- the gas strut (body side only),
- the two bolts (A).

The replacement of this part is a basic operation for a rear impact.

There are two methods of carrying out this operation:

- complete,
- partial, using cut A,

**IMPORTANT:**

The cutting position given in the procedure cannot be altered, it is determined according to the positions of the linings and stiffeners. It may be cut symmetrically depending on the side in question.

**NOTE:**

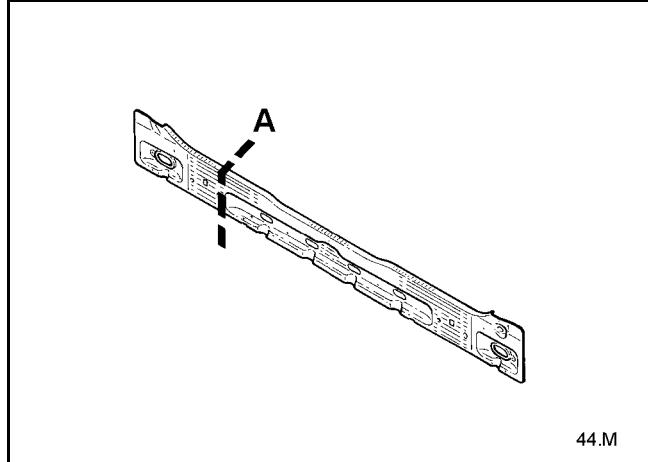
The procedure for replacing this part has no specific features, and joints can all be made as originally.

In the step described below you will only find the cut positions for partial replacement.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

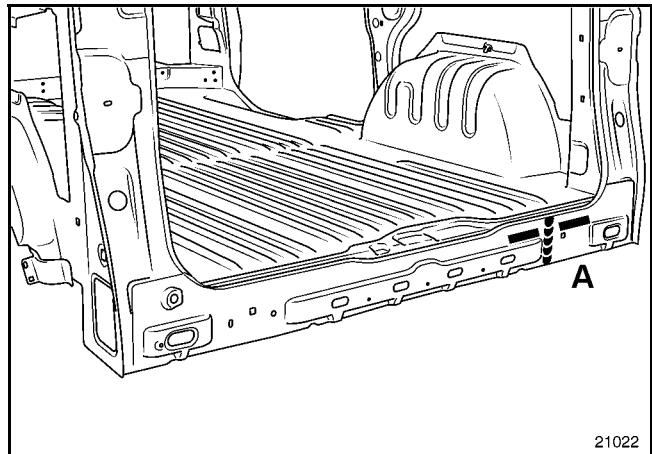
Part supplied on its own.



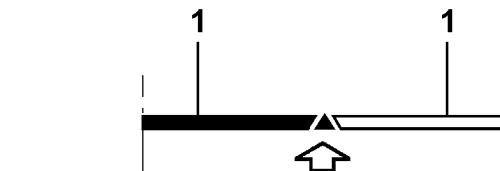
**PARTS CONCERNED (thickness in mm):**

1 Rear end panel 1.5

**Complete replacement**



**A**



**NOTE:**

It is advisable to make some additional plug welds at points hidden from view and covered by mastic.

The replacement of this part is a basic operation for a rear impact.

The door is a removable component.

In the procedure described below, you will only find descriptions of the connections which are specific to the part concerned.

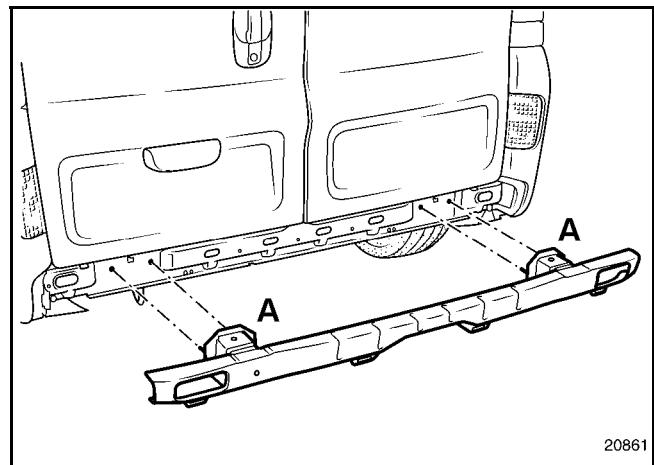
The information on the additional parts will be dealt with in their respective sections (refer to contents).

**NOTE:**

The part supplied by the Parts Store is black and does not need painting when fitted.

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied with:  
Bumper cross member  
Shock absorbers  
Absorber closure panel.

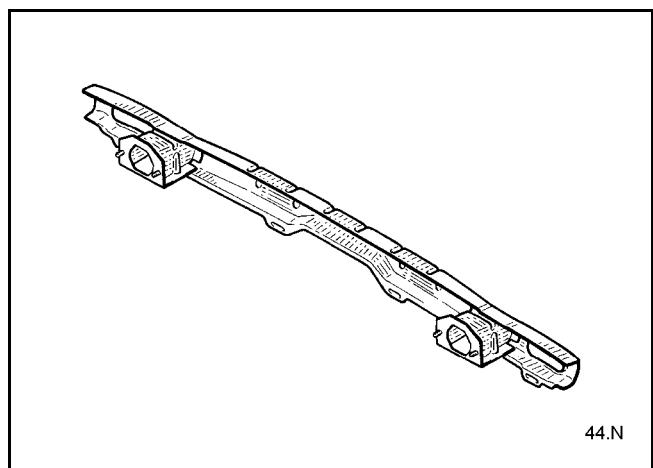


**REMOVAL**

Removal is by way of the mounting bolts (A) (two on each side).

**REFITTING**

Refitting is carried out in the reverse order to removal.



The replacement of this part is a basic operation.

**NOTE:**

In the procedure described below, you will only find descriptions of the connections which are specific to the part concerned.

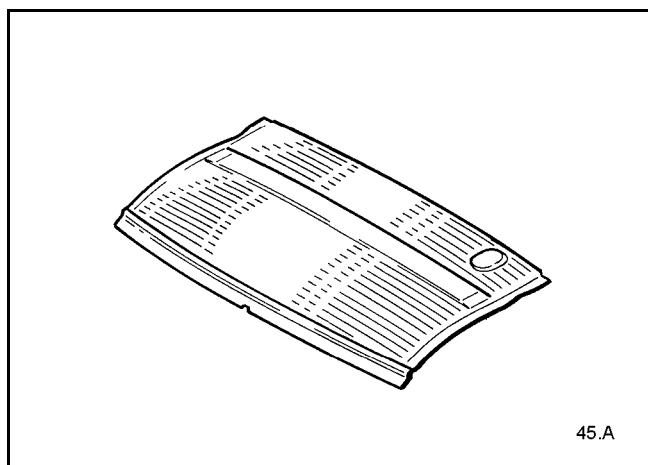
The information on the additional parts will be dealt with in their respective chapters (refer to contents).

The number of plug welds is not specified for joint **B**. A gap of approximately **70 mm** must be left between each weld.

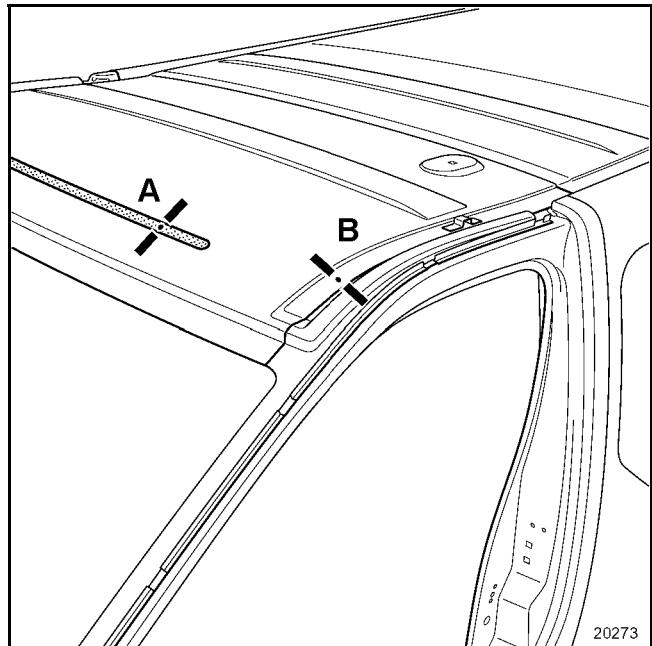
M.J.Pro type setting adhesive (part number: **77 11 172 676**) must be used for the areas to be bonded.

**COMPOSITION OF THE REPLACEMENT PART**

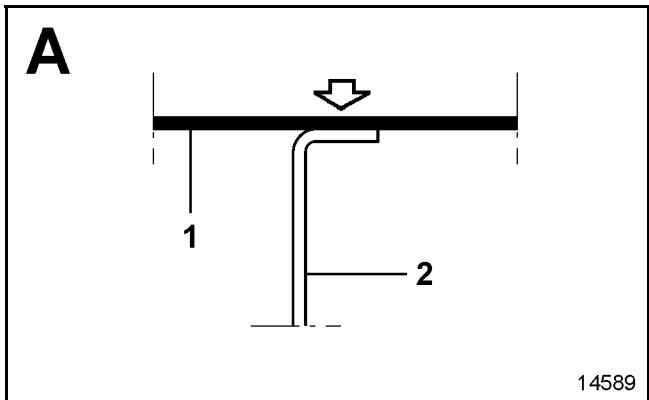
Part supplied on its own.



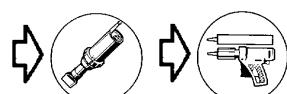
45.A



20273

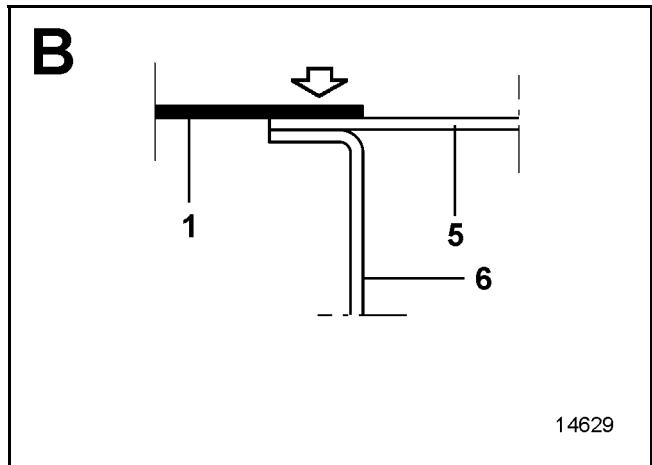


14589

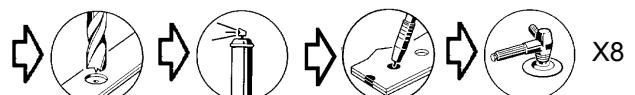


**PARTS CONCERNED (thickness in mm):**

|                                      |            |
|--------------------------------------|------------|
| <b>1</b> Cab roof                    | <b>0.7</b> |
| <b>2</b> Cab roof front cross member | <b>0.8</b> |
| <b>3</b> Rear roof                   | <b>0.7</b> |
| <b>4</b> Cab roof rear cross member  | <b>0.8</b> |
| <b>5</b> Cab side                    | <b>0.9</b> |
| <b>6</b> Windscreen pillar lining    | <b>1</b>   |



14629

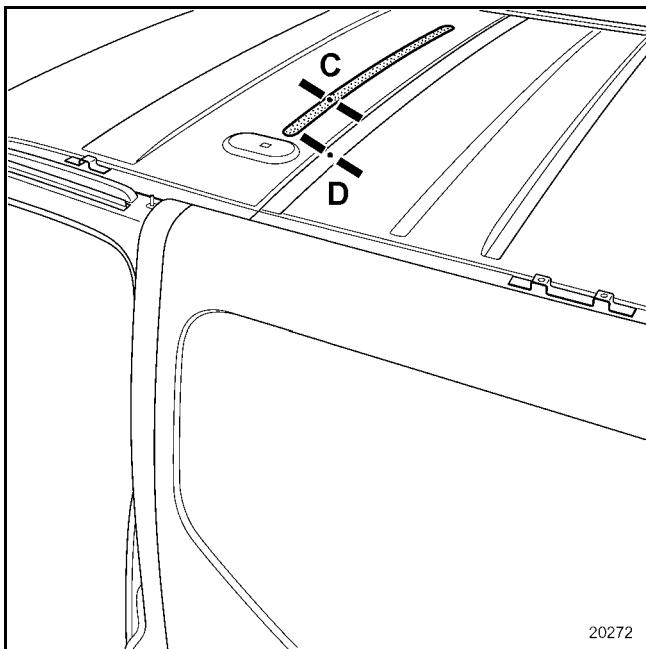


X8

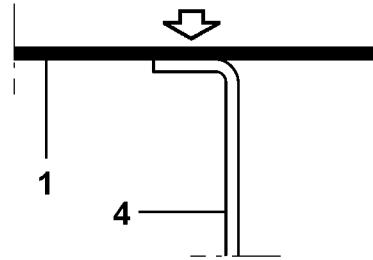
**TOP OF BODY**  
**Cab roof**

**45**

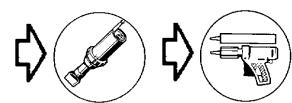
**A**



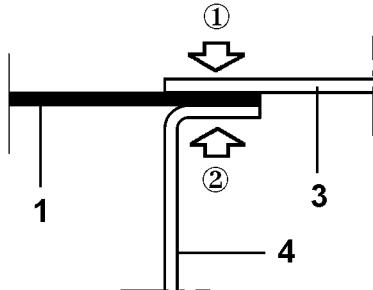
**C**



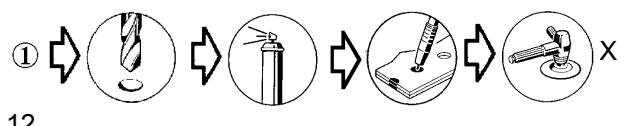
14589



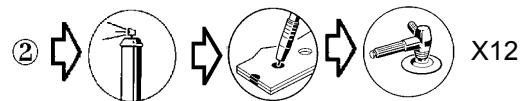
**D**



14629-1



12



X12

**NOTE:**

To remove cab roof (1), it is necessary to slightly lift rear roof (3) away from cross member (4), taking care not to mark these parts.

The replacement of this part is a basic operation.

**NOTE:**

In the procedure described below, you will only find descriptions of the connections which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective chapters (refer to contents).

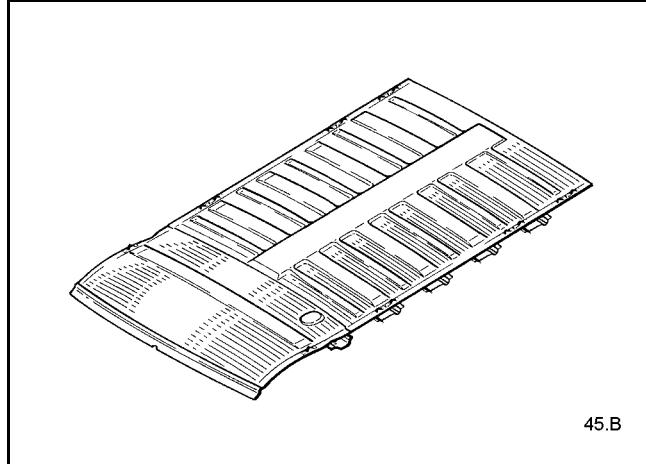
The number of plug welds is not specified for joints **B**, **F**, **I** and **G**. A gap of approximately **70 mm** must be left between each weld.

M.J. type setting adhesive (part number: **77 11 172 676**) must be used for the areas to be bonded.

**COMPOSITION OF THE REPLACEMENT PART**

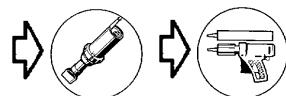
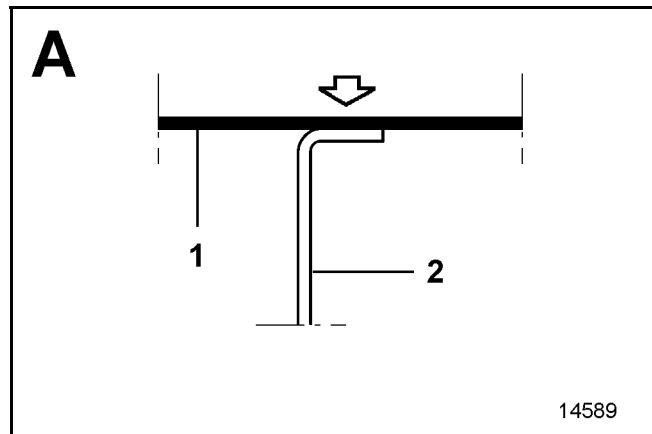
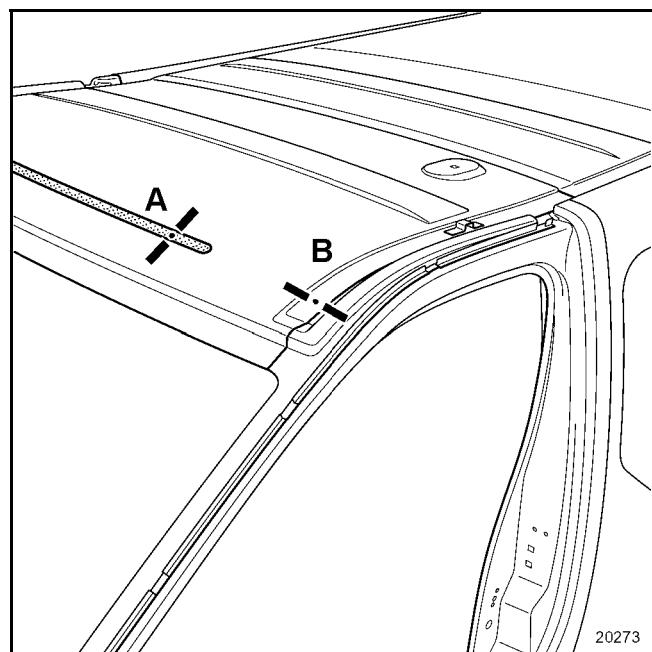
Part assembled with:

Cab roof  
Rear section of roof  
Roof rack mounting bridge pieces  
Cab roof rear cross member  
Roof centre cross member

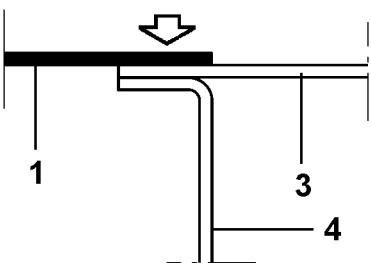


**PARTS CONCERNED (thickness in mm):**

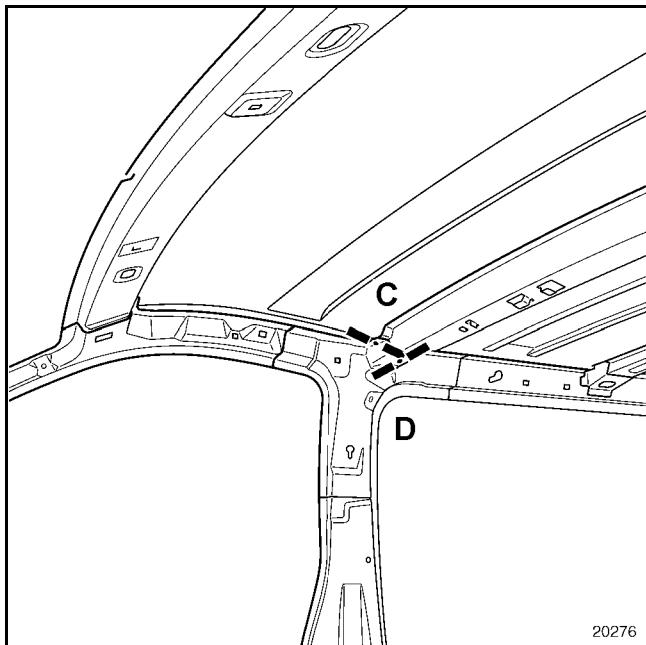
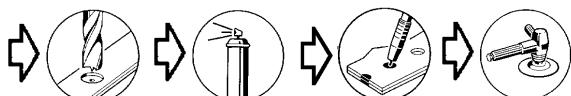
|    |                                |     |
|----|--------------------------------|-----|
| 1  | Roof                           | 0.7 |
| 2  | Roof front cross member        | 0.8 |
| 3  | Cab side                       | 0.9 |
| 4  | A-pillar lining                | 1   |
| 5  | Cab roof rear cross member     | 0.8 |
| 6  | Cab C-pillar lining            | 1.2 |
| 7  | Rear side panel, front section | 0.8 |
| 8  | Rear roof drip moulding lining | 0.8 |
| 9  | Shoulder harness reinforcement | 1.2 |
| 10 | Roof centre cross member       | 0.8 |
| 11 | Centre cross member bracket    | 0.8 |
| 12 | Rear side panel, rear section  | 0.8 |



**B**

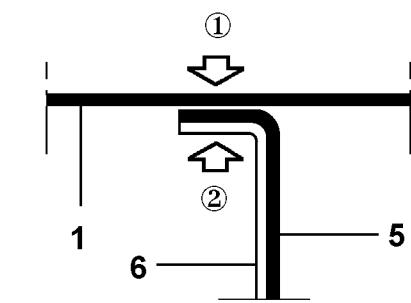


14629

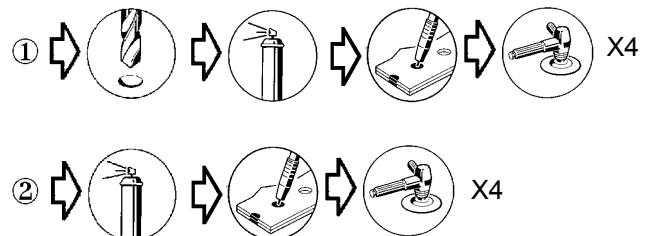


20276

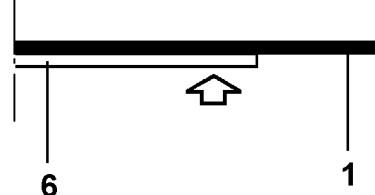
**C**



14641-3

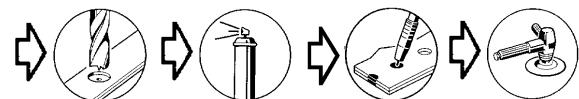
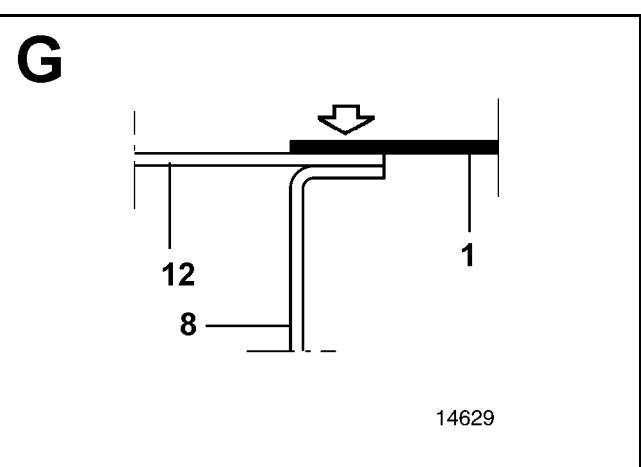
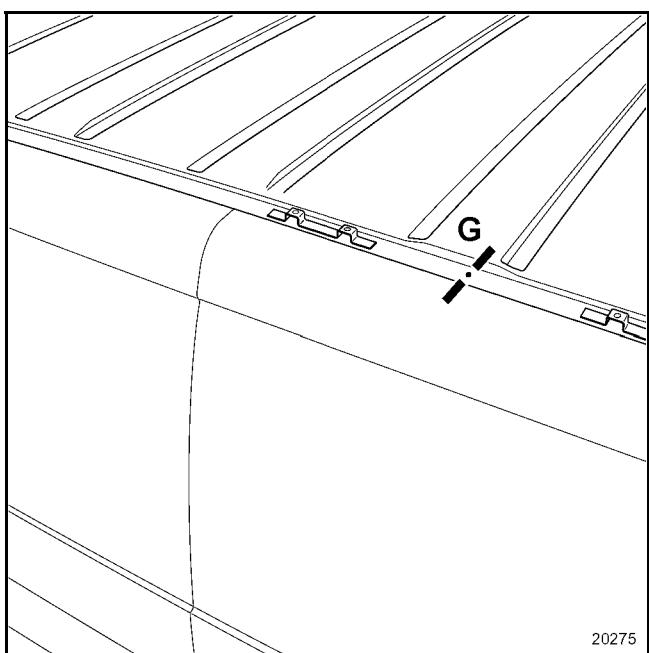
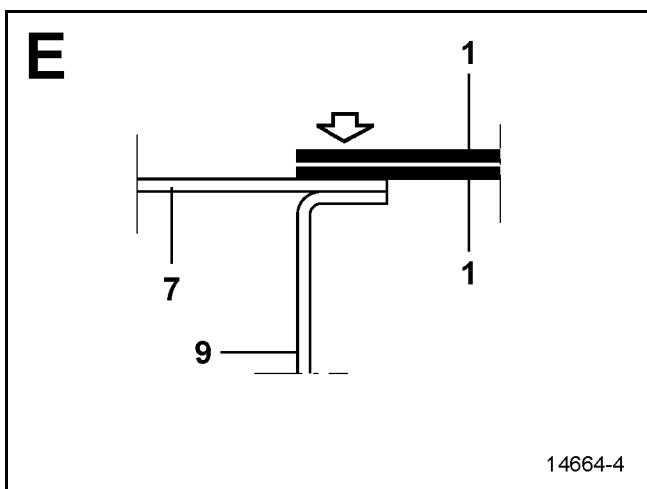
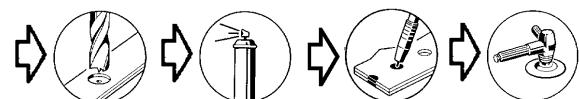
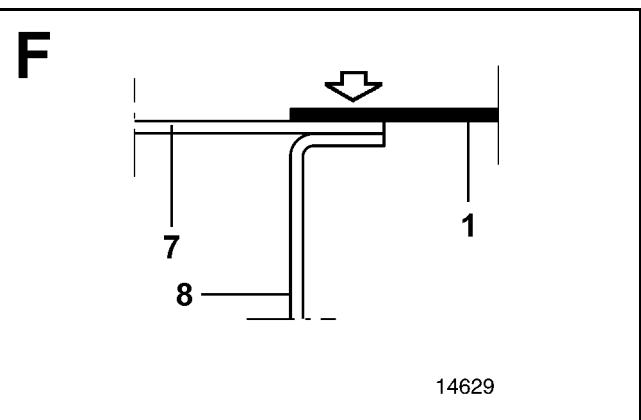
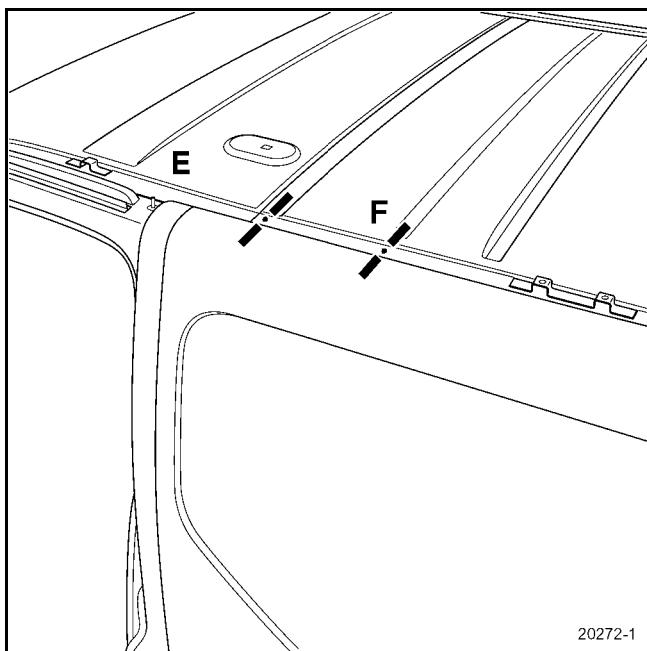


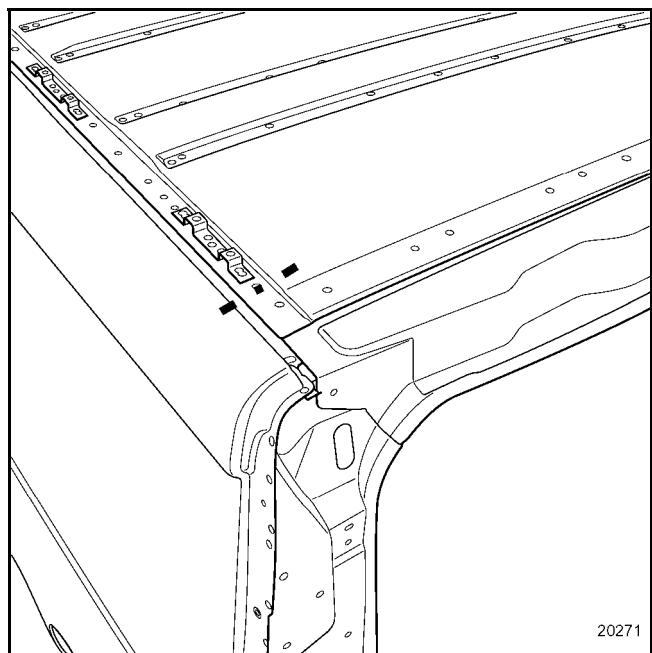
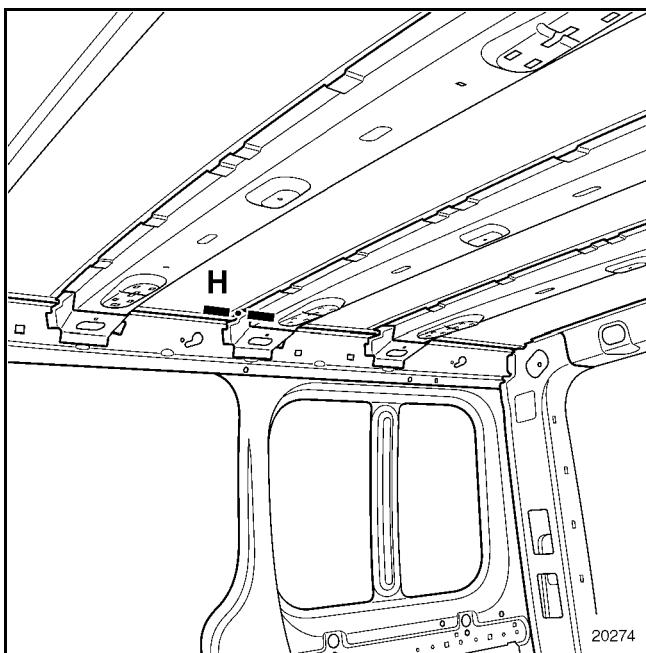
**D**



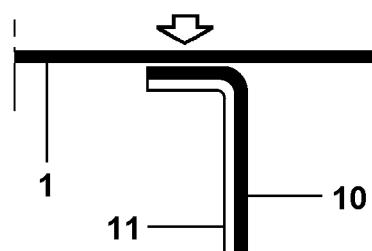
14577



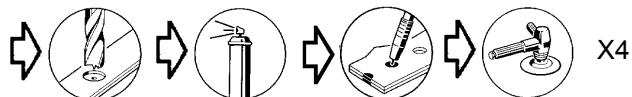
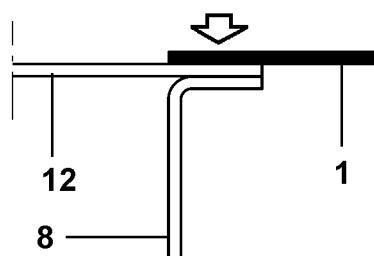




**H**



**I**



**NOTE:**

This operation must be performed on each cross member.

Replacement of this part is an operation associated with replacement of the roof rear cross member for a rear collision.

This operation may be carried out in two ways (refer to the procedure below):

- complete,
- partial, using cut A,

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

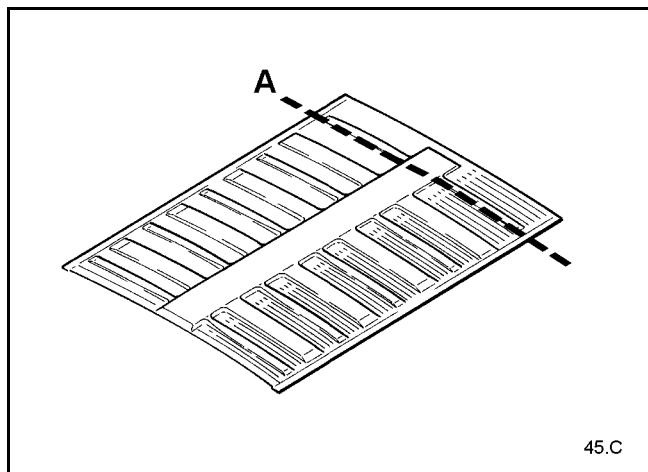
The information on the additional parts will be dealt with in their respective chapters (refer to contents).

**NOTE:**

For the long version (longer rear roof), the method is the same as for the basic vehicle.

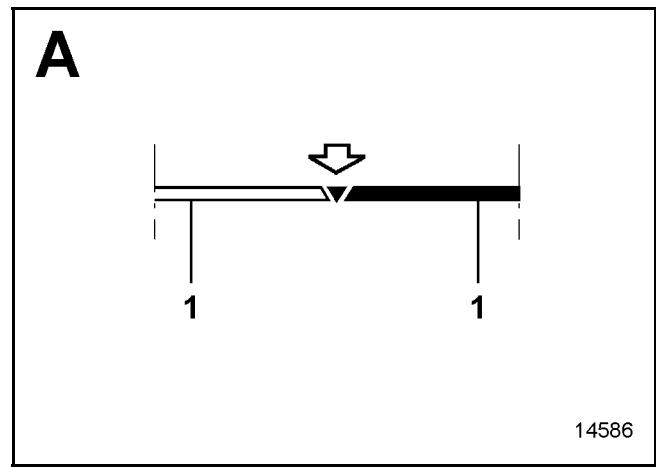
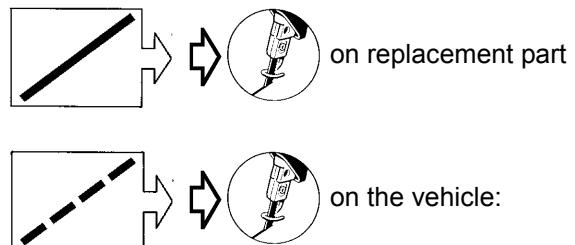
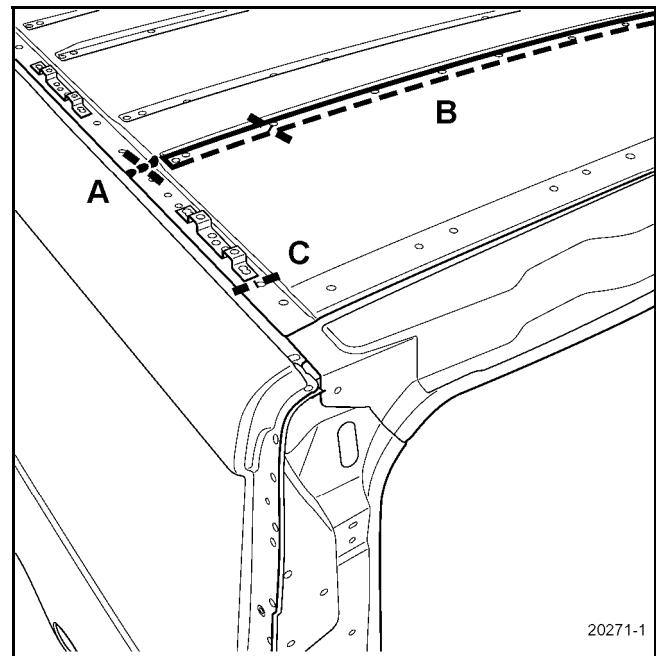
**COMPOSITION OF THE REPLACEMENT PART**

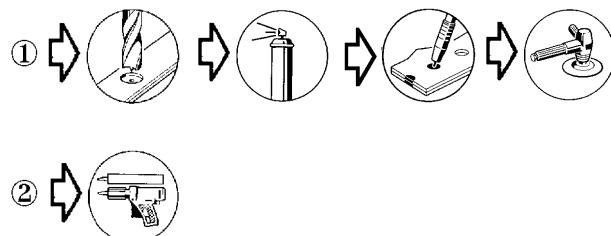
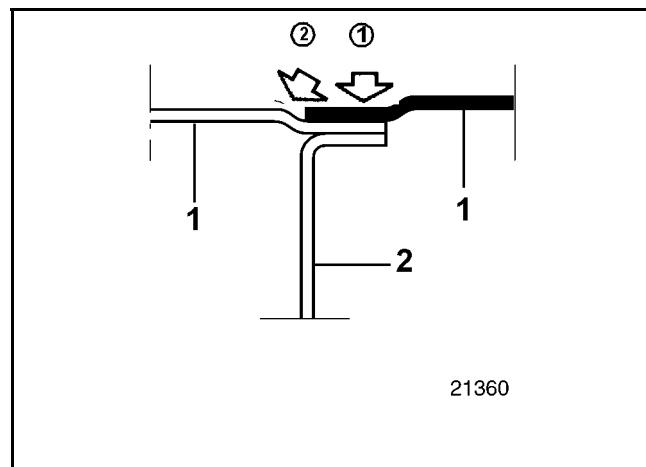
Part supplied on its own.



**PARTS CONCERNED (thickness in mm):**

|  |            |
|--|------------|
| <b>1</b> Rear roof                     | <b>0.7</b> |
| <b>2</b> Roof centre cross member      | <b>0.8</b> |
| <b>3</b> Rear side panel, rear section | <b>0.8</b> |
| <b>4</b> Rear drip moulding lining     | <b>0.8</b> |





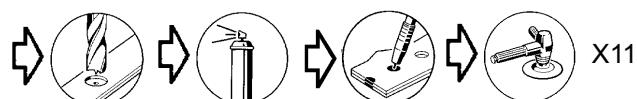
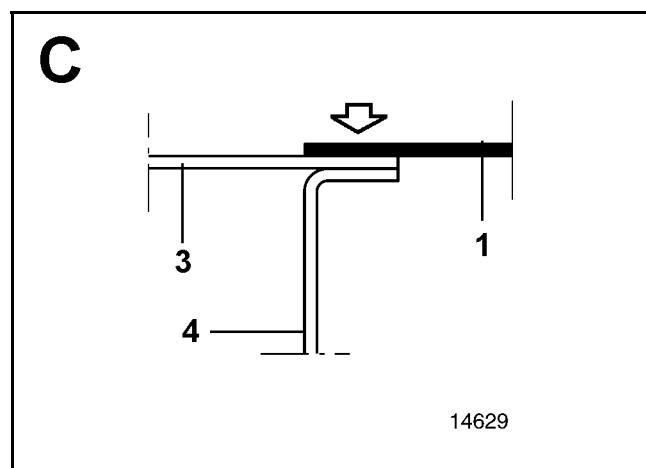
**NOTE:**

The number of plug welds is not specified in the method.

You should:

- leave a distance of approximately **60 mm** between the welds,
- after welding, apply a bead of glue in the flange to ensure leaktightness.

Use M.J.P type adhesive (part number:  
**77 11 172 676**)



Replacement of these parts is an operation associated with replacement of the rear roof.

In the method described below you will only find the positioning dimensions for the roof rack mounting bridge pieces.

**IMPORTANT:**

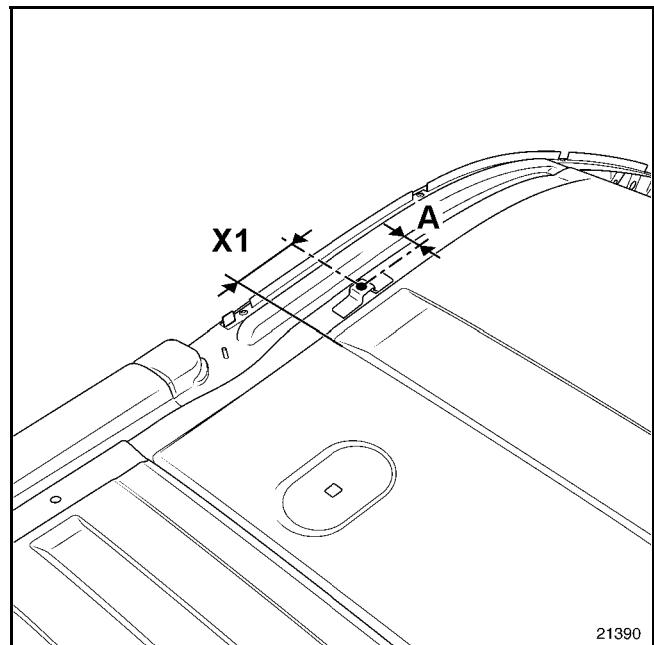
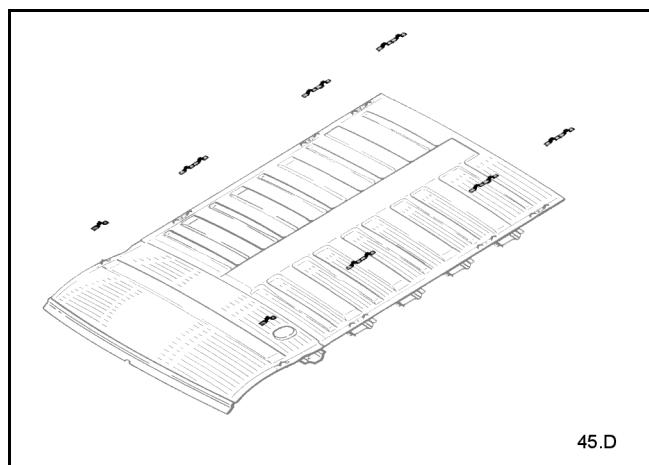
The dimensions are given for information only.

It is advisable to use the roof rack as a positioning template where possible.

The information on the additional parts will be dealt with in their respective chapters (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Parts delivered separately.



**NOTE:**

The two cab roof bridging pieces are used as starting points for positioning the other bridging pieces.

Transverse positioning must observe the centre-to-centre distance (see plan view below).

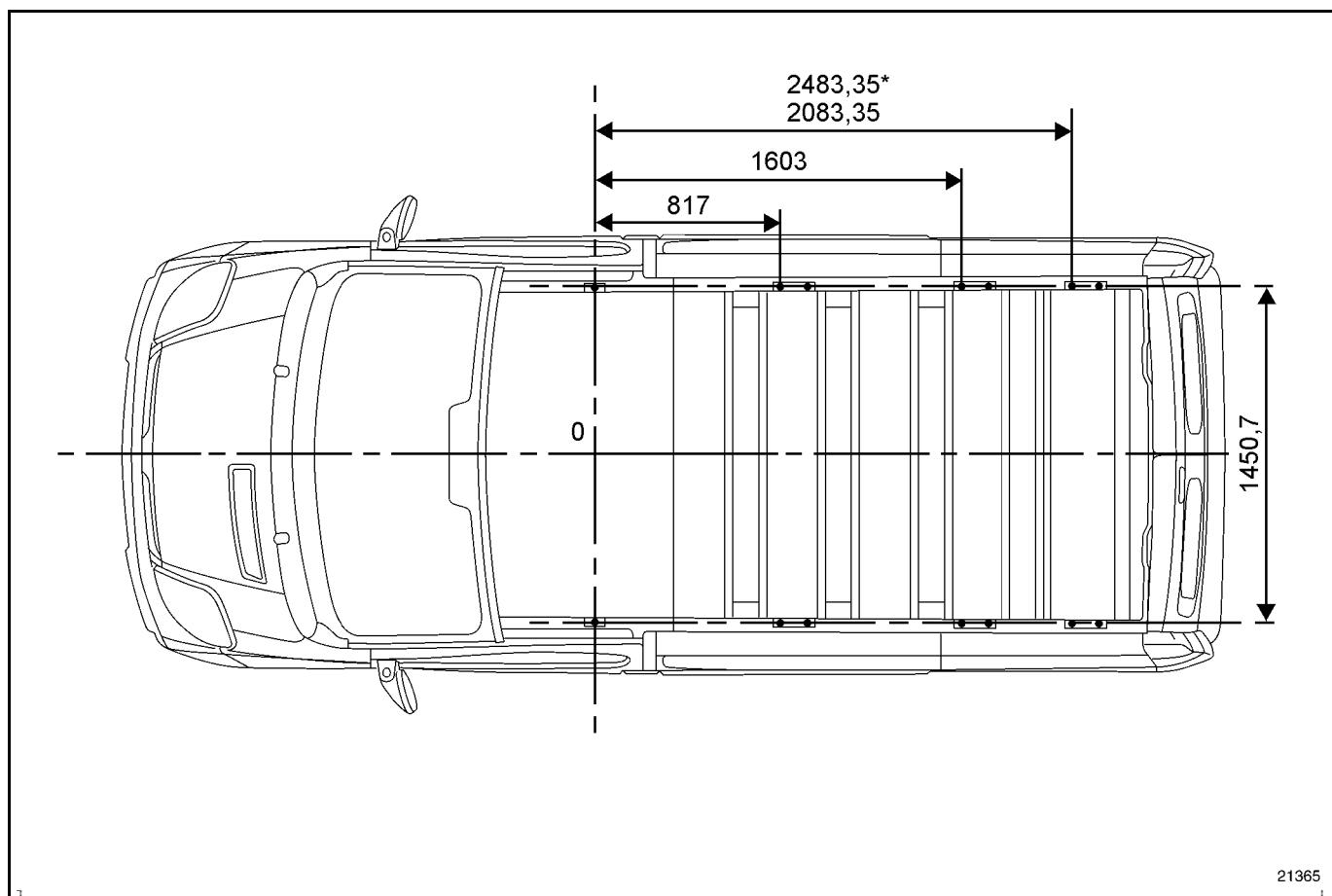
The gap (A) must be the same on each side to ensure perfect centring.

**X1: 81 mm**

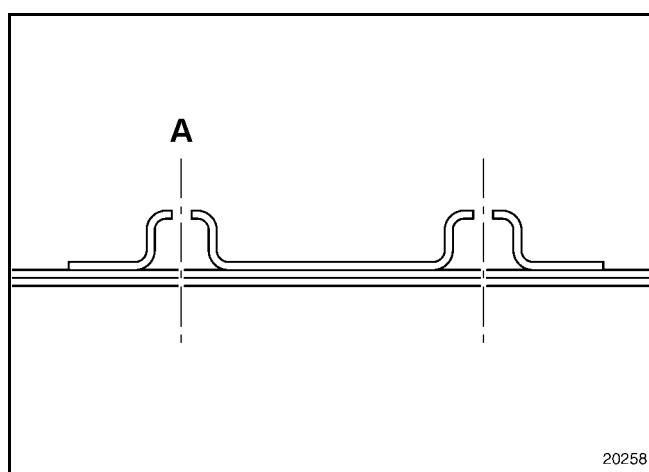
**TOP OF BODY**  
**Roof rack mounting bridge pieces**

**45**

**D**



\* Long version (L2)



**NOTE:**

All the dimensions are given from the front holes (A) of the bridging piece ( $\varnothing$  8.2 mm).

Replacement of this part is additional to replacement of the cab roof.

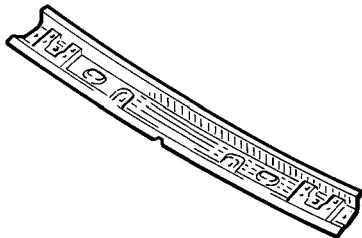
The procedure for replacing this part has no specific features, and joints can all be made as originally.

Below, for information, is a view of the part in its correct position on the body.

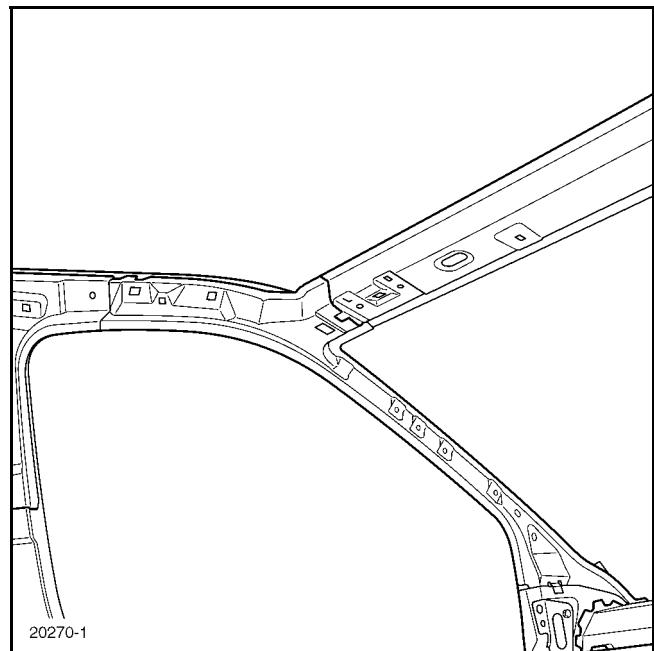
The information on the additional parts will be dealt with in their respective chapters (refer to contents).

**COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



45.E



Replacement of this part is a complementary operation to the replacement of the roof.

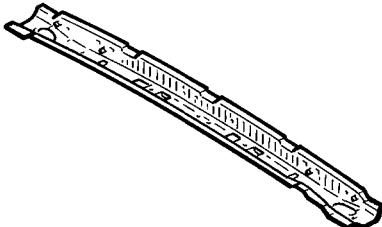
The procedure for replacing this part has no specific features, and joints can all be made as originally.

Below, for information, is a view of the part in its correct position on the body.

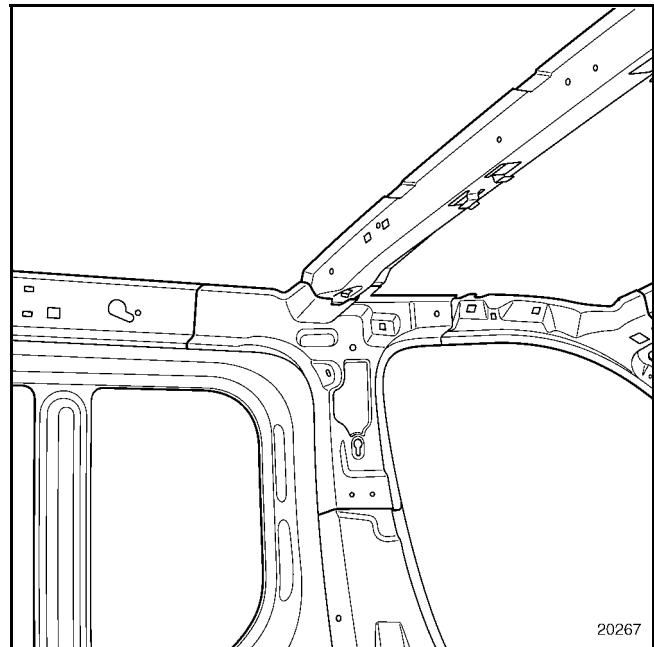
The information on the additional parts will be dealt with in their respective chapters (refer to contents).

#### **COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



45.F



# TOP OF BODY

## Rear cab roof centre cross member

45

G

Replacement of this part is a complementary operation to the replacement of the roof.

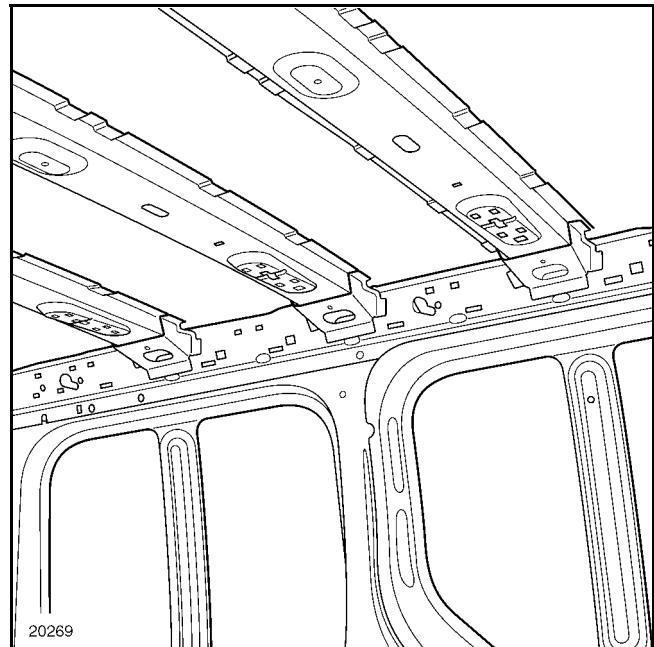
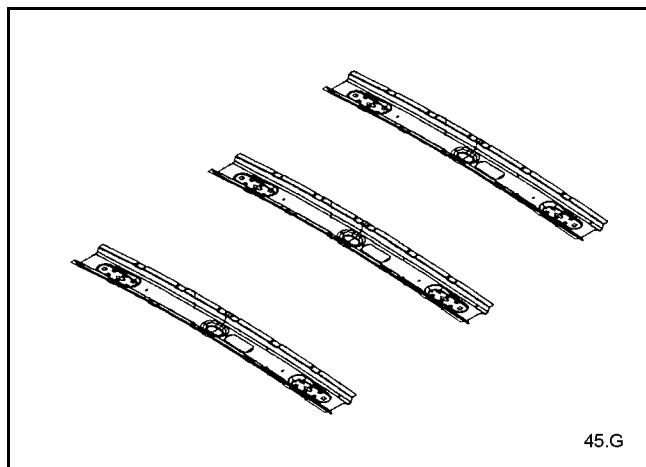
The procedure for replacing this part has no specific features, and joints can all be made as originally.

Below, for information, is a view of the various cross members in position on the body.

The information on the additional parts will be dealt with in their respective chapters (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.



Replacement of this part is associated with replacement of a roof centre cross member or additional to replacement of the rear roof drip moulding lining.

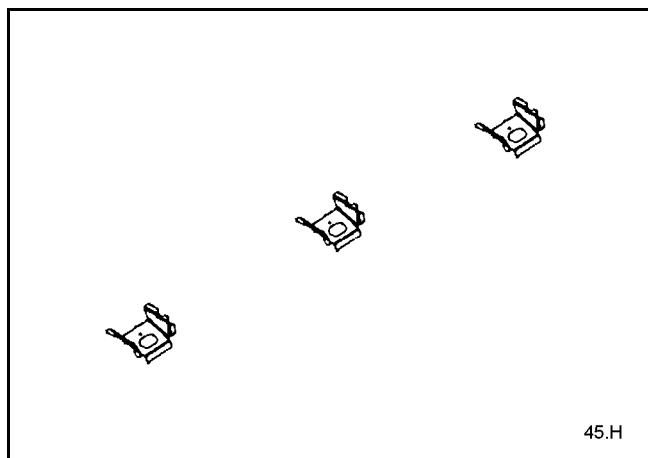
The procedure for replacing this part has no specific features, and joints can all be made as originally.

Below, for information, is a view of the various cross members in position on the body.

The information on the additional parts will be dealt with in their respective chapters (refer to contents).

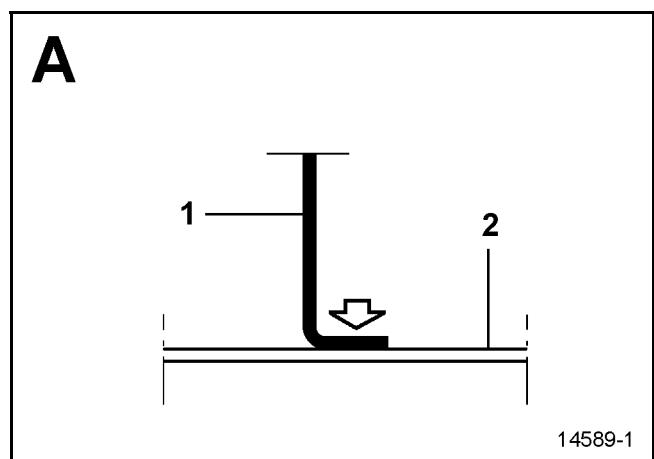
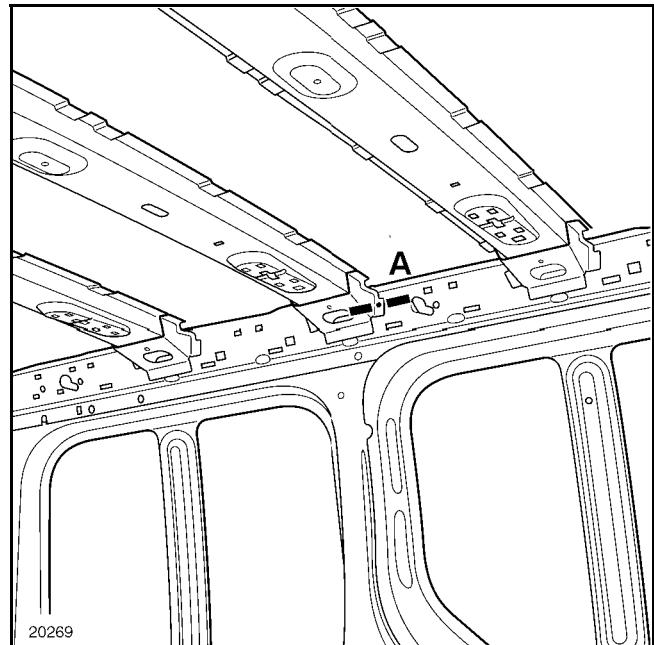
#### **COMPOSITION OF THE REPLACEMENT PART**

Part supplied on its own.



#### **PARTS CONCERNED (thickness in mm):**

|   |            |
|---|------------|
| <b>1</b> Roof cross member bracket      | <b>0.8</b> |
| <b>2</b> Rear roof drip moulding lining | <b>0.8</b> |



Replacement of this part is additional to replacement of the rear roof.

The procedure for replacing this part has no specific features, and joints can all be made as originally.

Below, for information, is a view of the part in its correct position on the body.

The information on the additional parts will be dealt with in their respective chapters (refer to contents).

#### **COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

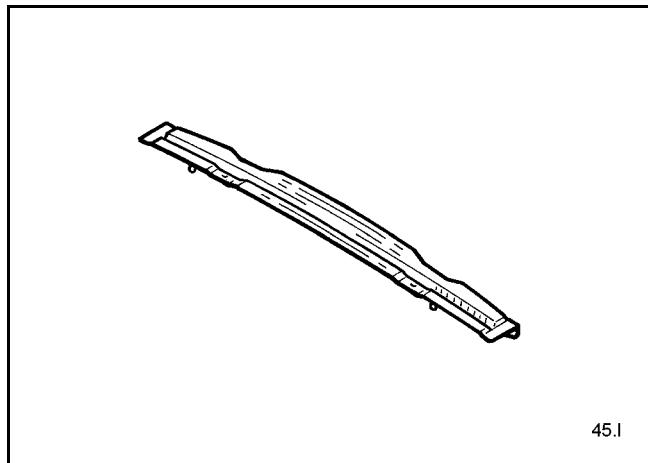
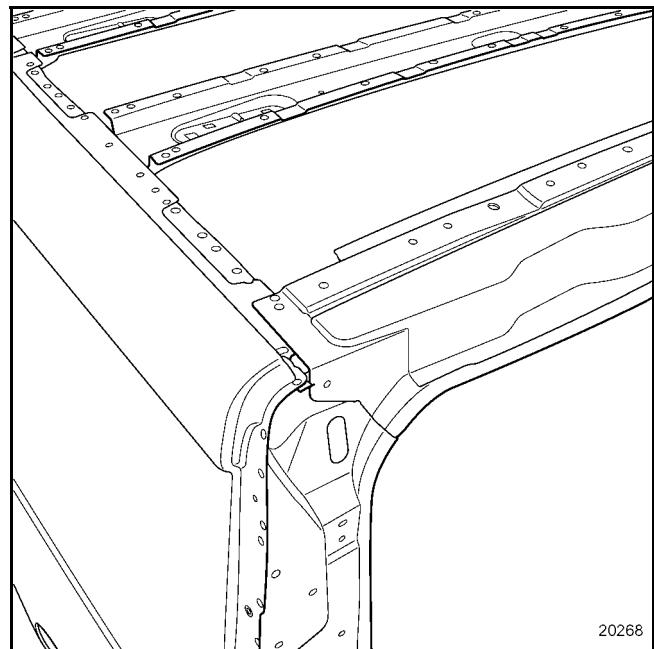
Rain channel

Striker stiffener

Stop mounting bridge piece

Welded nuts

Hinge reinforcements (tailgate version)



Replacement of this part is additional to replacement of the rear roof.

The procedure for replacing this part has no specific features, and joints can all be made as originally.

Below, for information, is a view of the part in its correct position on the body.

The information on the additional parts will be dealt with in their respective chapters (refer to contents).

#### **COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

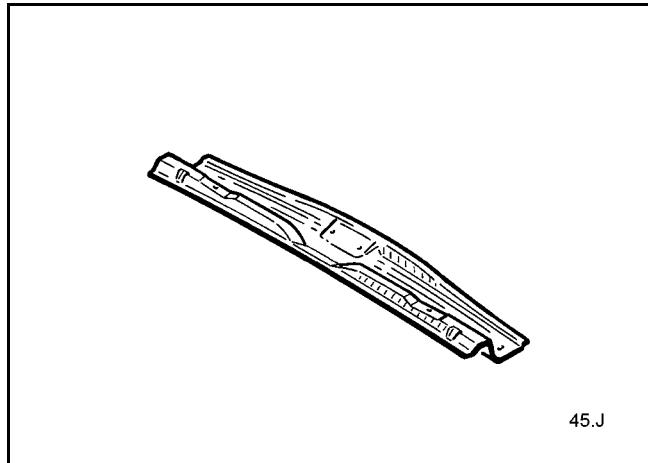
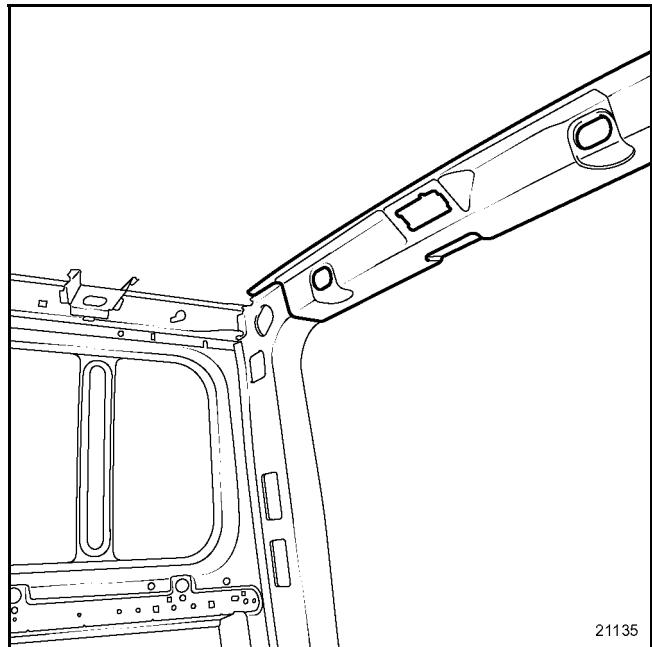
Rain channel

Striker stiffener

Stop mounting bridge piece

Welded nuts

Hinge reinforcements (tailgate version)



Replacement of this part is a basic operation for a side impact, or in addition to replacement of the front wing in the event of hinge replacement.

The door is a removable component.

There is no special feature in the door adjustment procedure.

Below you will find only information concerning the adjustment points.

**REMINDER:**

Information on additional parts or stripping of parts is dealt with in the relevant sections.

All clearances are given in **section 40**.

**COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:

Window surround

Rear mounting bracket

Panel stiffener

Door stop reinforcement

Rear stiffener plate

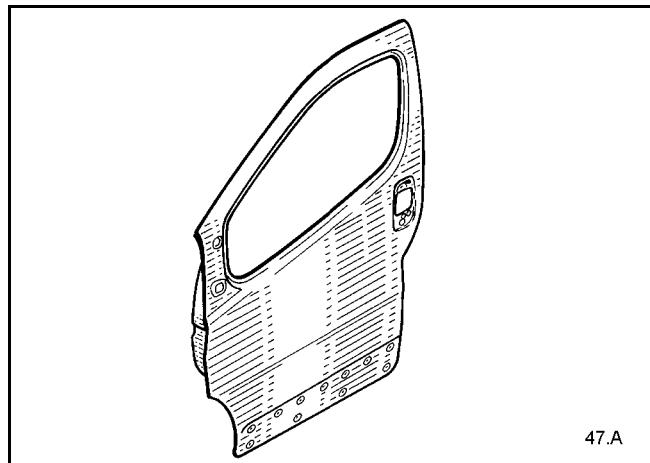
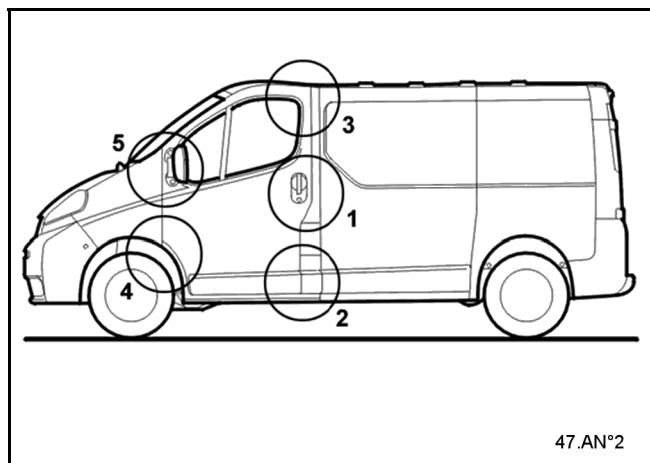
Impact bar

Impact stiffener

Impact reinforcement bracket

Reinforcement extender

Shock absorber

**ADJUSTMENT ZONES**

## I. FITTING THE DOOR

## REMINDER:

This operation can be carried out single-handed using the door support tool.

Part number: **SUP01**

otherwise, two people will be required to put the door in place.

Finger tighten all mountings without tightening them.

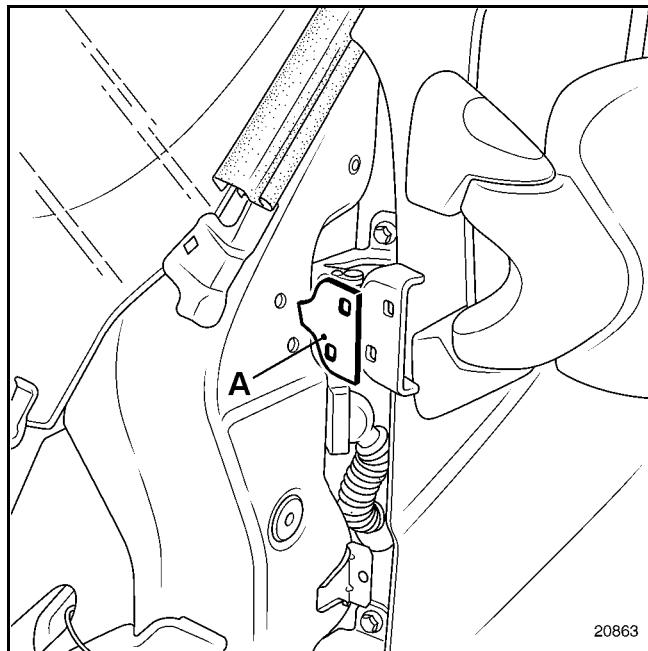
Fit all the parts to the door

## IMPORTANT:

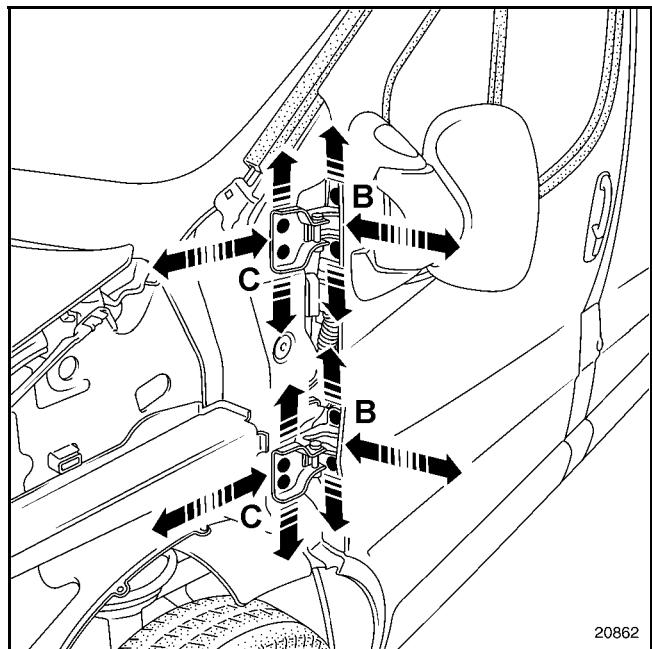
The door hinges are delivered complete with adhesive zinc pads (example **A**) on each bearing face.

These pads perform an anti-corrosion function, and if damaged during repair operations, should always be replaced.

Otherwise, before final fitting, ensure there is a perfect seal between the interfaces using filler mastic (refer to **Section 94**).



## II. SETTINGS



20862

All door gap adjustments (areas 1 to 5, see introduction) are performed using the hinge mounting bolts (B) and (C).

## REMINDER:

Front to back adjustment (**OX**) of the door is performed using only the hinge mounting bolts (C) on the A-pillar. Access to these bolts requires removal of the front wing.

Check the adjustments and tighten in position.

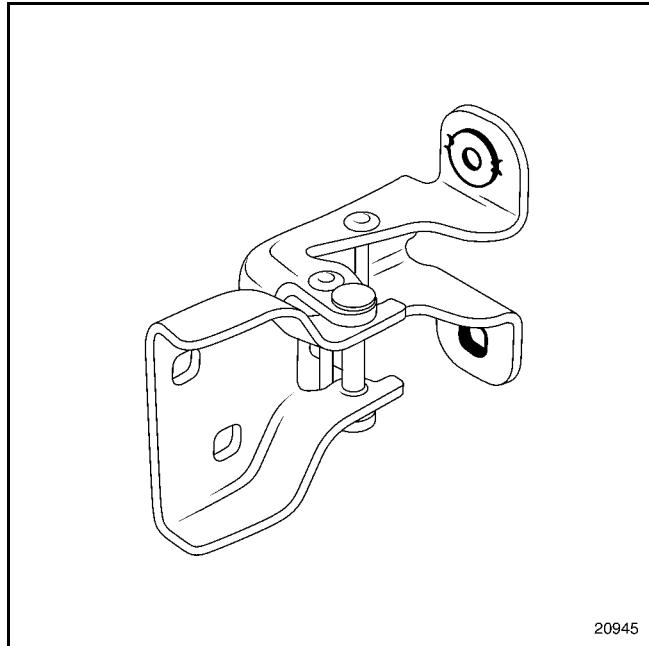
| TIGHTENING TORQUE (in daNm) |     |
|-----------------------------|-----|
| Hinge bolt                  | 2.8 |



2.8

**II. SETTINGS (continued)**

**Special notes for original hinges**



During manufacture, a washer is welded to the upper hole of the hinge (door support side) to guide the door into a fixed position.

If the door requires adjustment after replacement, it will be necessary to unweld this washer or to enlarge the hole ( $\varnothing 12$  maxi).

**REMINDER:**

Anti-corrosion protection is vital for all operations which expose the bare metal of the bodywork.

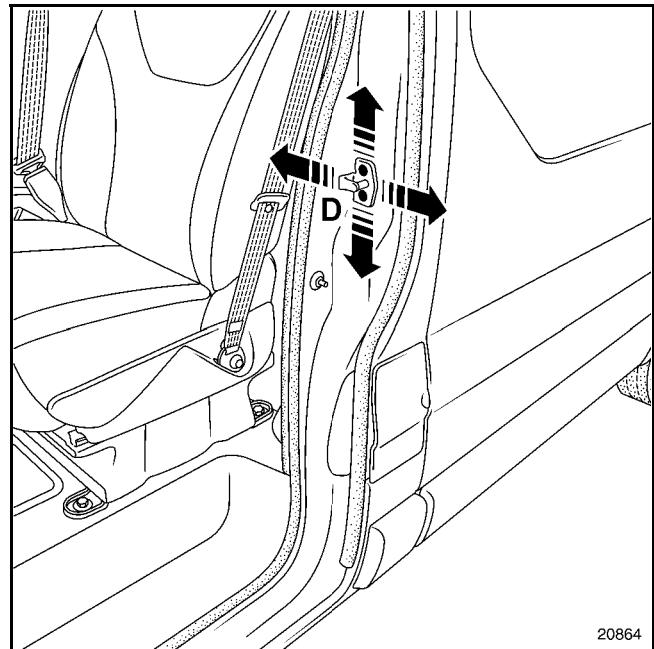
Protect against corrosion by applying the following products:

**Pre-treatment primer**  
**Reactive solvent**

**77 01 423 933**  
**77 01 423 955**

**NOTE:**

After-Sales hinges are supplied without the welded washer.



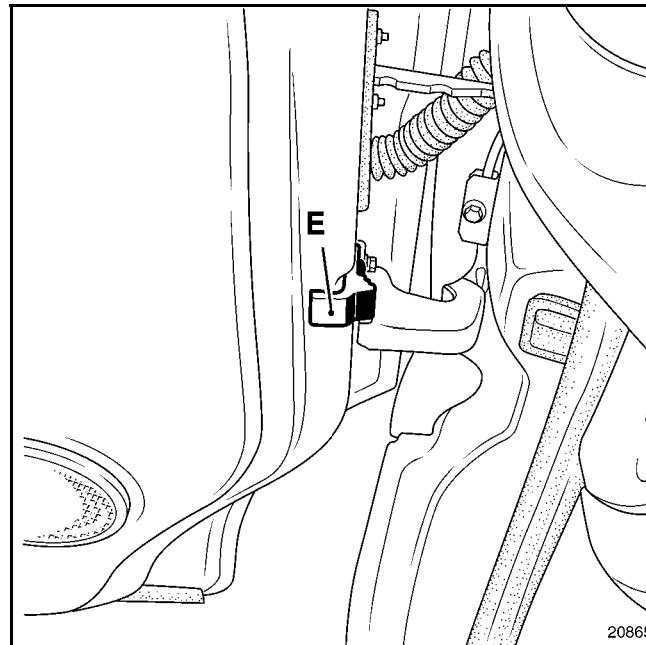
Striker plate bolts (**D**) prevent scraping and are used for closure firmness adjustment.

During this operation it is possible to adjust the flushness of the rear edge of the door.

Check the adjustment and tighten in position.

| <b>TIGHTENING TORQUE (in daNm)</b> |            |
|------------------------------------|------------|
| <b>Striker plate bolts</b>         | <b>2.8</b> |

**PASSIVE SAFETY**



**IMPORTANT:**

On completion of the operation, check the presence of the door-retaining device (E).

**REMINDER:**

The function of this part is essential in the event of a frontal impact.

The door-retention device keeps the door in its longitudinal plane, thereby absorbing impact energy efficiently.

| TIGHTENING TORQUE (in daNm) |     |
|-----------------------------|-----|
| Door-retention device bolts | 2.1 |

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

**REMINDER:**

The information on the additional parts will be dealt with in the appropriate sections.

All clearances are given in **section 40**.

There are three methods of carrying out this operation:

- complete,
- partial, using cuts **A** and **B**,
- partial lower, using cut **C**.

**NOTE:**

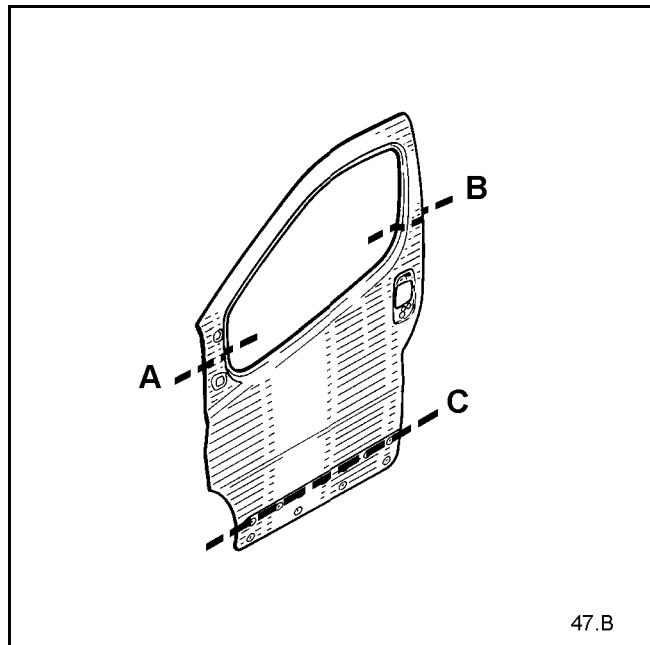
For partial replacements, in the procedure you will only find special notes concerning the cuts.

### COMPOSITION OF THE REPLACEMENT PART

Part assembled with:

Shock absorber

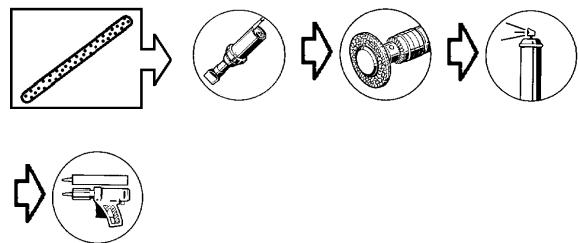
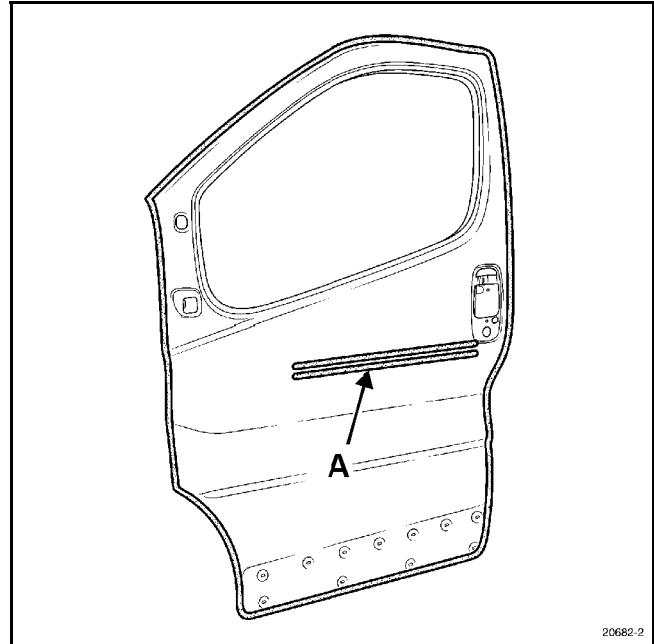
Reinforcement



### PARTS CONCERNED (thickness in mm):

|                    |     |
|--------------------|-----|
| 1 Door panel       | 0.8 |
| 2 Door box section | 1.2 |
| 3 Door stiffener   | 1.5 |

### Complete replacement

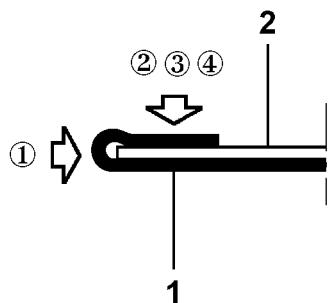


**NOTE:**

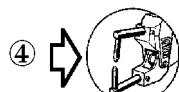
It is necessary to use a structural adhesive on the periphery (crimping zone), type **MTC 514** (part number: 77 11 172 674).

