

CITROËN

AUTOMOBILES CITROËN

Société anonyme régie par les articles 118 à 150 de la loi sur les sociétés commerciales

REPAIR MANUAL No. MAN. 008112

VOLUME 2

CUSTOMER SERVICES
AFTER-SALES TECHNICAL DEPARTMENT

OCTOBER 1980

• Supplement No. 1 :

••• No. 2 :

••••• No. 3 :

GSA VEHICLES

BODYWORK



CAPITAL 965.860.000 F
C.C.P. PARIS 121 - 54

SIEGE SOCIAL : 117 A 167, QUAI ANDRE-CITROËN 75747 PARIS CEDEX 15
TELEPHONE : (11) 578.61.61 - TELEGRAMME ET TELEX : 270817 CITROËN PARIS

R.C. PARIS B 64.2050199
SIRET 642050 199/000 16

HOW TO USE THE MANUAL

The Repair Manual regarding this type of vehicle is made up of two volumes

Volume 1 is divided into four parts separated by index sheets, numbered from I to IV

- I : CHARACTERISTICS - ADJUSTMENTS - CHECKS
- II : REMOVAL AND FITTING of units, sub-assemblies and accessories
- III : RECONDITIONING of units, sub-assemblies and accessories
- IV : ELECTRICAL SYSTEM - HEATING - VENTILATION

Two other index sheets are to be found at the end of this volume, entitled TECHNICAL BULLETINS and INFORMATION BULLETINS. They are intended for classification of these bulletins.

Volume 2 deals with operations regarding BODYWORK.

Each volume is presented in a blue binder with « RING » type mechanism, in order to facilitate classification of supplements or take out an operation sheet needed in the workshop.

COMPOSITION OF VOLUME 2

It contains :

- the list of operations appearing in it,
- the operations, filed in numerical order,
- the summary list of all special tools that are not sold and which are mentioned in the operations: together with the manufacturing drawings of these tools which have to be made by the repairer himself.

UPDATING TO VOLUME 2

The number of the updating is given by the number of dots located on the left of the italic number at the bottom right of each right-hand page.

- For example : 1 dot • updating No. 1
- 2 dots •• updating No. 2

OPERATIONS

The order of operations has been studied to obtain the best working quality in the shortest time.

The operation numbers are composed of :

- a) the vehicle code « GX »
- b) a three-figure number designating the unit or the unit component
- c) a figure indicating the kind of repair :
 - figures 0 0 0 indicate the characteristics of the vehicle
 - figures 0 0 indicate the characteristics of the unit
 - figure 0 indicates the checks and adjustments
 - figures 1, 4, 7 indicate removals and fittings
 - figures 2, 5, 8 indicate strippings and reassemblings
 - figures 3, 6, 9 indicate reconditionings

TOOLS

Special tools are indicated in the text by a number followed by the letter T.
Complementary tools are indicated in the text by a number preceded by the index MR.

TIGHTENING TORQUES

The torques are expressed in decaNewton metre (m.daN), statutory torque measuring unit :

$$9.81 \text{ mN} = 1 \text{ m.kg} = 0.981 \text{ m.daN}$$

These « rounded » values correspond approximately to the kilogram-metre (former measuring unit), namely :
In practice : **1 m.daN = 1 m.kg**

NOTE : When the indication "torque wrench" is mentioned following the value of a tightening torque, the operation must be IMPERATIVELY carried out with a torque wrench.

IMPORTANT :

For each operation or set of operations, there is a "TIGHTENING TORQUES" section.
Nuts, screws, studs ... which are **underlined**, indicate that they are of a special grade : SECURITY HARDWARE.
On assembly, it is IMPERATIVE to use this type of HARDWARE to the EXCLUSION OF ANY OTHER.
The tightening torques appearing in the drawings and preceded by an asterisk, likewise correspond to this "SECURITY HARDWARE".

IMPORTANT REMARKS

For all technical information regarding these vehicles, please contact :

The Service Department
Citroën Cars Ltd.
Mill St.
Slough Berks - GB - Tel. Slough 23808

or

DEPARTEMENT TECHNIQUE APRES-VENTE, ASSISTANCE TECHNIQUE - 163, avenue Georges Clémenceau - 92000
NANTERRE (FRANCE) Tel : 725-97-10

HOW TO USE THE MANUAL

The Repair Manual regarding this type of vehicle is made up of two volumes

Volume 1 is divided into four parts separated by index sheets, numbered from I to IV

- I : CHARACTERISTICS - ADJUSTMENTS - CHECKS
- II : REMOVE AND FITTING of units, sub-assemblies and accessories
- III : RECONDITIONING of units, sub-assemblies and accessories
- IV : ELECTRICAL SYSTEM - HEATING - VENTILATION

Two other index sheets are to be found at the end of this volume, entitled TECHNICAL BULLETINS and INFORMATION BULLETINS. They are intended for classification of these bulletins.

Volume 2 deals with operations regarding BODYWORK.

Each volume is presented in a blue binder with « RING » type mechanism, in order to facilitate classification of supplements or take out an operation sheet needed in the workshop.

COMPOSITION OF VOLUME 2

It contains :

- the list of operations appearing in it,
- the operations, filed in numerical order,
- the summary list of all special tools that are not sold and which are mentioned in the operations; together with the manufacturing drawings of these tools which have to be made by the repairer himself.

OPERATIONS

The order of operations has been studied to obtain the best working quality in the shortest time.

The operation numbers are composed of :

- a) the vehicle code « GX »
- b) a three-figure number designating the unit or the unit component
- c) a figure indicating the kind of repair :
 - figures 0 0 0 indicate the characteristics of the vehicle
 - figures 0 0 indicate the characteristics of the unit
 - figure 0 indicates the checks and adjustments
 - figures 1, 4, 7 indicate removals and fittings
 - figures 2, 5, 8 indicate strippings and reassemblings
 - figures 3, 6, 9 indicate reconditionings

TOOLS

Special tools are indicated in the text by a number followed by the letter T.

Complementary tools are indicated in the text by a number preceded by the index MR.

TIGHTENING TORQUES

The torques are expressed in decaNewton metre (m.daN), statutory torque measuring unit :

$$9.81 \text{ mN} = 1 \text{ m.kg} = 0.981 \text{ m.daN}$$

These « rounded » values correspond approximately to the kilogram-metre (former measuring unit), namely :

In practice : **1 m.daN = 1 m.kg**

NOTE : When the indication "torque wrench" is mentioned following the value of a tightening torque, the operation must be **IMPERATIVELY** carried out with a torque wrench.

IMPORTANT :

For each operation or set of operations, there is a "TIGHTENING TORQUES" section.

Nuts, screws, studs ... which are **underlined**, indicate that they are of a special grade : SECURITY HARDWARE.

On assembly, it is **IMPERATIVE** to use this type of HARDWARE to the **EXCLUSION OF ANY OTHER**.

The tightening torques appearing in the drawings and preceded by an asterisk, likewise correspond to this "SECURITY HARDWARE".

IMPORTANT REMARKS

For all technical information regarding these vehicles, please contact :

The Service Department
Citroën Cars Ltd.
Mill St.
Slough Berks - GB - Tel. Slough 23808

or

DEPARTEMENT TECHNIQUE APRES-VENTE, ASSISTANCE TECHNIQUE - 163, avenue Georges Clémenceau - 92000
NANTERRE (FRANCE) Tel : 725-97-10

**LIST OF OPERATIONS APPEARING
IN VOLUME 811-2**

Operation number	DESCRIPTION
	GENERAL
GX. 00	Vehicle jacking and towing points
GX. 00-800	Overall dimensions and interior space
	PANEL WORK
GX. 800-00	Components of the bodyshell
GXB. 800-000	Components of the bodyshell
GX. 800-00	Preparation of the bodyshell
GX. 800-0	Checking a damaged vehicle (FENWICK and CELETTE equipments)
GX. 800-1	Checking a stripped bodyshell (CAROLINER equipment)
GX. 800-2	Checking a vehicle, with all mechanical components in situ (CAROLINER equipment)
GX. 800-3	Checking a stripped body shell (DATALINER equipment)
GX. 800-4	Checking a vehicle, with all mechanical components in situ (DATALINER equipment)
GX. 801-1	Replacement of a dashboard cowl
GX. 801-4	Partial replacement of the windscreen frame
GX. 801-7	Replacement of scuttle side panels
GX. 802-1	Replacement of a front extension
GX. 802-4	Replacement of a front wheelarch
	Work on a side panel:
GX. 812-1	Replacement of a bodyshell front pillar
GX. 812-4	Replacement of a centre pillar
GX. 821-1	Replacement of a side panel, complete
GXB. 821-1	Replacement of a side panel, complete
GX. 821-4	Replacement of a side panel front part
GX. 821-7	Replacement of a side panel rear part
GXB. 821-7	Replacement of a side panel rear part
GX. 822-1	Replacement of a side panel central part
GX. 822-4	Replacement of a bodyshell side sill
	Work on a rear panel:
GX. 823-1	Replacement of the rear panel, complete
GX. 823-4	Replacement of the rear panel, bare
GX. 823-7	Replacement of a rear light cluster panel
	Work on a rear wheelarch:
GX. 824-1	Replacement of a rear wing
GXB. 824-1	Replacement of a rear wing
GX. 824-4	Replacement of a rear wheelarch top
GX. 824-7	Replacement of a rear wheelarch, complete
GXB. 824-7	Replacement of a rear wheelarch, complete
	Work on the roof panel:
GX. 825-1	Replacement of the roof panel
GXB. 825-1	Replacement of the roof panel
GX. 825-4	Replacement of the windscreen frame-roof panel assembly
GX. 825-7	Replacement of the lining of a rear quarter cant member
	Work on a subframe:
GX. 831-1	Replacement of the front floor stiffening plate
GX. 831-4	Replacement of crossmembers under front seats
GX. 832-1	Replacement of a rear crossmember
GX. 832-4	Replacement of the rear boot floor
GXB. 832-4	Replacement of the rear boot floor

**LIST OF OPERATIONS APPEARING
IN VOLUME 811-2**

Operation number	DESCRIPTION
	BODY REPAIR
GX. 840-0	Settings for trim elements
GX. 840-1	Positioning doors on bodyshell or on new side panel
GX. 841-0	Settings for side doors
GX. 841-1	Replacement of a side door
GX. 841-2	Stripping and reassembling a side door
GX. 841-3	Positioning the rollers of the window lower part on front and rear windows
GX. 841-4	Replacement of a side door outer panel
GX. 841-7	Fitting of side embellishers
GXB. 844-0	Adjustment of the tailgate
GX. 844-1	Removal and fitting of the hatchback door
GXB. 844-1	Removal and fitting of the tailgate
GX. 844-2	Stripping and assembly of the hatchback door
GXB. 844-2	Stripping and assembly of the tailgate
GX. 844-4	Fitting of the rear spoiler
GX. 851-1	Replacement of a front wing
GX. 852-1	Replacement of the bonnet
GX. 853-1	Replacement of the front bumper-front valance assembly
GX. 853-4	Replacement of the rear bumper
GXB. 853-4	Replacement of the rear bumper
GX. 856-1	Replacement of the dashboard
GX. 961-1	Replacement of the windscreen glass
GX. 961-4	Replacement of a rear quarter glass
GXB. 961-4	Replacement of a rear quarter glass
GX. 961-7	Replacement of the rear window glass
GXB. 961-7	Replacement of the tailgate window glass
GX. 988-0	Adjustment of the sun-roof
GX. 988-1	Replacement of the headlining
GXB. 988-1	Replacement of the headlining
GX. 988-2	Stripping and assembly of the sun-roof sliding panel
GX. 988-3	Water-tightness of the sun-roof
GX. 988-4	Replacement of the sun-roof
GX. 988-7	Replacement of a sun-roof runner
	TOOLING
	List of special tools appearing in the volume
	Manufacturing drawings for special tools not sold

**LIST OF OPERATIONS APPEARING
IN VOLUME 811-2**

Operation Number	DESCRIPTION
GENERAL	
GX. 00	Vehicle jacking and towing points
GX. 00-800	Overall dimensions and interior space
PANEL WORK	
GX. 800-000	Components of the body shell
◆ GXB. 800-000	Components of the body shell
GX. 800-00	Preparation of the body shell
GX. 800-0	Check of a damaged car
GX. 801-1	Replacement of the dashboard cowl
GX. 801-4	Partial replacement of the windscreen frame
GX. 801-7	Replacement of scuttle side panels
GX. 802-1	Replacement of a front extension
GX. 802-4	Replacement of a front wheelarch
Work on a side panel :	
GX. 812-1	Replacement of a body shell front pillar
GX. 812-4	Replacement of a centre pillar
GX. 821-1	Replacement of a side panel, complete
◆ GXB. 821-1	Replacement of a side panel, complete
GX. 821-4	Replacement of a side panel front part
GX. 821-7	Replacement of a side panel rear part
◆ GXB. 821-7	Replacement of a side panel rear part
GX. 822-1	Replacement of a side panel central part
GX. 822-4	Replacement of a body shell side sill
Work on the rear panel :	
GX. 823-1	Replacement of the rear panel, complete
GX. 823-4	Replacement of the rear panel, bare
GX. 823-7	Replacement of a rear light cluster panel
Work on a rear wheelarch	
GX. 824-1	Replacement of a rear wing
◆ GXB. 824-1	Replacement of a rear wing
GX. 824-4	Replacement of a rear wheelarch top
GX. 824-7	Replacement of a rear wheelarch complete
◆ GXB. 824-7	Replacement of a rear wheelarch, complete
Work on the roof panel :	
GX. 825-1	Replacement of the roof panel
◆ GXB. 825-1	Replacement of the roof panel
GX. 825-4	Replacement of the windscreen frame-roof panel assembly
GX. 825-7	Replacement of the lining of a rear quarter cant member
Work on a sub-frame :	
GX. 831-1	Replacement of the front floor stiffening plate
GX. 831-4	Replacement of crossmembers under front seats
GX. 832-1	Replacement of a rear crossmember
GX. 832-4	Replacement of the rear boot floor
◆ GXB. 832-4	Replacement of the rear boot floor

**LIST OF OPERATIONS APPEARING
IN VOLUME 811-2**

Operation Number	DESIGNATION
	BODY REPAIR
GX. 840-0	Settings for trim elements
GX. 841-0	Settings for side doors
GX. 841-1	Replacement of a side door
GX. 841-2	Stripping and reassembling of a side door
◆ GX. 841-4	Replacement of a side door outer panel
GX. 841-7	Fitting of side embellishers
◆ GXB. 844-0	Adjustment of the tailgate
GX. 844-1	Removal and fitting of the hatchback door
◆ GXB. 844-1	Removal and fitting of the tailgate
GX. 844-2	Stripping and assembly of the hatchback door
◆ GXB. 844-2	Stripping and assembly of the tailgate
GX. 844-4	Fitting of the rear spoiler
GX. 851-1	Replacement of a front wing
GX. 852-1	Replacement of the bonnet
GX. 853-1	Replacement of the front bumper - front valance assembly
GX. 853-4	Replacement of the rear bumper
◆ GXB. 853-4	Replacement of the rear bumper
GX. 856-1	Replacement of the dashboard
GX. 856-4	Replacement of the rear shelf retractable flap
GX. 961-1	Replacement of the windscreen glass
GX. 961-4	Replacement of a rear quarter glass
◆ GXB. 961-4	Replacement of a rear quarter glass
GX. 961-7	Replacement of the rear window glass
◆ GXB. 961-7	Replacement of the tailgate window glass
◆ GX. 988-0	Adjustment of the sun-roof
GX. 988-1	Replacement of the headlining
◆ GXB. 988-1	Replacement of the headlining
◆ GXB. 988-2	Stripping and re-assembly of the sun-roof sliding panel
◆ GXB. 988-3	Water-tightness of the sun-roof
◆ GXB. 988-4	Replacement of the sun-roof
◆ GXB. 988-7	Replacement of a sun-roof runner
	TOOLING
	List of special tools appearing in the volume Manufacturing drawings for special tools not sold

**LIST OF SPECIAL TOOLS
APPEARING IN THE MANUAL**

TOOLS SOLD

DESIGNATION	REFERENCE OF the tool sold
- "PICKAVANT" spot-weld cutter:	JWP 318 or 2662-T
- "CELETTE" universal jig:	MUF 4 or 5 or EUROMUF
- "CELETTE" jig equipment for "G" vehicles:	
- Checking equipment for bodyshell:	ENS. 158-000
- Front wheelarch supports:	ENS. 158-008
- "FENWICK" jig, all types:	2600-T
- Checking equipment for "G" vehicles:	2628-T
- CAROLINER universal jig:	MK 2 or MK 3
- DATALINER universal jig:	DATALINER 80
- Equipment for setting the door height:	OUT 507 501 T



JACKING POINTS

A and **C** : Jacking points for trolley jack or for jacking platform engaging under shell.

B : Car jack jacking point for wheel changing.

TOWING POINTS

D : Front towing points

E : Rear towing points



79-710



79-712



79-705



WOLFRUM
 000-00-00

OVERALL DIMENSIONS AND INTERIOR SPACE

DIMENSIONS :

Dimensions followed by a letter are recorded under the following conditions :

- A** : Lengths on floor
- B** : Heights in normal road position with engine running
- C** : Front track
- D** : Boot door entries
- E** : Rear track
- F** : Widths at shoulder height

VOLUMES :

- Four-door saloon :

Rear boot : 435 dm³

Rear bench seat folded down :

- a) Loading at shoulder heights : 766 dm³
- b) Loading up to roof panel : 1400 dm³

NOTE : In the case of loading up to the roof panel, it is necessary to have a rear-view mirror on each side of the vehicle.

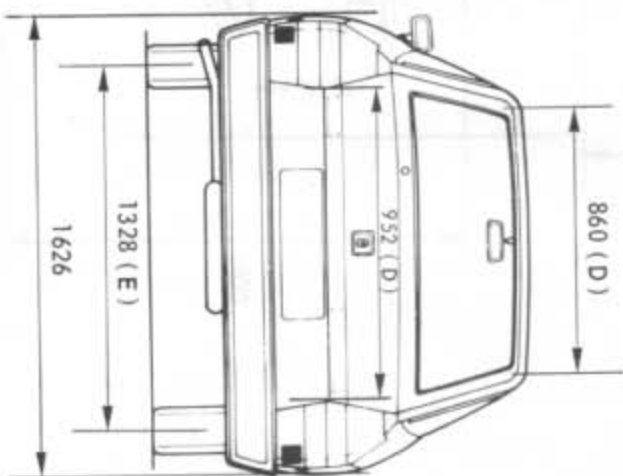
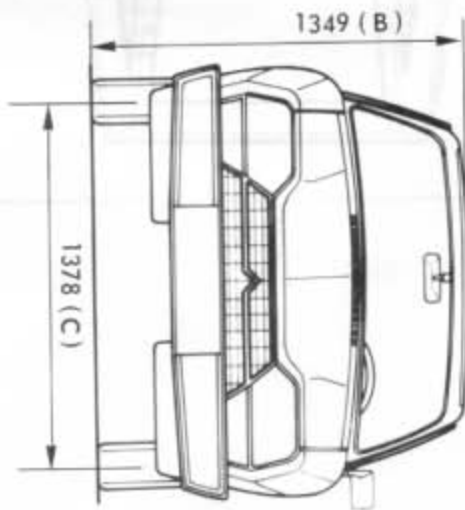
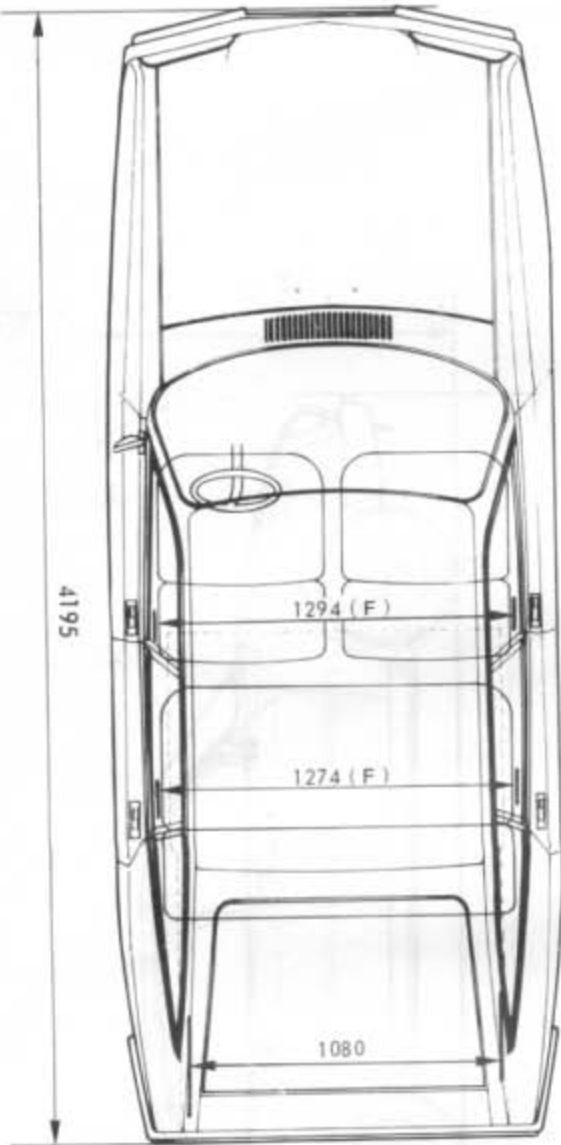
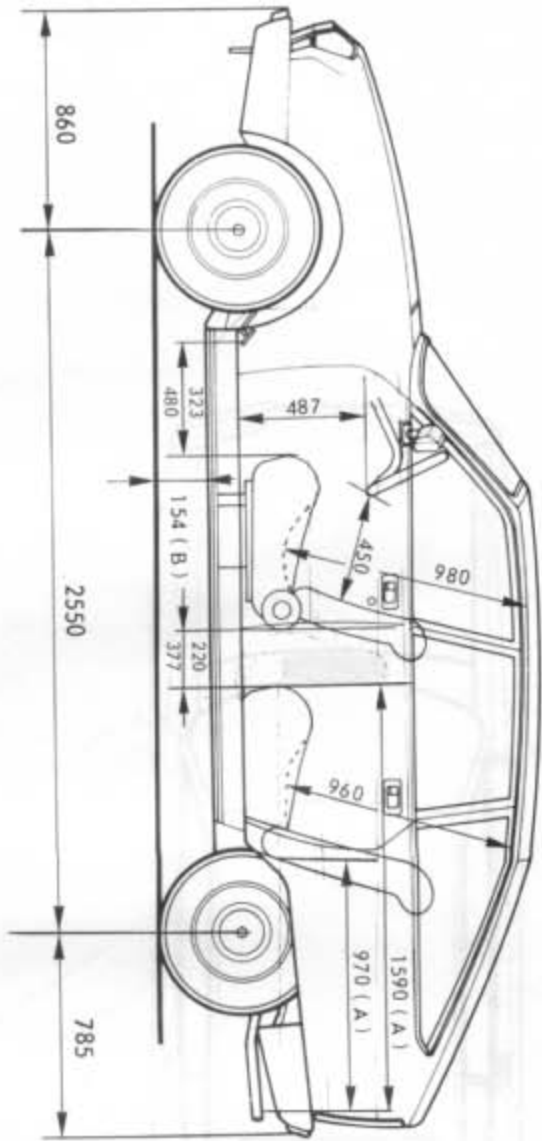
- Estate car :

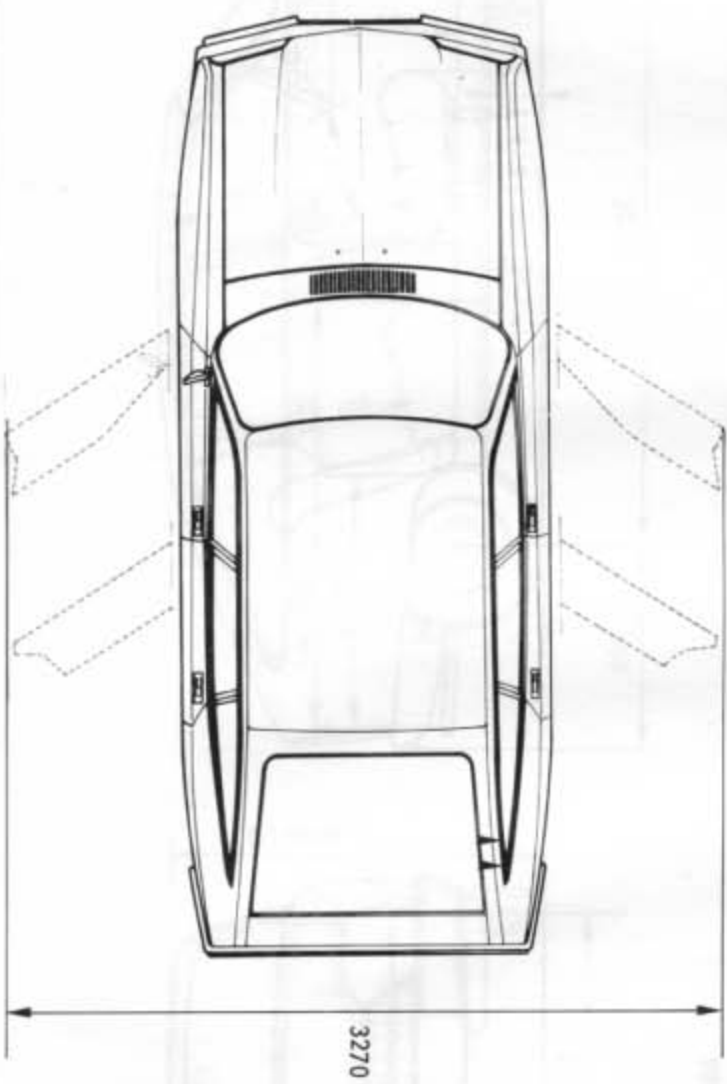
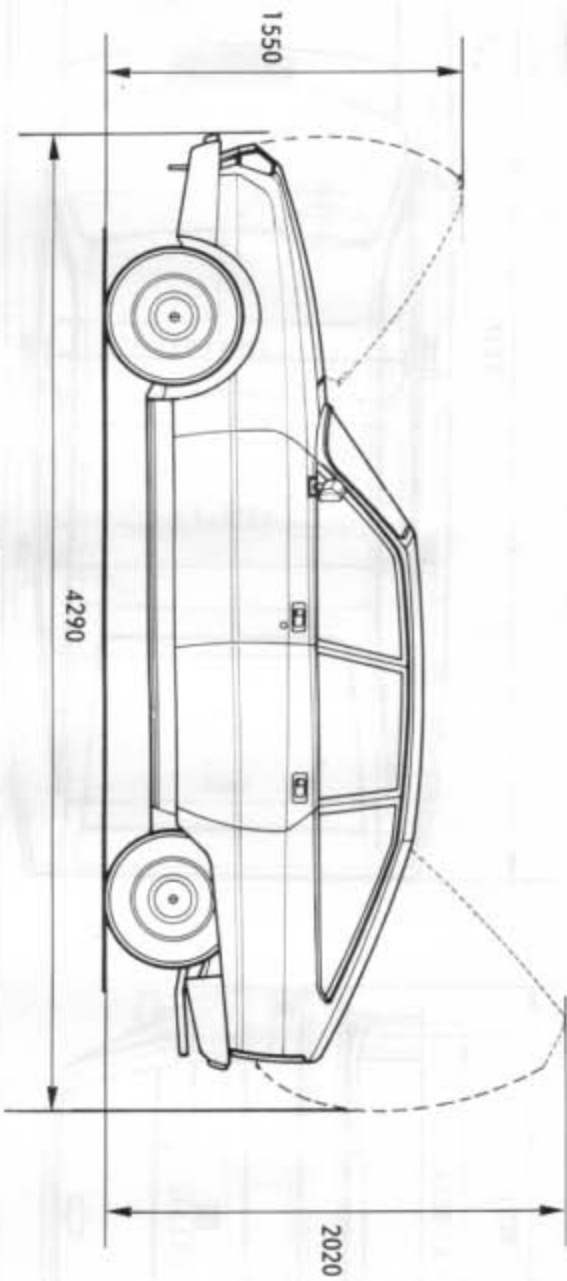
Rear boot : 645 dm³