For zones **(A)**, a setting adhesive is essential, type M.J.Pro (part number: 77 11 172 676).

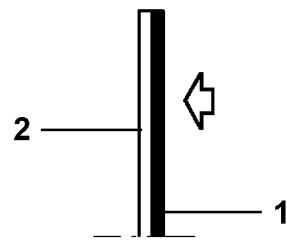
A B C D



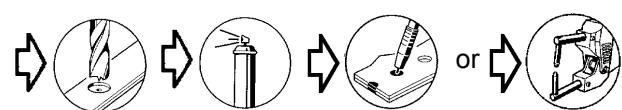
14587



E



14581

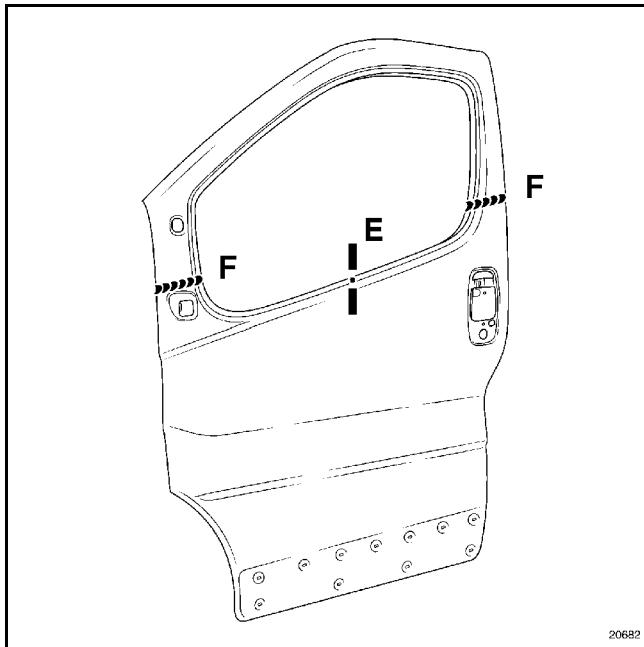
**NOTE:**

For the window surround, the number of spot welds is not specified in the procedure.

A gap of approximately **70 mm** must be left between the welds.

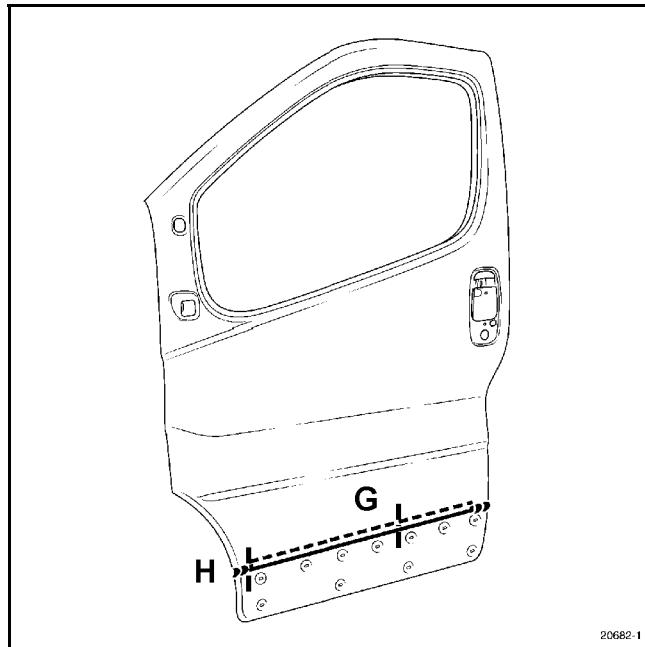
It is preferable to use resistance spot welding as used in original manufacture, if your equipment can do this.

## Upper partial replacement

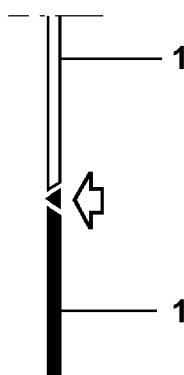


20682

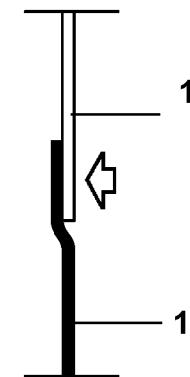
## Lower partial replacement



20682-1

**F**

14586

**G**

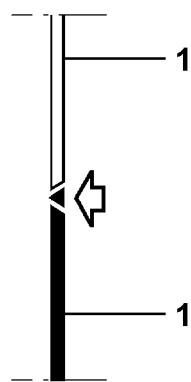
14582-1



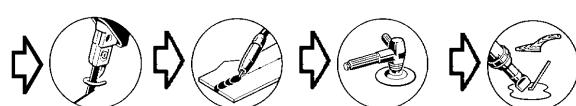
X5

**NOTE:**

Partial replacement is performed by overlapping the panels, the number of plug welds is not specified, a gap of **60 mm** must be left between the welds.

**H**

14586



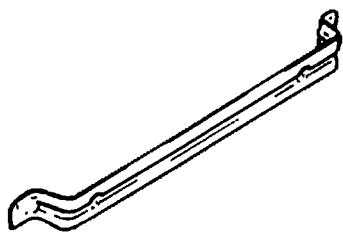
Replacement of this part is in addition to replacement of a front side door panel.

The method of replacement does not pose any particular problems, below you will only find information on the products.

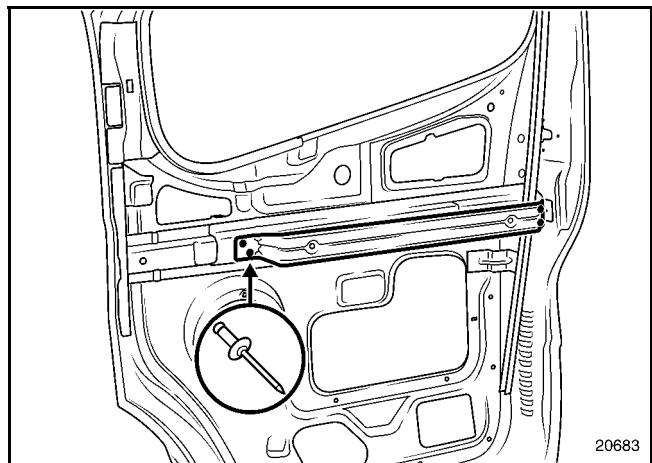
The information on the additional parts will be dealt with in the appropriate sections.

#### **COMPOSITION OF THE REPLACEMENT PART**

Part assembled with:  
Shock absorber  
Reinforcement



47.C



#### **NOTE:**

For refitting, use  $\varnothing 4.8 \text{ mm}$  rivets and a side member with **7.5 mm** head.

Replacement of this part is an operation associated with replacement of a cab C-pillar.

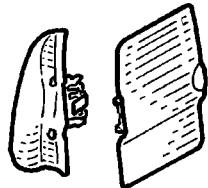
The door is a removable component.

In the procedure described below, you will only find descriptions of the connections which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

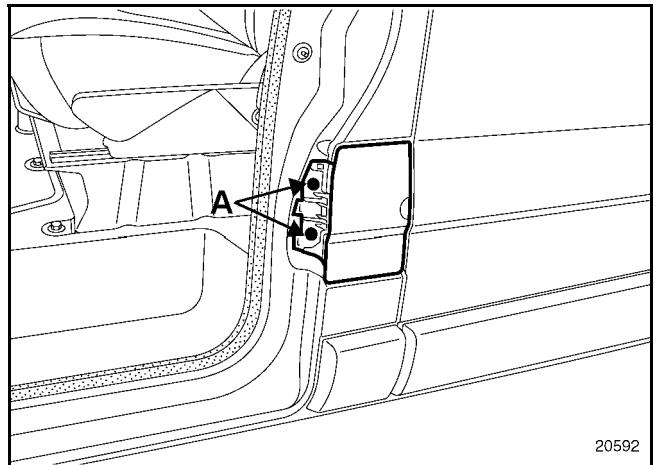
### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own (pre-primed).



47.D

### Removal of the filler flap with mounting



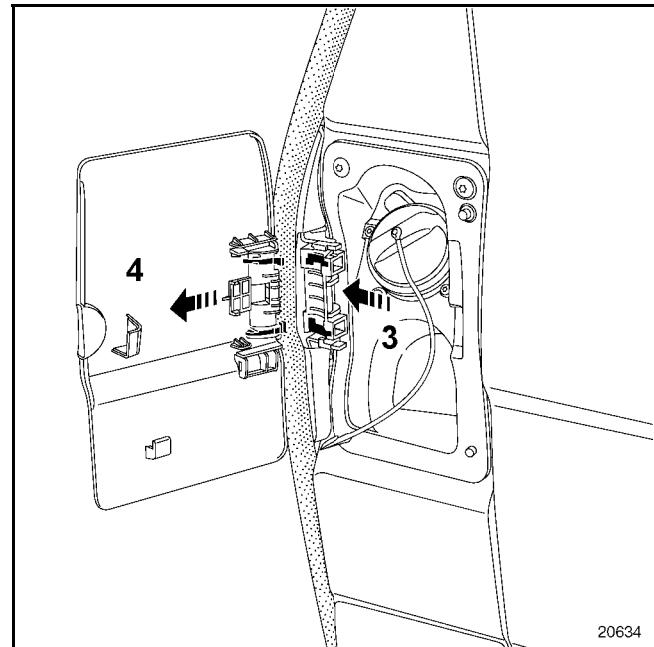
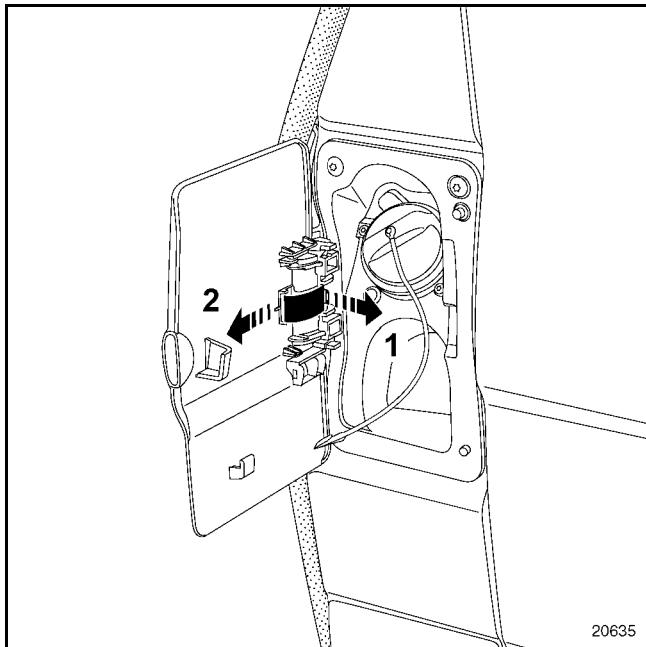
### REMOVAL

Removal is by way of the mounting bolts (A).

### REFITTING

Ensure sealing of the mounting bolts and the anti-corrosion protection using a filler mastic (see **Section 94**).

## Removal of the filler flap only

**REMOVAL**

Unclip the retaining spring in the direction of the arrows 1 and 2.

Remove the filler flap in the direction of the arrows 3 and 4.

**REFITTING**

If replacing the filler flap, it will be necessary to lightly grease the retaining spring to prevent abrasion and ease movement.

**REPAIR**

The filler flap is made of NORYL GTX, for paint products refer to **Section 95**.

Replacing this door after a side impact is a basic operation.

The door is a removable component.

Only the door adjustment operations, and not the removal and refitting methods, are described in the following procedure.

### **REMINDER**

The information on the additional parts will be dealt with in the appropriate sections.

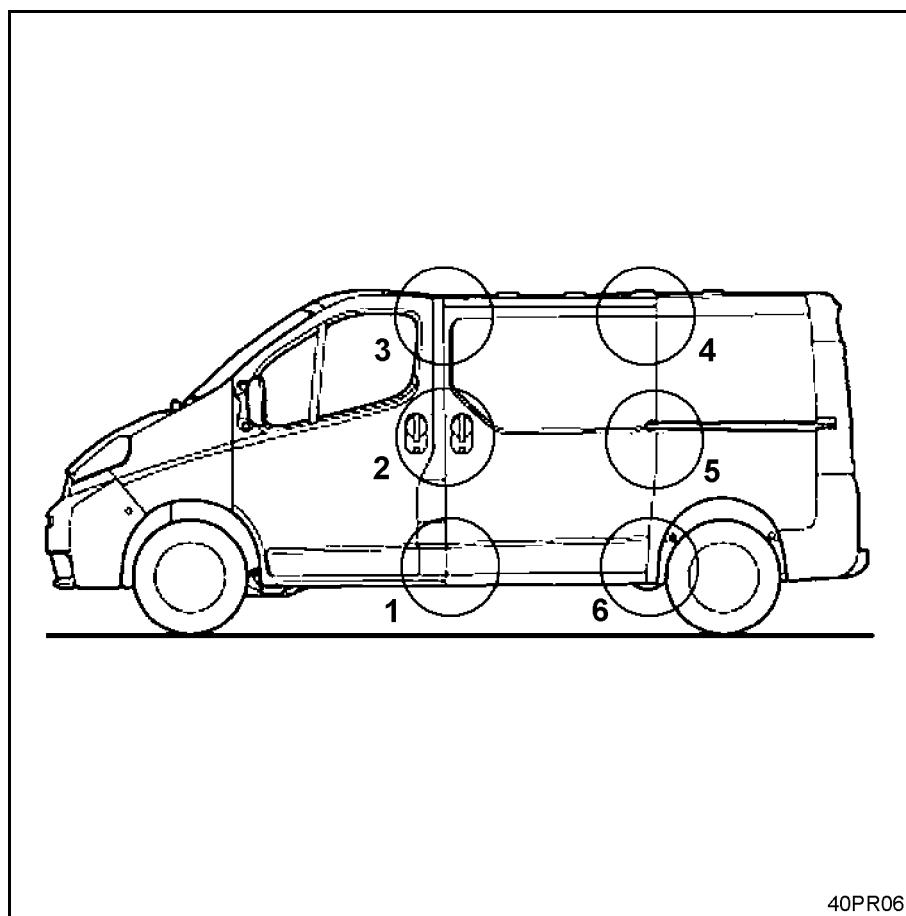
All clearances are given in **section 40**.

### **WARNING:**

For safety reasons, only open and close the door when the vehicle is stationary.

Closing during braking risks derailing the slides and dislodging the door. Opening during acceleration may deform the side panel at the stop.

### **ADJUSTMENT ZONES**



40PR06

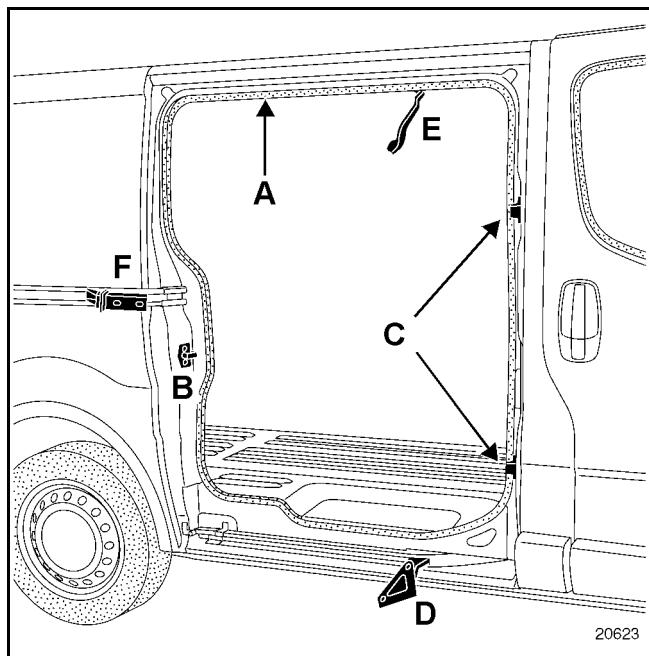
### I. PRE-ASSEMBLY PREPARATION

#### On the vehicle:

Remove:

- the door frame rubber seal (A),
- the central striker plate (B),
- the male centring devices (C).

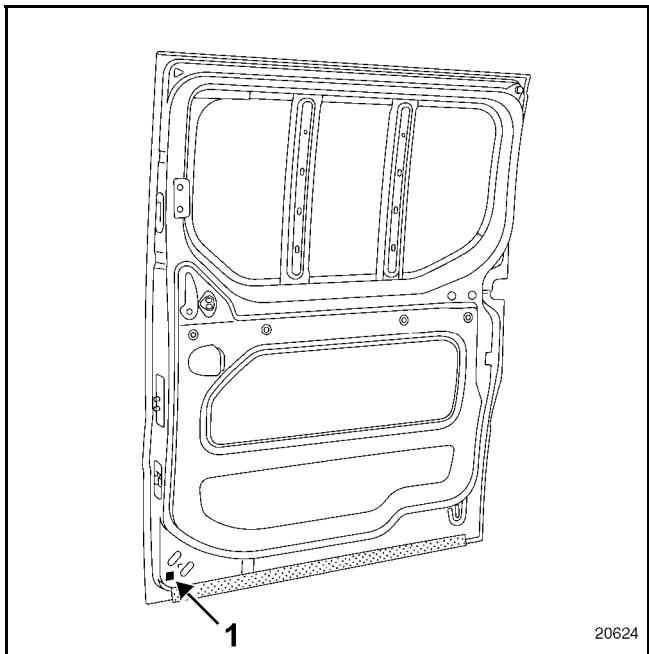
Position the lower arm (D), the upper arm (E) and the central slide (F) in their respective guide runners.



#### On the sliding side door:

Fit all the components to the door.

Do not remove the outer protective strip, in order to preserve access to the lower slide mounting nut (square slot 1).



### II. FITTING THE DOOR

#### REMINDER

This operation can be done by one person using the door support tool.

Part number: **SUP01**

If not using this tool, another operator will be required to support the door.

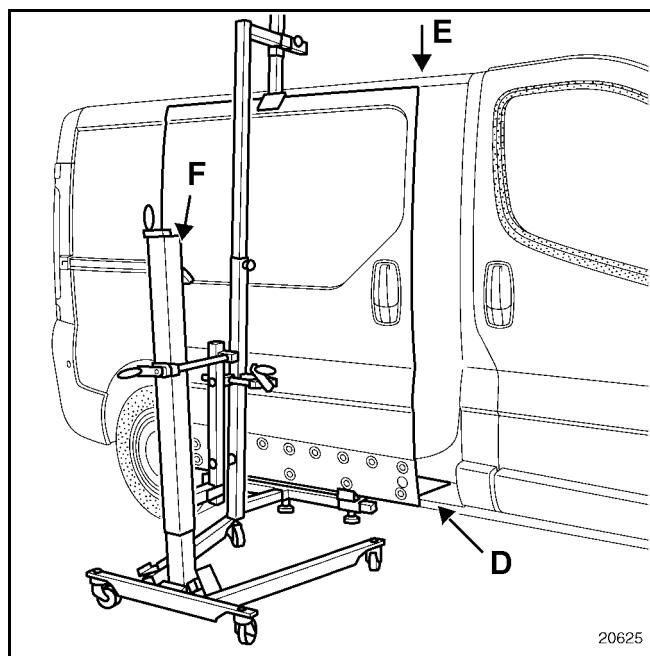
Engage the door in the central slide (F).

Position the lower arm (D) on the door.

Position the upper arm (E) on the door.

Insert all the bolts without tightening them.

Remove the door mounting tool.



### III. SETTINGS

#### NOTE:

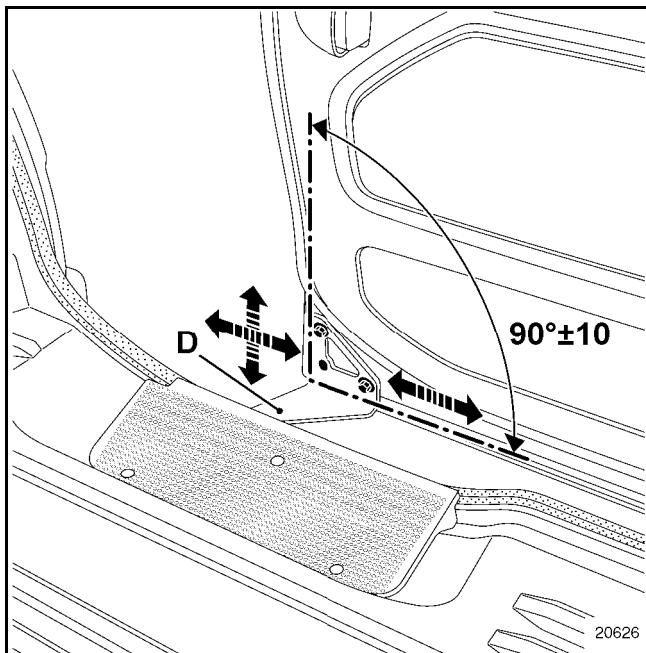
when setting special points, linked to an incident (e.g. rear flush-fitting), refer to the procedure for more detailed instructions.

Even in a regular case, you should always check the settings information. There may be more than one way to repair a fault, but using the information is quicker.

Perform the following settings in this order:

- 1 Height adjustment of the front section of the door
- 2 Height adjustment of the rear section of the door
- 3 Flush-fitting adjustment of the rear section of the door
- 4 Flush-fitting adjustment of the top rear section of the door
- 5 Flush-fitting adjustment of the lower rear section of the door
- 6 Adjustment of front and rear centring
- 7 Flush-fitting adjustment of the top front section of the door
- 8 Adjustment of the centring devices

### 1 Height adjustment of the front section of the door



#### IMPORTANT:

When tightening in position, the roller for the lower arm must be perpendicular to the guiding runner to prevent constriction. Always start with the lower nut and bolts to prevent it pivoting.

#### REMINDER:

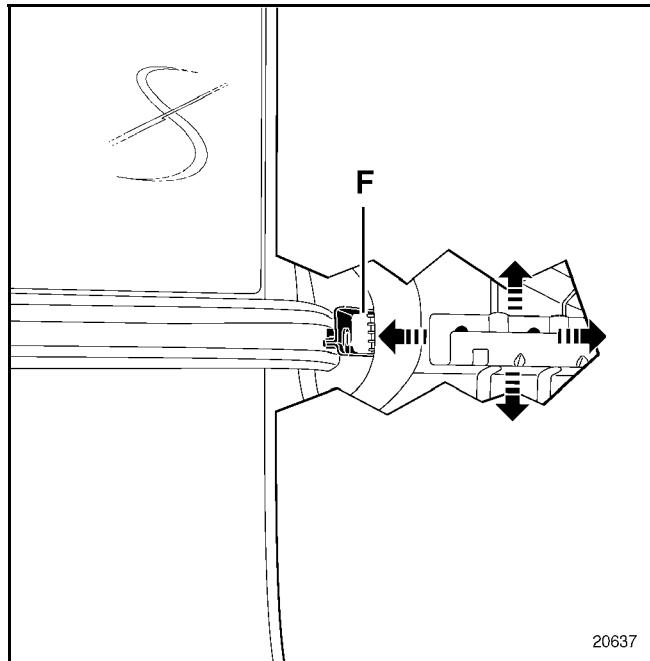
Adjustment is carried out without the door frame rubber seal to prevent constriction when closing.

Ensure that the edges and the gaps in areas **1** and **3** are correctly aligned (refer to the adjustment areas diagram in the introduction) using the nut and bolts on the lower arm (**D**).

Pre-tighten the two inner bolts, then tighten them from the outside using the mounting nut on the arm.

| TIGHTENING TORQUE (in daNm) |     |
|-----------------------------|-----|
| Lower arm                   | 2.1 |

### 2 Height adjustment of the rear section of the door



Ensure that the edges and the gaps in areas **4** and **6** are correctly aligned (see **introduction**) using the bolts on the central slide (**F**).

This is a two-person job, as the bolts can only be accessed from the inside of the vehicle.

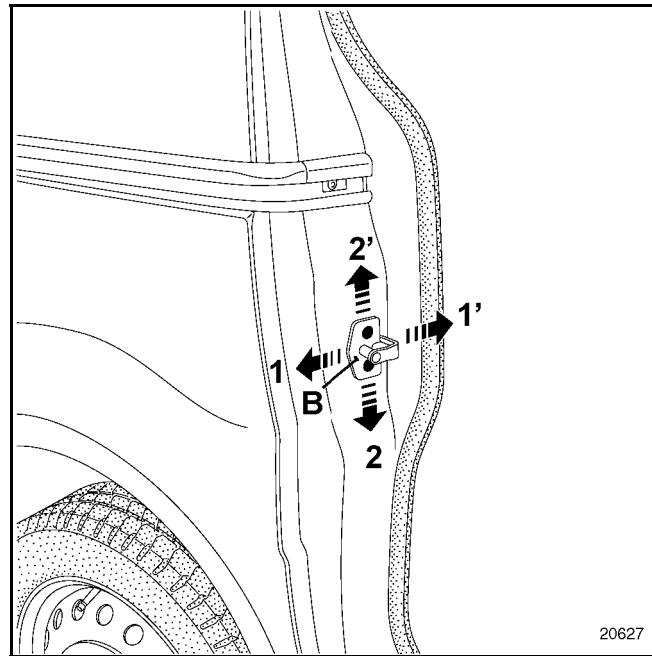
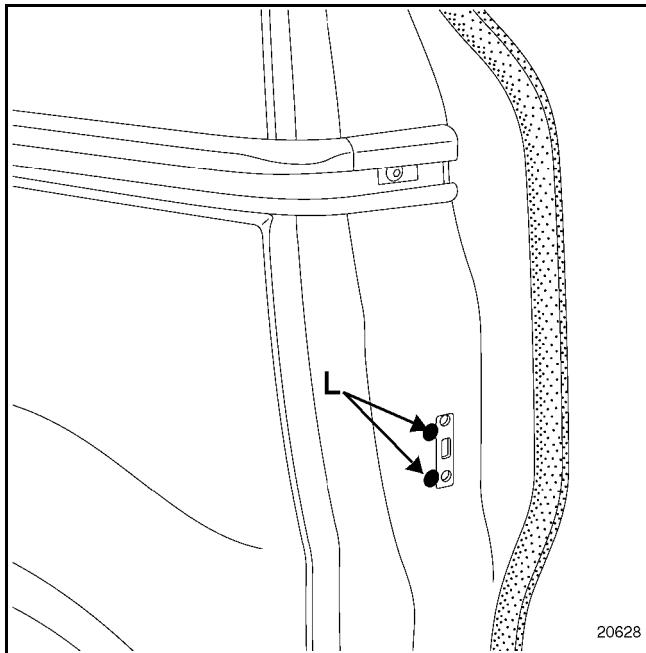
Tighten in position.

#### NOTE:

The edges in zones **2** and **5** can be adjusted during this operation, but this must be completed in operation **6**.

| TIGHTENING TORQUE (in daNm) |     |
|-----------------------------|-----|
| Central carriage            | 2.1 |

**3 Flush-fitting adjustment of the rear section of the door**



**IMPORTANT:**

To make factory assembly easier, the striker plate is riveted and thus immobile.

To allow adjustment of the striker plate, it will be necessary to drill out the retaining rivets (**L**).

**IMPORTANT:**

The rivet nails will fall into the bottom of the pillar when you perform this operation and may cause noise or corrosion. To prevent this, either remove the inner trim or inject the cavities.

Ensure flushness in area **5** (see **introduction**) using the striker plate bolts (**B**).

Fit:

- the door frame rubber seal,
- the striker plate **B** on the vehicle by finger tightening the bolts without tightening them.

Close the door.

Check and adjust flushness in the direction of the arrows **1** and **1'**.

Tighten in position.

**TIGHTENING TORQUE (in daNm)**



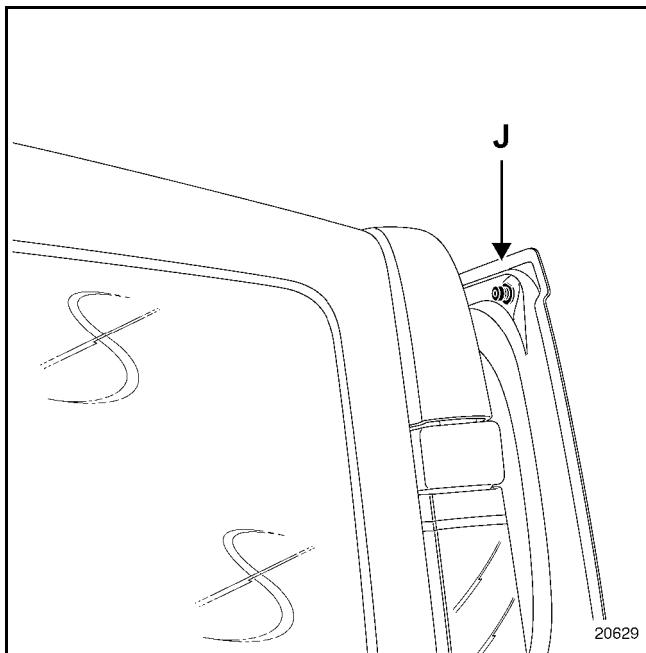
**Striker**

**2.1**

**NOTE:**

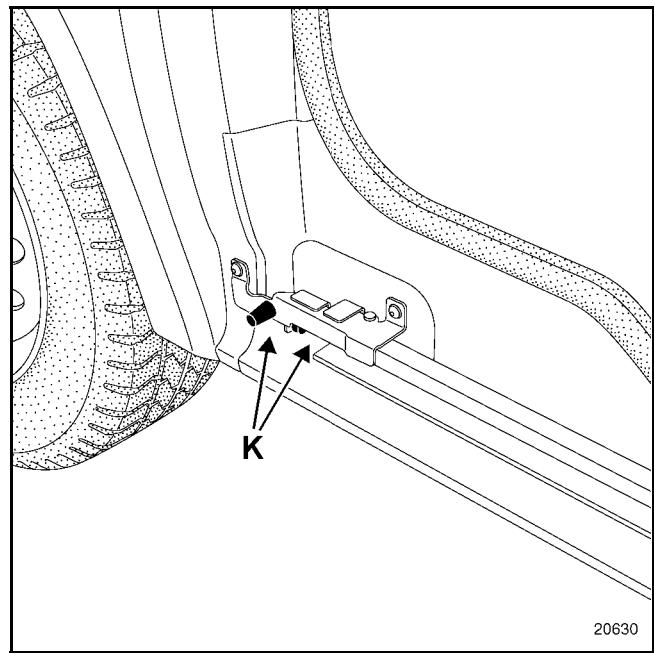
Adjustment in the direction of the arrows **2** and **2'** will prevent the lock scraping vertically.

**4 Flush-fitting adjustment of the top rear section of the door**



Check flushness in area **4** (see **introduction**) using the adjustable stop (**J**).

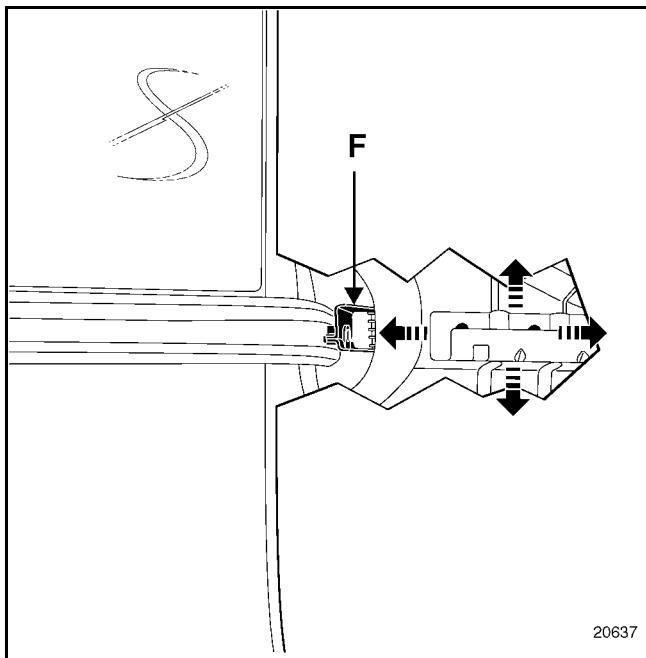
**5 Flush-fitting adjustment of the bottom rear section of the door**



There are no specific adjustments for this part of the door, adjustment is done as part of operations **3** and **4**.

Check that there are two stops (**K**) on the lower runner.

### 6 Adjustment of front and rear centring



20637

#### IMPORTANT:

Before finally locking the slide in position, it is essential to ensure that the roller (H) supporting the central slide (F) is correctly mounted on the rail. This will prevent horizontal scraping of the central lock when opening or closing the door.

To do this, insert a screwdriver between the runner and the slide and lever it upwards (arrow 1) to ensure that the roller is in proper contact.

This is a two-person job, as someone must be present to lock from the inside.

Ensure that the edges and the gaps in areas **2** and **5** are correctly aligned (see **introduction**) using the bolts on the central slide (F).

Tighten in position.

#### TIGHTENING TORQUE (in daNm)

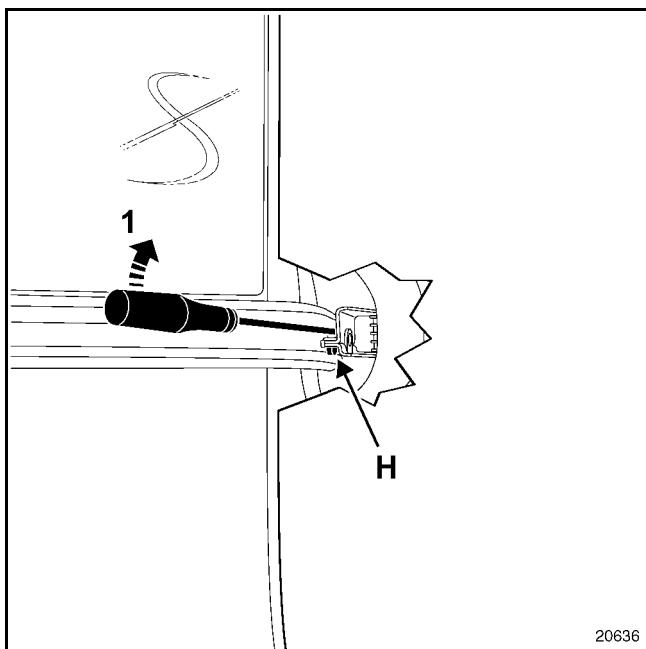


Central carriage

2.1

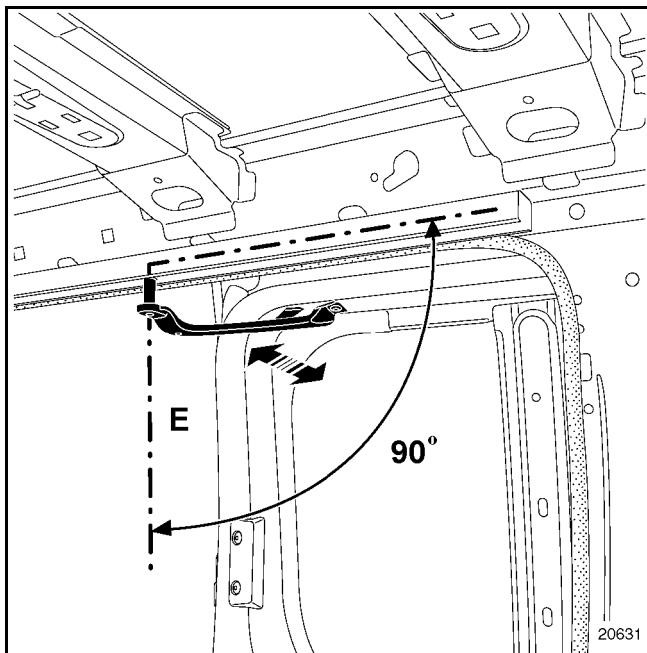
#### NOTE:

This operation completes the flushnesss adjustments carried out earlier in steps **3**, **4** and **5**.  
If you have carried out the previous instructions properly, there should be no need for this stage.  
Nonetheless, we advise you to check them.



20636

### 7 Flush-fitting adjustment of the top front section of the door



Check flushness in area 3 (see **introduction**) using the upper arm bolts (E).

**NOTE:**

You can counter-pierce the arm mounting holes by  $\varnothing 8$  mm to allow for a wider setting.

**IMPORTANT:**

The roller for the upper arm must be kept perpendicular to the guiding runner to prevent any constriction.

|                        |   |
|------------------------|---|
| <b>Roller too high</b> | Risk of contact with the upper mounting bolts on the runner |
| <b>Roller too low</b>  | Wear of the lower section of the runner                     |
| <b>Roller crooked</b>  | Wear of the O-ring  |

| TIGHTENING TORQUE (in daNm) |     |
|-----------------------------|-----|
| Upper arm                   | 0.8 |

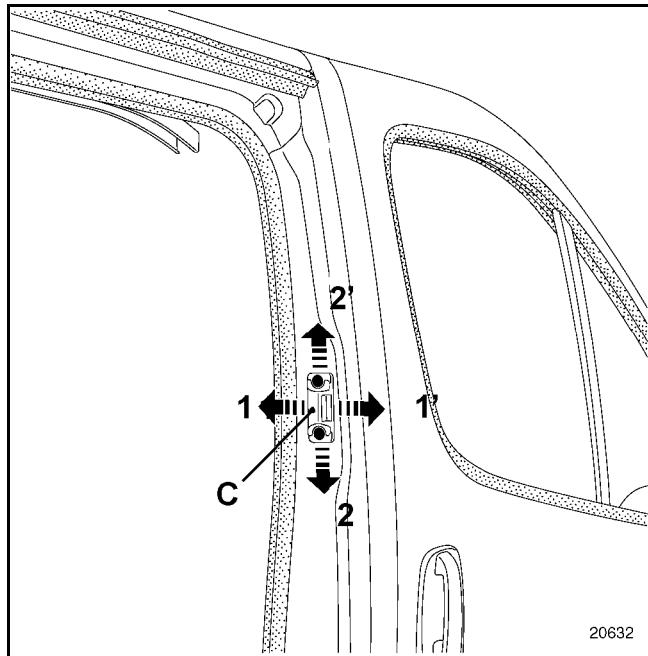
**REMINDER:**

Anti-corrosion protection is essential for all operations which expose the bare metal of the bodywork.

Protect against corrosion by applying the following products:

|                      |               |
|----------------------|---------------|
| Pre-treatment primer | 77 01 423 933 |
| Reactive solvent     | 77 01 423 955 |

## 8 Adjustment of the centring devices



Adjust flushness in zones **1**, **2** and **3** (see **introduction**) using the male centring device bolts (**C**).

First adjust with the upper centring fitting, and then with the lower fitting, following the same procedure. Adjust following the arrows **1** and **1'**.

Adjustment in the direction of the arrows **2** and **2'** will vertically position the male centring devices and prevent them from scraping.

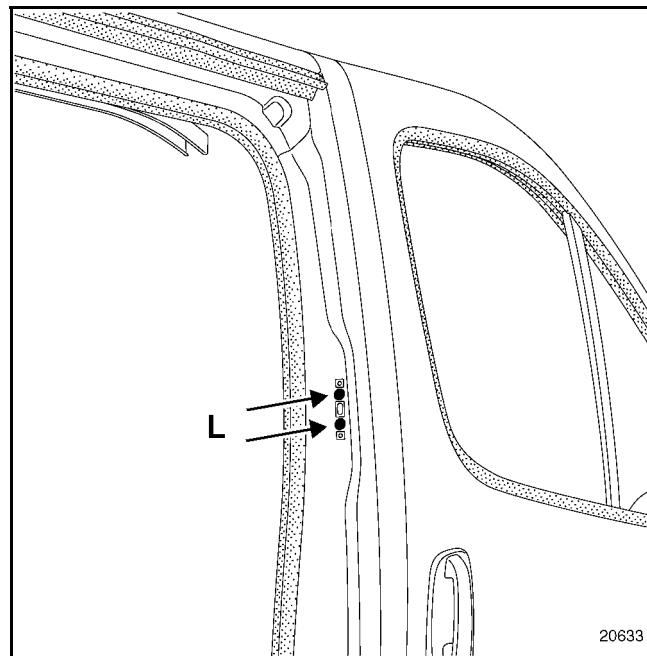
**NOTE:**

Adjustments cannot be made with the female centring devices on the door.

**IMPORTANT:**

Fitting of the centring fittings must be optimal (autocentring) as external beading may cause the door to become unseated.

Tighten in position.

**REMINDER:**

To make factory assembly easier, the male centring device mounting pads are riveted and thus immobile (as with the door striker plate).

To allow adjustment of the striker plate, it will be necessary to drill out the retaining rivets **L**.

As a general rule, it will not be necessary to drill the rivets, as the centring devices are positioned in the factory to correspond to an optimal door adjusting position.

The following operation should therefore only be carried out in case of a fault.

Remove the inner trim from the cab pillar to retrieve the rivet heads that have fallen into the pillar lining and thus prevent potential noises and corrosion.

| TIGHTENING TORQUES (in daNm) |     |
|------------------------------|-----|
| Male centring devices        | 0.8 |
| Female centring devices      | 0.8 |

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

There are two methods of carrying out this operation:

- complete for sheet panels,
- partial for glazed panels, using cuts **A**.

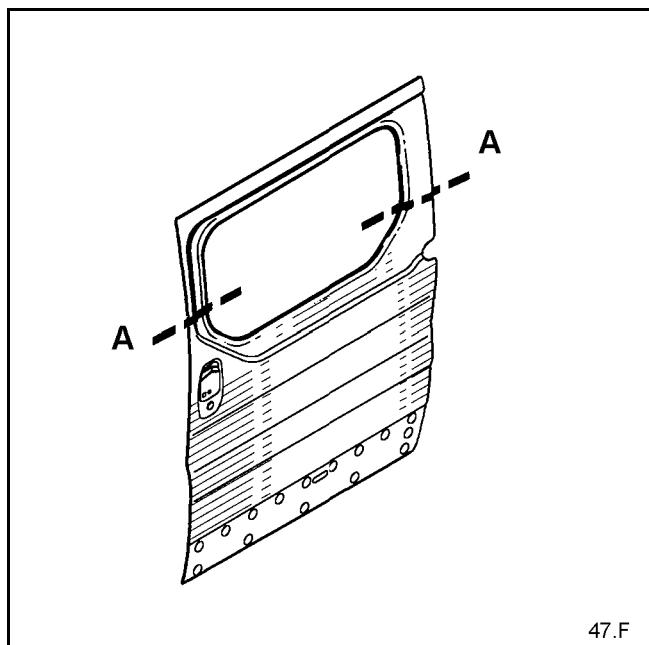
**NOTE:**

For partial replacements, in the procedure you will only find special notes concerning the cuts.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

## COMPOSITION OF THE REPLACEMENT PART

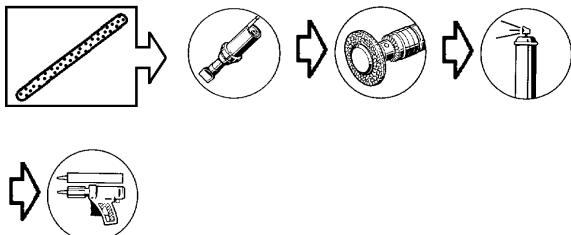
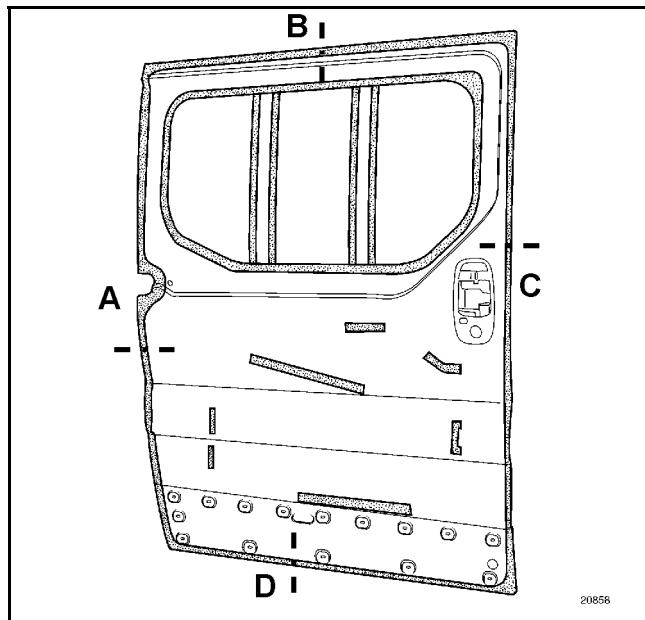
Part supplied on its own.



**PARTS CONCERNED (thickness in mm):**

**1** Door panel **0.8**  
**2** Door box section **0.8**

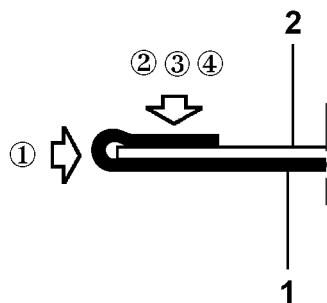
## PANEL VERSION



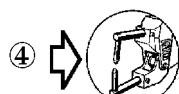
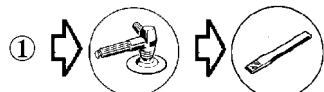
**NOTE:**

**NOTE:**  
It is necessary to use a structural adhesive on the periphery (crimping zone), type **MTC 514**  
**(part number: 77 11 172 674).**

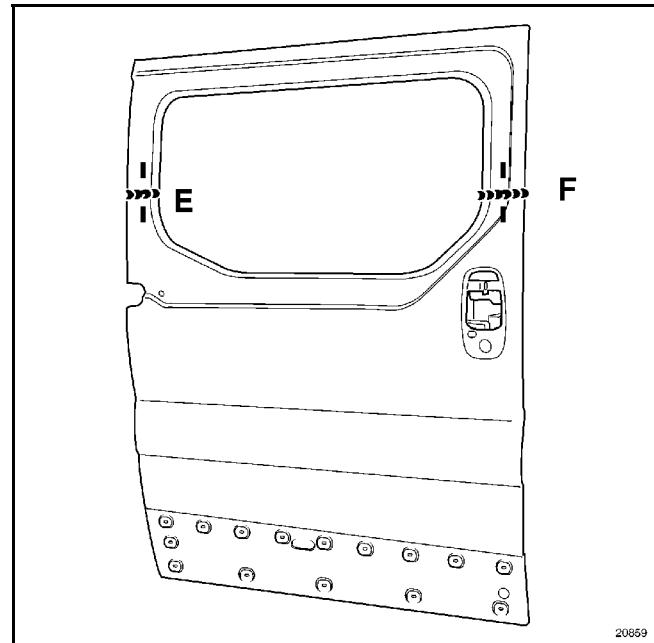
For the other zones use a setting adhesive type **MJPro (part number: 77 11 172 676)**.

**A B C D**

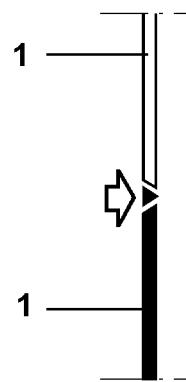
14587



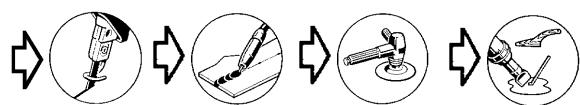
GLAZED VERSION



20859

**E F**

14586



The replacement of this part is a basic operation for a frontal collision.

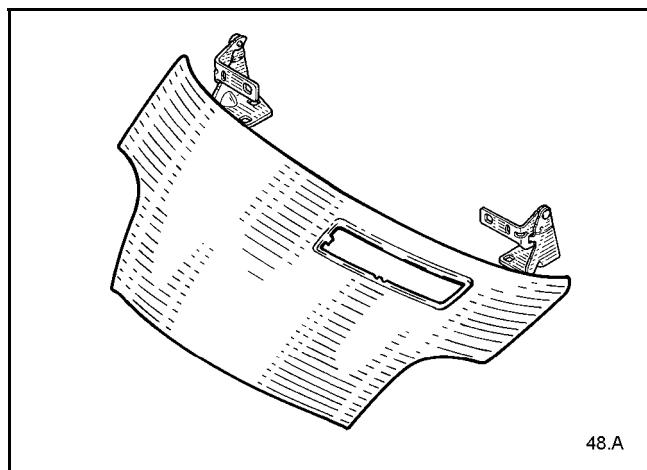
The door is a removable component.

**NOTE:**

There is nothing particularly difficult about removal and refitting; the procedure only describes adjustment possibilities.

**REMINDER:**

The information on the additional parts will be dealt with in the appropriate sections. All clearances are given in **section 40**.



48.A

**IMPORTANT:**

To access the lower mountings of the bonnet strut, the windscreen wiper motor mounting plate assembly must be removed.

| TIGHTENING TORQUE (in daNm) |     |
|-----------------------------|-----|
| Bonnet strut bolts          | 2.8 |

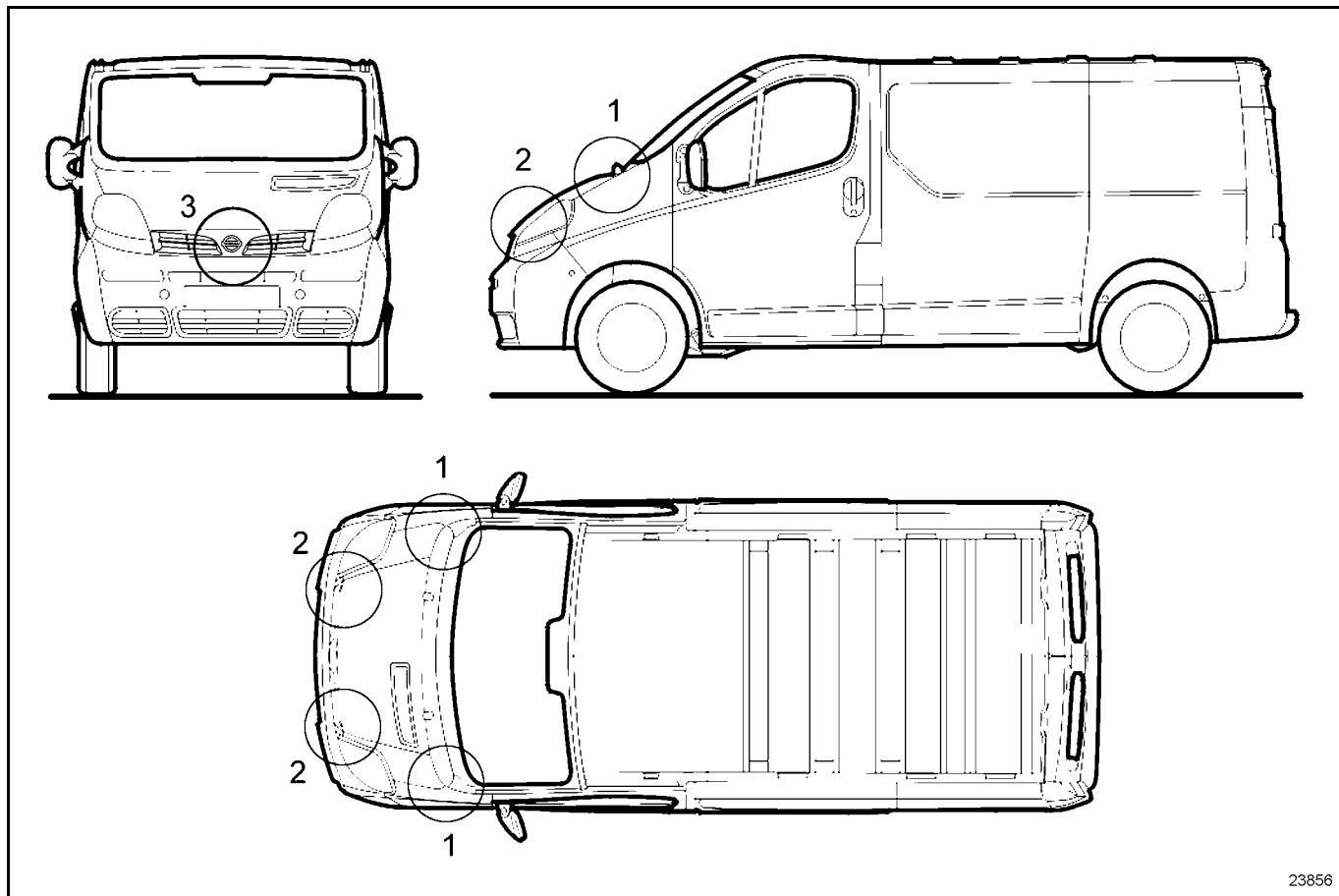
**IMPORTANT:**

The bonnet struts are supplied with an adhesive zinc pad on each side.

These pads perform an anticorrosion function. If damaged during repair operations, they should always be replaced.

Otherwise, ensure there is a perfect seal between the interfaces using filler mastic (see **Section 94**).

**ADJUSTMENT ZONES**



23856

**ADJUSTMENT**

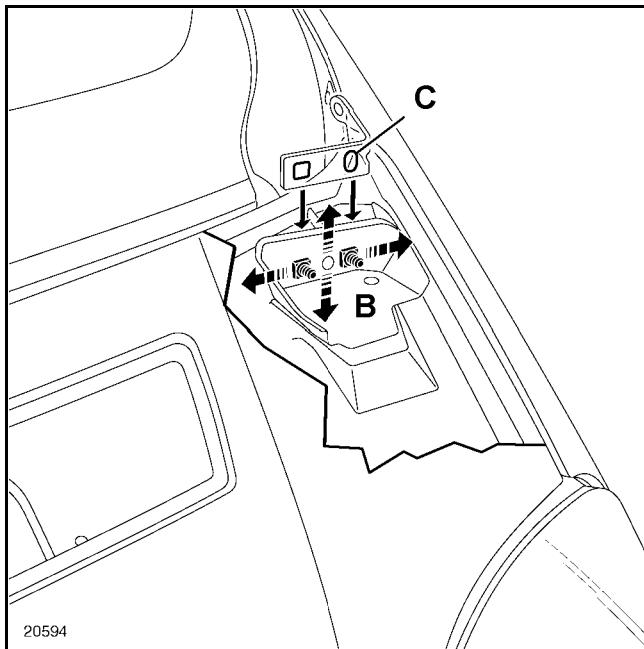
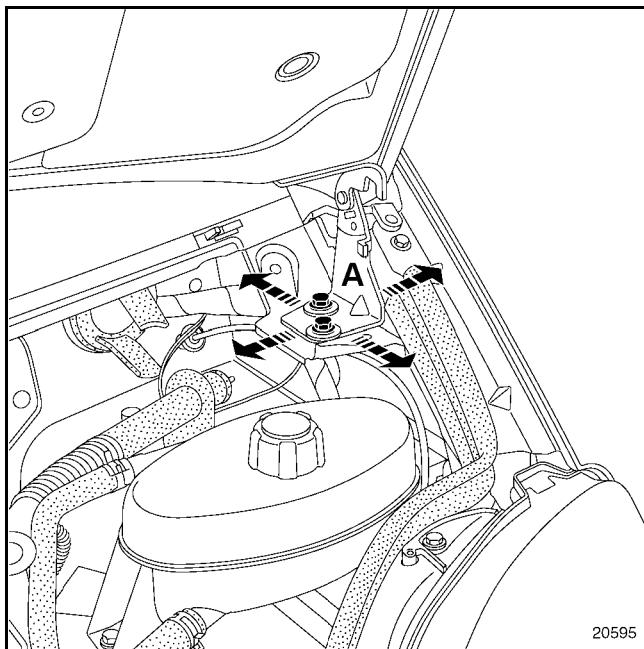
Position the bonnet on the vehicle (two persons are required for this operation).

Finger tighten all the attachments.

**IMPORTANT:**

The bonnet safety catch and plunger are to be fitted during the final adjustment operations so as not to create any stress in the closed position during the first two adjustment phases.

### ADJUSTMENT SEQUENCE:



### IMPORTANT:

To adjust the gap between the bonnet and the wing, the bonnet strut slot (C) can be drilled out to  $\varnothing 12 \text{ mm}$  (if necessary).

### 2 Adjustment: Bonnet-Wing (lower section)

Ensure clearances and flushness in zone 2 (bolts A and B).

Check the adjustment and tighten in position.

### NOTE:

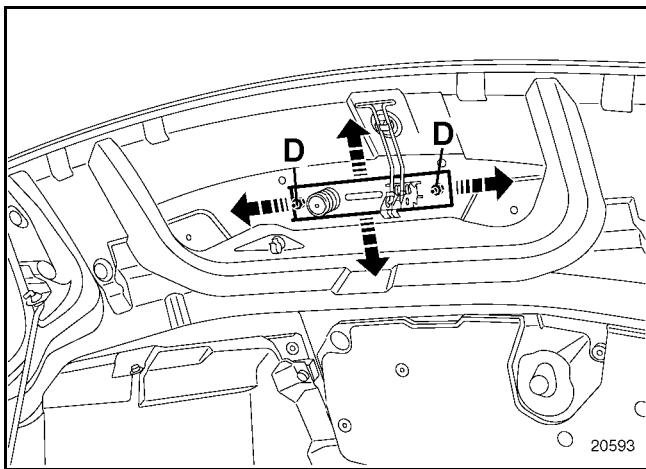
When adjusting the side gap between the bonnet and wing, you can use the upper attachments of the front wing.

### 1 Adjustment: Bonnet-Wing (upper section)

Ensure correct clearances and flushness in zone 1 (bolts A and B).

### REMINDER:

In all cases, you should begin by adjusting the contact surfaces at the strut.



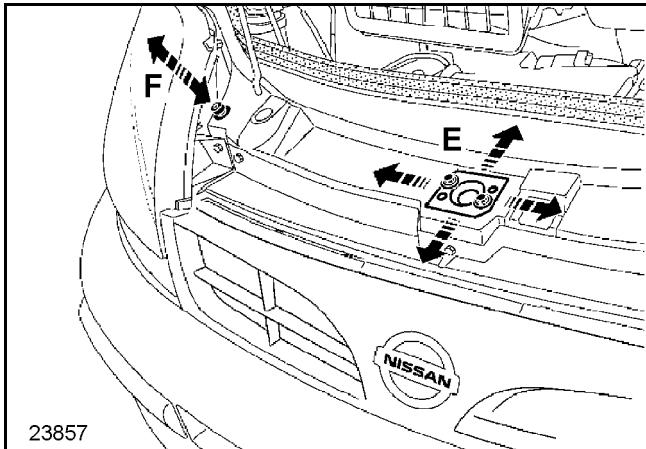
Pre-treatment primer  
Reactive solvent

77 01 423 933  
77 01 423 955

### 3 Adjustment: Bonnet-Headlight-Radiator grille

Fit the mounting plate for the bonnet closure pin and safety catch (bolts **D**).

It is possible to drill the out plate to  $\varnothing 8 \text{ mm}$  (if necessary) to provide additional adjustment play.



Prevention of scraping is achieved by adjusting the lock (**E**).

These adjustments must not alter the peripheral play set previously.

#### NOTE:

Adjustment of flushness in zones **2** and **3** is performed using the stops (**F**).

#### REMINDER:

Anti-corrosion protection is vital whenever paintwork is removed during drilling operations.

Protect against corrosion by applying the following products:

The replacement of this part is a basic operation for a rear collision.

The door is a removable component.

There are no specific features concerning the method of adjusting this component.

Below you will only find information concerning adjustment.

**REMINDER:**

The information on the additional parts will be dealt with in the appropriate sections.

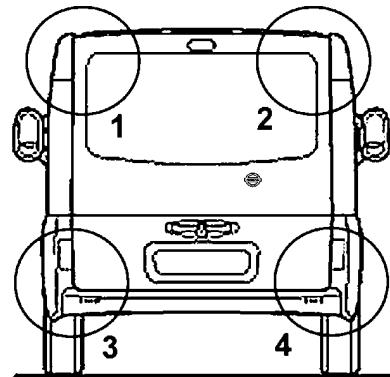
All clearances are given in **section 40**.

### COMPOSITION OF THE REPLACEMENT PART

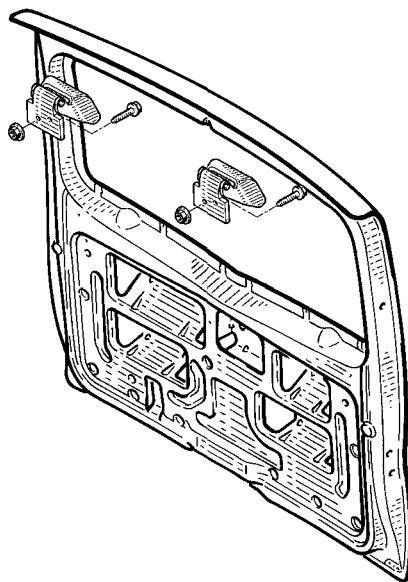
Part assembled with:

Shock absorber

Tapped plate



23858



48.B

### I. FITTING THE TAILGATE

Fitting the tailgate requires the assistance of a second person.

Finger tighten all mountings without tightening them.

Fit all the parts to the door

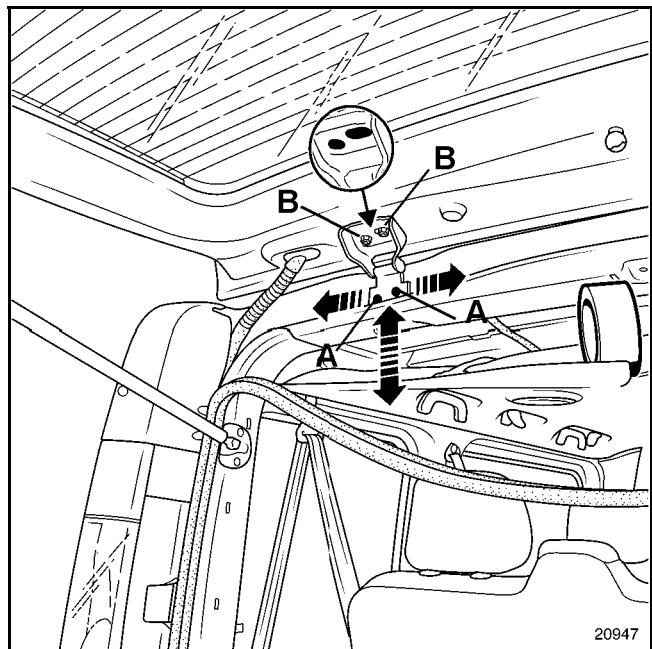
#### REMINDER:

The hinges are delivered with adhesive zinc pads on each contact face.

These pads perform an anticorrosion function. If damaged during repair operations, they should always be replaced.

Otherwise, before final fitting, ensure there is a perfect seal between the interfaces using filler mastic (see **Section 94**).

### II. SETTINGS



All gap adjustments in zones 1 to 4 (see diagram in introduction) are performed using the hinge mounting bolts (A).

#### IMPORTANT:

No adjustment is possible using bolts (B).

To access the mounting nuts (A), it is necessary to partially remove the head lining.

Check the adjustments.

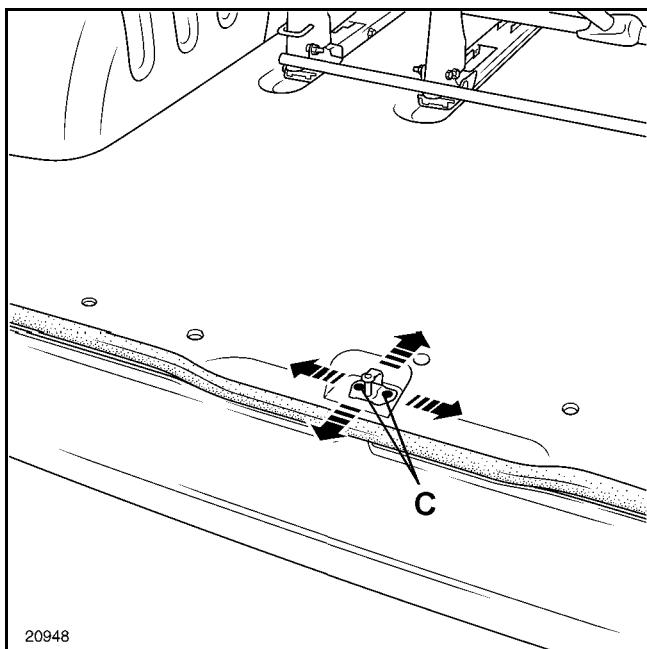
Tighten in position.

#### TIGHTENING TORQUES (in daNm)

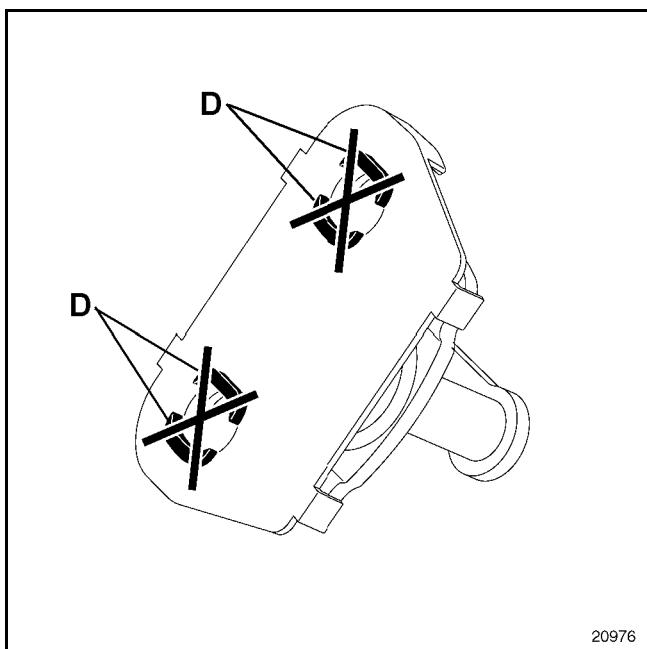


|            |     |
|------------|-----|
| Hinge bolt | 2.8 |
| Hinge nut  | 2.8 |

### II. SETTINGS (continued)



Prevention of scraping and closure firmness adjustment are set using the striker plate bolts (C).



To increase the play of the striker plate, it will be necessary to trim the plastic studs (D) of the striker plate mounting.

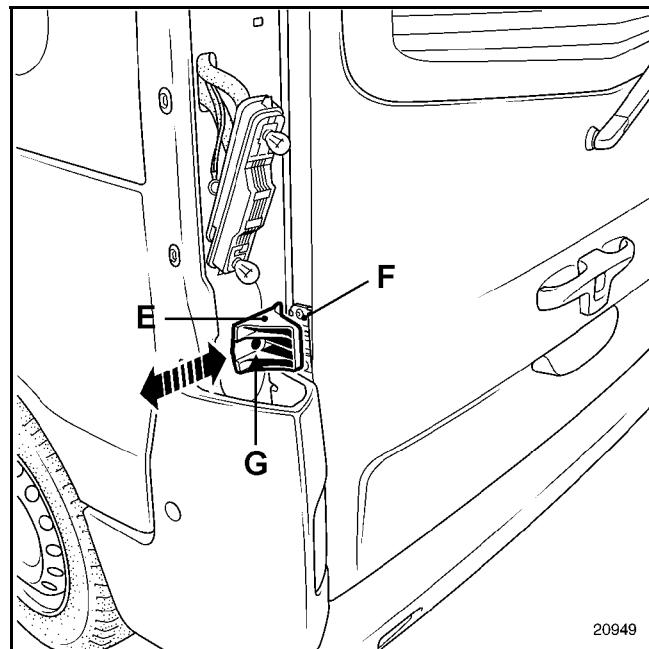
During this operation it is possible to adjust the flushness of the lower edge of the door.

Check the adjustment.

Tighten in position.

| TIGHTENING TORQUE (in daNm) |     |
|-----------------------------|-----|
| Striker plate bolts         | 0.8 |

### II. SIDE STOP ADJUSTMENT



Remove the lights.

Close the tailgate.

Ensure there is contact between stop (E) on the vehicle and stop (F) on the tailgate.

Lock in position using bolt (G).

Refit the lights.

| TIGHTENING TORQUES (in daNm) |     |  |
|------------------------------|-----|---|
| Stop bolt on vehicle         | 2.1 |   |
| Stop bolt on tailgate        | 0.4 |   |

The door consists of two symmetrical doors, the left-hand door closing over the right, these are removable structural components.

Replacement of these parts is a basic operation for a rear collision.

In the following method, you will only find a description of the adjustment operations, information concerning the additional parts is given in their respective sections.

All clearances are given in **section 40**.

This method corresponds to replacement of the two doors with hinges (most complicated scenario in terms of setting and adjustment), and is applicable to both panel and glazed doors.

**IMPORTANT:**

Where the hinges are not to be replaced, in order to make adjustment easier, it is advisable not to remove them:

- from the door during bodywork replacement,
- from the vehicle during door replacement.

If only one of the doors is being replaced, the method is the same, but it will be necessary to verify equal distribution of gaps and clearances between the two doors.

**IMPORTANT:**

**For safety reasons, only open and close the door when the vehicle is stationary.**

**IMPORTANT:**

The hinges are delivered with adhesive zinc pads on each contact face.

These pads perform an anticorrosion function. If damaged during repair operations, they should always be replaced.

Otherwise, ensure there is a perfect seal between the interfaces using filler mastic (see **Section 94**).

**I. PRE-ASSEMBLY PREPARATION**

**On the doors:**

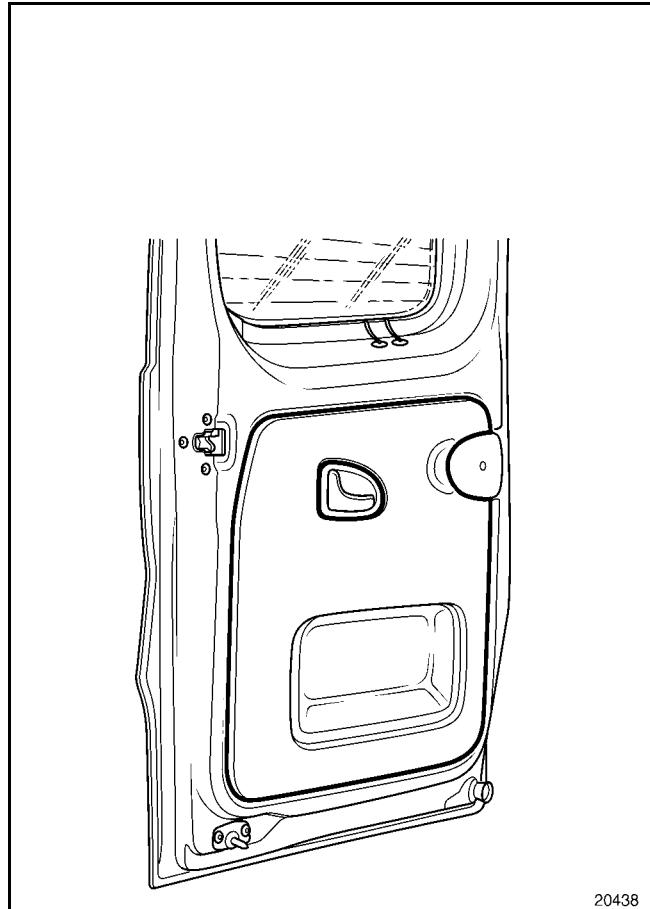
Fit all the necessary parts to the doors (except the hinges).

Do not fit the striker plate (**B**) or seal (**A**) of the right-hand door.

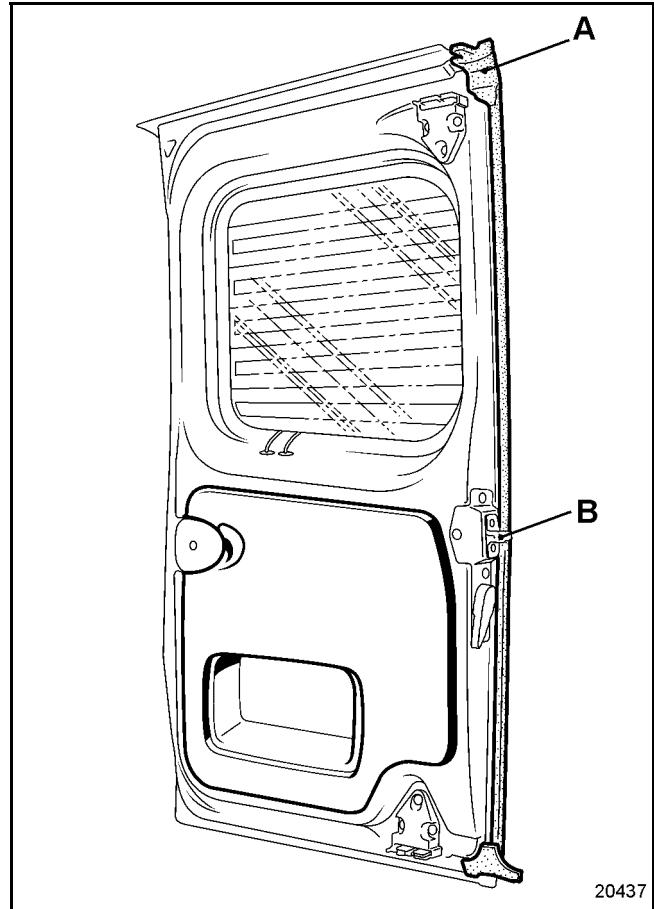
**IMPORTANT:**

Leave the two striker plate bolts on the movable plate to avoid dropping them into hollows in the door opening control.

**Left-hand door**



**Right-hand door**



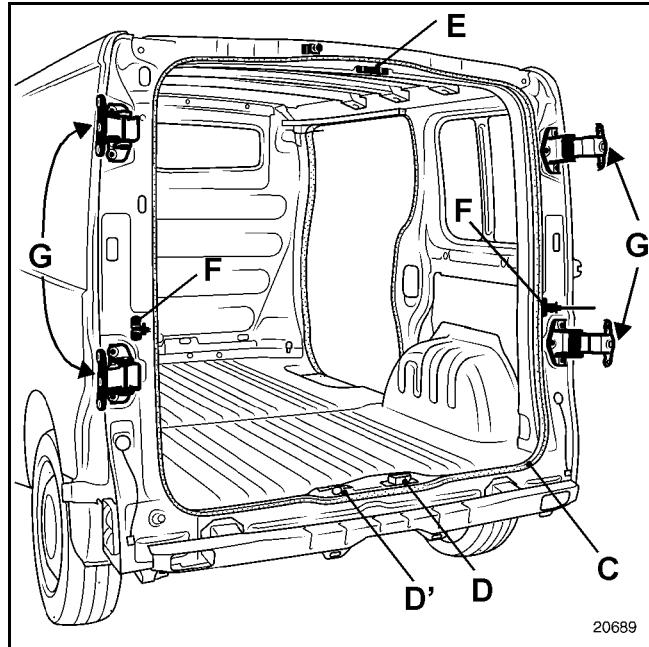
### On the vehicle:

Remove:

- the lights,
- the upper wing panel extensions,
- the rear floor threshold trim,
- the door frame rubber seal (C),
- the striker plate (D) and the lower centring devices (D'),
- the upper striker plate (E),
- the door check strap (F).

Pre-tighten the door hinges (G) at the centre of the slots.

Fit the bumper, which will be used as a reference for height adjustment of the doors during the first operation.



### II. FITTING THE DOORS

This operation can be carried out single-handed using the door support tool.

Part Number: **SUP01**

Otherwise two additional persons will be required to support the door.

Finger tighten all mountings without tightening them.

#### IMPORTANT:

Use the old marks on the vehicle or door where possible.

In the case of new (replacement) parts, position the bolts in the centre of the hinge holes.

### III. ORDER OF ADJUSTMENT

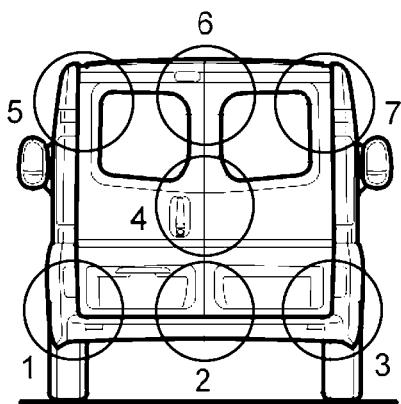
- 1 Height adjustment in zones **1, 2, 3, 5, 6, 7**.
- 2 Transverse adjustment (centring) in zones **2, 4, 6**.
- 3 Adjustment of lateral flushness in zones **5, 7**.
- 4 Adjustment of right-hand door flushness in zone **2**.
- 5 Adjustment of right-hand door flushness in zone **6**.
- 6 Adjustment of left-hand door flushness in zones **2, 4, 6**.
- 7 Adjustment of left-hand door flushness in zones **1, 2**.

#### IMPORTANT:

Follow the adjustment method described below. There may be several ways to correct a fault, but this method is the most efficient.

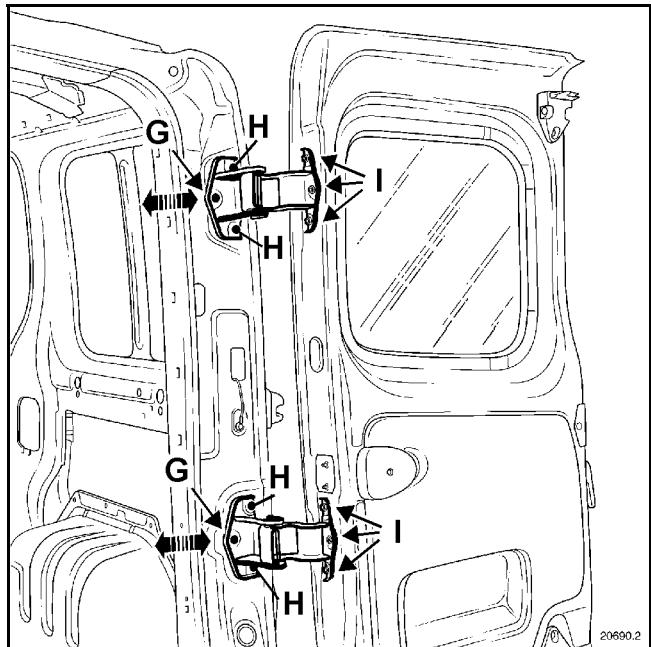
For particular adjustments associated with an incident, refer to the method to find detailed instructions on the point in question.

#### ADJUSTMENT ZONES



48.C

Height adjustment and centring of the two doors in zones **1, 2, 3, 5, 6, 7**.



#### NOTE:

This operation requires the presence of the bumper, which is used as one of the starting reference points for height adjustment.

Each hinge (body support side) has a horizontal slot, which limits only transverse adjustment (**OY**).

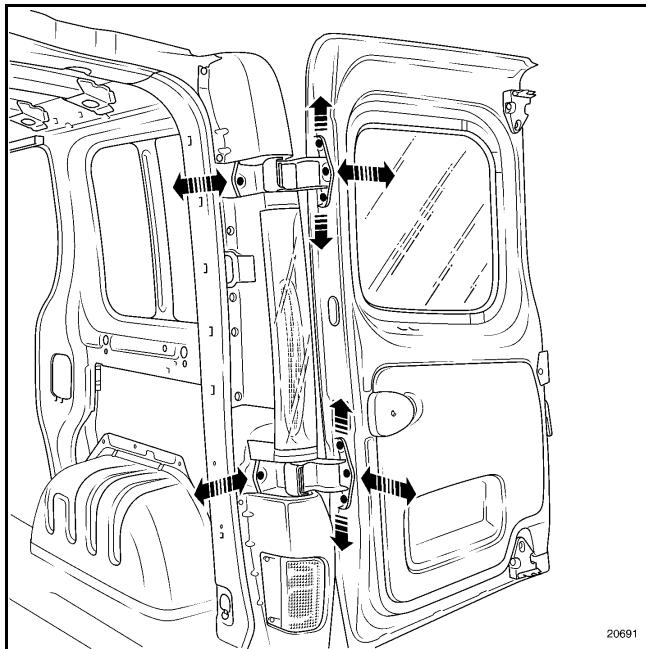
When replacing a single door, use the second door fitted in place as a starting reference point (adjustment guide).

Adjust the two doors in the closed position, starting with the right-hand side.

Ensure **alignment and centring** of the upper section with respect to the roof using bolts (**H** and **G**).

Adjust the **height gap** with respect to the bumper and **vertical flushness** with respect to the roof using bolts (**I**).

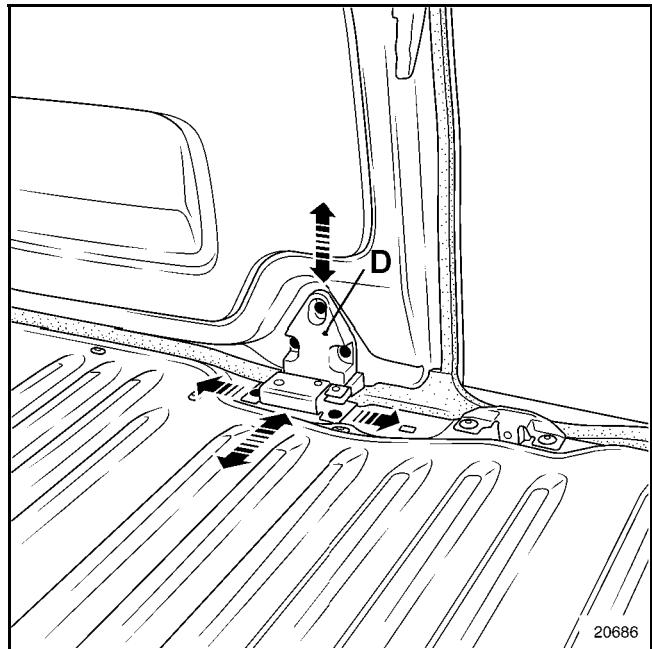
Adjustment of flushness in upper section of zones 5, 7.



Adjust **the depth clearance** of the upper section of the door with respect to the roof using the upper hinge bolts (I), the door being in the closed position.

Slacken the lower hinges to release any stresses, then retighten them without locking them in position, they will be adjusted later in the procedure.

Adjustment of flushness in lower central area (right-hand door)

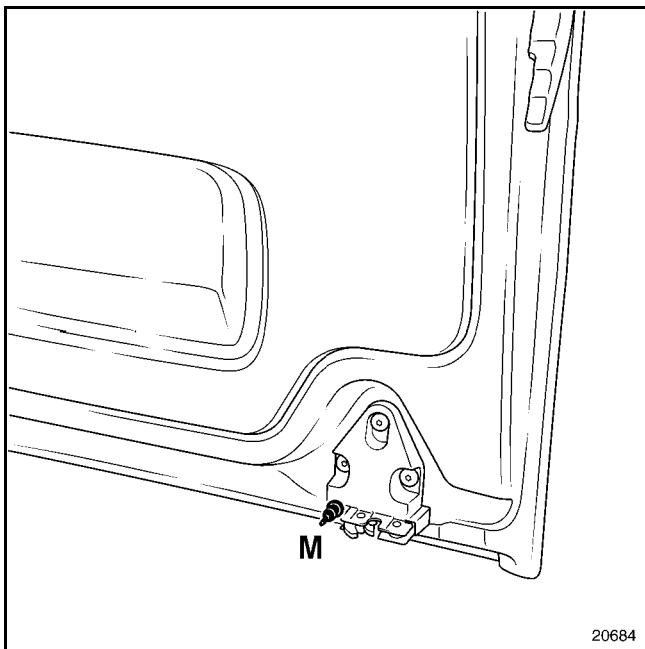


Ensure flushness in zone 4 using the bolts of the lock and self-centring striker plate (D).

It is possible to countersink the striker plate to  $\varnothing 8 \text{ mm}$  (if necessary) to obtain a wider adjustment range.

Fit:

- the door frame seal,
- the door seal,
- the striker plate on the vehicle by finger-tightening the bolts.



Close the door.

Check and adjust flushness.

Tighten in position.

The engagement of the centring device (**M**) must be perfectly accurate (autocentring) to prevent scraping.

| <b>TIGHTENING TORQUES (in daNm)</b> |            |
|-------------------------------------|------------|
| <b>Striker</b>                      | <b>0.8</b> |
| <b>Lock</b>                         | <b>0.8</b> |

**REMINDER:**

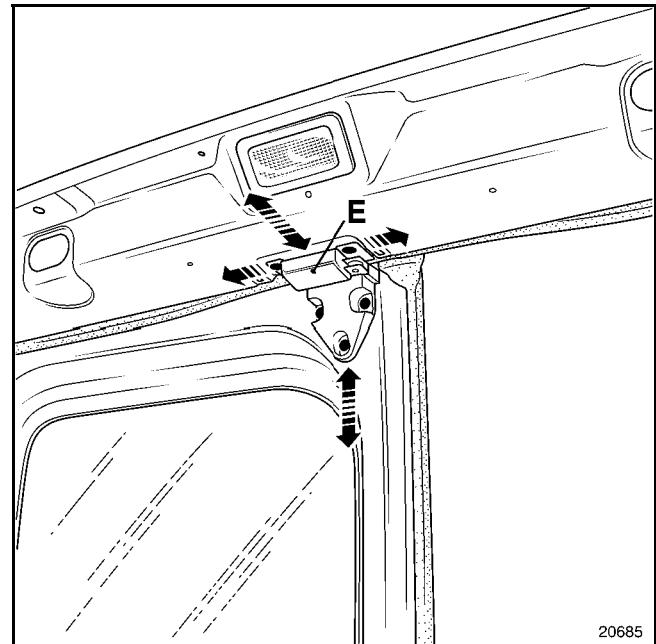
Anti-corrosion protection is vital for all operations which expose the bare metal of the bodywork.

Protect against corrosion by applying the following products:

**Pre-treatment primer**  
**Reactive solvent**

**77 01 423 933**  
**77 01 423 955**

**Adjustment of flushness in upper central area (right-hand door)**



Ensure flushness in zone **6** using the bolts of the lock and self-centring striker plate (**E**).

It is possible to countersink the striker plate to  $\varnothing 8 \text{ mm}$  (if necessary) to obtain a wider adjustment range.

Finger tighten the striker plate bolts.

Close the door.

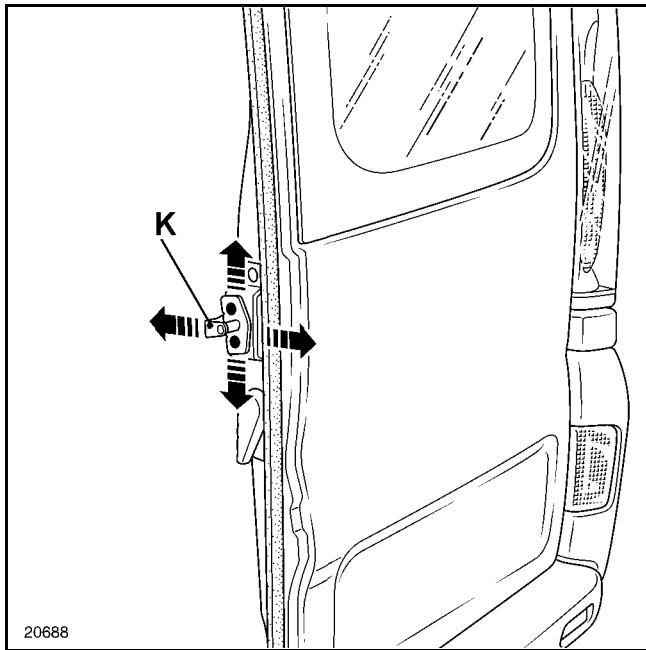
Check and adjust flushness.

Tighten in position.

The engagement of the centring device must be perfectly accurate (autocentring) to prevent scraping.

| <b>TIGHTENING TORQUES (in daNm)</b> |            |
|-------------------------------------|------------|
| <b>Striker</b>                      | <b>0.8</b> |
| <b>Lock</b>                         | <b>0.8</b> |

### Adjustment of flushness in central area



20688

Ensure flushness in zone 4 using the striker plate bolts (K).

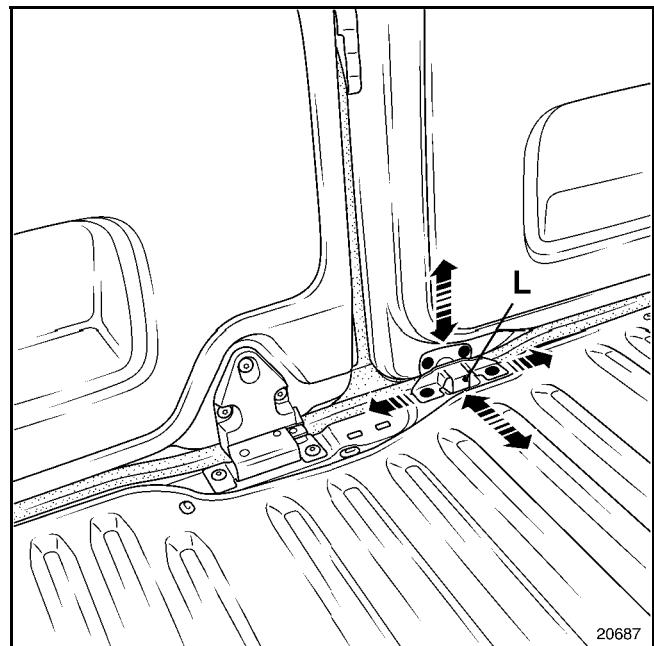
Finger tighten the striker plate bolts.

Close the door.

Check and adjust flushness.

Tighten in position.

### Adjustment of flushness in lower area (left-hand door)



20687

Ensure flushness in zone 2 using the bolts of the lock and self-centring striker plate (D).

It is possible to countersink the striker plate to  $\varnothing 8 \text{ mm}$  (if necessary) to obtain a wider adjustment range.

Finger tighten the striker plate bolts.

Close the door.

Check and adjust flushness.

Tighten in position.

The engagement of the centring device must be perfectly accurate (autocentring) to prevent scraping.

#### TIGHTENING TORQUES (in daNm)



|         |     |
|---------|-----|
| Striker | 2.1 |
| Lock    | 0.8 |

#### TIGHTENING TORQUES (in daNm)



|         |     |
|---------|-----|
| Striker | 0.8 |
| Lock    | 0.8 |

The replacement of this part is a basic operation for a rear collision.

There are two methods of carrying out this operation:

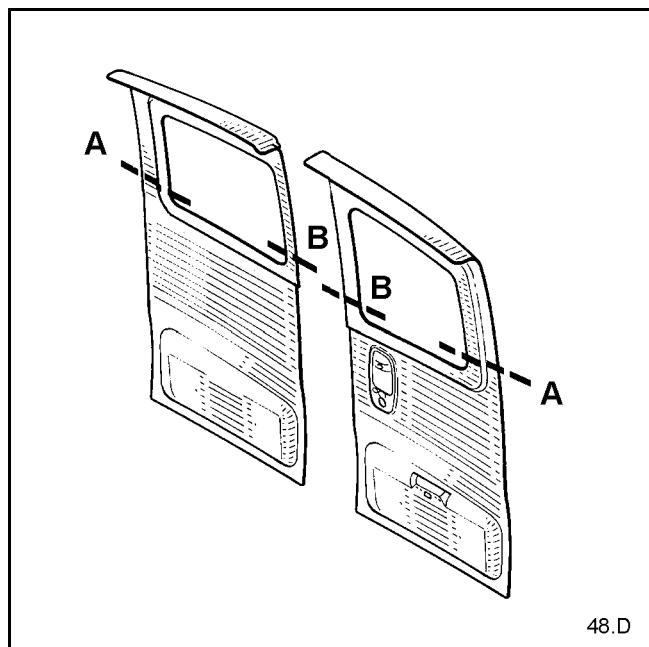
- complete for sheet panels,
- partial for glazed panels, using cuts **A** and **B**.

In the procedure described below, you will only find the descriptions and the joints which are specific to the part concerned.

The information on the additional parts will be dealt with in their respective sections (refer to contents).

### COMPOSITION OF THE REPLACEMENT PART

Part supplied on its own.

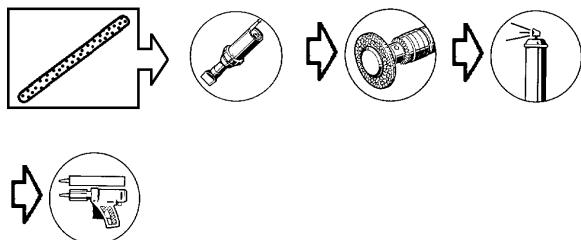
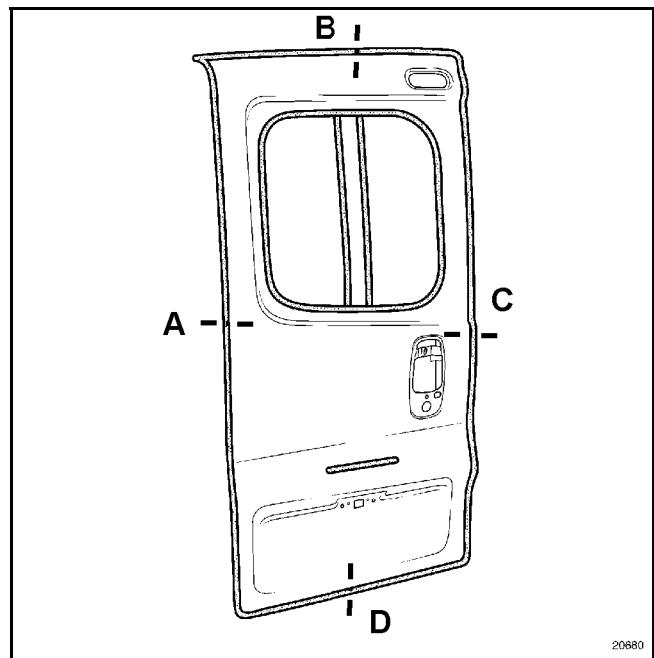


### PARTS CONCERNED (thickness in mm):

|                    |     |
|--------------------|-----|
| 1 Door panel       | 0.8 |
| 2 Door box section | 0.8 |

### PANEL VERSION

#### *Left-hand side*

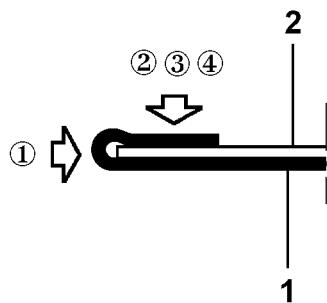


#### NOTE:

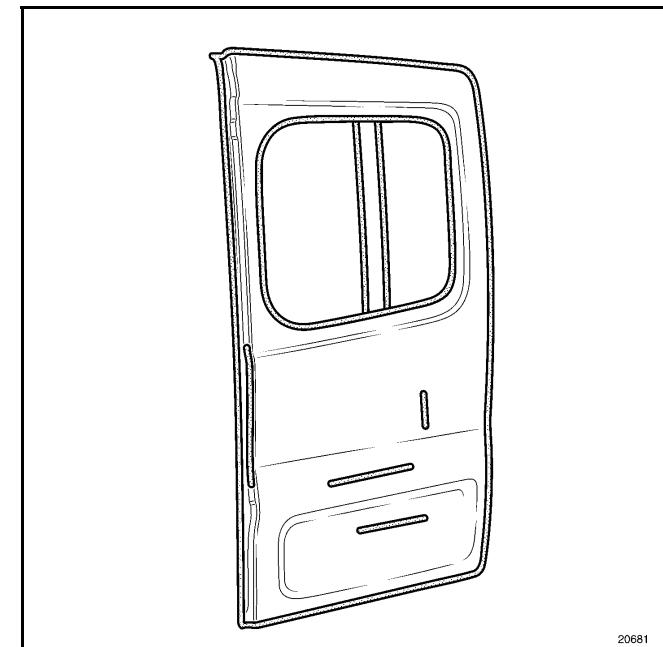
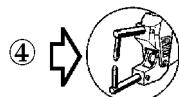
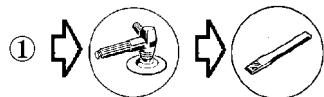
It is necessary to use a structural adhesive on the periphery (crimping zone), type **MTC 514** (part number: 77 11 172 674).

For the other zones, a setting adhesive is sufficient, type **M.J.Pro** (part number: 77 11 172 676).

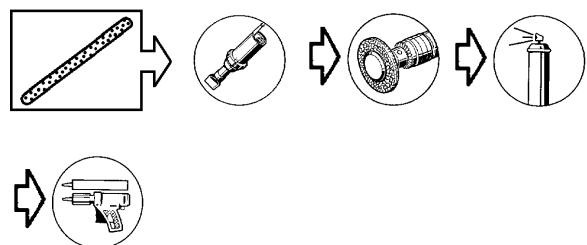
**A B C D**



14587



20681



**NOTE:**

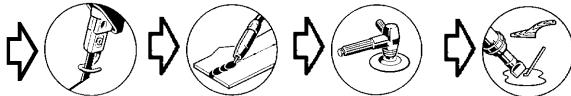
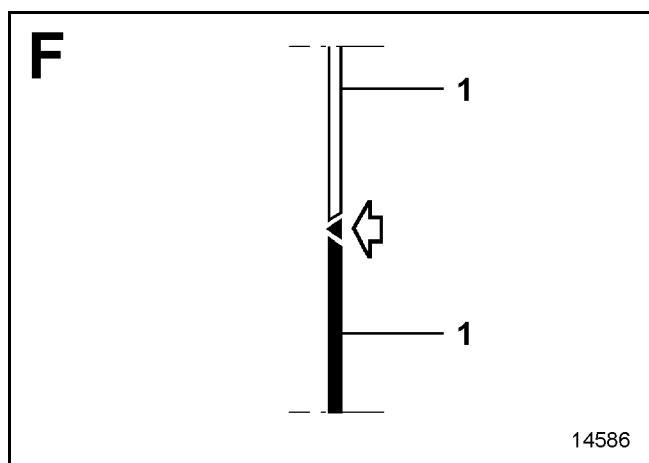
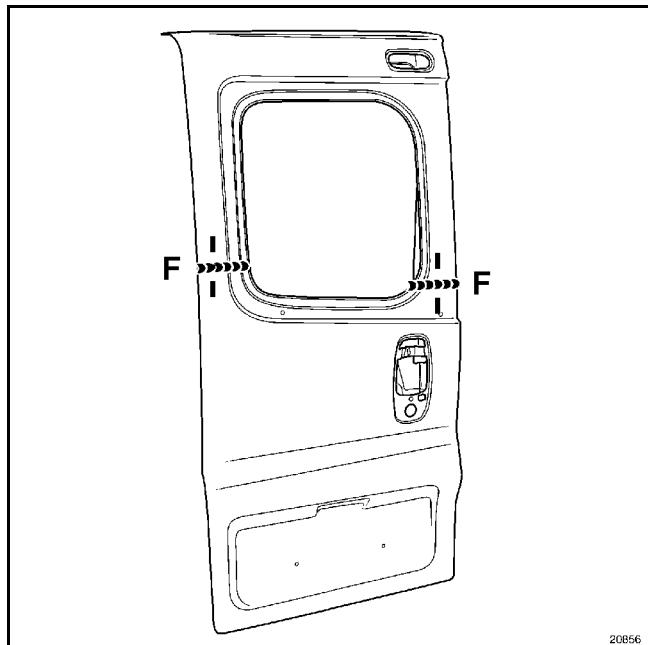
The method of replacing the panel is identical to that for the left-hand side; only the bonding zones are shown.

**GLAZED VERSION**

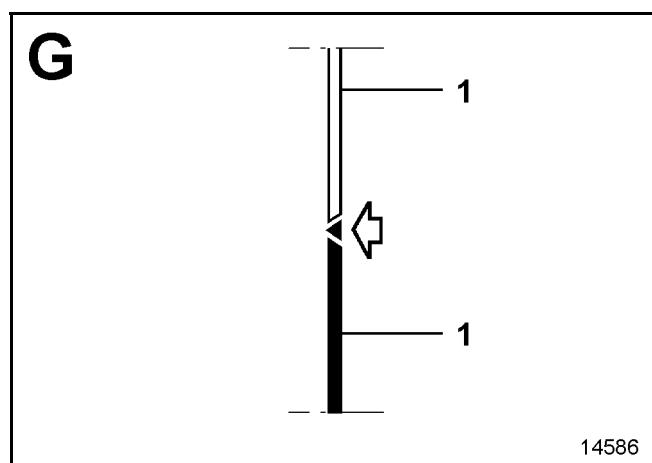
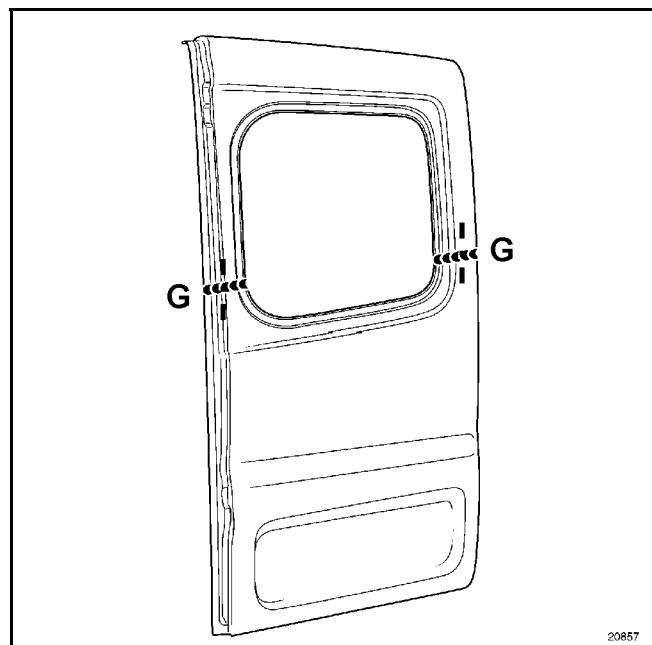
**NOTE:**

For partial replacements, the procedure only contains special notes concerning the cuts.

*Left-hand side*



*Right-hand side*

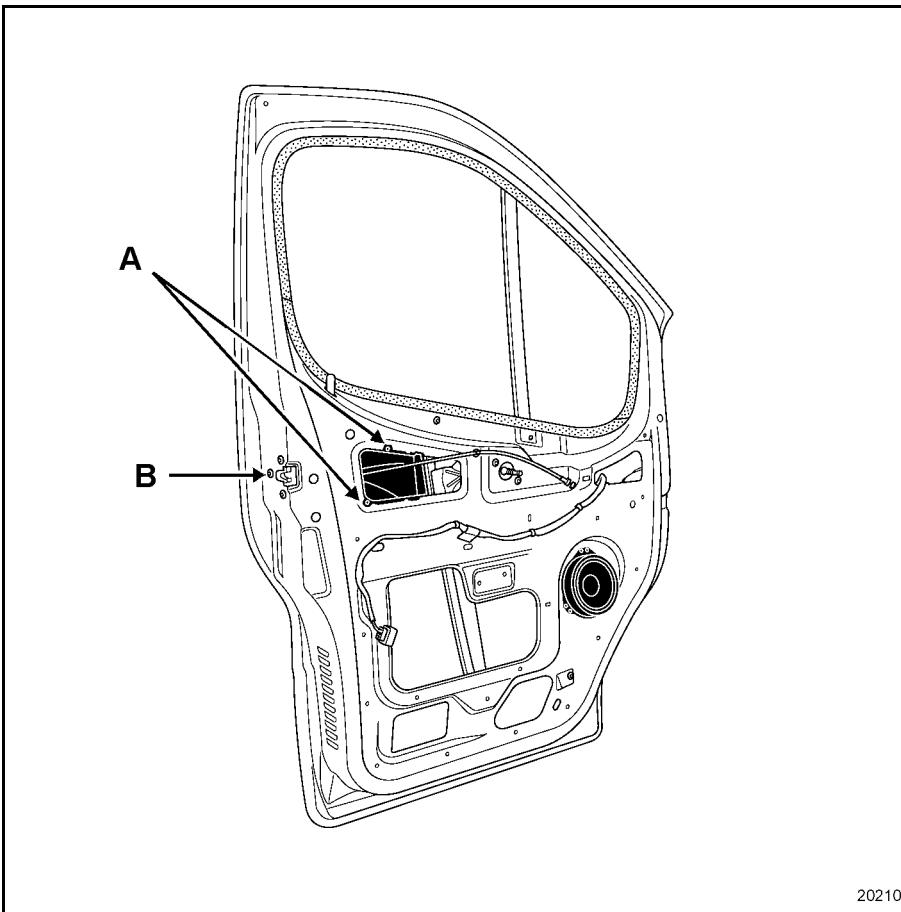


**REMOVAL**

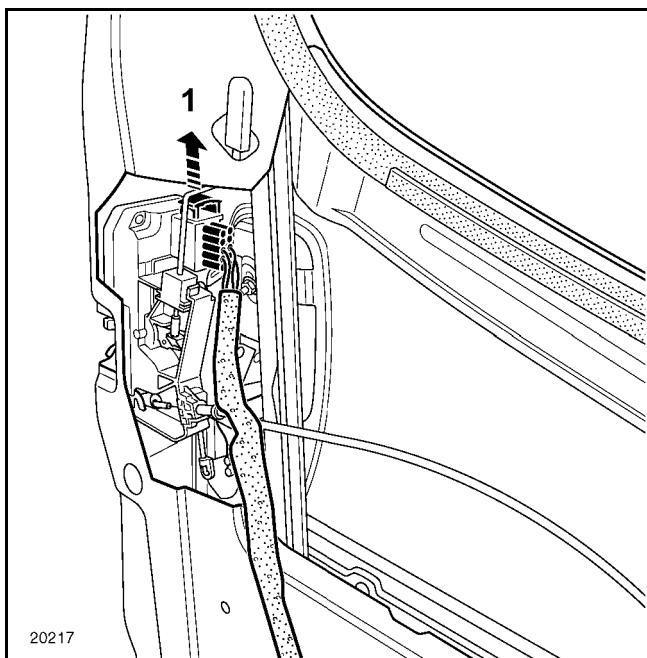
Put up the sliding window.

Remove:

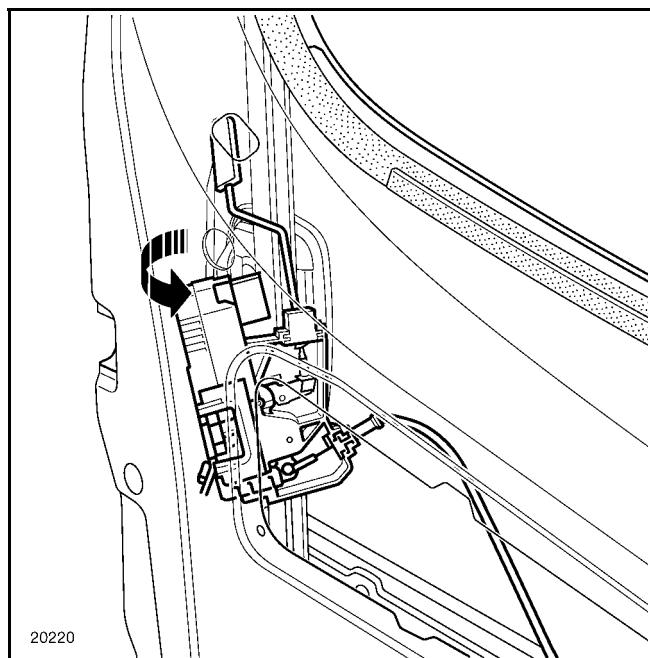
- the door trim (**Section 72-A**),



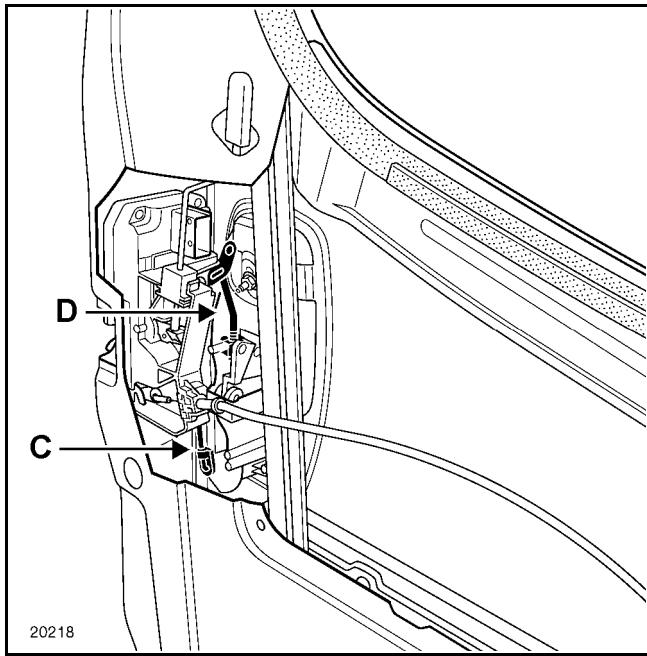
- the tamper-proof cover (**A**),
- the three lock mounting bolts (**B**).



Disconnect the connector (1).



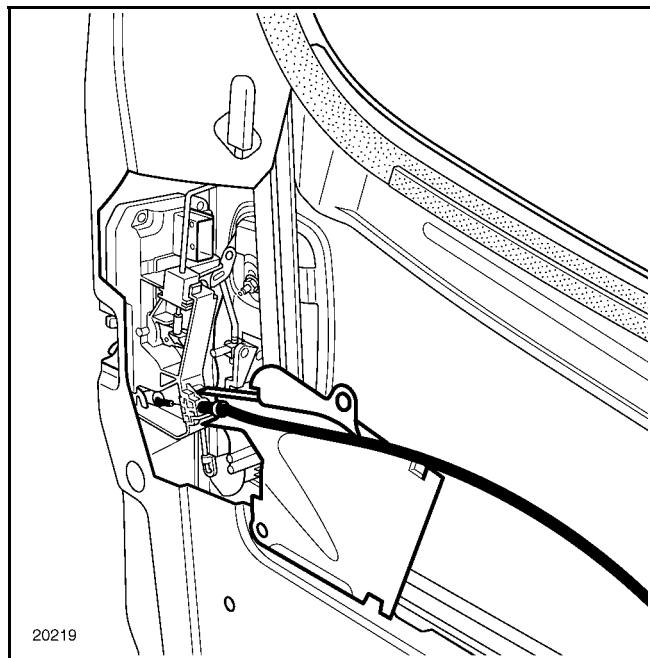
Release the lock.



Remove:

- the lock barrel control linkage (C),
- the exterior door handle linkage (D).

#### REFITTING



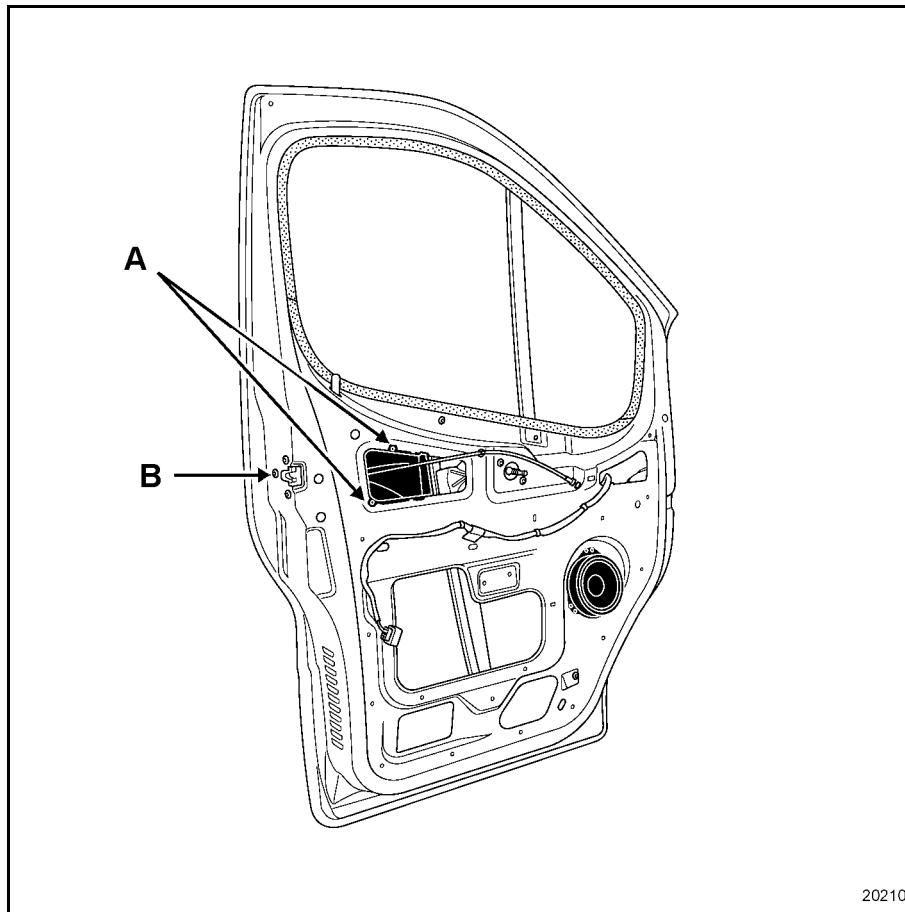
Refit the tamper proof cover.

**REMOVAL**

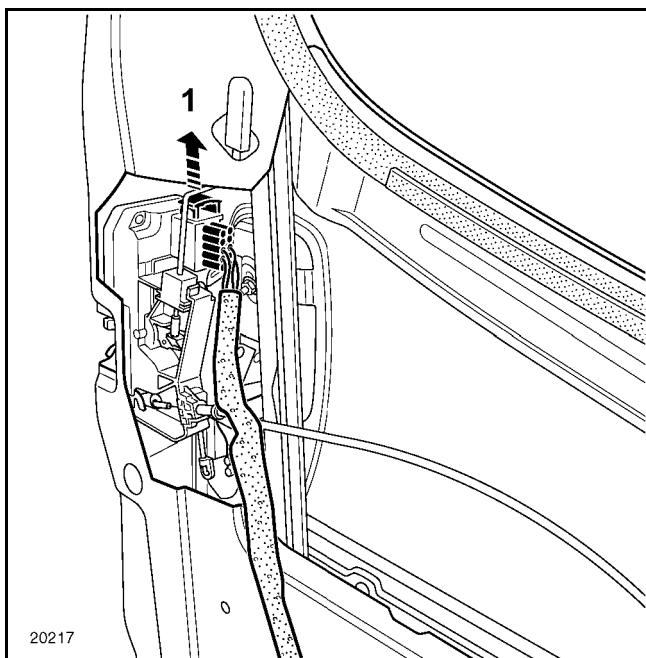
Put up the sliding window.

Remove:

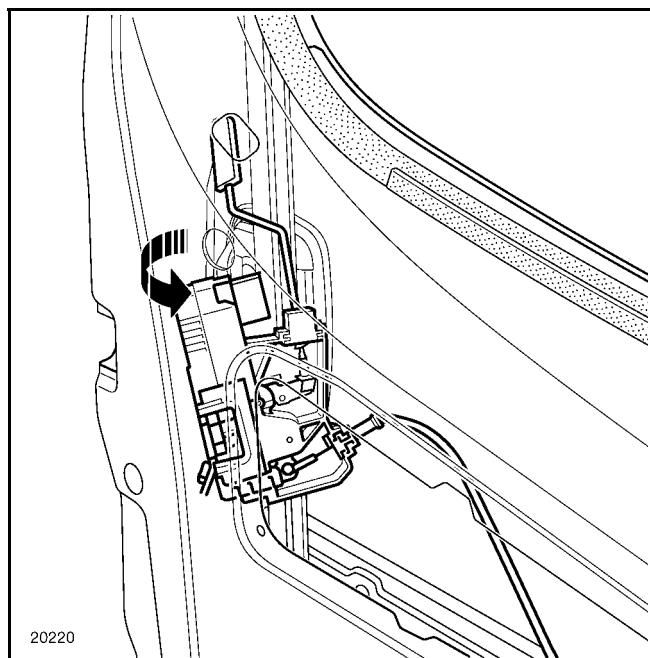
- the door trim (Section 72-A),



- the tamper-proof cover (A),
- the three lock mounting bolts (B).



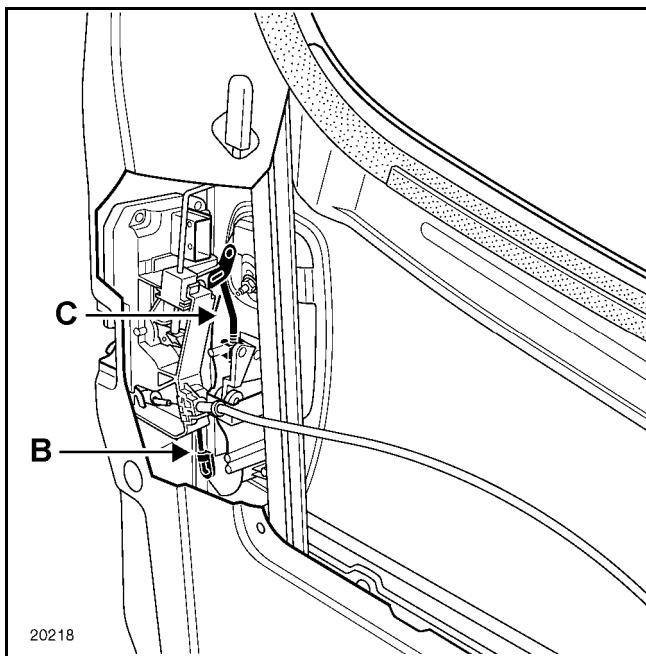
20217



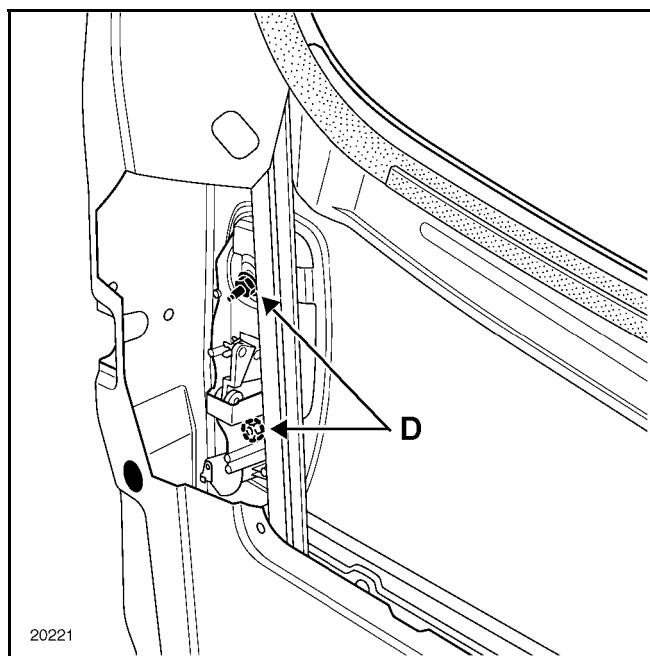
20220

Disconnect the connector (1).

– the lock,



20218

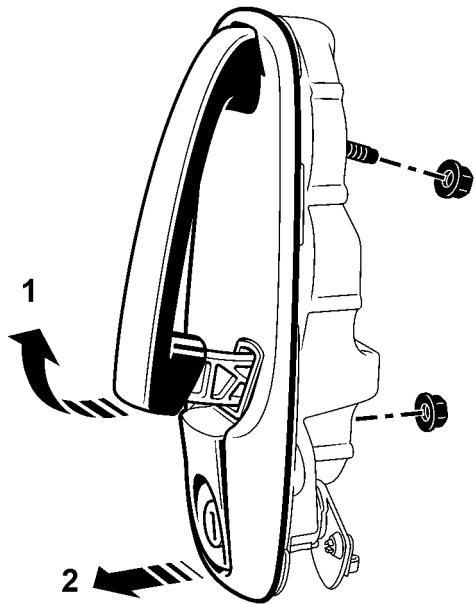


20221

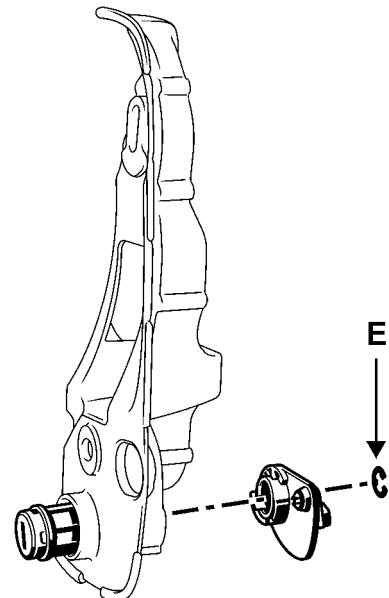
Remove:

- the lock barrel control linkage (B),
- the exterior door handle linkage (C),

– the two nuts (M6 10 head) (D), then hold the lock barrel support plate in position.



20674



20675

Release the exterior door handle (1) then (2).

Remove the circlips (E).

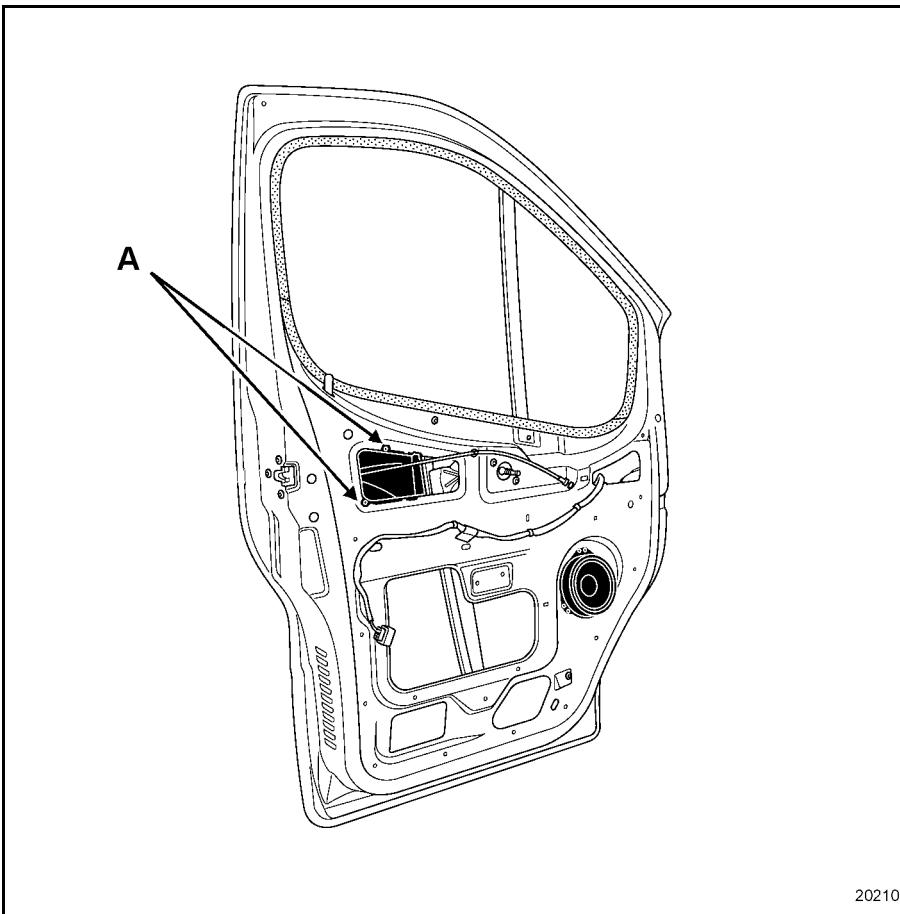
Release the lock barrel.

**REMOVAL**

Put up the sliding window.

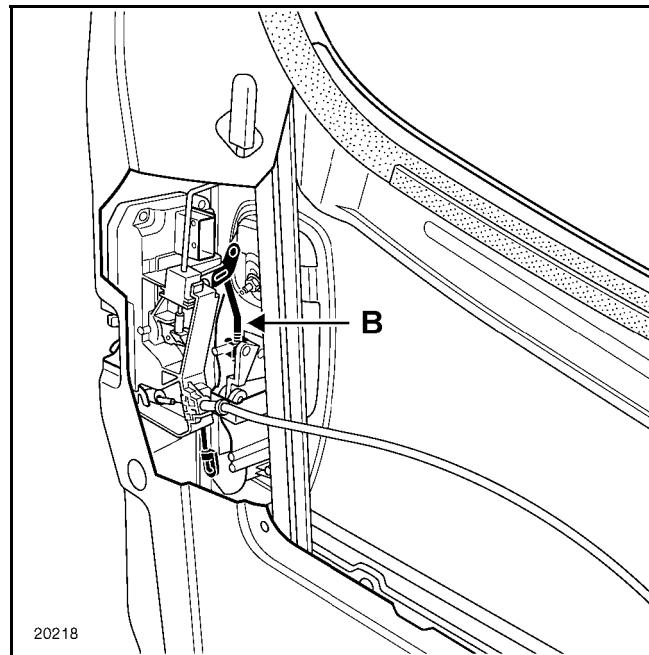
Remove:

- the door trim (**Section 72-A**),



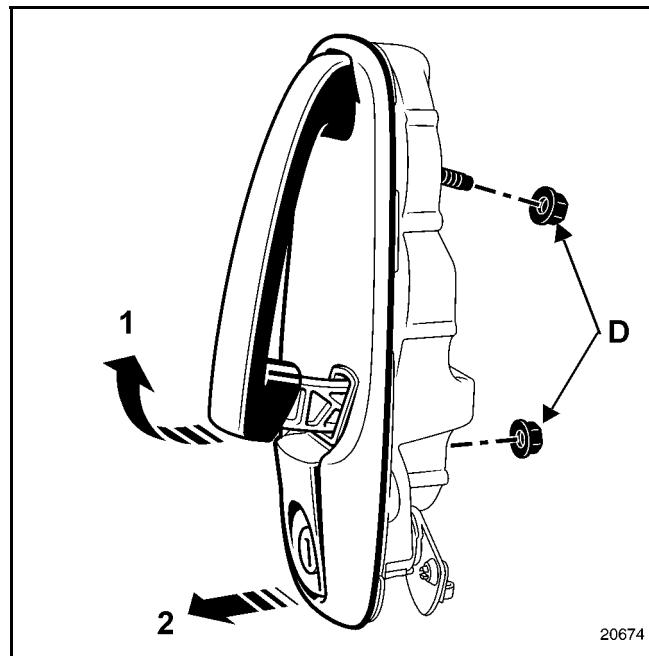
20210

- the tamper-proof cover (A).



Remove:

- the exterior door handle linkage (B),

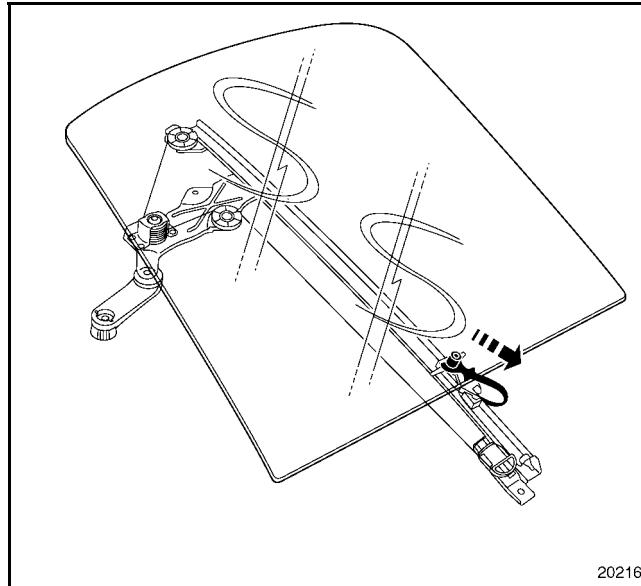


- the mounting nuts (D).

Release the door handle (1) then (2).

**REMOVAL (manual window)**

After removing the door trim (Section 72-A), lower the window until it meets the stop bolt.

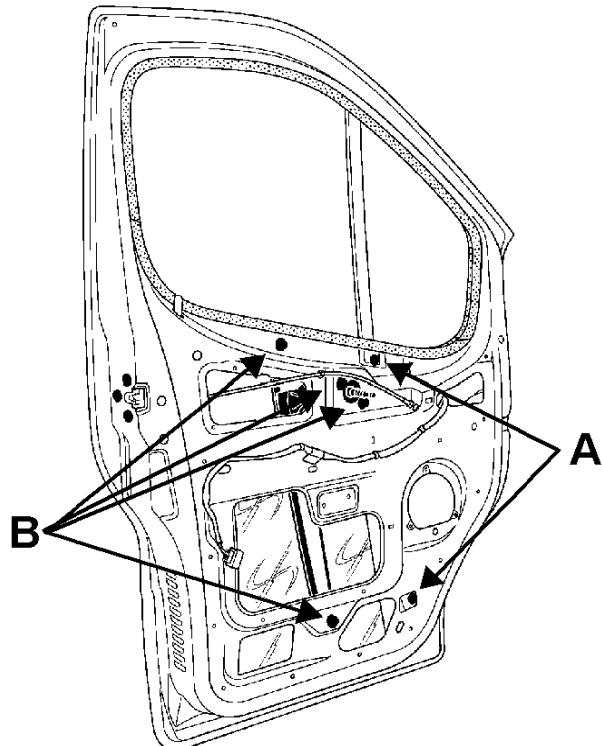


Unfasten the stop bolt.

Remove the two mounting bolts (A) on the fixed upright.

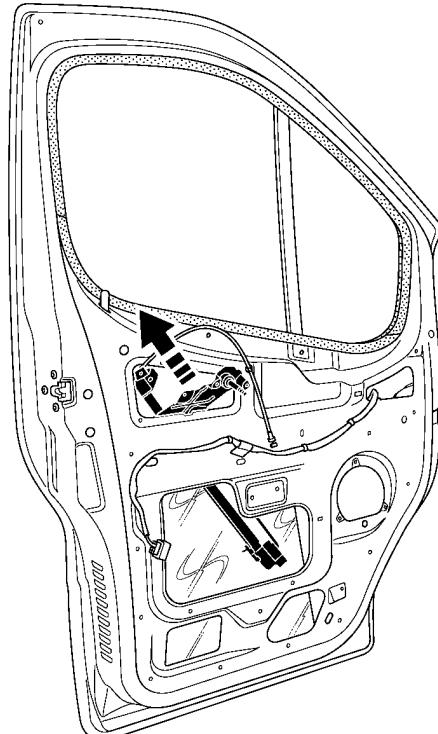
Release the window from the slide shaft, then put it at the bottom of the door box section (protect it with cloth).

Remove the four mounting bolts (B) from the window riser.



20211

Release the window riser mechanism.

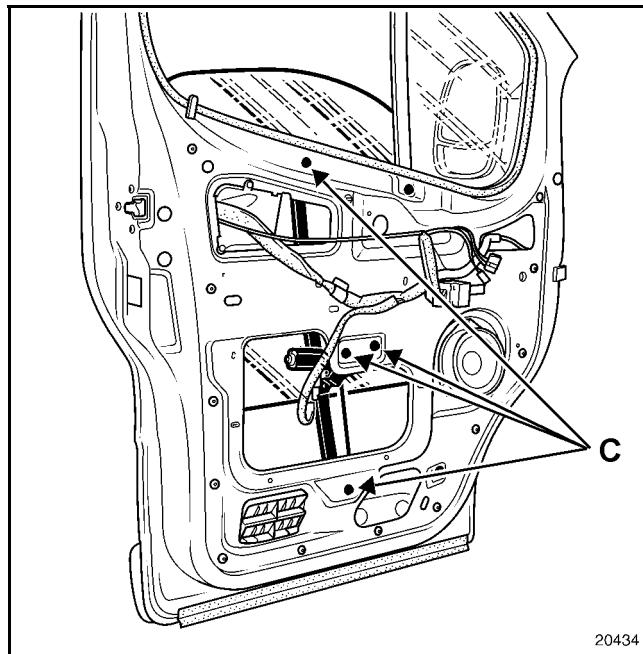


20212

**REMOVAL (electric window)**

Remove the four mounting bolts (**C**) from the window riser.

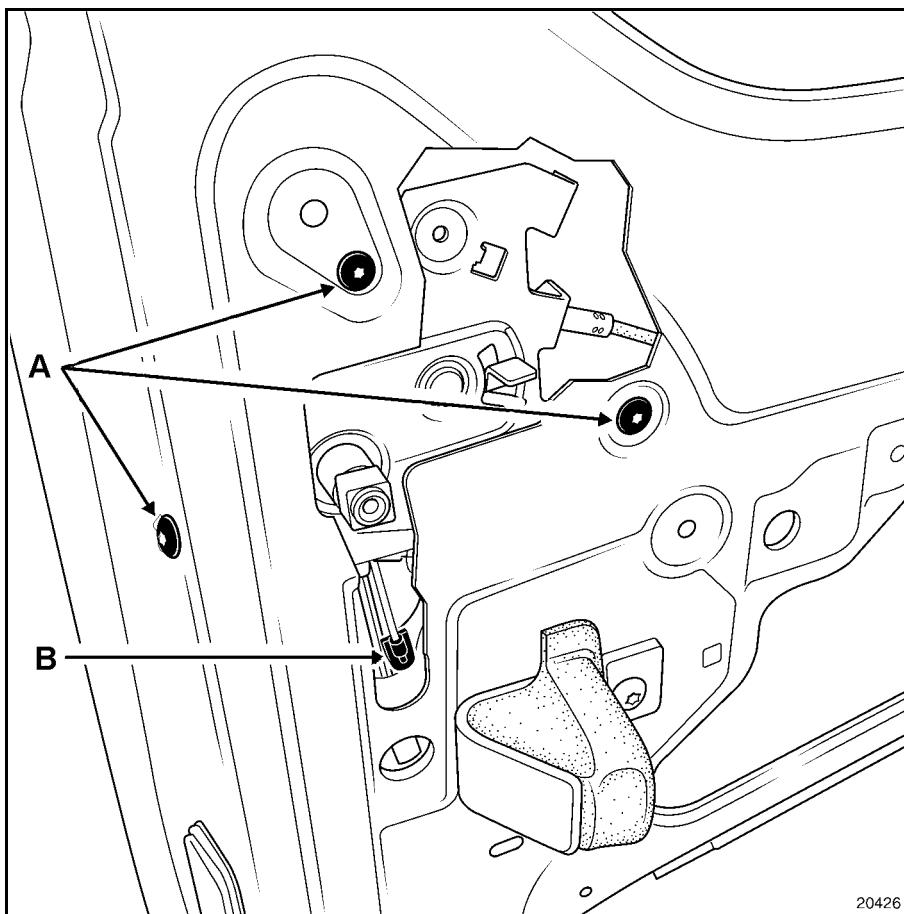
Disconnect the power supply connector.



The procedure is the same as for manual window risers.

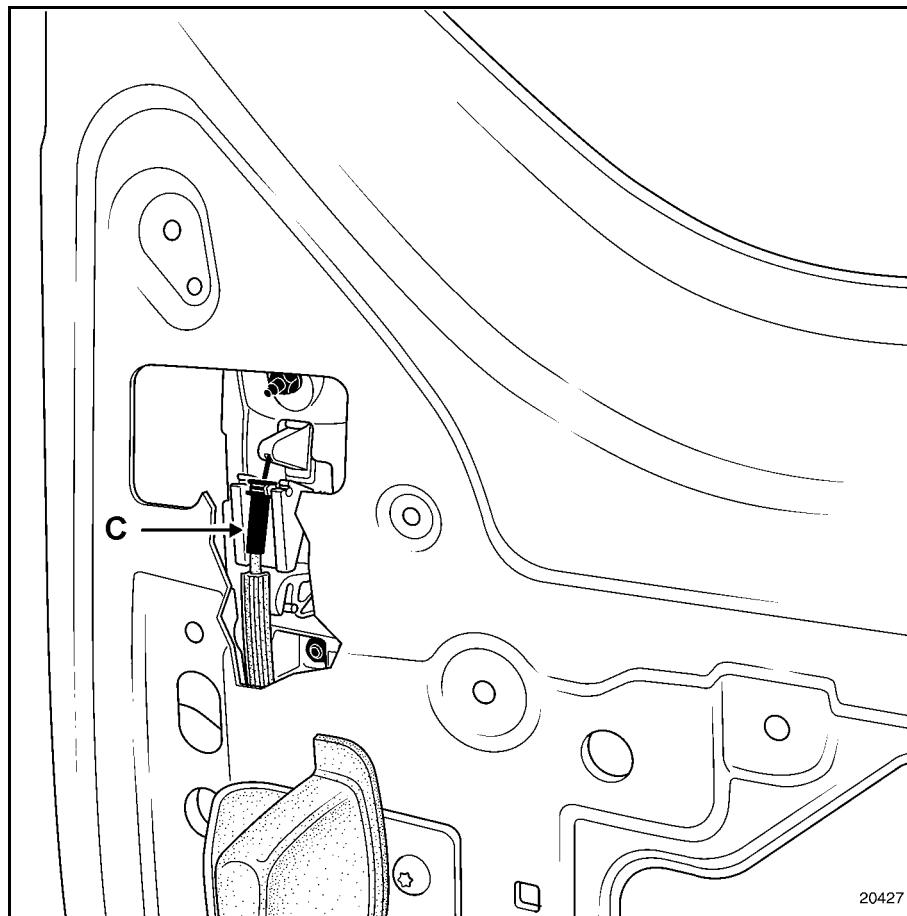
### REMOVAL

After removing the door trim (Section 72-B),



remove:

- the three mounting bolts (A) for the locking control,
- the lock barrel control linkage (B).



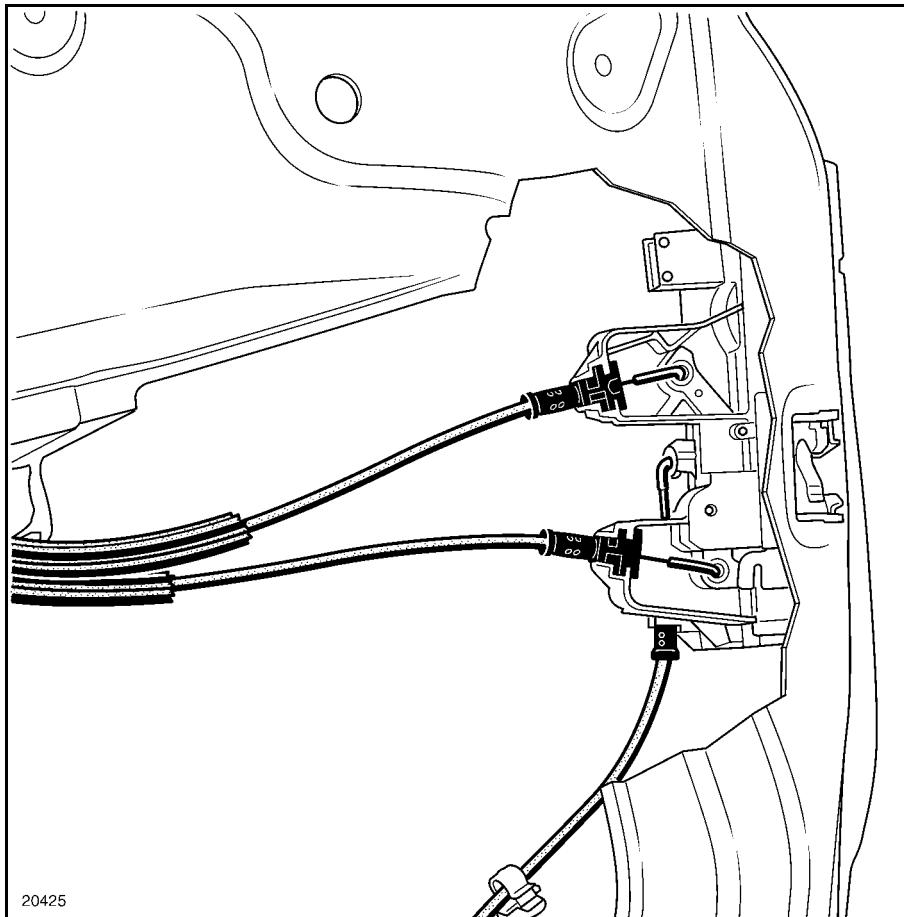
Remove the exterior door handle cable (C).

## SIDE OPENING ELEMENT MECHANISMS

Lock and interior door handle on the sliding side door

**51**

**E**

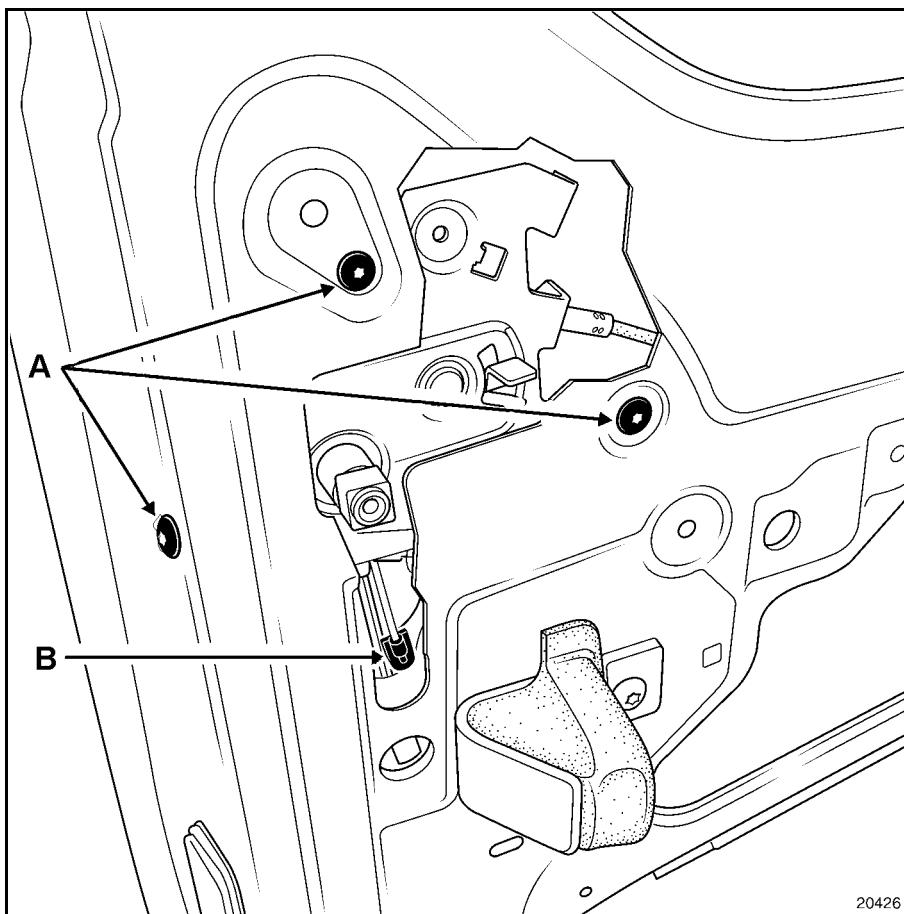


Remove the three lock mounting bolts.

Release the locking assembly, cables, and interior door handle.

### REMOVAL

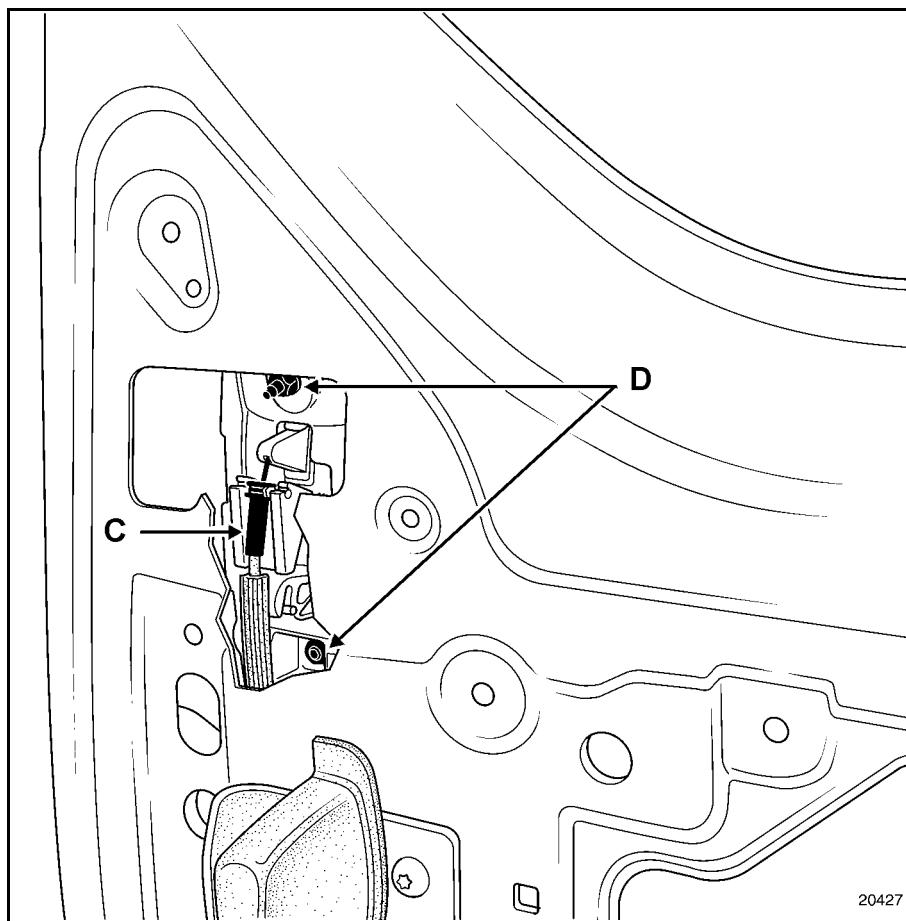
After removing the door trim (Section 72-B),



remove:

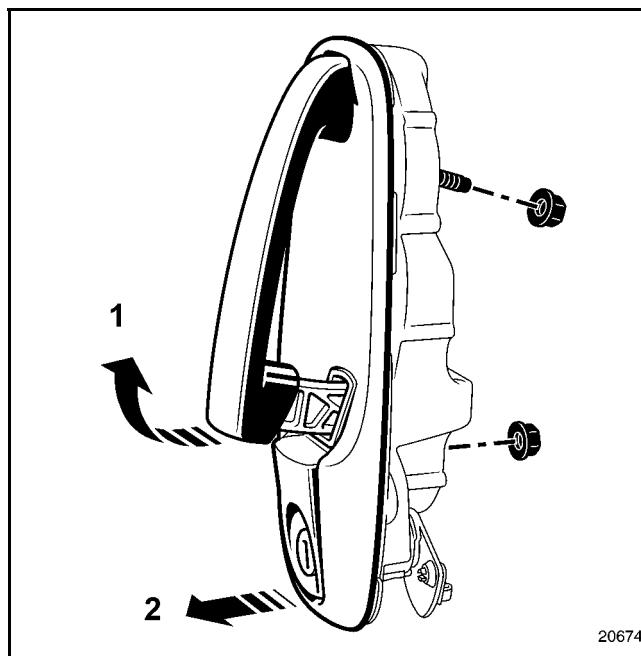
- the three mounting bolts (**A**) for the locking control,
- the lock barrel control linkage (**B**).

Release the interior door handle.



Remove:

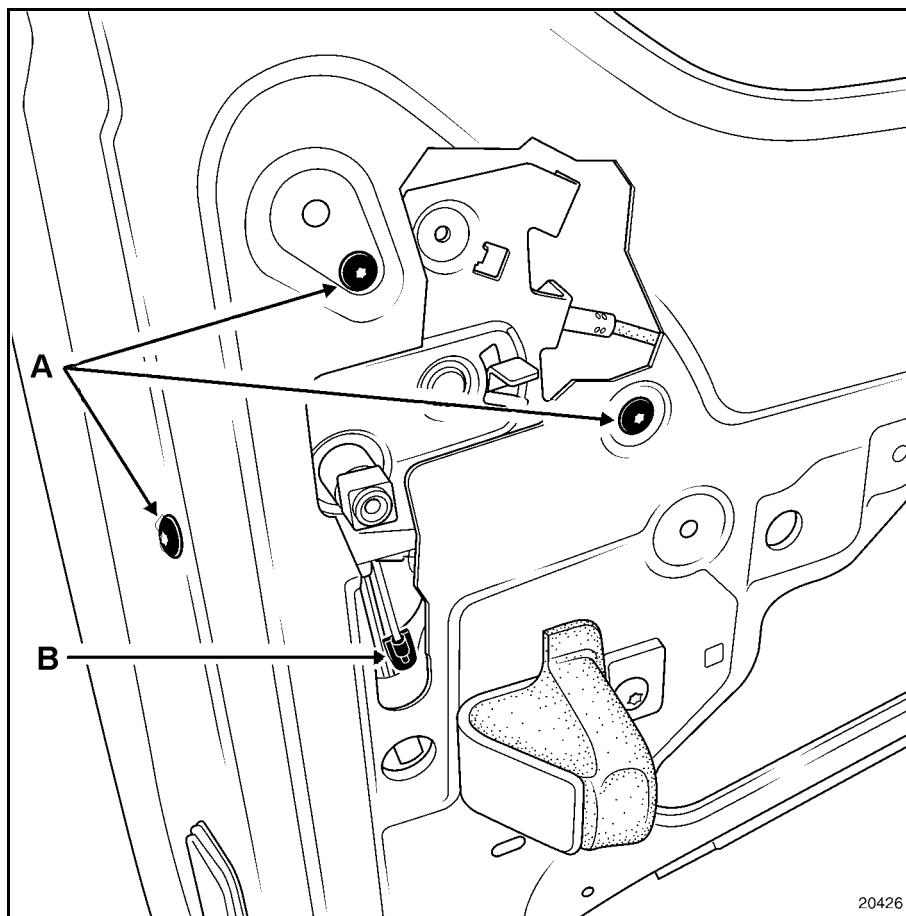
- the sleeve stop (C) from the exterior door handle,
- the two mounting nuts (D),



- the door handle (1), then (2).

**REMOVAL**

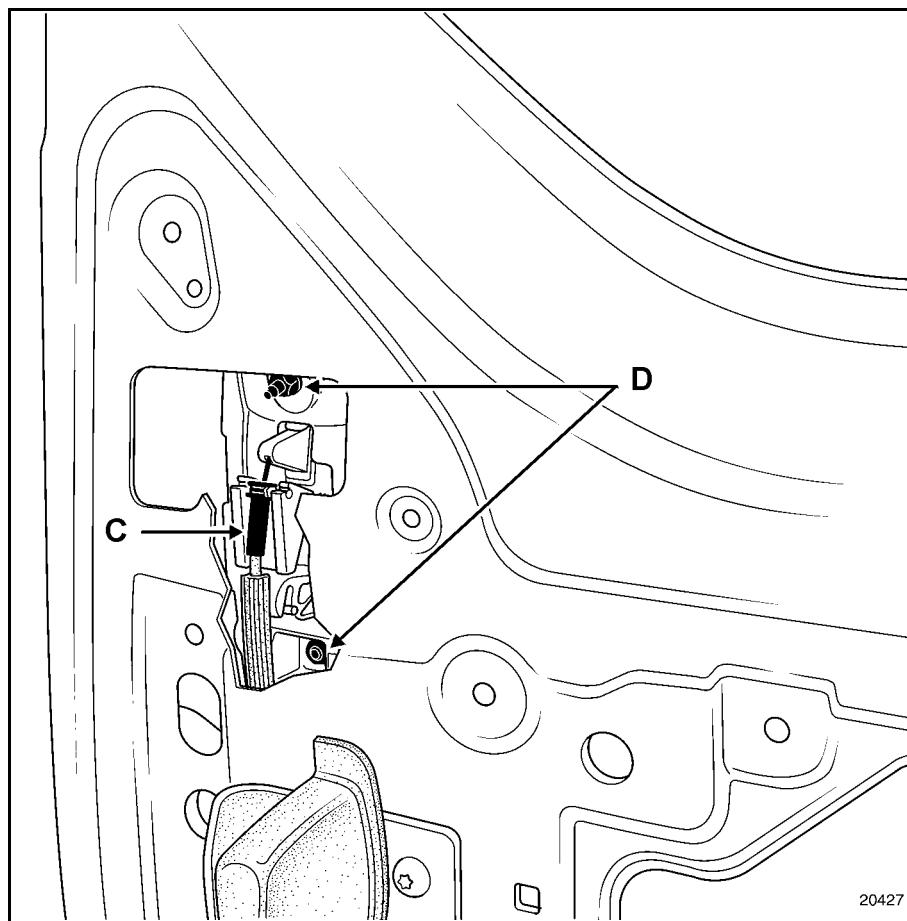
After removing the door trim (Section 72-B),



remove:

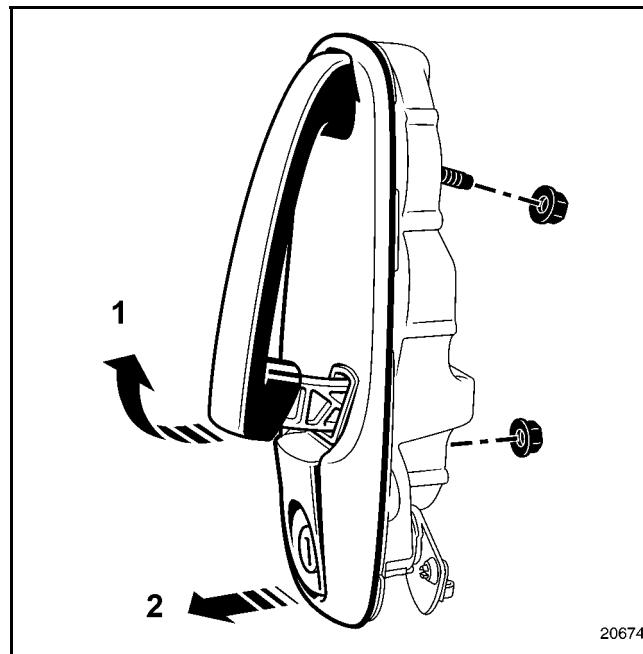
- the three mounting bolts (**A**) for the locking control,
- the lock barrel control linkage (**B**).

Release the interior door handle.

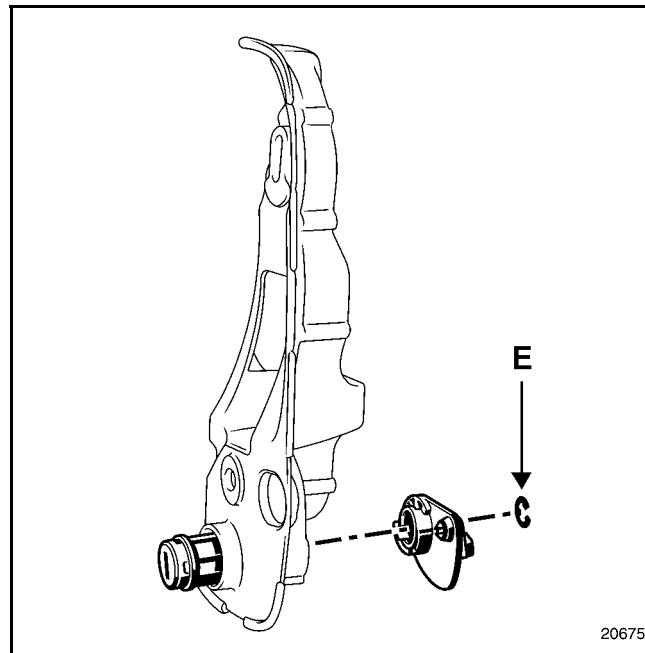


Remove:

- the exterior door handle cable (**C**),
- the two mounting nuts (**D**),

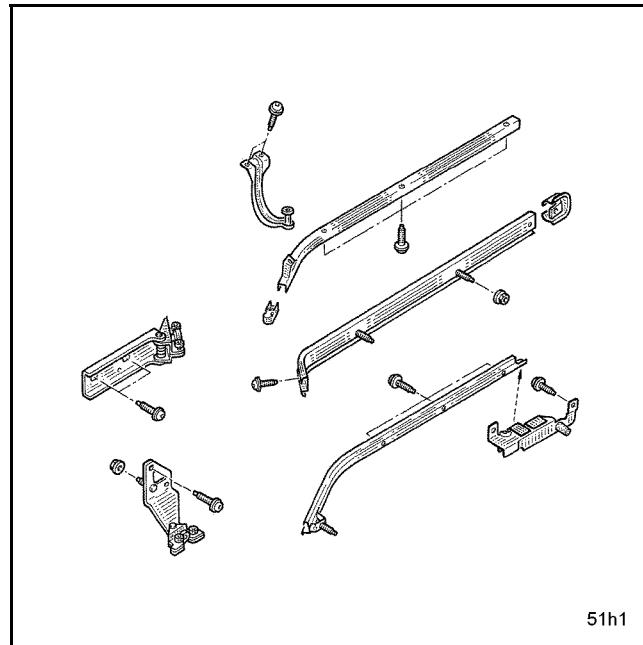


- the door handle (**1**), then (**2**).