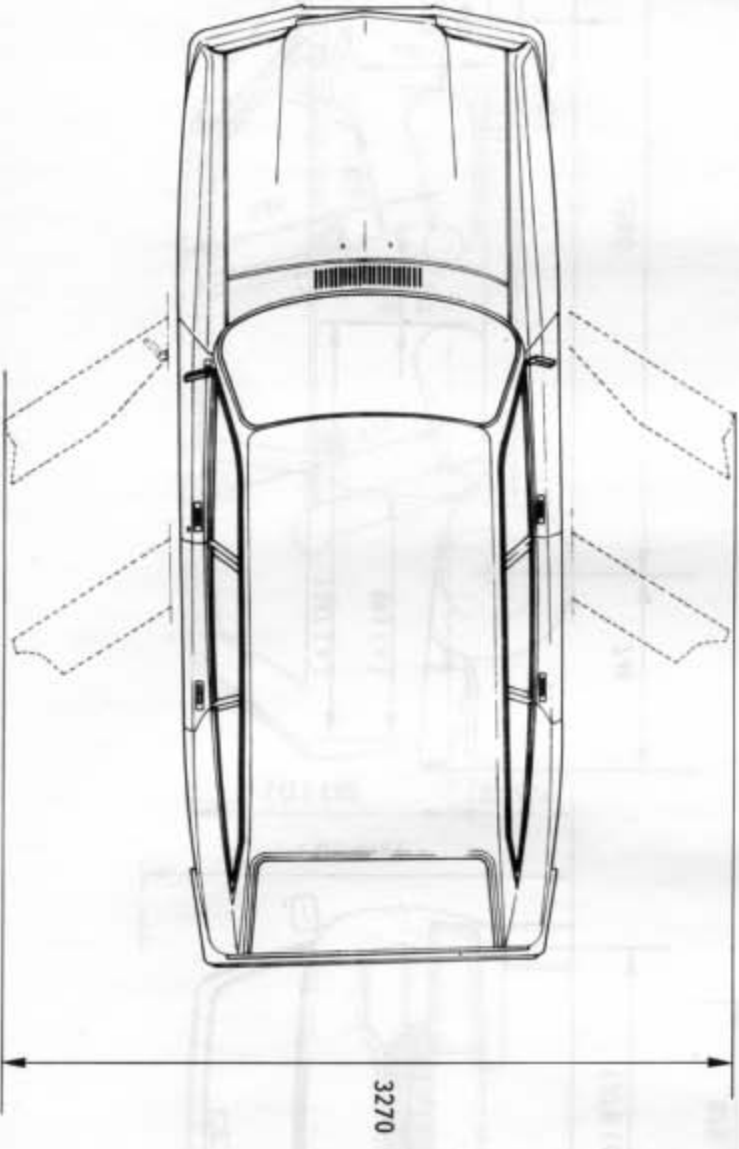
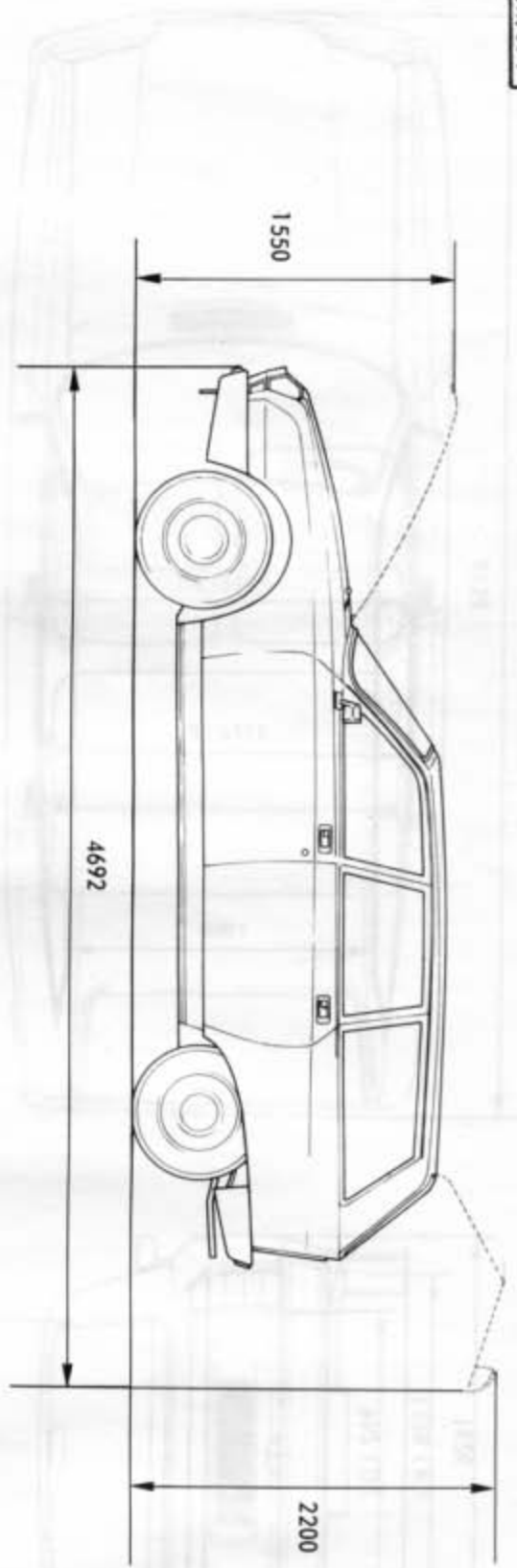
Rear bench seat folded down :

- a) Loading up to roof panel : 1504 dm³

OVERALL DIMENSIONS AND INTERIOR SPACE





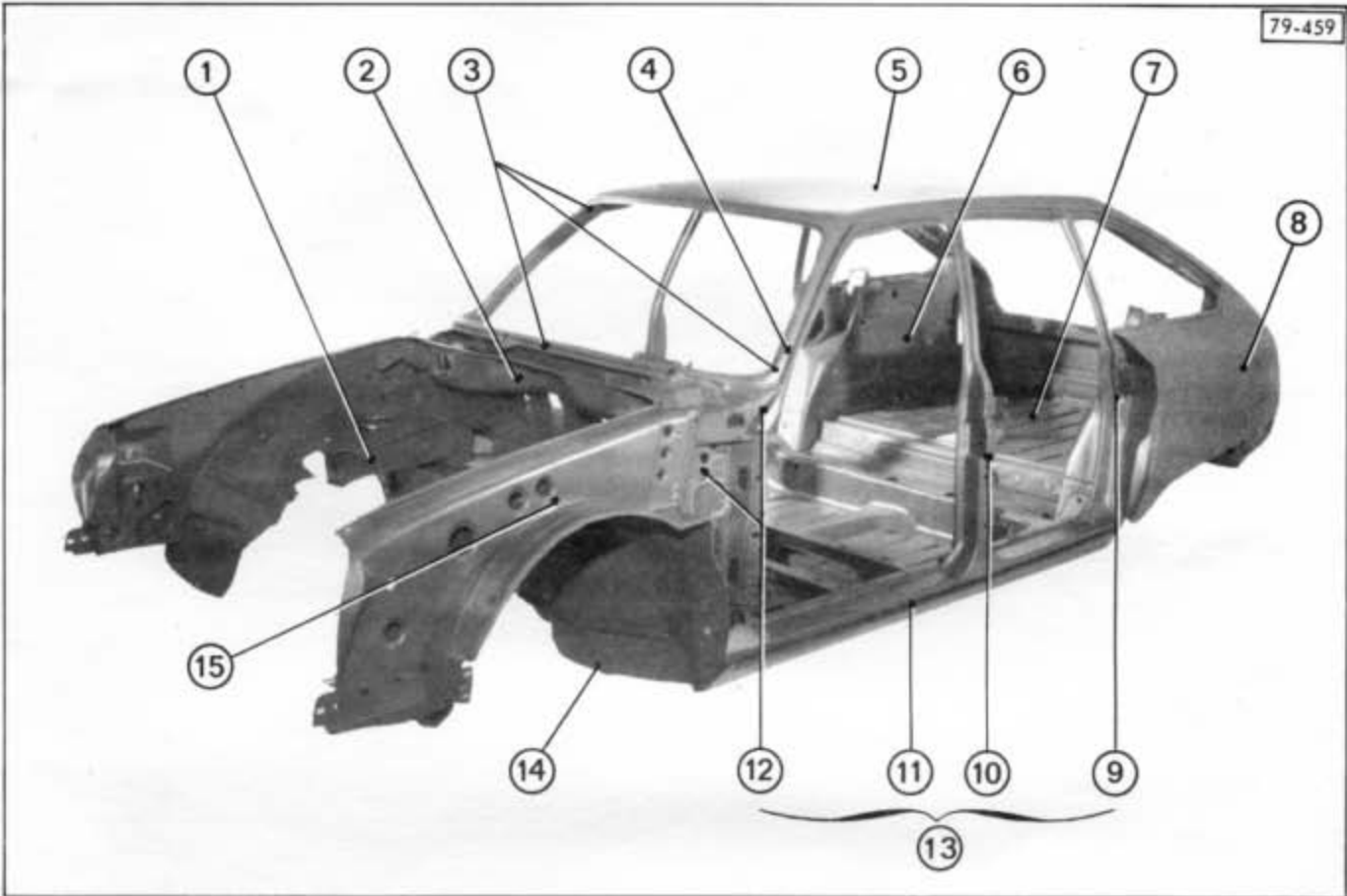


WOTABRRO
000-008_X3

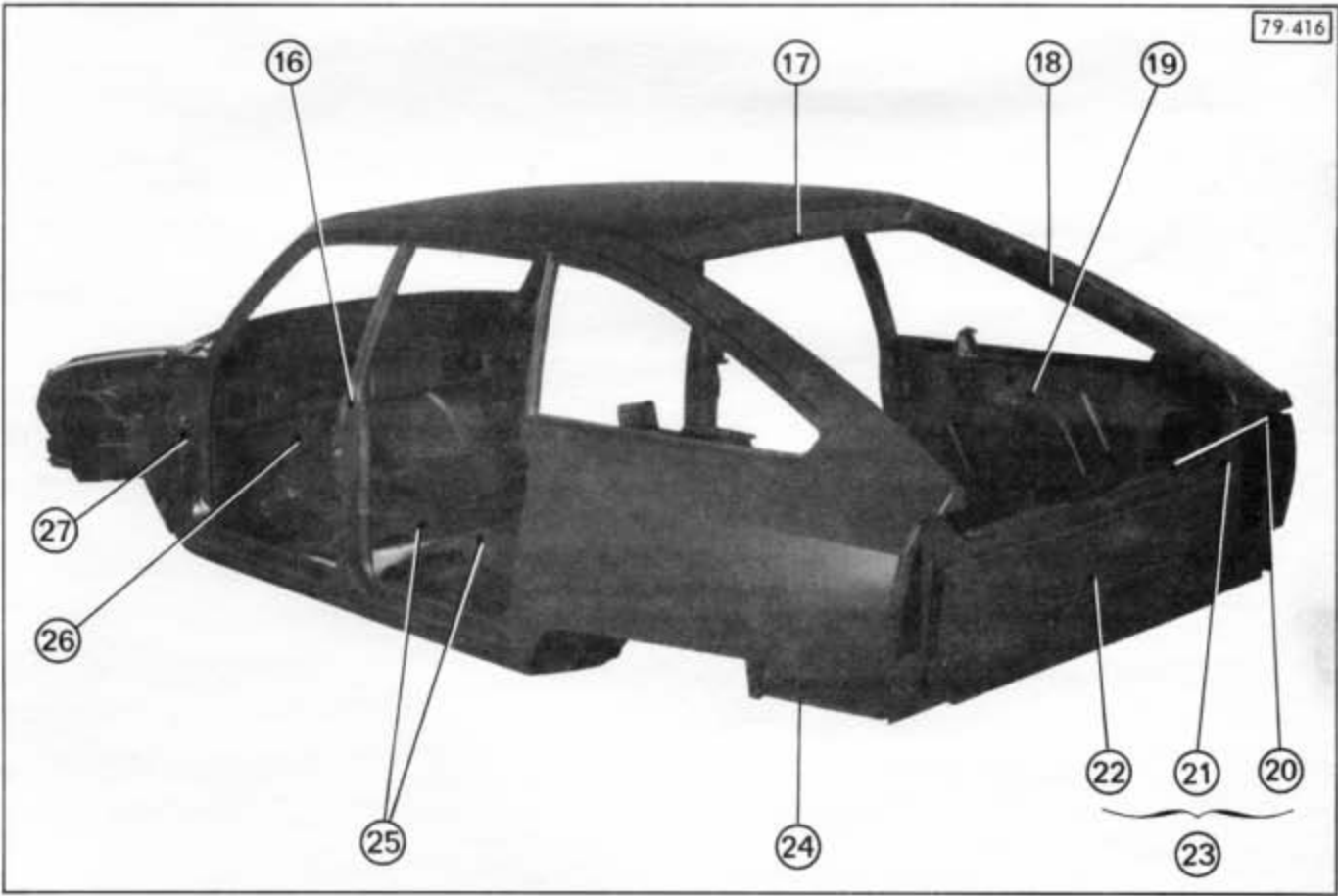
COMPONENTS OF THE BODY SHELL

REFERENCES	COMPONENTS	CORRESPONDING OPERATIONS
①	Front extensions	GX. 802-1
②	Front upper unit	GX. 801-7
③	Windscreen frame, complete	GX. 825-4
④	Windscreen frame (side part)	GX. 801-4
⑤	Roof panel	GX. 825-1
⑥	Rear wheel arches assembled	GX. 824-7
⑦	Boot floor	GX. 832-4
⑧	Rear wing	GX. 824-1
⑨	Side panel (rear part)	GX. 821-7
⑩	Side panel (central part)	GX. 822-1
⑪	Body shell side sill	GX. 822-4
⑫	Side panel, front part	GX. 821-4
⑬	Side panel, complete	GX. 821-4
⑭	Front floor stiffener	GX. 831-1
⑮	Front wheel arch	GX. 802-4
⑯	Centre pillar	GX. 812-4
⑰	Roof panel rear crossmember	See GX. 825-1
⑱	Rear quarter panel lining	GX. 825-7
⑲	Upper wheel arch	GX. 824-4
⑳	Rear panel crossmember	See GX. 823-4
㉑	Rear lights support plate	GX. 823-7
㉒	Rear panel, bare	GX. 823-4
㉓	Rear panel, complete	GX. 823-1
㉔	Rear lower crossmember	GX. 823-1
㉕	Crossmembers under front seats	GX. 831-4
㉖	Front unit, complete	GX. 801-1
㉗	Front pillar	GX. 812-1

79.459



79.416

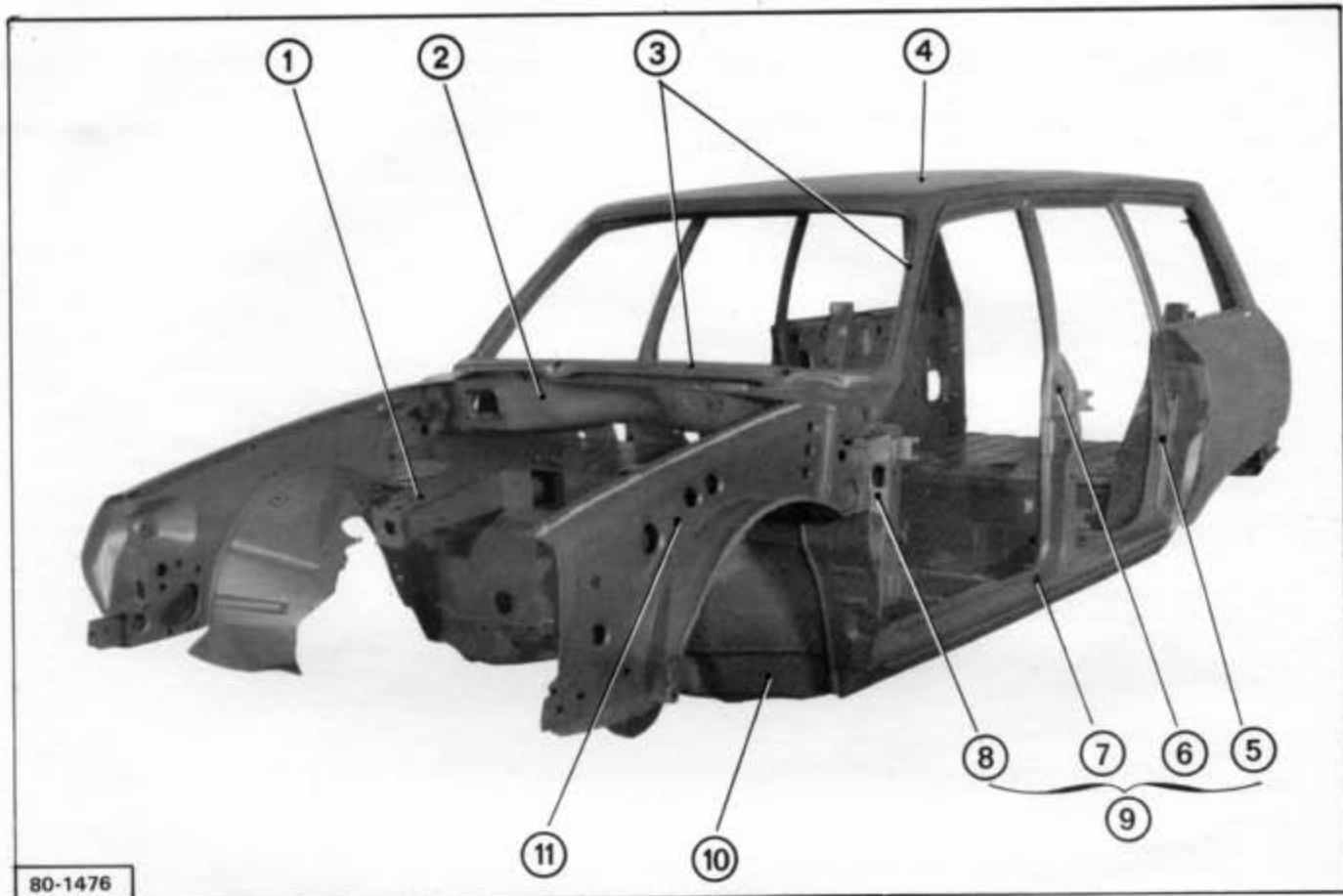


UNIVERSITY
OF THE SOUTH PACIFIC

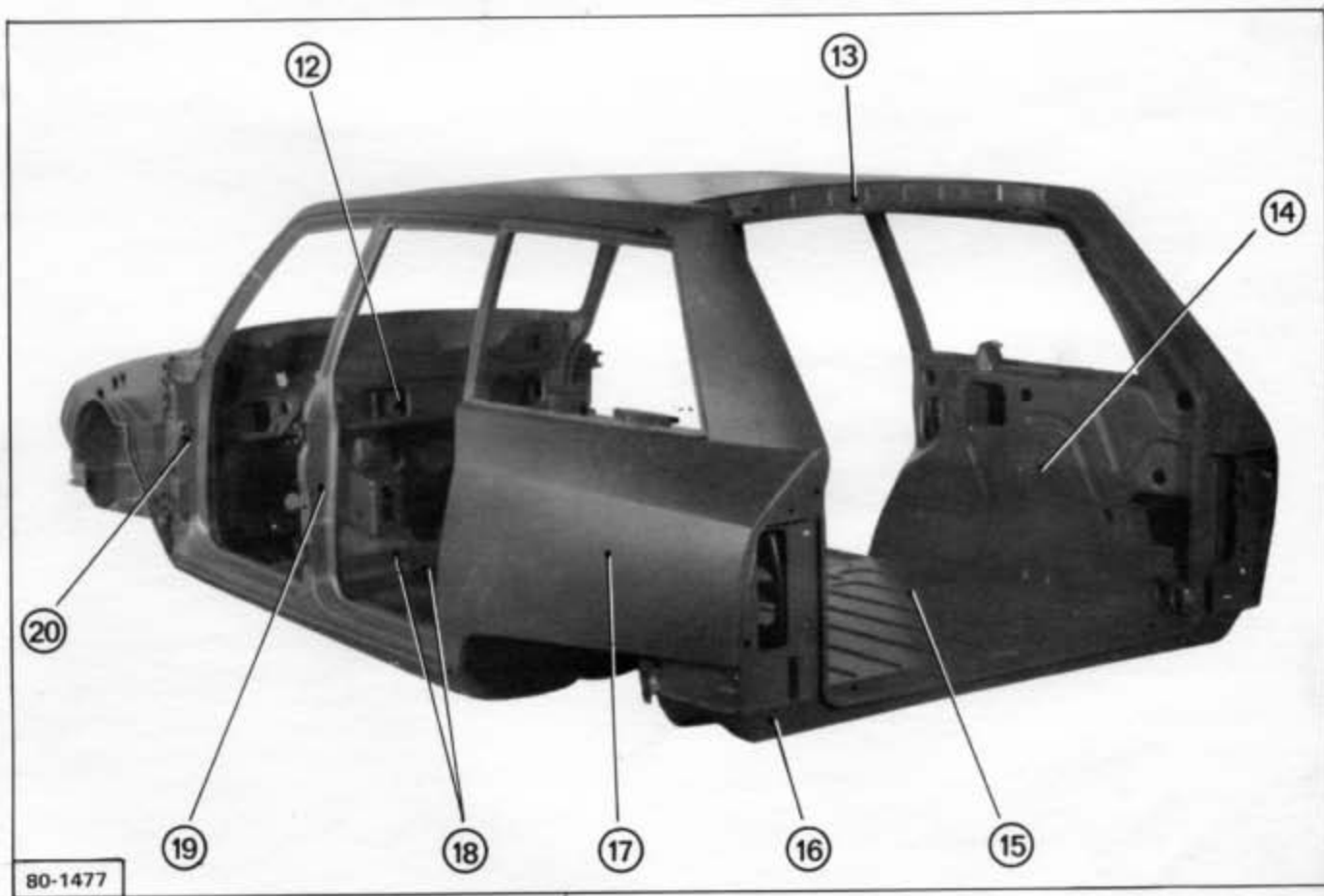
COMPONENTS OF THE BODY SHELL

REFERENCES	COMPONENTS	CORRESPONDING OPERATIONS
①	Front extensions	GX. 802-1
②	Front upper unit	GX. 801-1
③	Windscreen frame, complete	GX. 825-4
④	Roof panel	GXB. 825-1
⑤	Side panel (rear part)	GXB. 821-7
⑥	Side panel (central part)	GX. 822-1
⑦	Body shell side sill panel	GX. 822-4
⑧	Side panel (front part)	GX. 821-4
⑨	Side panel, complete	GXB. 821-1
⑩	Front floor stiffener	GX. 831-1
⑪	Front wheelarch	GX. 802-4
⑫	Front unit, complete	GX. 801-1
⑬	Roof panel rear crossmember	GXB. 825-1
⑭	Rear wheelarch	GXB. 824-7
⑮	Rear boot floor	GXB. 832-4
⑯	Rear lower crossmember	GX. 832-1
⑰	Rear wing	GXB. 824-1
⑱	Crossmembers under front seats	GX. 831-4
⑲	Centre pillar	GX. 812-4
⑳	Front pillar	GX. 812-1

UNIVERSITY OF THE SOUTH PACIFIC



80-1476



80-1477

ИЗДАНИЕ
00-000-00

I - BODY WATER-SEALING, USING SEALING COMPOUND

RECOMMENDATION

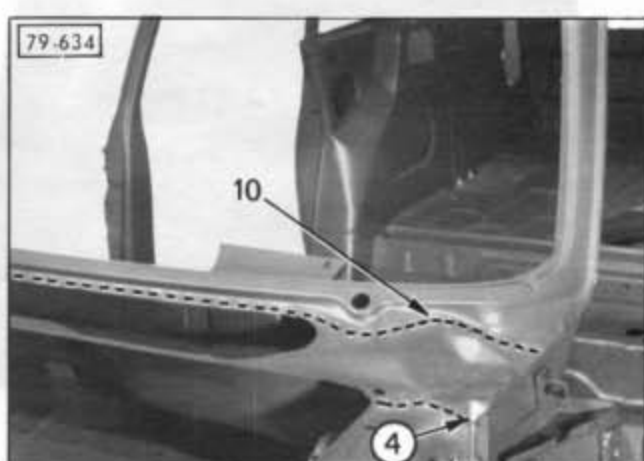
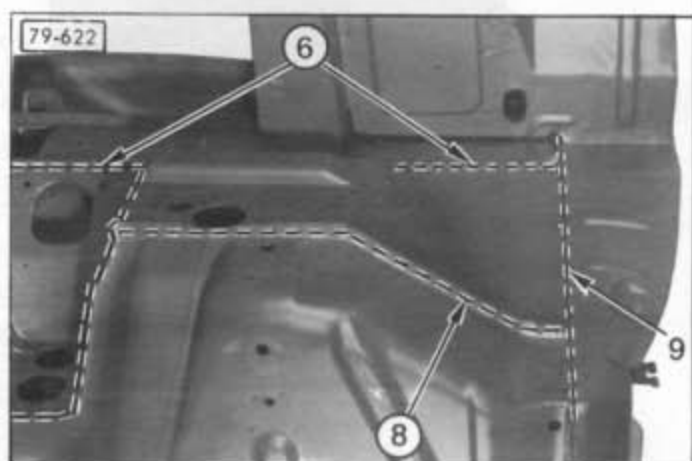
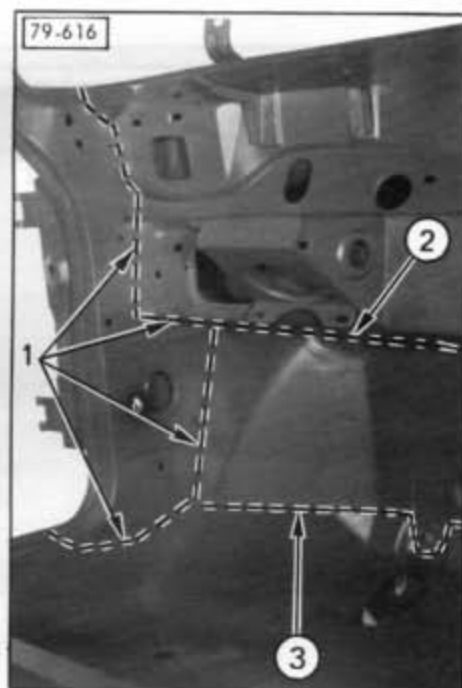
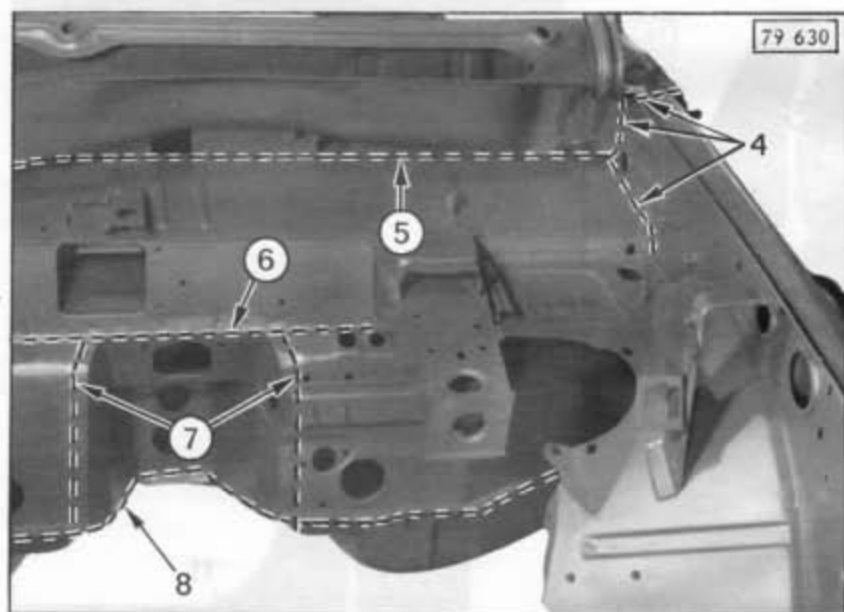
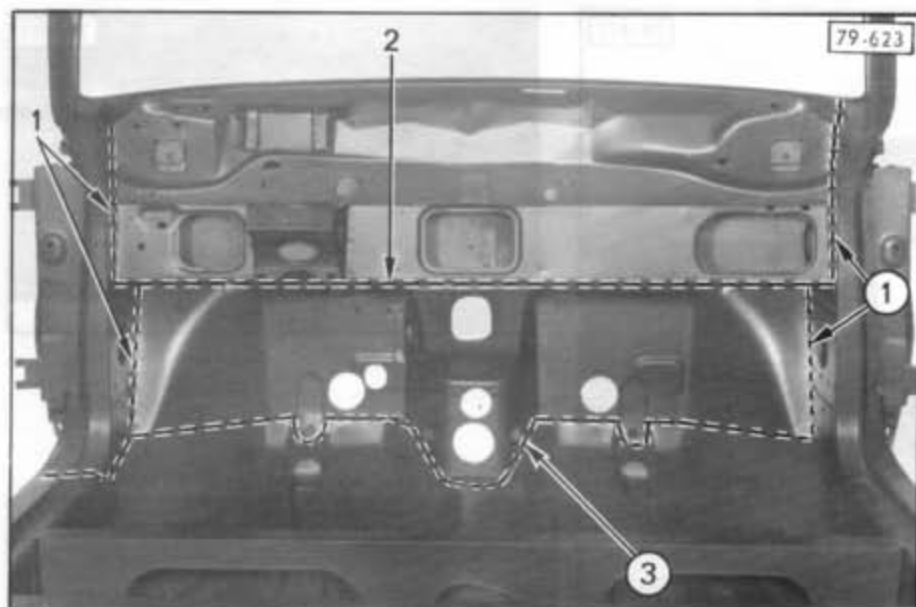
For this operation, use the recommended products (see bodywork generalities)

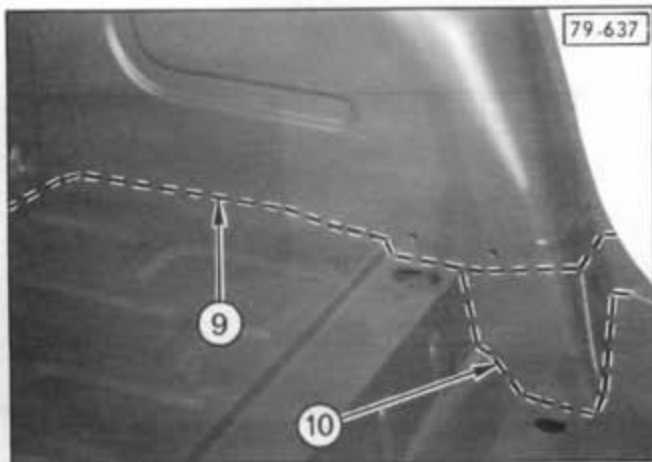
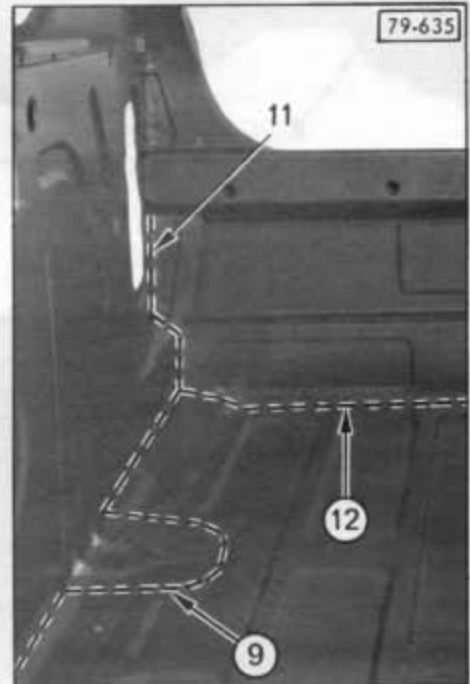
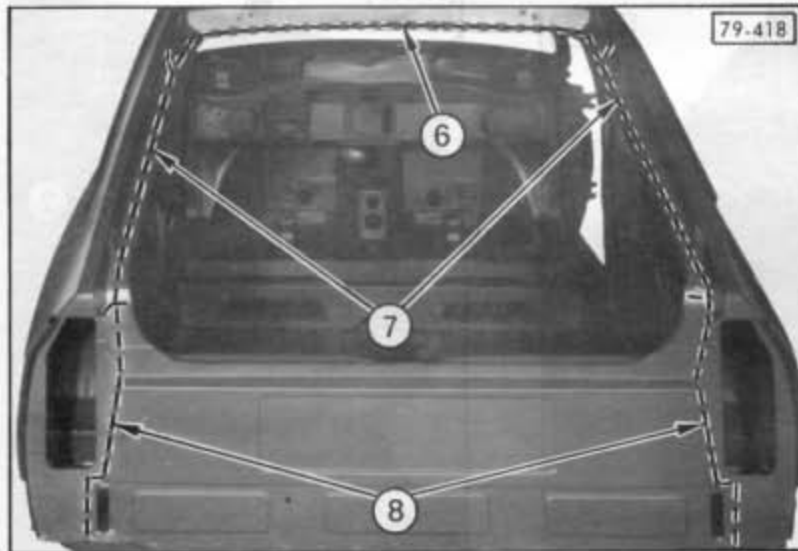
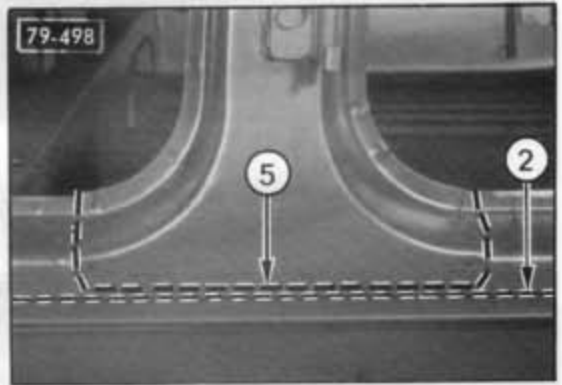
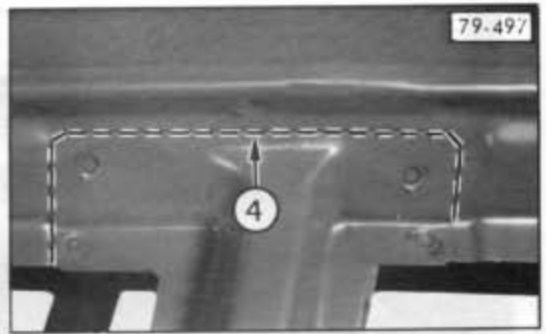
Apply the sealing compound along the lines and on the points indicated below (the sealing compound being applied on the side indicated on the photograph)

FRONT UNIT

1. Dashboard cowl-scuttle panel joint-line (*on each side*)
2. Joint-line between top and bottom parts of cowl
3. Dashboard cowl-sub-frame floor joint-line
4. Wheel arch-cowl joint-line (*on each side*)
5. Lower unit-upper unit joint-line
6. Lower cowl-upper cowl joint-line
7. Gearbox recess-lower cowl joint-line
8. Cowl-sub-frame floor joint-line
9. Lower cowl-closing panel joint-line (*on each side*)
10. Upper unit-windscreen frame joint-line





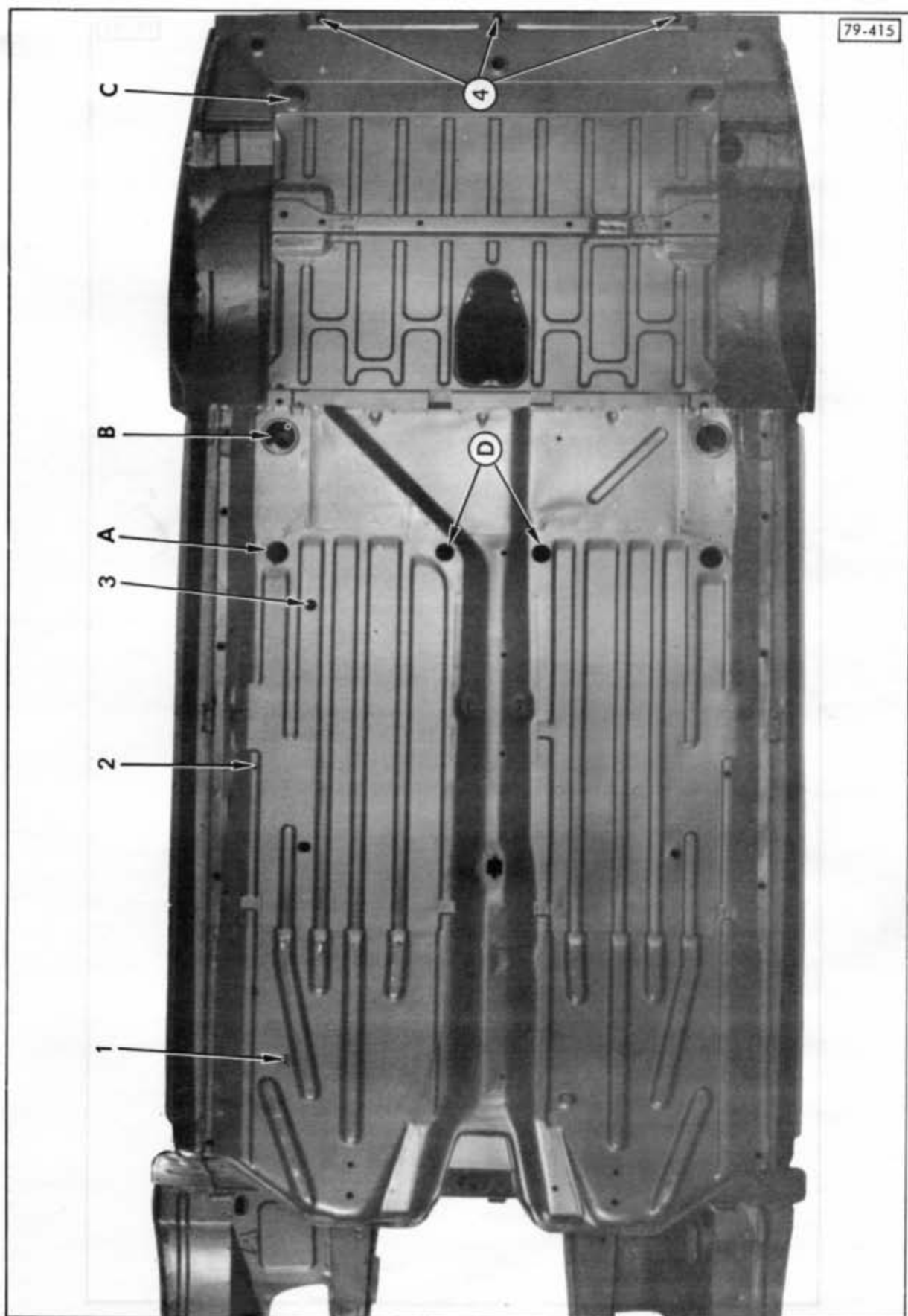


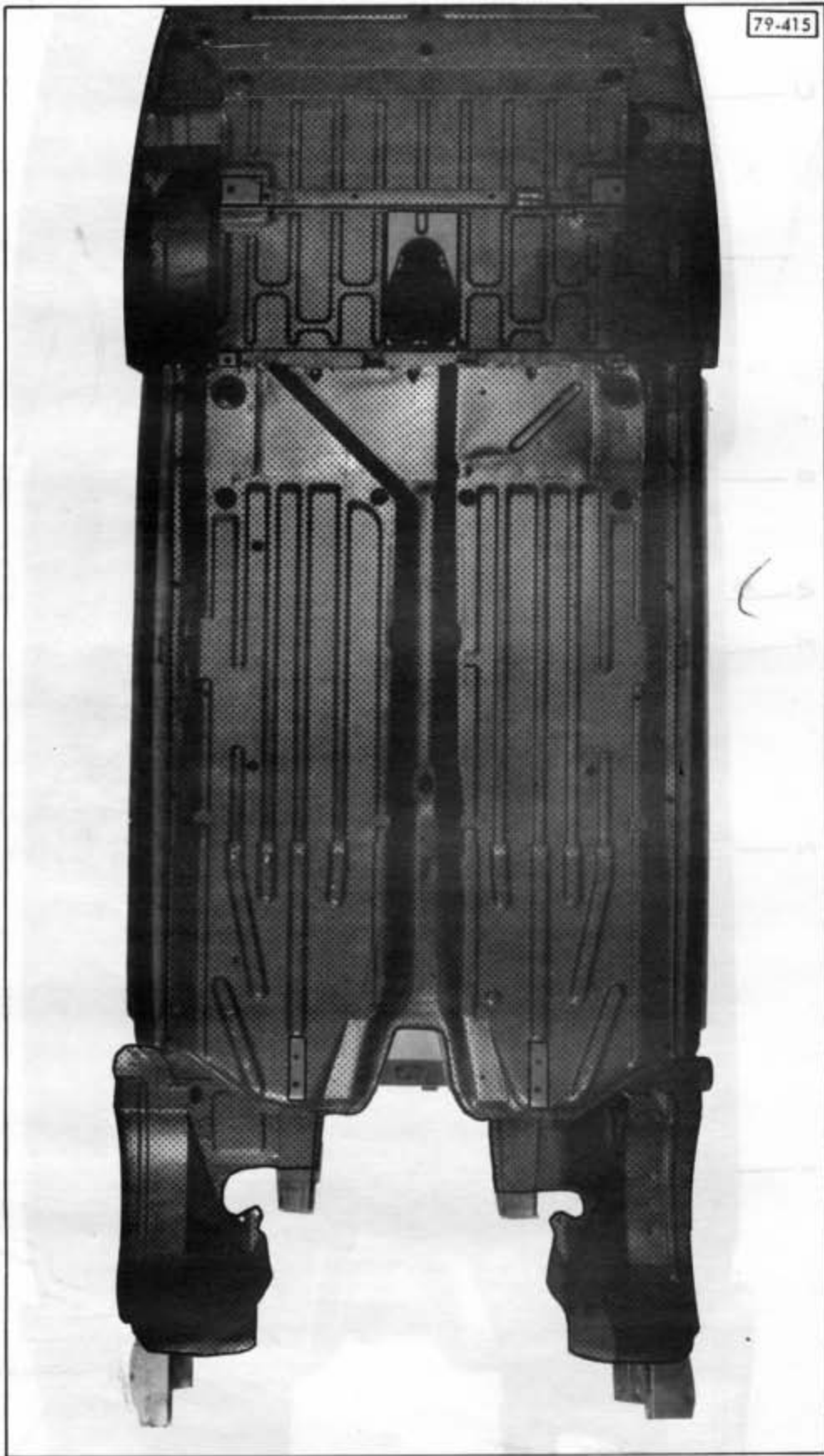
SIDE PANEL (on each side)

1. Roof panel gutter channel
2. Body shell side sill rubbing-strip joint-line
3. Side panel-blanking flange joint-line
4. Centre pillar-side panel upper joint-line
5. Centre pillar-side panel lower joint-line

REAR UNIT

8. Rear crossmember with lining joint-line
7. Roof panel with rear quarter pillar joint-line
8. Rear panel-lights support plate joint-line
9. Boot floor-wheel arch joint-line (on each side)
10. Wheel arch plate under rear seat joint-line
11. Rear panel-wheel arch joint-line (on each side)
12. Boot panel-rear panel joint-line





79-415



III - PROTECTIVE AND SOUNDPROOFING COATING

1. Protect the areas having to be sheltered from the soundproofing coating spraying :

Protect :

- support areas of mechanical components and miscellaneous equipment.
- screw-threads (nuts and bolts),
- support areas and holes for plugs fitted under the vehicle.
- jacking housings.
- contact areas for seals of the fuel filler

2. Apply the soundproofing product :

Apply one coat (min. thickness = 0.5 mm) of the soundproofing and protective product according to the shaded areas of the photograph opposite.

Apply a thick layer of product over the joint-lines between sheet metal panels in order to give efficient seal-tightness.

NOTE : For this operation, use the recommended products (see bodywork generalities).

IV - PLATE SOUNDPROOFERS

Soundproofing of sub-frame floor :

Cut out four soundproofing panels :

- for the front : two panels 370 X 440
- for the rear : two panels 370 X 470.

Apply the panels (self-adhesive) to the floor, respectively in the places of the feet of the front and rear passengers.

NOTE : For this operation, use the recommended products (see bodywork generalities).

CHECK OF A DAMAGED CAR

A damaged car is checked in three phases according to a well-established order :

a) Visual check : Search for creases, distortions, kinks, cracks in the body shell.

To a certain extent, this check makes it possible to determine the kind of operations to be carried out in order to put the vehicle back into running order.

In case of doubt, the geometry of the axles must be checked.

b) Checking the geometry of axles :

This check is carried out by means of an optical appliance, without any removal of mechanical components. Its purpose is to check the characteristic angles of the front and rear axles.

c) Check of the front and rear axle units and their alignment :

The purpose of this operation is to check whether one of the units is distorted or not and whether the alignments are correct.

d) Check of the body shell on the body jig.

I - "VISUAL" CHECK

A - FRONT IMPACT

1. **Front wheel arches :** Distortions at « a » on the inner and outer faces of the wheel arch.
2. **Front extensions :** Distortions at « b » on the inner and lower faces of the extension.
3. **Windscreen pillar-front pillar joint-line :** distortion of the windscreen frame and the side panel at « c » with alignment defect of the front door.
4. **Roof panel cantrail :** Distortion of the front door frame at « e » (excessive play between frame and door); at « f », creasing of roof panel and « detachment » of centre pillar.
5. **Body shell side sill :** Creases on side sill at « d », in the front bottom corner and at the level of the first crossmember under seat.

B - SIDE IMPACT

6. **Body shell side sill :** Distortions on the inner face of the side sill at « g ».
7. **Rear wheel arches :** Distortions at « n » at the joint-line between wheel arch and boot floor.

C - REAR IMPACT

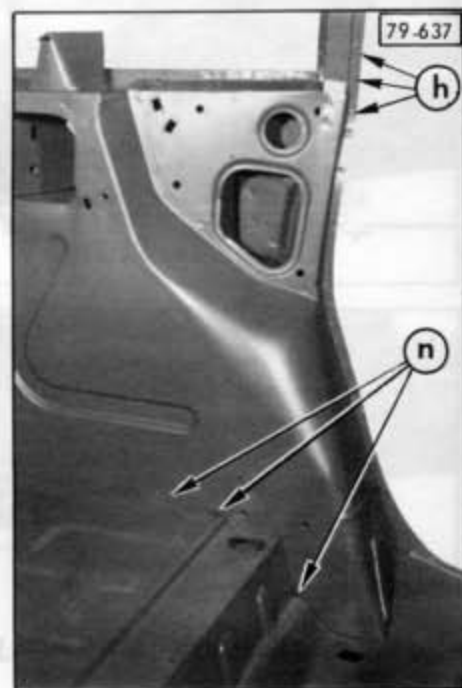
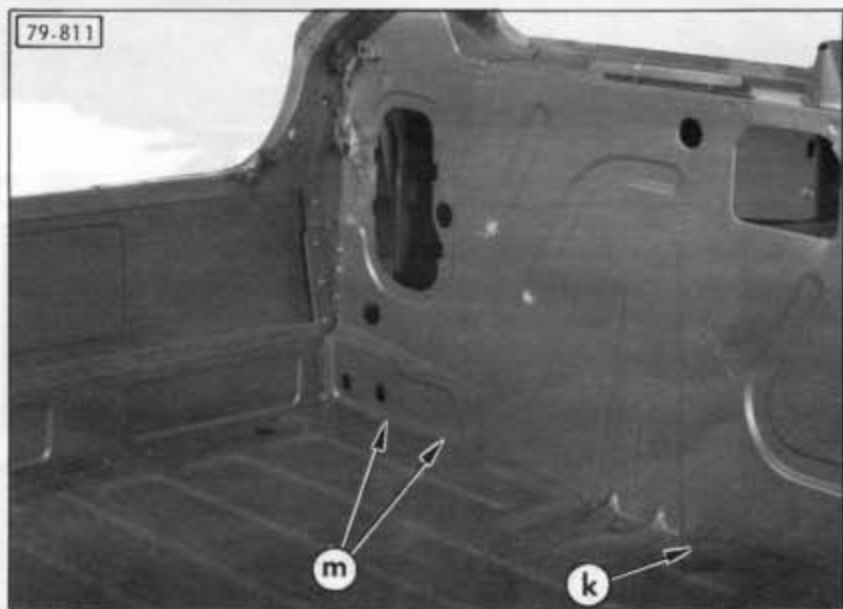
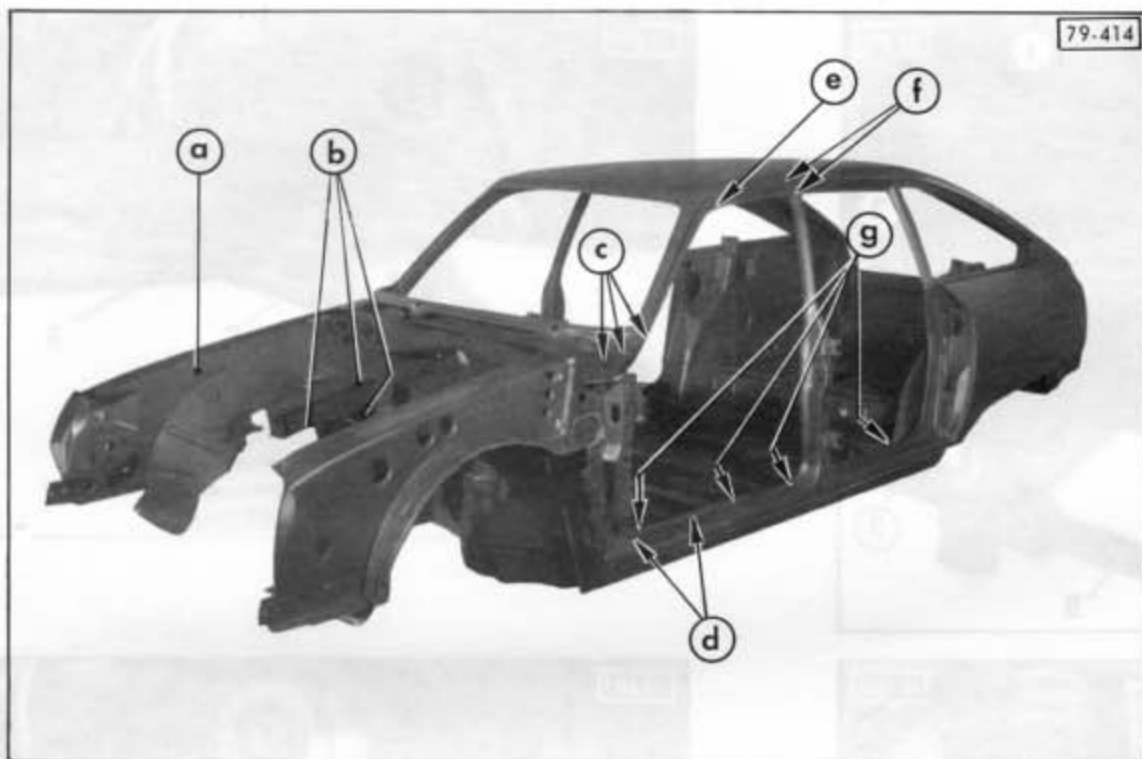
8. **Wheel arches and rear floor :** Distortions at « n » at back of rear axle fastenings.
9. **Rear wheel arches :** Distortions of pillar at « h » and insufficient play between wing and rear door.
10. **Wheel arches and rear floor :** Creases on wheel arch and floor at front of axle fastenings.
11. **Body shell side sill :** Creases on body shell side sill at « i » with distortions of door frame.

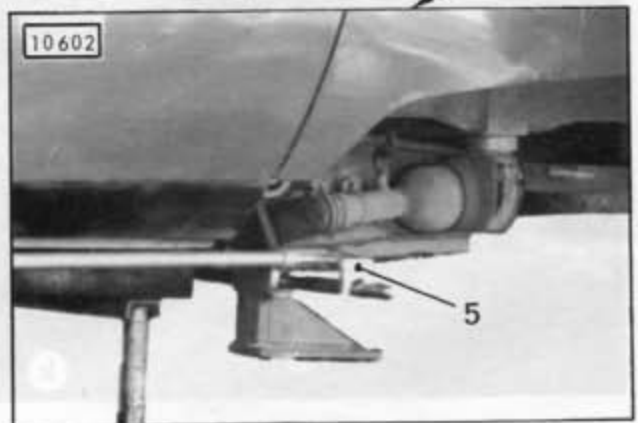
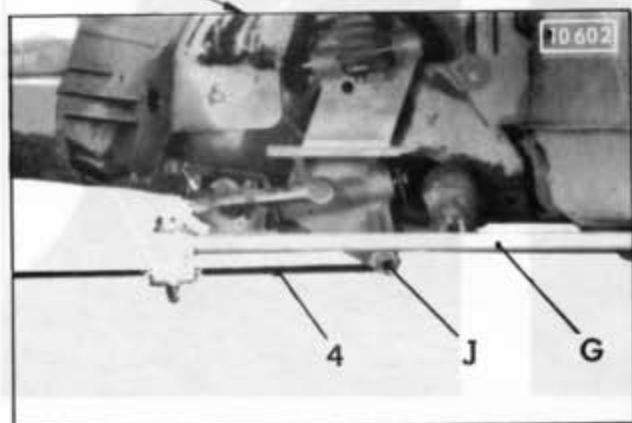
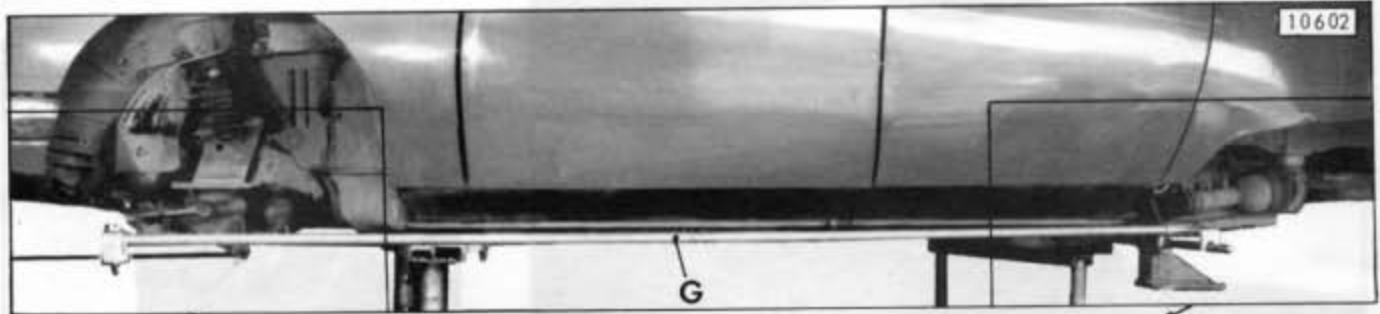
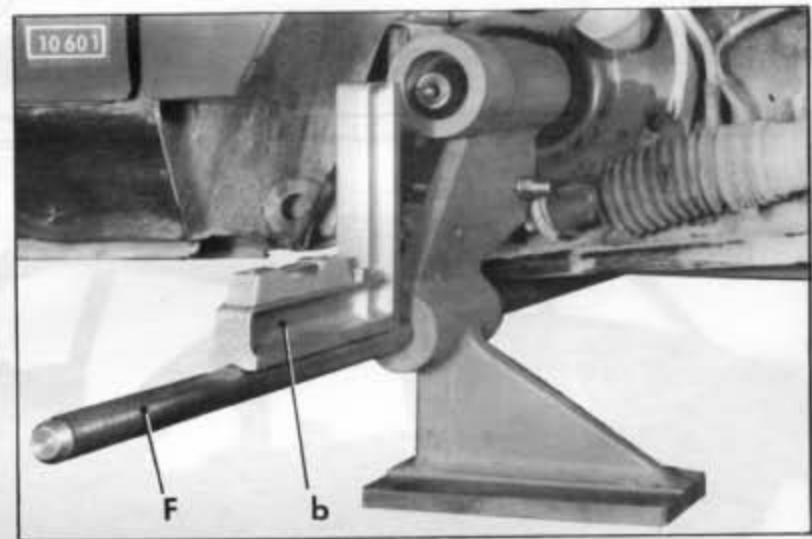
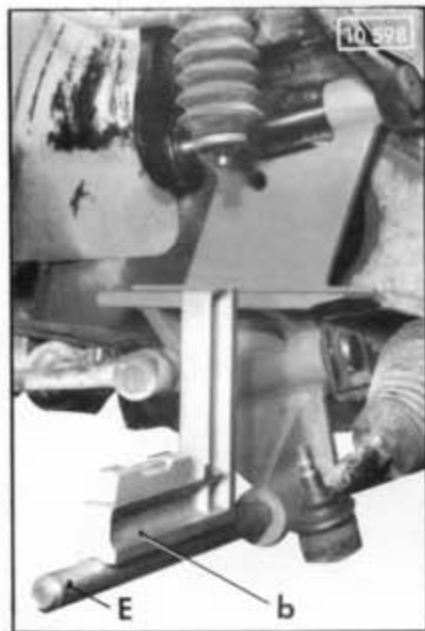
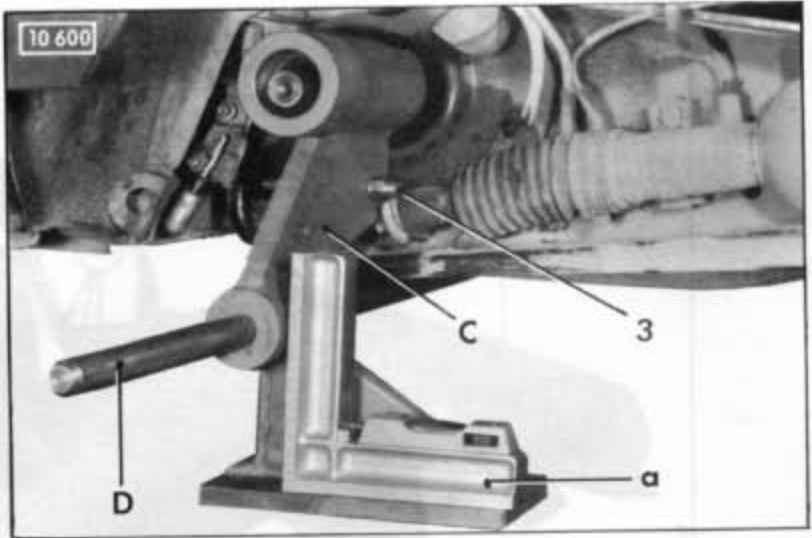
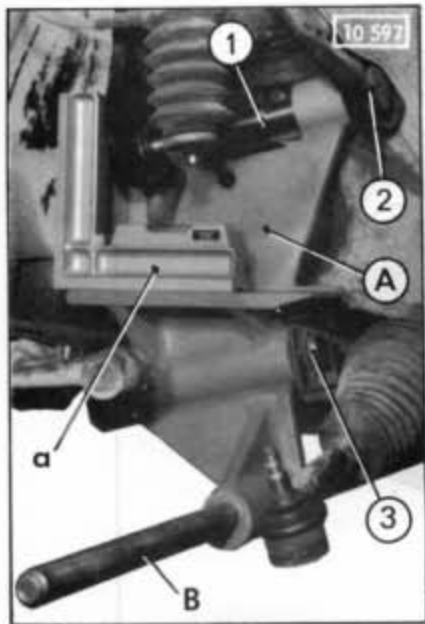
CONCLUSION

In all the cases of distortions or creases found in the points mentioned (except at points « a » and « m »), **it is essential for the body shell to be checked on the body jig.**

In case of doubt, it is necessary to :

- Check the geometry of the vehicle,
- In the case of geometry defect, check the front and the rear axle units and their alignment (tracking, warping)





II - CHECK OF THE AXLES GEOMETRY

Using an optical apparatus, check the geometry of the axles (without mechanical removal). Respect checking conditions (flat ground, vehicle in road position and engine running)

See Manual No. MAN 008111.

- Operation No. GX. 410-00 for front axle
- Operation No. GX. 420-00 for rear axle

III - CHECK OF FRONT AND REAR AXLE UNITS

1. Check of the front axle unit :

- a) Put the car onto flat and horizontal ground.
On each side, remove : Upper and lower arms, transmission
- b) Present checking tools **A** [Ref. 2638-T] corresponding to each of the sides of the axle and fasten them :
 - with threaded pin (1) at the place of the upper arm (knurled nut (2) facing the rear)
 - by pin (3) at the place of the lower arm, the head facing the rear (pin (3) must be free in its bore)
- c) Introduce control bar **B** [Ref. 2632-T]bis in the lower bores of checking tools **A**.

The bar must turn and slide without any hard spots.

If this is not so, the axle unit is buckled and must be replaced (straightening is forbidden).

2. Check of the rear axle unit :

- a) Put the vehicle on stands, on flat and horizontal ground.
On each side, remove the axle arm and the suspension stop.
- b) On each side, put checking tool **C** [Ref. 2637-T] into place on the suspension arm pin.
Put an adjustable spirit-level « a » on the baseplate of one of the front checking tools **A** and adjust the « bubble » to zero.
- c) Place the spirit-level « a » on the baseplate of each of the rear checking tools **C** and by means of screw (3), adjust the position of each of the checking tools **C** in such a way that the spirit-level bubble is on the zero position (the direction of the spirit-level must be the same as at the front).
- d) Introduce a bar **D** [Ref. 2632-T bis] into the lower bores of checking tools **C**.

The bar must turn and slide without hard spots. If this is not so, the unit is buckled and must be replaced (any straightening being forbidden).

3. Check of the twisting of the body shell :

NOTE : This check is to be carried out when check of the units has not revealed any irregularity.