Remove circlips (E).

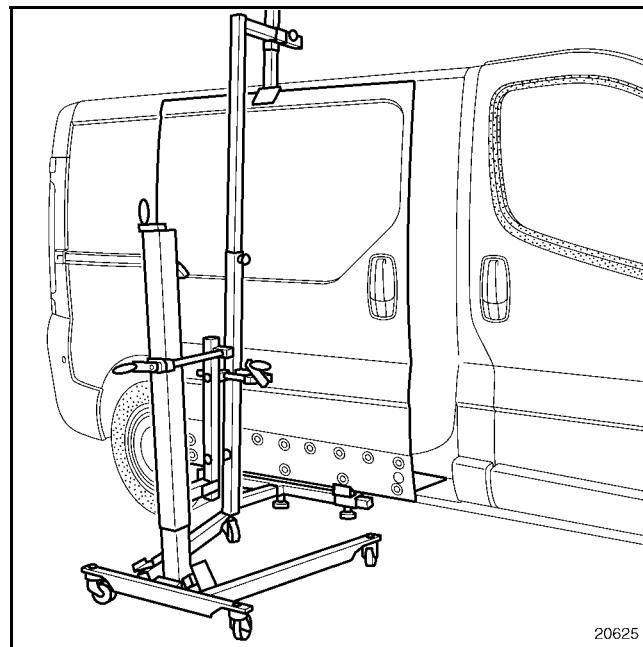
Release the lock barrel.



This operation can be carried out by just one person using the door support tool.

Part number: **SUPO 1**

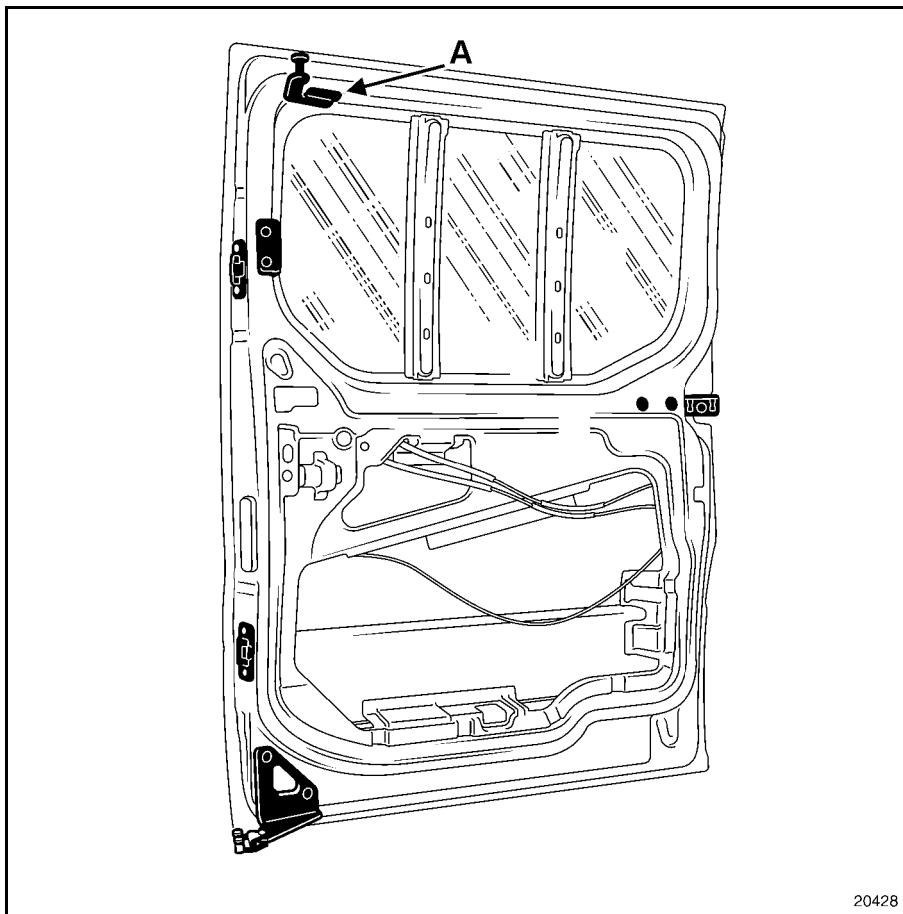
If this tool is not used, another operator will be required to support the door.



**REMOVAL OF THE UPPER ARM AND RUNNER**

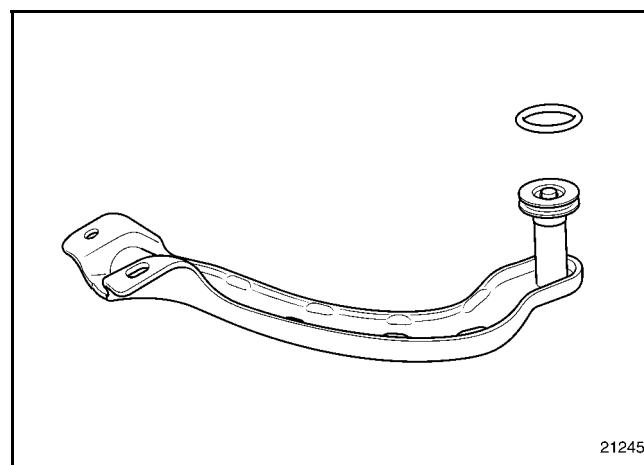
**SPECIAL NOTES**

This operation can be carried out with the door closed, without using the door support tool.

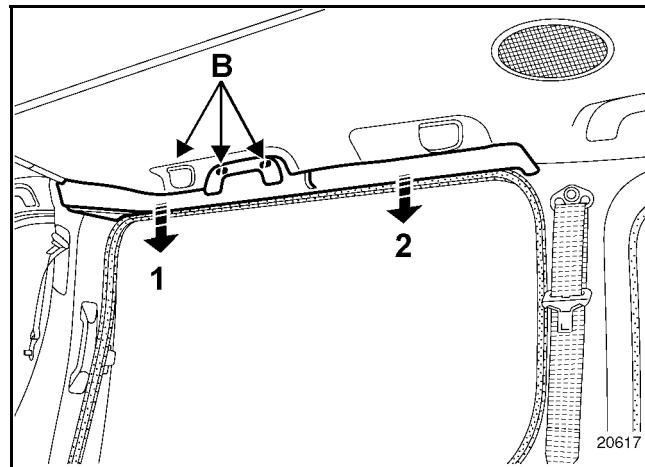


Remove the two mounting bolts (A) from the upper arm (T30).

Slide it towards the back of the vehicle, separate the lining from the upper runner carefully (according to the fitting), then release the arm

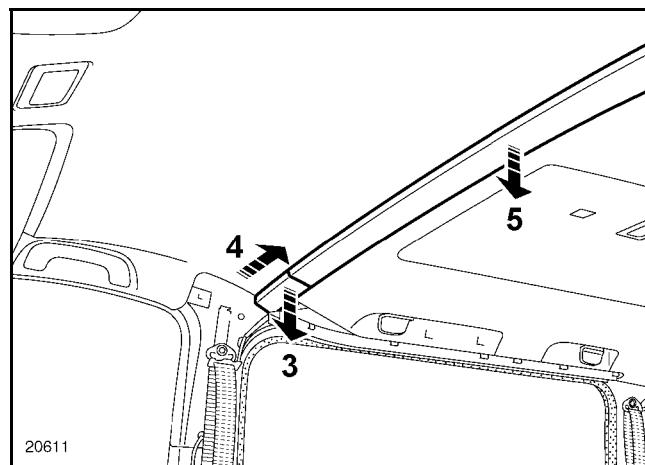


Replace the seal on the guide roller if necessary.

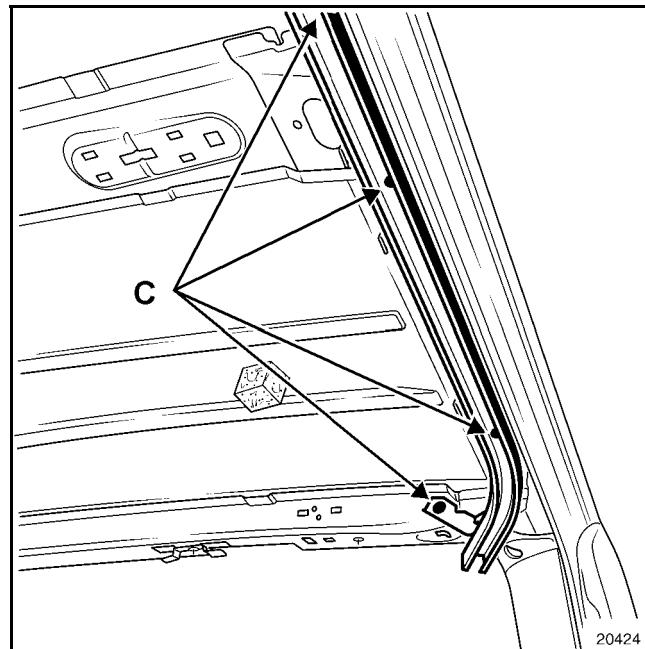


Using the tool **Car. 1597**, unfasten:

- the clips from the towing ring cover and grab handles (B),
- the linings from the upper runner (1) then (2).



- the right side lining from the roof cross member (3) then (4),
- the central lining (5).

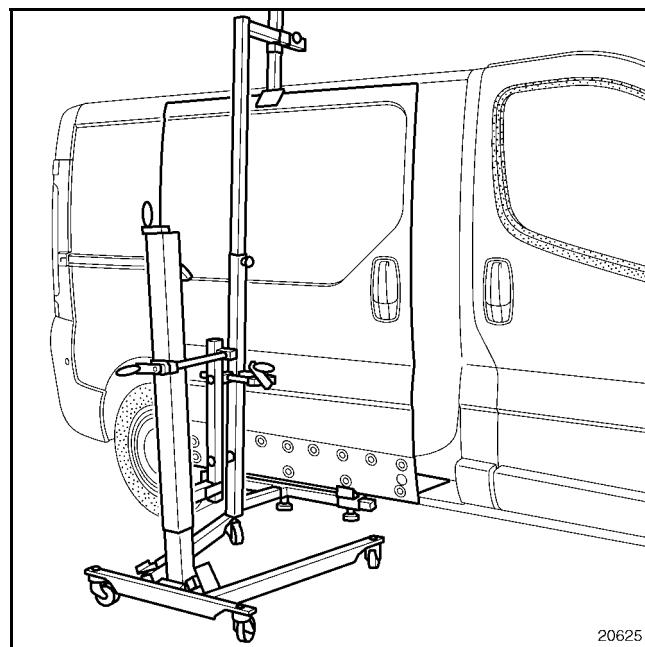


Remove:

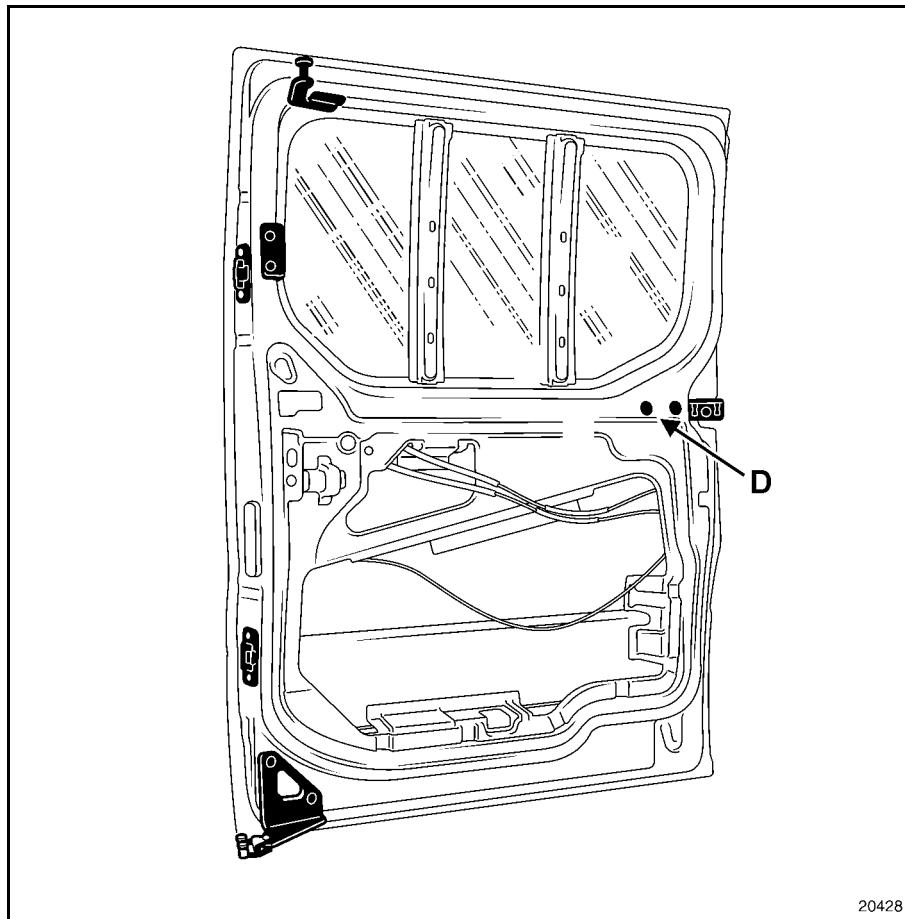
- the four mounting bolts (C),
- the upper runner.

#### **REMOVAL OF THE SLIDE AND CENTRE RUNNER**

Remove the rear light.

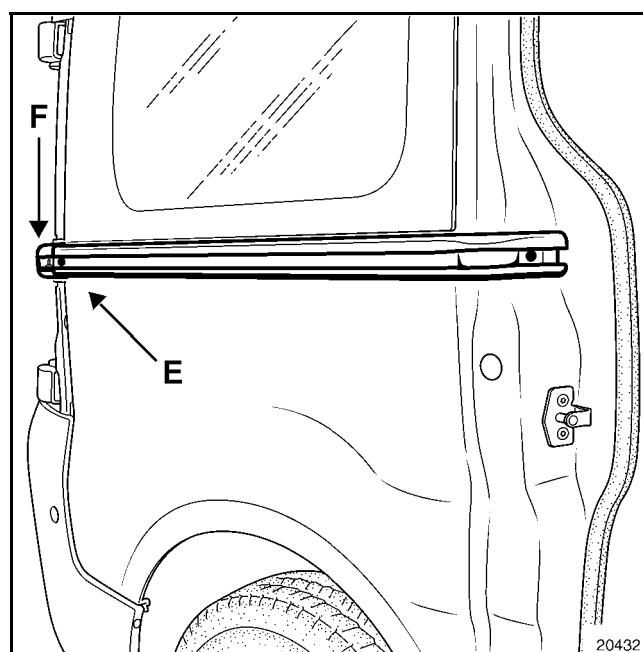


With the door ajar, fit the holding tool to it

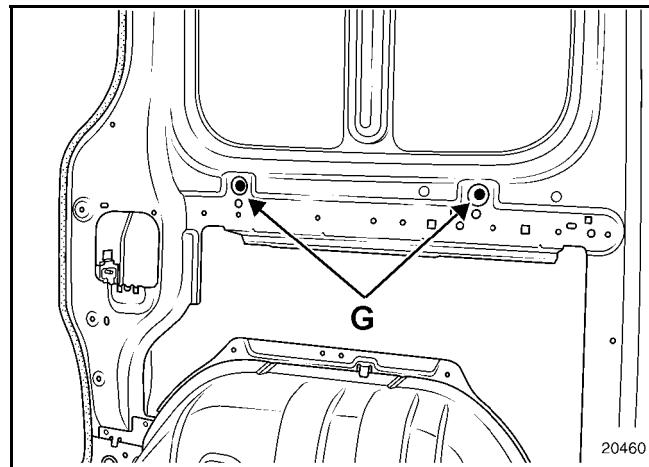


Remove:

- the blanking covers, then the two mounting nuts (**D**) from the slide,



- the mounting bolts (**E**),
- the runner end (**F**), then move the slide to the back of the runner to release it.

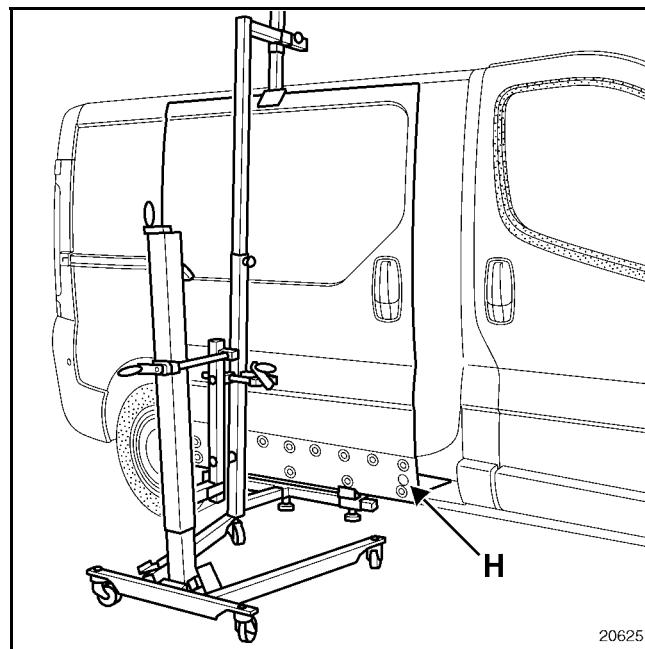


Remove:

- the blanking covers, then the two mounting nuts (**G**) from the runner,
- the runner.

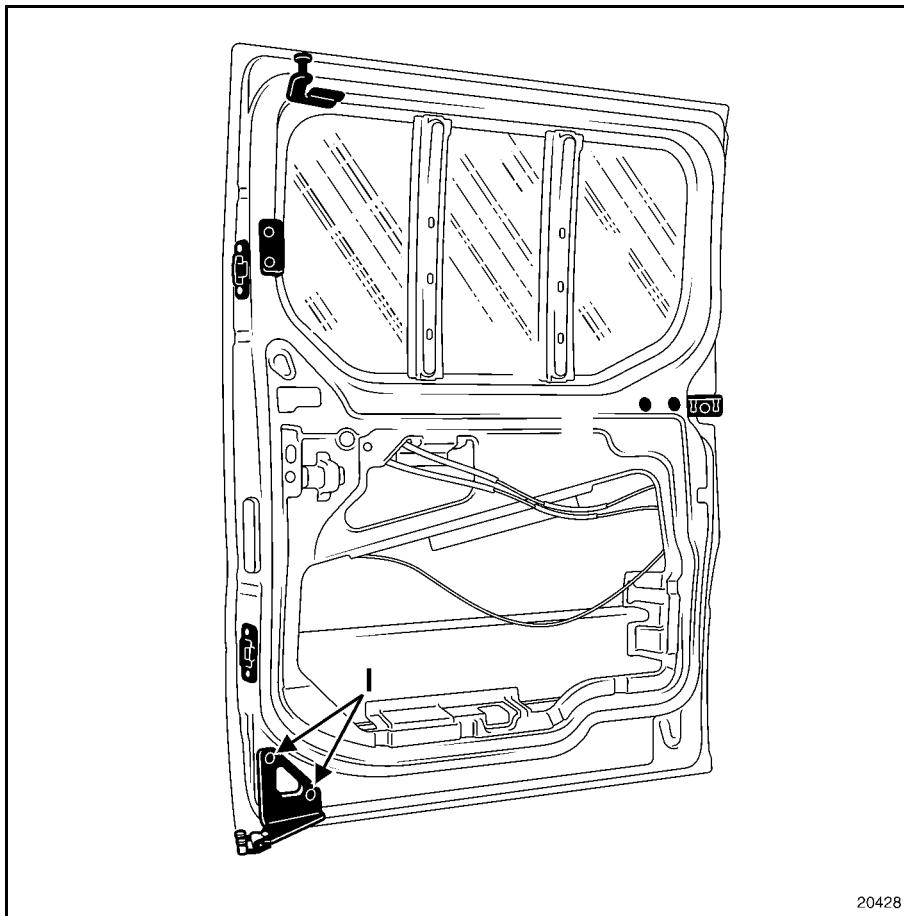
#### **REMOVAL OF THE SLIDE AND LOWER RUNNER**

Fit the holding tool to the door.

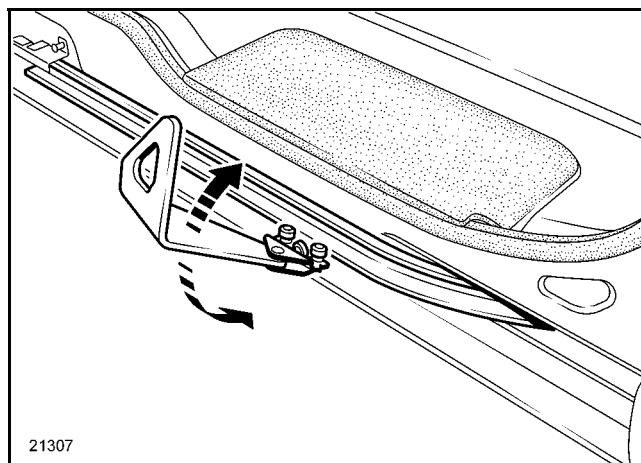


Remove:

- the door strip,
- the mounting nut (**H**) from the lower slide,



– the two mounting bolts (I) from the lower slide.

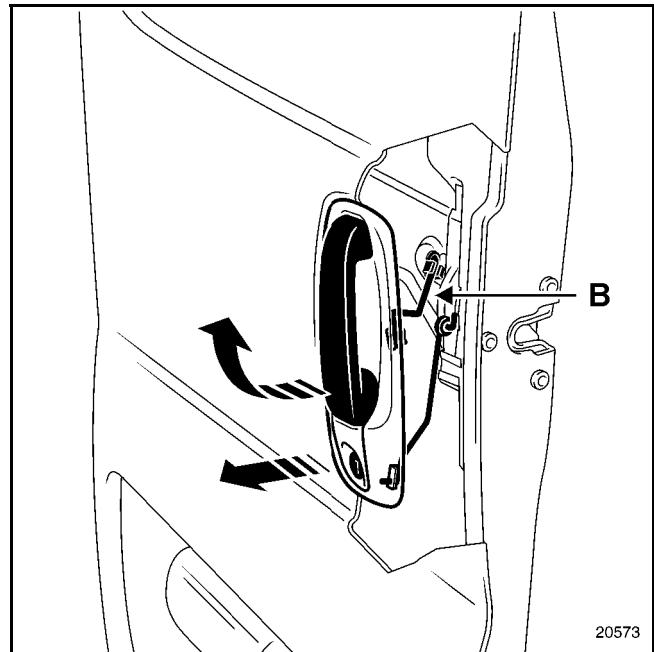
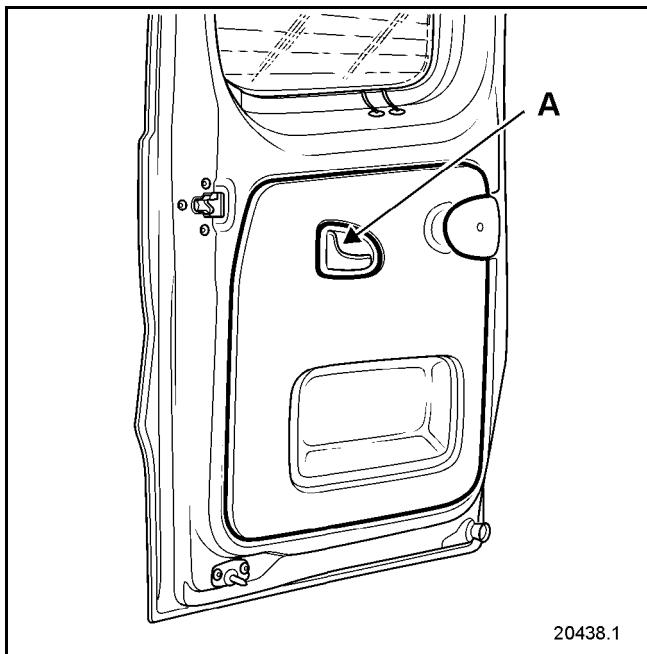


Carefully move the door, and then release the slide.

#### **REFITTING**

To adjust the sliding side door, see **Section 47**.

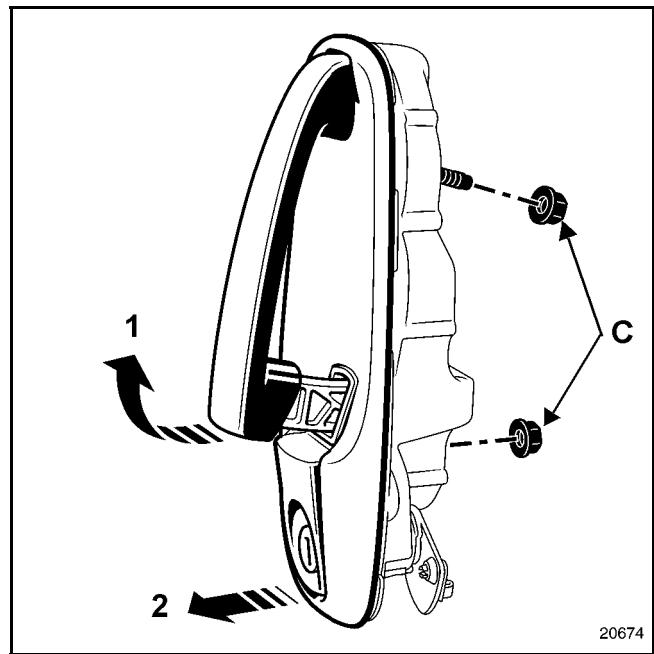
**REMOVAL**



Remove:

- mounting bolt (A),
- the inside opening handle.

Unclip the door lining with the unclipping tool.

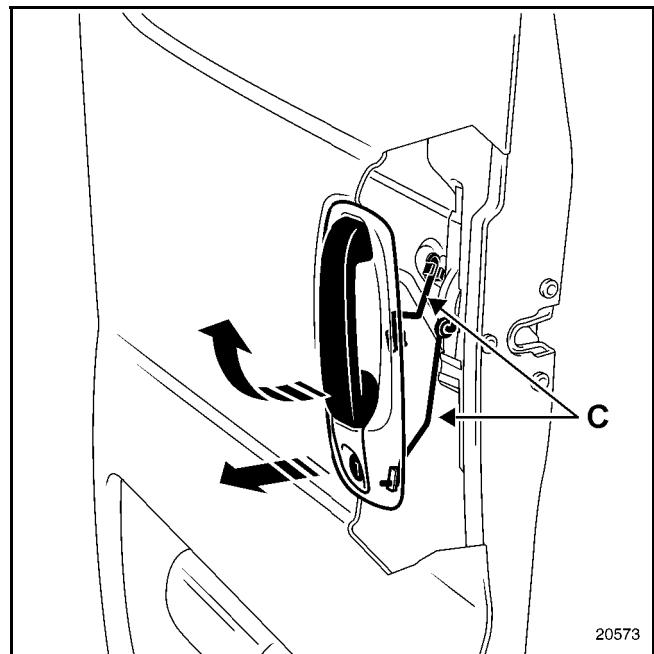
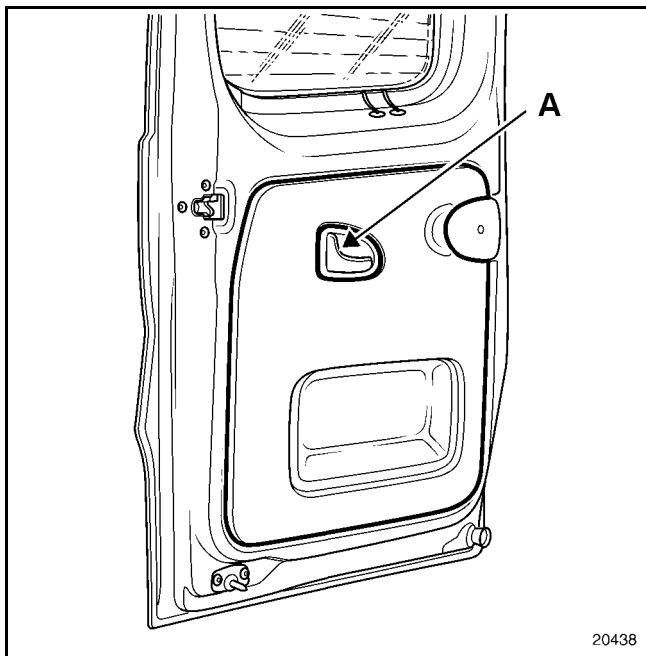


Remove:

- the door handle linkage (B),
- the two mounting nuts (C) from the door handle.

Lift the handle (1) then release the exterior door handle (2).

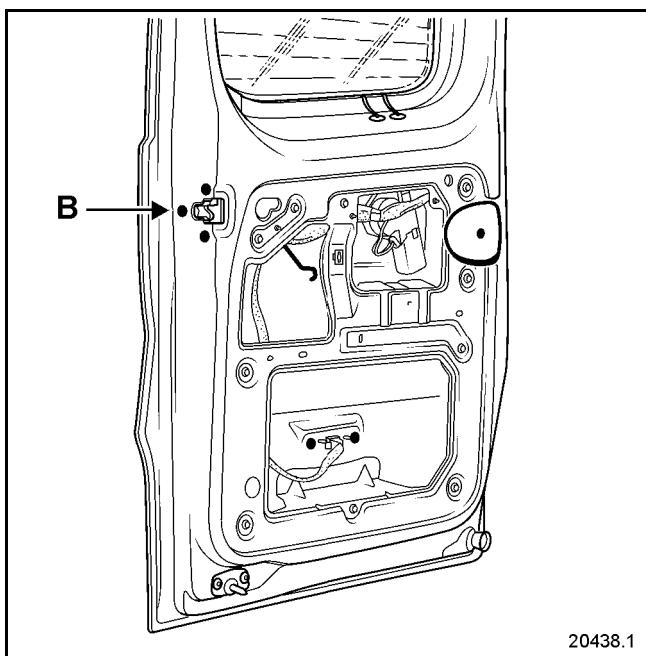
**REMOVAL of the left hand rear door lock**



Remove:

- mounting bolt (A),
- the inside opening handle.

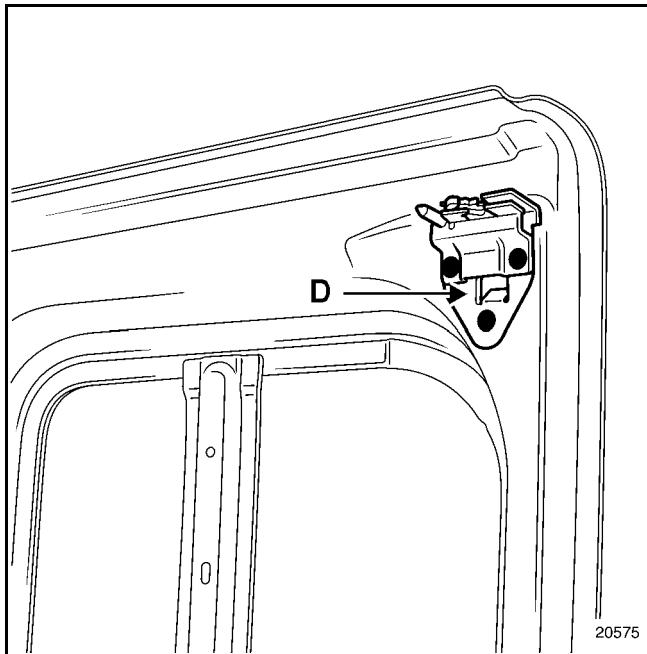
Using the unclipping tool, unclip the lining panel.



Remove:

- the three lock mounting bolts (B),

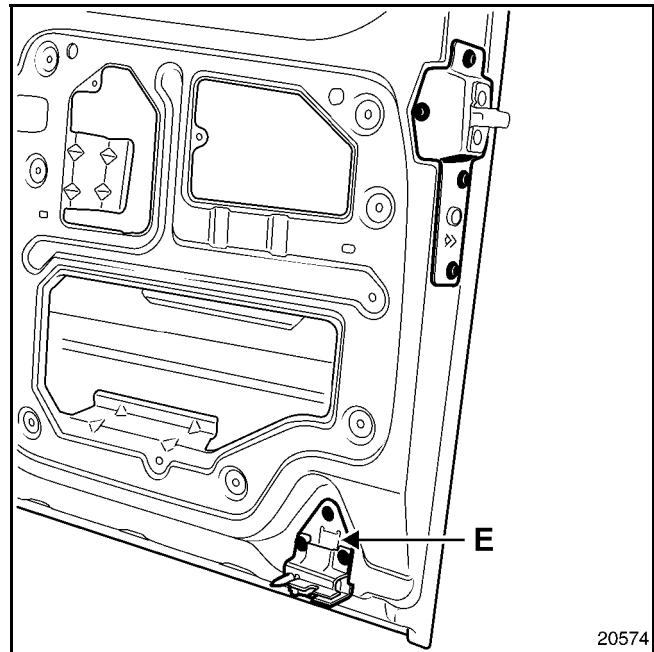
**REMOVAL of the right hand rear door locks**



Unclip cable sleeve stop (D) using a flat screwdriver.

Remove the three mounting bolts from the upper lock.

Carefully release the lock to remove the cable stop knob.

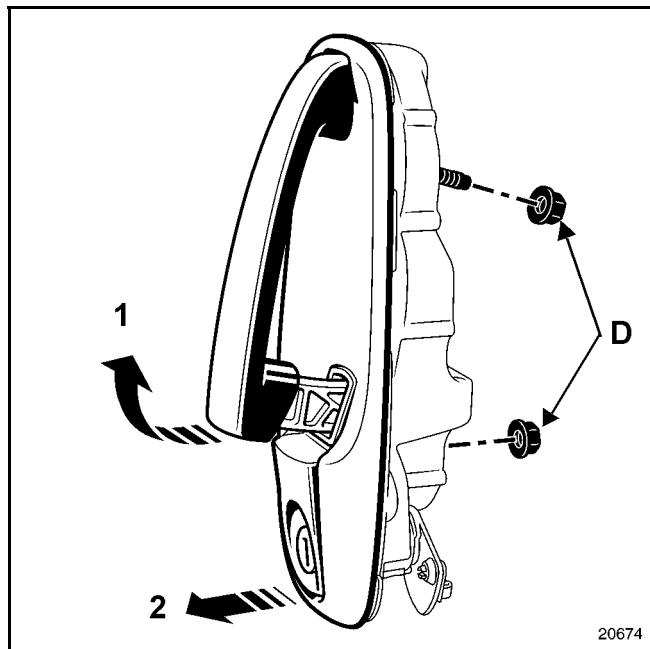
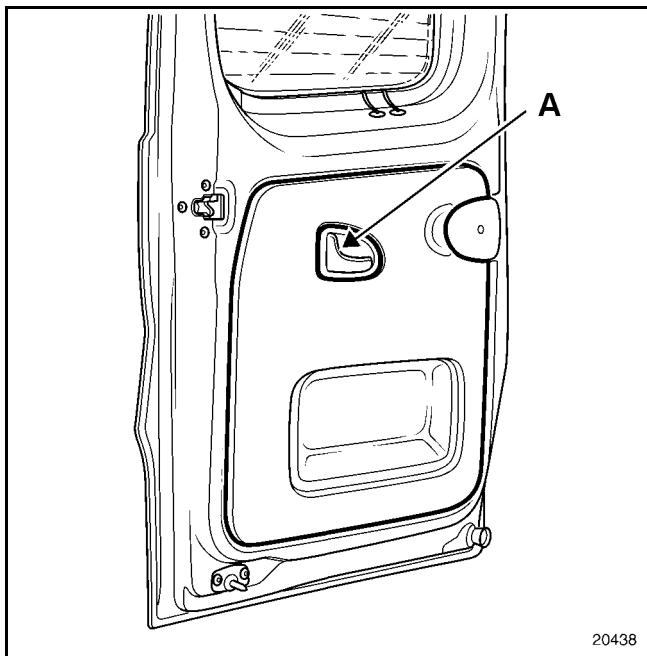


Unclip cable sleeve stop (E) using a flat screwdriver.

Remove the three mounting bolts from the lower lock.

Carefully release the lock to remove the cable stop knob.

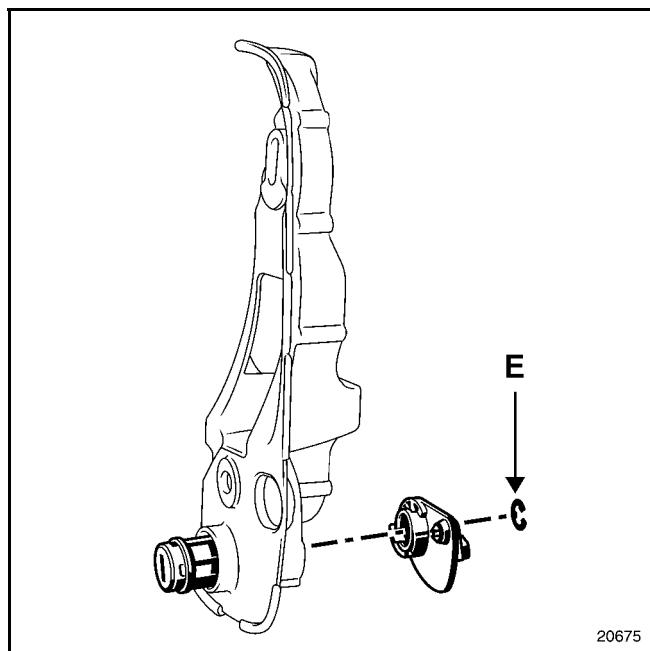
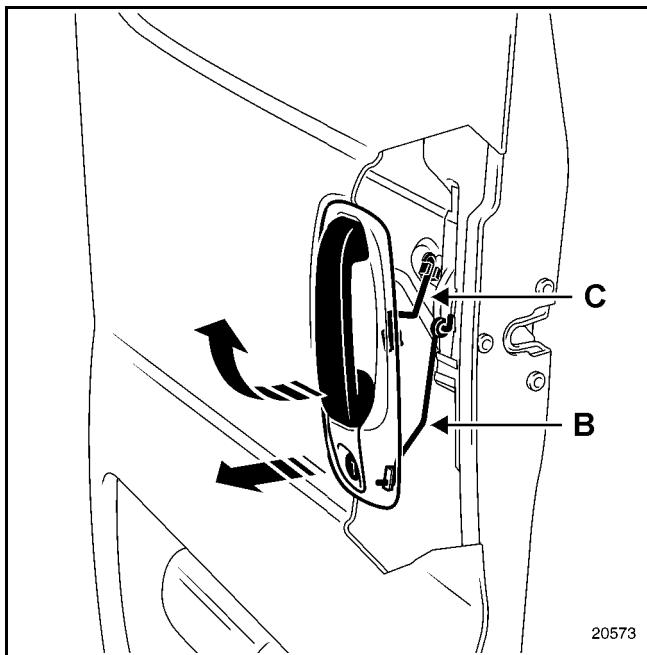
**REMOVAL**



Remove:

- mounting bolt (A),
- the inside opening handle.

Using the unclipping tool, unclip the lining panel.



- circclips (E).

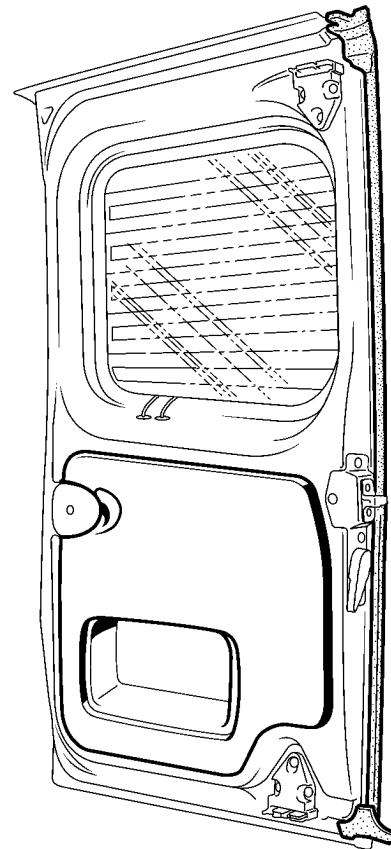
Release the lock barrel.

Remove:

- the lock barrel control linkage (B),
- the exterior door handle linkage (C),

### REMOVAL of the control

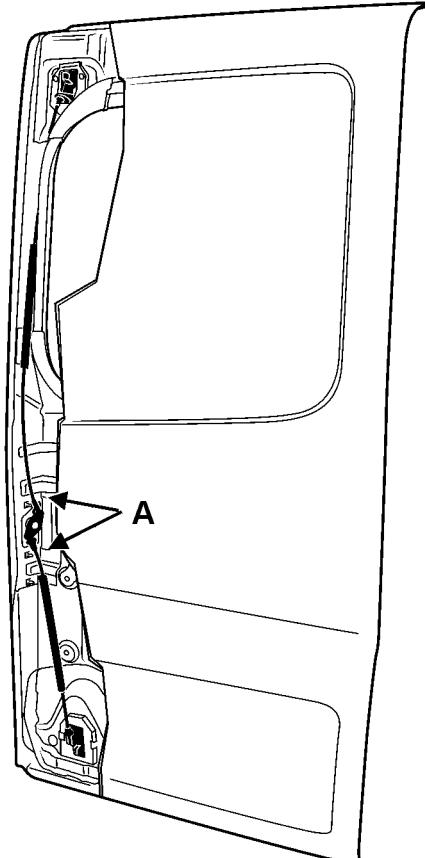
Using the unclipping tool, unclip the lining panel.



20437

Remove:

- the two sleeve stops (A),
- the two cable stop knobs,

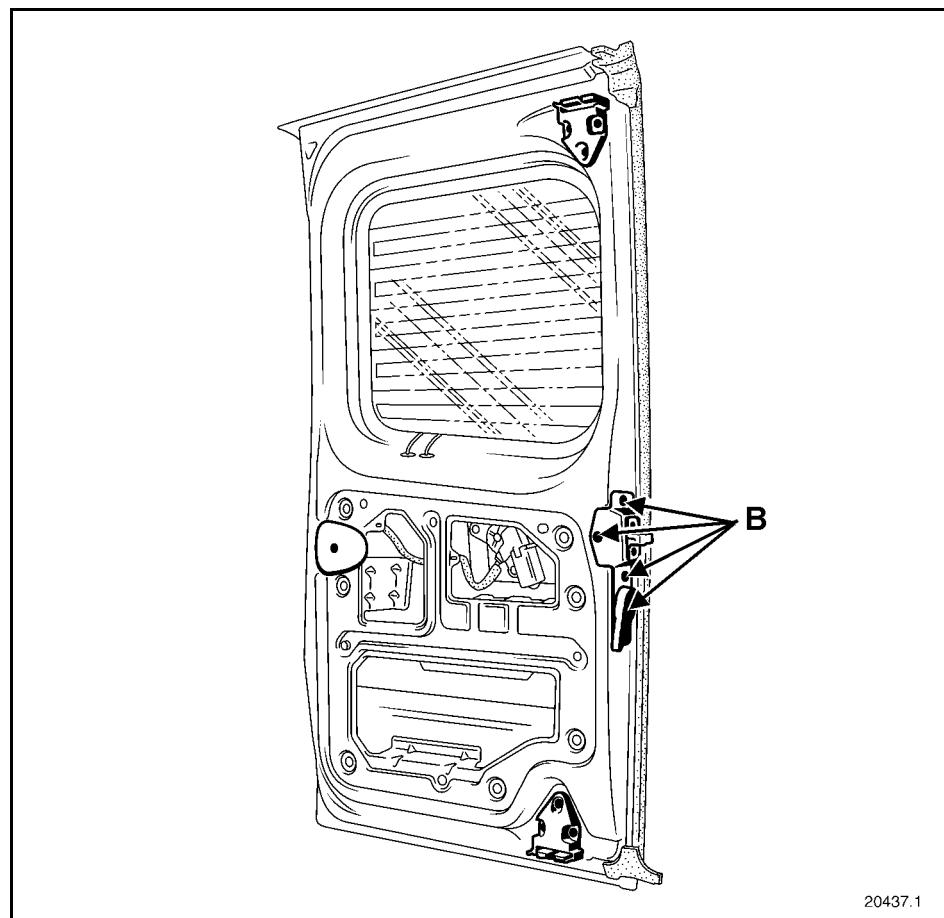


20572

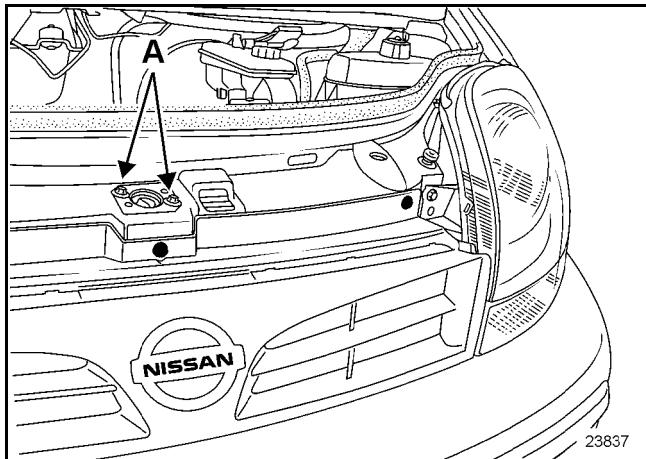
### REMOVAL of the control mechanism

Remove:

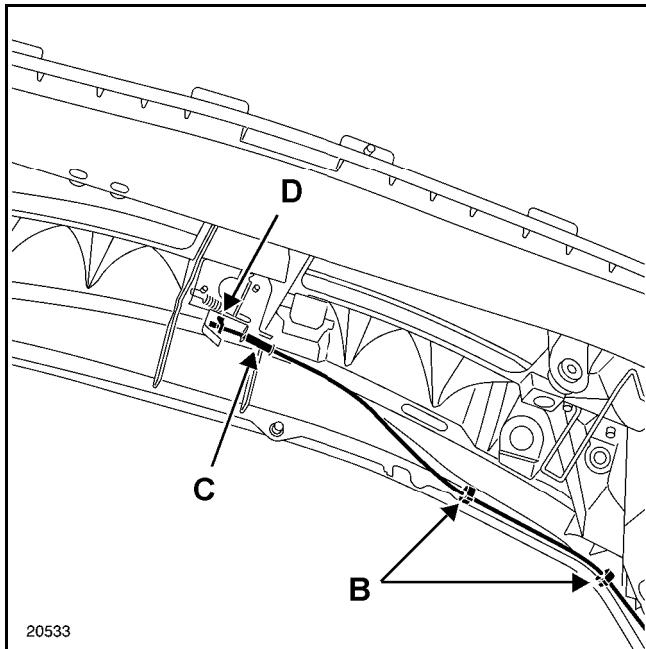
- the four mounting bolts (B) from the interior opening control mechanism, then remove it.



**REMOVAL**



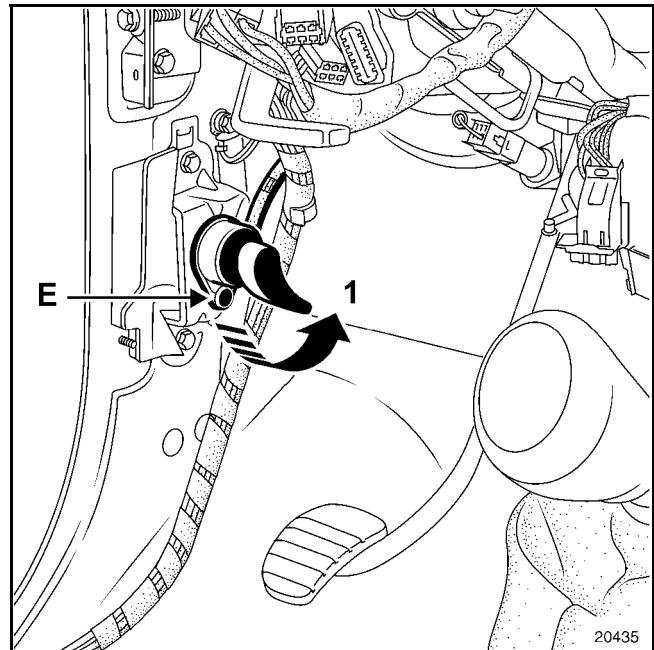
The lock (bolt A) must be removed to fit the cable.



**Unclip:**

- the sleeve for the three retaining clips (B),
- the sleeve stop (C),
- the cable stop knob (D).

**Passenger compartment section**



**Remove:**

- retaining clip (E),
- the door handle as shown on the diagram (1).

Release the blanking cover from the scuttle panel, then the assembly via the inside of the vehicle.

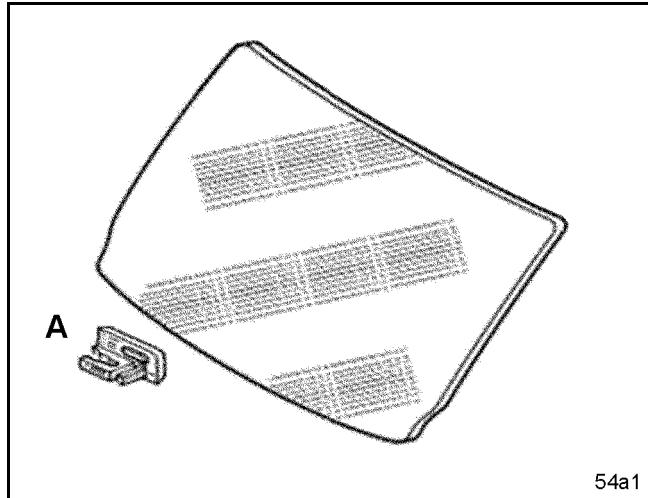
**REFITTING**

Proceed in the reverse order to removal.

### PREPARATION BEFORE CUTTING

Before cutting the windscreen using a stranded wire, the following must be removed:

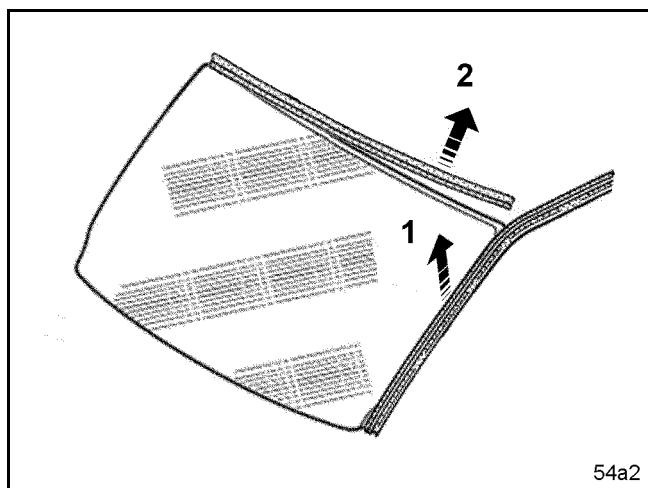
- the cowl vent grilles,
- the windscreen pillar trims,
- the sun visors.



### IMPORTANT:

It is essential to replace the five retaining blocks (A) of the windscreen each time it is removed.

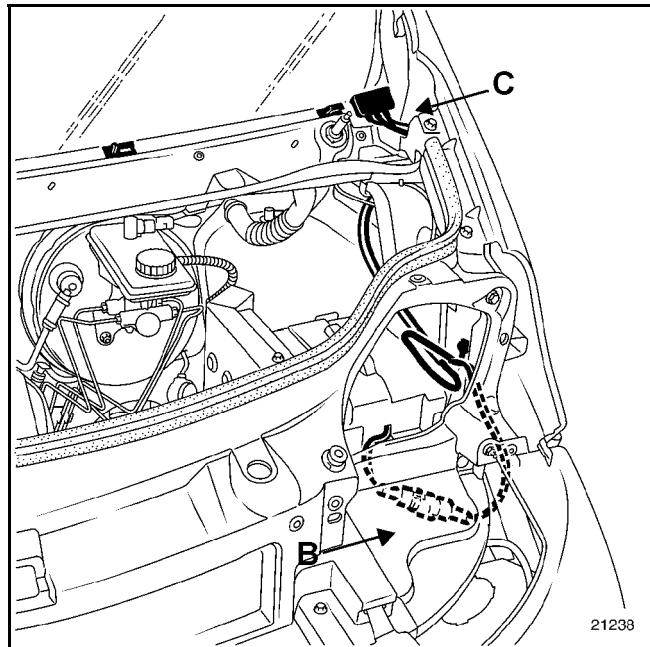
### REMOVAL



Remove side seals (1), then upper seals (2).

Using locally made shims about **3 cm** thick, carefully detach the head lining.

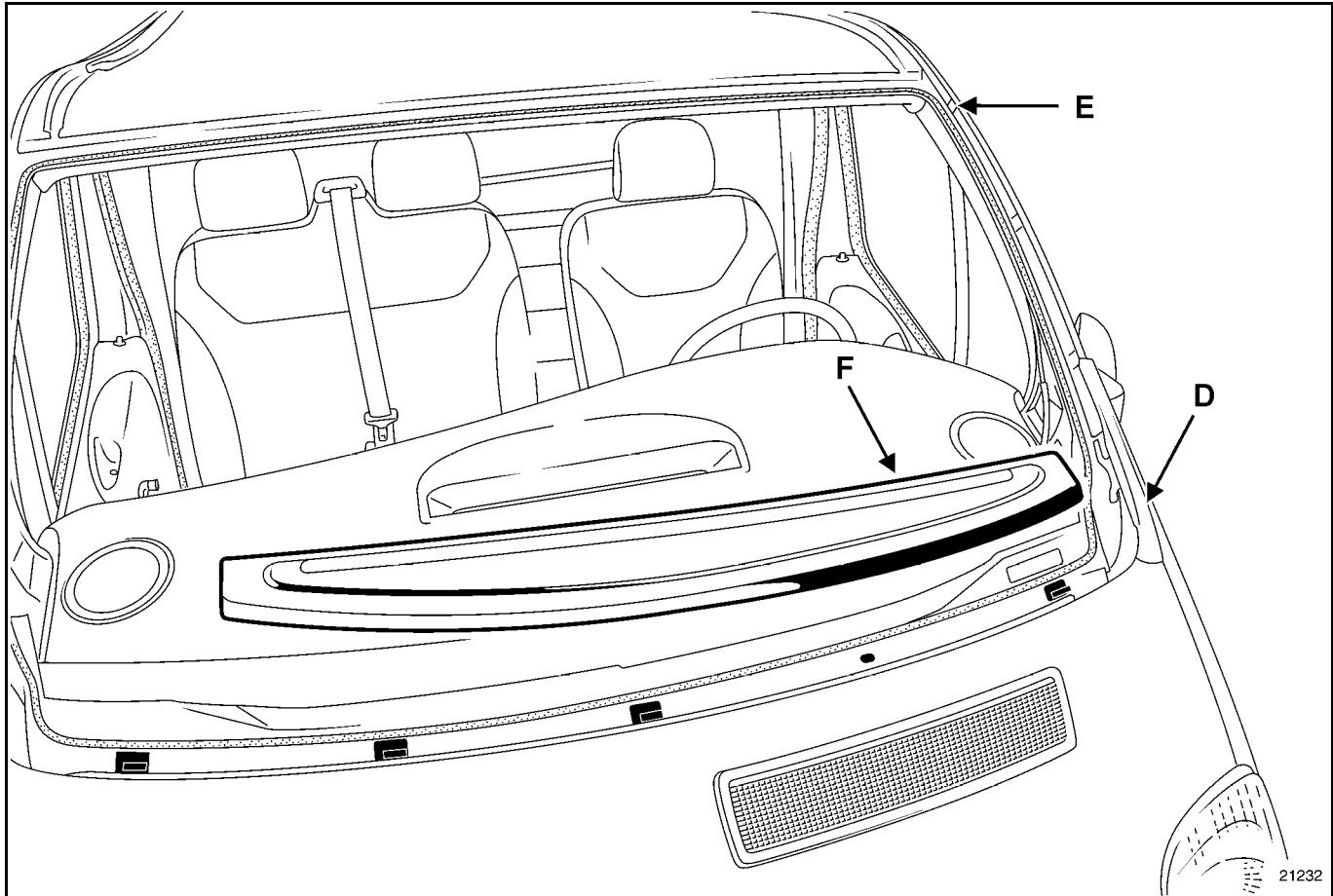
### SPECIAL NOTE FOR VEHICLES FITTED WITH A DE-ICING WINDSCREEN



Disconnect connector (B), which is attached to the engine interconnection unit, then release de-icing wiring harness (C).

**IMPORTANT:**

There is no specific dashboard protector for this vehicle.



Protect: (protective tape 77 11 171 708)

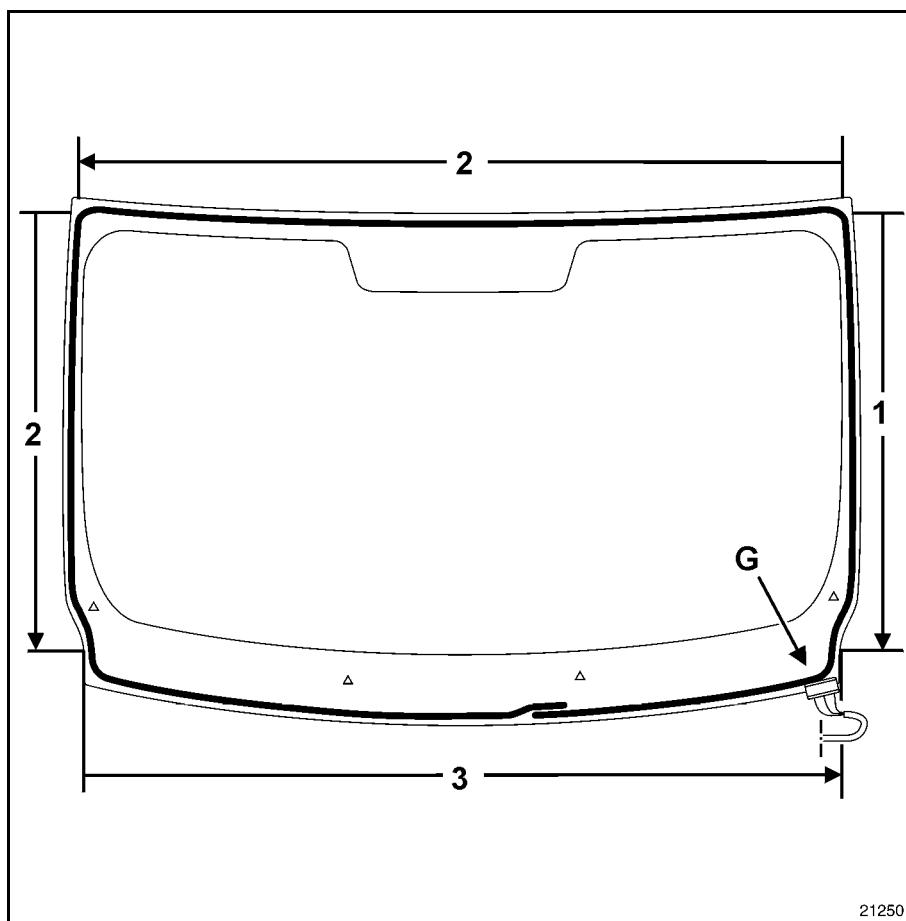
- the upper section of the front wings (D),
- the windscreen surround.

Using the cutting wire insertion tool, pierce the bead of adhesive at (E).

**IMPORTANT:**

The use of dashboard protector (F) **Car. 1482** is recommended for protecting both ends of the dashboard when cutting the windscreen using twisted wire.

**Two people are required to carry out this operation.**



Cut the bead of adhesive:

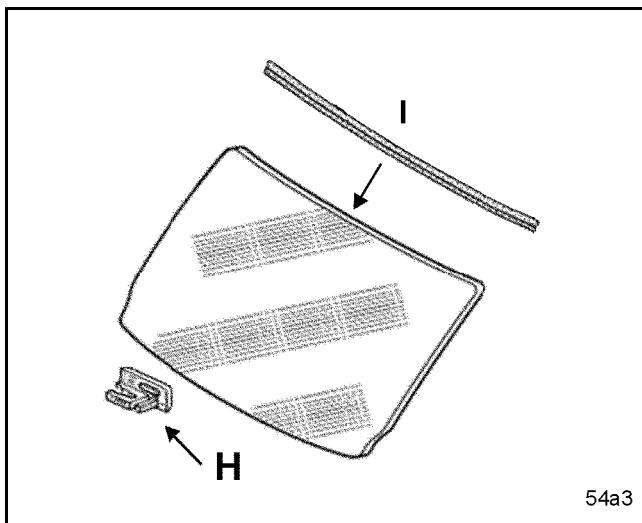
- (area 1) downwards to the lower left-hand corner,
- (area 2) in the opposite direction to the lower right-hand corner,
- (area 3) with a to and fro motion in the bottom corners, taking care not to damage de-icing wiring harness (G).

### REFITTING

Refer to the **Procedure for fitting windows** section for information about surface preparation and applying adhesive.

Clip the five retaining blocks (H) to the aperture (there are five oblong holes for this).

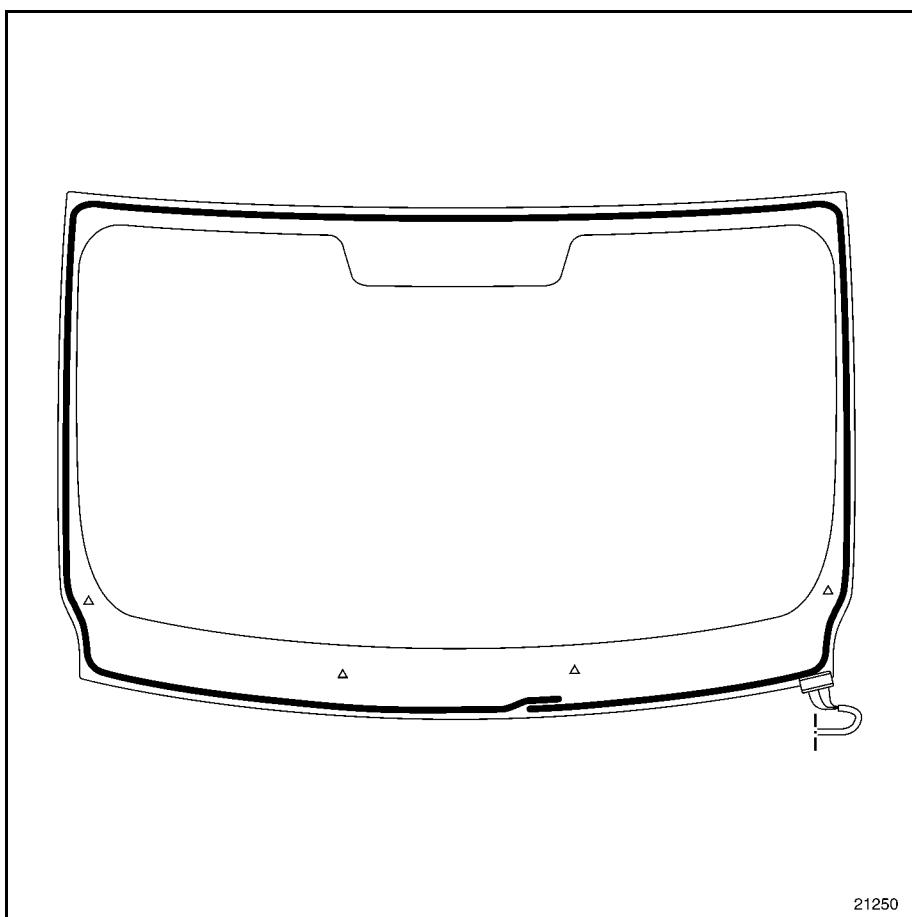
Fit upper trim piece (I) to the windscreens.

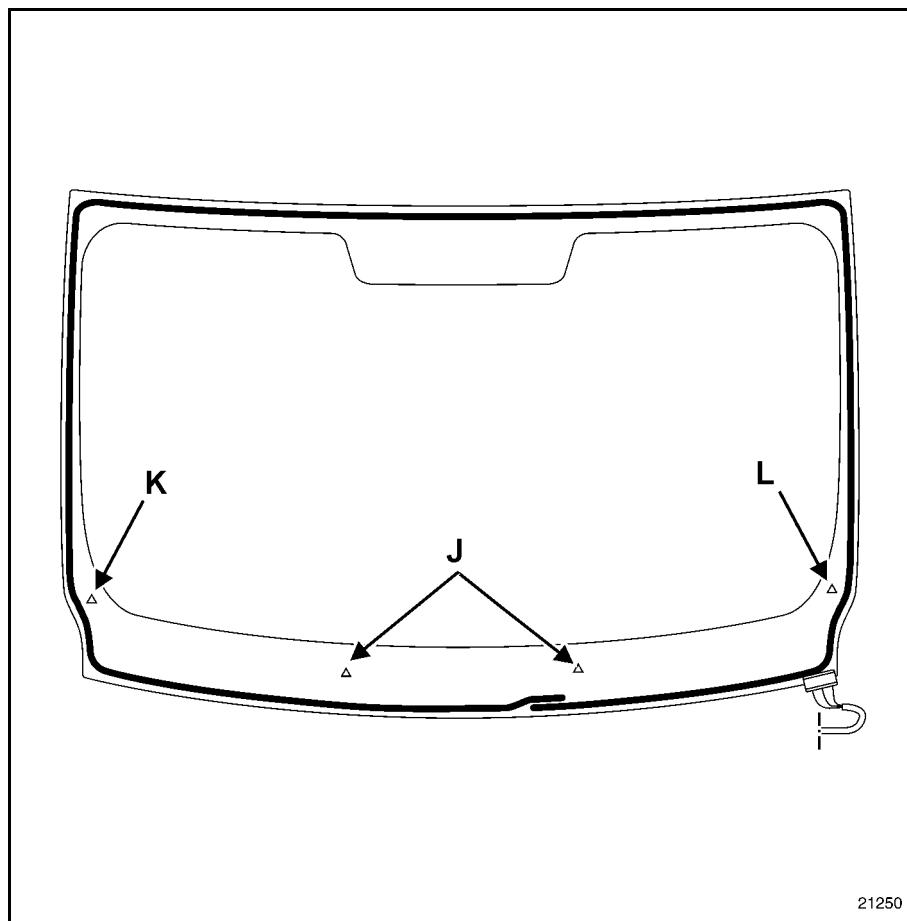


Retain the setting and size of the bead of adhesive.

Glue the window (this requires two people).

Adjust the side aspects clearance.

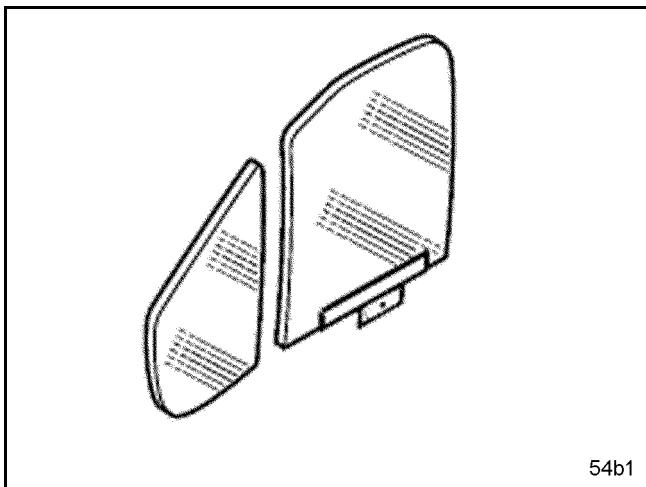




**NOTE:**

The windscreen has several marks printed on the lower section. These allow the wiper blades to be fitted during refitting.

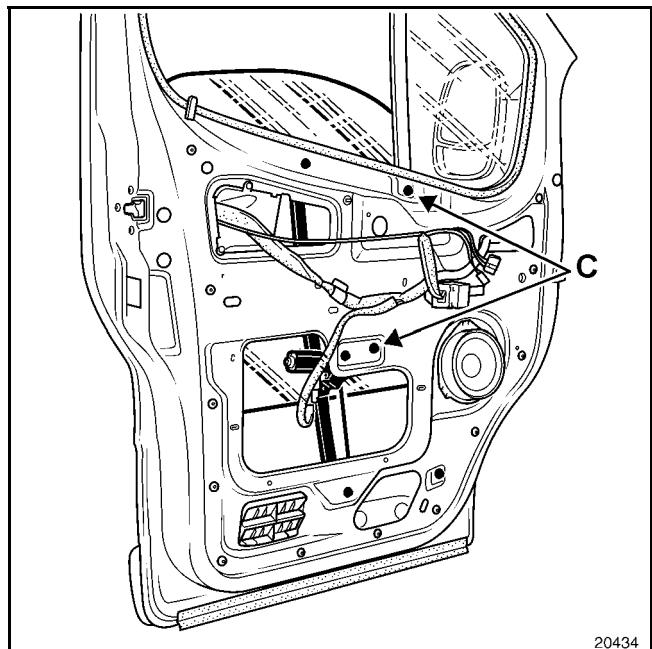
- left-hand blade mark (J),
- right-hand blade mark (K),
- Mark (L) is used on right-hand drive vehicles.



54b1

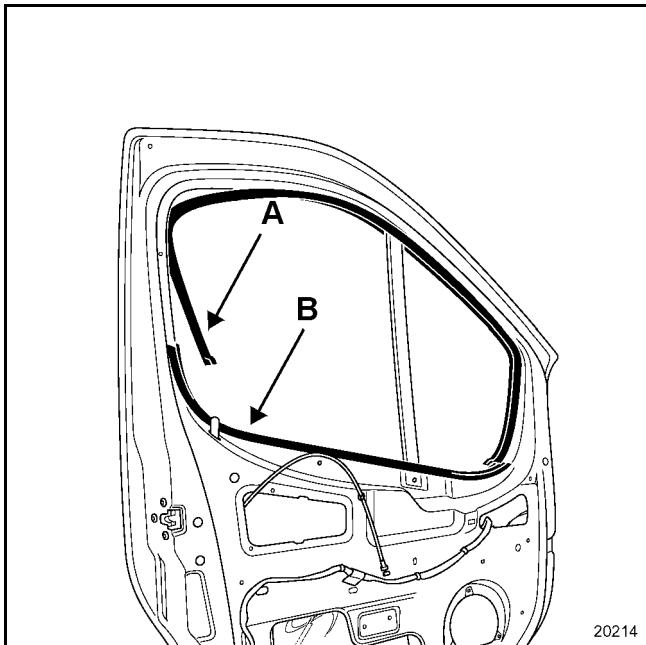
**REMOVAL**

After removing the door lining,



20434

- the two mounting screws (C) of the fixed upright.

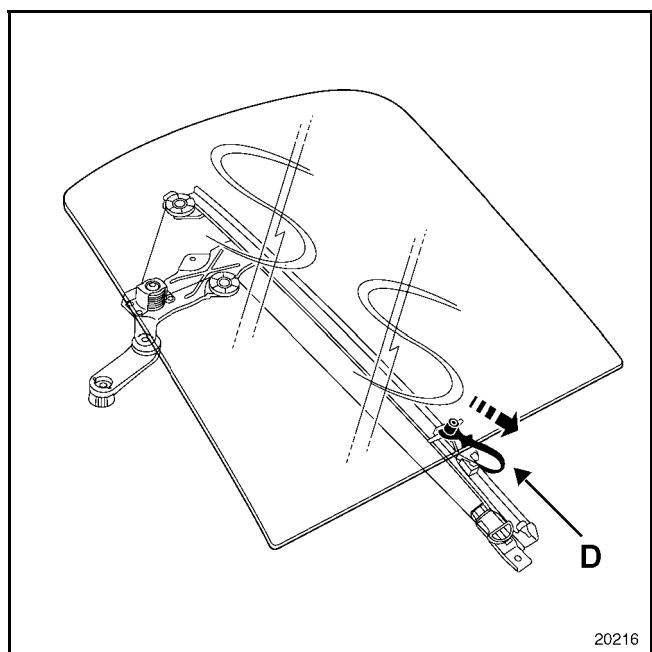


20214

partially release the upper weatherstrip (A).

Remove:

- the inner weatherstrips then the outer ones (B),



20216

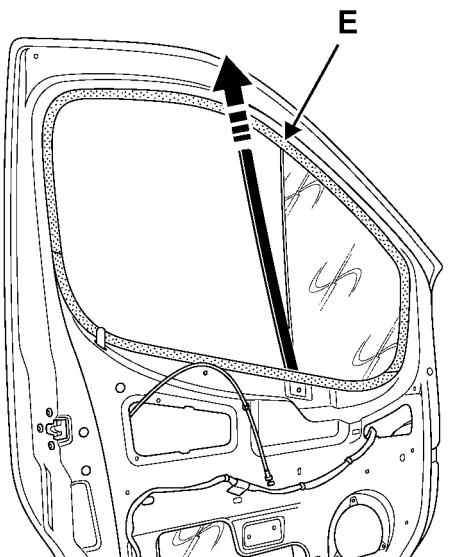
Unclip window winder fork (D).

Release the window from the shaft of the moving slide.

Fit the glass at the bottom of the inner door shell.

**IMPORTANT:**

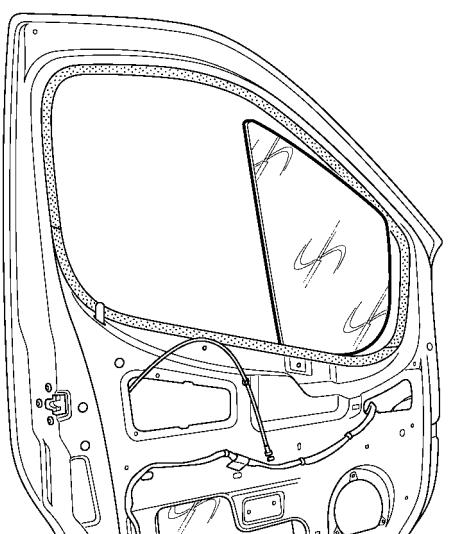
Clip fork (D) back onto the moving slide shaft, before adjusting it.



Slide the fixed upright downwards to release it from its retaining clip (E).

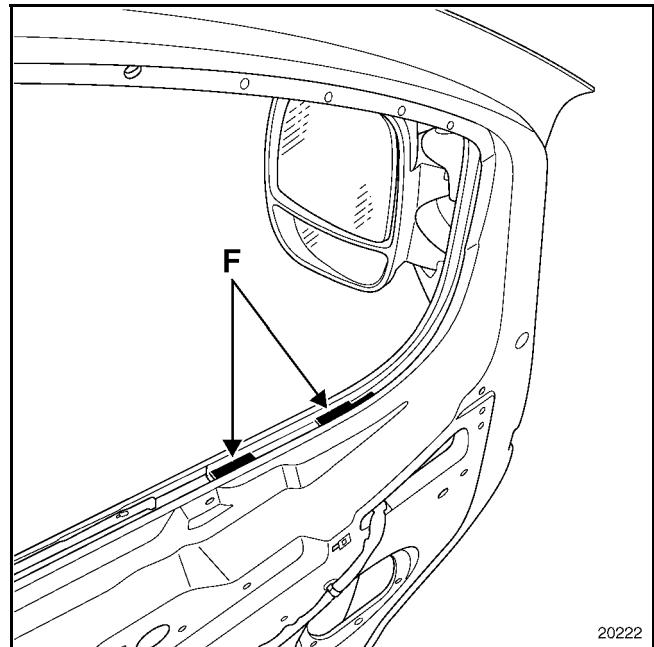
Remove the fixed upright by sliding it upwards on the inside of the door side.

Release the sliding window.



Release the fixed window.

**REFITTING**

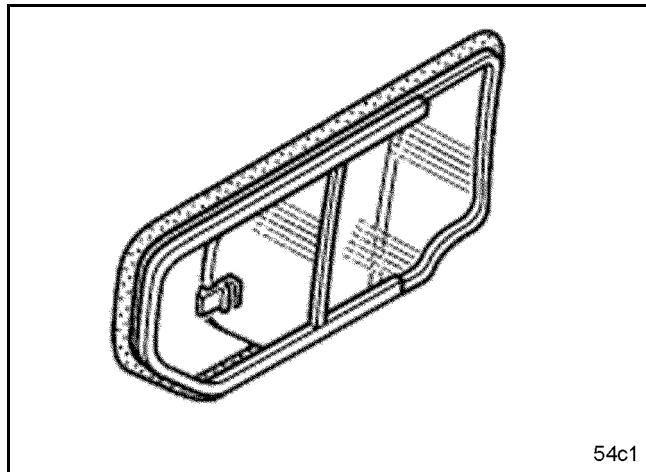


Check that the two adhesive foam shims (F) are fitted before refitting the fixed window, then carry out the opposite procedure to removal.

**NOTE:**

The sliding window is not sold separately.

Only the window assembly with frame / fixed window / sliding window / lock, is available from the replacement parts shop.



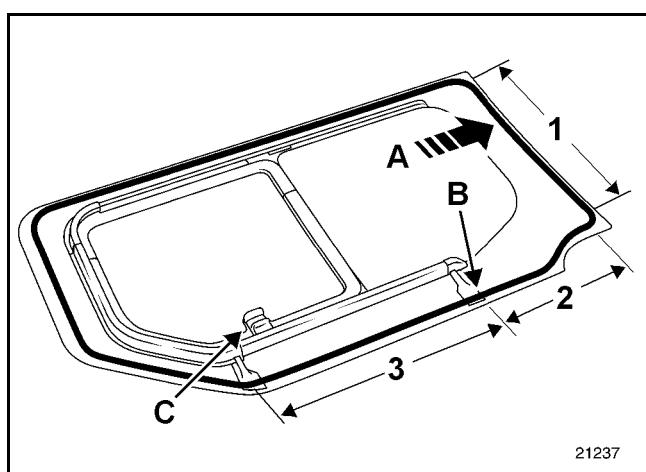
54c1

### PREPARATION BEFORE CUTTING

Before cutting the window with a stranded wire, the following should be protected (protective tape 77 11 171 708):

- the interior window frame,
- the interior door groove,
- the exterior window surround.

### REMOVAL: two people required



21237

Using the cutting wire insertion tool, pierce the adhesive bead at (A) from inside the vehicle.

Cut through the bead of adhesive (area 1).

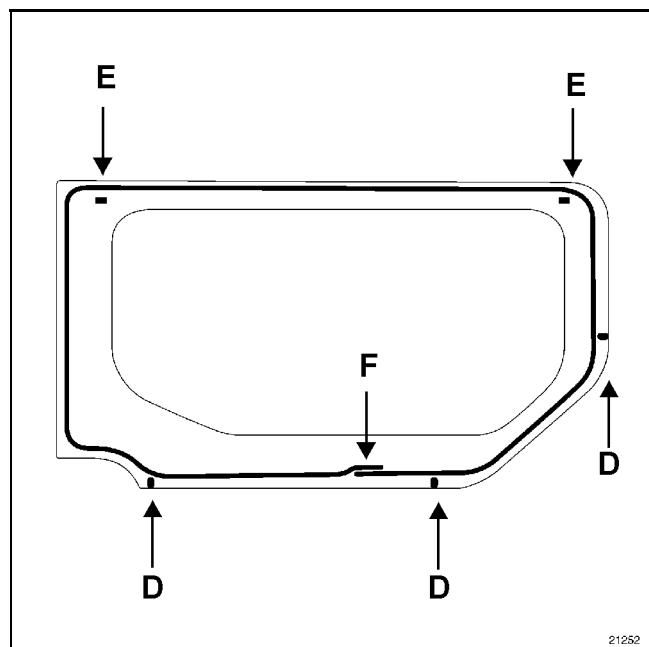
Mark the bead of adhesive at (B), then cut it (area 2).

With the marking tool (protected at the end), press down on water discharge pipe (C) then cut out the adhesive bead (area 3).

Cut out the rest of the adhesive bead, with a to and fro motion.

### REFITTING

Refer to the **Procedure for fitting windows** section for information about surface preparation and applying adhesive.



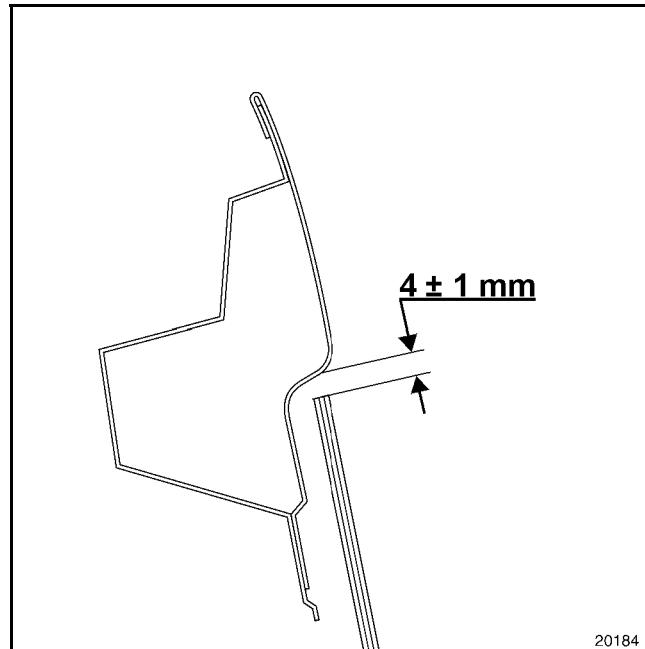
21252

Fit the three shims (D) to the door rabbet (there are three holes for this).

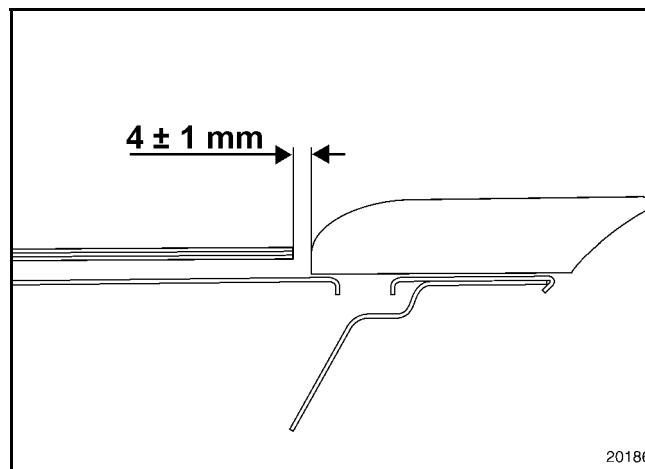
Stick the two adhesive shims (E) to the door rabbet.

Attach adhesive bead (F) between the two water discharge pipes.

Slide the window fully against shims (D).

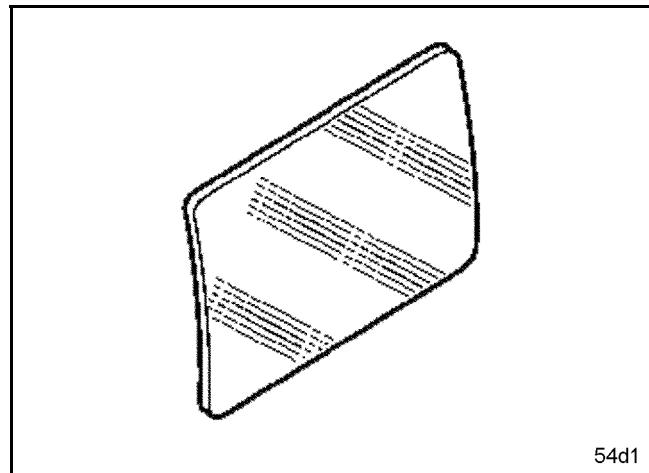


Adjust the aspect clearance:  
– in the upper section of the door,



– in the rear side section.

After having adjusted the aspect clearance, hold the window in position using masking tape while the adhesive dries.



**PREPARATION BEFORE CUTTING using a stranded wire**

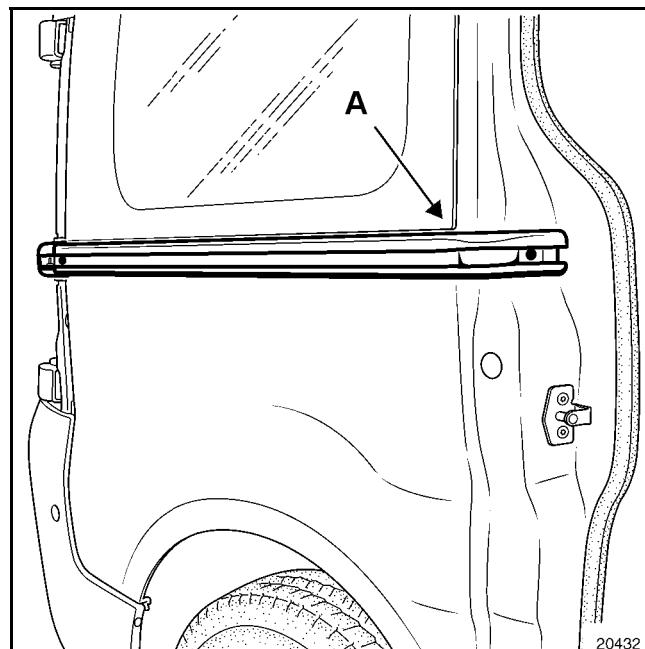
Remove:

- the rear light,
- the rear upper corner protector.

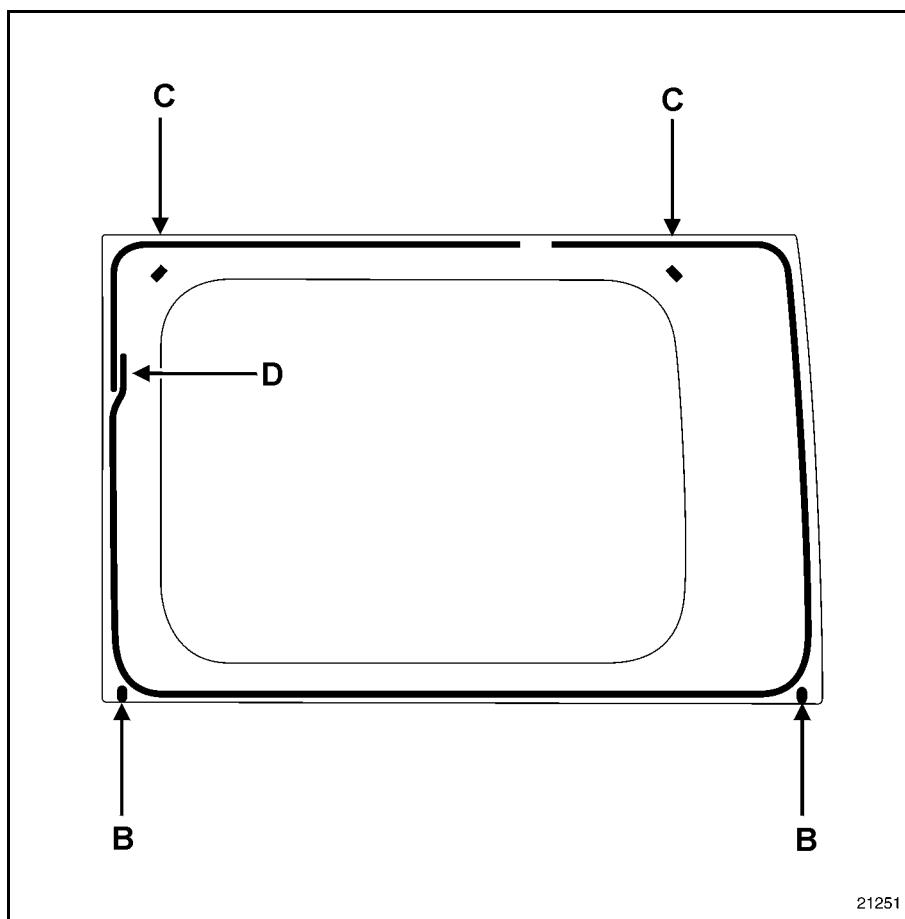
Protect: (protective tape 77 11 171 708):

- the exterior window surround,
- the sliding side door runner.

**REMOVAL: two people required**



Using the cutting wire insertion tool, pierce the adhesive bead at (A) from inside the vehicle.

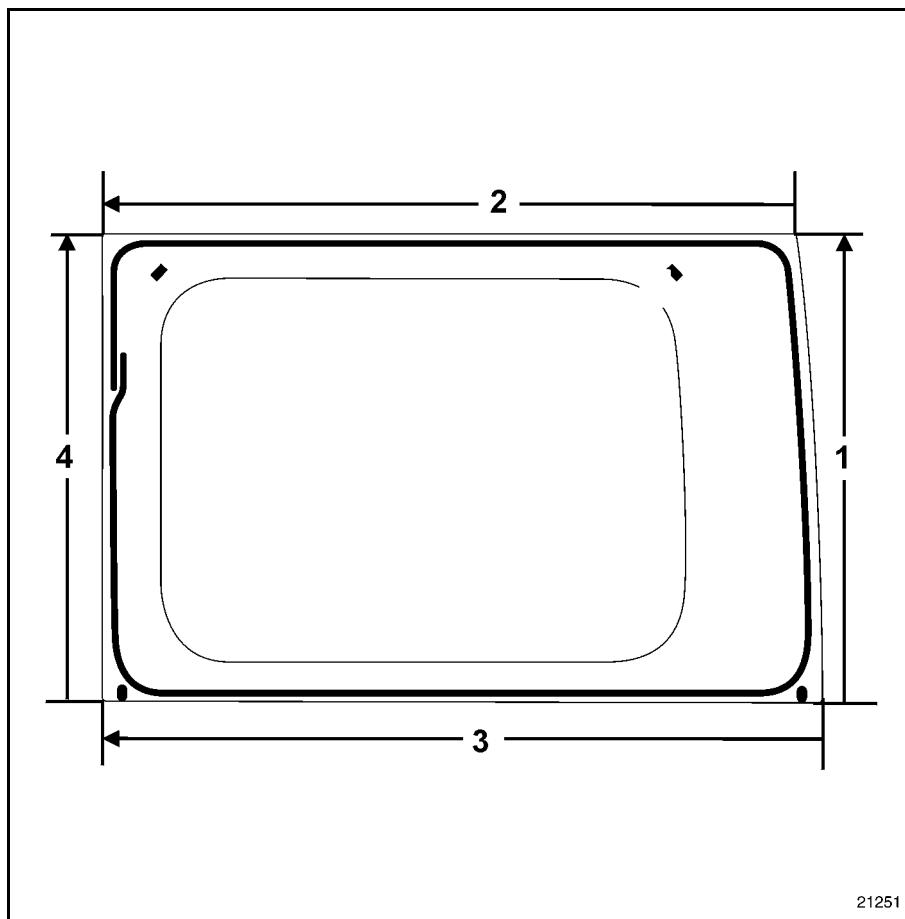


Fit the two divisible shims (B) onto the wing panel.

Stick the two adhesive shims (C) to the wing panel flange.

Remember the position of join (D) of the adhesive bead.

Slide the window fully against shims (B).



Cut through the adhesive bead (area 1), from bottom to top then in (area 2) from the front to the rear of the vehicle.

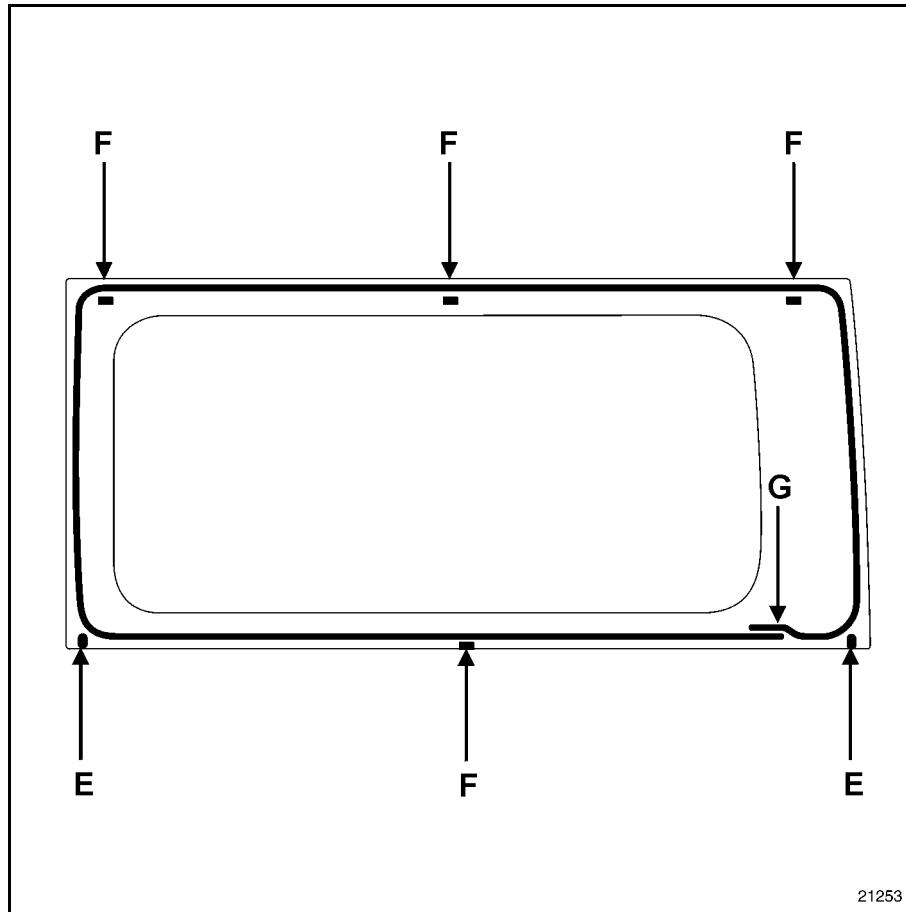
Return to marking point (A).

Cut through the adhesive bead (area 3) from the front to the rear of the vehicle, then in (area 4) from the bottom to the top.

#### **REFITTING**

Refer to the **Procedure for fitting windows** section for information about surface preparation and applying adhesive.

**SPECIAL NOTE: version LH2 (long)**

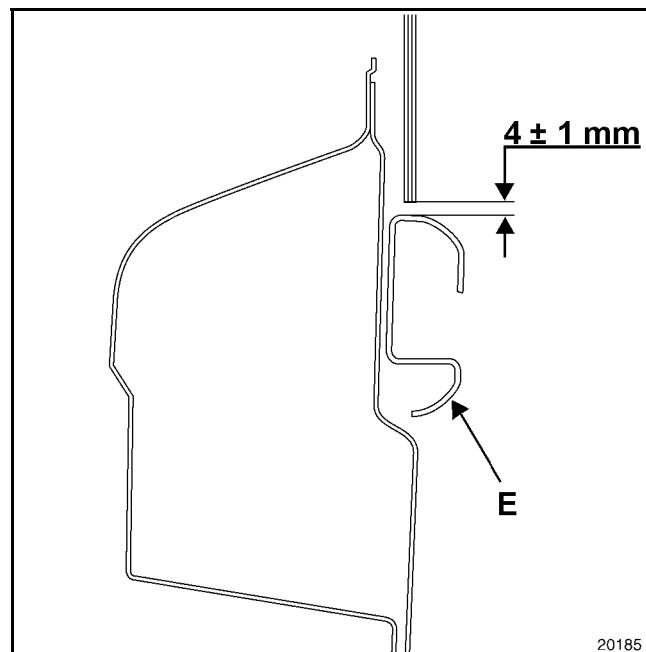


Fit the two shims (E) onto the wing panel.

Stick the five adhesive shims (F) to the wing panel flange.

Remember the position of join (G) of the adhesive bead.

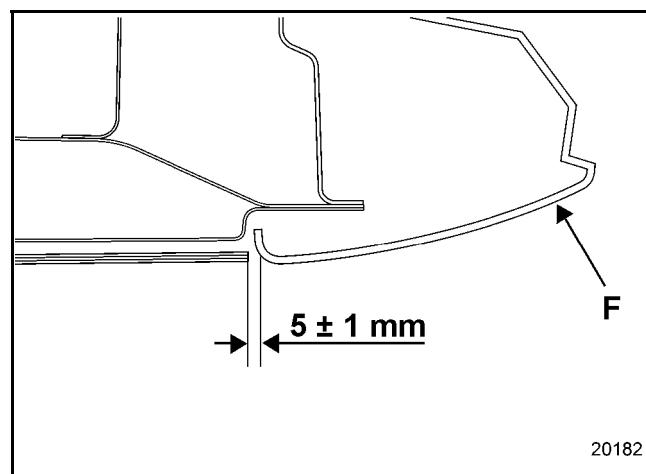
Slide the window fully against shims (B).



20185

Adjust the aspect clearance:

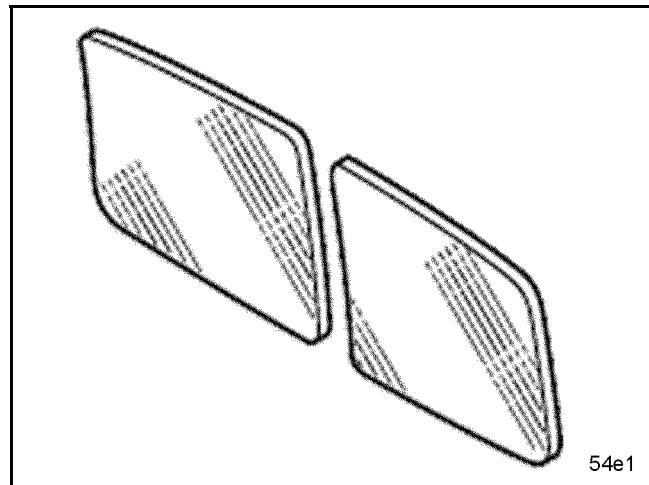
- sliding side door runner (E).



20182

- rear upper corner protector (F).

After having adjusted the aspect clearance, keep the window in position using masking tape while the adhesive dries.

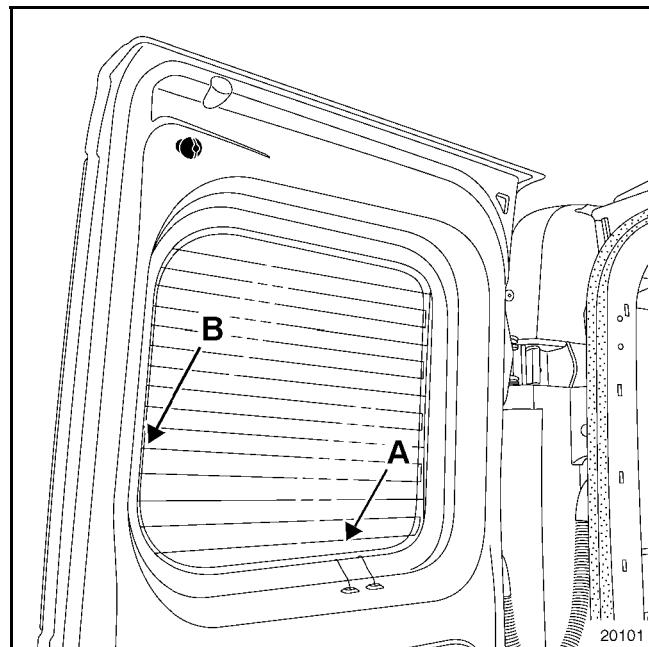


**PREPARATION BEFORE CUTTING using a stranded wire**

Remove the windscreen wiper arms.

Protect (protective tape **77 11 171 708**) the exterior surround of the window.

**REMOVAL: two people required**



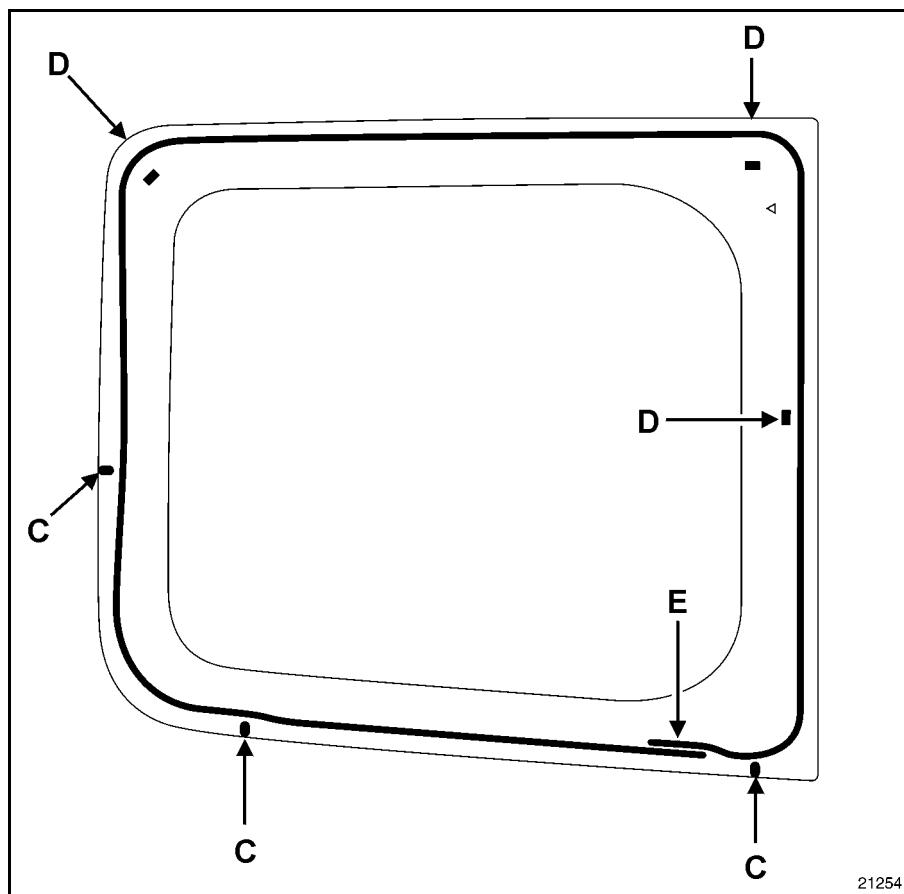
Disconnect the de-icing connectors (A).

Using the cutting wire insertion tool, pierce the adhesive bead at (B) from inside the vehicle.

Cut through the bead of adhesive.

**REFITTING**

Refer to the **Procedure for fitting windows** section for information about surface preparation and applying adhesive.



Fit the three shims (C) to the door panel.

Stick the three adhesive shims (D) to the door panel flange.

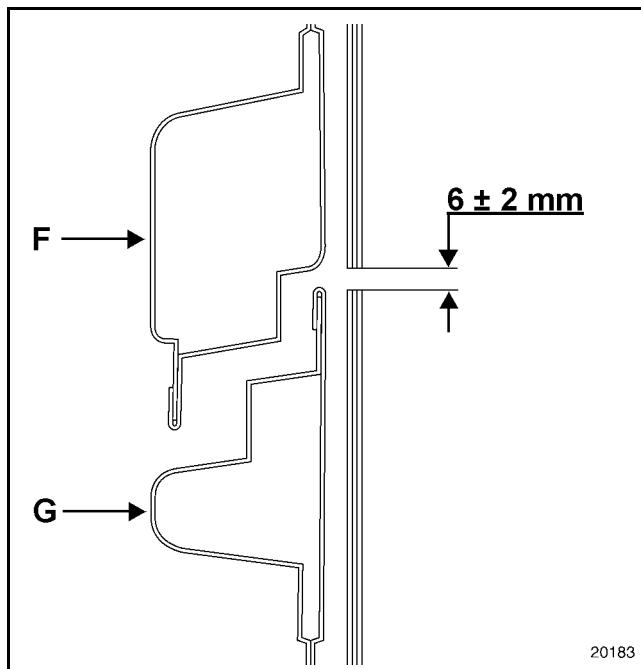
Remember the position of join (E) of the adhesive bead.

Slide the window fully against shims (C).

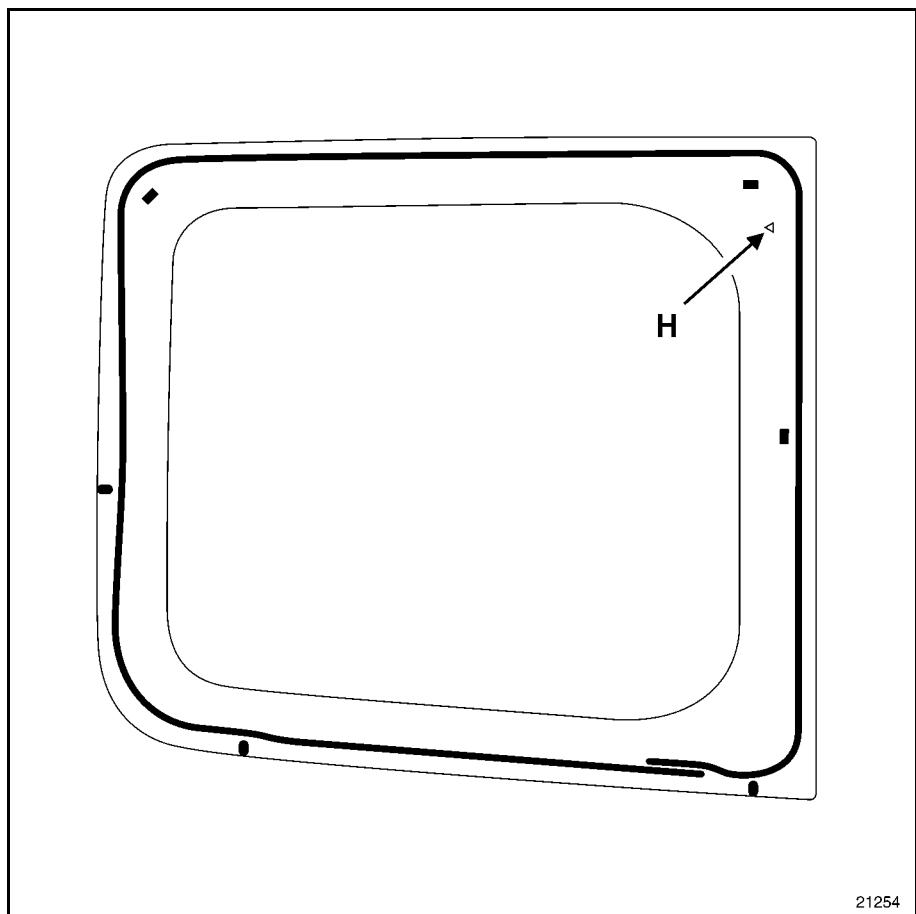
Adjust the aspect clearance:

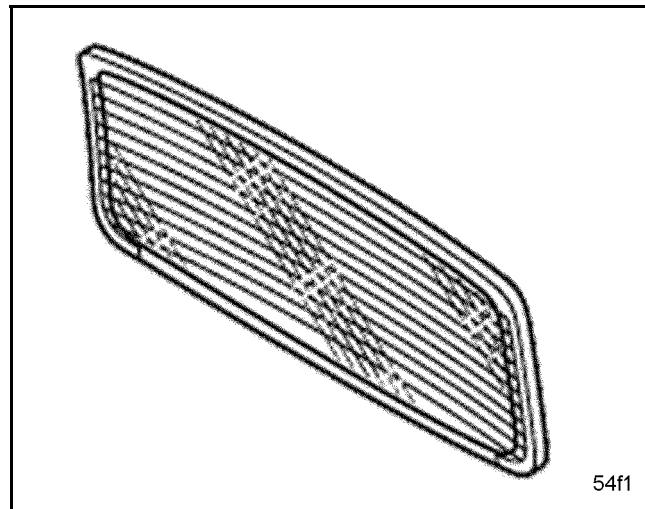
- (F) right-hand luggage compartment door box section,
- (G) left-hand luggage compartment door box section,

After having adjusted the aspect clearance, keep the window in position using masking tape while the adhesive dries.



- marks (H) enable the wiper blades to be positioned.





54f1

#### **PREPARATION BEFORE CUTTING**

Remove:

- the windscreen wiper arms,
- the de-icing wiring harness connectors,
- the tailgate trim.

Protect (protective tape **77 11 171 708**) the exterior surround of the window.

#### **REMOVAL**

The stranded wire procedure requires two people.

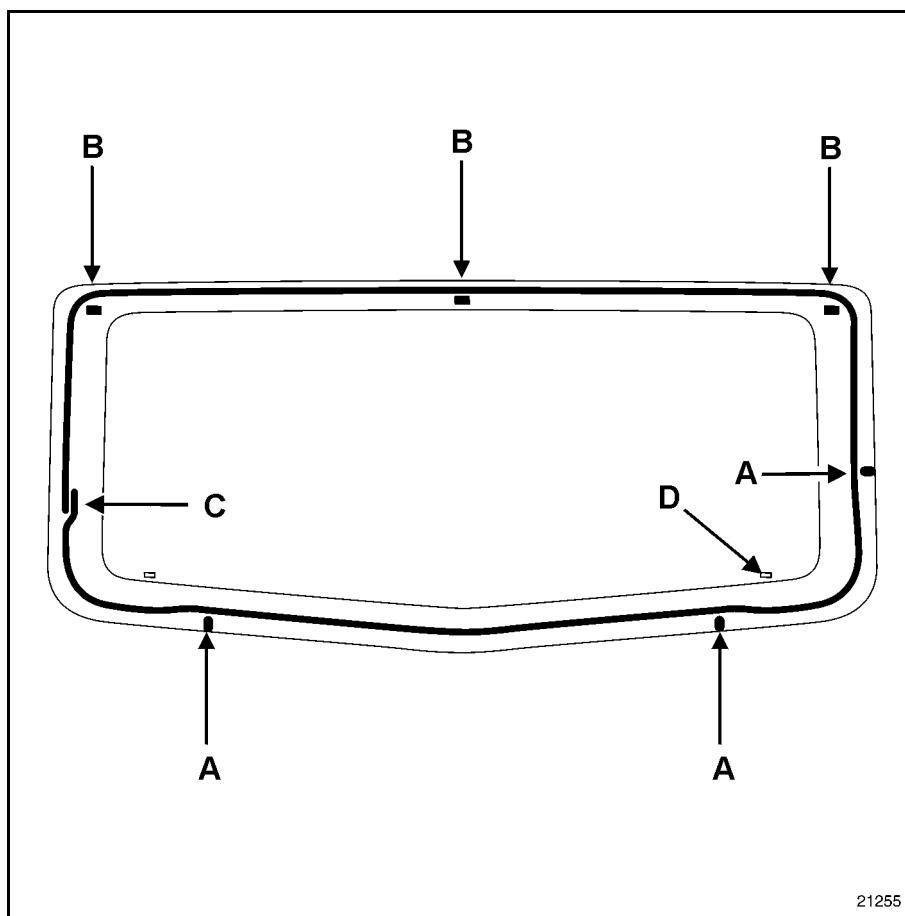
##### **NOTE:**

There are no particular removal difficulties.

Using the wire inserting tool, pierce the adhesive bead from inside the vehicle, then cut through it.

#### **REFITTING**

Refer to the **Procedure for fitting windows** section for information about surface preparation and applying adhesive.



Fit the three shims (A) to the door panel.

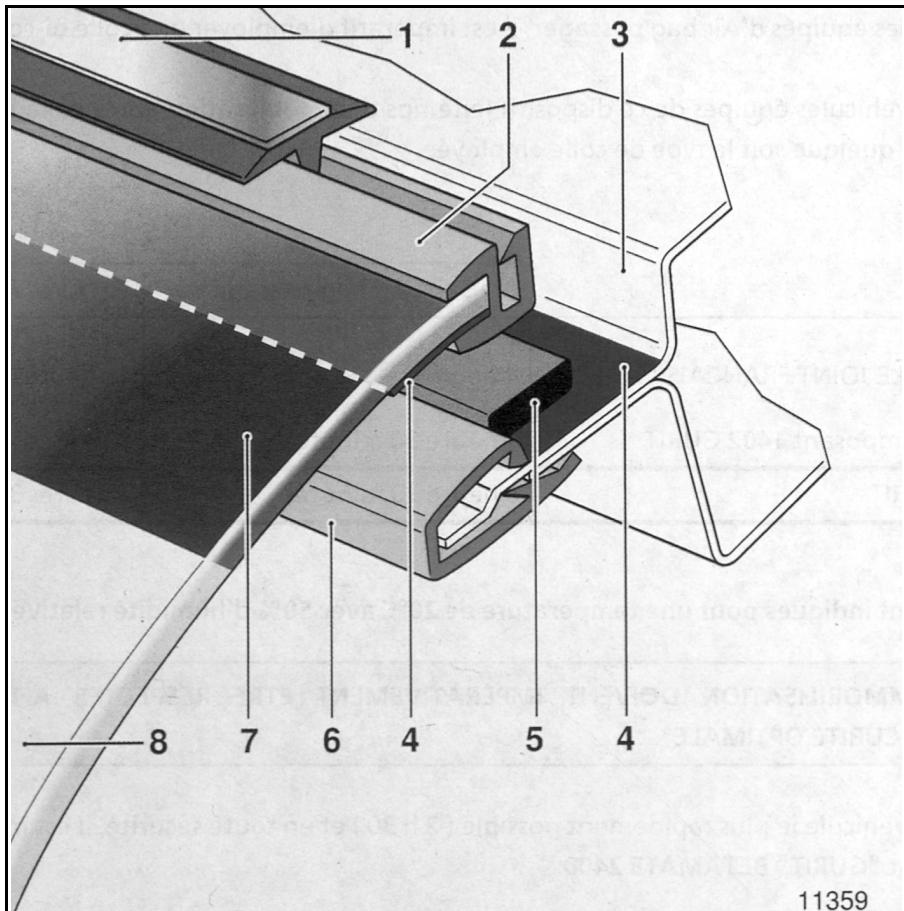
Stick the three adhesive shims (B) to the door panel flange.

Remember the position of join (C) of the adhesive bead.

Slide the window fully against shims (A).

After having adjusted the aspect clearance, keep the window in position using masking tape while the adhesive dries.

Marks (D) enable the wiper blades to be positioned.



11359

- 1 - Trim
- 2 - Trim mounting
- 3 - Bodywork
- 4 - Glass primer/painted panel
- 5 - Adhesive compound
- 6 - End seal
- 7 - Tinting
- 8 - Window

**MINIMUM VEHICLE REPAIR TIME**

| <b>Vehicle fitted with:</b> | <b>No airbag<br/>One airbag</b> | <b>Two airbags</b> |
|-----------------------------|---------------------------------|--------------------|
| <b>BIPAC +</b>              | 30 minutes                      | 1 hour 30 minutes  |
| <b>MONOPAC +</b>            | 1 hour                          | 2 hours            |
| <b>MONOPAC</b>              | 1 hour                          | 3 hours 30 minutes |

All the times stated are for a temperature of 20 °C with 50 % relative humidity.

It is not advisable to use ONE COMPONENT products at temperatures below 10 °C.

**IT IS IMPERATIVE THAT THESE OPERATION TIMES ARE ADHERED TO  
TO GUARANTEE OPTIMUM SAFETY**

**IMPORTANT**

Never mix the products when carrying out any adhesive bonding process.

Only use the products that are contained in the adhesive kit that has been selected.

BIPAC + ADHESIVE KIT Part no.: 77 11 219 552



18168

#### CONTENTS OF KIT

- Two **225 ml** cartridges (activator + PU).
- One sachet (yellow) containing two cloths: one impregnated + one dry.
- One **10 ml** tube (green) of glass primer.
- One **10 ml** tube (red) of paint primer.
- One mixer.
- One pair of gloves.
- One specific nozzle.

#### IMPORTANT

Take note of the product expiry date printed on the kit.

MONOPAC + 2 ADHESIVE KIT Part no.: 77 11 218 570

Additional tube + one bottle nozzle, Part no.: 77 11 218 571



#### CONTENTS OF KIT

- One **300 ml** bottle.
- One sachet (yellow) containing two cloths: one impregnated + one dry.
- One **10 ml** tube (green) of glass primer.
- One **10 ml** tube (red) of paint primer.
- One pair of gloves.
- One bottle nozzle.

#### IMPORTANT

Take note of the product expiry date printed on the kit.

MONOPAC ADHESIVE KIT Part no.: 77 11 210 350

Additional cartridge + one nozzle: Part no.: 77 11 210 482

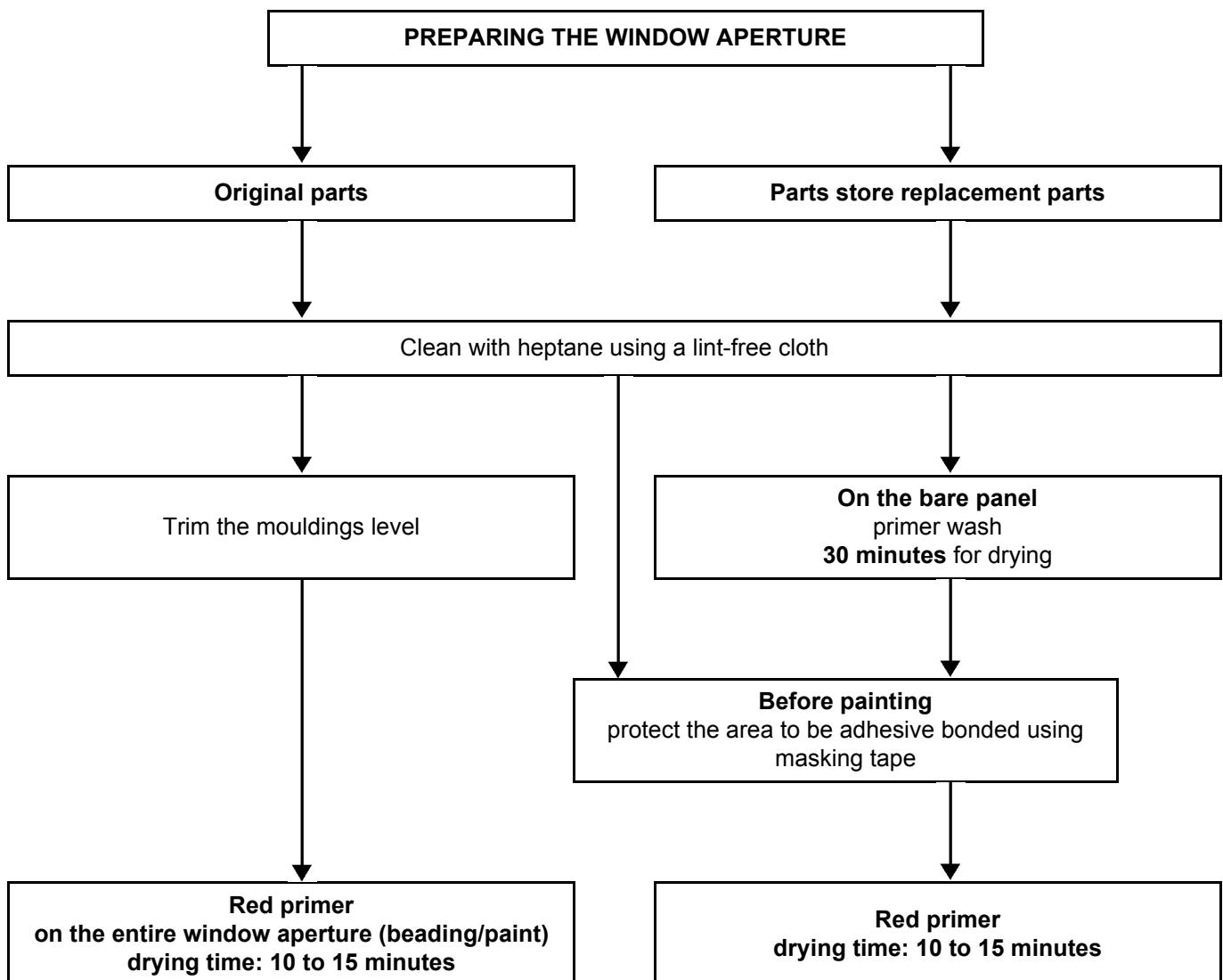


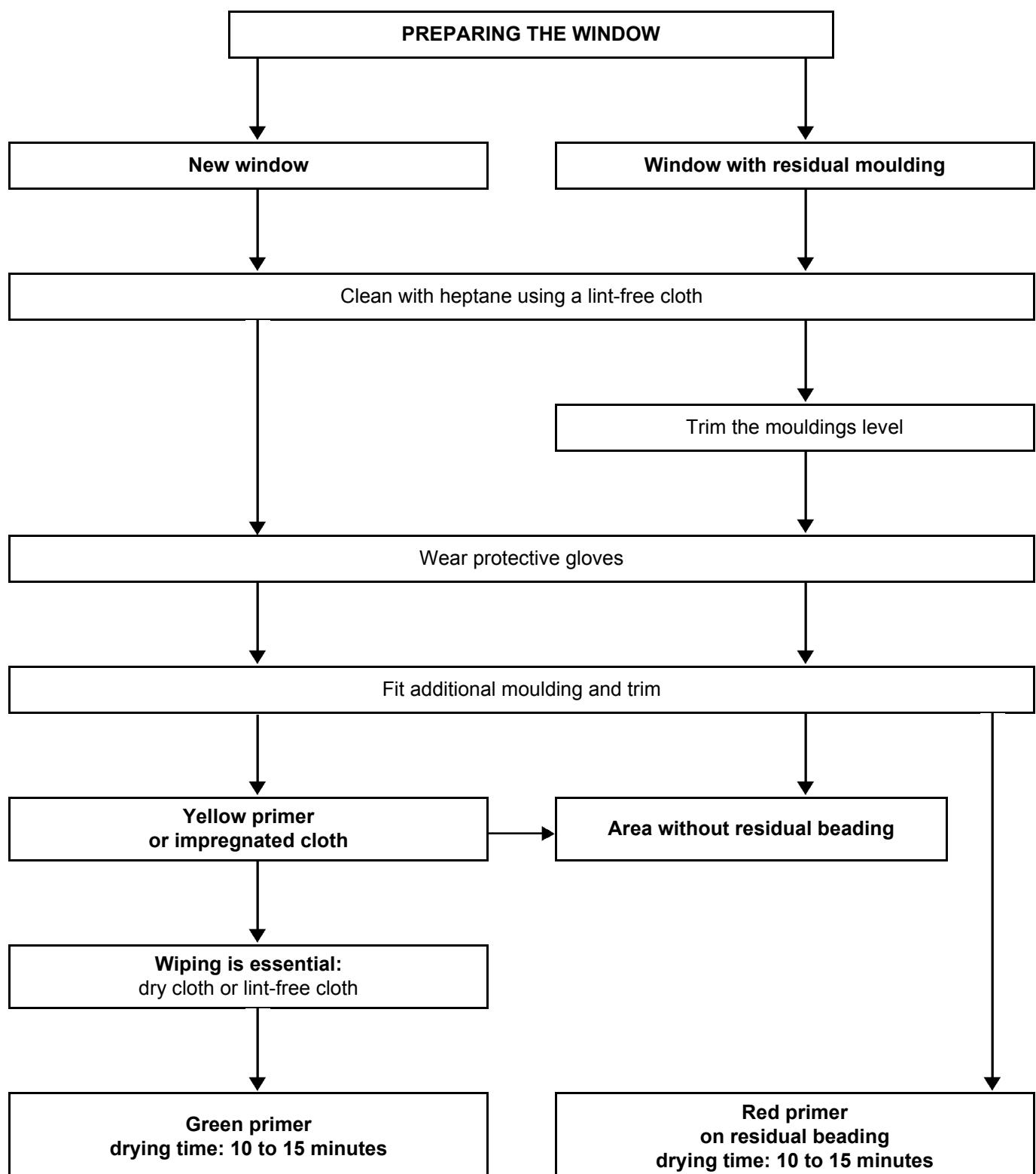
#### CONTENTS OF KIT

- One **310 ml** cartridge.
- One **15 ml** phial (yellow) of cleaner.
- One **15 ml** phial (green) of glass primer.
- One **15 ml** phial (red) of paint primer.
- One pair of gloves.
- Two applicators.
- One specific nozzle.

#### IMPORTANT

Take note of the product expiry date printed on the kit.







54003



18172

## HEPTANE

**Part No.: 77 11 170 064**

Very volatile solvent that facilitates optimum cleaning of the area surrounding the adhesive-bonded area. Evaporates very quickly.

## PRIMER TUBES (red/green)

Take care when opening the tube:

- keep the tube upright (impregnating pad at the top),
- push on the pad, then screw down.

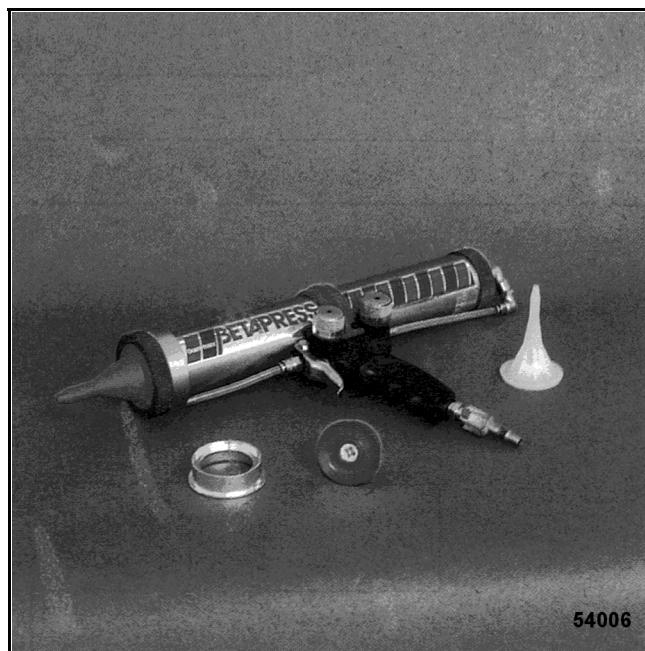
After applying the primer, allow it to dry for **10 to 15 minutes** before applying the adhesive.

**IMPORTANT**  
If any of the product is spilt outside the adhesive bonding area, it must be wiped away immediately (risk of marking the glass).



**GUN FOR TWO-PART ADHESIVE**

Part No.: 77 01 408 909



**GUN FOR ONE-PART ADHESIVE**

Part No.: 77 11 171 310

**IMPORTANT**

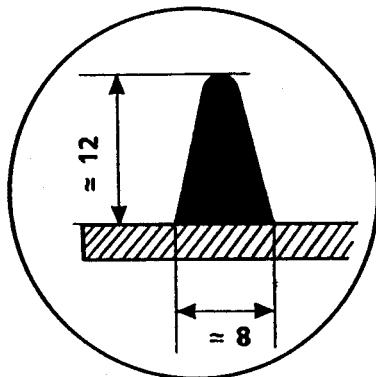
If the adhesive is in a ROUNDED TUBE package, a retainer, Part no.: 77 11 211 726 MUST be fitted to the gun. The cup is screwed onto the piston of the gun.

### APPLICATION

After the old moulding has been cut away, the remainder should be trimmed level as late as possible. This ensures the moulding is as clean as possible (risk of contamination is reduced).

The adhesive moulding will be triangular in shape (application nozzle supplied with the kits).

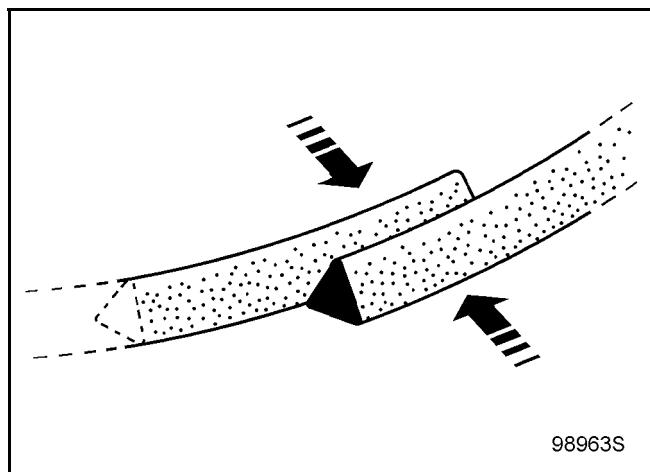
If you do not have the special nozzles, ensure that you observe the dimensions specified for the moulding.



DI5418

The moulding must be applied evenly, preferably starting at the bottom and in the centre.

Finish by overlapping the two ends of the moulding by **50 mm**.



Slide the two ends of the moulding together to merge them.

**VERY IMPORTANT**  
During any adhesive-bonding process, it is essential that the window is installed immediately after the adhesive has been applied

**CONTACT BETWEEN THE ADHESIVE PRODUCT AND ANY OF THESE PRODUCTS IS PROHIBITED:**

**-THINNERS**

**-GREASES**

**-OILS**

**-ALCOHOLS**

**-CHROMATE/PHOSPHATE COATINGS**  
*(before drying)*

**-SILICONE PRODUCTS**

**-SOAP AND SOAPY WATER**

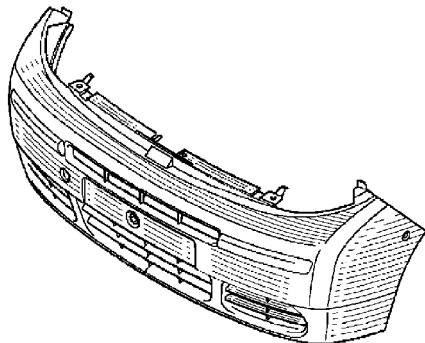
*In the event of serious contamination (with silicone type products), clean with distilled water or acetone prior to any preparation work.*

**IMPORTANT**

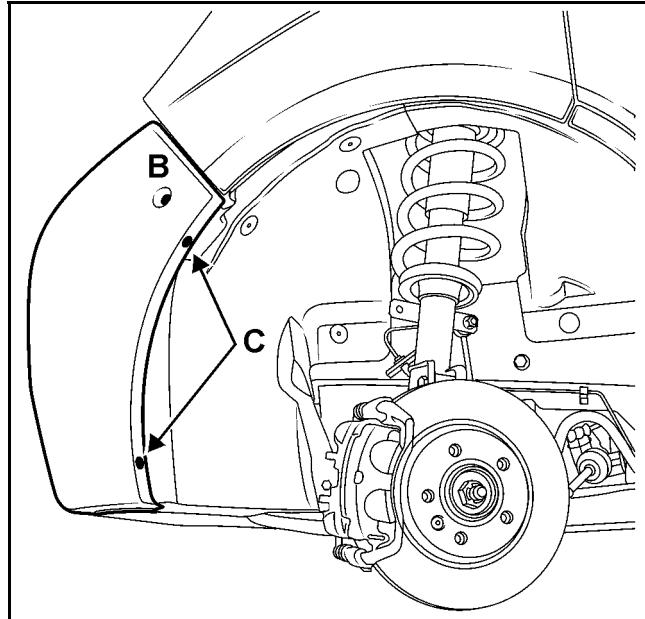
*Never mix the products when carrying out any adhesive bonding process.*

*It is essential that:*

- only those products contained in the adhesive kit selected are used,*
- that protective clothing (gloves and goggles) is worn*



55PR01



20290

**NOTE:**

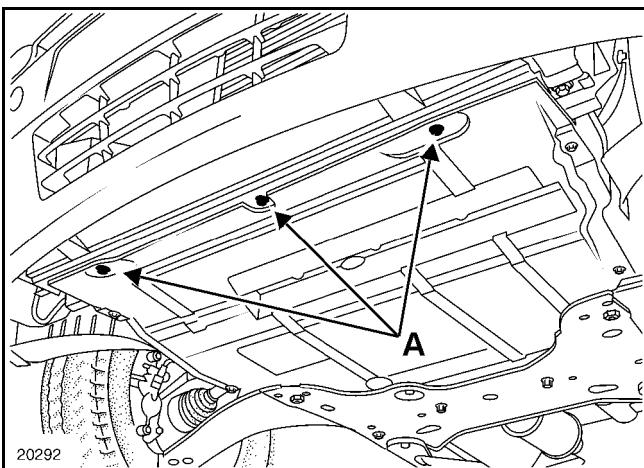
First, you must remove:

- the number plate,
- the radiator grille,
- the side repeaters,
- the lens units.

**REMOVAL**

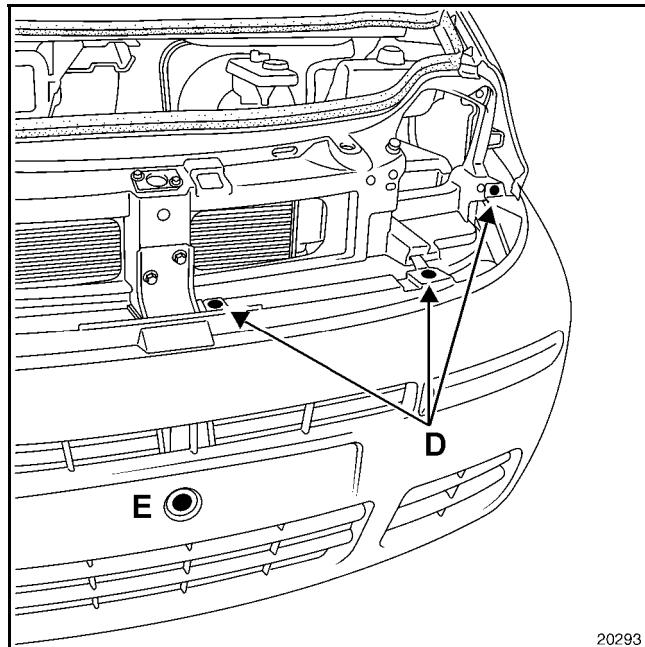
Remove:

- the three skid bolts (A),



20292

- the side bolt (B) (one on each side),
- the bolts (C) (two on each side),



20293

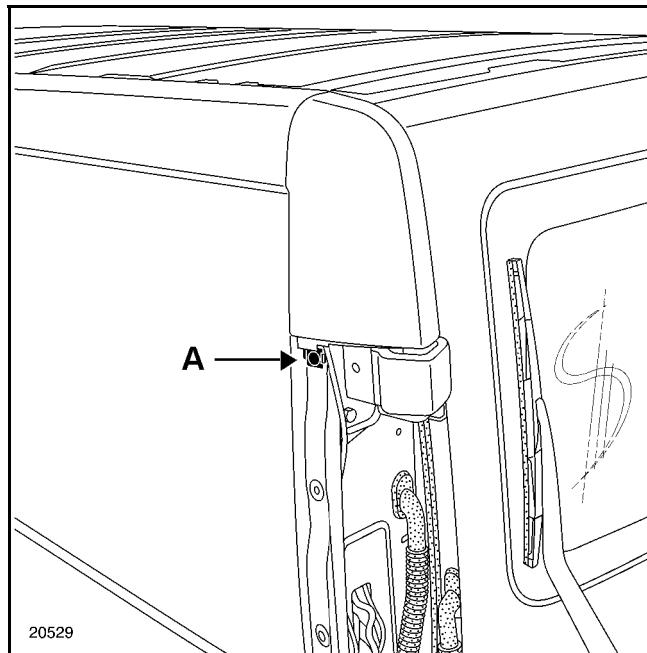
- the bolts (D) (three on each side),
- the central bolt (E).

**REFITTING**

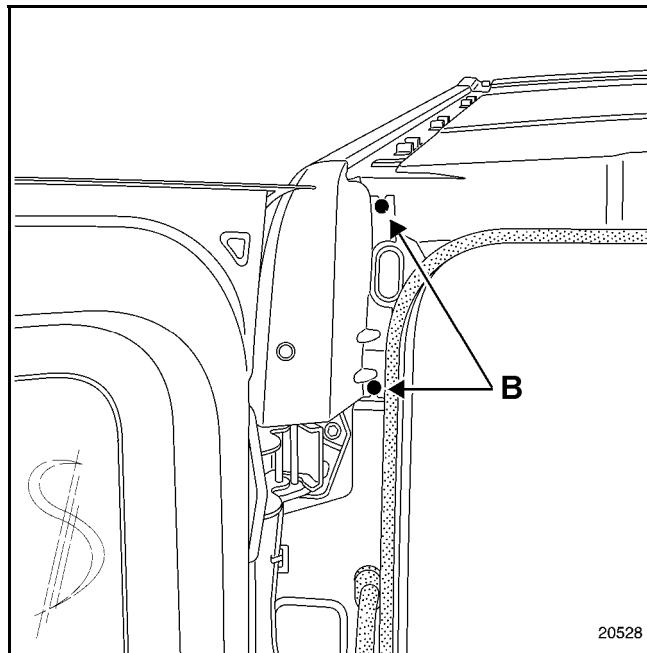
This operation requires two people.

**REMOVAL**

After removing the rear lights,



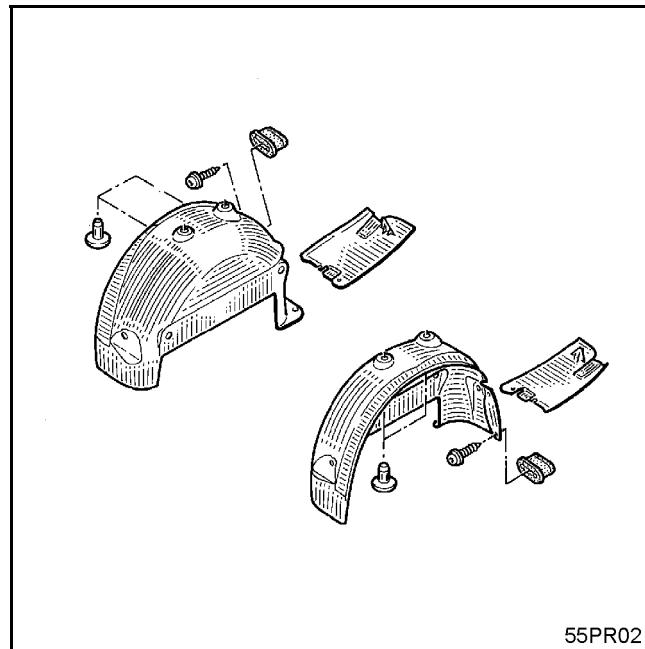
remove bolt (A).



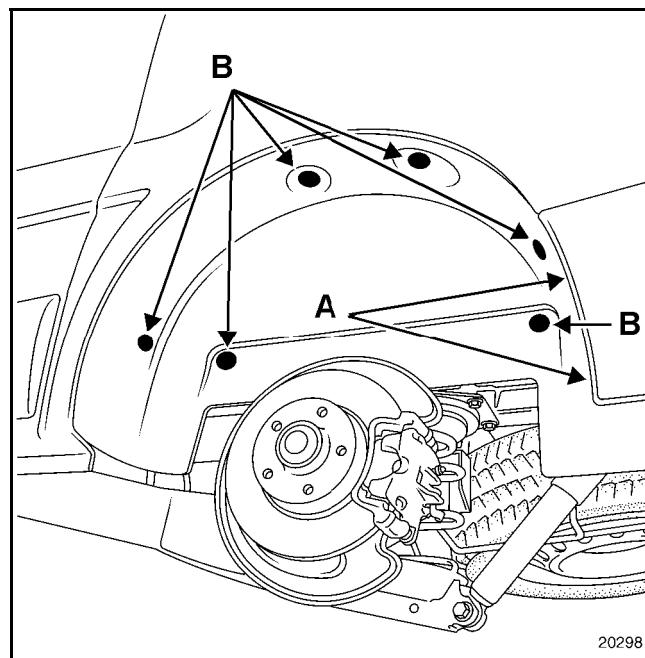
Unfasten the two clips (B) and then remove the part so that the coolant hose can be disconnected.

**REFITTING**

Check that the coolant hose is correctly positioned on the jet before refitting.

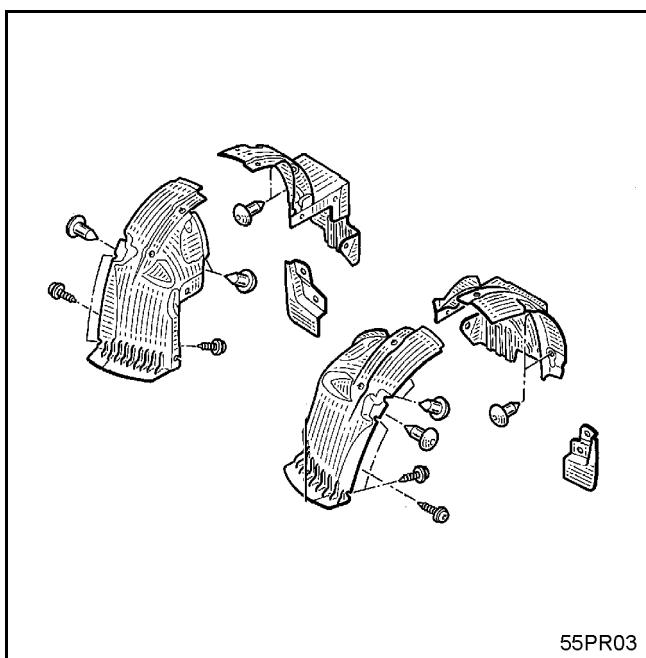


**REMOVAL**



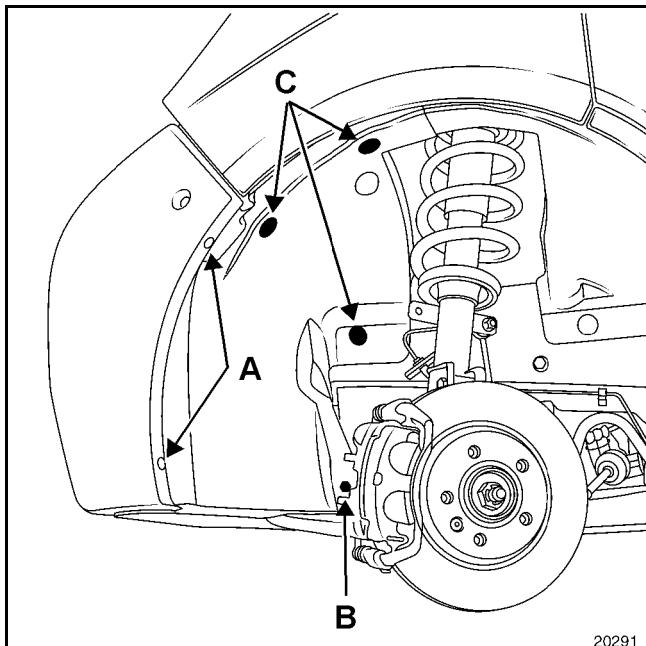
Remove:

- bolts (A),
- clips (B).



**REMOVAL**

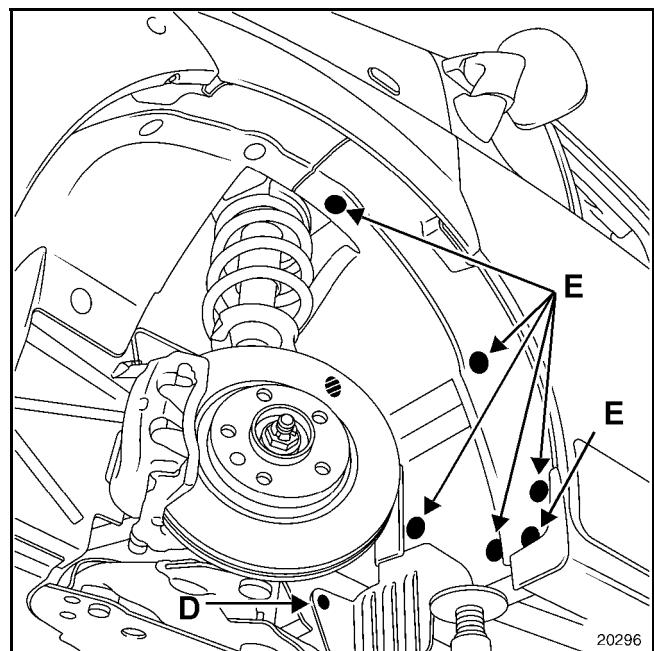
**Front wing interior protector, front section**



Remove:

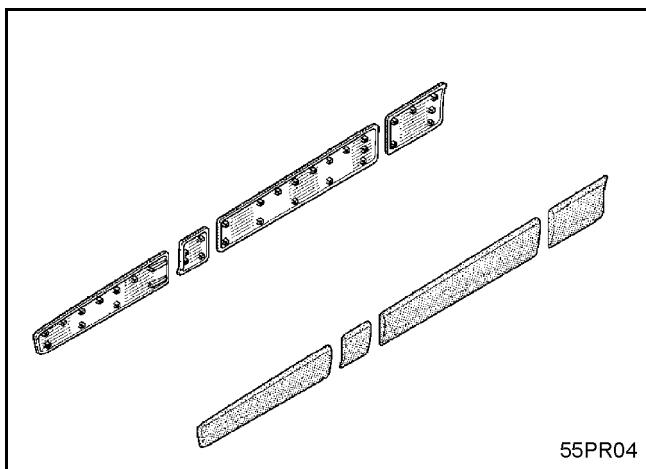
- bolts (A),
- bolt (B),
- clips (C) and then remove the wheel arch screen.

**Front wing interior protector, rear section**



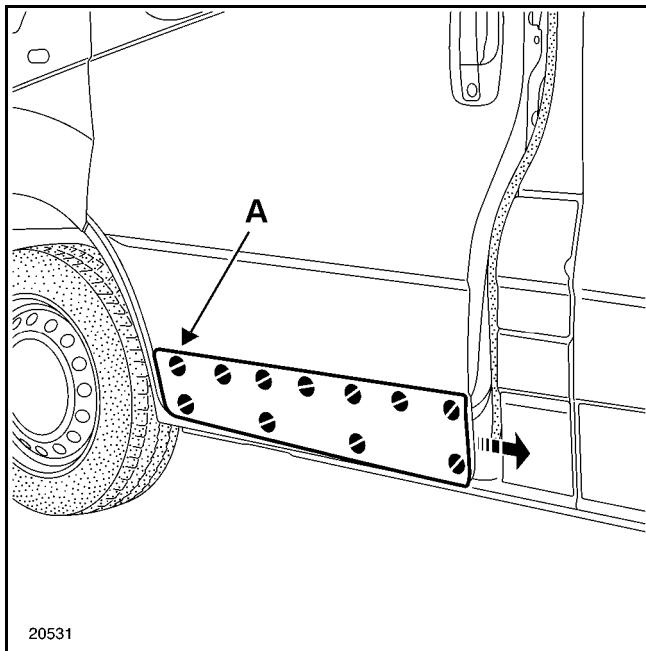
Remove:

- bolt (D),
- clips (E).



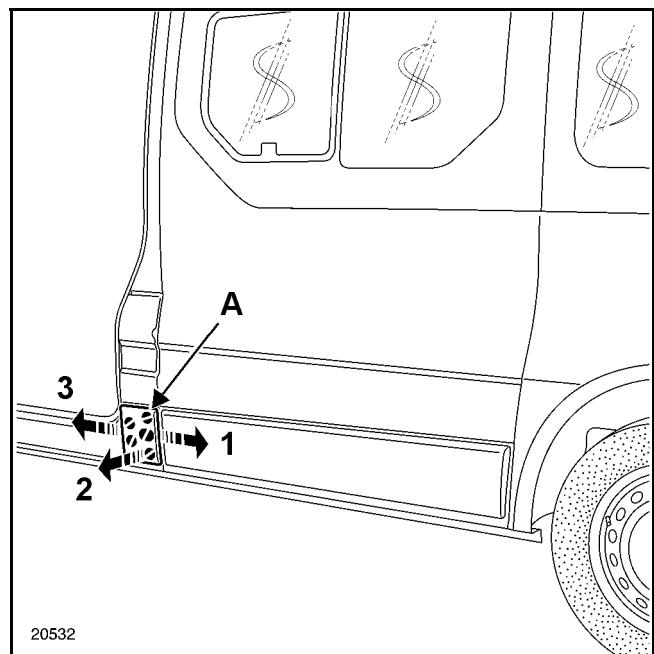
**REMOVAL**

**Front door strip**



Slide the strip towards the rear of the vehicle.

**Cab pillar strip**



**NOTE:**

Removal is in three stages:

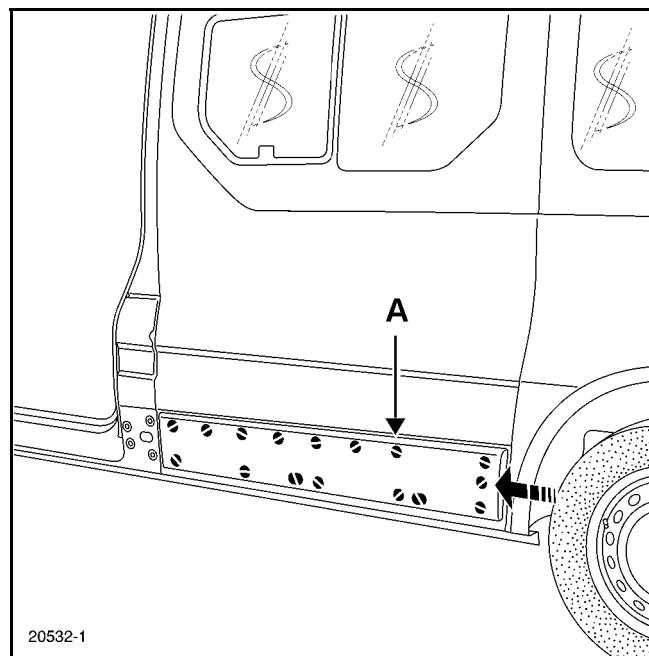
- 1 slide the moulding strip towards the rear of the vehicle,
- 2 carefully move the moulding strip towards you,
- 3 keeping the moulding strip steady, slide it towards the front of the vehicle.

**IMPORTANT:**

Indexing clips (A) cannot be removed without being damaged, so always fit new ones after removal (e.g. after a panel straightening operation).

### Side panel strips

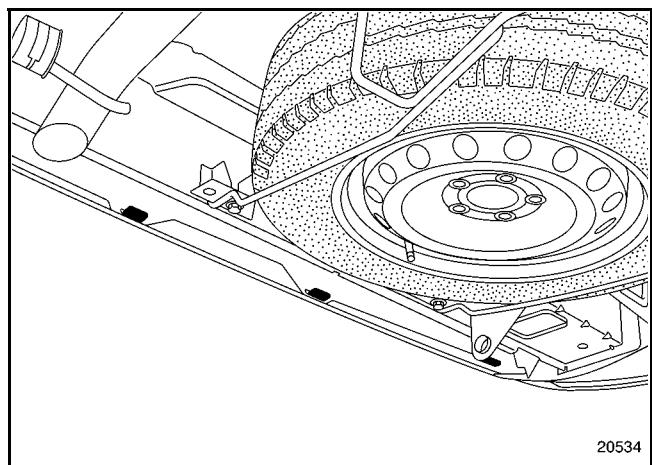
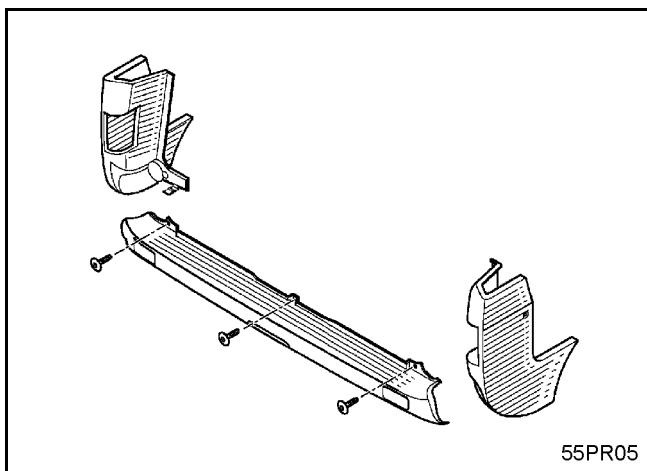
After removing the cab pillar strip,



slide the strip towards the front of the vehicle.

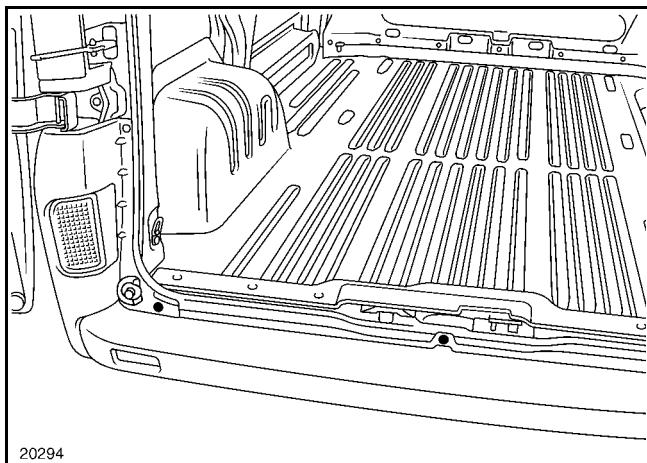
**WARNING:**

Indexing clips (A) cannot be removed without being damaged, so always fit new ones after removal (e.g. after a panel straightening operation).



## REMOVAL

### Rear bumper, central section

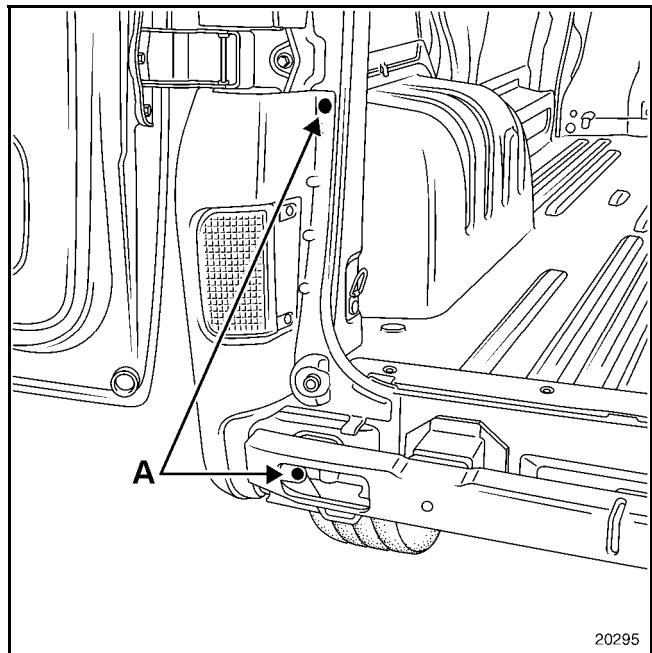


Remove the three upper mounting bolts.

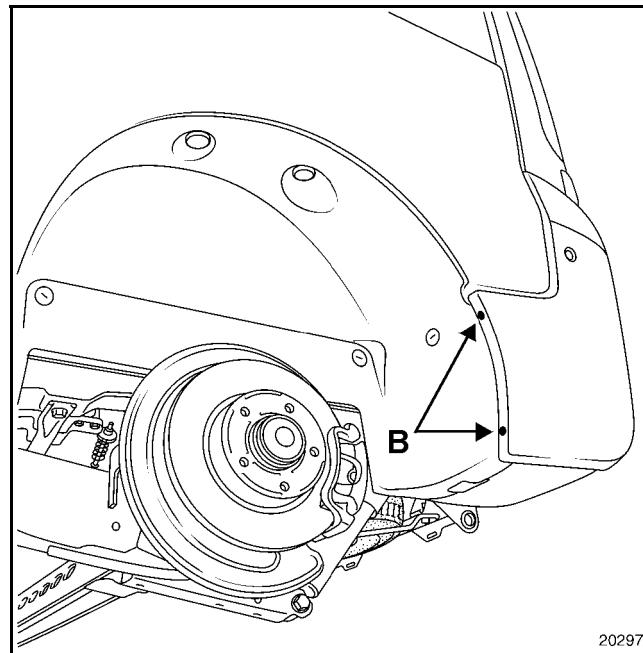
Unclip the inner mountings.