Place adjustable spirit-level « b » successively on bars **E** and **F** and compare their horizontal condition : it must be **equal to around $\pm 0.25\%$** (e.g. : with a spirit-level of 300 mm long, the difference measured with a set of shims must not exceed 0.75 mm)

4. Check of inter-alignment of axles :

Present control bar **G** [Ref. 2636-T] successively on each side of the vehicle.

Place foot (5) of this bar on one of the bars **E** and **F** and bring measuring rod (4) from the opposite end into contact with the other bar. Tighten measuring rod locking screw (4).

Make the first recording on the side where the distance separating the two bars **E** and **F** is the greater.

Place bar **G** on the other side and compare the distances separating the two bars **E** and **F**; for this, measure, with shims, the play existing between measuring rod (4) and control bar (**E** or **F**).

The play J, recorded on the side where the between-centres between the bars E and F is the shortest, must not be greater than 4 mm.

IMPORTANT : If one of the axle units is buckled and no characteristic sign (absence of distortions and creases on the body shell) makes it possible to consider it necessary to have a check on the body jig, a new unit must be put into the place of the buckled unit and the checks carried on.

If the results of the last two checks are not conclusive, the body shell must be checked and, if need be, straightened on the body jig.

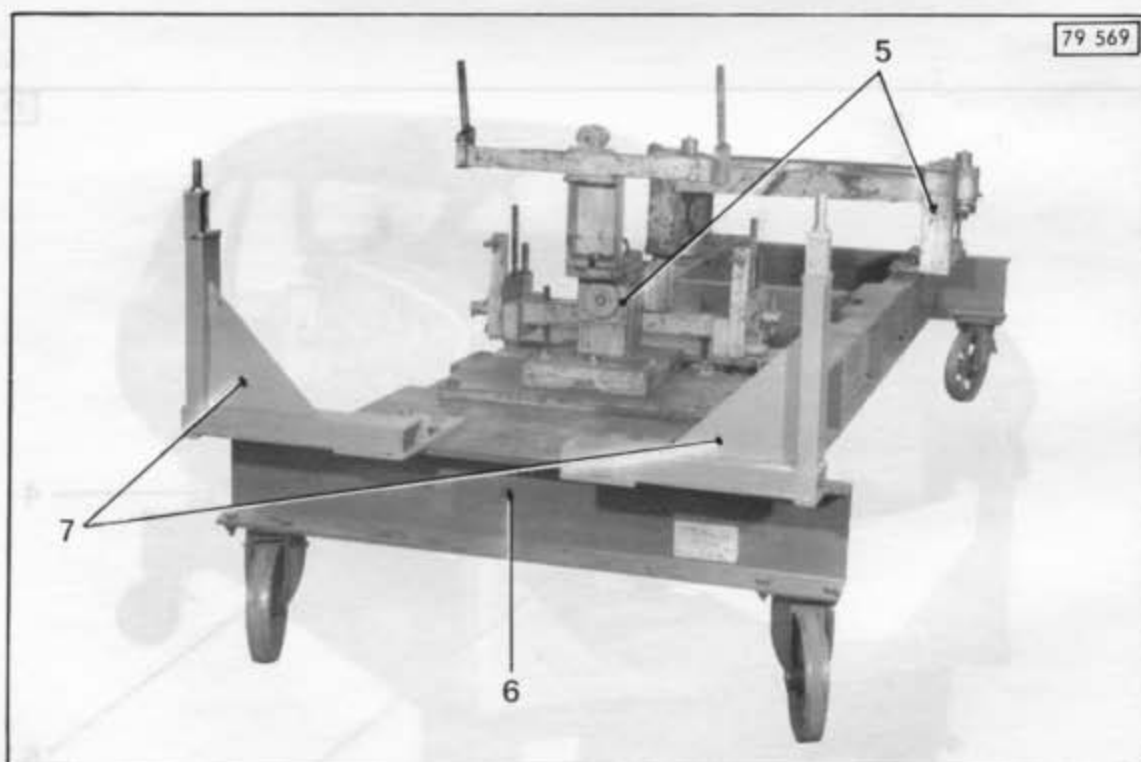
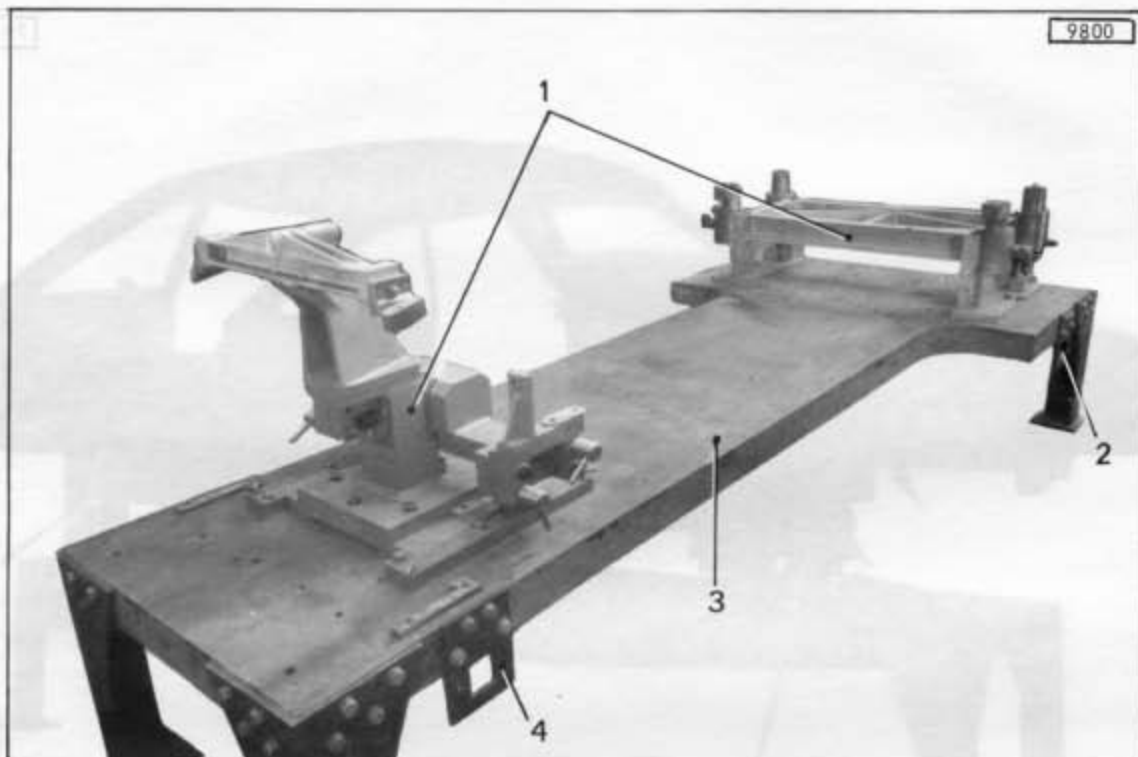
IV - BODY JIG AND CHECKING EQUIPMENT

« FENWICK » BODY SHELL CHECKING EQUIPMENT

- 1 - Body shell checking frame : 2628-T
- 2 - 4 - Transverse tube fastening flanges for jacking operations : 2640-T
- 3 - Universal body jig : 2600-T

« CELETTE » BODY SHELL CHECKING EQUIPMENT

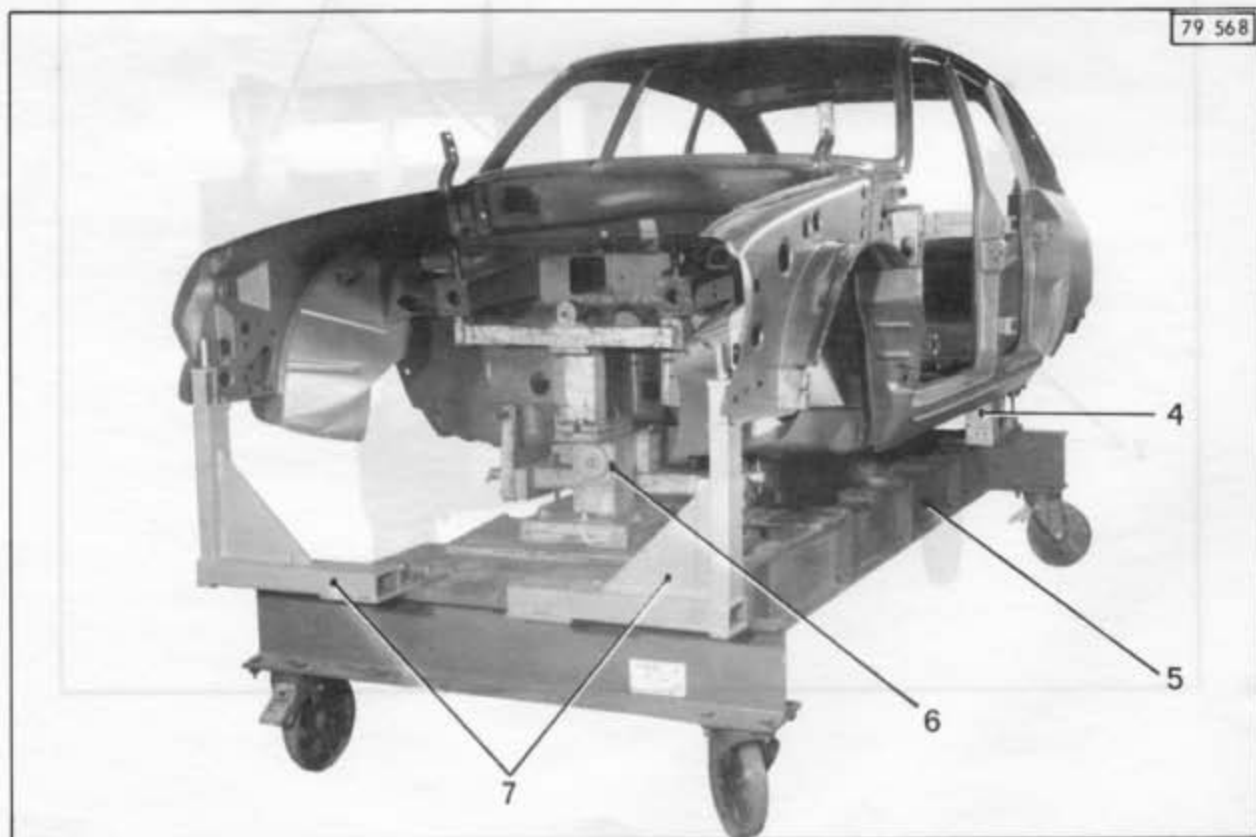
- 6 - Universal body jig : MUF 3, MUF 4, MUF 5, EUROMUF
- 5 - Body shell checking equipment : ENS. 158-000
- 7 - Front wheel arches support : ENS. 158-008



79-505



79 568



V - CHECK OF A BODY SHELL ON THE BODY JIG

1. Preliminary removals :

Check of a body shell using a jig and a checking frame requires the prior removal of :

- the front valance,
- the front axle unit-propulsion system assembly,
- the rear axle unit,
- the fuel tank.

2. Checking equipment :

a) FENWICK

- | | |
|--------------------|---------|
| 2. jig : | 2600-T |
| 1. rear equipment | } |
| 3. front equipment | |

b) CELETTE

- | | |
|---------------------------------------|--------------------------|
| 5. jig : | MUF 3, 4 or 5 or EUROMUF |
| 6. front equipment | } |
| 4. rear equipment | |
| 7. front wheel arches support : | ENS. 158-008 |

3. Checking :

(See pages 13 and 14 (correspondings paragraphs))

4. Replacement of sub-frame elements :

In the event of replacement of one or several elements comprising checking points on the body jig, it is always necessary to adjust the checking frame to its nominal position in order to fasten the new part.

5. Check of rear axle unit fastening points :

The body shell is held in four points which are the fastening points of the rear axle unit :

- the two front points (reels or supports **A**) are fixed,
- the two rear points (pistons **B**) are mobile on a vertical shaft : a vernier **C**, integral with each piston **B**, enables checking of the position of the rear fastenings within the limit of a permitted tolerance « t ». When the vernier **C** is at « zero » the piston **B** is at the « nominal dimension » : this may drop by 4.64 mm (vernier at « - 4.64 ») or rise by 8.64 mm (vernier + 8.64 »).

6. Check of front axle unit fastening points :

The body shell is pinned at eight points which are the fastening points of the front axle unit.

This assembly is mobile in relation to the body jig and permits :

- a fore-and-aft tolerance « t3 »,
- a side ways tolerance « t4 »,

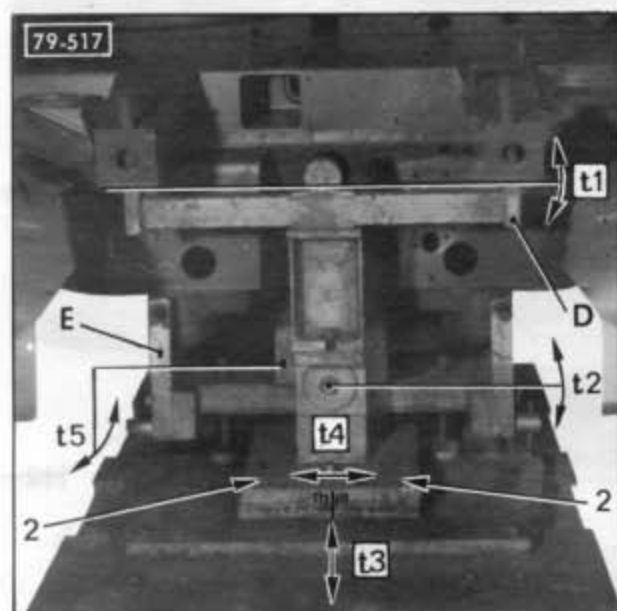
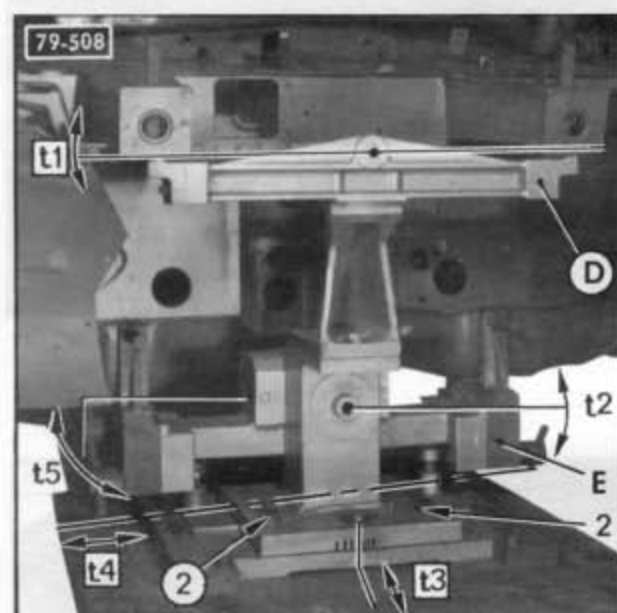
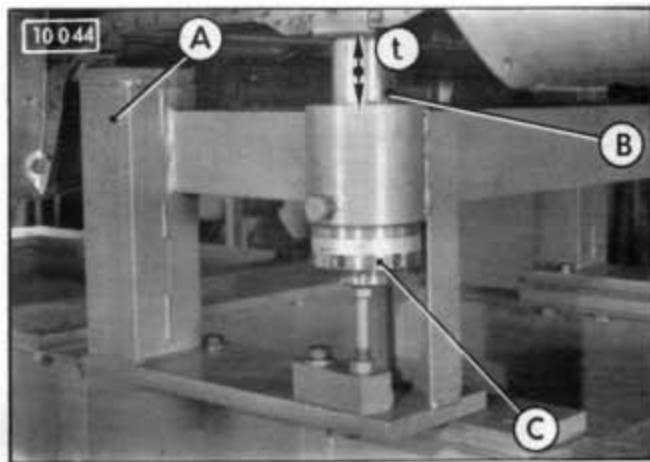
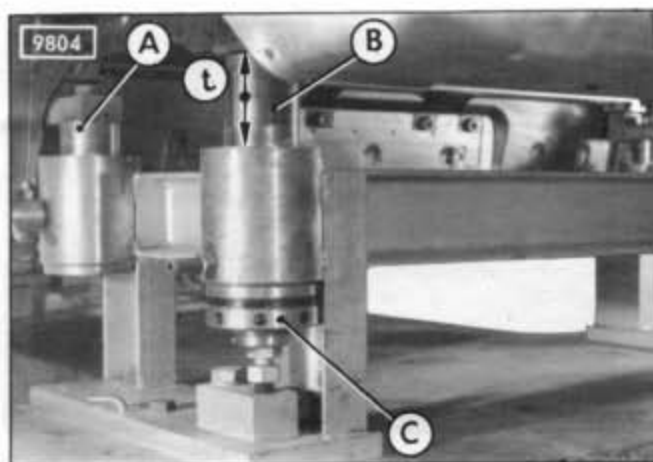
when the two screws (2) are loosened.

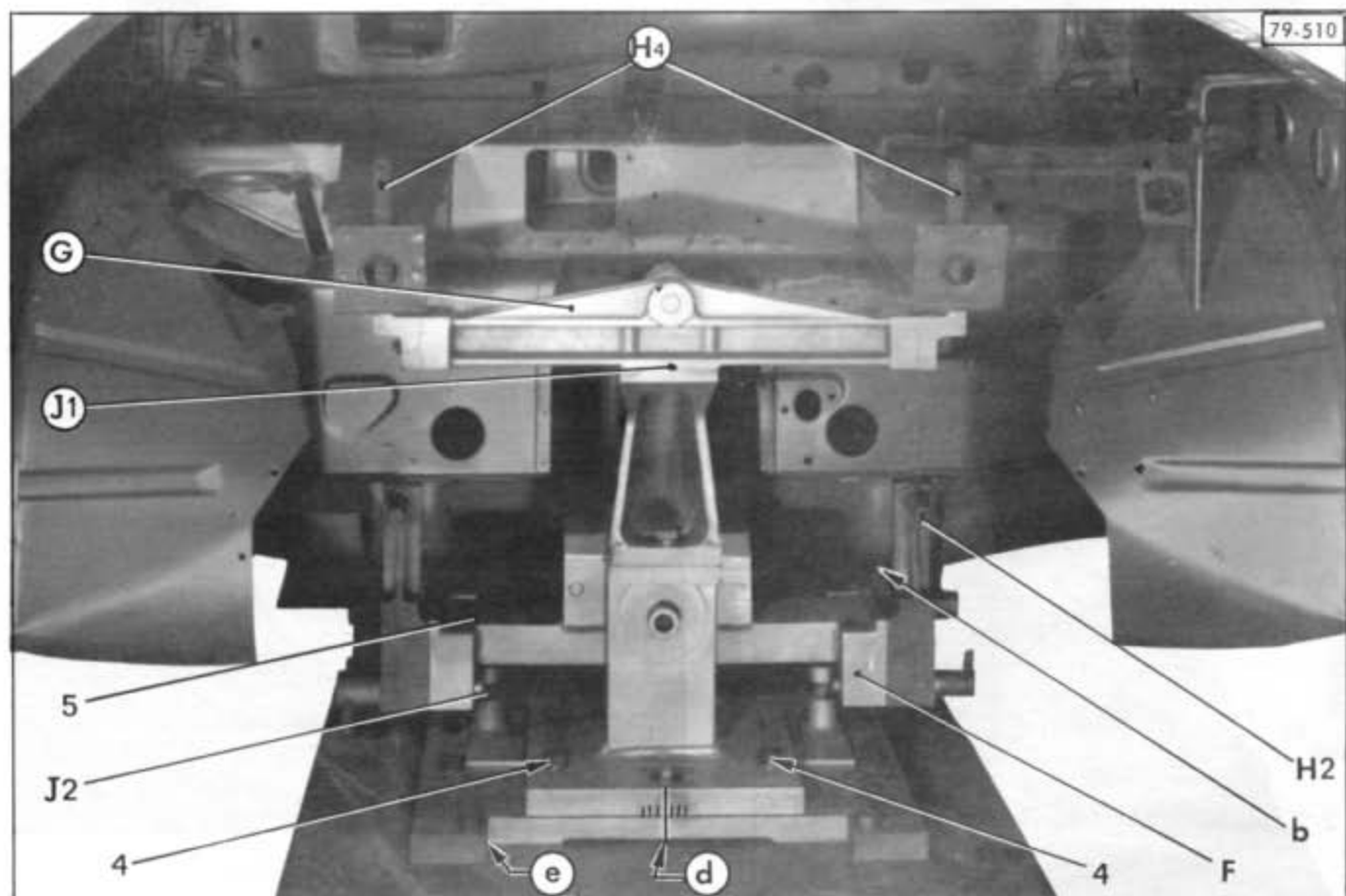
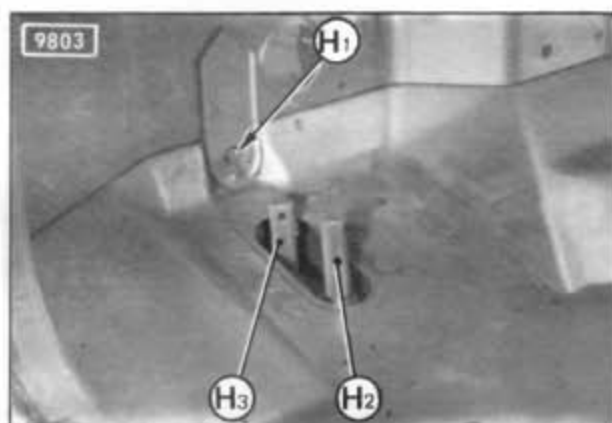
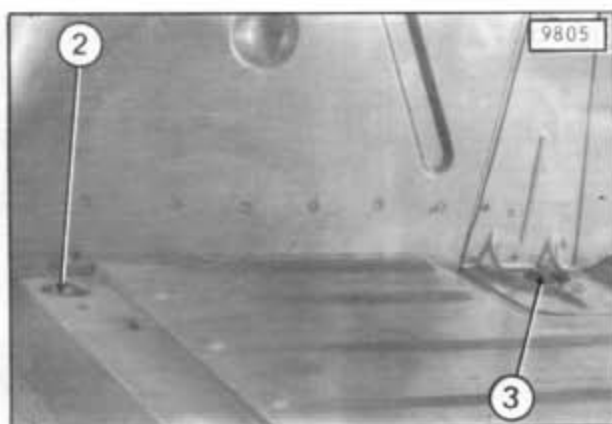
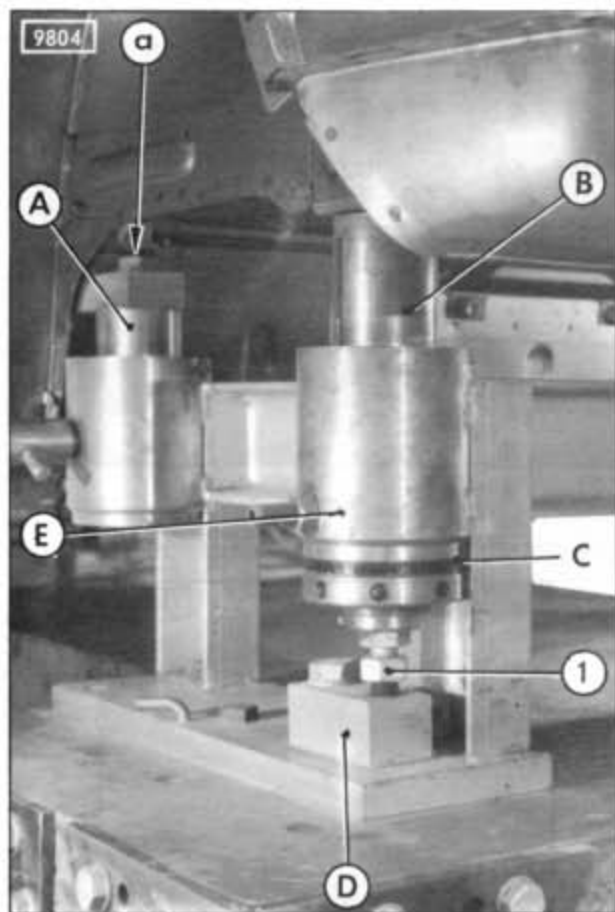
In this assembly, two supports are movable, which allows in addition :

- for the upper fastening points : - a tolerance « t1 » (transverse tilting of the extension support **D**)
- for the lower fastening points : - a tolerance « t2 » (transverse tilting of the lower support **E**)
when the two screws (2) are fully loosened
- a tolerance « t5 » (longitudinal rotation of the lower support **E**)

7. Check of front wheel arches :

Each wheel arch is pinned to support **F** at its front lower point. This support makes it possible to check the transverse longitudinal position and the height of the wheel arch.





FIRST CASE : Slightly damaged body shell :**1. Check of rear fastenings :**

- a) Lower rear assembly pistons **B** to the maximum, by turning screws (1).
- b) Present the body shell horizontally above the body jig :
 - Let it rest on the two rear assembly front reels **A** (or supports).
 - Engage the body shell at « a » on the reels centring studs.
 - Do not fit the fastening screws.
- c) Leave the body shell resting on the body jig front assembly.
- d) Fully unscrew vernier **C** on each side of the rear assembly.
- e) Check :
 - that at « b » the body shell fully bears on each of the front supports.
 - that by turning screw (1), each piston **B** can be brought INTO CONTACT with the intermediate body shell crossmember : see that the body shell is not raised at « a »
 - that the verniers **C** can be screwed until making contact with cylinders **E**.
 - that the difference between the two dimensions indicated by the verniers **C** is not greater than 4 mm.

IF ONE OF THESE CONDITIONS IS NOT FULFILLED, THE BODY SHELL IS BUCKLED.

REMARK : Examples of possible readings on the verniers :

- If one of the verniers indicates « - 2 » one must not read a dimension greater than « + 2 » on the other vernier.
- If one of the verniers indicates « + 1 », one must not read a dimension lower than « 0 » nor greater than « + 8 » on the other vernier.

2. Check of front fastenings :

- a) Loosen the two stop screws (4).
Unscrew the two screws (5) to bring them into abutment in the top position (maximum tolerance : « t2 »).
- b) On each side, put into place, in order : pins **H4**, **H3**, **H2** and **H1**.
NOTE : These pins must be able to be engaged or screwed in, by hand.
- c) Tighten the two stop screws (4) once again.
- d) Check :
 - that ALL the pins **H** can be disengaged BY HAND,
 - that the play recorded at « j2 » (to the right, or to the left) is not greater than FIVE TIMES the value of that recorded at « j1 », on the same side.

IF ONE OF THESE CONDITIONS IS NOT FULFILLED, THE BODY SHELL IS BUCKLED.

ATTENTION Never «straighten » a body shell with jacks when it is pinned on the extension support D.

SECOND CASE : Body shell damaged at the front :**1. Fasten the body shell on the rear assembly :**

- a) Lower the rear assembly pistons **B** to the maximum, turning screws (1).
- b) Present the body shell horizontally above the body jig :
 - Let it rest on the two rear assembly front reels **A** (or supports).
 - Engage the body shell at « a » on the reels centring studs.
- c) Let the front of the body shell rest on the body jig front assembly.
- d) Raise the pistons **B** (screw (1)) to the « nominal dimension » (vernier at « zero »).
- e) Fit the two screws (2) and the two screws (3).

2. Position the front assembly at the « nominal dimension » :

- a) Remove the support **G** from the extensions.
If necessary, remove one of the « seating brackets » from the support **F**, on the side where traction will be exerted.
Loosen the two stop screws (4).
ATTENTION : Never « straighten » a body shell with jacks when it is pinned on the extensions support G.
- b) Place the front assembly in the « centre » position for all permitted tolerances :
 - *Lateral tolerance « t4 »* : the « zero » reference of the vernier at « d » must be opposite the fixed reference.
 - *Longitudinal tolerance « t5 »* :
On the FENWICK body jig : place a 2 mm thick shim on each side at « e ».
On the CELETTE body jig : the corresponding vernier must be at the « zero » position.
 - *Tolerance on tilting « t2 » of the bottom support F.*
Fully unscrew the two screws (5).
Fit a 2.70 mm thick shim at « j2 », under one of the screws (5) and tighten the other so as to cancel out the tilt.
Withdraw the 2.70 mm shim and tighten this screw in order to cancel out again the tilt of support **F**.
Tighten the two screws (4).

3. Straighten the body shell : Straighten it by means of jacks until it is possible to put into place, and in the correct order, the pins **H3**, **H2** and **H1**, corresponding to the « seating bracket » remaining in place.

4. Fit the removed « seating bracket ».
Proceed as indicated in para. 3 above.

5. Fit the support G for the extensions.
Check the extensions by means of the pins **H1** : proceed as indicated in para. 2, in the first case.

THIRD CASE : Body shell damaged at the rear :

1. Position the front assembly at the « nominal dimension » :

Proceed as indicated in para. 2, b, of the SECOND CASE.

2. Pin the body shell on the front assembly lower support :

On each side, put into place, **in order**, the pins **H2**, **H1** and **H3**.

NOTE : These pins must be able to be put into place *by hand*.

Check the extensions by means of the pins **H4** proceeding as indicated in para. 2, b, of the FIRST CASE.

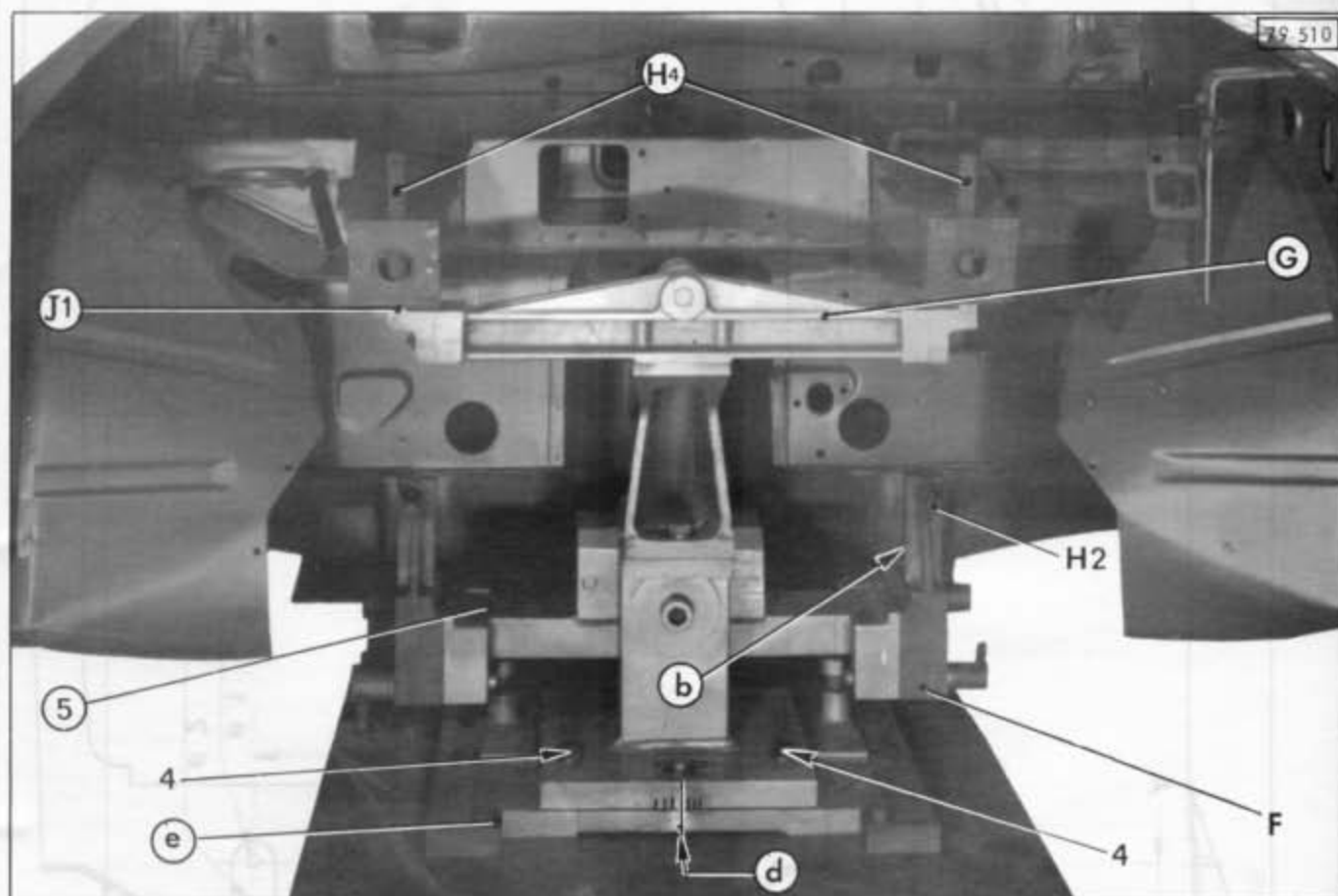
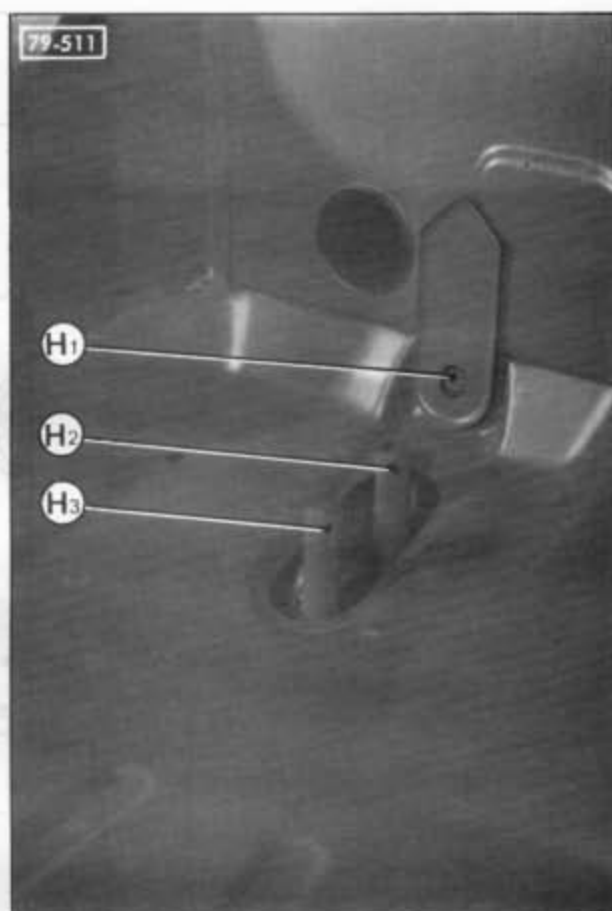
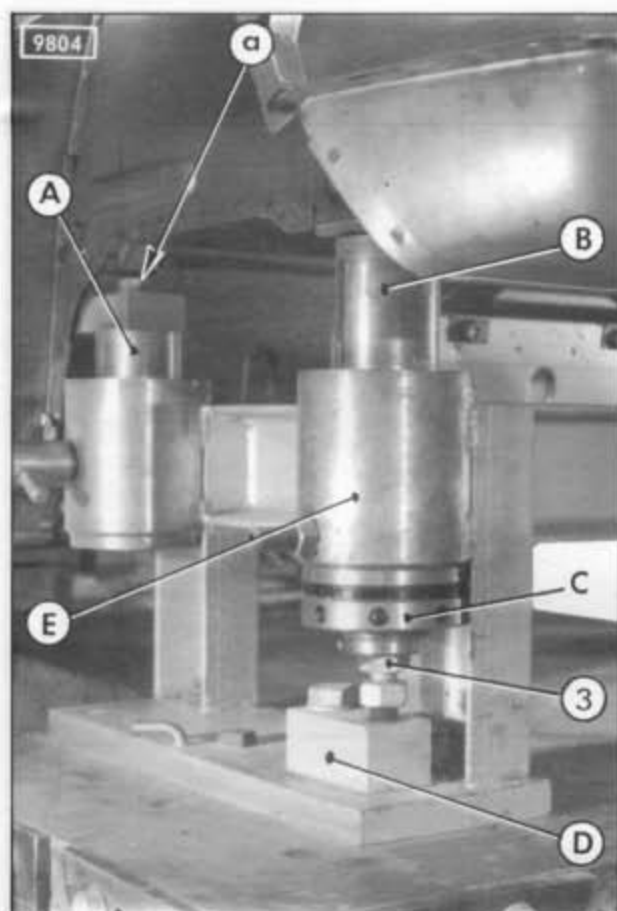
Withdraw the pins following check.

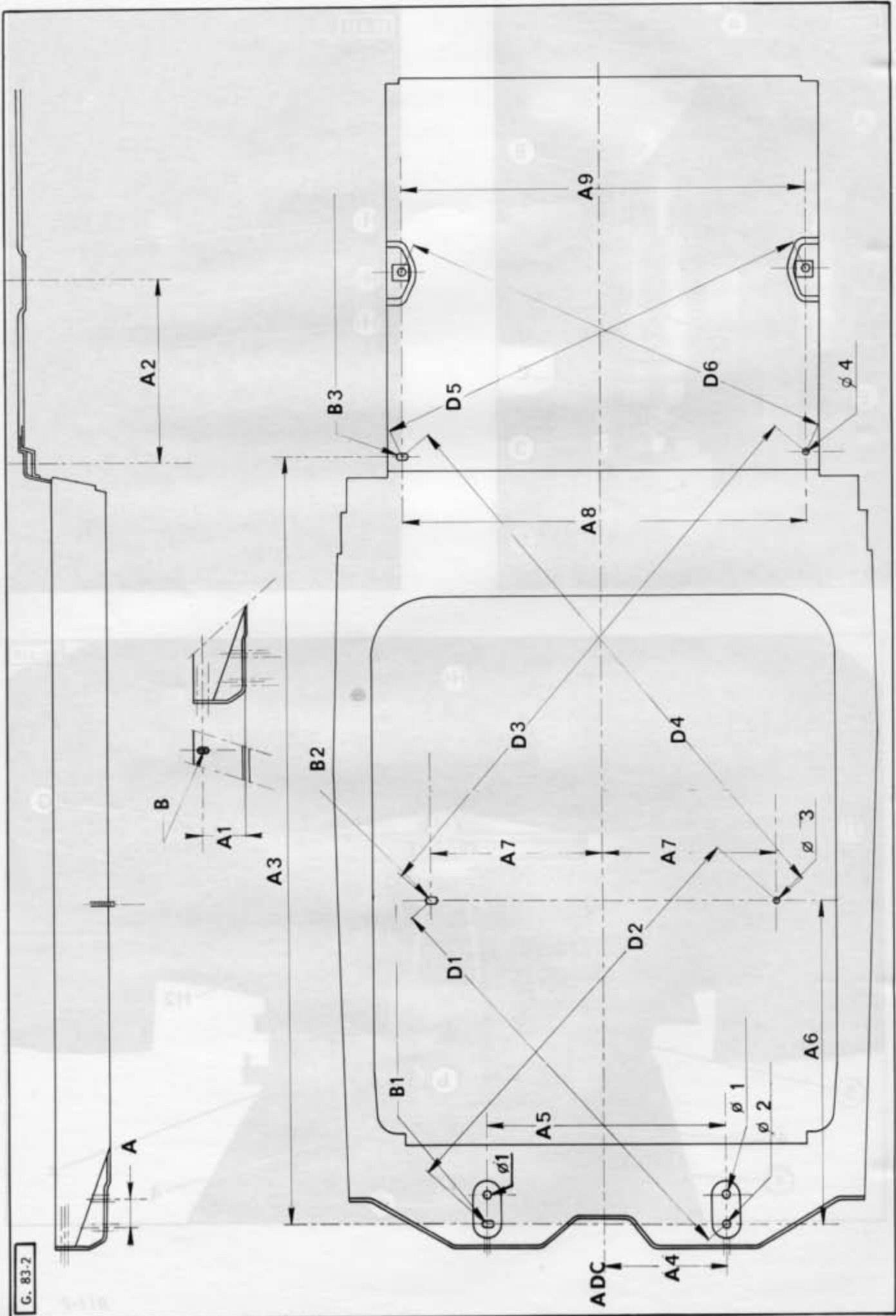
Check, by means of a spirit-level, the parallelism of the body shell in comparison with the jġg (put the spirit-level on the body shell side sill).

3. Free the rear fastenings :

Pivot the shims **D** and lower the pistons **B** as far as possible.

4. Straighten the body shell : Straighten it by means of the jacks until it is possible to check the rear fastenings as indicated in para. 1 of the FIRST CASE.





G. 83-2

DIMENSIONAL CHECK OF A SUB-FRAME

A D C : Body shell centre line

Dimensions :

A = 70 ± 0.1
A 1 = 105.2 ± 0.2
A 2 = 464
A 3 = 1895 ± 0.5
A 4 = 300
A 5 = 600 ± 0.25
A 6 = 799 ± 0.5
A 7 = 425
A 8 = 1020 ± 0.25
A 9 = 1020

Diagonals :

D1 = D2 = 1078.9 ± 0.5
D3 = D4 = 1440.7 ± 0.8
D5 = D6 = 1120.6 ± 0.3

Drilling diameters :

dia. 1 = $11 \begin{smallmatrix} +0.25 \\ 0 \end{smallmatrix}$
dia. 2 = $14 \begin{smallmatrix} +0.2 \\ -0.05 \end{smallmatrix}$
dia. 3 = $20 \begin{smallmatrix} +0.25 \\ -0.1 \end{smallmatrix}$
dia. 4 = 14 ± 0.1

Slotted holes :

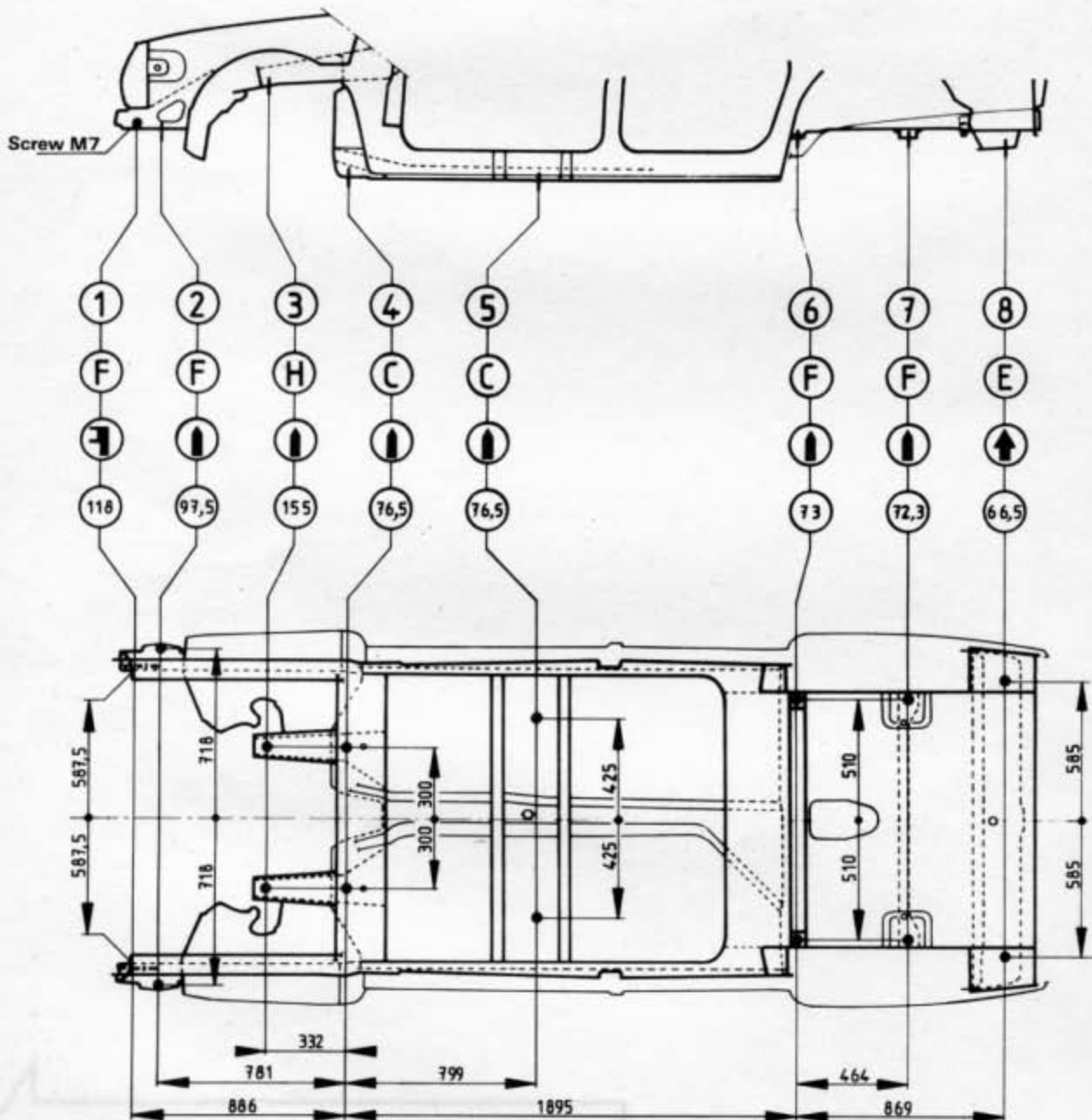
B = 14×16
B 1 = 14×16
B 2 = 20×24
B 3 = 14×17.25

REMARKS :

The sub-frame diagram is given as an indication but must in no case serve as a reference for the straightening of a body shell or the replacement of any element.

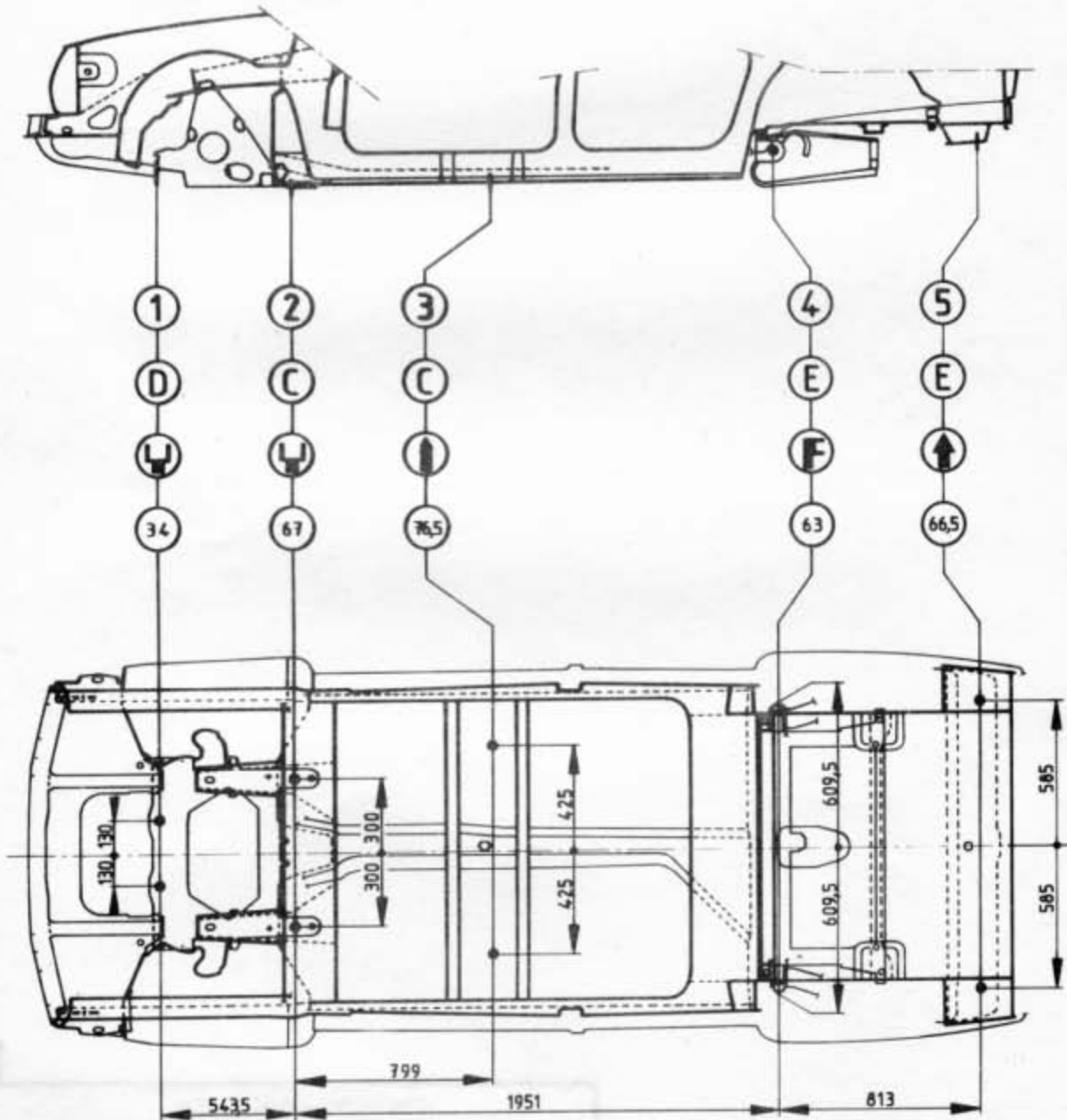
HOCHLEISTUNG
FÜR DIE XD

CAROLINER GSA Stripped bodyshell

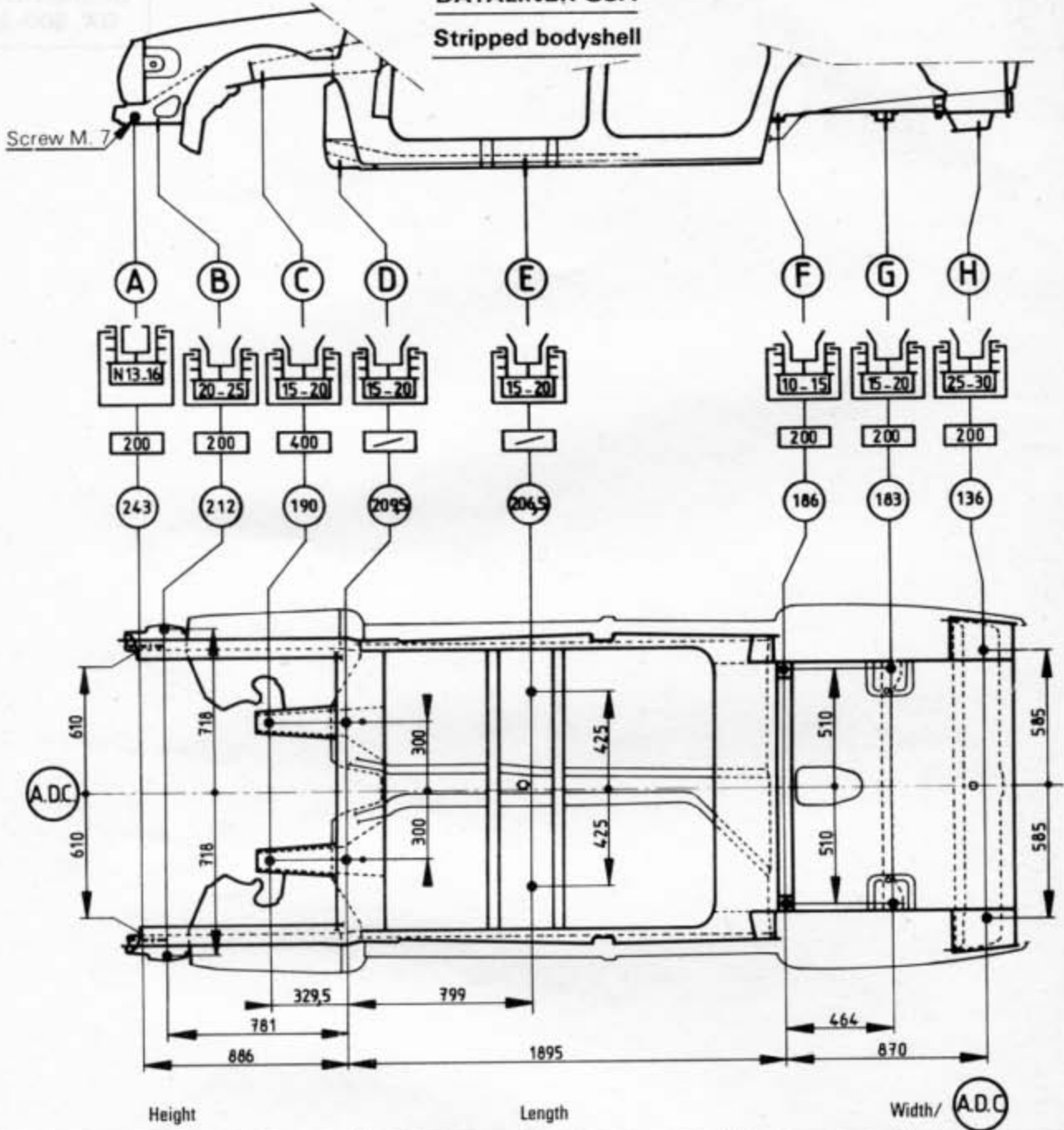


WITTENBERG
E-900 207

CAROLINER CSA
WITH ALL MECHANICAL COMPONENTS IN SITU



DATALINER GSA
Stripped bodyshell



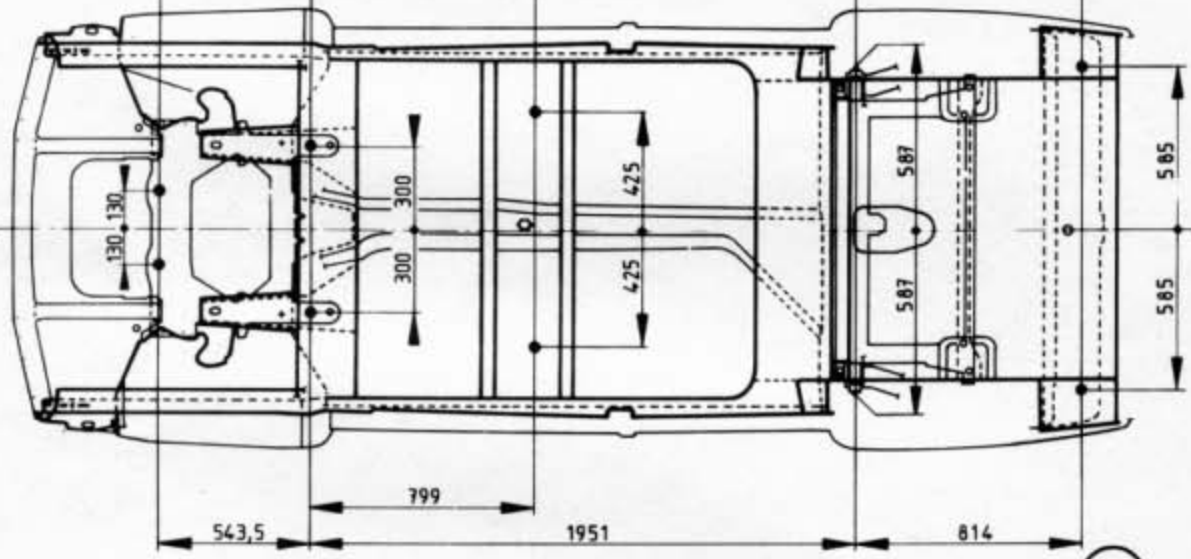
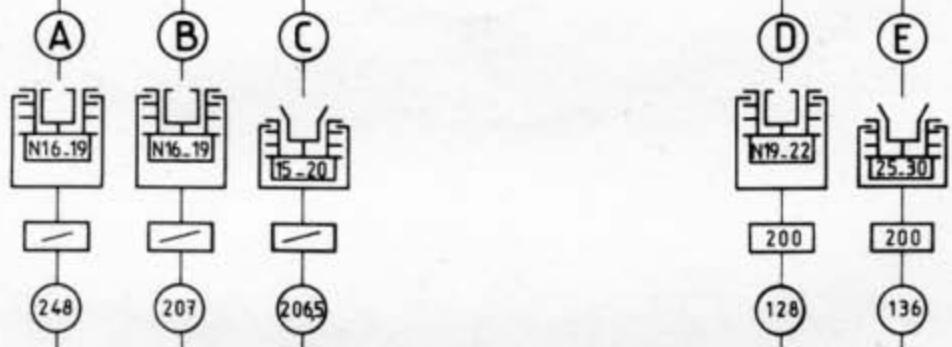
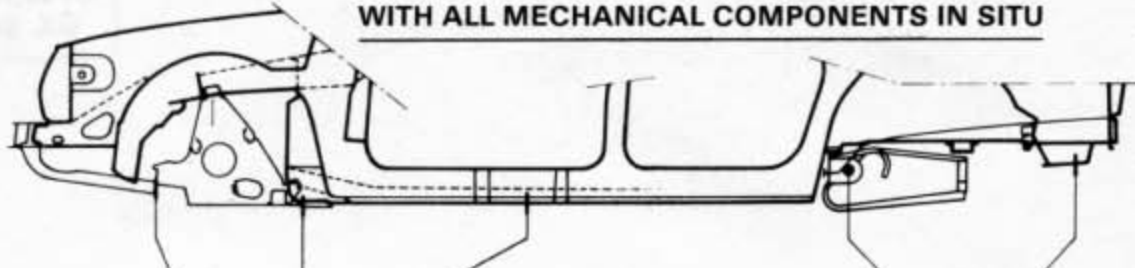
Ref.	Original dimensions	L.H. deviation	R.H. deviation
A	243		
B	212		
C	190		
D	209,5		
E	206,5		
F	186		
G	183		
H	136		

Ref.	Original dimensions	L.H. deviation	R.H. deviation
A_D	886		
B_D	781		
C_D	329,5		
D	0		
E_D	799		
F_D	1895		
G_F	464		
H_F	870		

Ref.	Original dimensions	L.H. deviation	R.H. deviation
A	610		
B	718		
C	300		
D	300		
E	425		
F	510		
G	510		
H	585		

DATALINER GSA

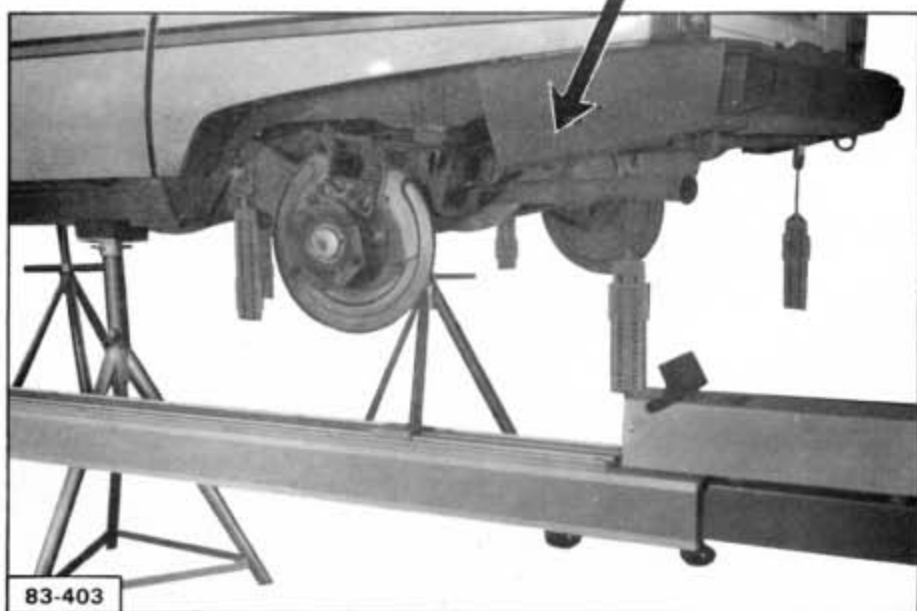
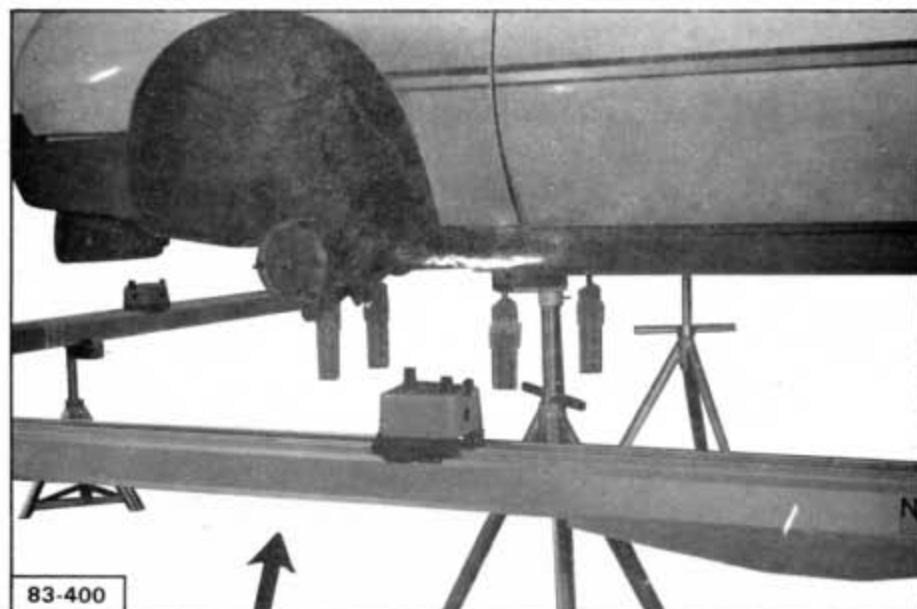
WITH ALL MECHANICAL COMPONENTS IN SITU



Ref.	Original dimensions	L.H. deviation	R.H. deviation
A	248		
B	207		
C	206,5		
D	128		
E	136		

Ref.	Original dimensions	L.H. deviation	R.H. deviation
A-B	543,5		
B	0		
C-B	799		
D-B	1951		
E-D	814		

Ref.	Original dimensions	L.H. deviation	R.H. deviation
A	130		
B	300		
C	425		
D	587		
E	585		



RECOMMENDATION

This operation does require the body shell to be checked on the body jig (unless there are distortions on the front cowl, the extensions or the inner face of the sub-frame side sills).