### Rear bumper, side section

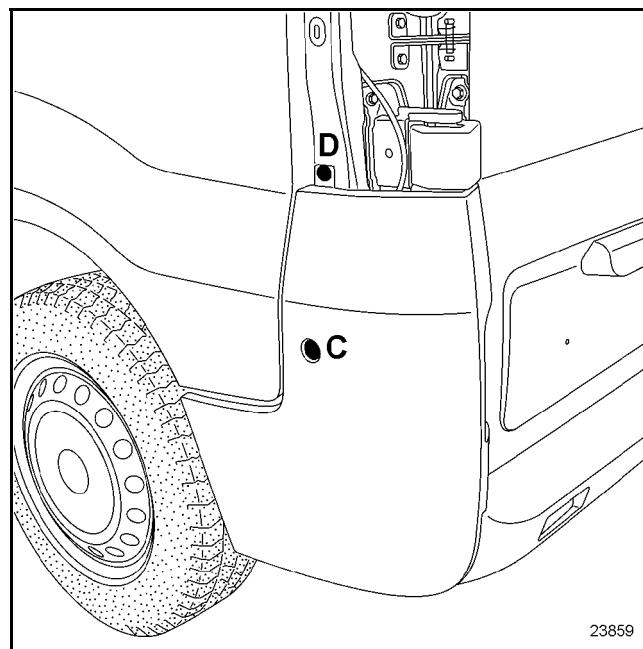
After removing the rear lights,



remove:  
– bolts (A),



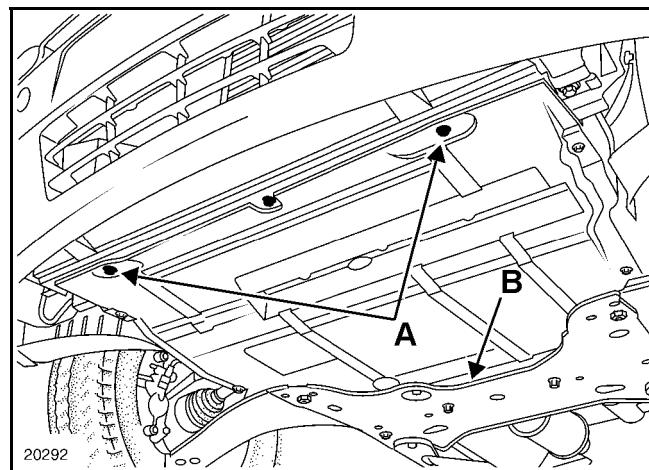
– bolts (B),



– bolt (C).

Unfasten clip (D).

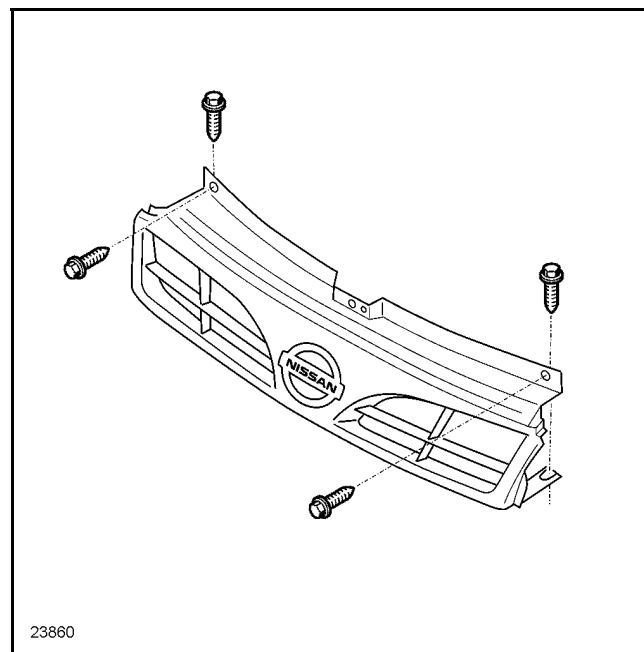
**REMOVAL**



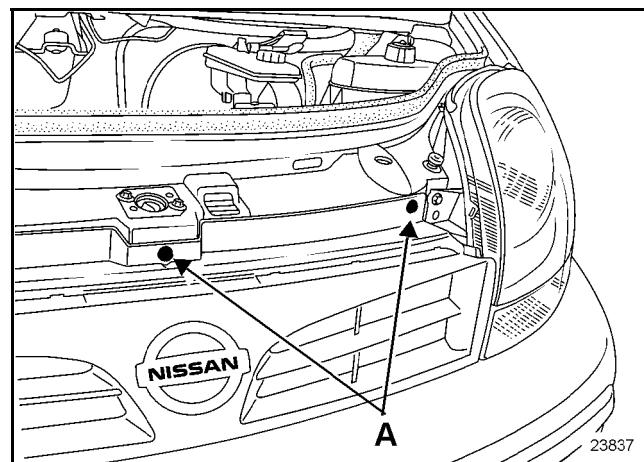
Remove bolts (A) and then slide the skid towards the front of the vehicle.

**REFITTING**

Position retaining bracket (B) on the sub-frame and continue refitting in the reverse order to removal.

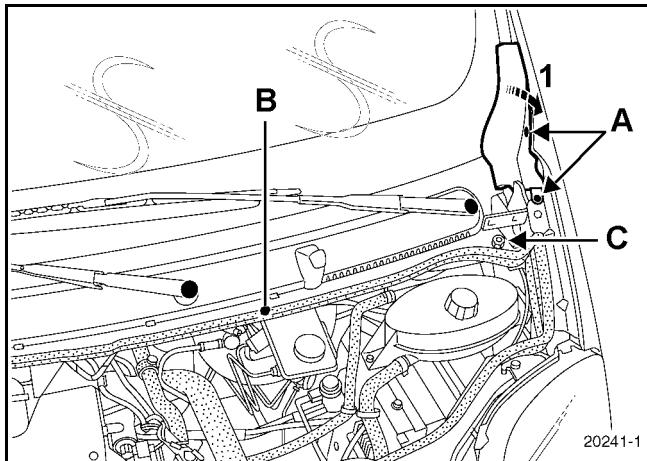


### REMOVAL



Remove mounting bolts (A).

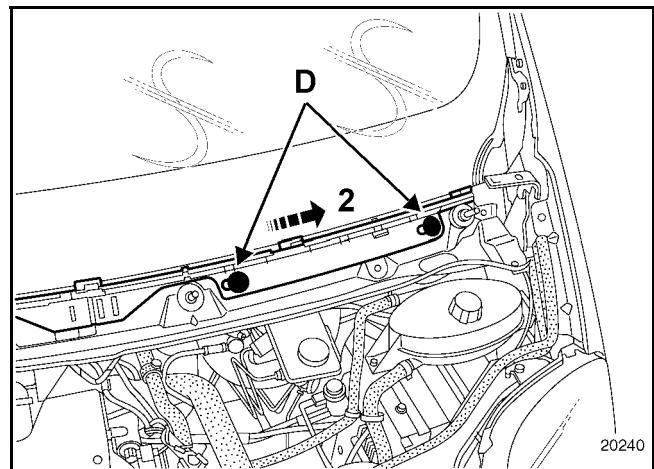
**REMOVAL**



**Remove:**

- the wiper arms using tool Elé. 1294-01,
- the two clips (A) and release the cover (1),
- the seal (B),
- the clips (C).

Carefully release the grille so that you can remove the wiper hose.

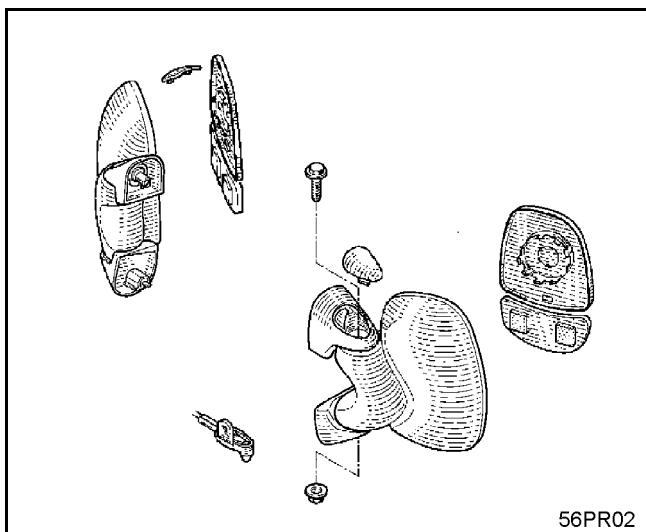


Unfasten the clips (D), and then remove the scuttle panel grille support as shown in the diagram (2).

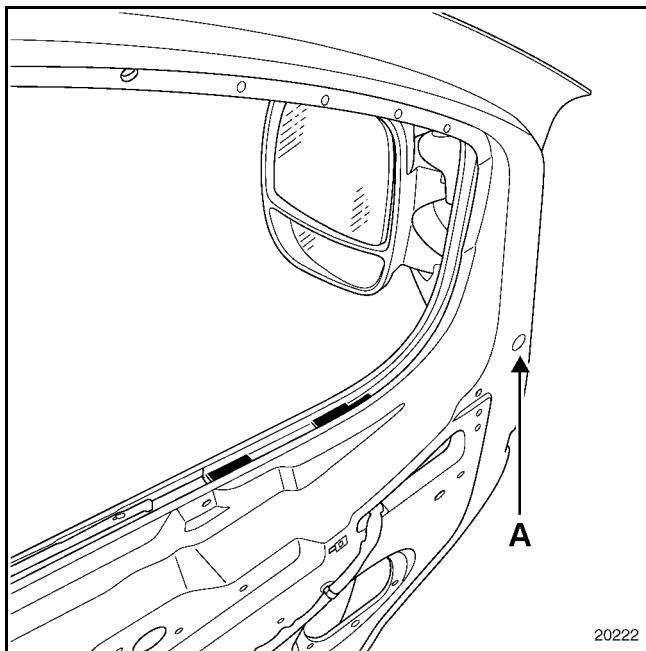
**REFITTING**

Check that the coolant hose is correctly positioned before refitting.

| TIGHTENING TORQUE (in Nm) |    |
|---------------------------|----|
| Wiper arms                | 21 |

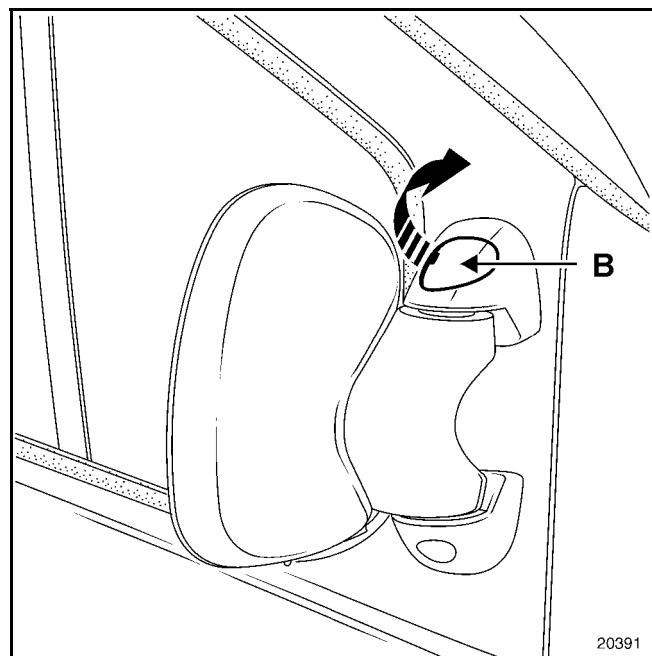


**REMOVAL**



Remove:

- the blanking cover, to reach the mounting bolt (A).



- the door mirror upper cover, to reach the bolt (B).

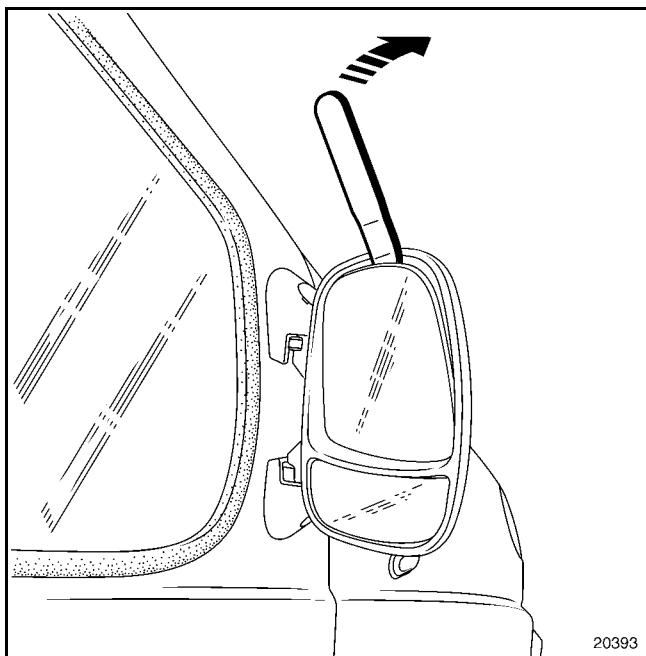
Carefully move the door mirror, and then disconnect the connector.

**REFITTING**

Check that the connector is fitted on the door mirror before refitting.

**REMOVAL**

**Rear-view mirror upper glazing**

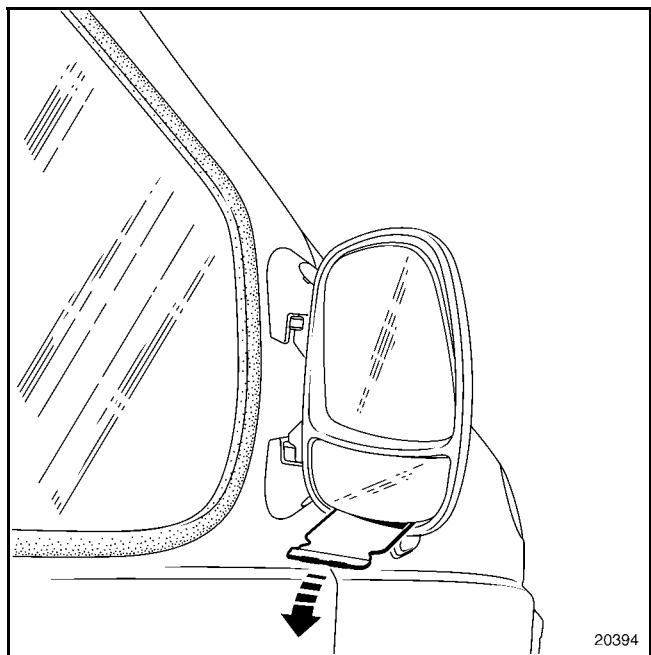


Insert tool **Car. 1363**, use the edge of the door mirror plastic casing as a support and push as shown above.

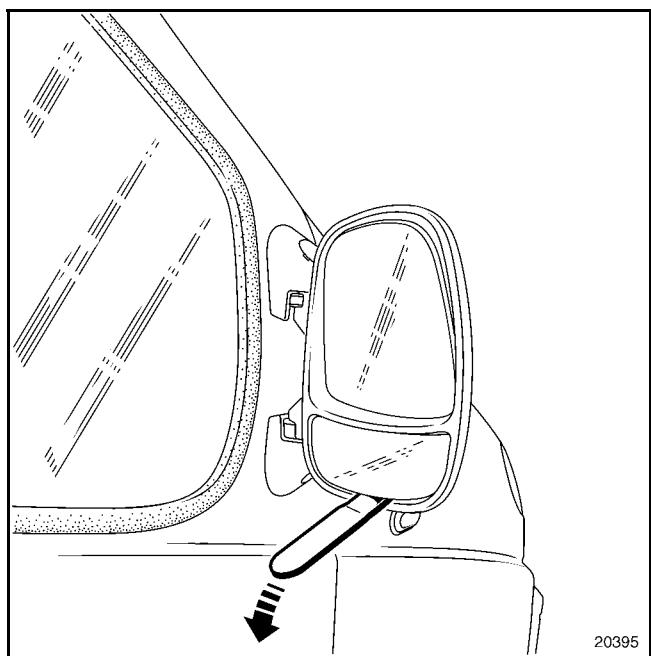
Disconnect the various connectors.

**Door mirror lower glazing**

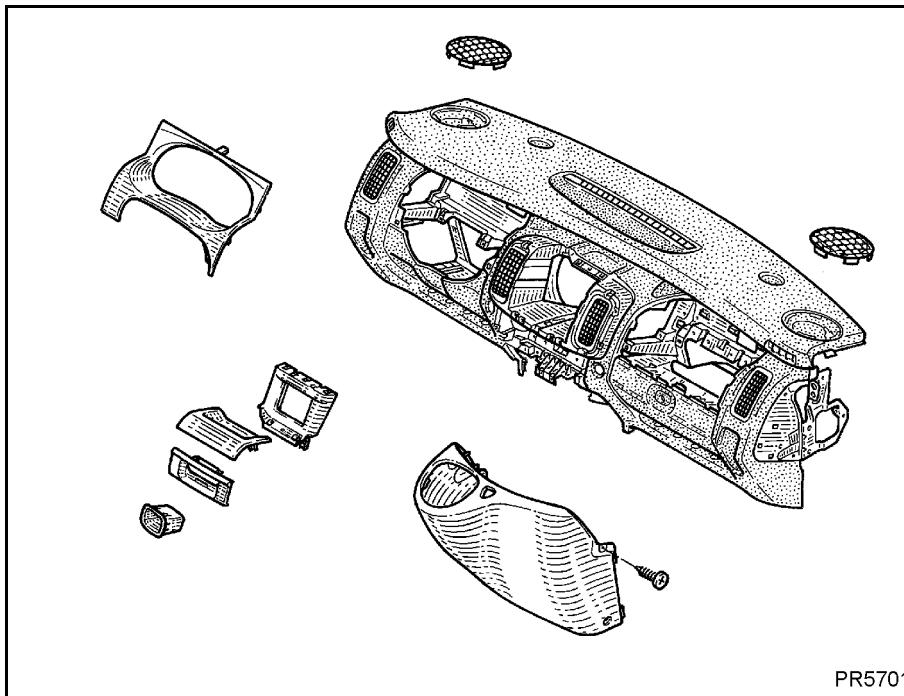
**Note:**  
the glass is made of a durable plastic.



Insert an **80 mm** mastic knife and push as shown above.



Once the lower section has been released, insert tool **Car. 1363**, then push gently as shown above to release the upper glazing.

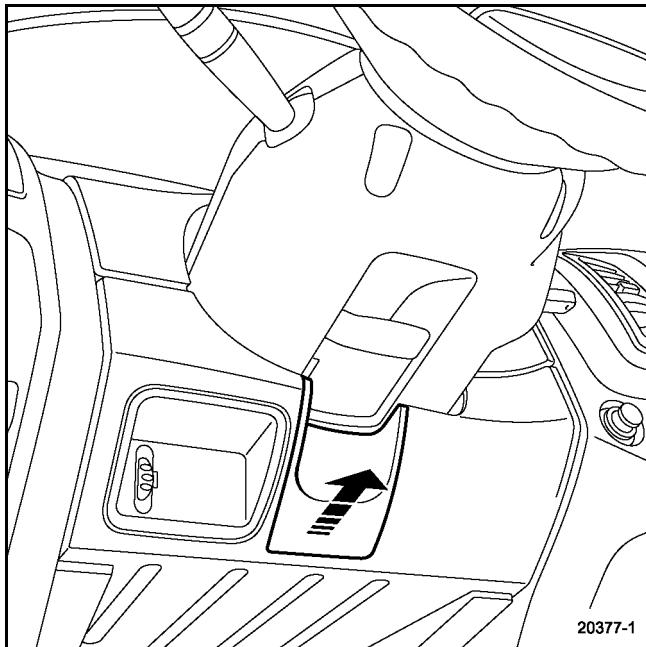


PR5701

**WARNING:**

Pyrotechnic systems (airbags and pretensioners) must not be handled near to a heat source or flame as they may be triggered.

### REMOVAL

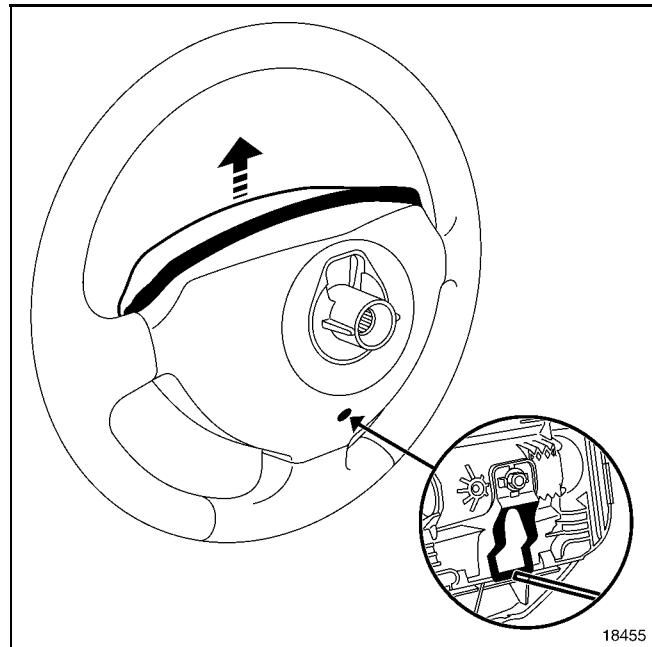


Unclip the cover under the steering wheel to connect the diagnostic tool.

**IMPORTANT:**

Before removing the airbag modules, lock the compute using the diagnostic tool (for instructions, refer to Section 88).

Disconnect the battery.



Unclip the driver's front airbag module.

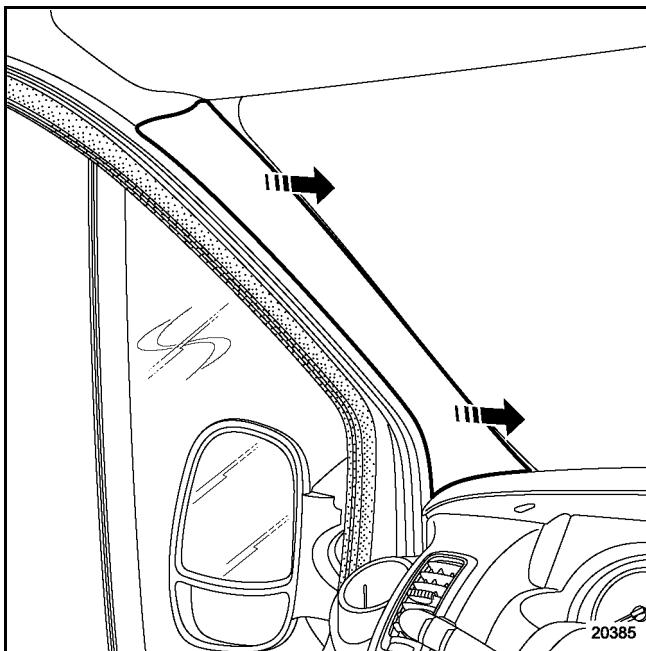
Disconnect the airbag connector.

**WARNING:**

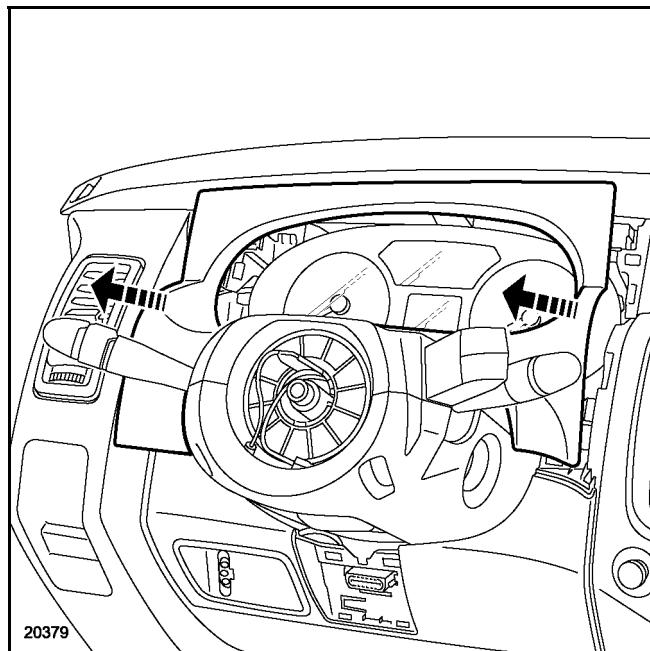
It is essential to mark the position of the rotary switch and ensure that the wheels are straight when removing it, so that the strip is centred.

Remove:

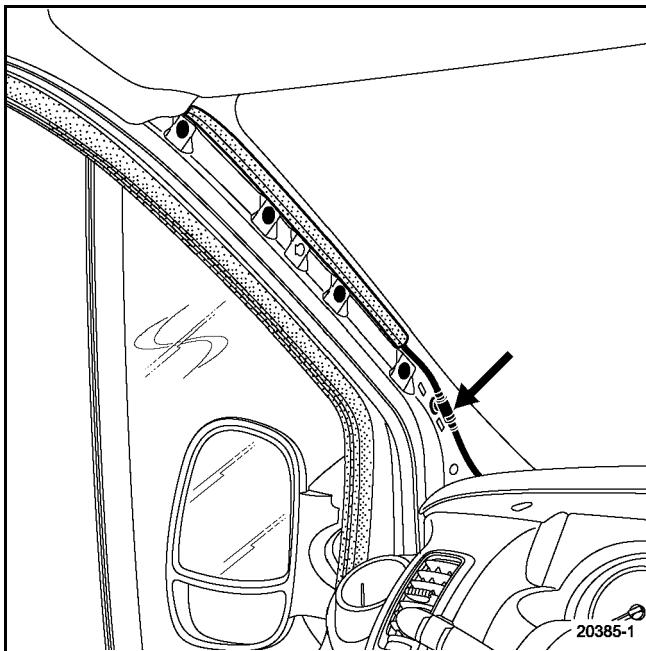
- the steering wheel bolt,
- the steering wheel.



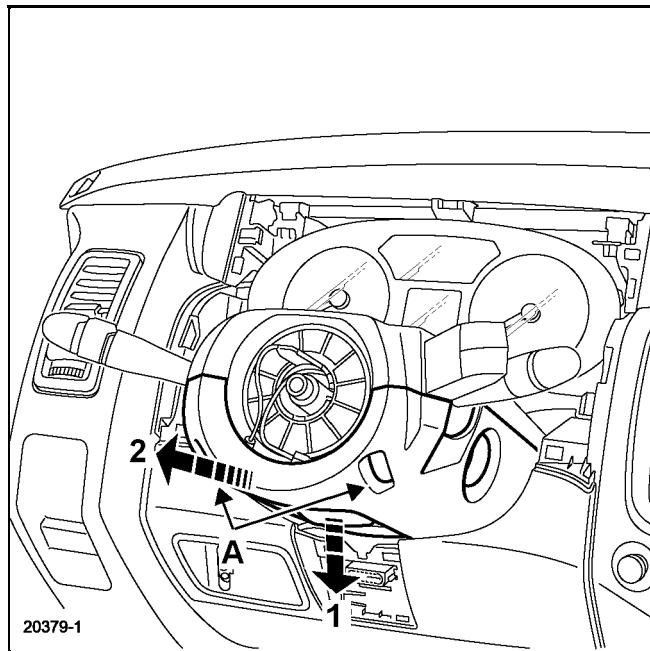
– the windscreen pillar trims.



Unclip the instrument panel visor.



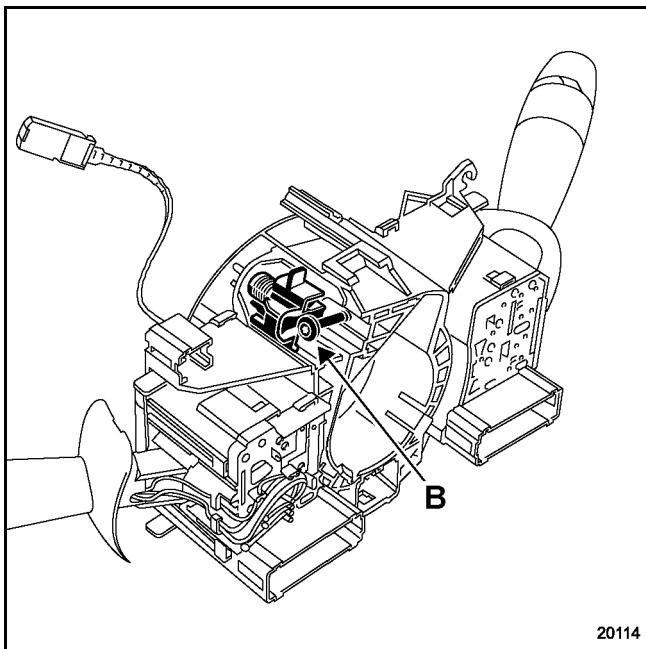
Disconnect the antenna connector.



Remove the two mounting bolts (A) from the casing.

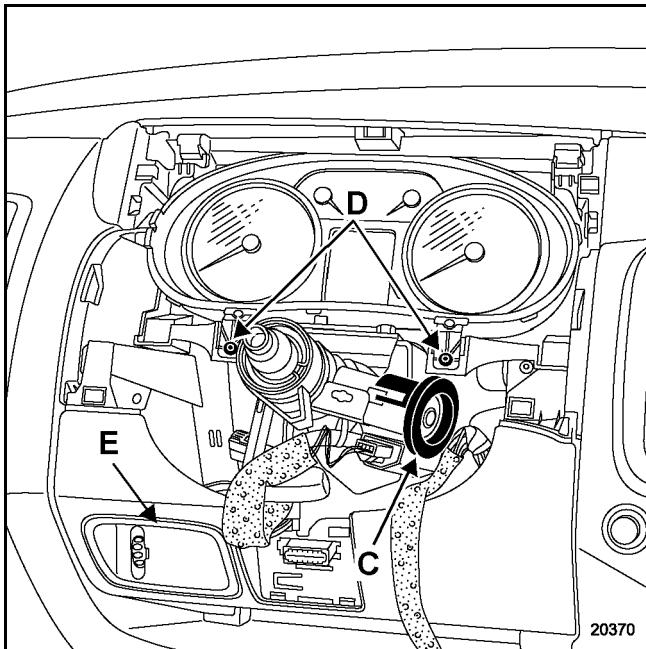
Unlock the steering wheel height adjustment control.

Undo the lower half cowling (1) then (2).



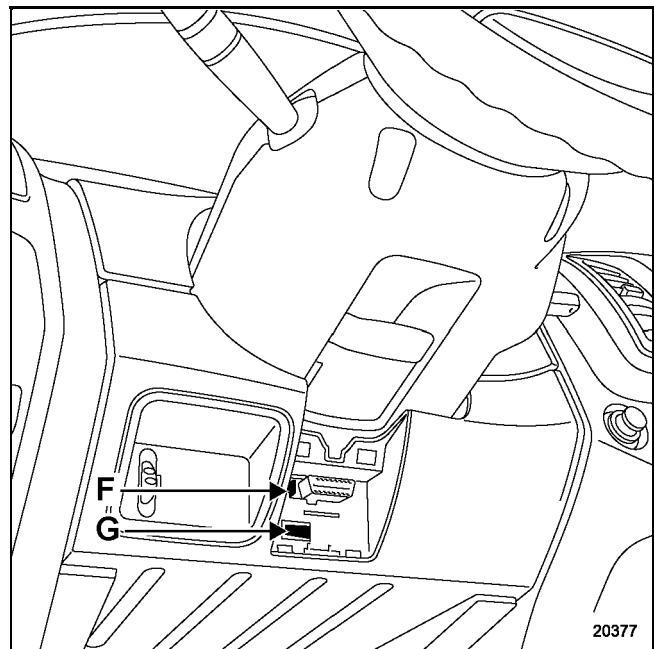
Disconnect the rotary switch connectors.

Undo the screw (B) then release the rotary switch.



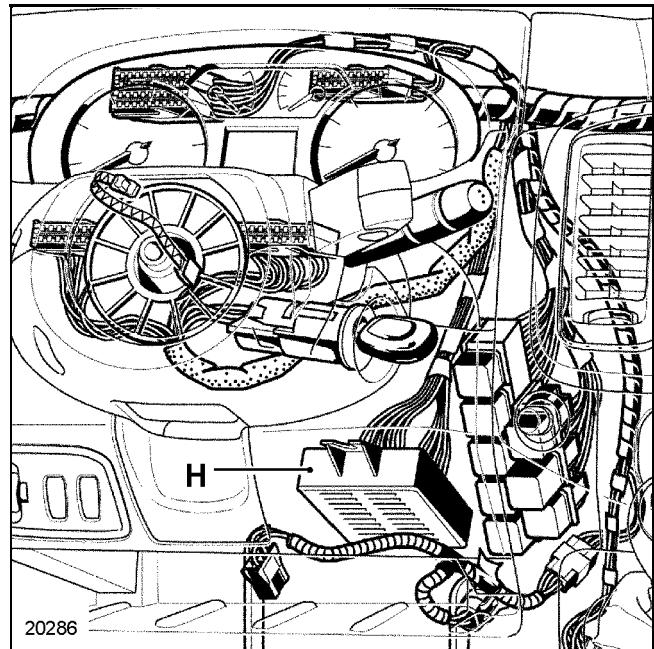
Remove:

- the transponder ring (C),
- the two dashboard mounting bolts (D),
- the instrument panel, and then disconnect the connectors,
- disconnect the plate connectors (E) (depending on version).

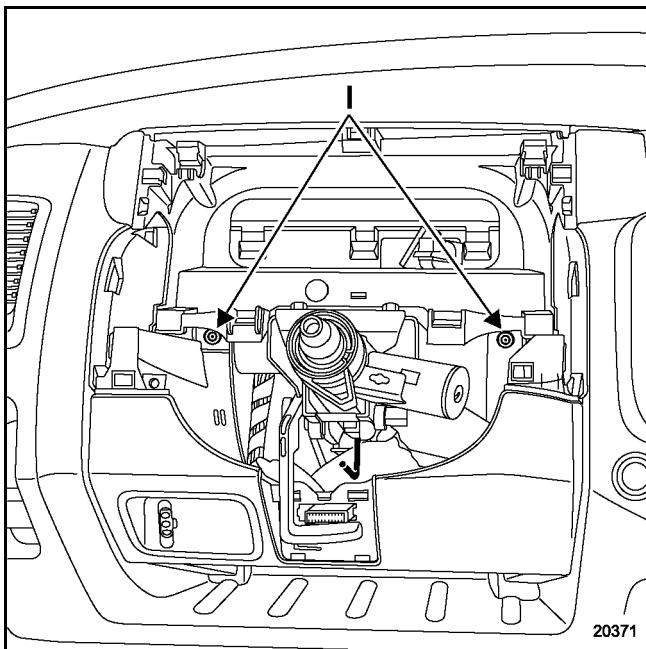


Remove:

- the diagnostic socket (F),
- the ignition switch connector (G).

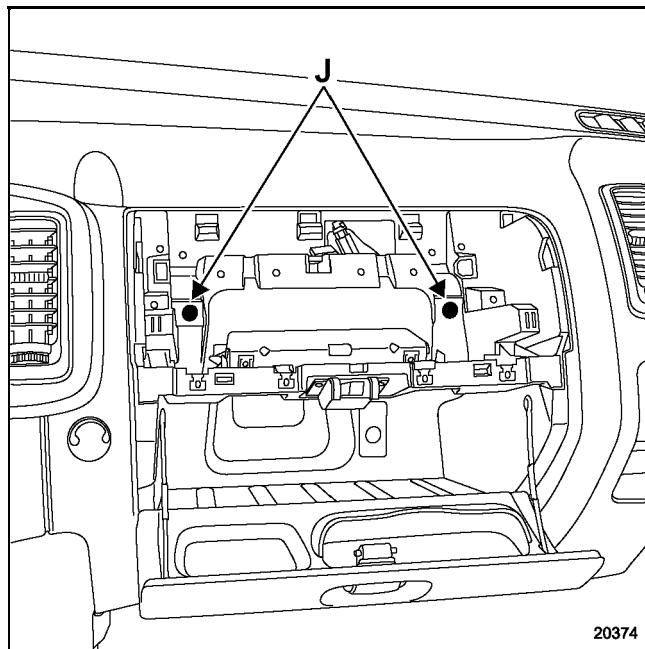


Disconnect the UCH (H) (it is located close to the steering column).



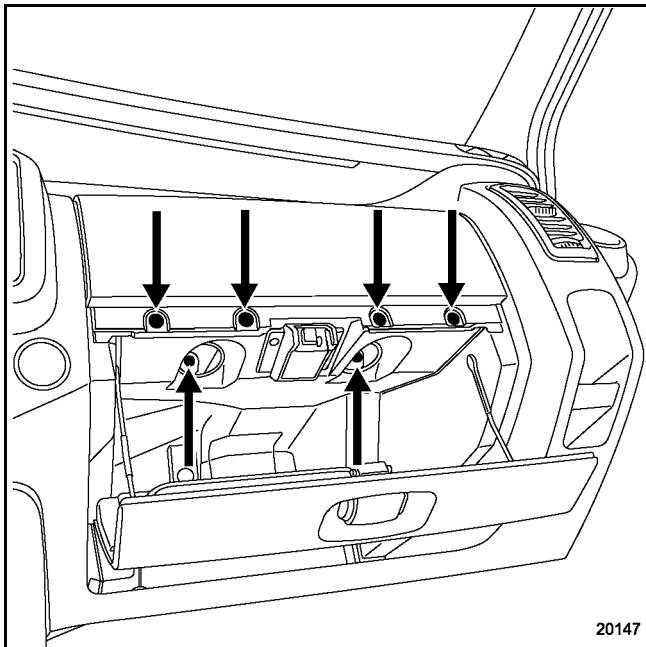
Remove the dashboard mounting bolts (I).

Lock the steering wheel height adjustment control.



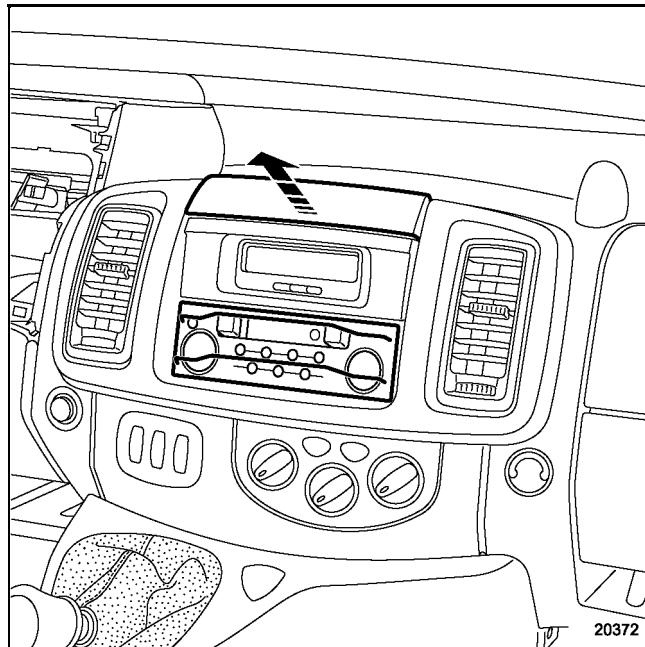
Remove the dashboard mounting bolts (J).

Disconnect the glove compartment light connector.



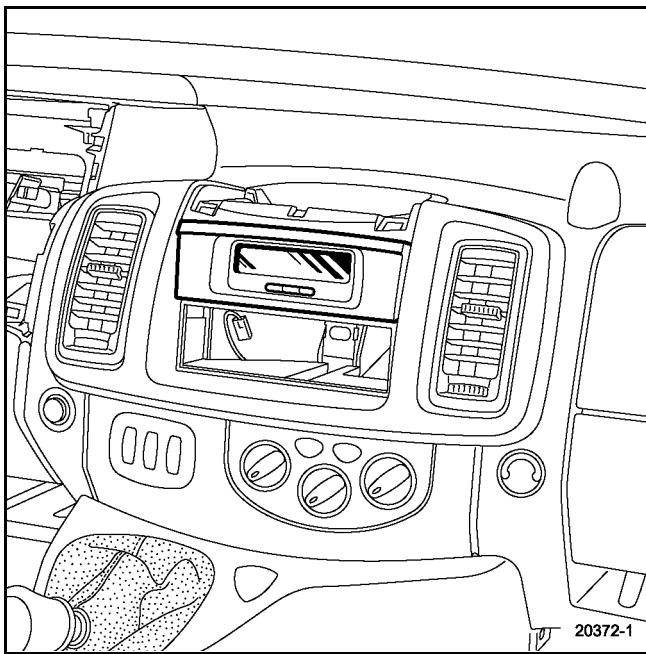
Remove the six mounting bolts from the passenger airbag.

Disconnect the connector, then release the airbag.



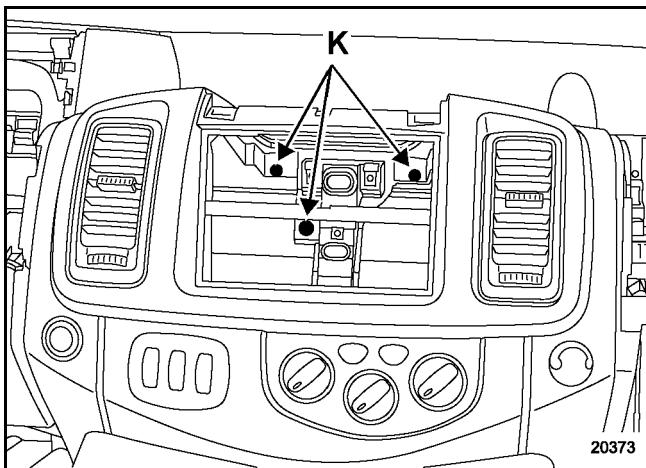
Unclip the central upper cover.

Remove the radio with tool **MS. 1373**.

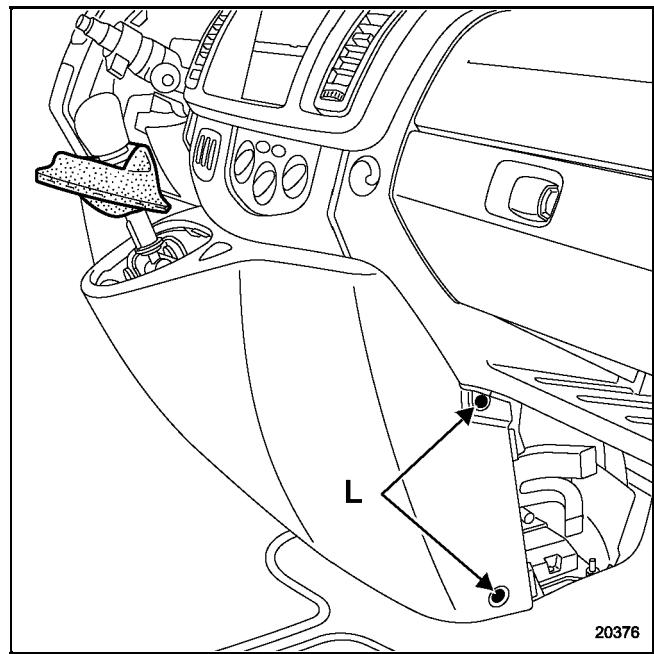


Remove:

- the central display,



- the dashboard mounting bolts (K).

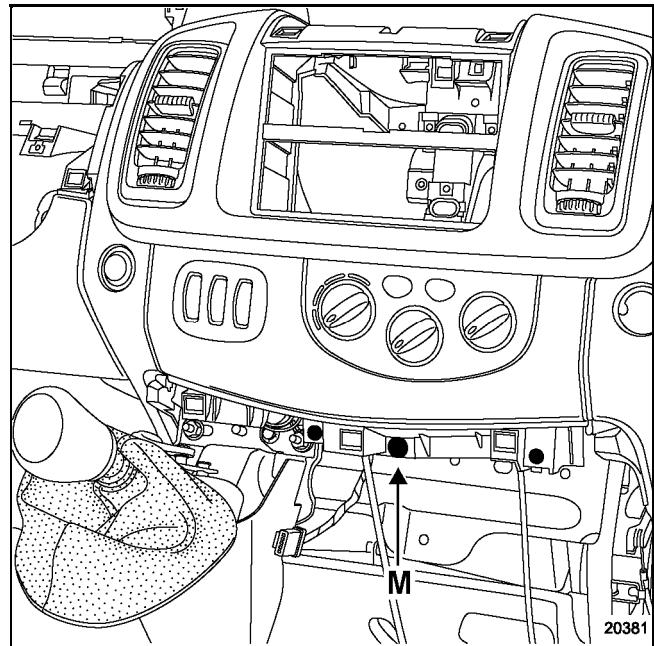


Unclip the garter from the gear control lever.

Remove the four mounting bolts (L) from the central console.

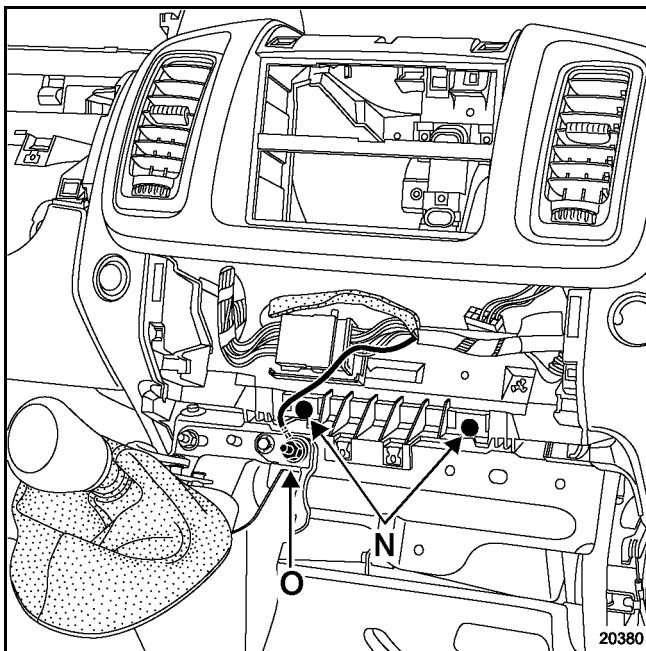
Disconnect the hazard warning lights connector.

Release the central console.



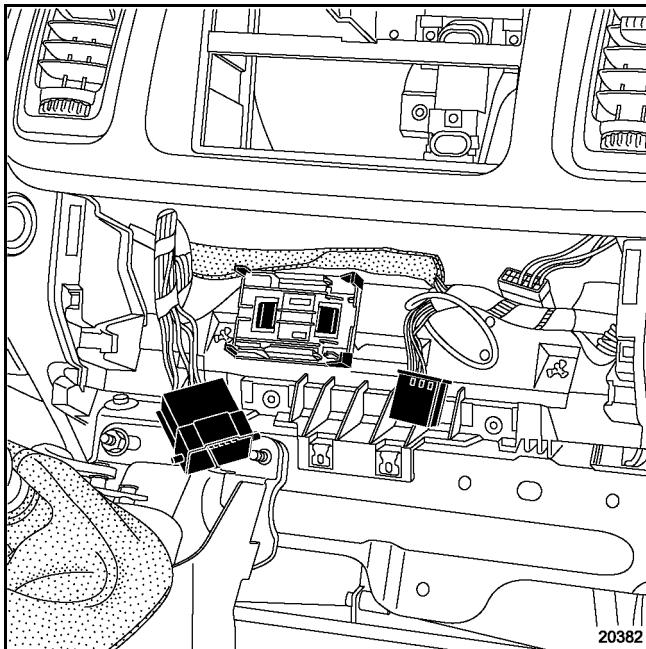
Remove the mounting bolt (M).

Disconnect the connectors, then release the heater control panel.

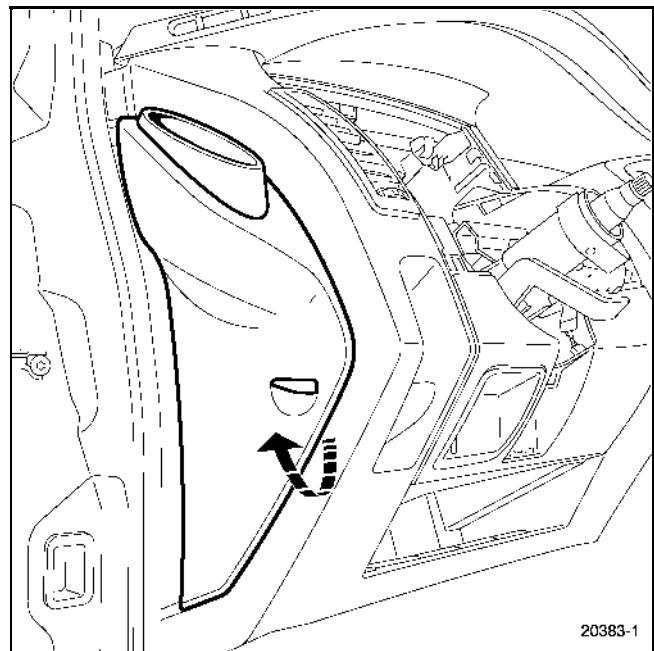


Remove:

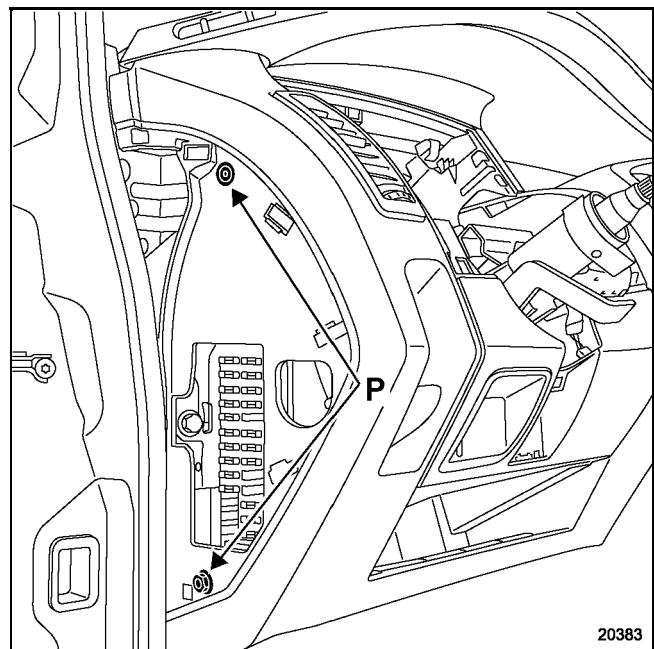
- the mounting bolts (N),
- the earth wire (O),



- the connector.



Unclip the ashtray supports.



Remove the four side mounting bolts (P).

**The remainder of the operations require two people.**

Partially release the dash board.

Disconnect the connectors from the speakers.

Remove the dashboard.

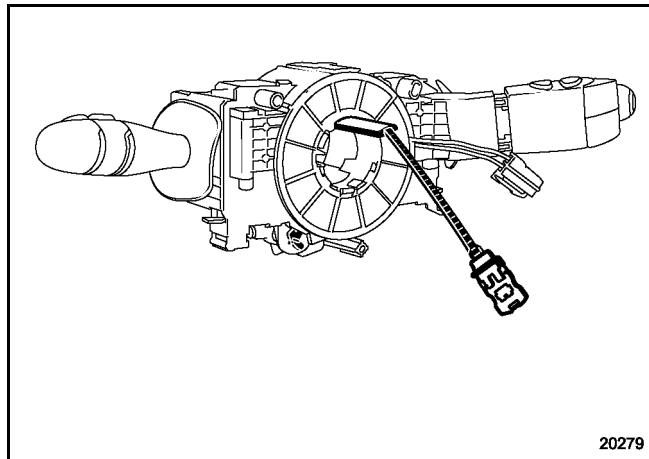
### REFITTING

#### Special notes on the rotary switch

Ensure that the wheels are straight.

Tighten the rotary switch mounting bolt.

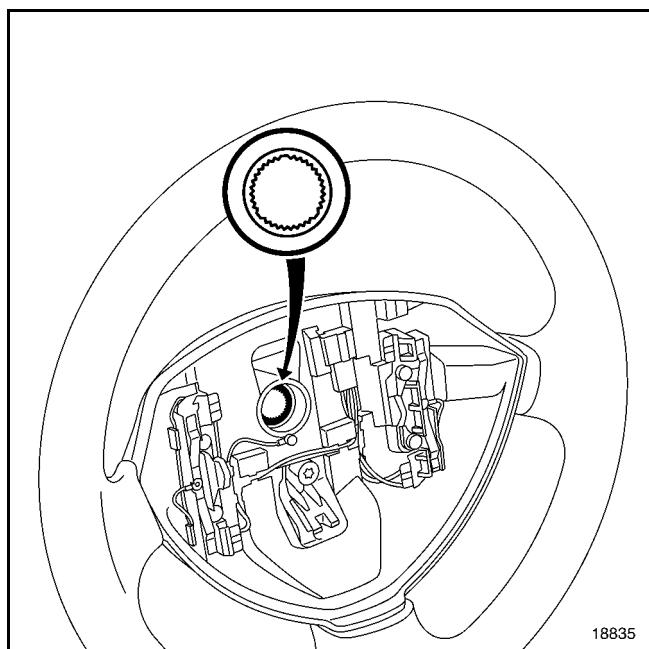
Connect the connectors.



#### Special notes on the steering wheel

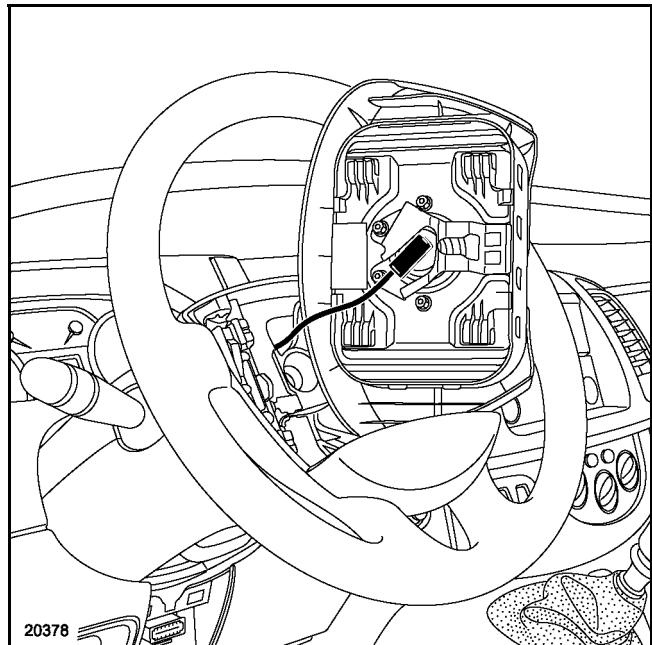
##### IMPORTANT:

The steering wheel splines are made so that the wheel can be fitted in one position only. **The steering wheel must fit back into the splines easily.** Be careful not to damage them.



It is essential to replace the steering wheel bolt each time it is removed and to tighten it to a torque of **4.4 daNm**.

#### Special notes on the driver's airbag



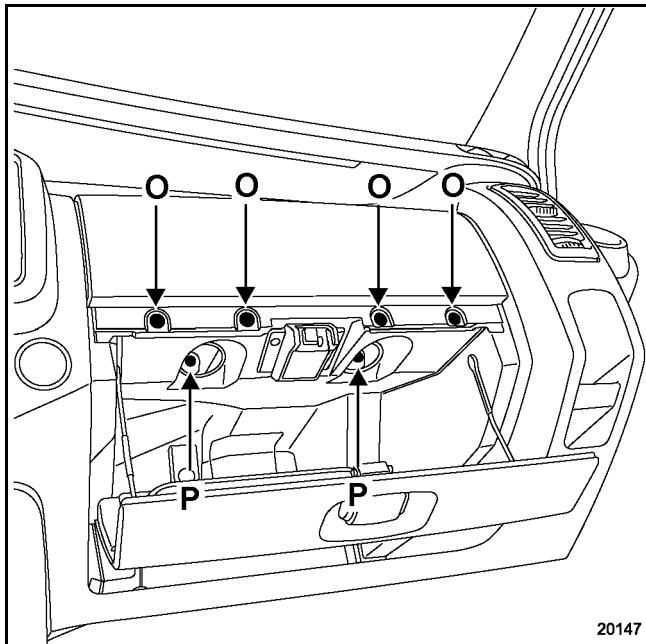
Connect the connector, the lock it.

Position the driver's front airbag module onto the steering wheel and slide it downwards until it clicks into place.

### Special notes on the passenger airbag

**IMPORTANT:**

- Check for foreign bodies (bolts, clips, etc.) when fitting the airbag module.
- On the module side, make sure that the connector is properly clipped (powerful clip) and position the safety lock.



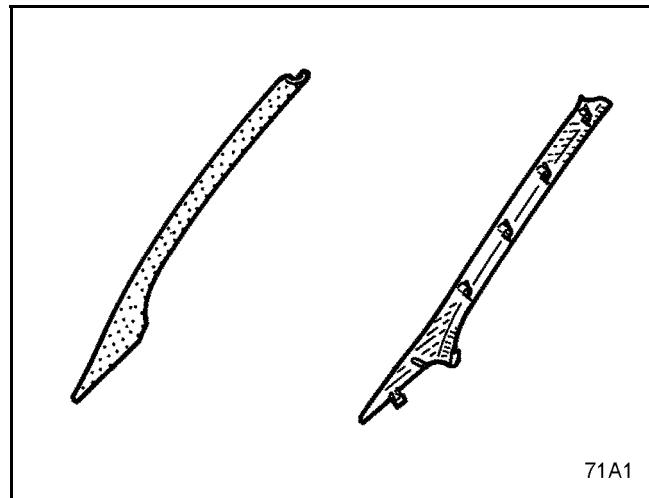
It is essential to check the tightening torque of the mounting bolts:

- four bolts (O) = **2 Nm**,
- two bolts (P) = **8 Nm**.

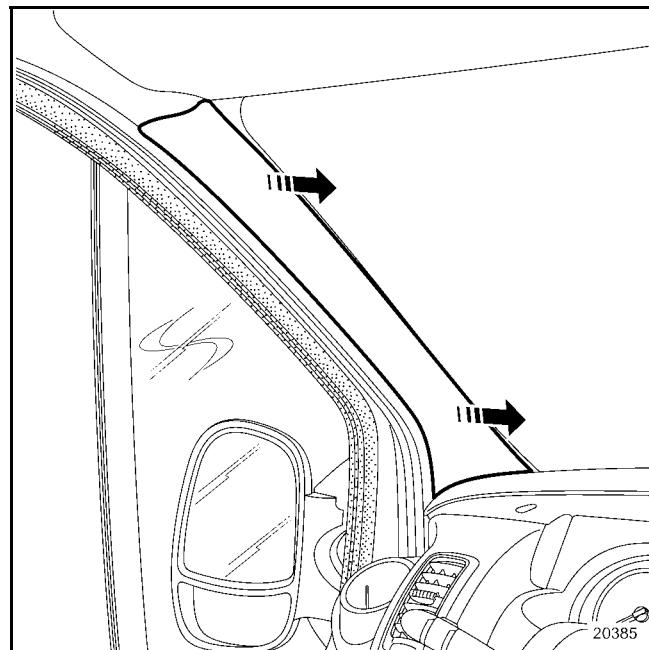
Check the module using the diagnostic tool. If everything is correct, unlock the computer or see the "Fault finding" section.

### Special features for vehicles fitted with a tachograph

Refer to the user's manual for vehicles fitted with a tachograph for a description of how to reinitialise the system.

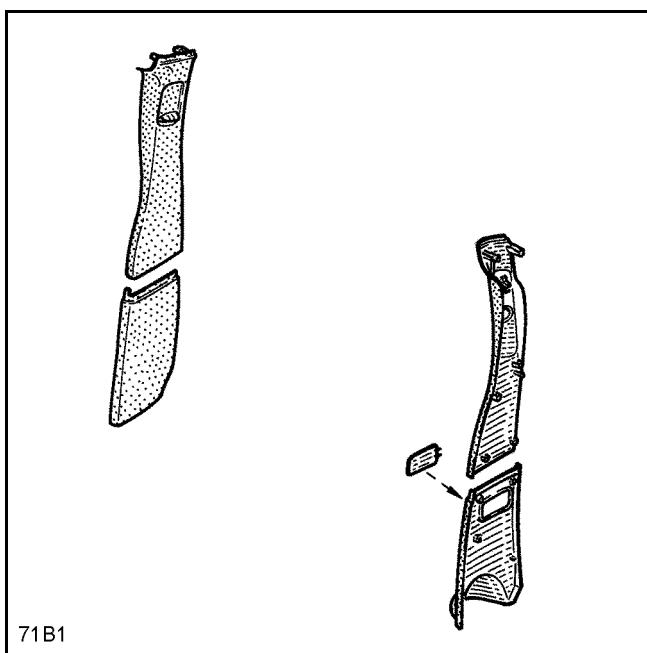


**REMOVAL**



Partially remove the front door seal.

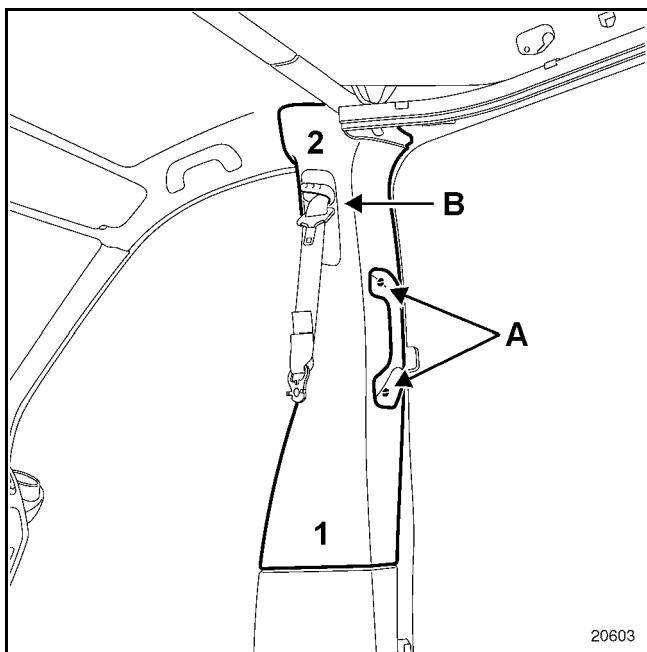
Unclip the windscreen pillar trim.



71B1

Remove:

- the seat belt mounting for the front seats,
- the side sliding door upper rail trim,
- the frame seals for the front door and sliding side door (partially).

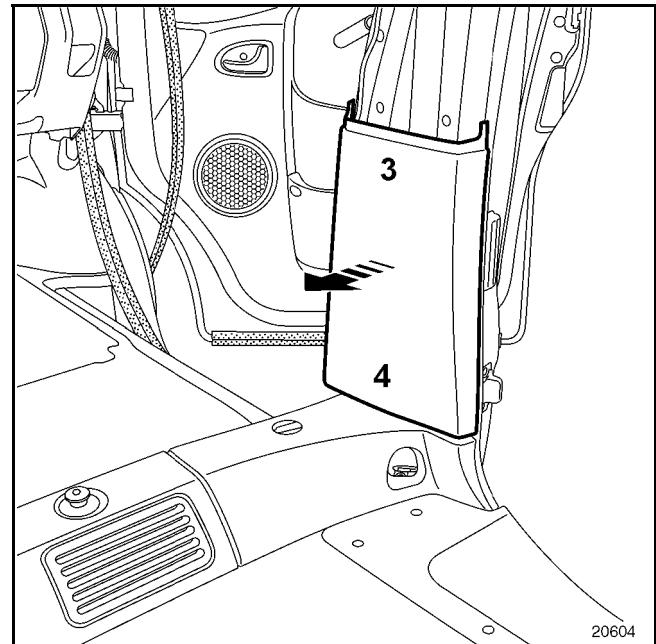


20603

Unclip the two covers (A) to allow removal of the two mounting bolts for the grab handle.

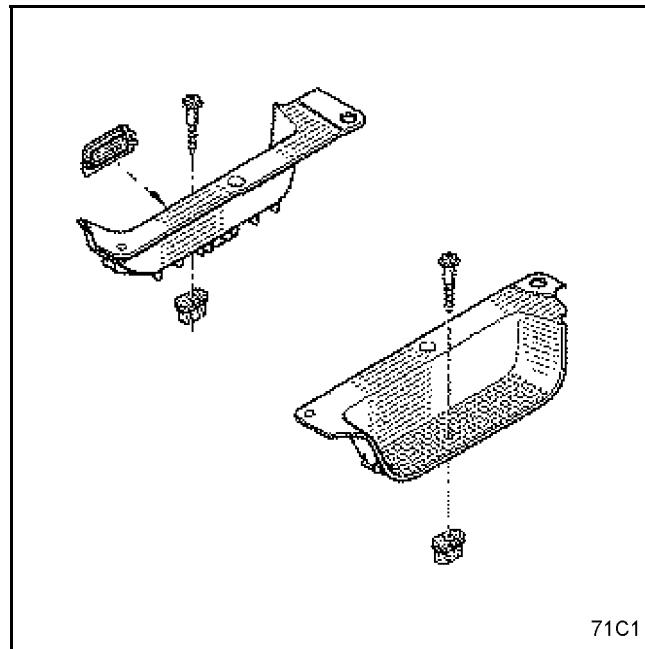
Unclip trim (1), then (2).

Carefully release trim (B), ensuring that it is not damaged.



20604

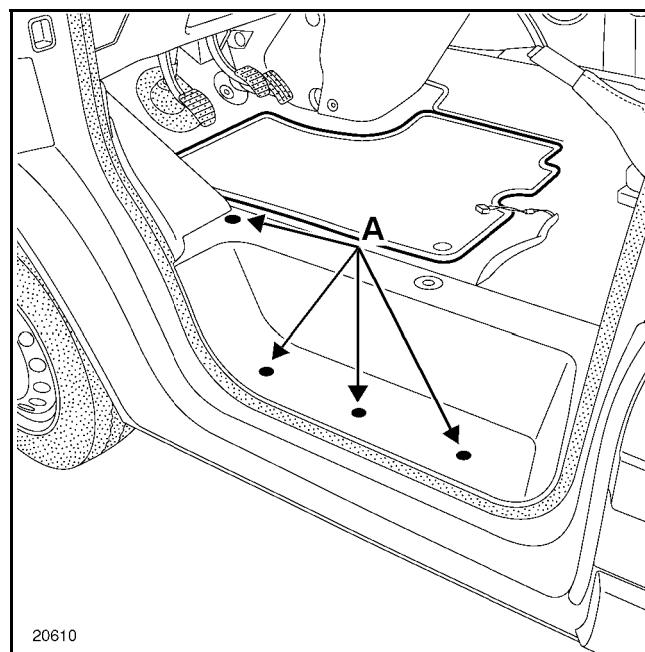
Unclip the lining from the upper section (3), then the lower section (4).



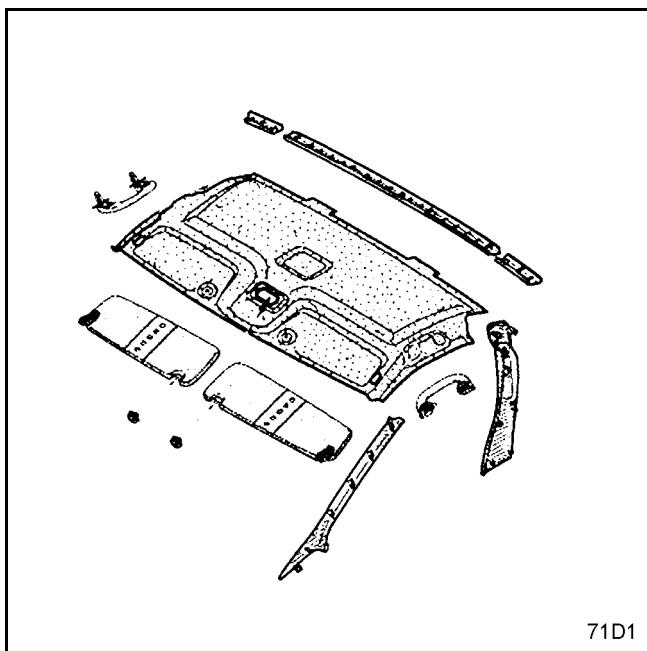
### **REMOVAL**

Remove:

- the front seats,
- the seat mounting spacers,



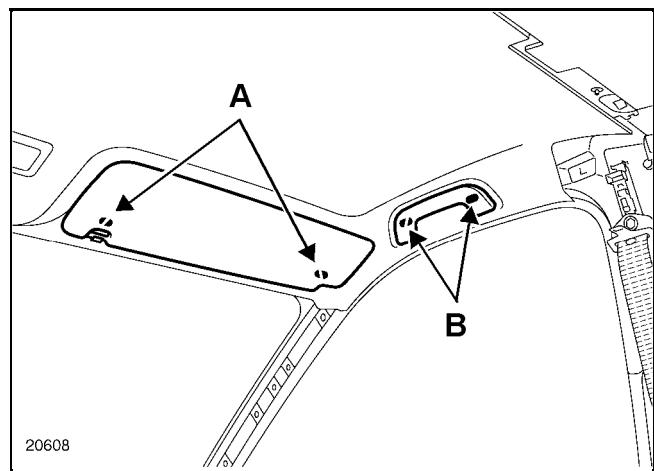
- the four mounting bolts (A), then remove the step.



#### REMOVAL

Remove:

- the cabin pillar upper trims,
- the windscreens pillar trims.



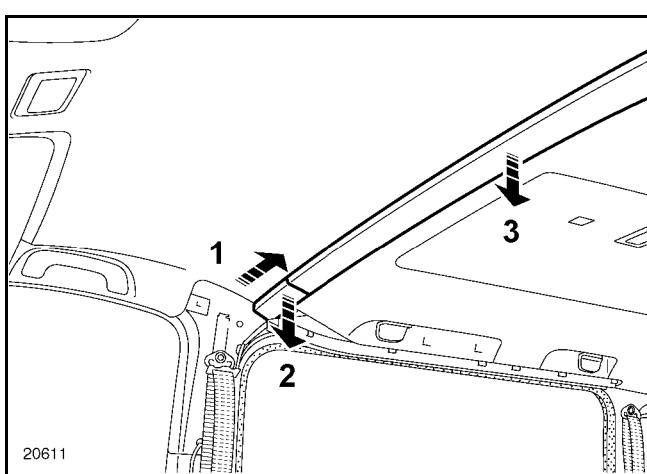
Unclip the sun visor, then turn it towards the door.

Remove mountings (A).

Using tool **Car. 1597**, remove:

- the grab handle clips (B), then pull on the handle to remove it,
- the courtesy light.

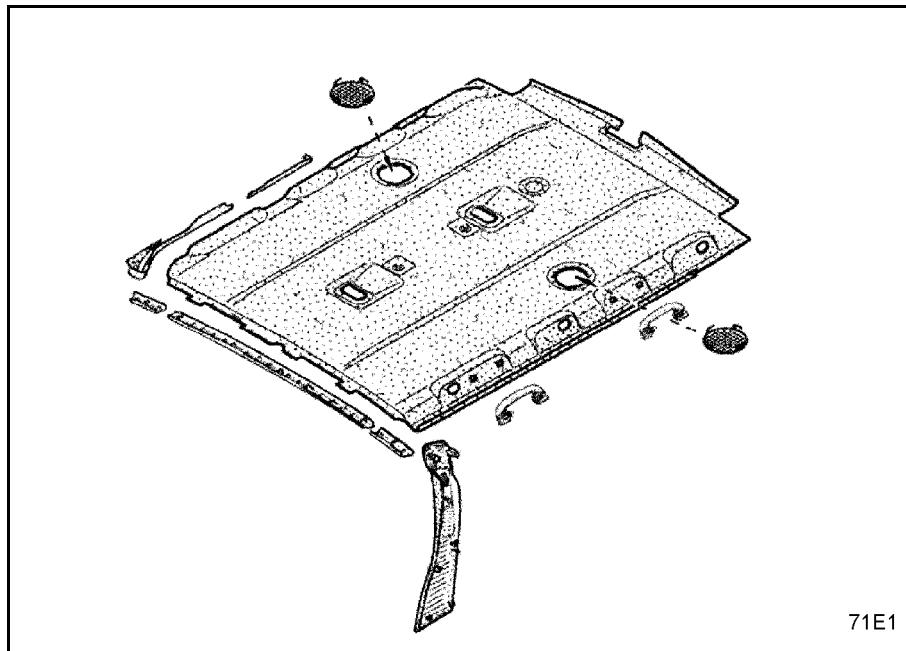
Remove the head lining.



Unclip the side sections of the trim (1).

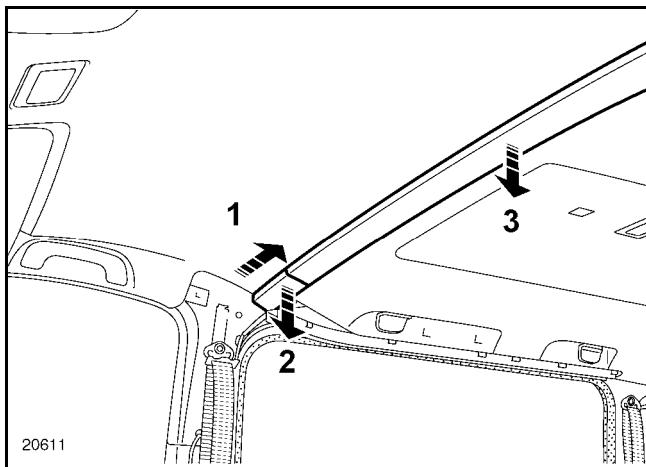
Remove the trim (2).

Unclip the central section of the trim (3).



**REMOVAL**

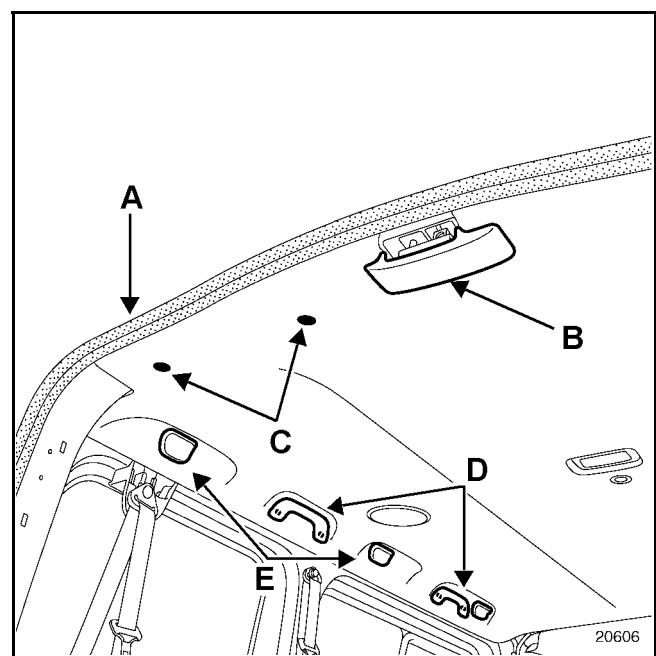
Remove the cabin pillar upper trim.



Unclip the side sections of the trim (1).

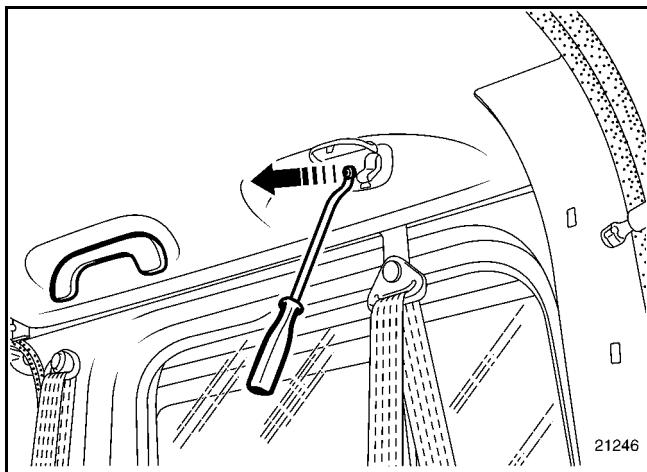
Remove the trim (2).

Unclip the central section of the trim (3).

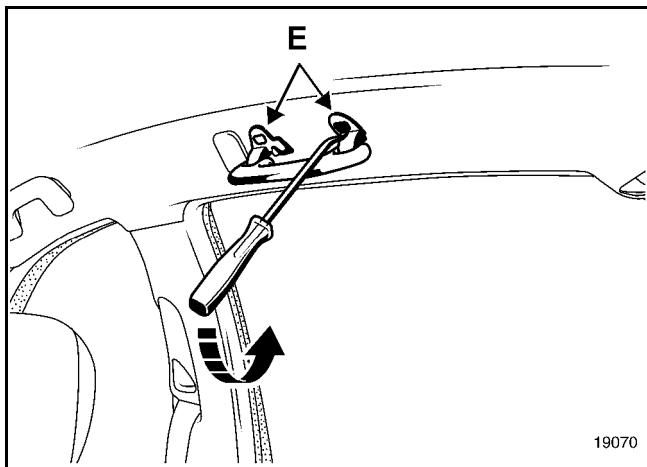


Remove:

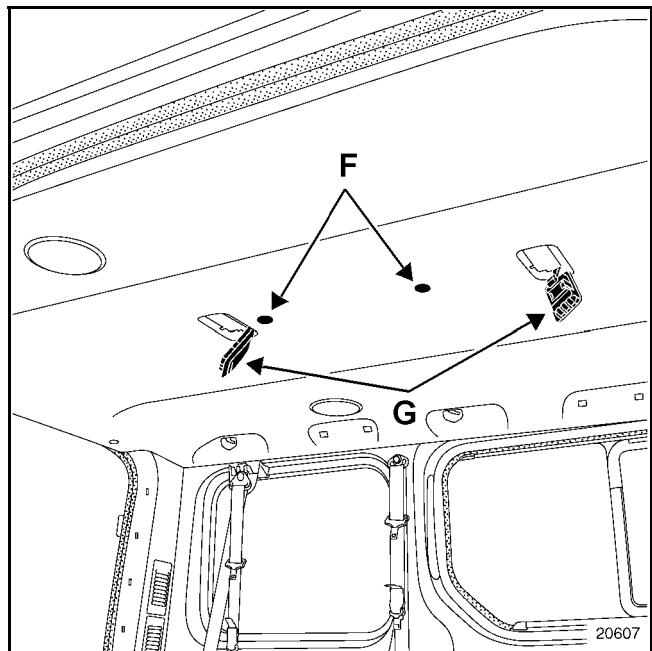
- the luggage compartment lid seal (A) partially,
- latch cover (B),
- the four clips (C),
- the four grab handles (D),
- the six covers for the luggage net fixings (E) (see photo below).



Remove the mounting pin, then the cover.

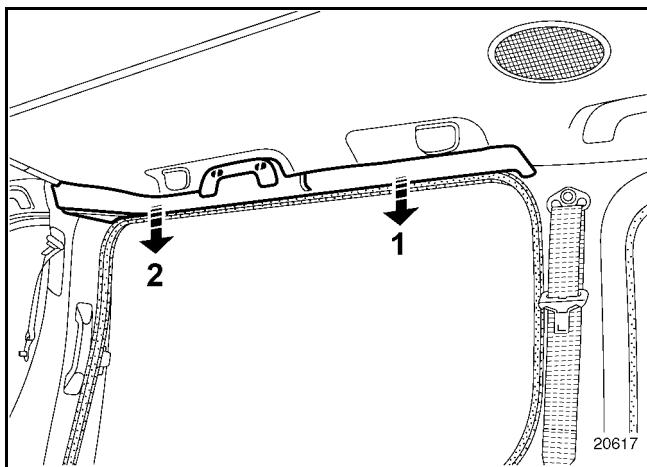


Unclip the mounting pins (E) (they spring out by a centimetre), then remove the handles, pulling upwards.