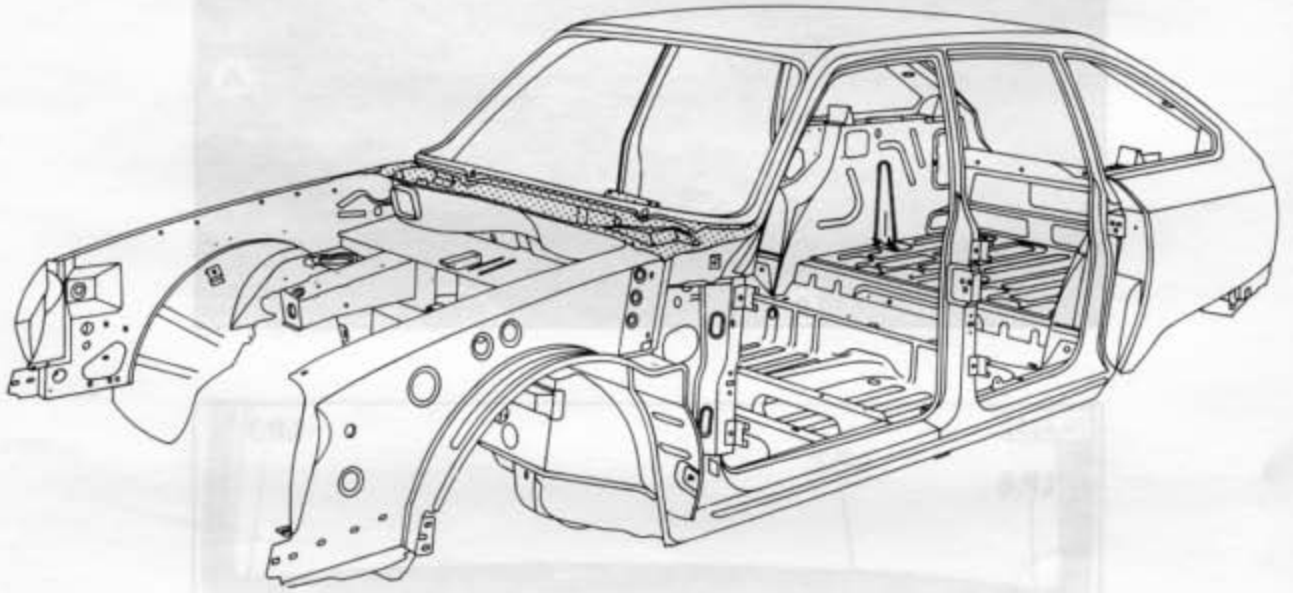
PRELIMINARY REMOVALS

- front doors and their rubber sealing strip,
- engine bonnet,
- front wings,
- ventilation grille,
- windscreen,
- screen-washer mechanism and motor assembly,
- windscreen pillar trim,
- handbrake control,
- dashboard,
- front seats,
- heater unit,
- cowl soundproofing trim,
- battery,
- dashboard electrical harness,
- hydraulic electrical harness,
- hydraulic fluid reservoir,
- screen washer reservoir.

TOOLS REQUIRED

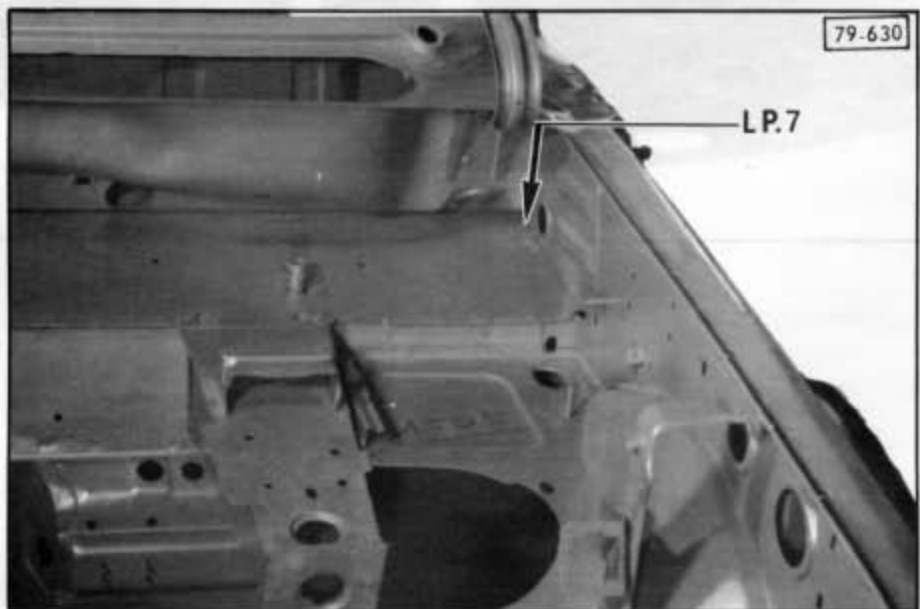
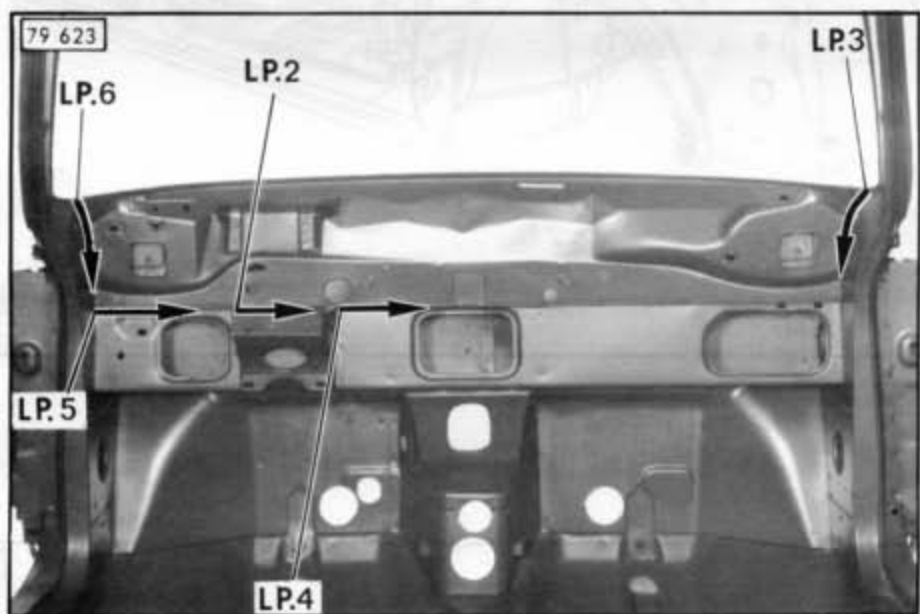
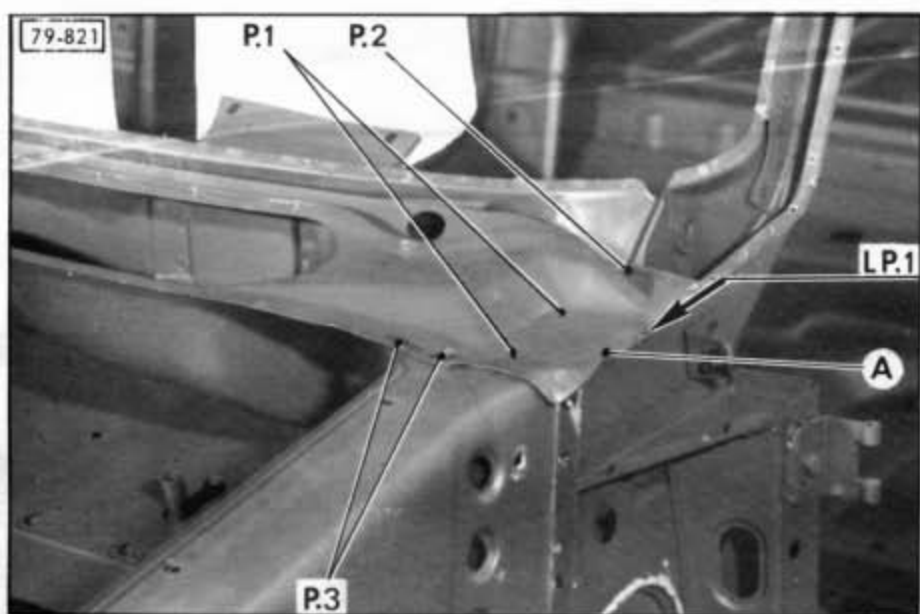
- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot welds cutter
- « MIG » welding equipment
- Spot welding head
- Oxyacetylene set
- Panel clamps.

GX. 80-2



79-1363





REPLACEMENT OF A DASHBOARD COWL

REMOVAL

1. Remove bottom part of windscreen frame :

(See Operation GX. 801-4) :

2. Remove dashboard cowl :

Raise lug **A** on each side.

Break the spot-welds following the lines :

- LP. 5.
- LP. 2.
- LP. 4.

Drill and break the spot welds following the lines :

- LP. 1 } (on each side)
- LP. 7. }
- LP. 3.
- LP. 6.

and the points :

- P. 1, }
- P. 2 } (on each side)
- P. 3.

Remove the dashboard cowl.

PREPARATION

3. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all edges to be welded by using a spot-welding head.

FITTING

4. Fit the dashboard cowl :

Put the dashboard cowl into place and hold it with the panel clamps.

Check its positioning by lining up the bottom part of the windscreen frame and also the windscreen itself.

5. Assemble dashboard cowl :

Carry out the welding operation :

a) by using a spot-welding head along :

- LP. 5.
- LP. 4.
- LP. 3.
- LP. 6.
- LP. 1 (on each side)

and the points :

- P. 2 (on each side)
- P. 3

b) by using oxy-acetylene plug welding (MIG) following the lines :

- LP. 2.
- LP. 7 (on each side)
- and the points P. 1 (on each side).
- Fold back lug **A** (on each side)

6. Fit bottom part of windscreen frame :

(See Operation GX. 801-4)

7. Finish off seal-tightness with water sealant

(See Operation GX. 800-00)

8. Paint.**9. Fit and adjust the previously removed components.**

INDUSTRIAL
S-108 30

RECOMMENDATION

This operation does not require the body shell to be checked on the body jig.

PRELIMINARY REMOVALS

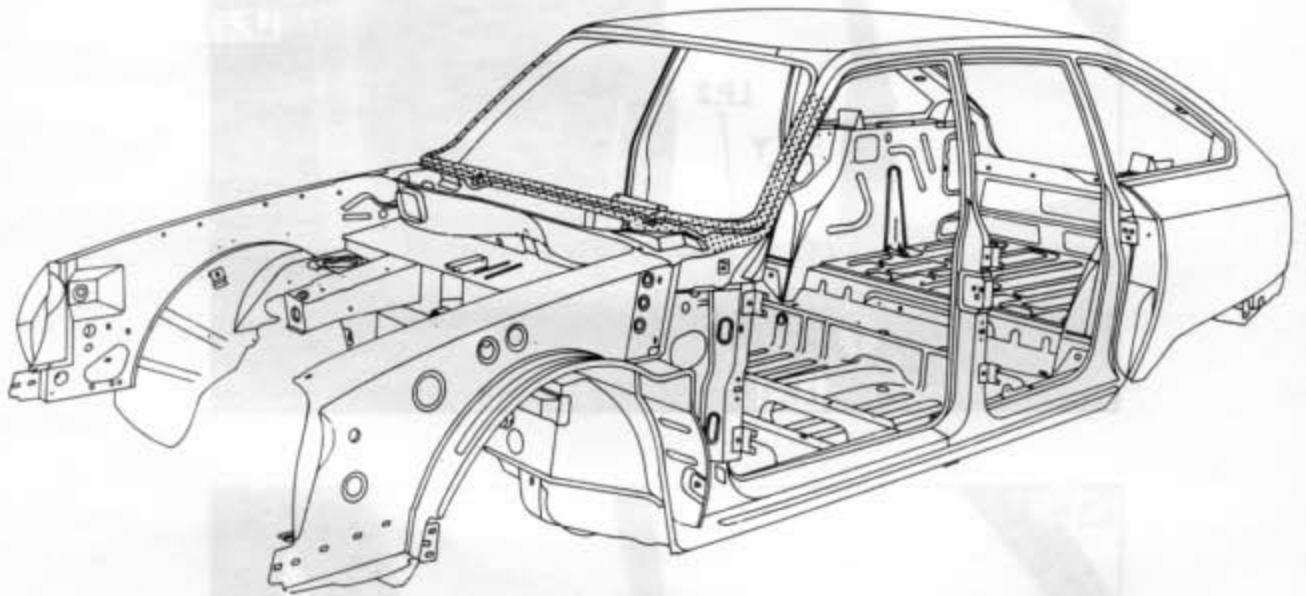
- windscreen and sealing strip,
 - dashboard,
 - bonnet,
 - front door and rubber sealing strip,
 - front wing,
 - windscreen frame pillar trim,
 - windscreen wiper, nut and shaft fixing washer.
- } (*side involved*)

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot weld cutter
- Spot-welding head
- Oxyacetylene set
- « MIG » welding equipment
- Panel clamps

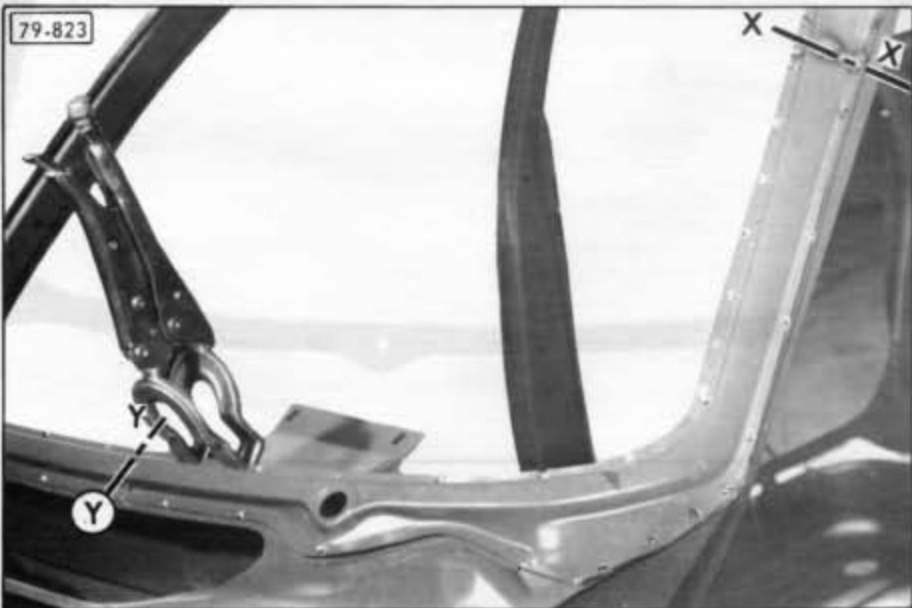
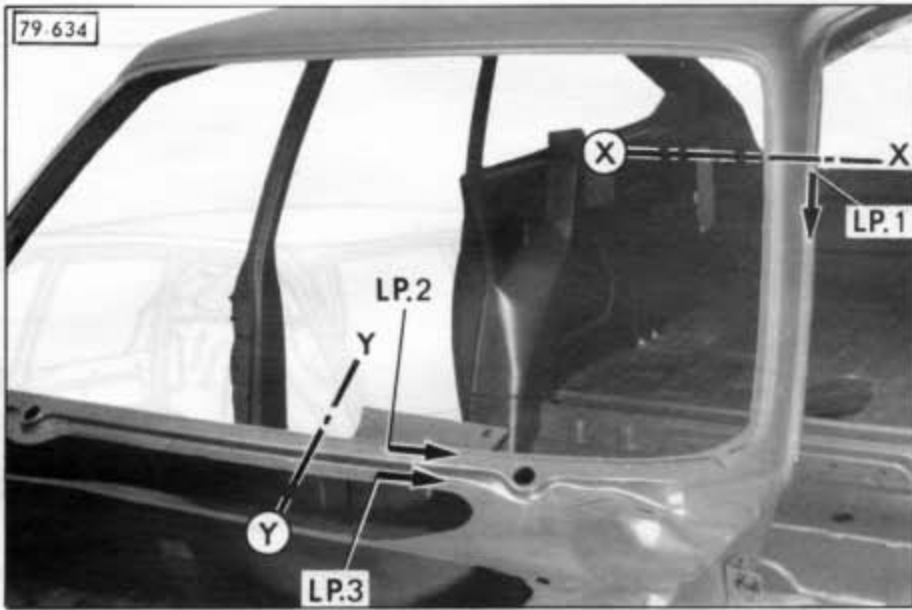
INDUSTRIAL S-108 30

GX. 80.2



79-822





PARTIAL REPLACEMENT OF A WINDSCREEN FRAME

REMOVAL

1. Partially cut windscreen frame :

Cut with a metal saw following the sections :

- X-X,
- Y-Y.

(TAKE CARE not to damage the interior pillar).

NOTE : Section **X-X** must in all cases be situated more or less half-way up the pillar.

Drill and break spot-welds, following the lines :

- LP. 2, *(between the two cuts)*
- LP. 1,
- LP. 3.

3. Remove side part of windscreen frame.

PREPARATION

- 4.** Prepare the previously separated welding seams.
Reshape the panels if necessary.
Scour weld zones on body shell and new components.
Apply a conductive priming coat on the inner face of all the edges to be welded by using a spot-welding head.

5. Line up new windscreen frame :

Trace on the new windscreen frame the sections **X-X** and **Y-Y** in relation to the body shell cuts.

FITTING

6. Fit windscreen frame :

Line up, cut out and adjust the windscreen frame.
Hold it in place with the panel clamps.
Check its positioning, using the windscreen as template.

7. Assemble windscreen frame :

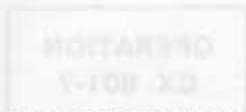
- a) Tack the windscreen frame with a welding unit (MIG) following **X-X** and **Y-Y**.
- b) Spot weld following the lines :
 - LP. 1,
 - LP. 2,
 - LP. 3.
- c) Make an oxyacetylene weld bead (MIG) following :
 - X-X,
 - Y-Y.

NOTE : Make successive tangential spots until they form a bead (semi-interrupted welding).

8. Grind and surface the oxyacetylene weld bead following X-X and Y-Y.

Solder finish connections **X-X** and **Y-Y** if necessary.

9. Paint.**10. Fit and adjust the previously removed elements.**



RECOMMENDATION

This operation requires the body shell to be checked on the body jig.

PREPARATION FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- windscreen and sealing strip,
 - dashboard,
 - bonnet,
 - front carpet,
 - front door and rubber sealing strip,
 - front wing,
 - windscreen frame pillar trim,
 - cowl and scuttle trim,
 - windscreen wiper, nut and shaft fixing washer,
 - front seat.
- } (side involved)

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- « MIG » welding equipment
- Oxyacetylene set
- Spot-welding head
- Panel clamps

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig

ENS. 158-000 : Body shell checking equipment

ENS. 158-008 : Front wheel arches support

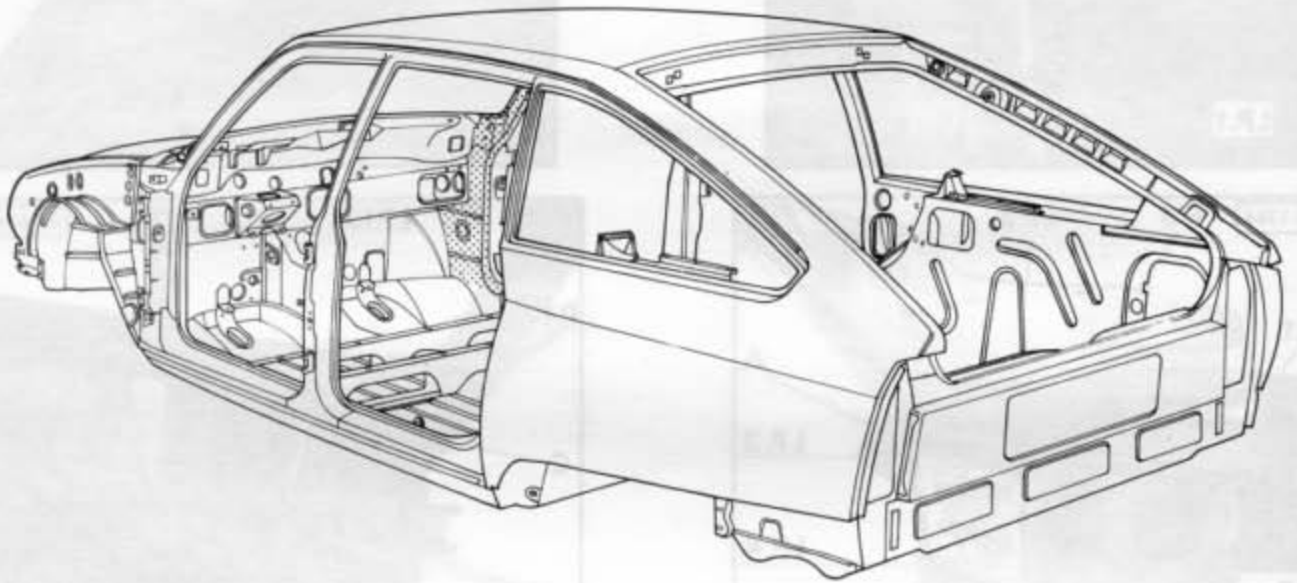
or

2600-T : « FENWICK » body jig

2628-T : Checking equipment for « GX » vehicles

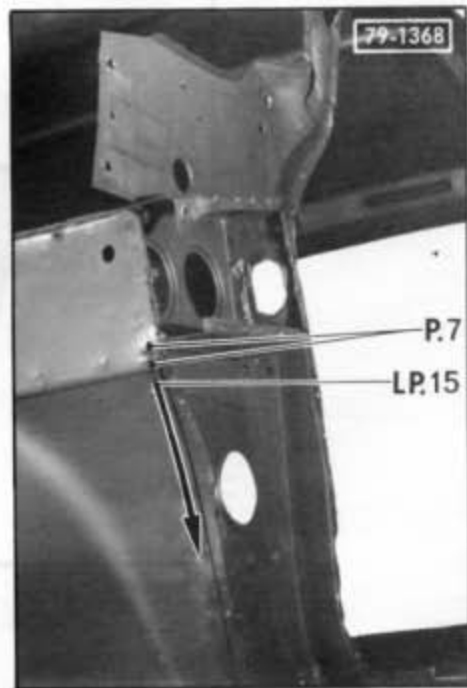
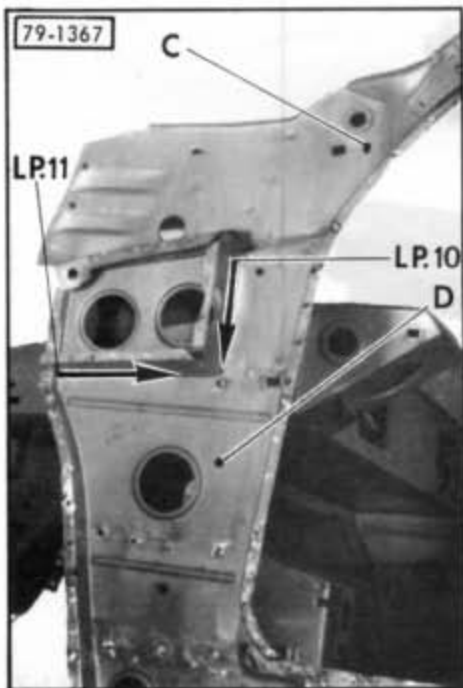
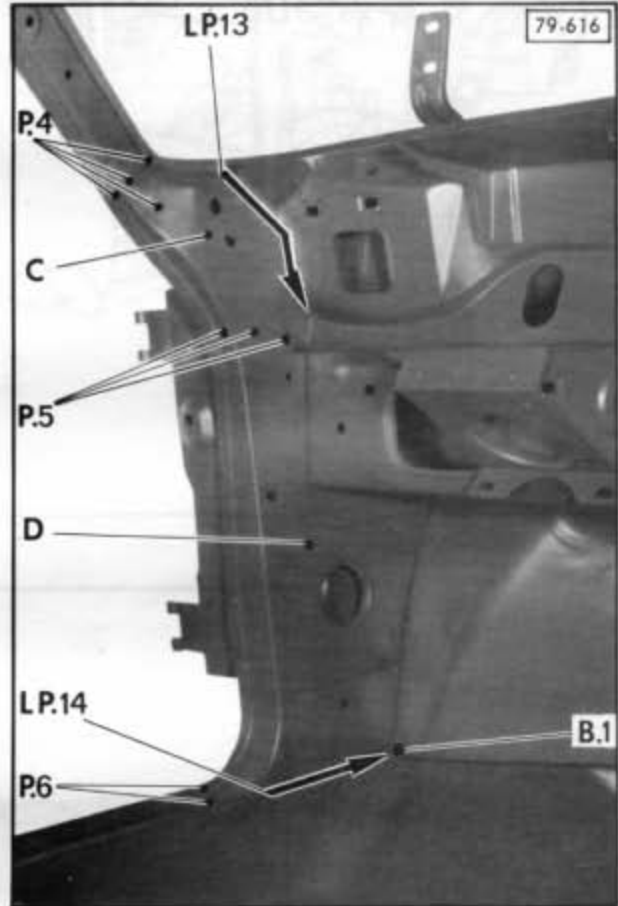
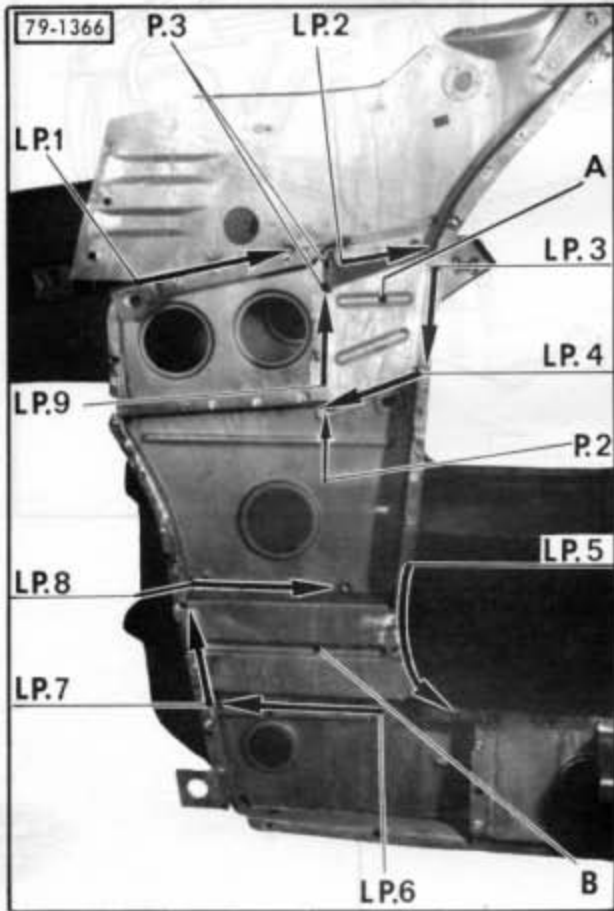
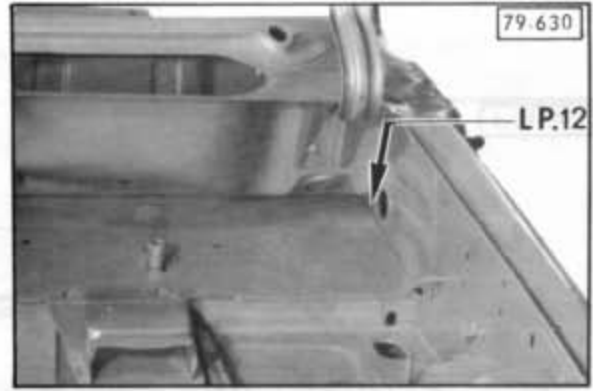
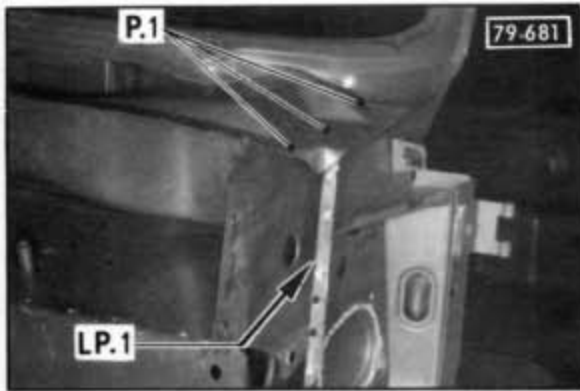


GX. 80-3



79-1382





REPLACEMENT OF SCUTTLE SIDE PANELS

REMOVAL

- 1. Remove front wheel arch (side involved) :**
(See Operation GX. 802-4).
- 2. Partially remove windscreen frame :**
(See Operation GX. 801-4)
- 3. Remove front part of side panel and front lining of side sill (side involved) :**
(See Operation GX. 821-4)
- 4. Remove scuttle top spacer A :**
Break the spot welds, following lines :
- LP. 2, LP. 3, LP. 4, LP. 9
and points : P. 2; P. 3.
- 5. Remove scuttle bottom spacer B :**
Break the spot welds, following lines :
- LP. 10, LP. 11, LP. 14, LP. 15
and points : P. 6, P. 7 and P. 5 (in the event of panel C remaining in place).
Remove brazing spot B. 1 using a torch.
- 7. Remove scuttle top panel C :**
Break the spot welds, following lines :
- LP. 1, LP. 12, LP. 13
and points P. 1, P. 4 and (P. 5 in the event of panel D remaining in place).
- 8. Put body shell on body jig :**
Check and realign the body shell.
(See Operation GX. 800-0).

PREPARATION

- 9. Prepare the previously separated welding seams.**
Reshape the panels if necessary.
Scour the weld zones on body shell and new components.
Apply a conductive primer coat on the inner face of all edges to be welded.

FITTING

- 10. Fit scuttle top panel C :**
Put scuttle top panel **C** in place and hold it with the panel clamps.
Spot-weld, following lines :
- LP. 1, LP. 12, LP. 13.
and points : P. 1, P. 4, and (P. 5 in the event of panel D remaining in place).
- 11. Fit scuttle side panel D :**
Put scuttle side panel **D** into place and hold it by means of the panel clamps.
Spot-weld, following lines : LP. 10, LP. 11, LP. 14, LP. 15
and points : P. 5, P. 6, and P. 7.
Make a brazing spot: B 1, using a torch.
- 12. Fit scuttle bottom spacer B :**
Put spacer **B** into place and hold it with the panel clamps.
Spot-weld, following lines :
- LP. 5, LP. 6, LP. 7 and LP. 8.
- 13. Fit scuttle top spacer A :**
Put spacer **A** into place and hold it with the panel clamps
Spot-weld; following lines :
- LP. 2, LP. 3, LP. 4, LP. 9
and points : P. 2, P. 3.
- 14. Fit front part of side panel and front lining of side sill :**
(See Operation GX. 821-4).
- 15. Fit windscreen frame :**
(See Operation GX. 801-4)
- 16. Fit front wheel arch :**
(See Operation GX. 802-4)
- 17. Finish off body shell seal-tightness and protection.**
- 18. Paint.**
- 19. Fix and adjust the previously removed elements.**

RECOMMENDATION

This operation requires the body shell to be checked on the body jig.

PREPARATION

(See Operation GX. 800-0).

PRELIMINARY REMOVALS

- bonnet,
- front valance,
- fan cowl,
- front wing (*side involved*),
- front and rear axle units,
- fuel tank.

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- « MIG » welding unit
- Spot-welding head
- Oxyacetylene set
- Panel clamp

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig.

ENS. 158-000 : Body shell checking equipment

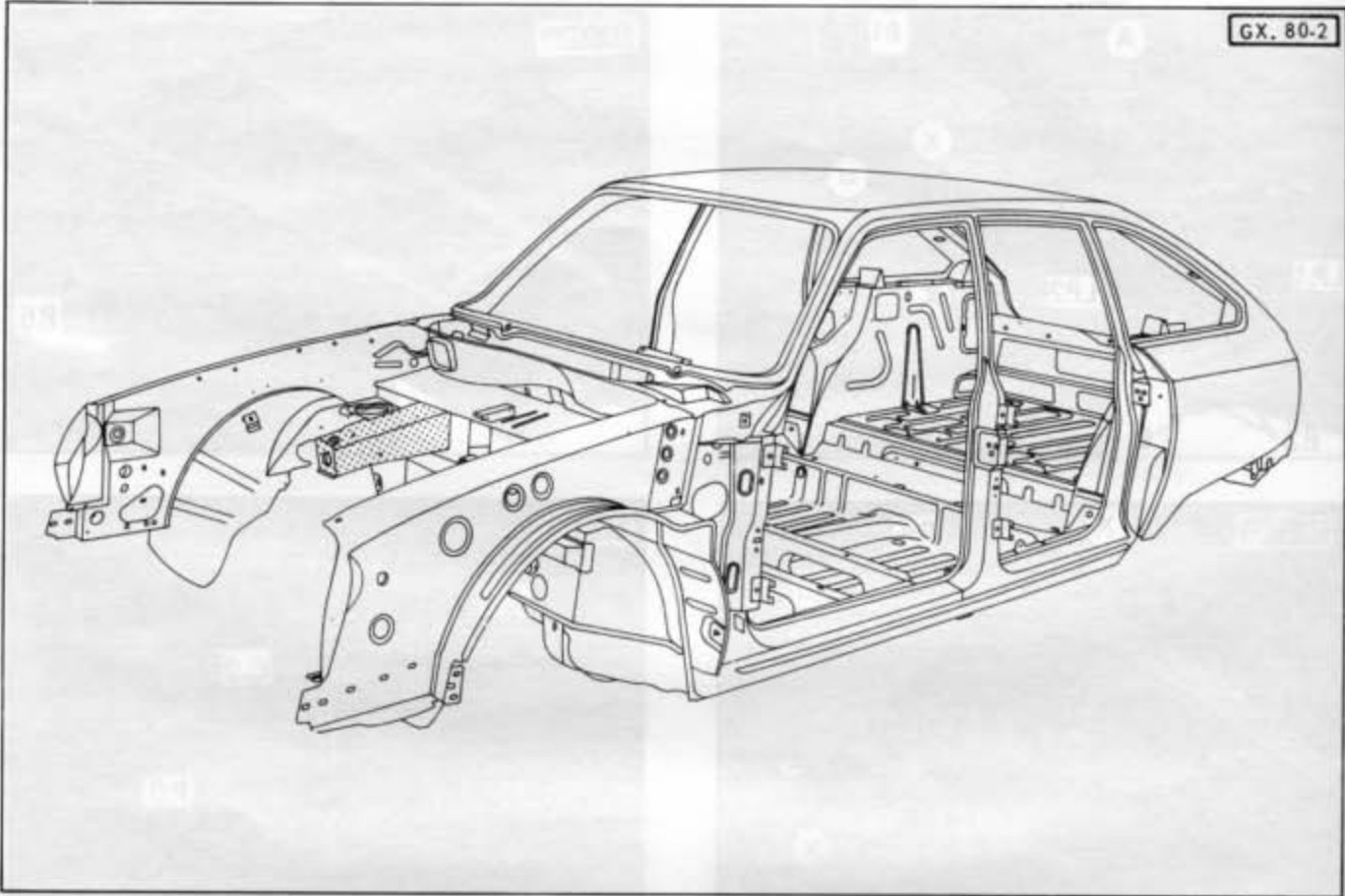
ENS. 158-008 : Front wheel arches support

or

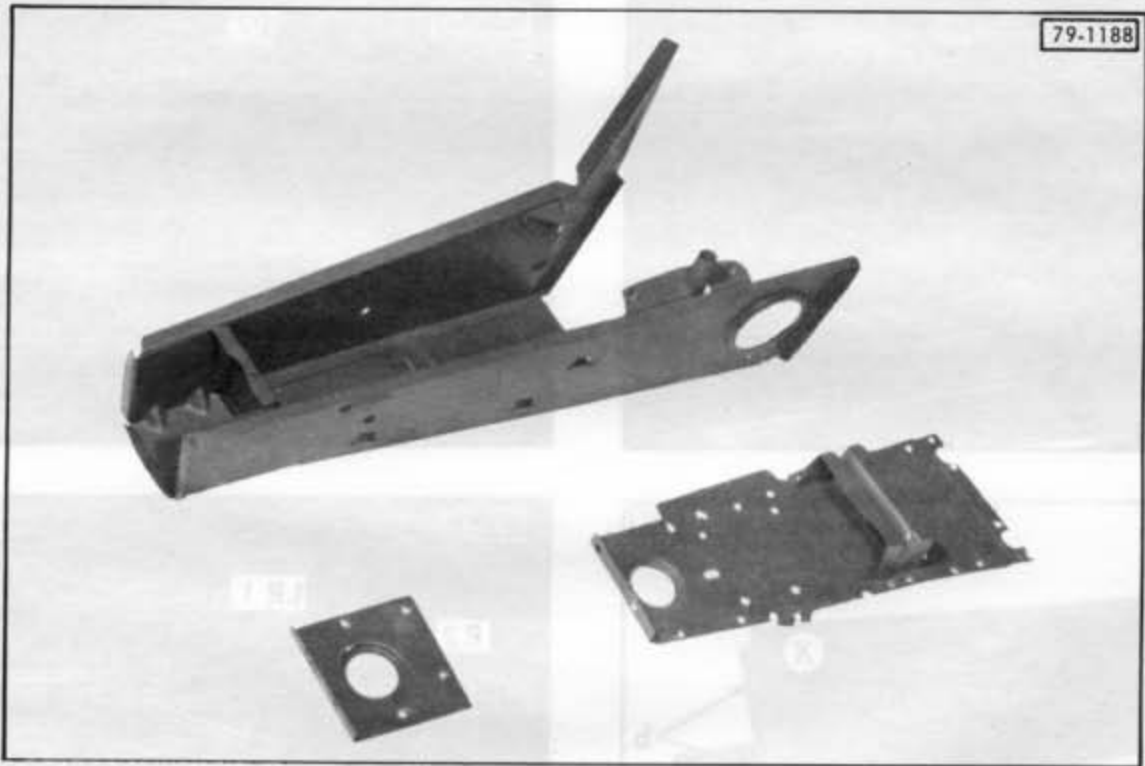
- 2600-T : « FENWICK » body jig.

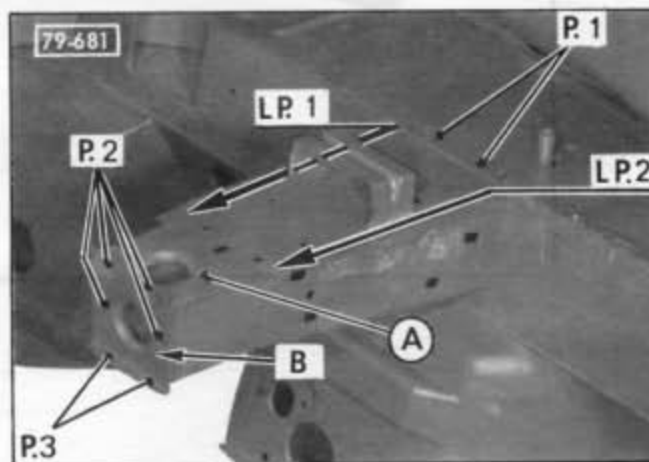
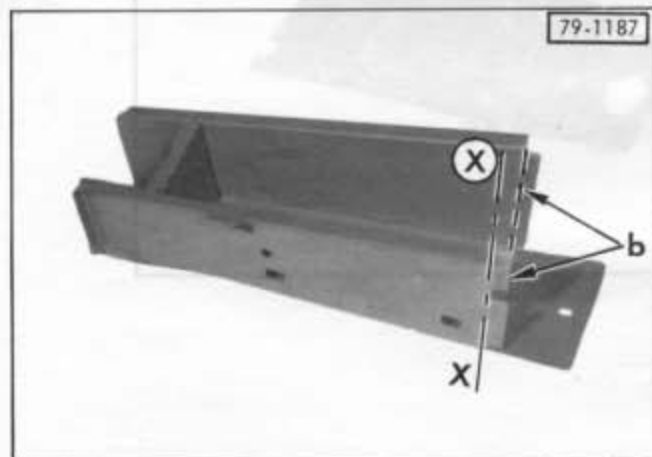
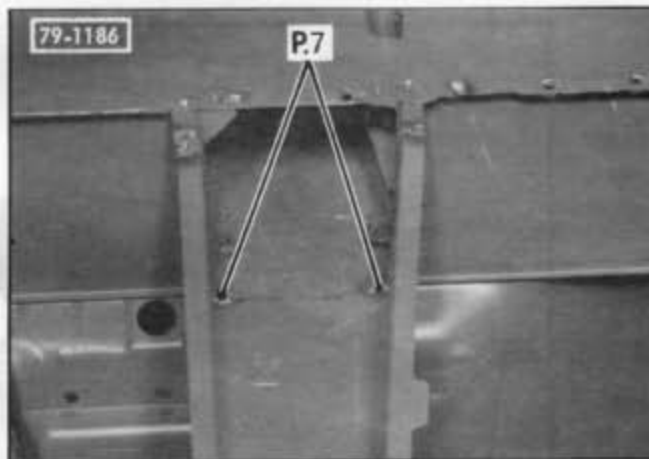
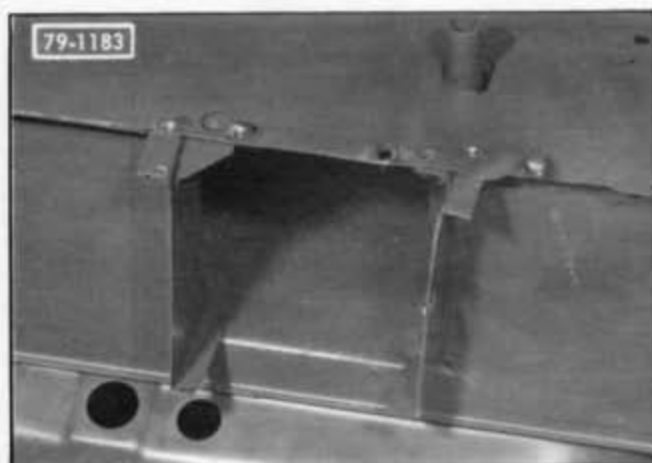
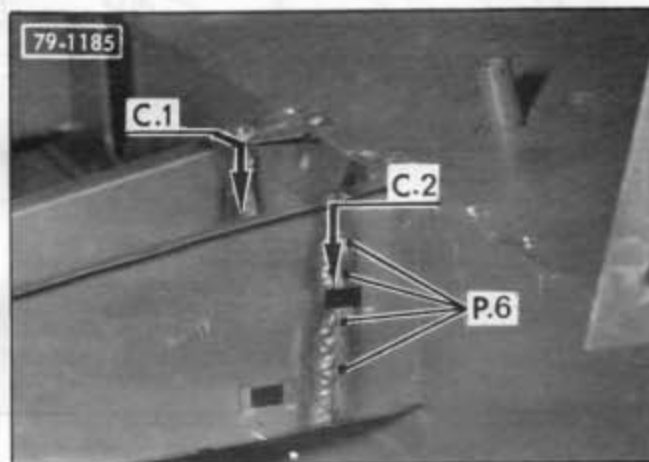
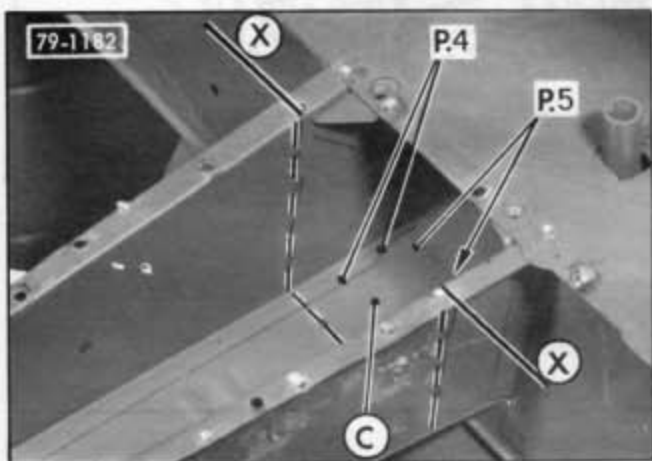
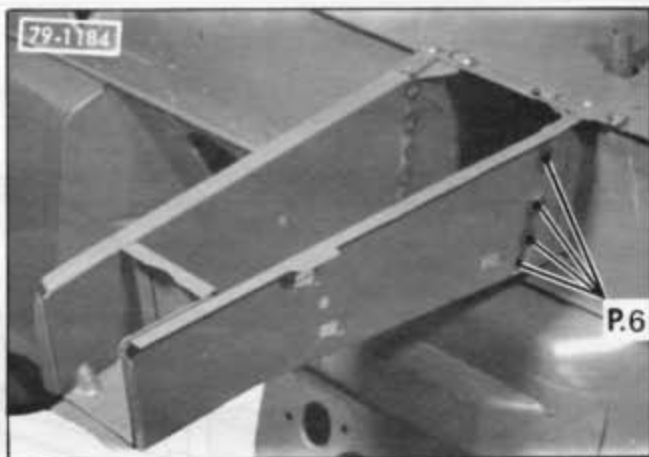
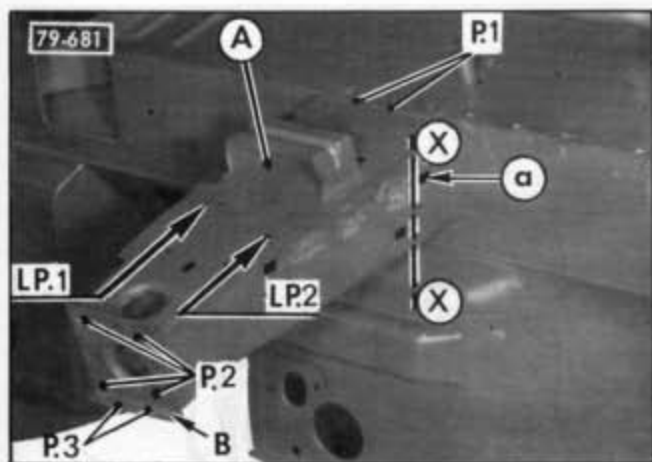
- 2628-T : Checking equipment for « GX » vehicles.

GX. 80-2



79-1188





REPLACEMENT OF A FRONT EXTENSION

REMOVAL

1. Remove front wheel arch (side involved) :
(See Operation GX. 802-4).

2. Remove extension (partial) :

Break the spot-welds, following points :

- P. 1,

and lines :

- LP. 1 partially separate these two lines,
starting from the rear and fold
- LP. 2 panel **A** forwards

Trace out section **X-X** :

Trace perpendicularly to the dashboard cowl, flush with the stud-hole at « a ».

Cut according to **X-X** with a saw.

3. Remove remaining part of bottom plate C :

Break the spot-welds, following points :

- P. 4 (both sides of the extension)

- P. 5

Disengage the remaining piece of panel.

PREPARATION

4. Prepare new part :

Trace out section **X-X** on the two side plates of the new part.

Trace an edge « b », 12 mm away from section **X-X**.
Cut according to this latter trace (do not damage the bottom panel)

Break the points located at « P. 4 » on the new part and remove the rear part of the side plates.

Lap weld the two edges « b » towards the interior.

5. Prepare the previously separated welding seams. -

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

6. Put body shell on body jig :

(See Operation GX. 800-0)

Check and fasten body shell to body jig.

7. Fit the new extension on the body shell using the body jig as positioning template.

FITTING

8. Fit extension :

Put the extension into place and fasten it on the checking template by means of the corresponding peg. Hold it on the body shell by means of the panel clamps.
NOTE : The edges « b » must pass in the inner side of the extension side panels.

9. Weld extension :

a) Spot-weld following points :

- P. 6 (on the two side faces of the extension),

- P. 4

b) Oxyacetylene « plug » weld (MIG) following points :

- P. 5 and P. 7.

c) Make oxyacetylene weld beads (MIG) following C. 1 and C. 2 (intermittent welding)

Grind weld beads C. 1 and C. 2.

Reshape the panels in the event of distortion.

10. Fit extension closing panels :

Put the two panels **A** and **B** into place.

Hold them with the panel clamps.

Weld :

- Spot weld, following lines :

- LP. 1,

- LP. 2,

and points :

- P. 2,

- P. 3,

- Oxyacetylene « plug » weld (MIG) following points :

- P. 1

11. Fit front wheel arch :

(See Operation GX. 800-0)

12. Finish off body shell seal-tightness and protection.

Remove body shell from body jig.

13. Paint.

14. Fit and adjust the previously removed elements.

RECOMMENDATION

If the geometry of the vehicle is in order, following optical inspection, this operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

- engine bonnet and air manifold panel,
- front bumper,
- radiator grille,
- fan cowl,
- front valance,

Left-hand side

- battery,
- fuse box,
- diagnostic socket,
- wheel passage interior sealing panel,
- Disengage bonnet opening control
- front wing,

Right-hand side

- front wing,
- hydraulic fluid reservoir,
- screen washer water container.

TOOLS REQUIRED

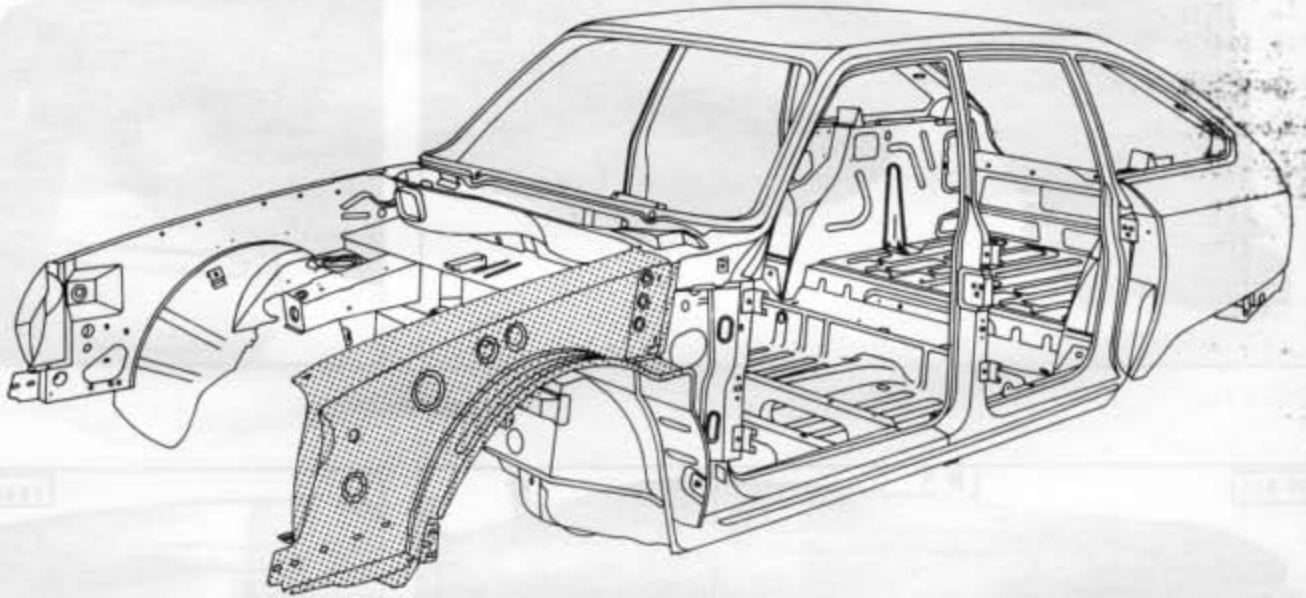
- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- « MIG » welding unit
- Spot-welding head
- Panel clamps

SPECIAL TOOLING

- 2645-T : Front wheel arch positioning template
- 2641-T : Spirit level on base plate.

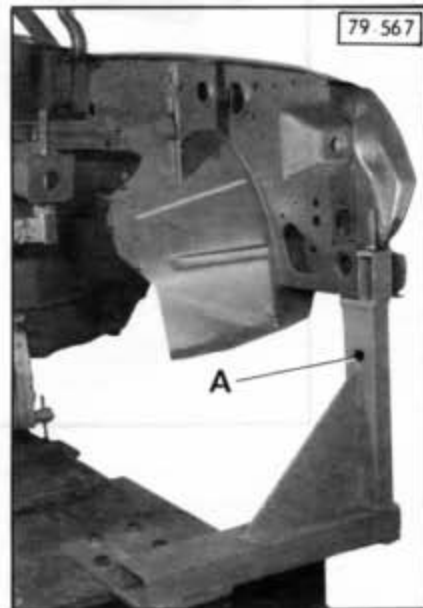
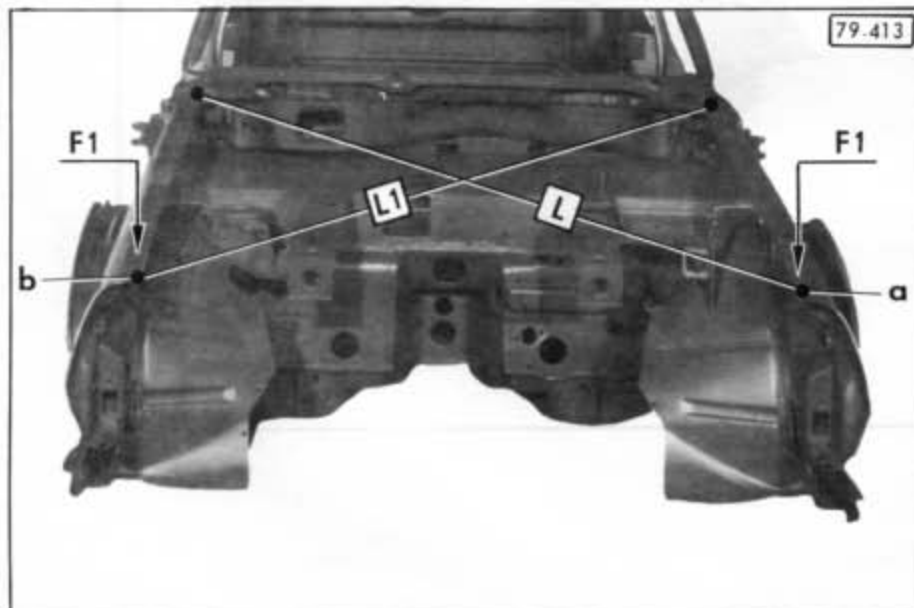
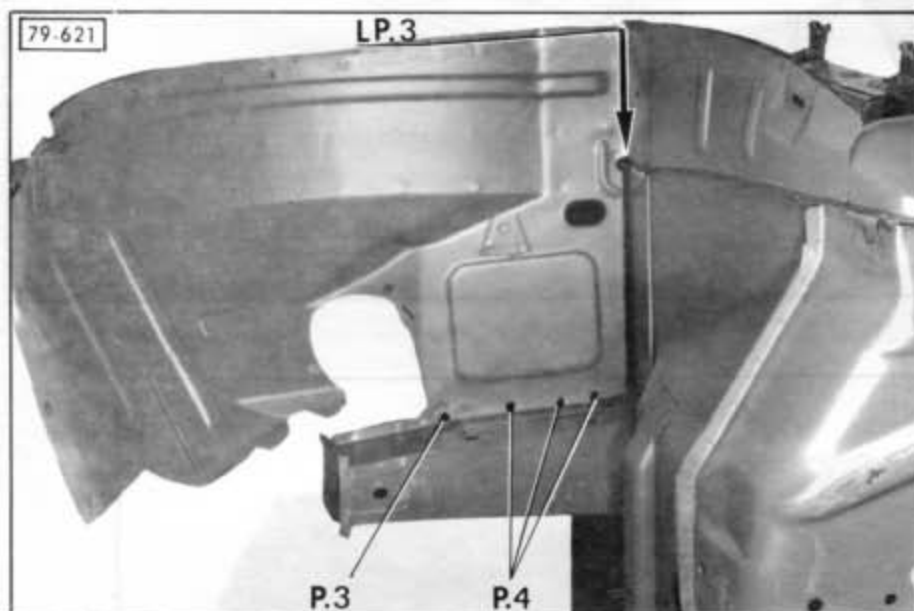
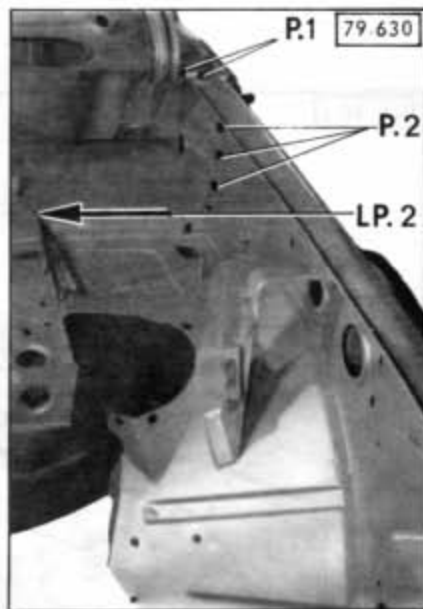
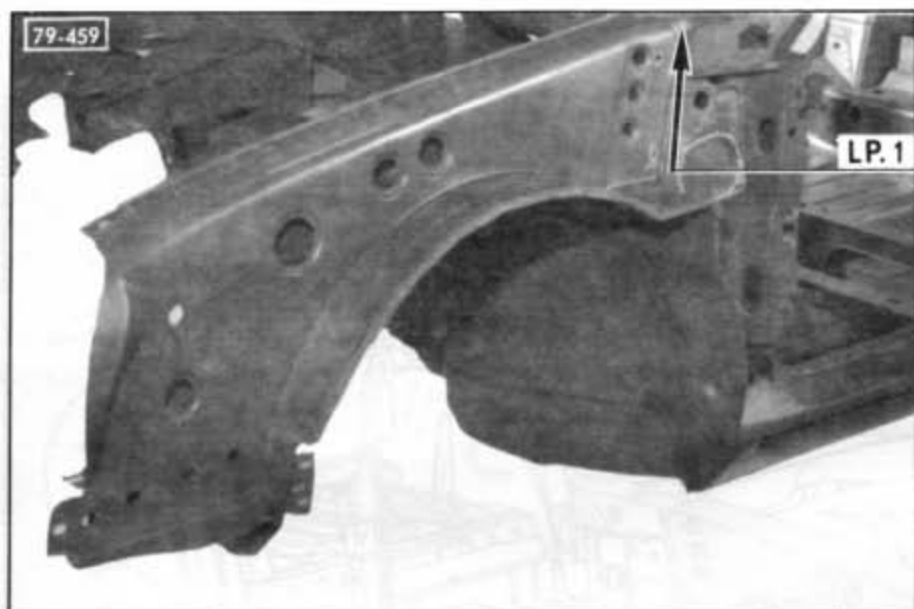


GX.80.2



79.676





REPLACEMENT OF A FRONT WHEEL ARCH

REMOVAL

1. Remove front wheel arch :

Drill and break the spot-welds, following lines :

- LP. 1,
- LP. 2 (left-hand side)
- LP. 3,

and points :

- P. 1,
- P. 2,
- P. 3 } (left-hand side)
- P. 4 }
- P. 5 (right-hand side)

2. Disengage front wheel arch.

PREPARATION

3. Prepare the previously separated welding seams:

Reshape the panels if necessary

Scour the weld zones on body shell and new components.