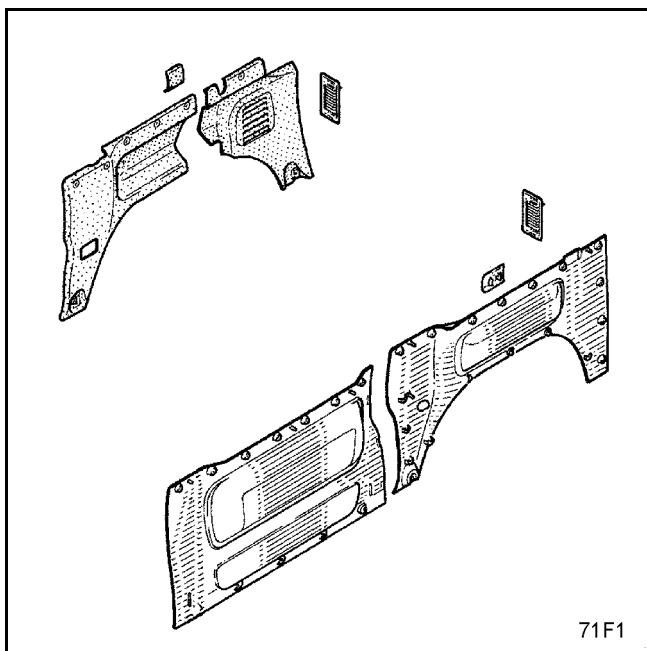
Using tool **Car. 1363**, remove:

- the two courtesy lights (F),
- the two clips (G), then remove the head lining towards the rear of the vehicle (**this operation requires two people**).

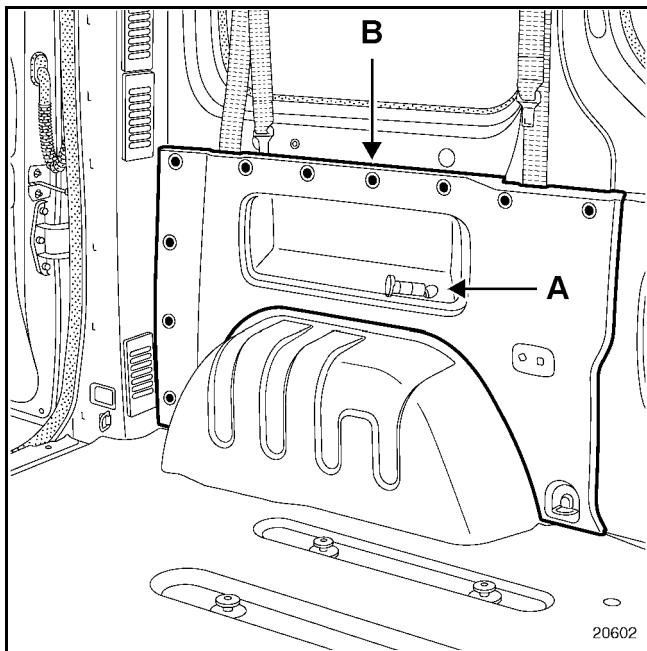


Remove:

- the grab handle,
- the upper rail trims of the sliding side door at (1), then at (2).



**REMOVAL**



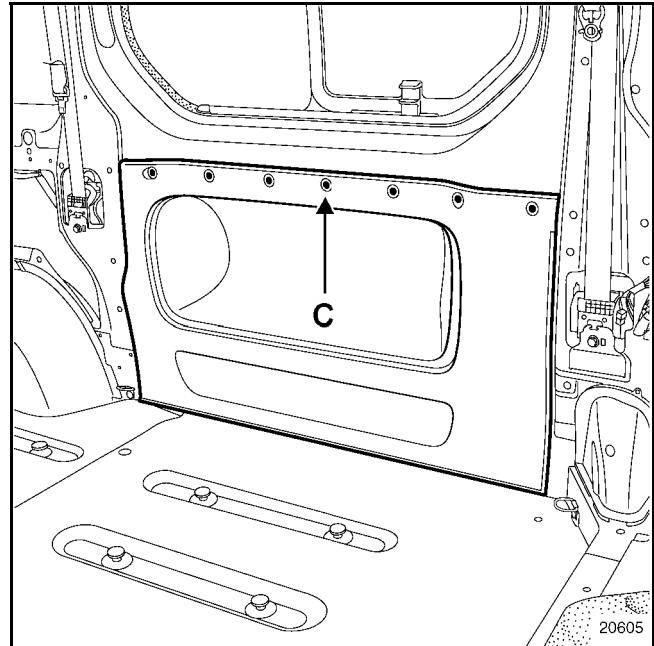
Remove the **12 V** connection (A), then disconnect the connector.

Using unclipping pliers, remove:

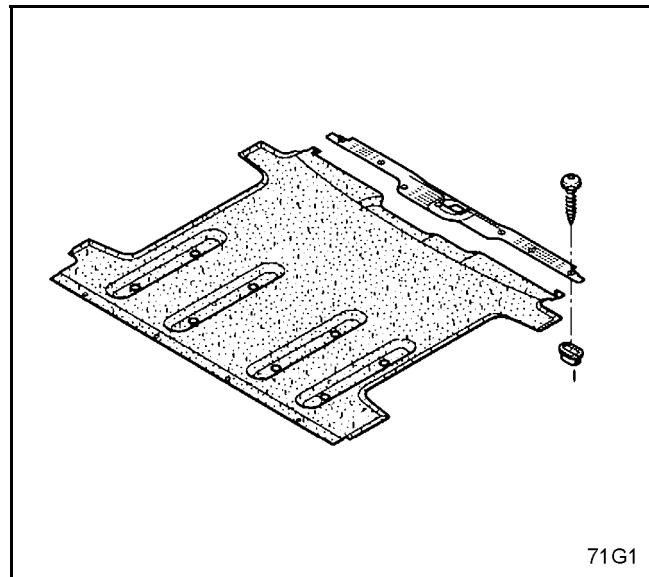
- the retaining clips (B),
- the trim panel.

Remove:

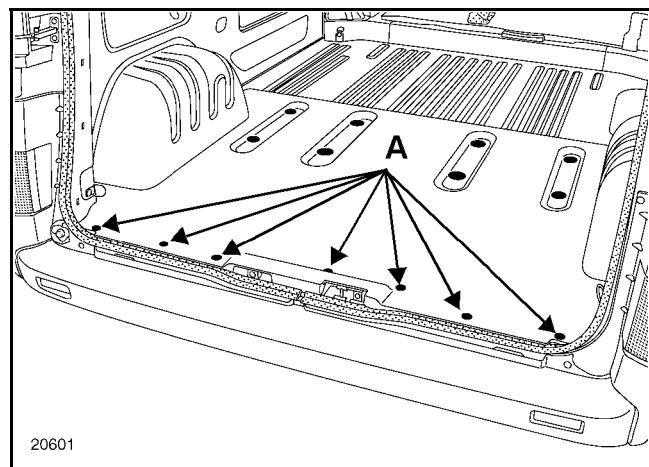
- the cabin pillar trim,
- the central lower trim,



- the mounting clips (C),
- the trim panel.



**REMOVAL**

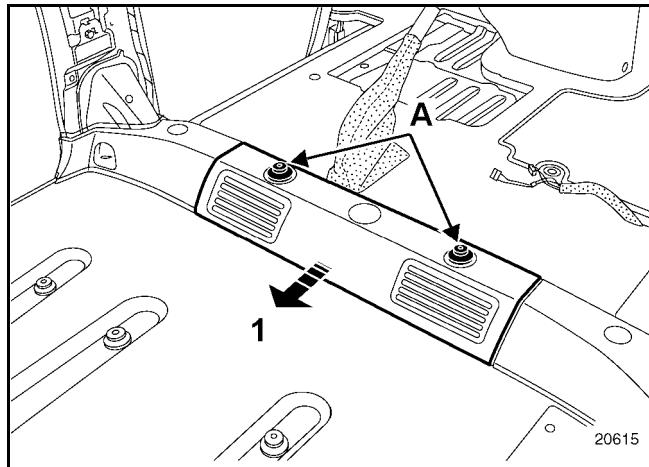


Remove the sill trim mounting bolts (A), then remove the sill trim.

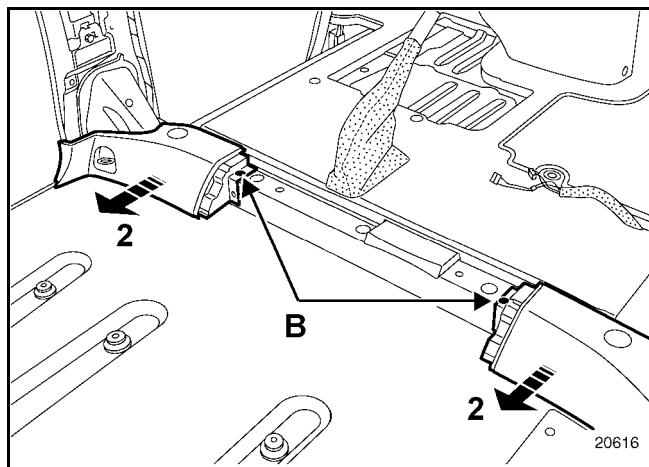
**REMOVAL of the centre section luggage compartment carpet**

Remove:

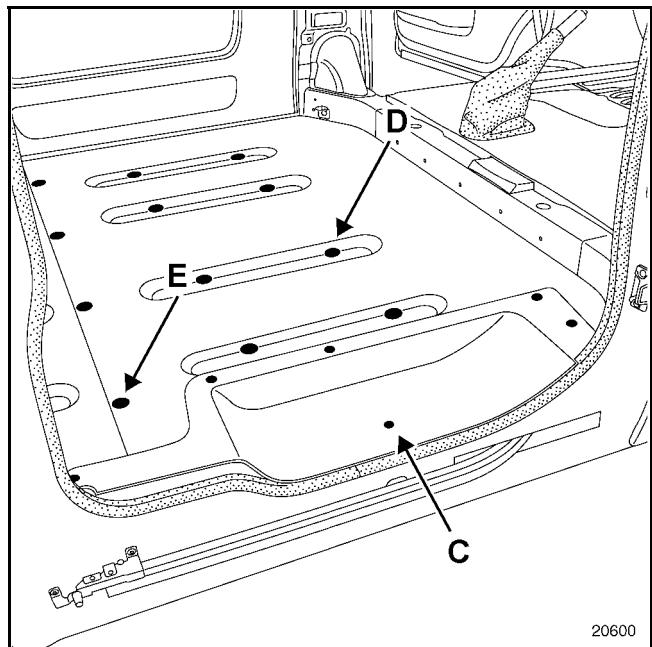
- the driver and passenger seats,
- the two rear bench seats,



- the two front seat mounting studs (A), then remove the trim as shown above (1),



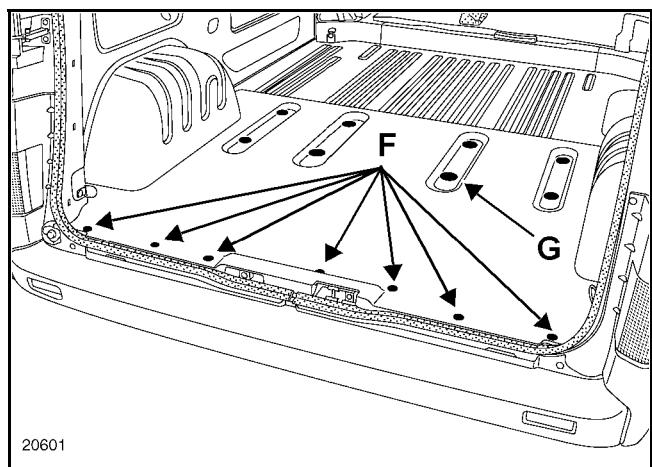
- the mountings (B), then remove the trims (2).



Remove:

- the step mountings (C),
- the eight bench seat mounting studs (D),
- the four clips (E),
- the carpet.

**Rear section luggage compartment carpet**



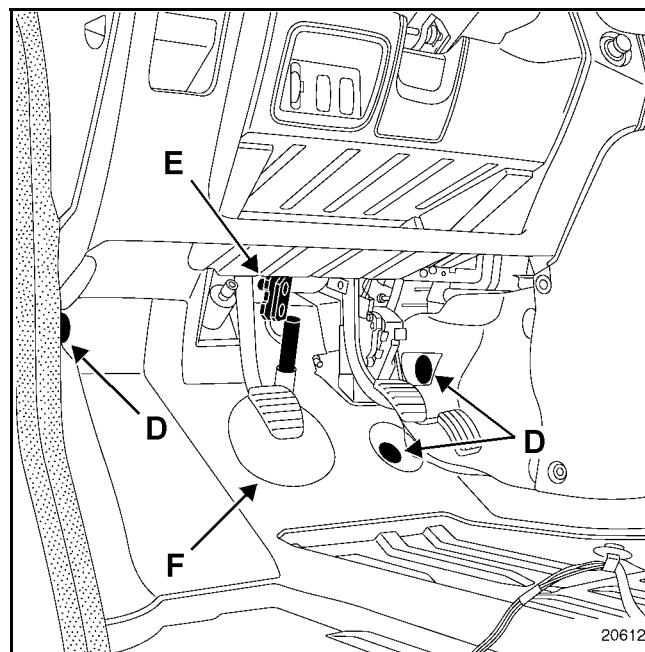
Remove:

- the sill trim mounting bolts (F),
- the eight bench seat anchorage studs (G), then remove the carpet.

**TIGHTENING TORQUES (in daNm)**

Bench seat mounting studs

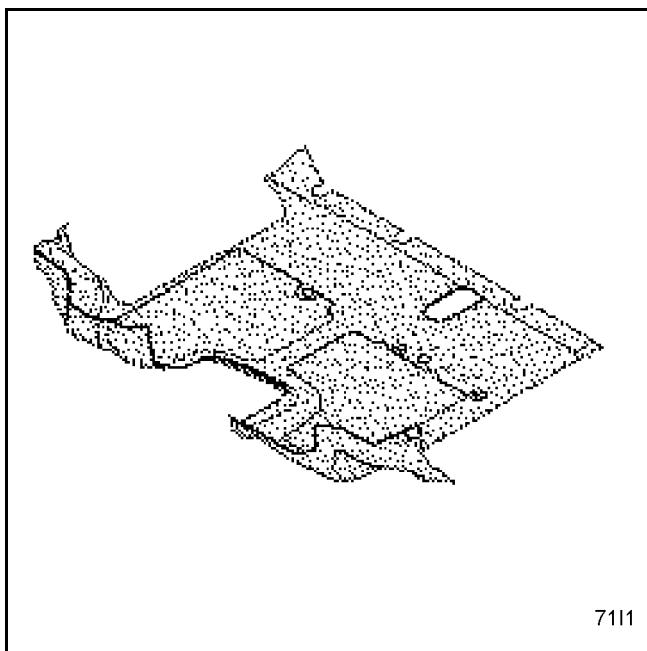
4.4



Partially remove the door seal.

Remove:

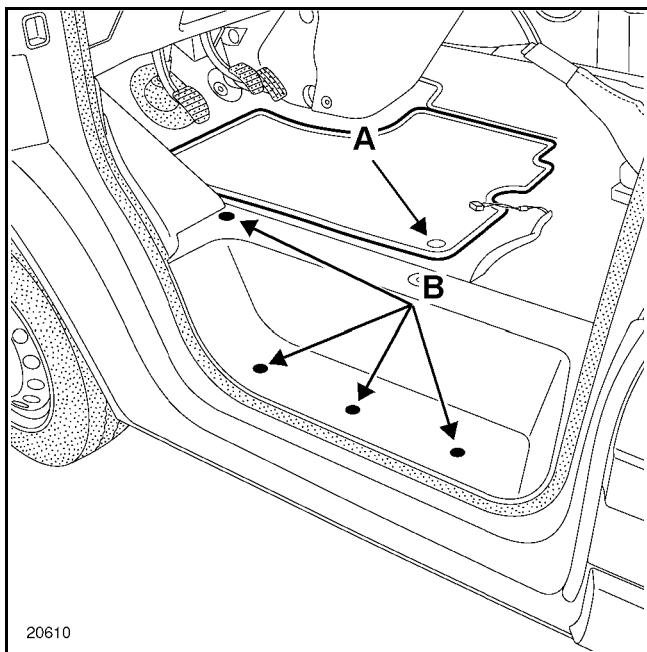
- the three clips (D),
- the two steering column mountings (E), then disconnect the steering column,
- the sealing gaiter (F),
- the cabin carpet, taking care to release the cut-out around the steering column.



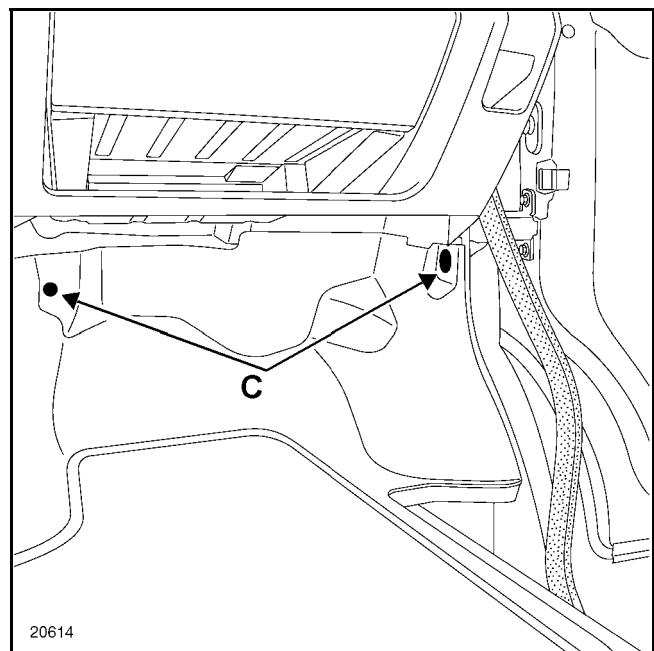
#### REMOVAL

Remove:

- the front seats,

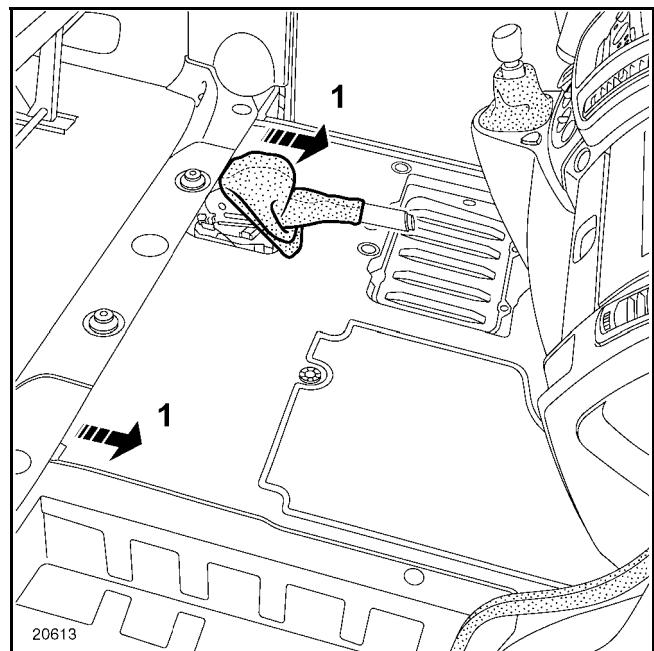


- the battery compartment carpet (A),
- the step mounting bolts (B), then remove the step.



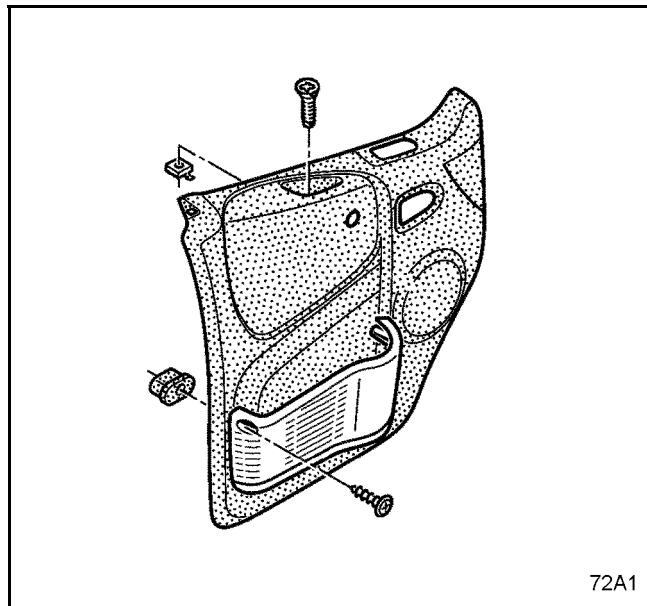
Partially remove the door seal.

Remove the two clips (C).

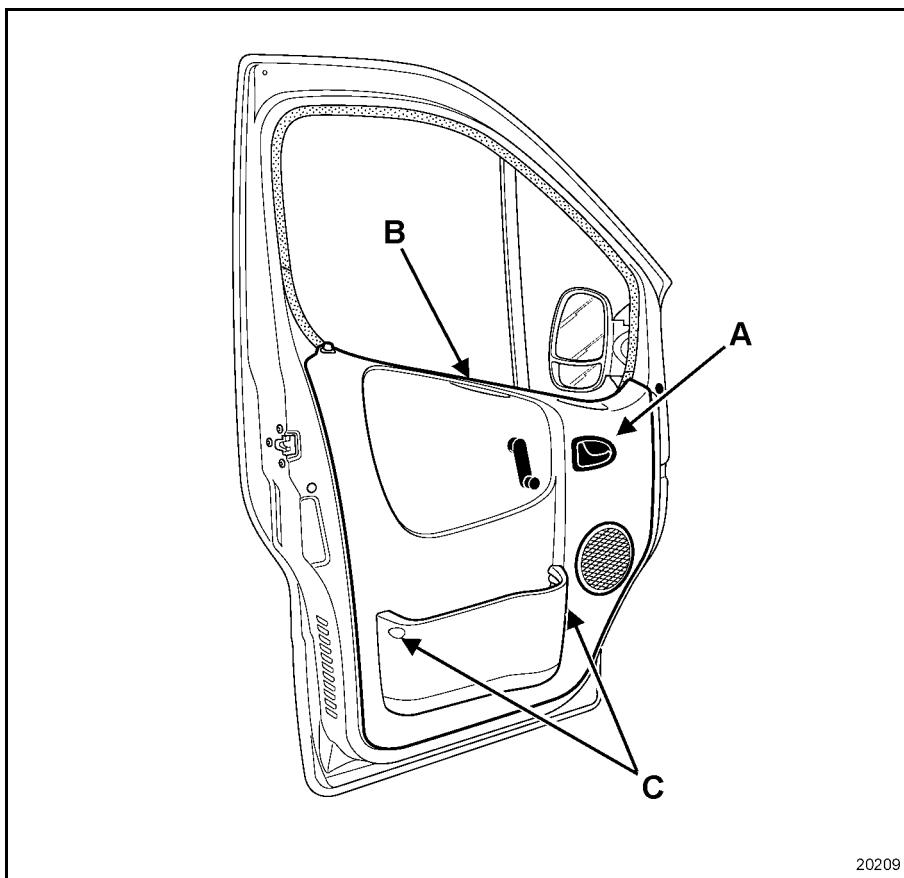


Unclip the handbrake lever gaiter.

Release the carpet from the lower trims at (1) then from the handbrake lever.



**REMOVAL**

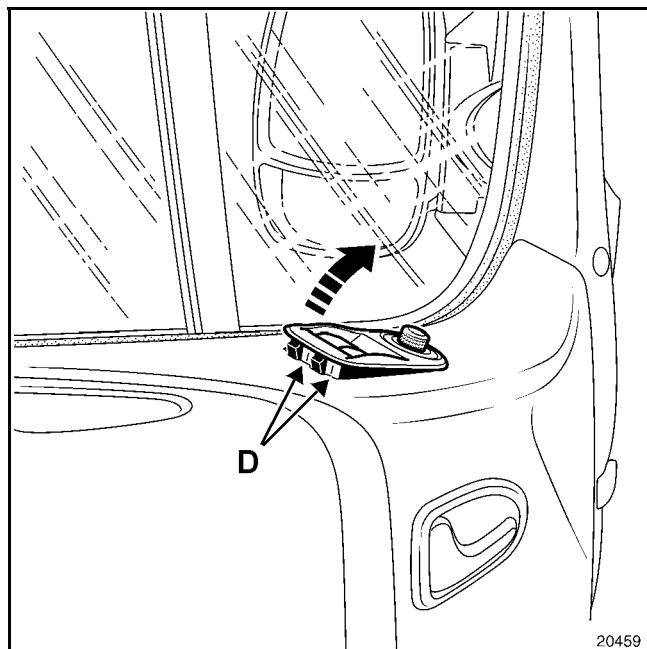


Remove:

- mounting bolt (A) then the inside opening handle,
- mounting bolt (B) of the grab handle,
- mounting bolts (C),
- the window winder handle.

Unclip the panel.

**SPECIAL NOTES for models fitted with electric windows**

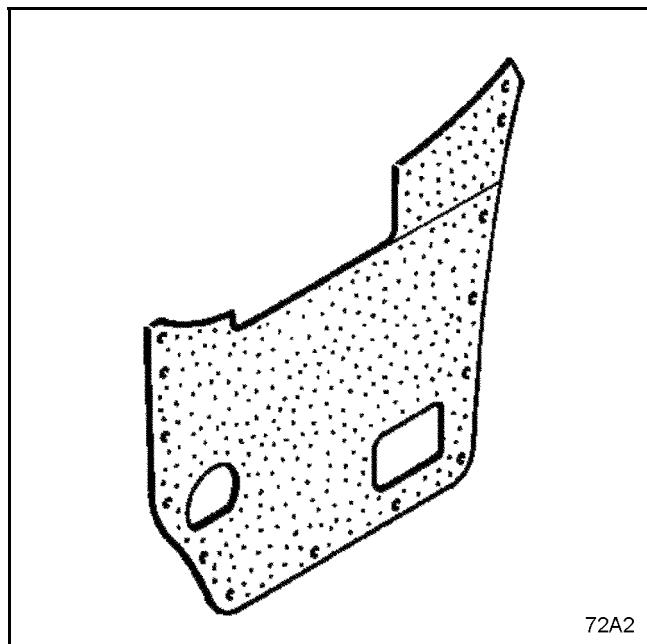


Remove the electric window control at (D).

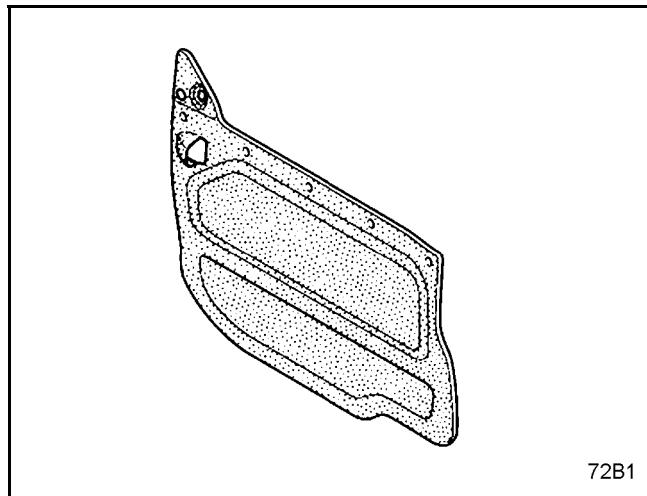
Disconnect the connectors.

Unclip the panel.

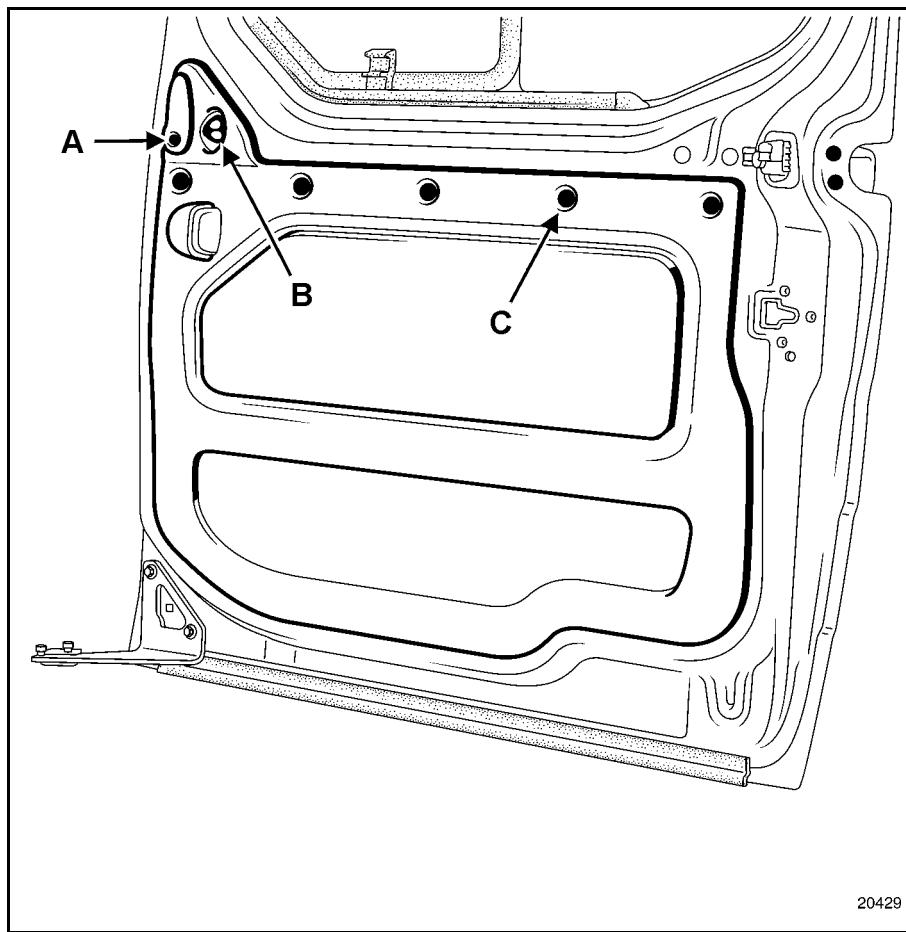
#### **REFITTING**



The self-adhesive protective film must always be replaced if it has been removed.



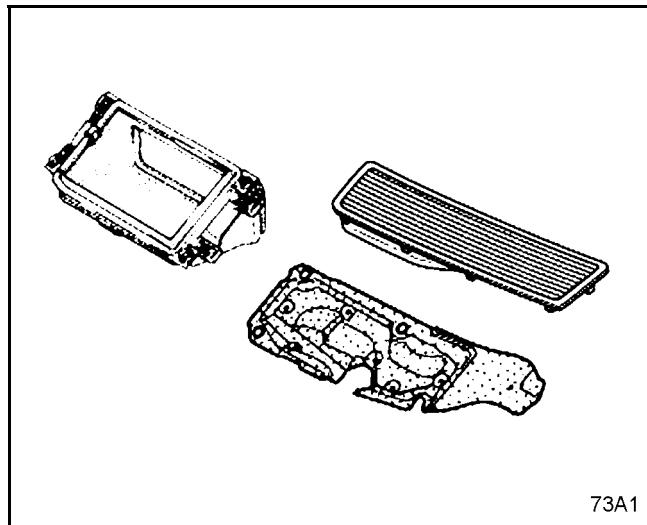
**REMOVAL**



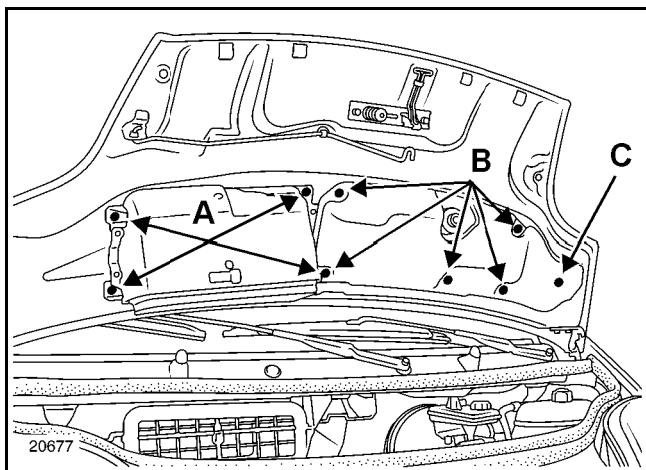
Remove mounting bolt (A) then the inside opening handle.

Using tool (Car. 1597), remove:

- interior locking button (B),
- the five clips (C) (the female section remains affixed to the door box section),
- the door trim.



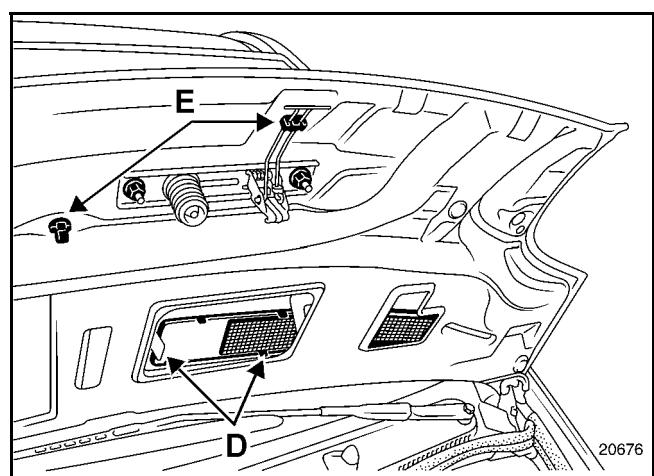
**REMOVAL**



Remove:

- the four mounting screws (A),
- the five trim mounting screws (B).

Use unclipping pliers to remove clip (C).

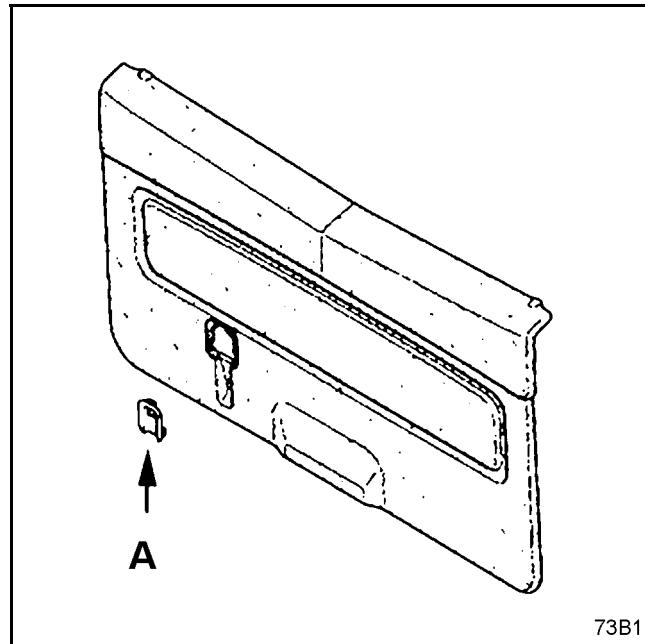


Unclip retaining lugs (D), then remove the vent grille.

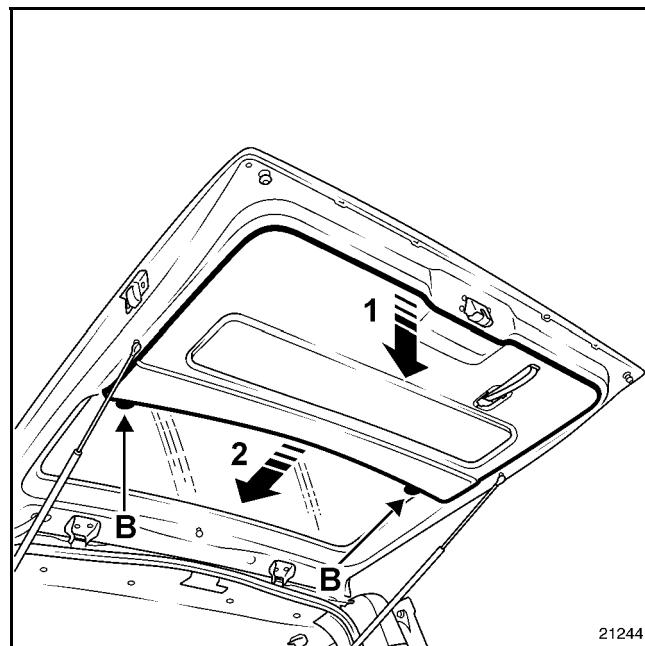
**NOTE:**

change retaining clips (E) whenever the bonnet is replaced.

REMOVAL



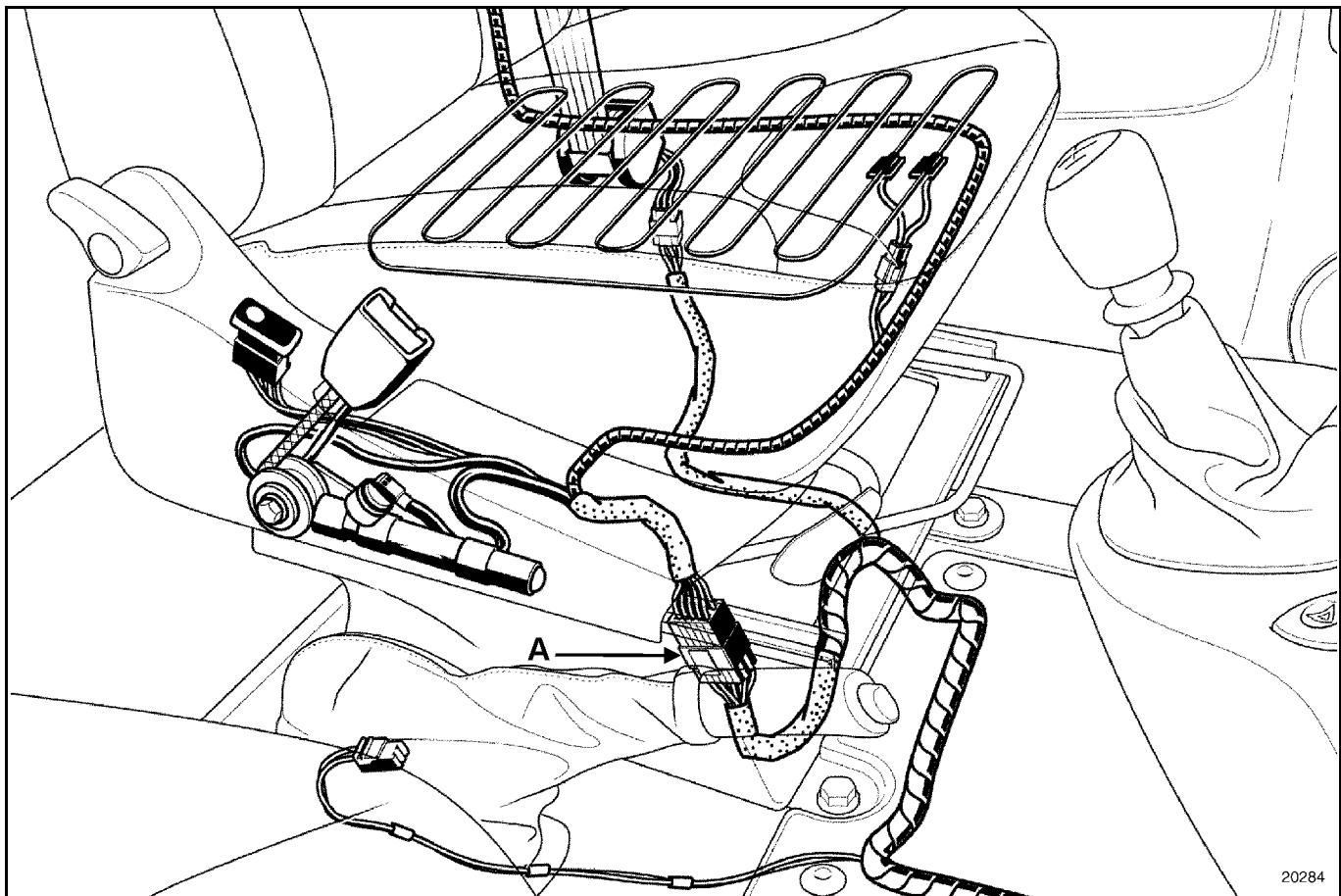
Using tool **Car. 1597**, unclip pull strap trim (A).



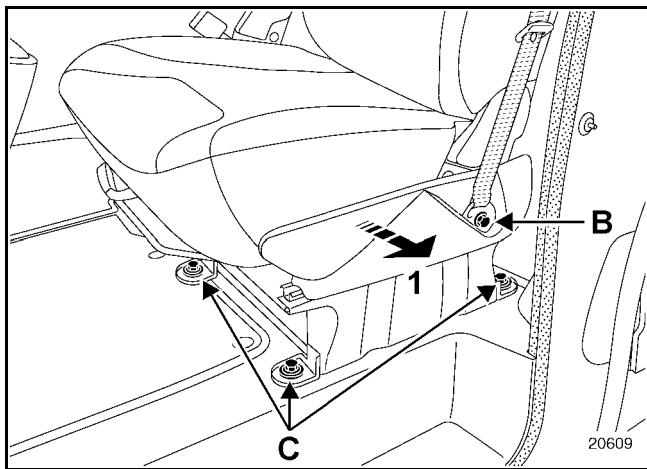
Disconnect the two heated rear screen harness connectors (B).

Unclip the trim at (1), then at (2).

**REMOVAL**



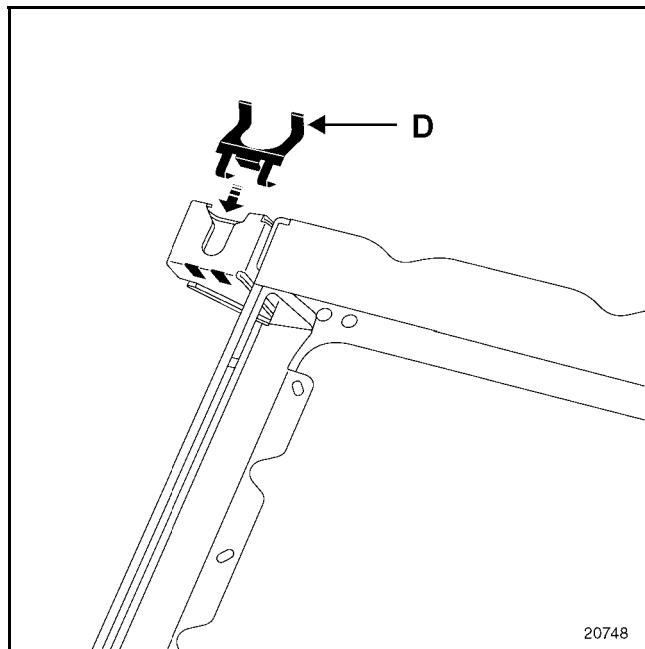
Disconnect connector (A) fitted to the seat height adjuster.



Remove:

- the seat belt mounting (B),
- the three seat mounting bolts (C).

Protect the door sill lining, then release the seat (1) (one centring pin holds the seat in the right-hand rear section of the seat height adjuster).

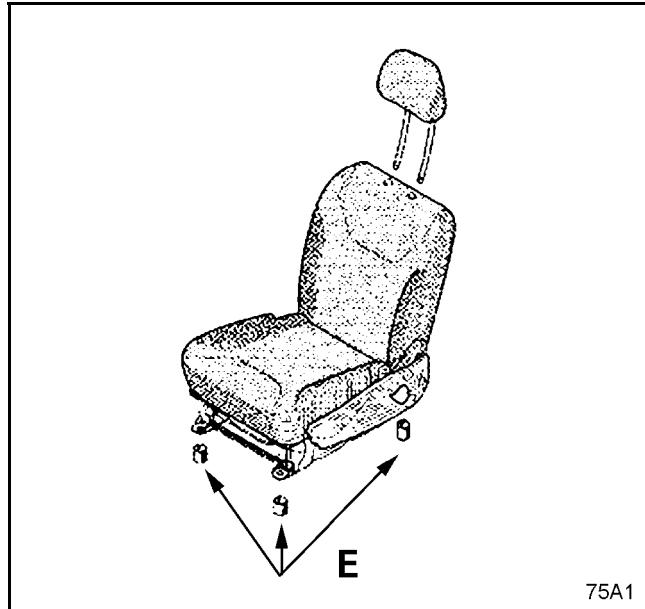


Check for the presence of the metal clip (D) on the right-hand rear section of the seat height adjuster.

#### REFITTING

**IMPORTANT:**

Before refitting the seat, inspect the condition of the connectors on the seat frame and on the body.

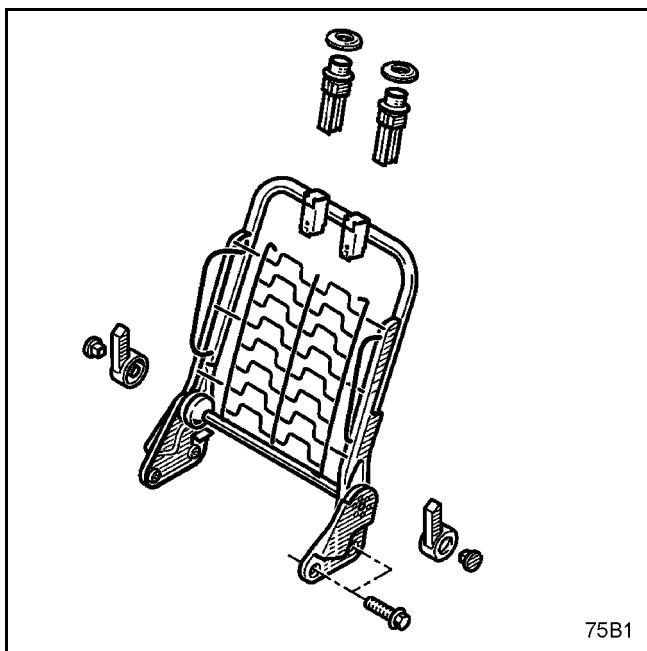


Ensure that the spacers for the seat level adjustment system are present (E).

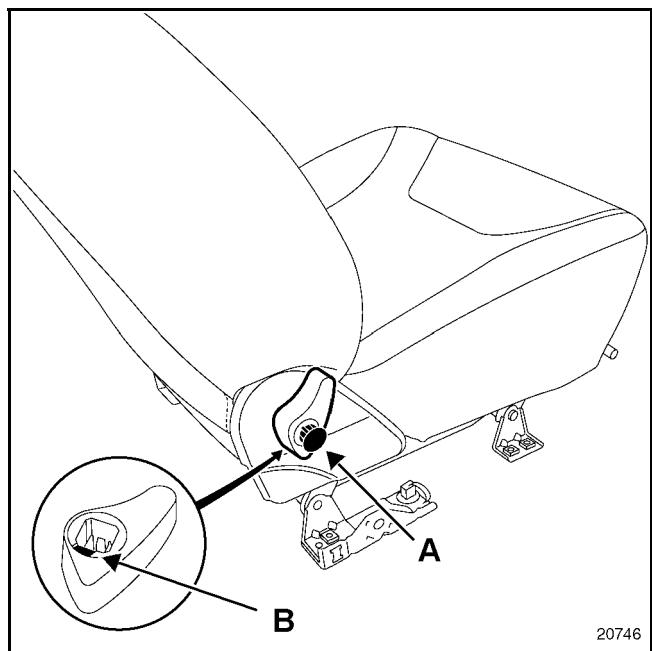
**TIGHTENING TORQUES (in daNm)**



|   |            |
|---|------------|
| <b>Seat mounting nuts</b>                 | <b>4.4</b> |
| <b>The seat belt mounting on the seat</b> | <b>3.7</b> |



75B1

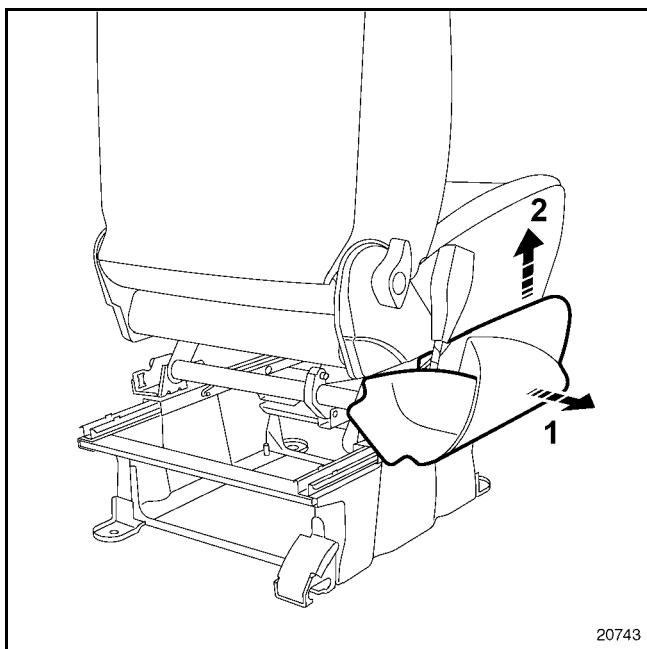


20746

**NOTE:**

It is not necessary to remove the seat to remove the seatback, it merely needs to be moved fully forwards.

**REMOVAL**

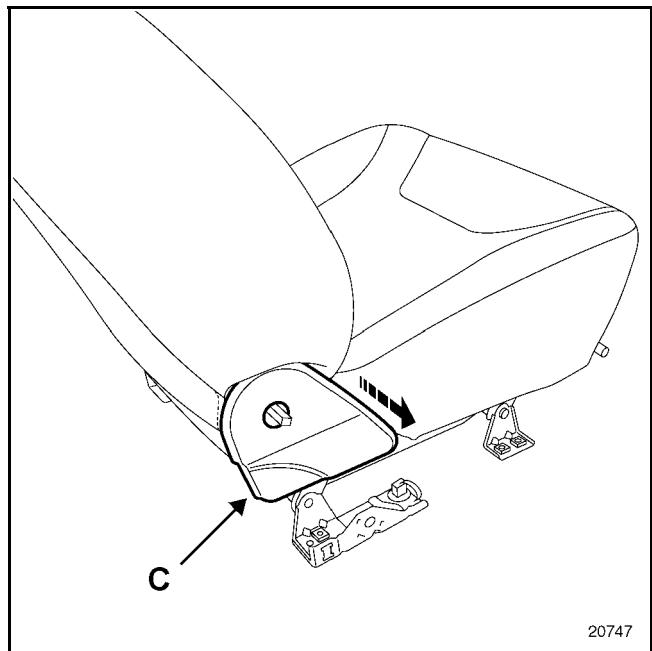


20743

Unclip the two side covers at (1) then at (2).

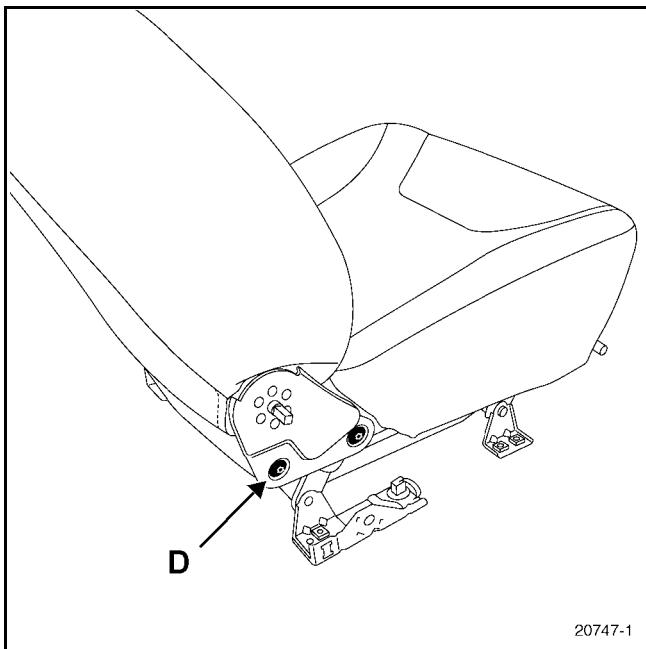
Using a small flat screwdriver, remove the blanking cover (A) on the adjustment handle, using the recess provided for this purpose (B).

Remove the adjustment handle.



20747

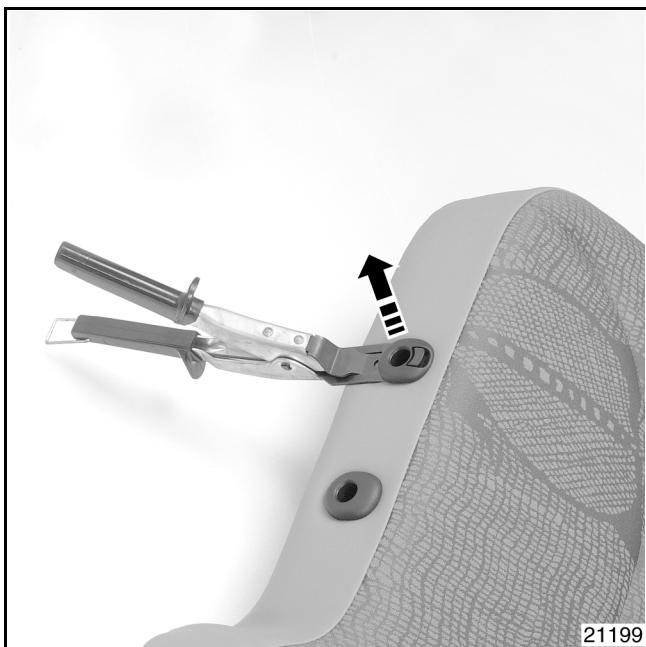
Unclip the two mounting covers (C).



Disconnect the supply connector for the heating layer (if fitted to the vehicle).

Remove:

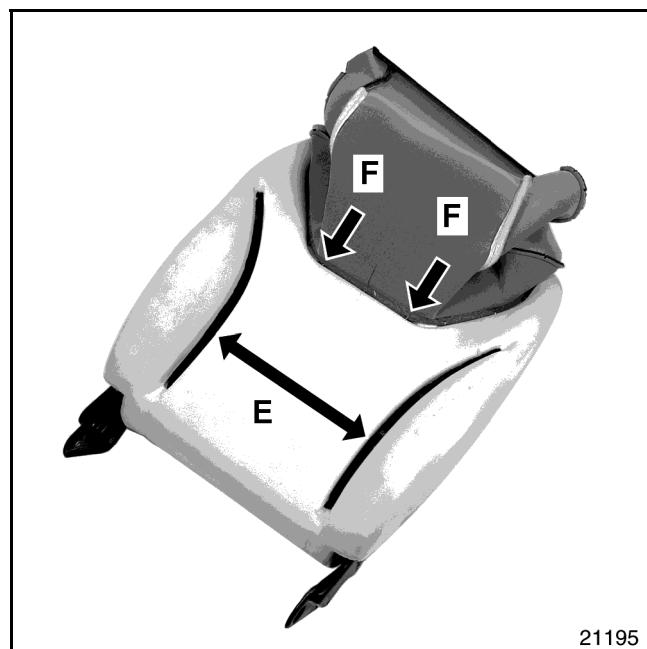
- the four mounting bolts (D),
- the seatback.



Unclip the two head rest guide covers.



Remove the rear, then the front, seatback cover retaining strips.

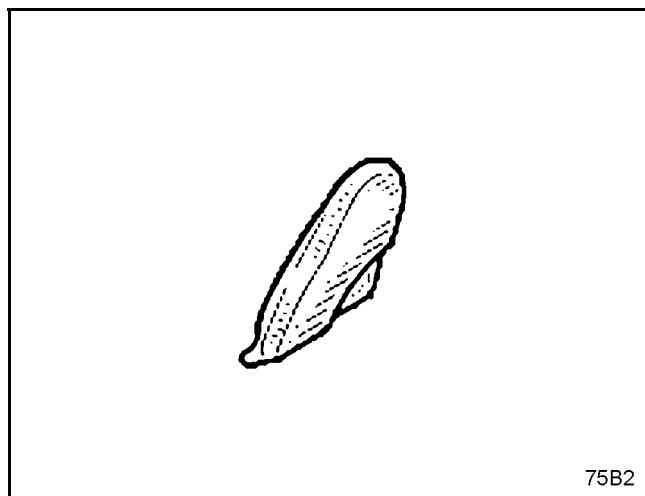
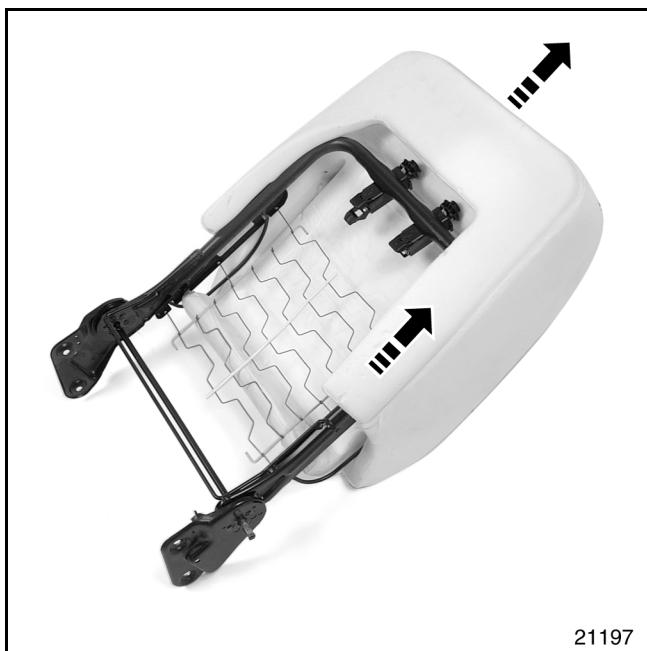


Simultaneously pull away the front and back of the cover towards the upper section of the seatback.

The cover is held by Velcro (E) at the front section of the seatback.

**NOTE:**

It is not necessary to cut cover retaining clips (F) if removing the cover and foam pad assembly.



**TIGHTENING TORQUE (in daNm)**



Seatback frame mounting bolt

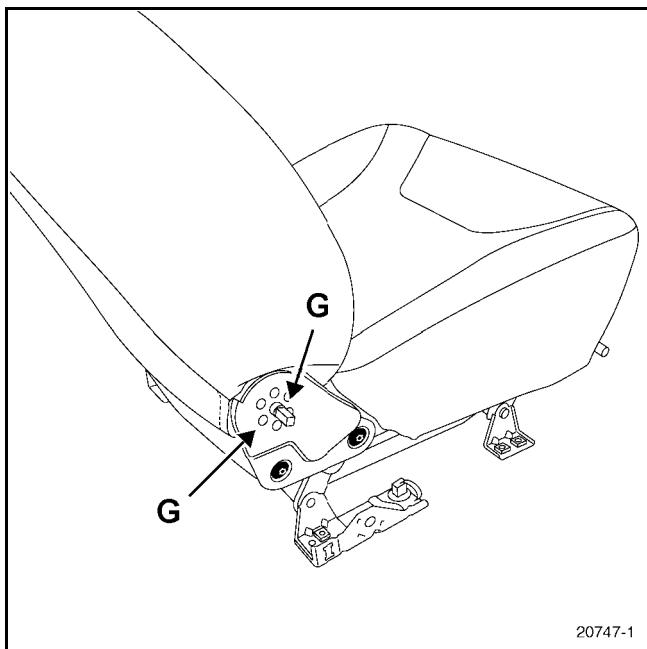
3.9

Remove the cover and foam pad.

**REFITTING**

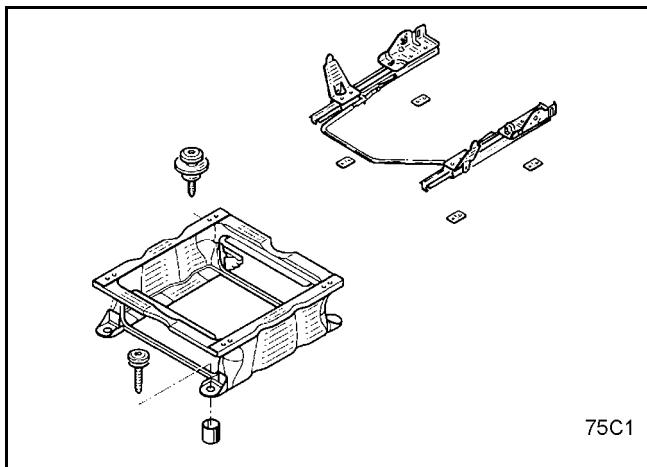
For right-hand drive vehicles.

**SPECIAL NOTE:**



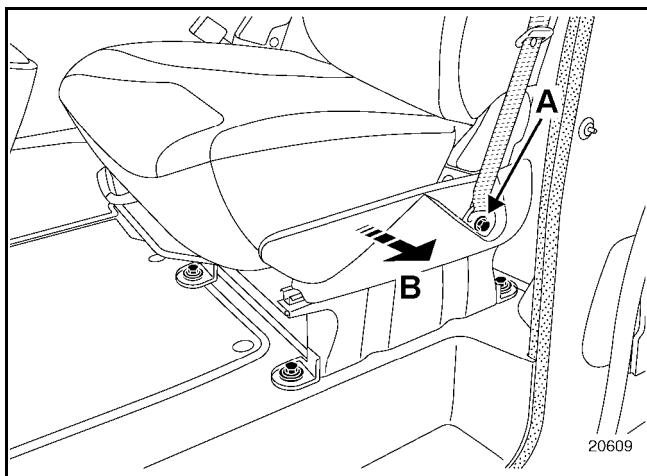
It will be necessary to cut the seatback tilt adjuster shaft at (G) to be able to mount the cover (see drawing opposite).

**REMOVAL**



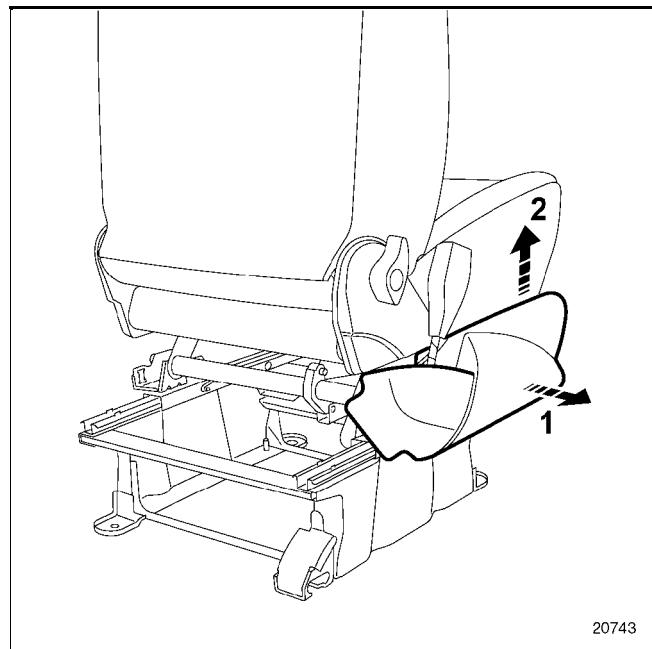
**NOTE:**

The runners may be removed without removing the seat height adjuster.

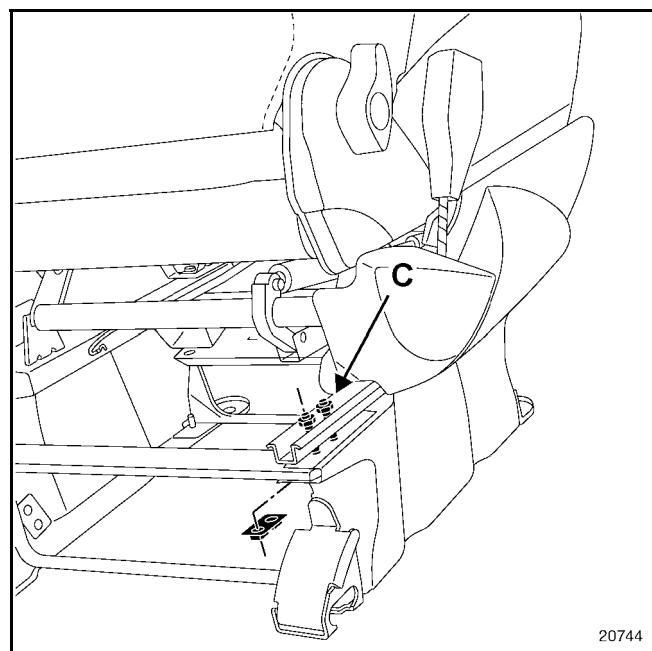


Remove:

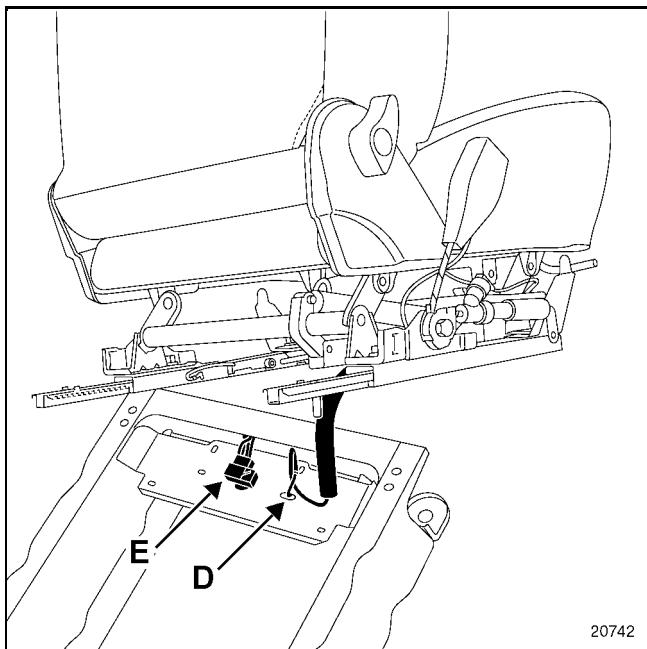
- the seat belt mounting (A),
- the left hand cover at (B),



- the right hand cover at (1), then at (2).



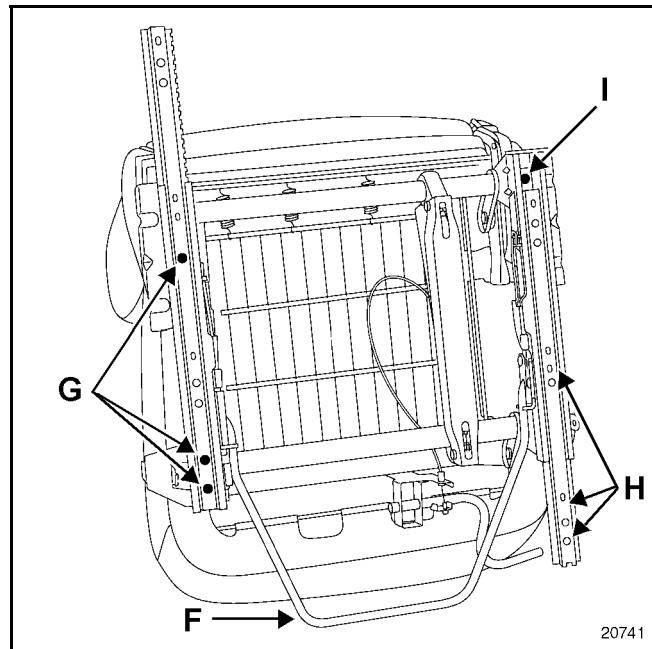
Remove the eight mounting bolts (C) located at each end of the runner.



Cut retaining clip (D).

Remove the connector (E).

Remove the seat.



Operate the adjustment control bar (F) until the three runner mounting bolts (G) line up with the holes in rail (H), then remove the bolts.

Slide the rail as far as it will go towards the front of the seat, then remove bolts (I).

Remove the runners together with the adjustment control bar.

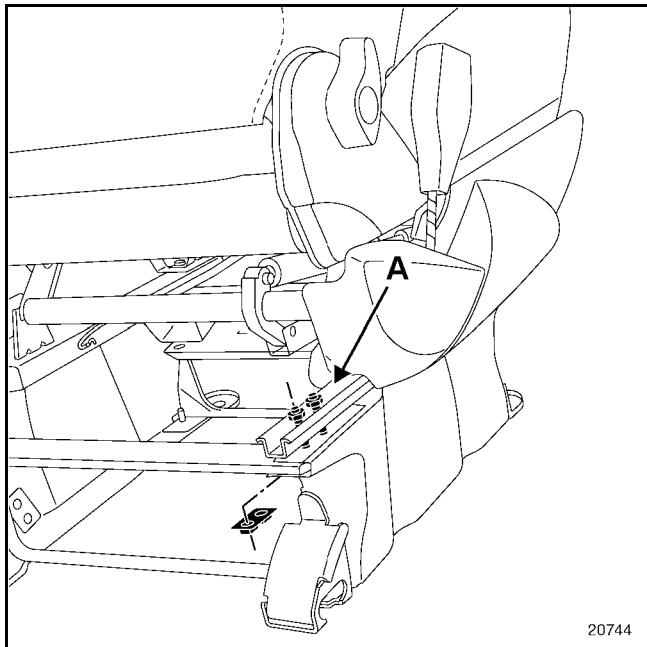
#### REFITTING

##### TIGHTENING TORQUES (in daNm)

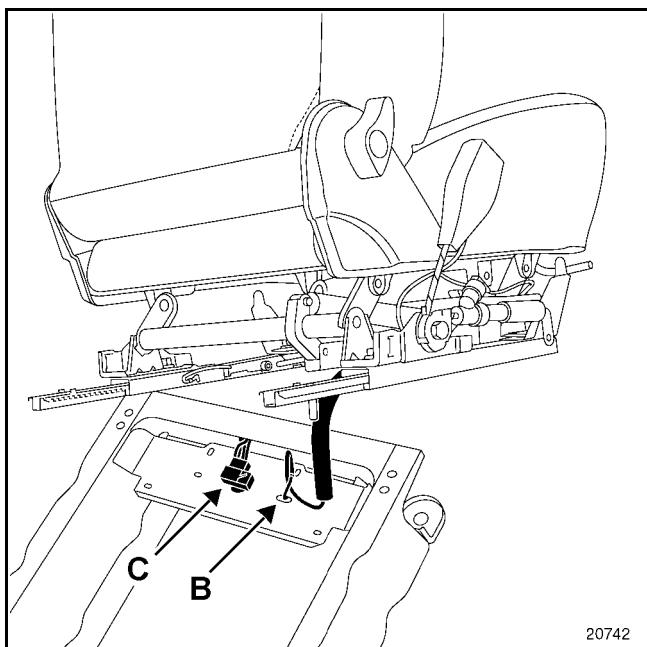


|                         |     |
|-------------------------|-----|
| Seat bolt on frame (C)  | 1.9 |
| Runner bolt on seat (G) | 1.9 |

**REMOVAL**



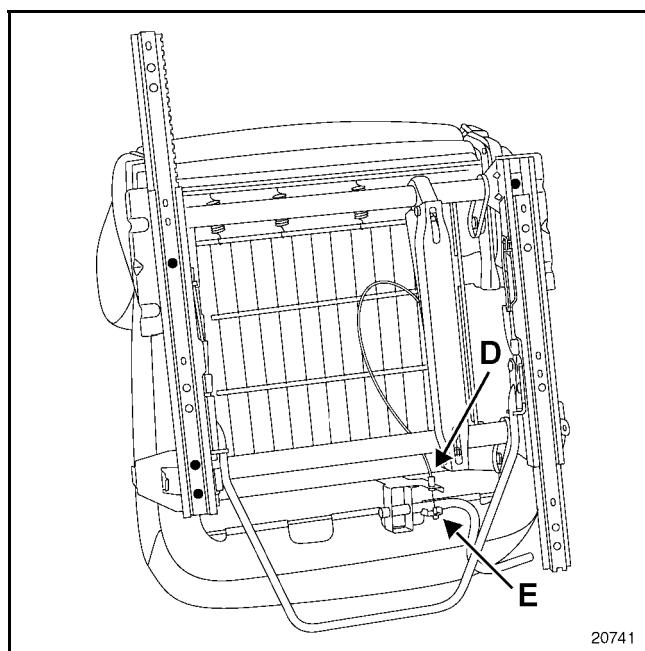
Remove the eight mounting bolts (A) located at each end of the runner.



Cut retaining clip (B).

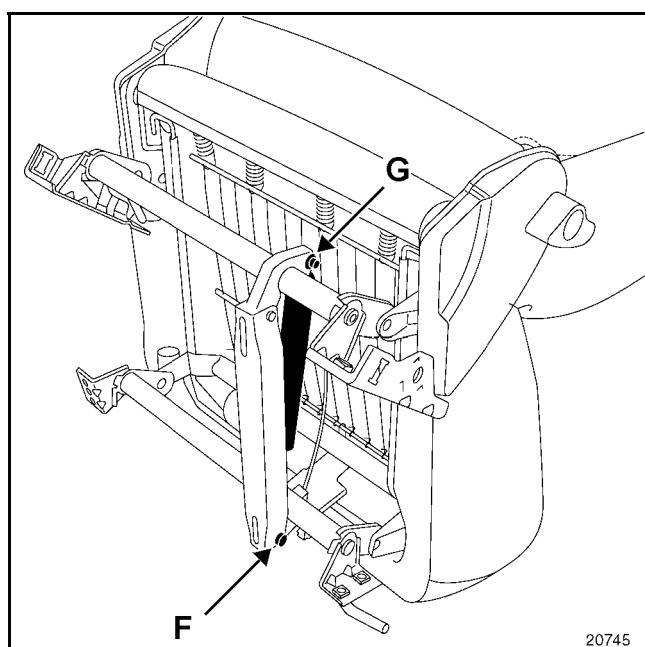
Remove the connector (C).

Remove the seat.



Remove:

- the sleeve stop (D),
- the control cable (E).



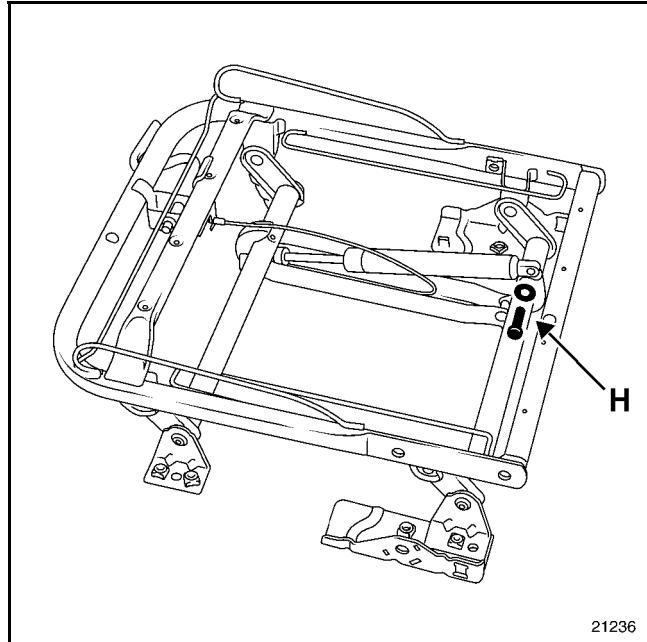
Mark the centre of retaining pin (F) using a centring punch. Use a drill to grind off the matt section of the retaining pin, then remove it.

Remove the stop and the pin (G).

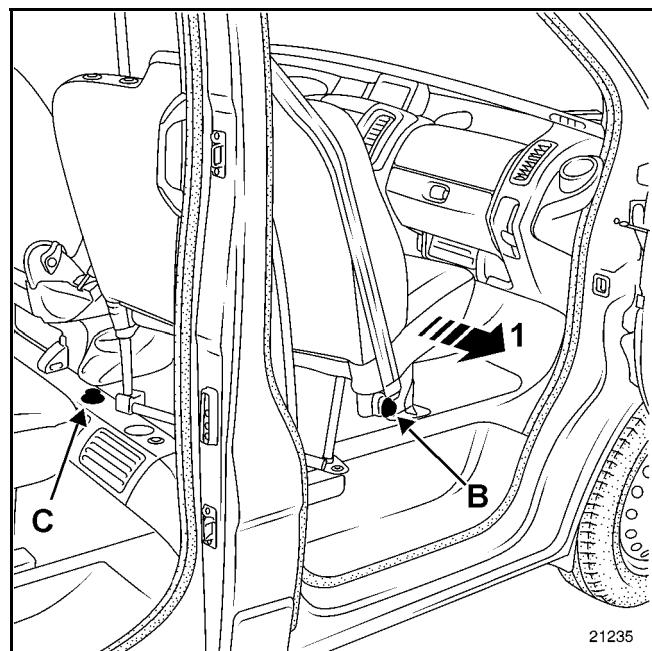
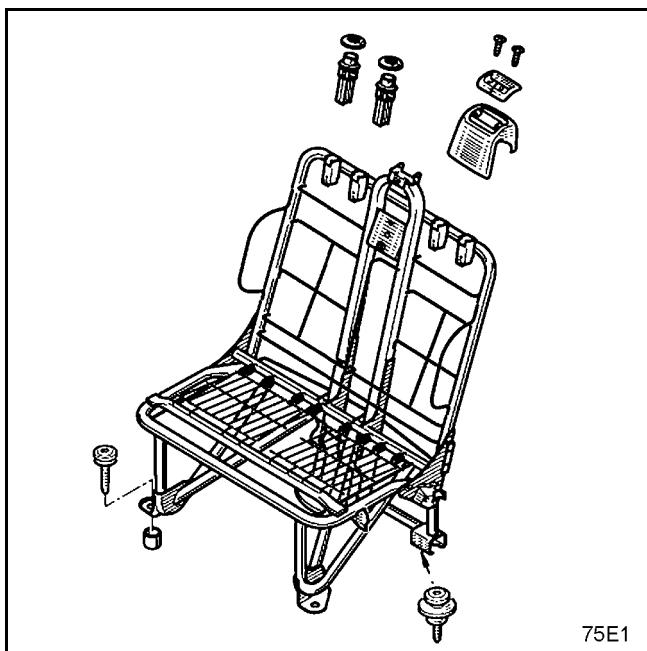
Disconnect the adjustment mechanism.

**REFITTING**

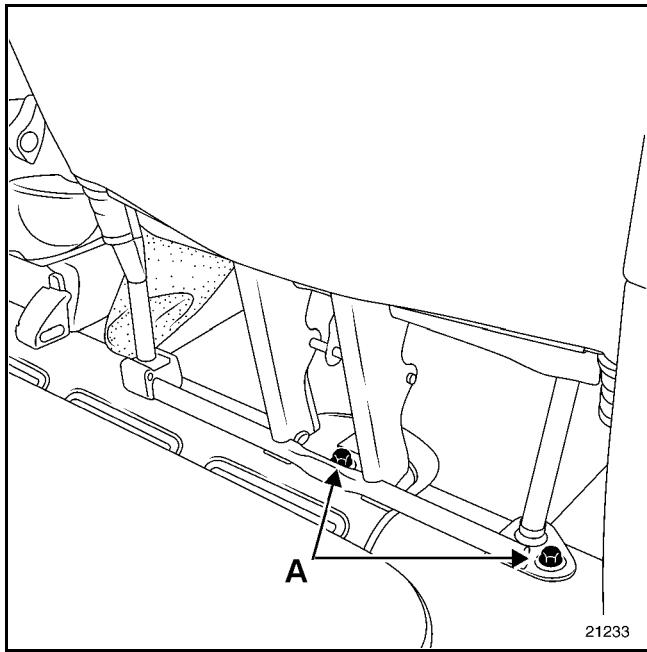
The replacement parts store will supply specific After Sales retaining pins.



Ensure that the two plastic washers (H) are in place.



**REMOVAL**



Remove:

- the four mounting screws (A),

– the seat belt mounting bolt (B) for the bench seat.

Disconnect the harness connector under the seat.

Protect the door sill lining, then release the bench seat (1) (one centring pin (C) holds the seat at the rear).

### REFITTING

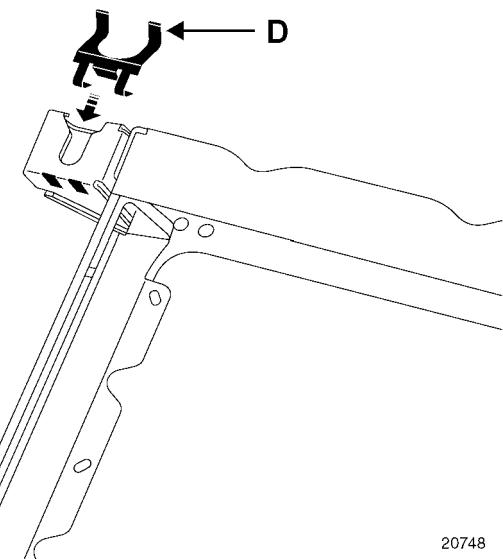
#### IMPORTANT:

Before refitting the seat, inspect the condition of the connectors on the seat frame and on the body.

#### TIGHTENING TORQUES (in daNm)

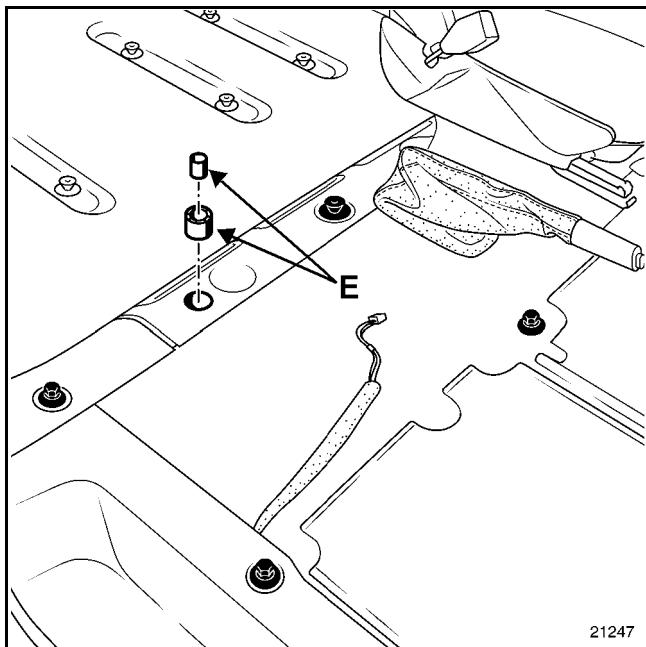


|  |     |
|--|-----|
| Front bench seat mounting                | 4.4 |
| The seat belt mounting on the bench seat | 3.7 |



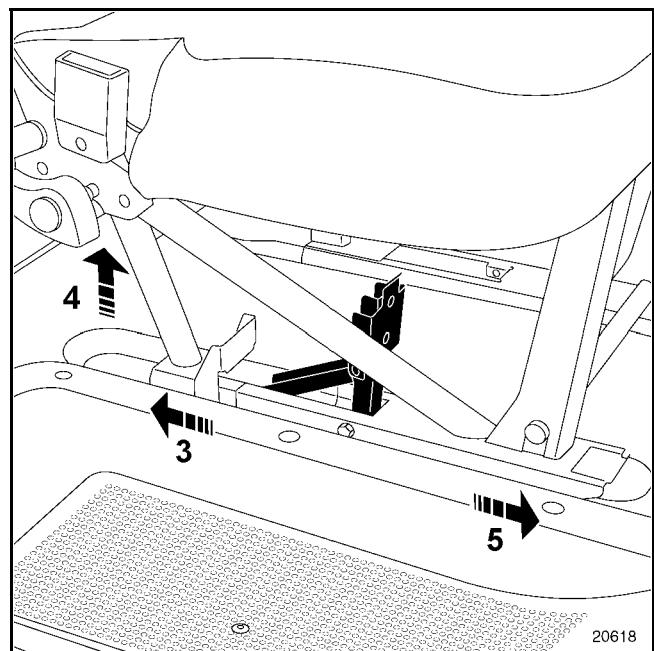
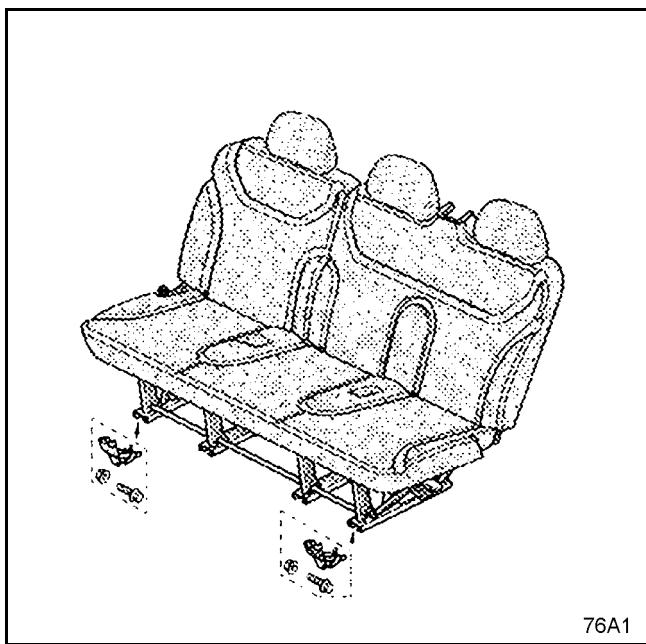
20748

Check for the presence of the metal clip (D) on the lower left-hand rear section of the frame.



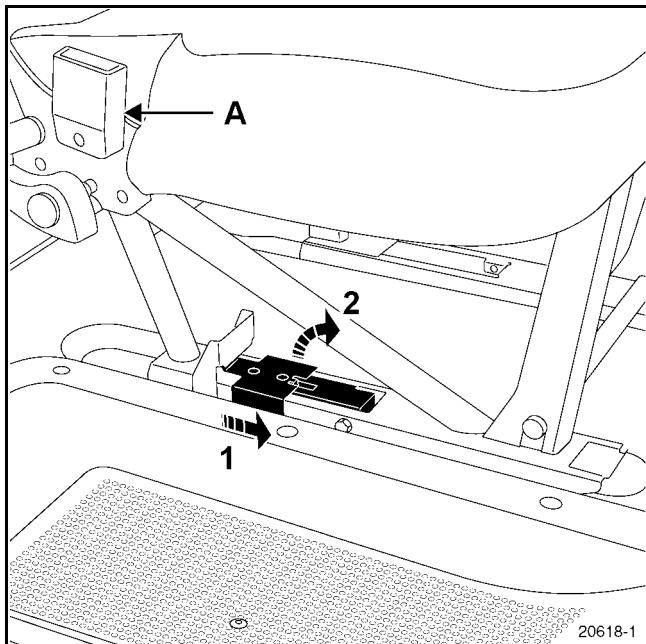
21247

Ensure that the spacers for the seat level adjustment system (E) are present at each mounting point.



## REMOVAL

**This operation requires two people.**



Unscrew the two sliding bolts (A), then release the seat belt clips.

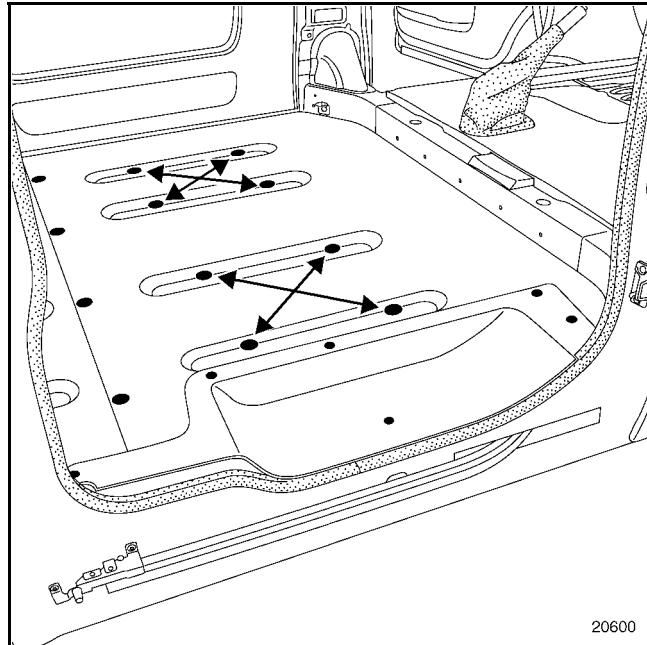
Unscrew the two bench seat mounting bolts (1), then (2).

Slide the bench seat towards the rear of the vehicle (3).

Lift the rear part of the bench seat (4).

Slide the seat towards the front of the vehicle (5), then remove it.

## REFITTING

**IMPORTANT:**

Before refitting, check the tightness of the seat anchorage bolts.

Tightening torque: **4.4 daNm**.

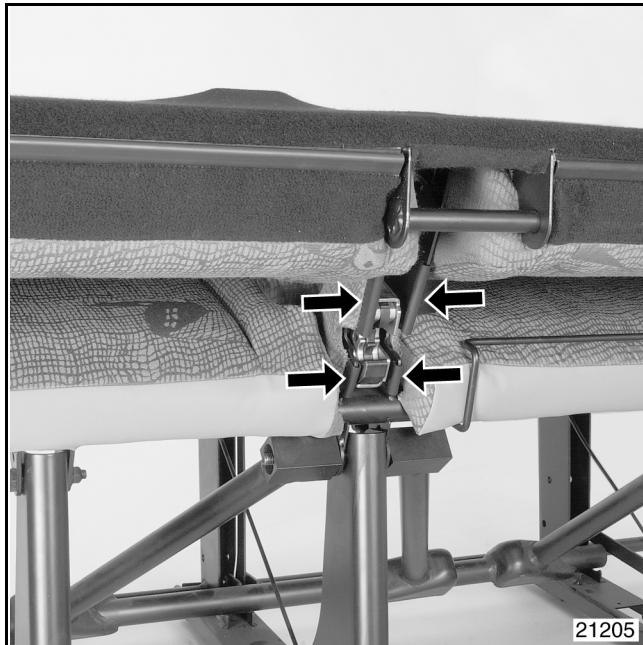
**NOTE:**

The removal method is identical for the two rear bench seats.

### REMOVING the lock

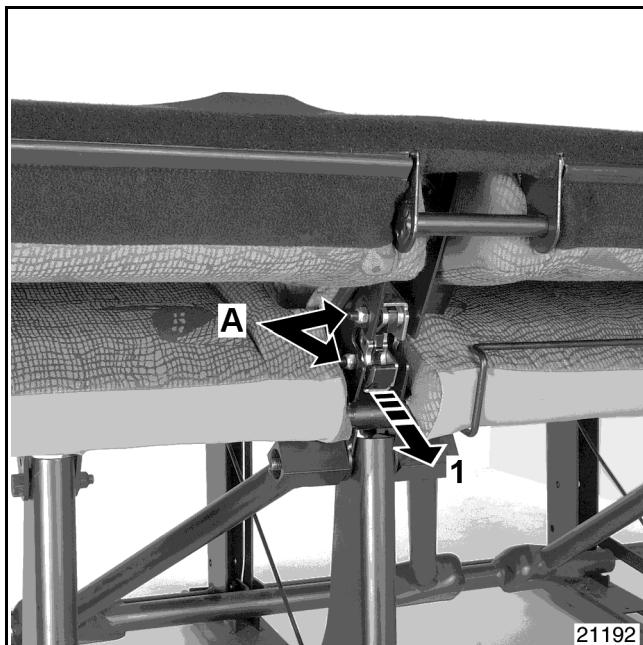
**NOTE:**

it is not necessary to remove the bench seat to carry out this operation.



Lower the seatback.

Remove the retaining strips around the lock mechanism.

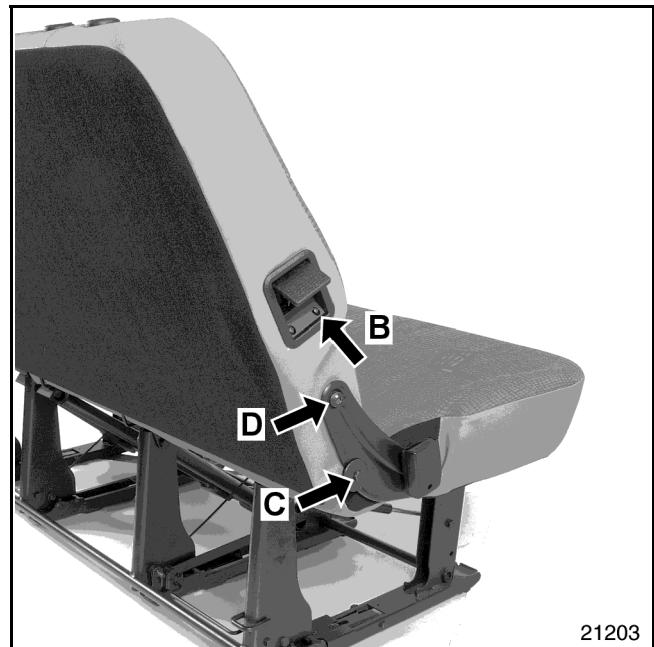


Remove the two lock mounting bolts (A).

Remove the lock (1) and unclip the control cable.

### REMOVING the control catch

The lock must be removed prior to carrying out this operation.



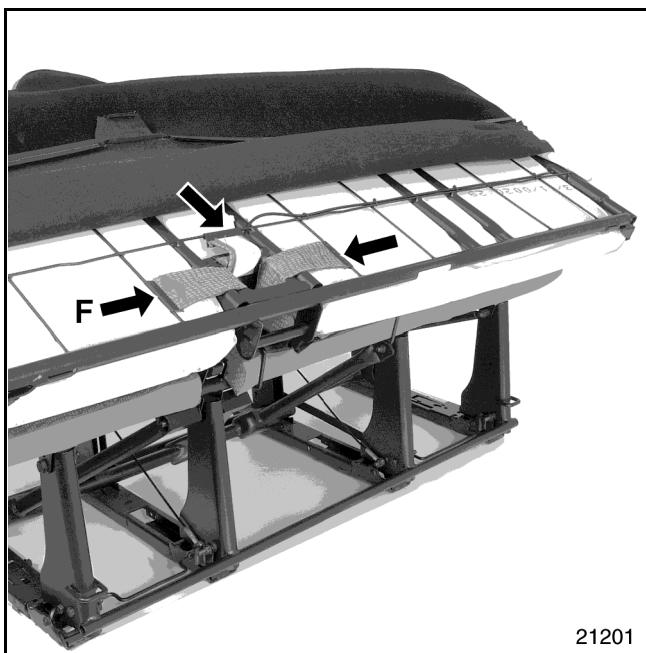
Remove the three mounting bolts (B) of the catch; disconnect the cable,

On each side of the seat, remove:

- the two bolts (C) and the seatback stop spacers,
- the two mounting bolts (D) of the seatback.

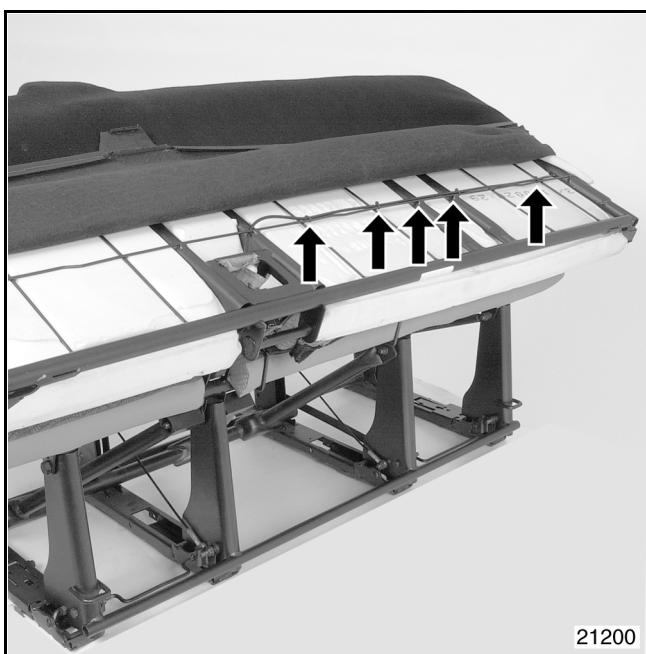


Lower the seatback and remove the retaining strip (E) from the seatback cover.



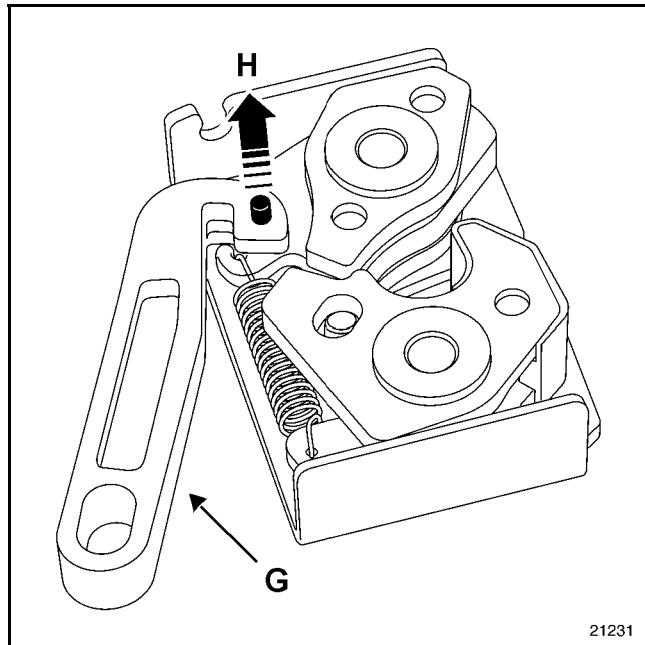
Simultaneously pull away the front and back of the cover to half-way.

Remove the three retaining strips (F).



Cut the five control cable retaining clips, then remove the cable.

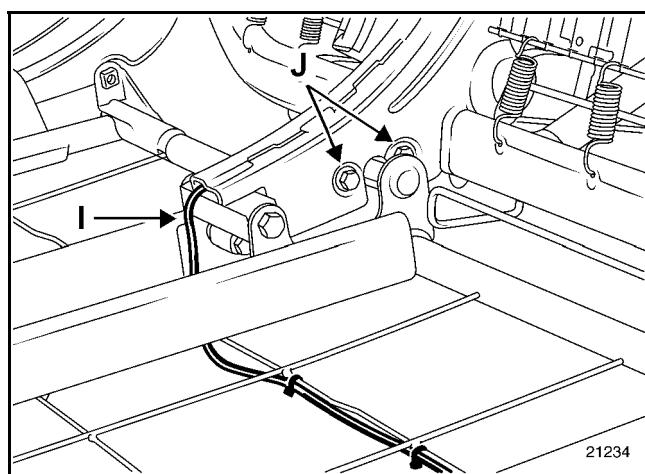
### REFITTING



21231

#### NOTE:

To fit the new lock mechanism, remove pin (H); remove the reduction gearing (G).



21234

### IMPORTANT

Ensure that the control cable is correctly routed (I).

Replace the retaining clips.

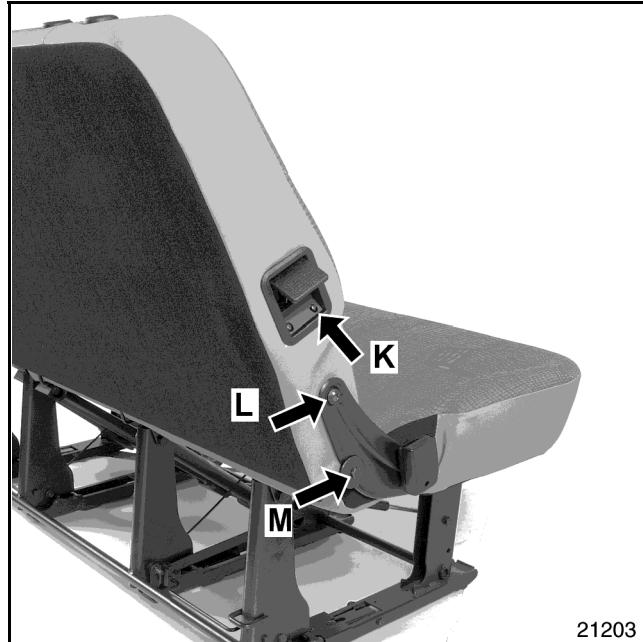
# REAR SEAT FRAMES AND RUNNERS

Lock and locking control of the second-row bench seatback

76

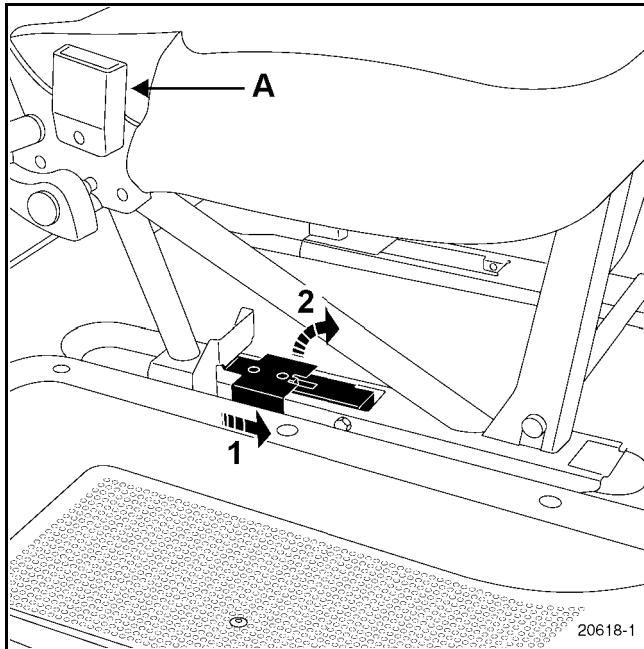
B

| TIGHTENING TORQUES (in daNm) |   |     |
|------------------------------|---|-----|
| Lock mechanism mounting bolt | J | 1.9 |
| Control catch mounting bolt  | K | 0.2 |
| Seatback mounting bolt       | L | 3.7 |
| Seatback stop bolt           | M | 1.9 |



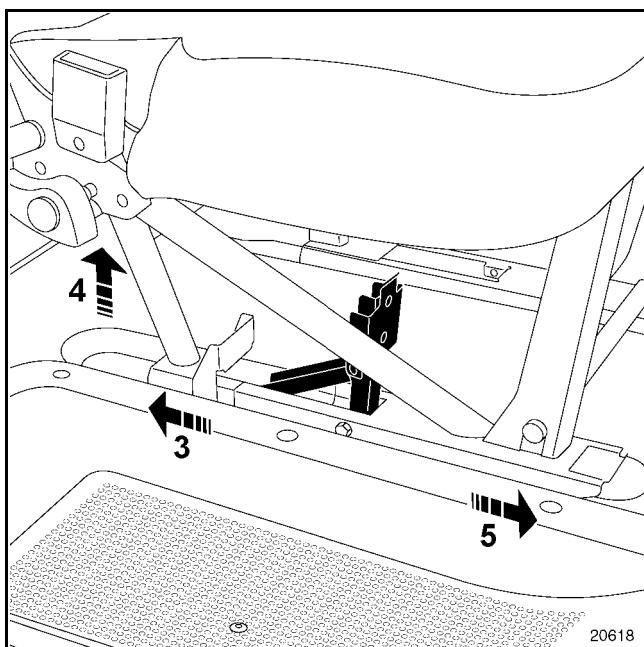
**SPECIAL NOTE:**

The two rear bench seats (first and second row) have the same locking system.

**REMOVAL**

Unscrew the two sliding bolts (A), then remove the seat belt clips.

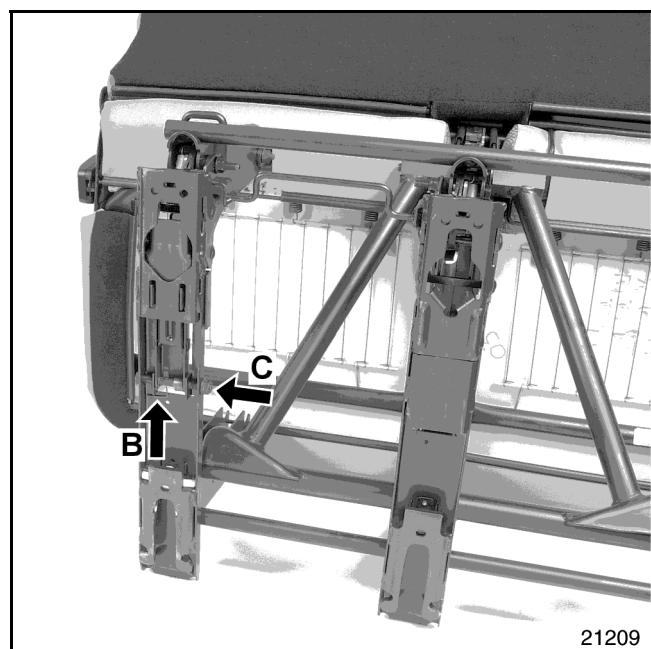
Unscrew the two bench seat mounting bolts (1), then (2).



Slide the bench seat towards the rear of the vehicle (3).

Lift the rear part of the bench seat (4).

Slide the seat towards the front of the vehicle (5), then remove it.



Hold spring (B) in position, then remove mounting bolt (C).

Remove the lock mechanism.

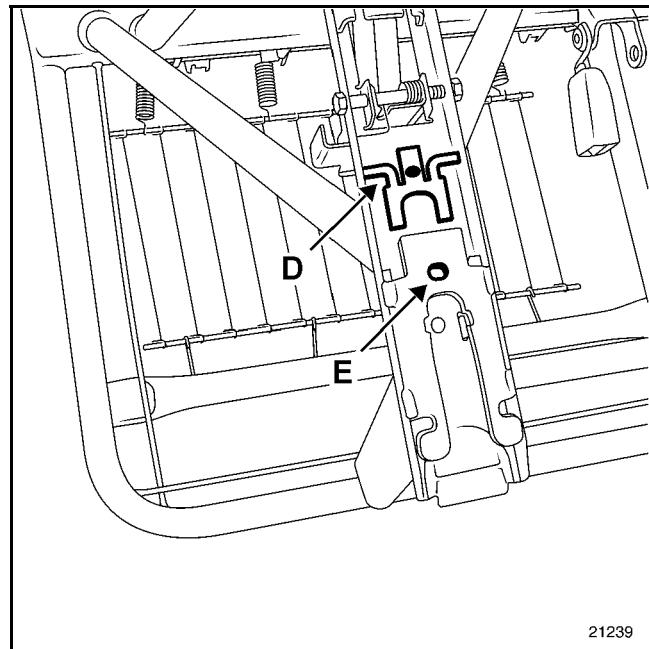
**REFITTING****IMPORTANT:**

Take care to observe the correct direction of fitting of spring (B).

**TIGHTENING TORQUES (in daNm)**

Lock mechanism mounting bolt (C)

0.6



Ensure that the lower guides are in place.

The indexing lug (D) clips into the hole in the frame (E).

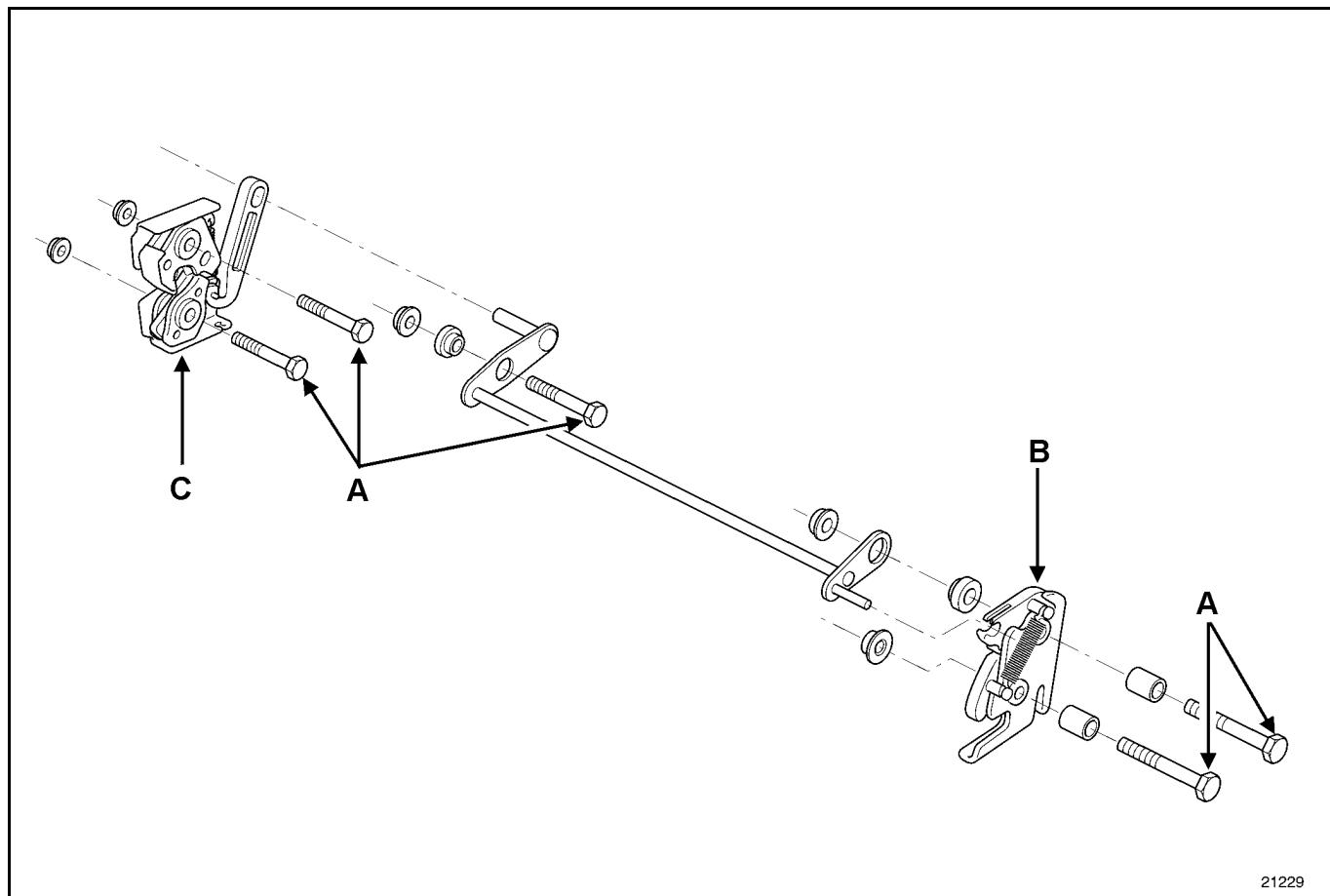
**REMOVAL:** This operation requires two people

Lower the bench seatback.

Remove:

- the bench seat,
- the mounting bolts (A).

Remove the entire mechanism.



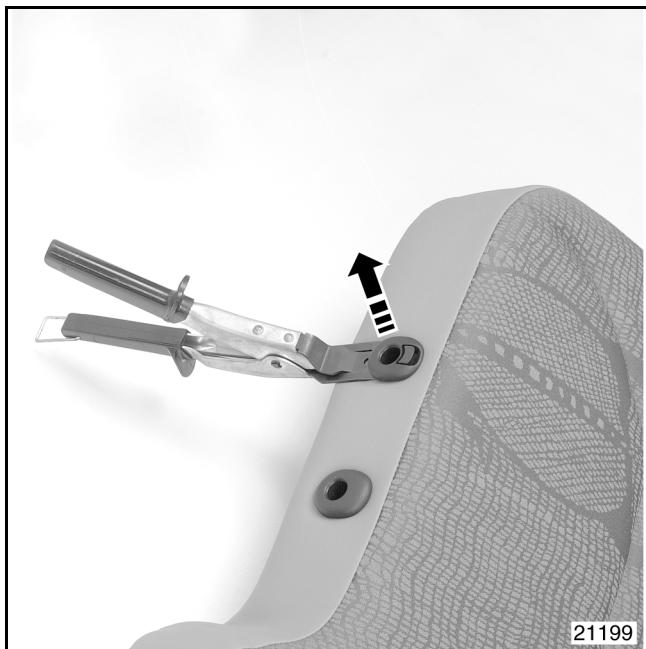
**REFITTING (assembly sequence):**

Exterior locking mechanism (B).

Lower locking mechanism (C).

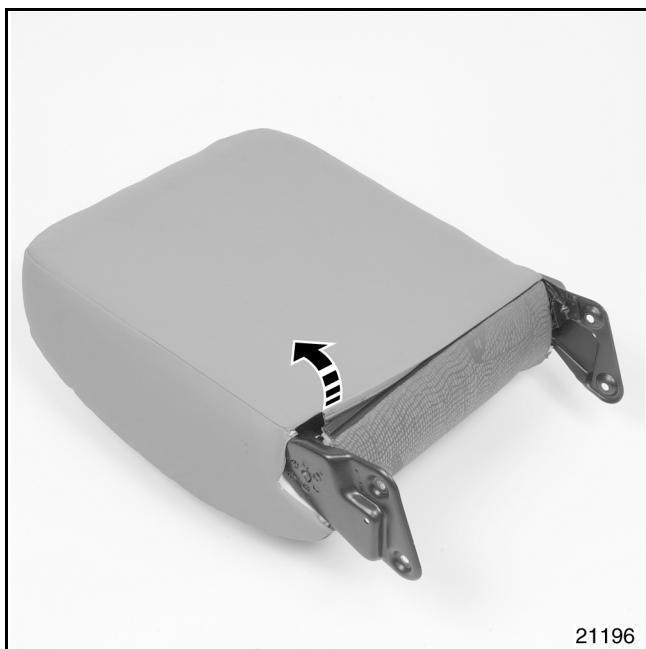
| TIGHTENING TORQUES (in daNm)     |     |
|----------------------------------|-----|
| Lock mechanism mounting bolt (A) | 1.9 |

**REMOVAL**

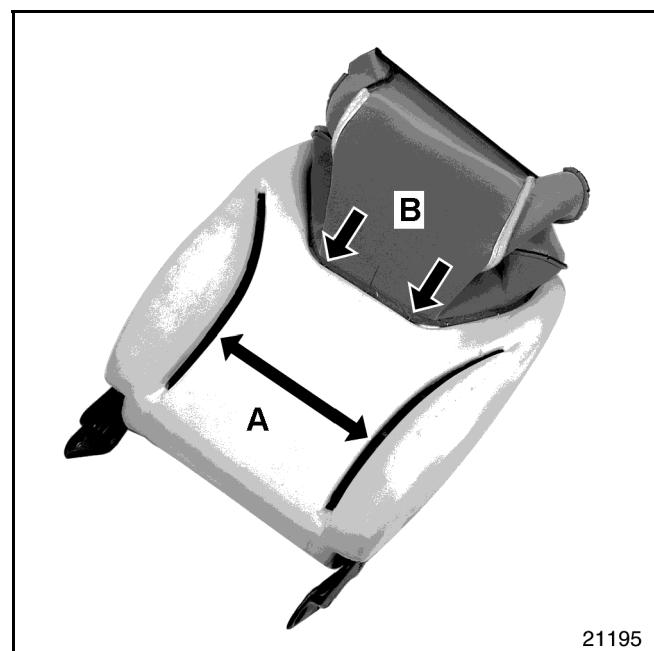


Remove the seatback.

Unclip the two head rest guide covers.



Remove the rear, then the front, seatback cover retaining strips.

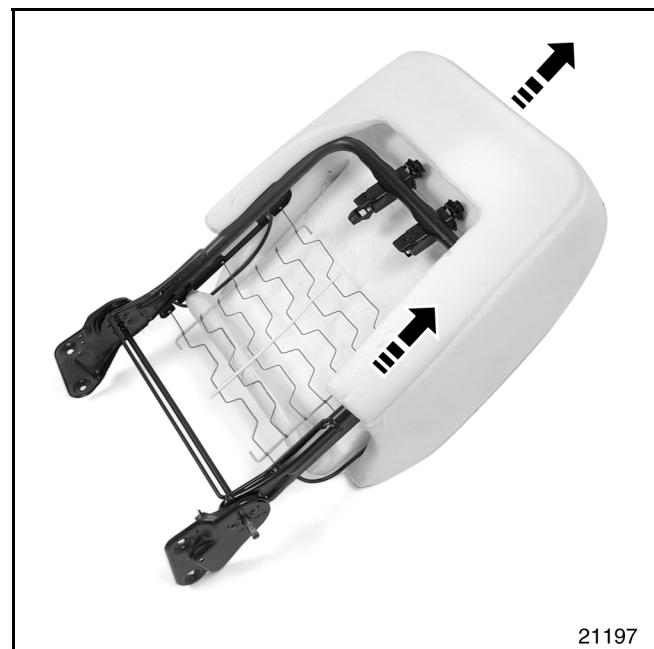


Simultaneously pull away the front and back of the cover towards the upper section of the seatback.

The cover is held by Velcro (A) at the front section of the seatback.

Cut the retaining clips (B).

Remove the cover.

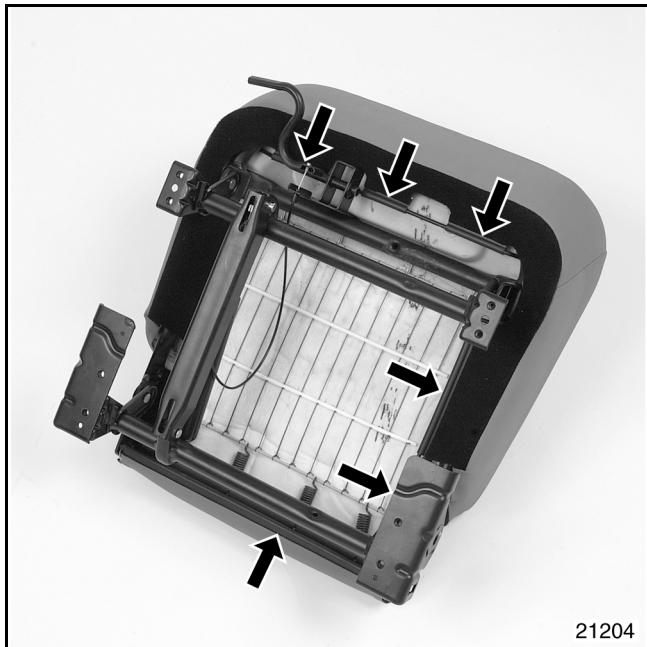


Remove the foam pad.

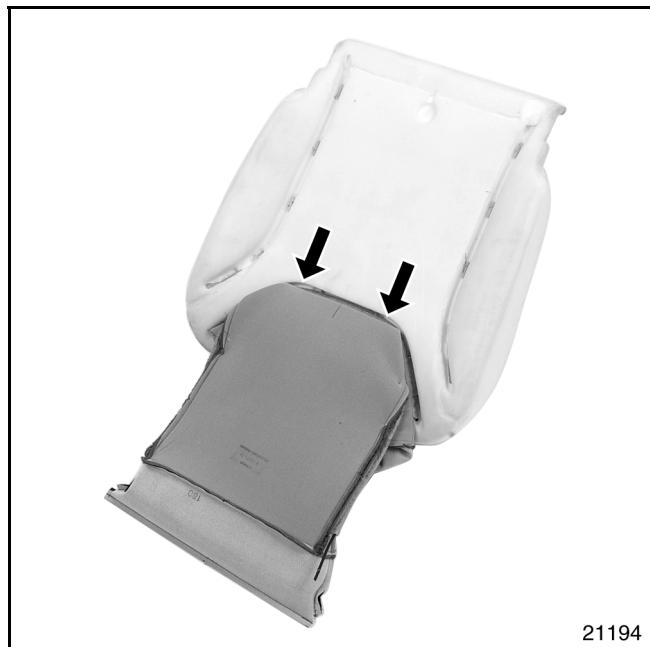
**REMOVAL**

Remove:

- the seat,
- the seatback.



21204



21194

- the front section clips.

Release:

- the cover,
- the foam pad.

Remove lower seat cushion cover retaining strips.



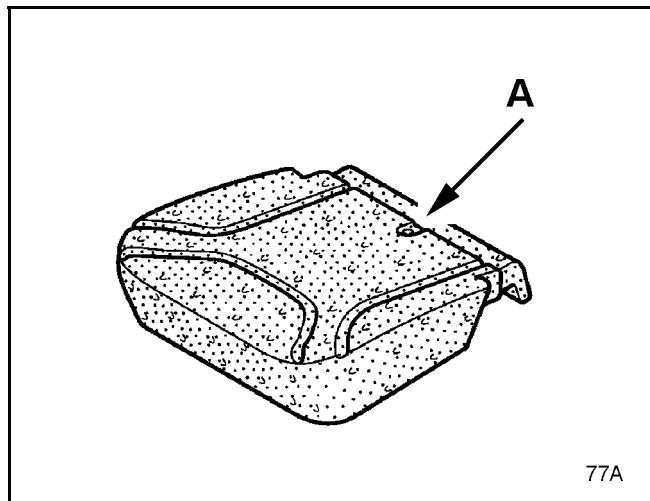
21193

Cut:

- the side section clips,

**REFITTING**

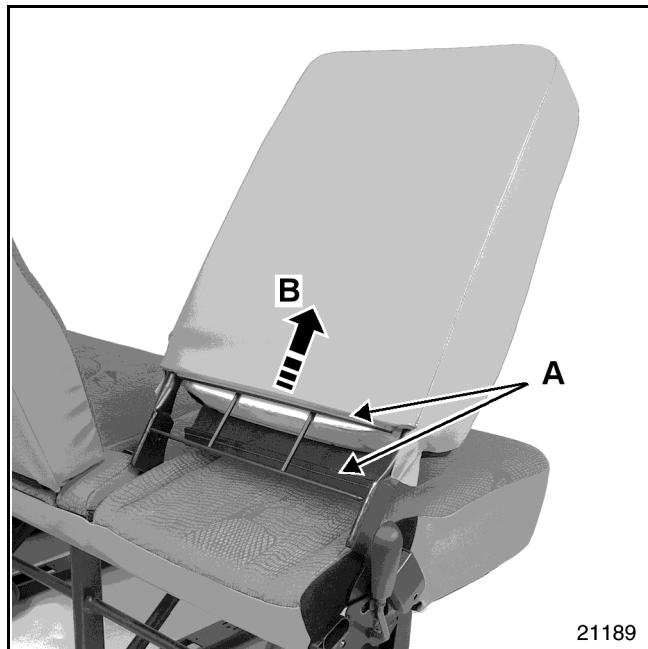
**SPECIAL INSTRUCTIONS:** on vehicles equipped with a heater pad, it will be necessary to cut the seat cushion at (A), to enable the heater pad electrical harness to be removed.



77A

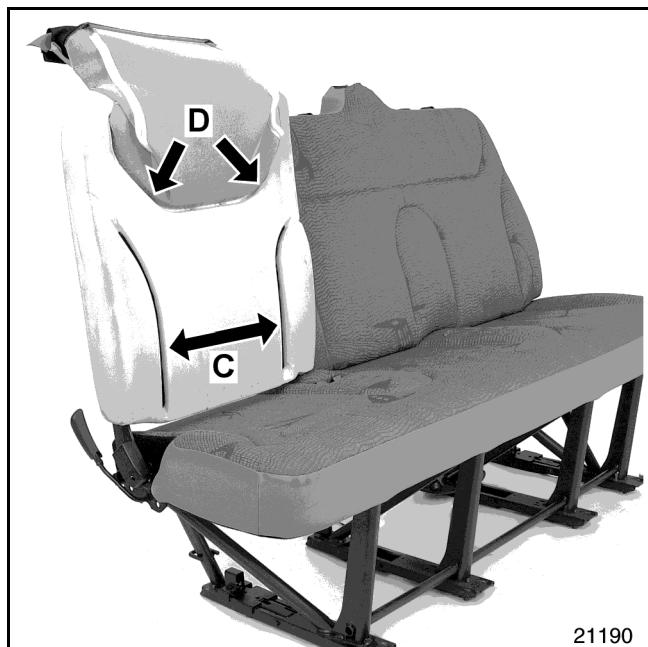
**REMOVAL of the 1/3 seatback**

Unclip the two head restraint guide covers.



**Release:**

- the retaining strips (A) of the cover,
- the cover and foam pad (B).



If only the cover is being removed:

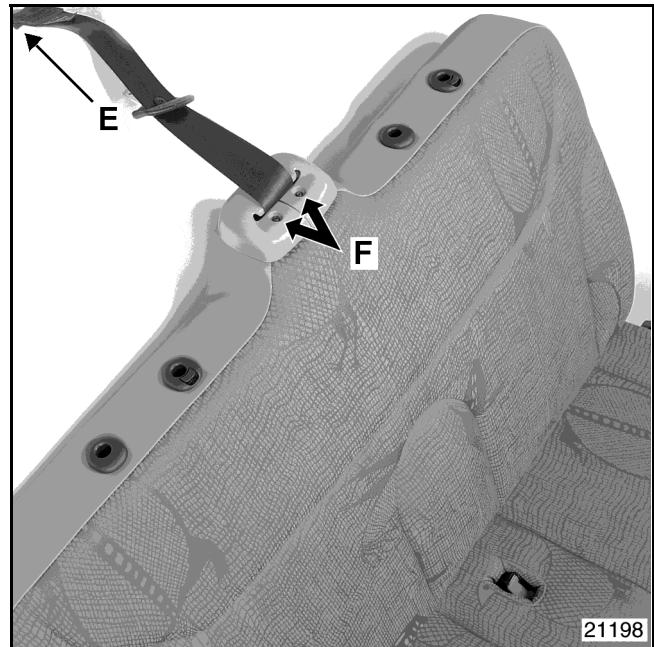
Remove the cover retaining strips (A).

Simultaneously pull away the front and back of the cover towards the upper section of the seatback, the cover is held in place by Velcro (C) at the front section of the seatback.

Cut the retaining clips at (D).

Remove the 1/3 seatback cover.

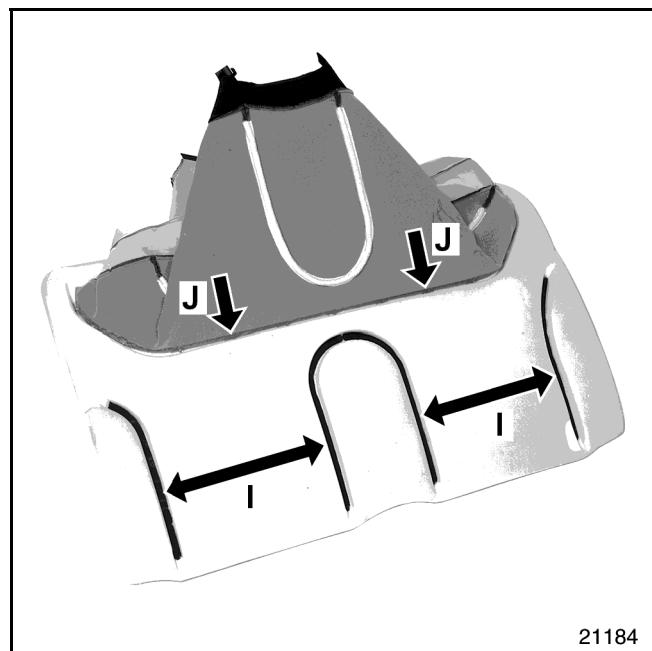
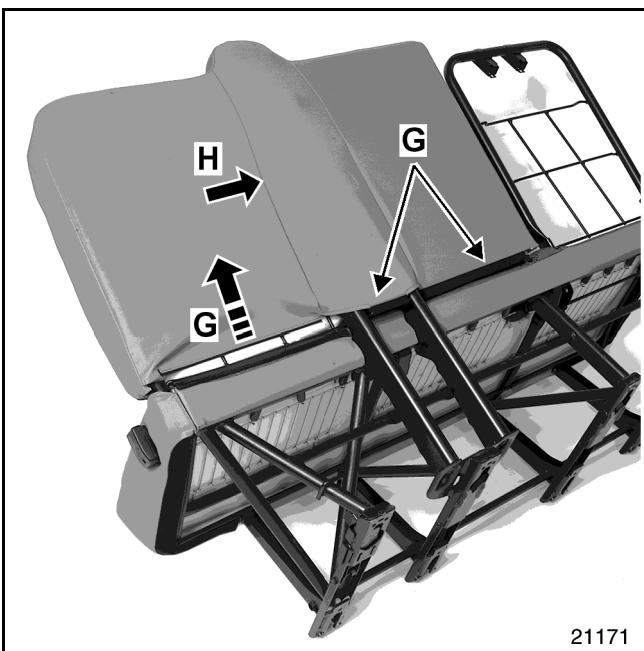
**REMOVAL of the 2/3 seatback**



**Remove:**

- the seat belt mounting bolt (E), beneath the bench seat,
- the two bolts (F) of the upper cover,
- the cover.

Unclip the four head restraint guide covers.



Release:

- the front and rear seatback cover retaining strips (G),
- the retaining strip (H) (see photo below).



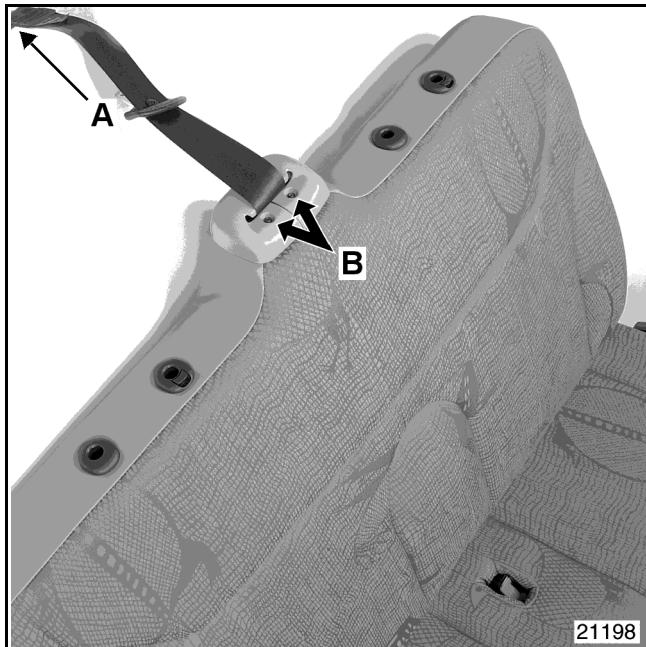
Simultaneously pull away the front and back of the cover towards the upper section of the seatback.

The cover is held in place by Velcro at (I).

Cut the retaining clips at (J).

Remove the cover.

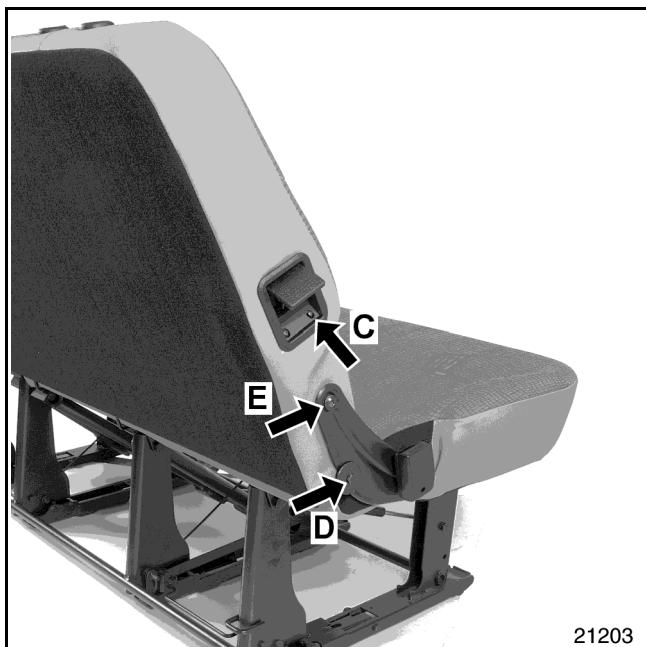
**REMOVAL**



Remove:

- the seat belt mounting bolt (A), beneath the bench seat,
- the two bolts (B) of the upper cover,
- the cover.

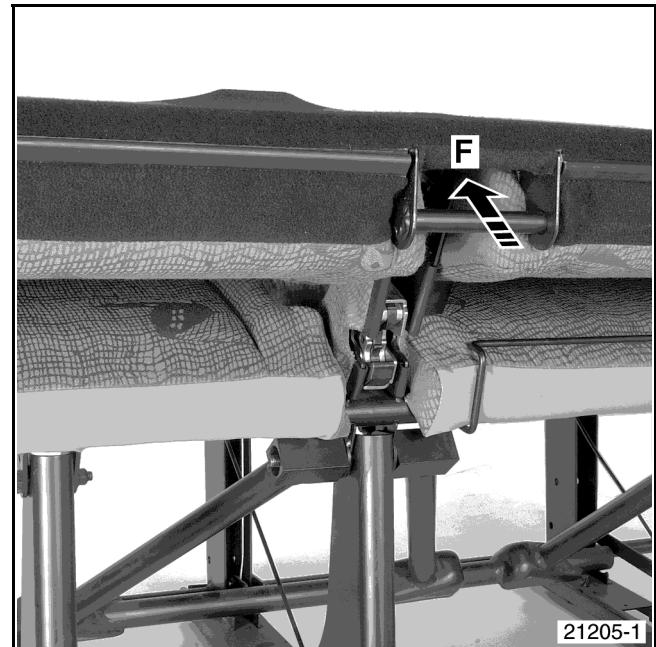
Unclip the six head restraint guide covers.



Remove:

- the three mounting bolts (C) of the catch, then disconnect the cable,
- the two bolts and spacers (D) of the seatback stop,

- the two seatback mounting bolts (E).

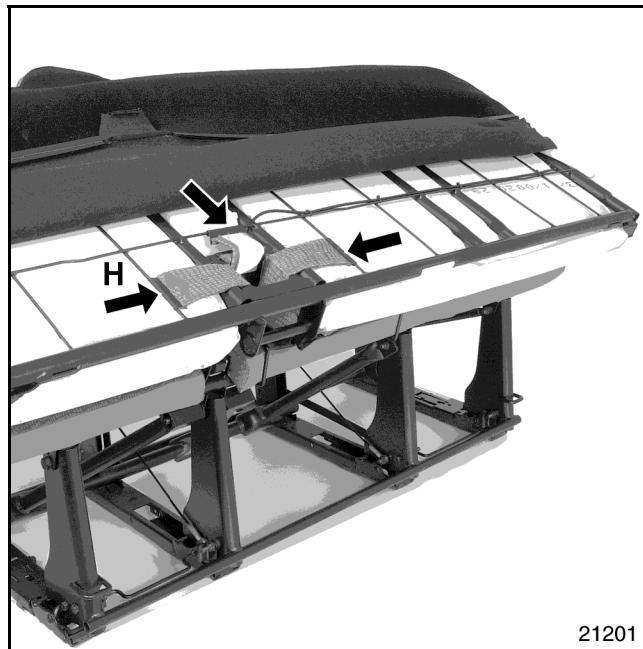


Lower the back of the bench seat, then release:

- the retaining strip (F) along the join,



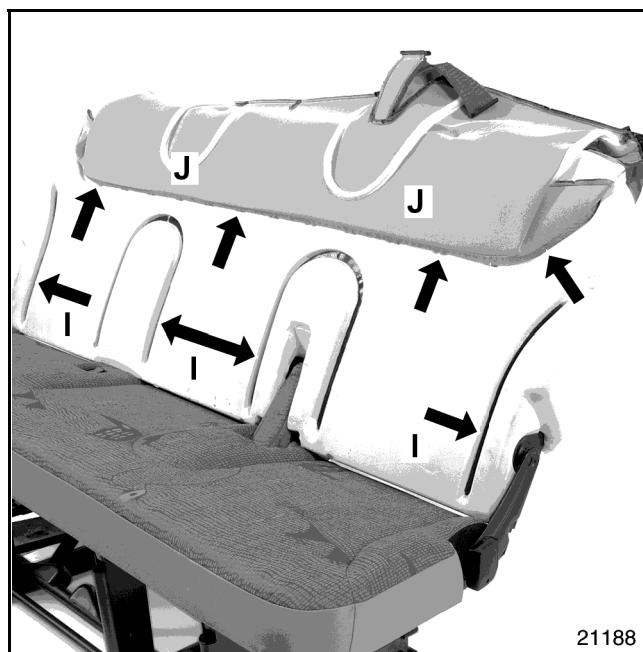
- the seatback cover retaining strip (G).



Simultaneously pull away the front and back of the cover to half-way.

Release:

- the three retaining strips (H),



- the cover, held in place by Velcro, at (I).

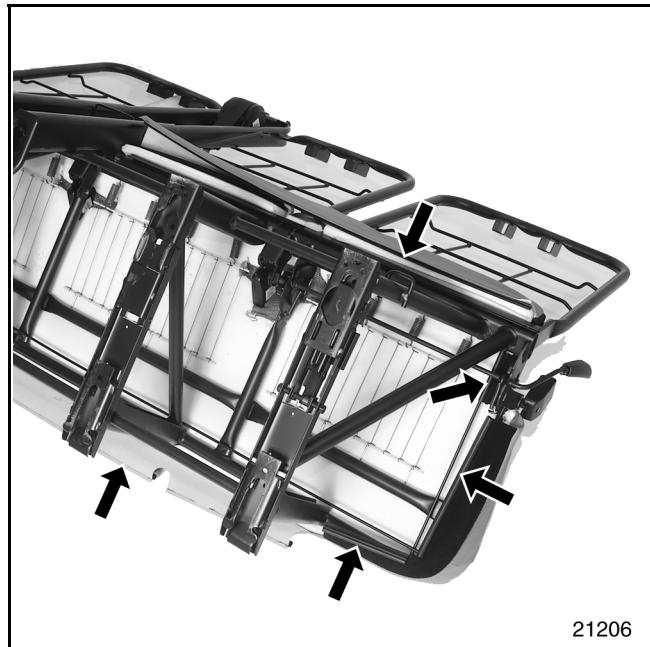
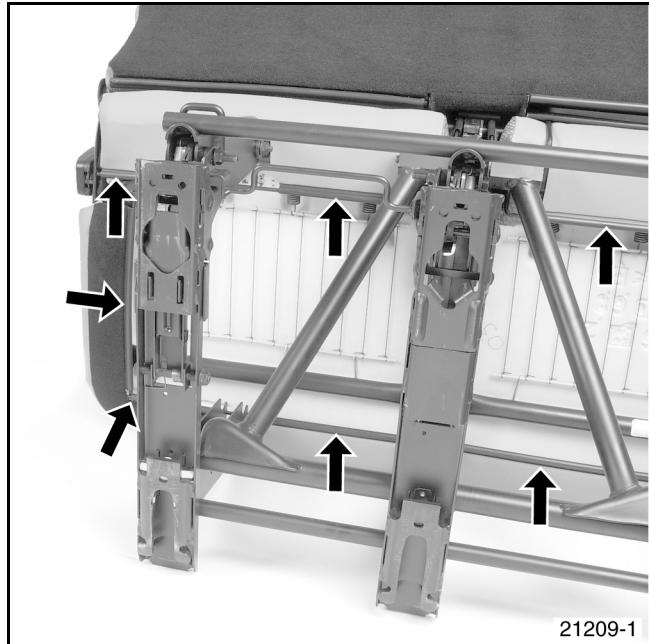
Cut the retaining clips at (J).

Release:

- the cover,
- the foam pad.

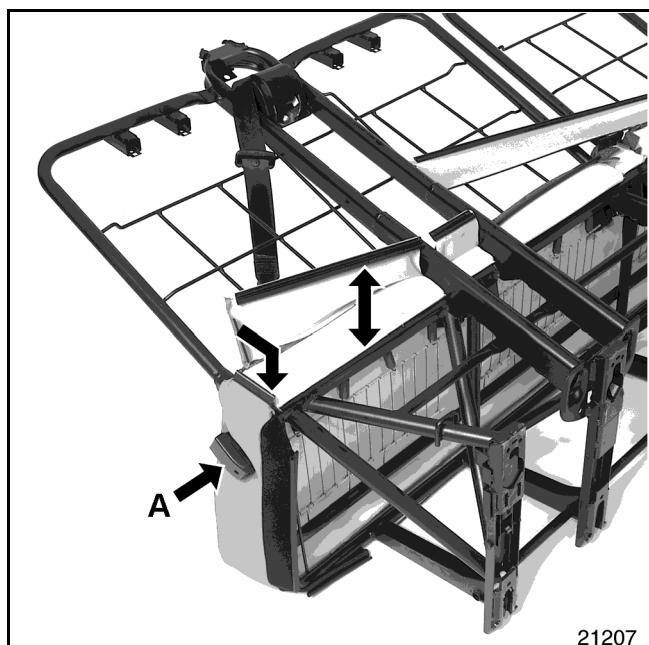
**REMOVAL**

Remove the seat.



– the cover retaining straps.

Remove the cover and foam cushion pad together.

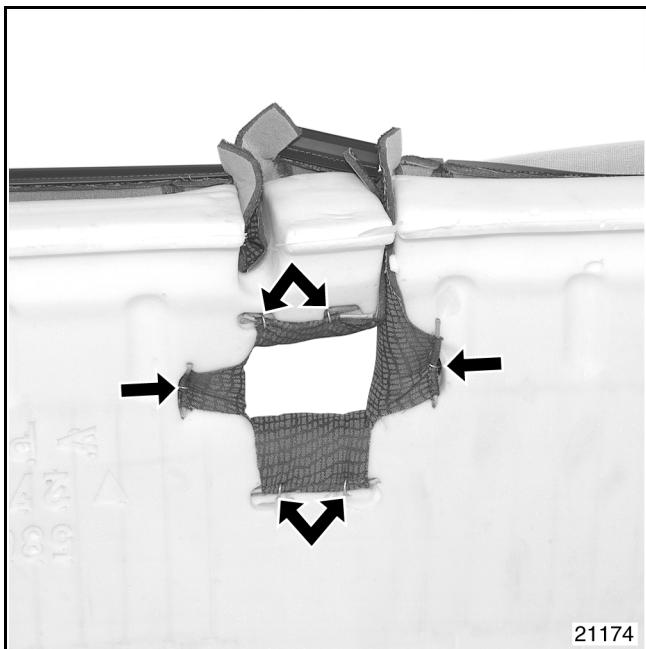


Cut the retaining clips at the rear.

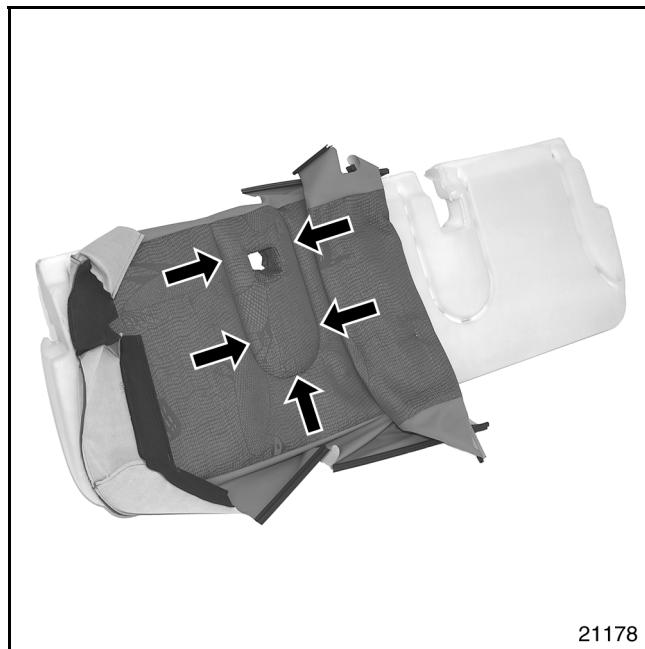
Release the two sliding bolts (A), on each side of the bench seat.

Release:

– the seat cover retaining strips, on the rear section,

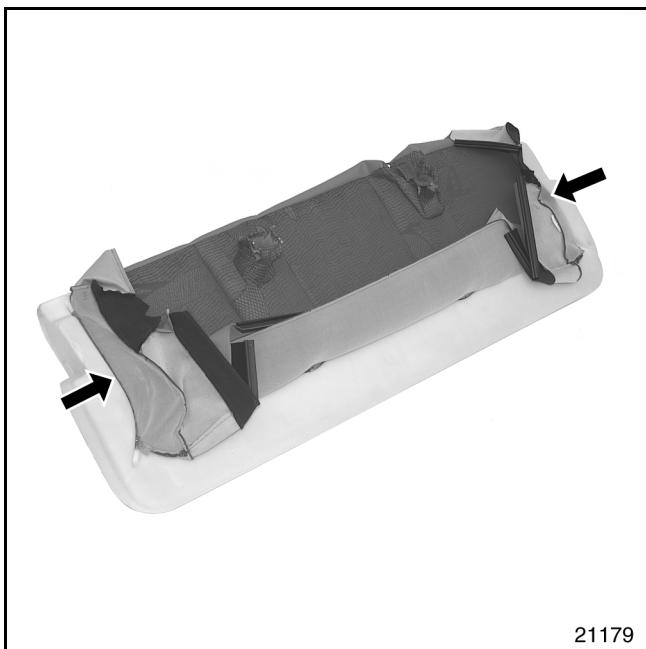


21174



21178

**IMPORTANT:** take care not to damage the mounting lugs when cutting the clips.



21179

Cut:

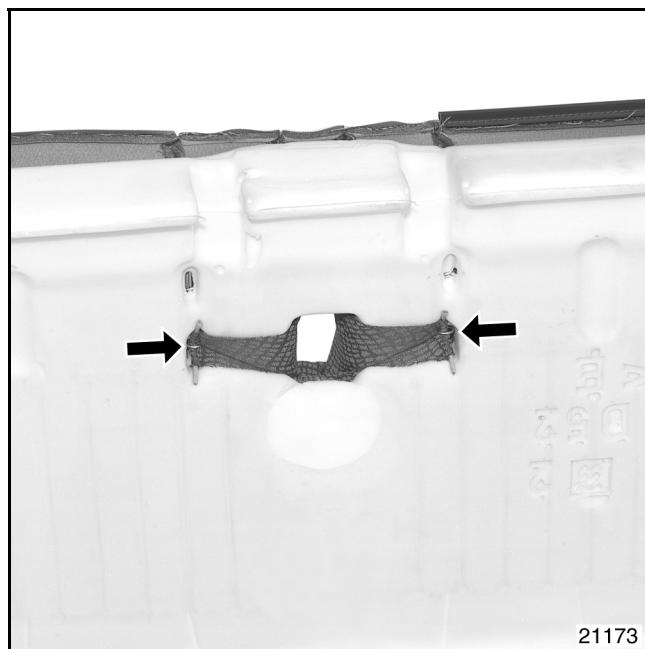
– the side section clips,

– the centre section clips.

Remove the cover.

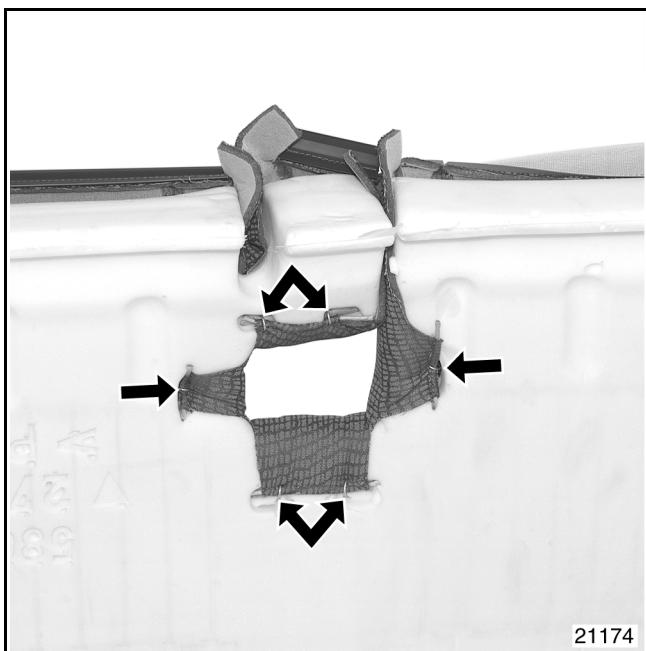
#### REFITTING

**IMPORTANT:** Check the number and positioning of the clips under the bench seat foam pads is correct.

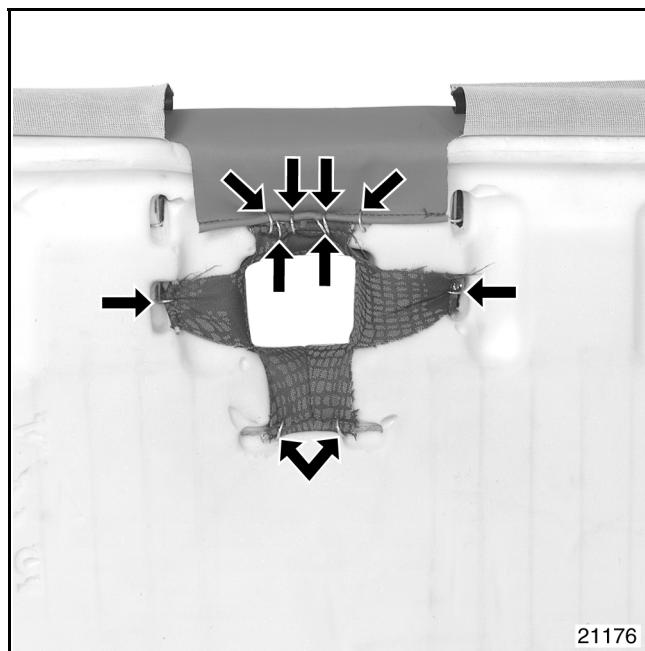


21173

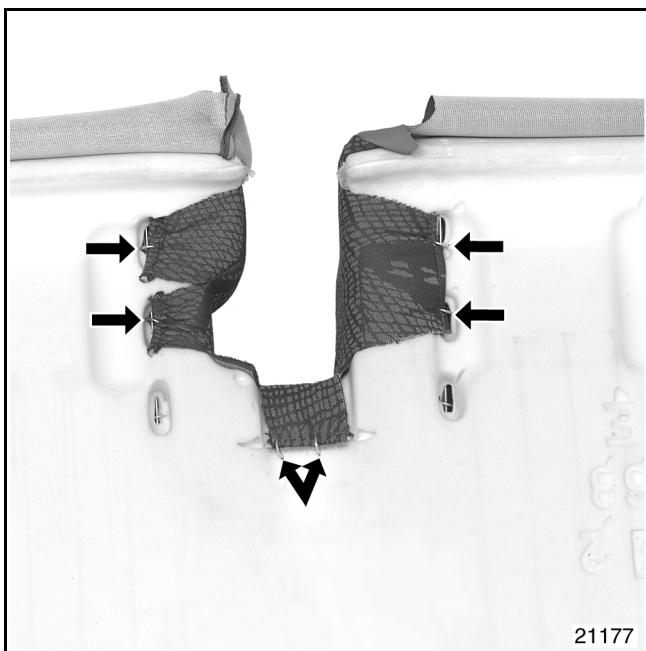
Front row left-hand bench seat cushion.



Front row right-hand bench seat cushion.



Second row right-hand bench seat cushion.



Second row left-hand bench seat cushion.

The purpose of this section is to recommend a product for **SEALING THE DETACHABLE BODYWORK ASSEMBLIES** (bolt-on, screw-on, etc.).

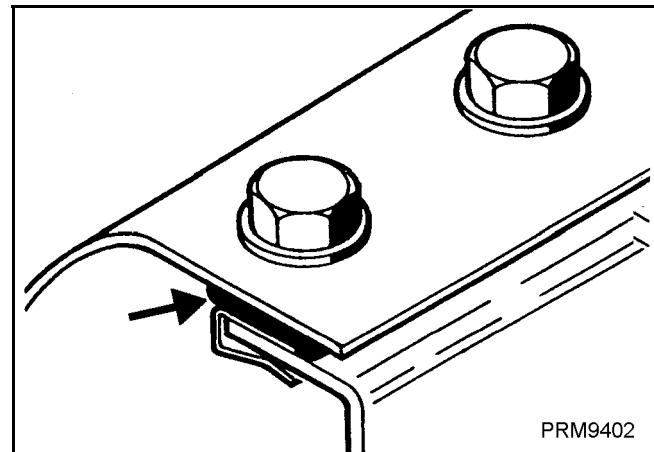
When sealing, it is essential to use **IXEL sealing mastic** part number **77 11 170 230**.

**ASSEMBLIES CONCERNED:**

- Sealing the tailgate hinge leaves to be carried out each time the tailgate is removed.
- Sealing the Parts Department door bolt-on hinges.

Generally, when a bodywork component is removed or replaced, the removable assemblies (hinges, hinge leaves) should be sealed using mastic, in accordance with the original fitting.

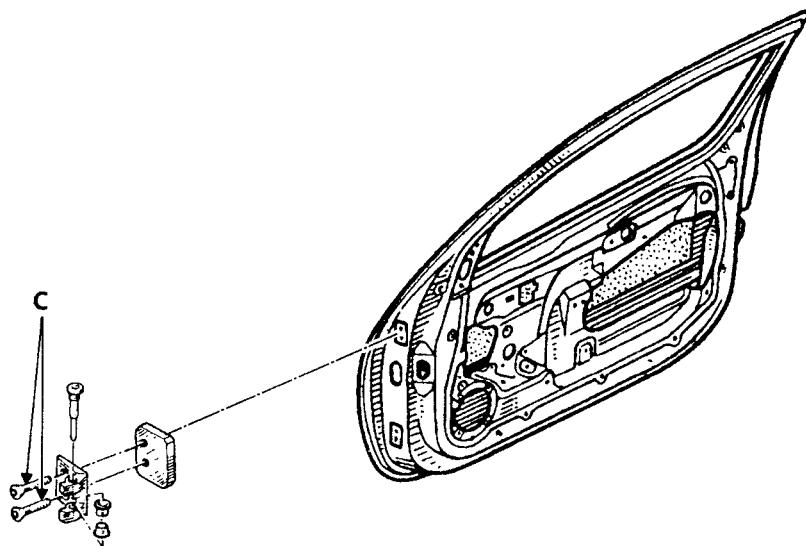
The malleable mastic is supplied in a preformed  $\varnothing 6\text{L}$  **300 mm** roll which is applied to the mounting between the two components to be assembled.



After pressure has been applied, this product seals the assembly and makes it weather-tight.

**NOTE:**

Before applying this product, both mating faces must be cleaned using a surface cleaner.



PRM9401

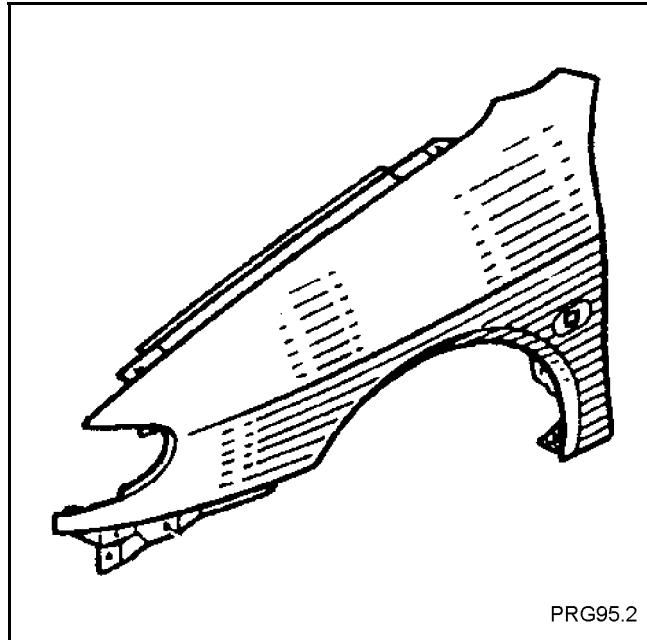
Sealing the bolt-on door hinges fitted when fitting a replacement door from the Parts Department.

Apply a mastic bead between the plate and the bodywork at the two hinge mounting bolts (C).

**Reminder of the paintwork operations on a door following its replacement:**

- Paint the special After-Sales bolt-on hinges and door frames in accordance with the After-Sales paint range.
- Fit hinges with mastic operations in between the plate and the bodywork.
- Fit the door on the vehicle and on the hinge pins.
- Adjust the door on the vehicle and tighten hinge bolts (C).
- Touch up the paint around the hinges and bolt heads (C) if the paintwork was damaged when these were adjusted.
- Paint the door panel and its pillars with the door fitted according to the After-Sales paint operations.

Operations for painting on Noryl GTX



- Degrease.
- Sand with a very fine buffer pad (grey pad), soaked in antistatic thinner.
- Degrease with antistatic thinner.
- Wipe carefully.
- Apply MAXIMA HS polyurethane dual component finish (following supplier's technical information).
- Bake for 35 to 40 minutes at 60 °C.
- Polish P800.
- Degrease with surface cleaner.
- Apply paint (following supplier's technical information):
  - the base coats,
  - the top coat and lacquer (without flexibiliser\*).
- Bake for 35 minutes at 60 °C.

**\* WARNING:** these paint operations are only applicable to NORYL GTX wings.