Apply a conductive priming coat on the inner face of the edges to be welded by using a spot-welding head.

FITTING

4. Position the new wheel arch on body shell :a) **With check of body shell on « CELETTE » body jig :**

- Fasten the wheel arch to bracket **A** (See operation GX. 800-0)
- Hold the rear of the part with the panel clamps
- Check the spacing of the wheel arches by means of template 2645-T, taken between points « a » and « b ».

b) **Without check of body shell onto body jig :**

- Line up template 2645-T, taken between spots « a » and « b »
- Adjust the wheel arch by means of level 2641-T placed on the face **F1** of each arch.
- Check the length of the diagonals :
(L = L1)

5. Weld wheel arch :

a) Spot weld, following lines :

- LP. 1
- LP. 2 (left-hand side)
- LP. 3

and points :

- P. 1
- P. 2
- P. 3 (left-hand side)
- P. 5 (right-hand side)

b) Oxyacetylene « plug » weld (MIG) following points :

- P. 4

6. Finish off body shell seal-tightness and protection. (See Operation GX. 800-00)**7. Paint.****8. Fit and adjust the previously removed elements**

RECOMMENDATION

This operation does not require checking the body shell on the body jig

PRELIMINARY REMOVALS

- front door,
 - front wing,
 - front door check strap
 - rebate switch,
 - front door sealing joint,
 - front pillar interior trim.
- } (*side involved*)

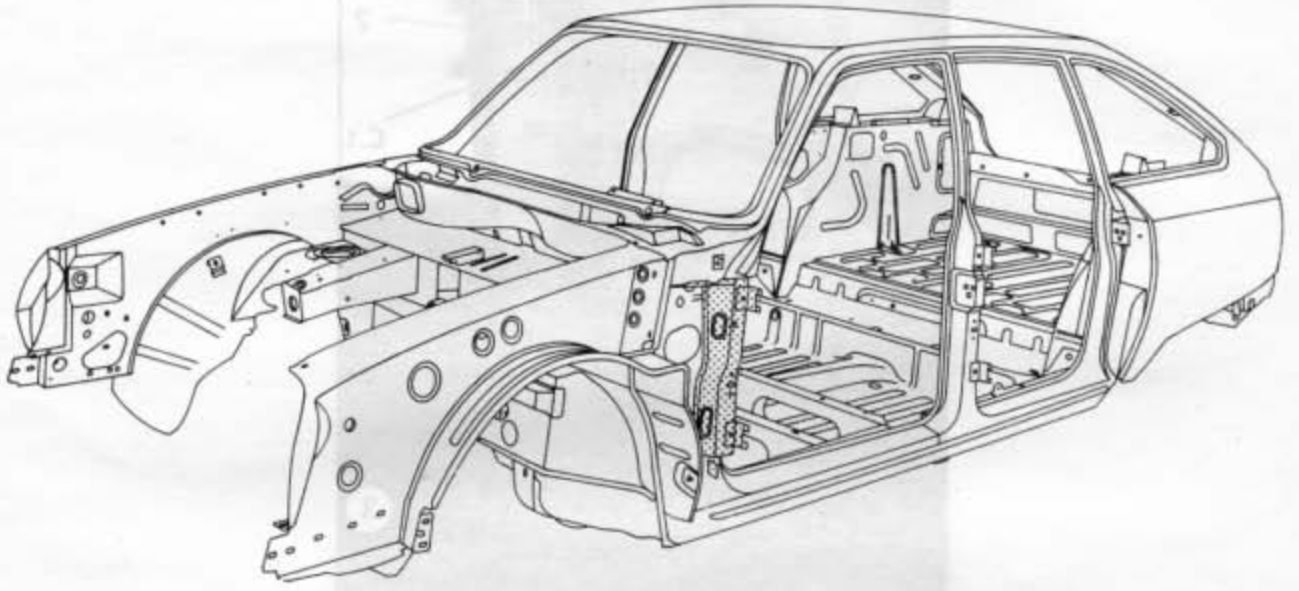
Protect the instrument panel, front seat and carpet with a tarpaulin.

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- « MIG » welding set
- Panel clamps

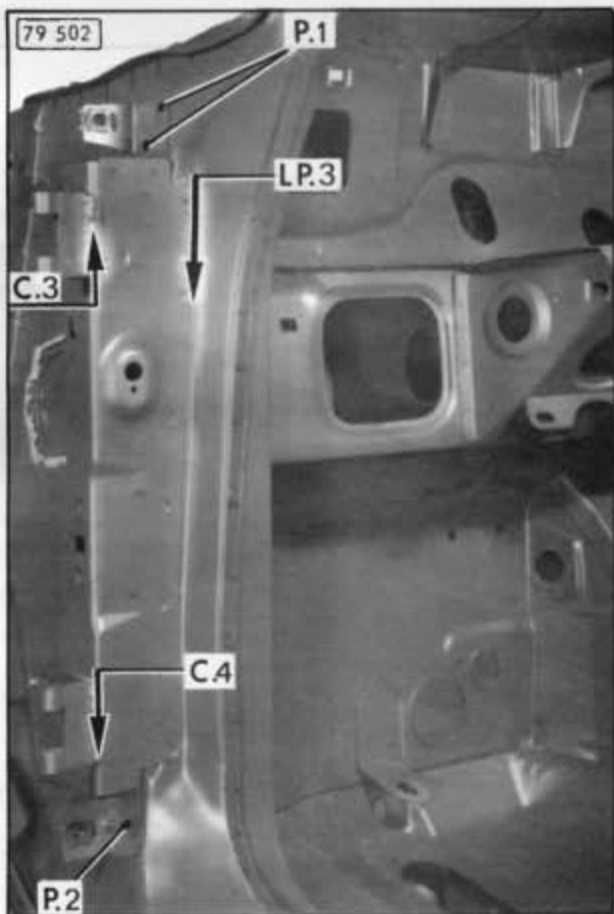
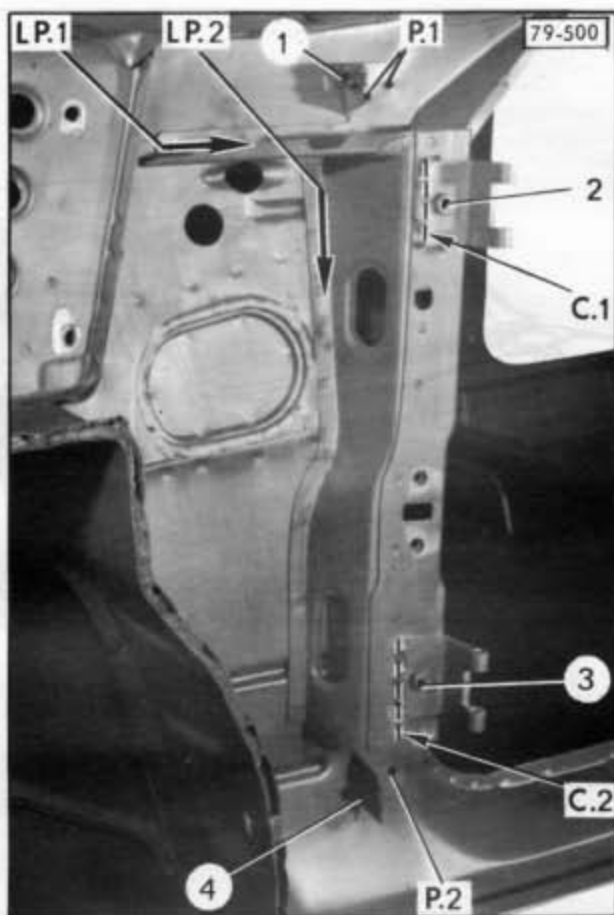


GX.80-2



79-1220





REPLACEMENT OF A BODY SHELL FRONT PILLAR**REMOVAL****1. Remove body shell front pillar :**

Mark front wing fixing lugs (1) and (4) with a traced line.

Drill and break the spot-welds, following lines :

- LP. 1,

- LP. 2,

- LP. 3,

and points :

- P. 1,

- P. 2.

Remove the body shell front pillar.

PREPARATION**2. Prepare the previously separated welding seams.**

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive priming coat on the inner face of all edges to be welded.

FITTING**3. Fit front pillar :**

Put the front pillar into place and position it in relation to the front wing fastening lugs (see outlines (1) and (4).

Temporarily tack the pillar and line up the front door in its frame using it as template (modify the position of the pillar if necessary).

« Plug » weld (MIG) following lines :

- LP. 1,

- LP. 2,

- LP. 3,

and points :

- P. 1,

- P. 2.

4. Fit and adjust the front door :

Fasten the hinges with screws (2) and (3).

Fit and adjust the door and line up the wing (check clearances).

Weld the front door hinges with a « MIG » unit, following beads :

- C. 1,

- C. 2,

- C. 3,

- C. 4.

5. Remove the front door (by its hinge pins).**6. Finish off the body shell seal-tightness and protection.****7. Paint.****8. Fit and adjust the previously removed elements.**

OPERATION
4-518 J2

RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

- trim and seat belt on centre pillar,
 - rear door and sealing joint,
 - front door striking plate
 - front seat,
 - rear bench seat.
- } (*side-involved*),

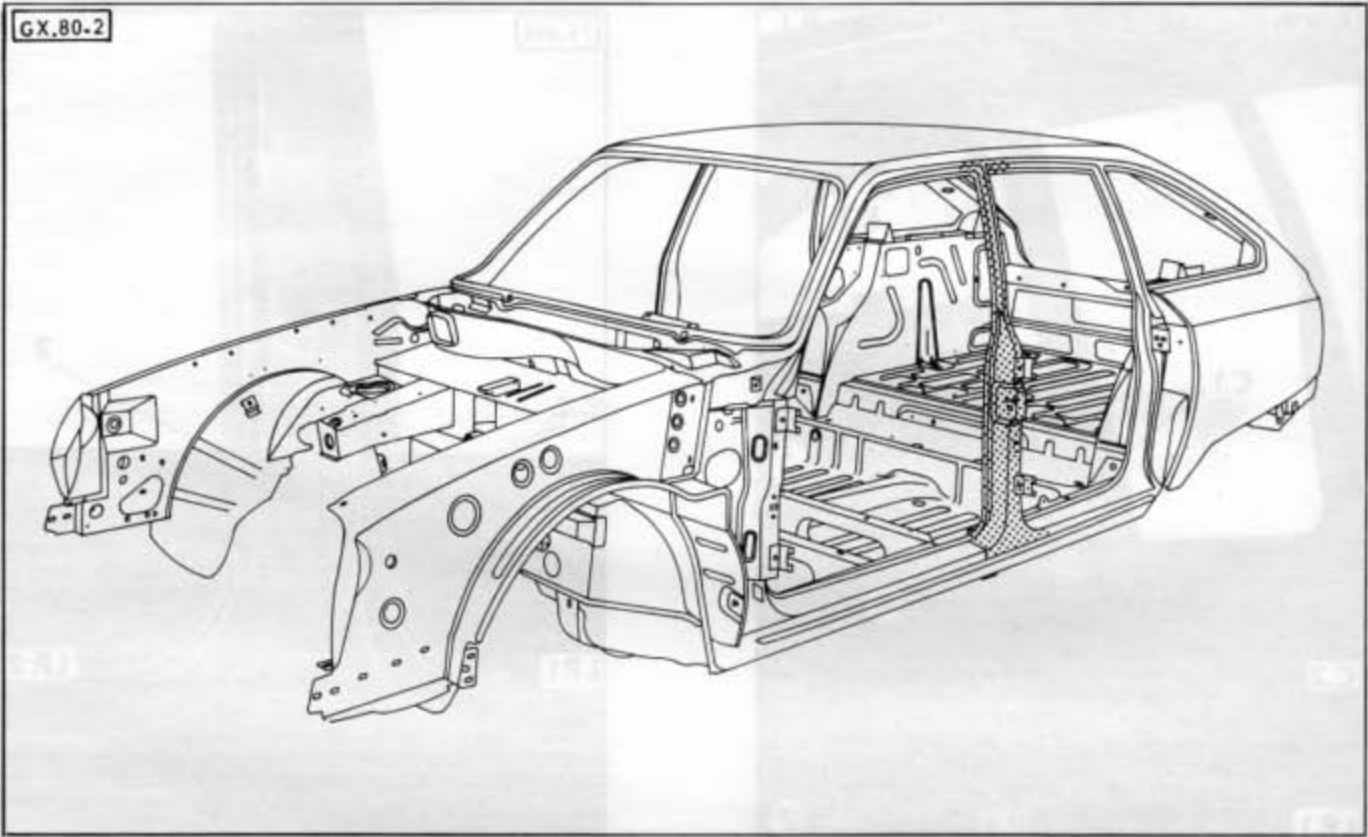
Protect the passenger compartment and the front door with a tarpaulin.

TOOLS REQUIRED

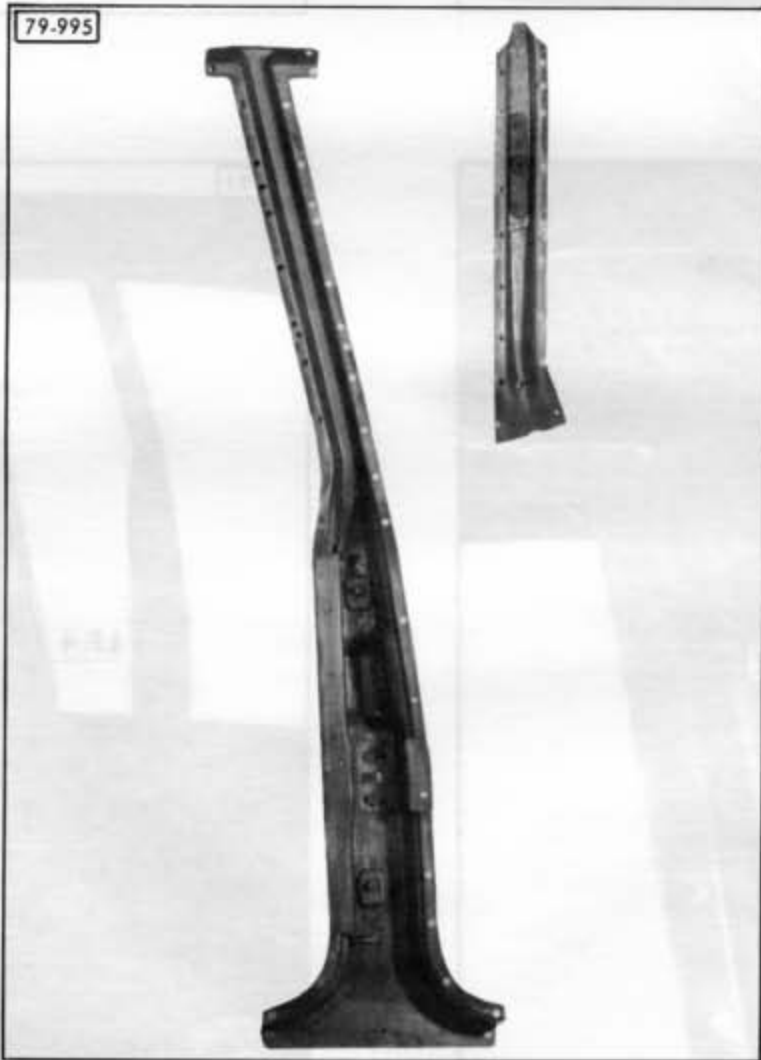
- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot welds extractor
- Oxyacetylene set
- « MIG » welding set
- Spot-welding head
- Panel clamps

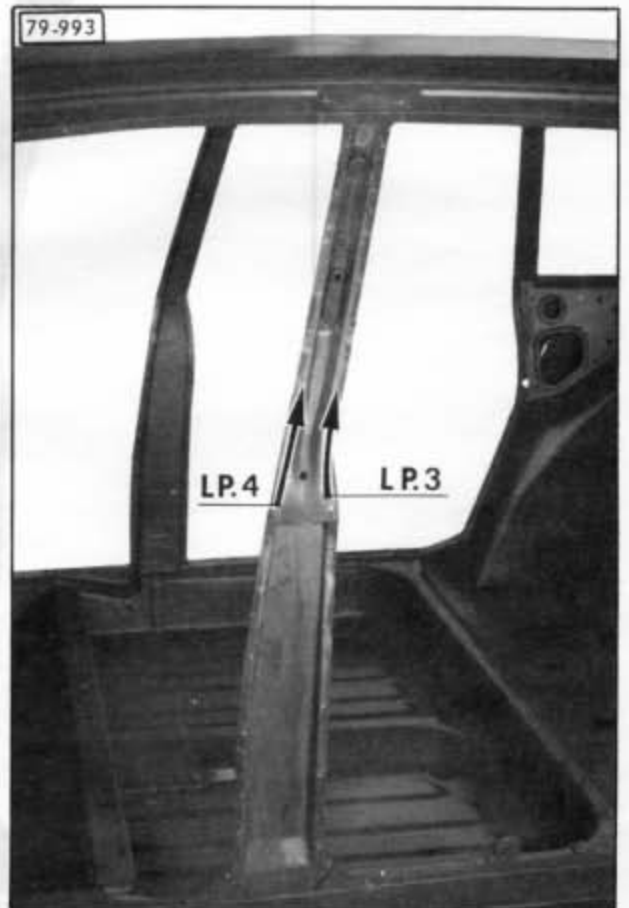
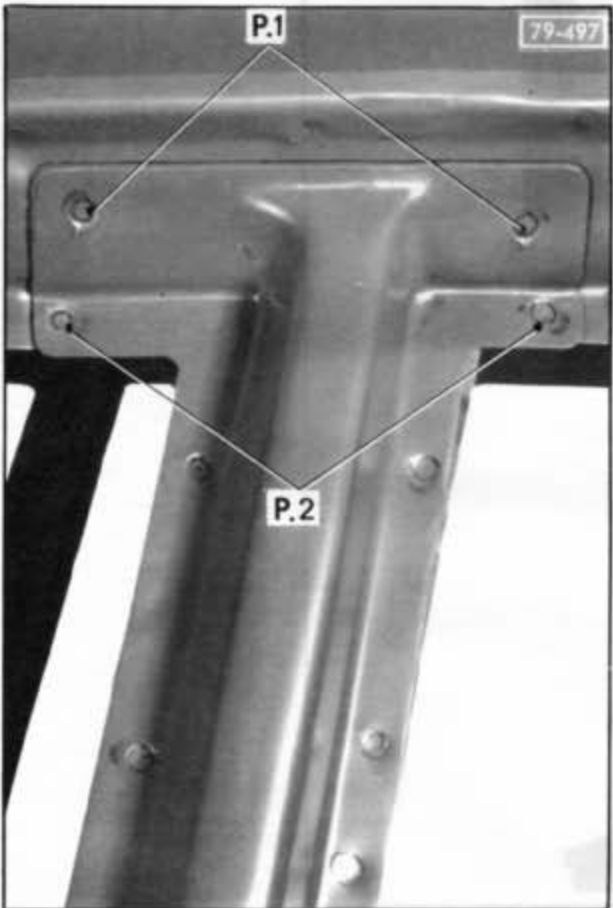
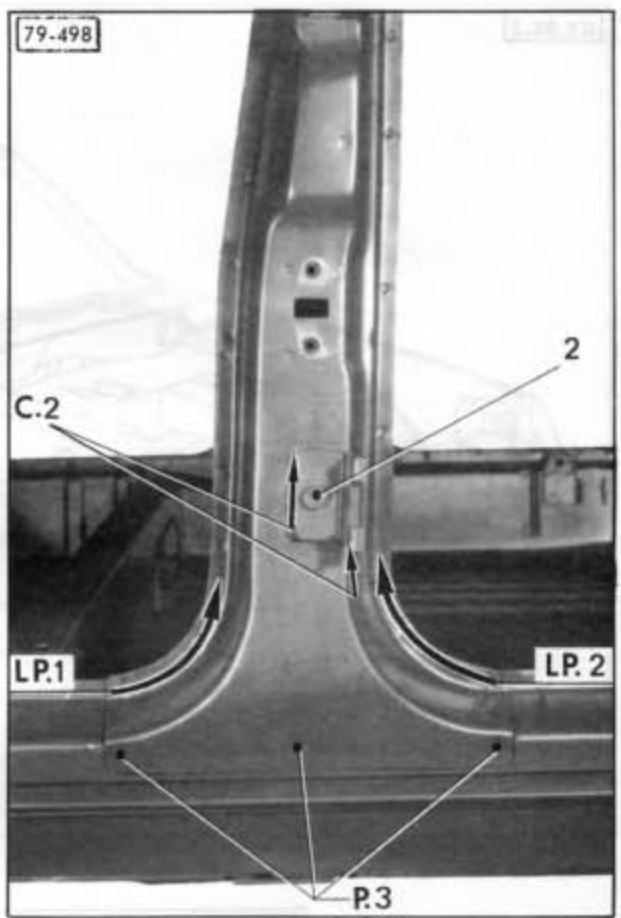
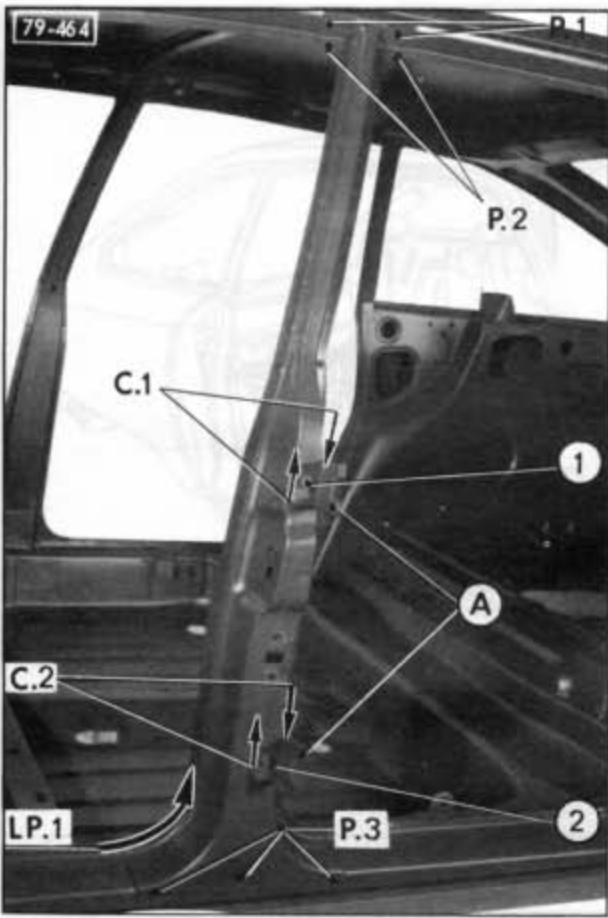


GX.80-2



79.995





REPLACEMENT OF A CENTRE PILLAR**REMOVAL****1. Remove centre pillar :**

Drill and break the spot-welds, following lines :

- LP. 1
- LP. 2

and points :

- P. 1
- P. 2
- P. 3.

Remove the centre pillar.

2. Remove side panel stiffener .

Drill and break the spot-welds, following lines :

- LP. 3,
- LP. 4.

Remove the side panel stiffener.

PREPARATION**3. Prepare the previously separated welding seams.**

Reshape the panels if necessary.

Scour the weld zones on shell body and new components.

Apply a conductive primer coat on the inner face of all the edges to be spot welded.

Drill to dia. = 6 mm in the places of points P. 1 and P. 3 to carry out plug welds.

FITTING**4. Fit centre pillar :**

Position the centre pillar and hold it by means of panel clamps.

Spot weld, following lines :

- LP. 1,
- LP. 2,

and points :

- P. 2.

Carry out « PLUG » welds using a « MIG » welding unit, following :

- P. 1,
- P. 3.

5. Fit and adjust rear door :

Equip the rear door with hinges **A**.

Fit and fasten the door with screws (1) and (2).

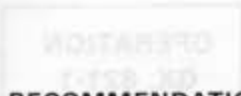
Fit the front door striker plate.

Adjust all the elements of the side involved.

Weld the hinges, (« MIG » weld beads, following C. 1 and C. 2).

Remove the rear door and the front door striker plate.

6. Grind and surface the plug welds.**7. Finish off the body shell seal-tightness and protection.****8. Paint.****9. Fit and adjust the previously removed elements.**



RECOMMENDATION

This operation only requires checking the body shell on the body jig if :

- the inner face of the body shell side sill is distorted,
- distortions appear in the fastening zones for the rear axle elements.

It is important, in all cases, to make sure of this by checking the geometry of the vehicle.

PREPARATION (if need be) FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- bonnet,
- air manifold grille,
- side doors,
- side doors striker plates,
- front wing,
- front and rear seat belts
- door check straps,
- rear quarter glass,
- scuttle side trim,
- quarter panel centre pillar and rear wheel arch trim,
- front seat,
- rear bench seat,
- windscreen glass,
- dashboard,
- drip moulding embellishment section.

} (side involved)

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot weld cutter
- Oxyacetylene set
- « MIG » welding set
- Spot-welding head
- Panel clamps

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig

ENS. 158-000 : Body shell checking equipment

ENS. 158-008 : Front wheel arches support

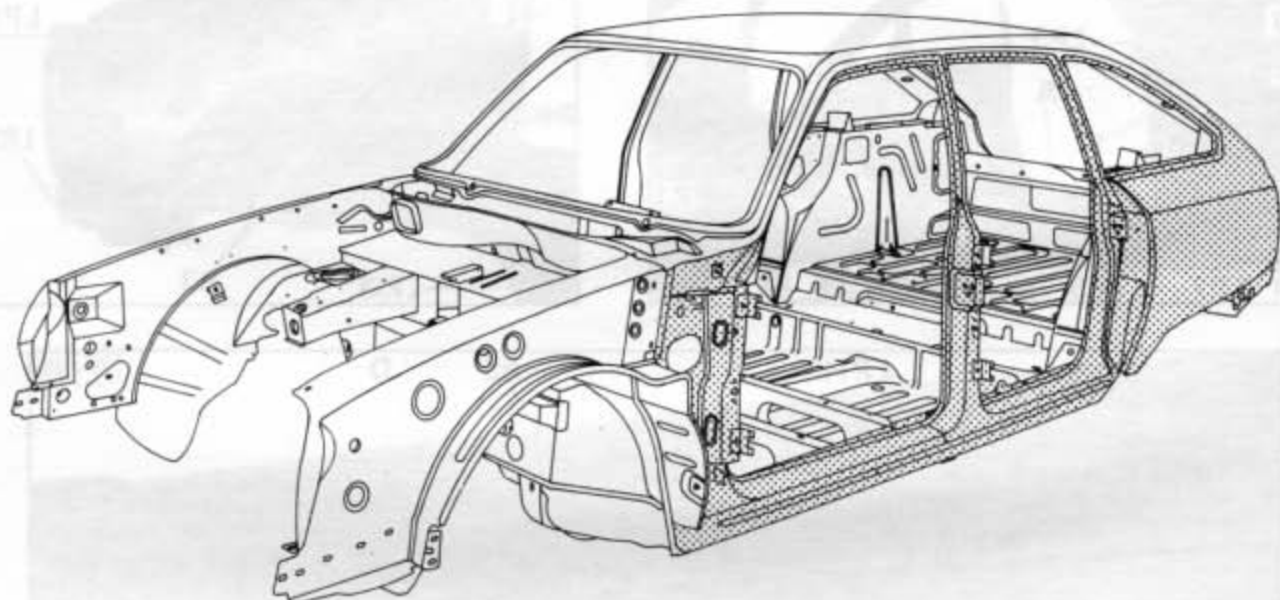
or

- 2600-T : « FENWICK » body jig

- 2628-T : Checking equipment for « GX » vehicle.



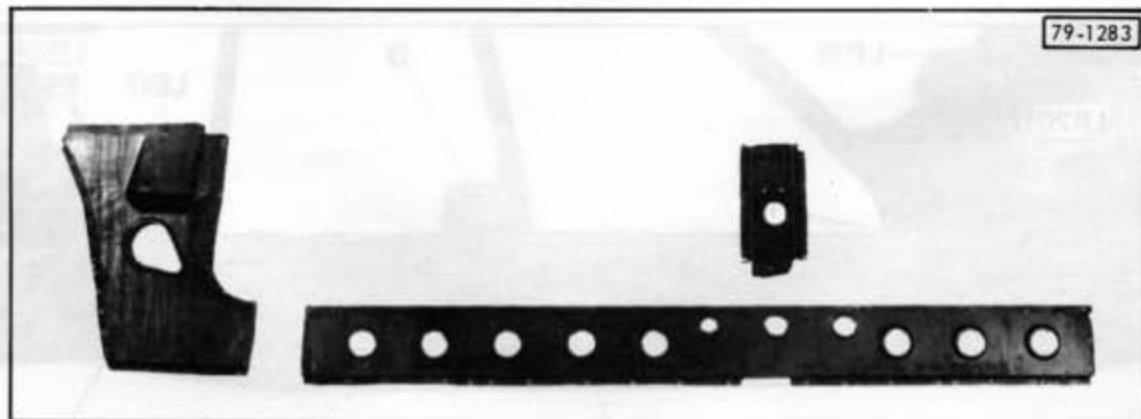
GX. 80-2

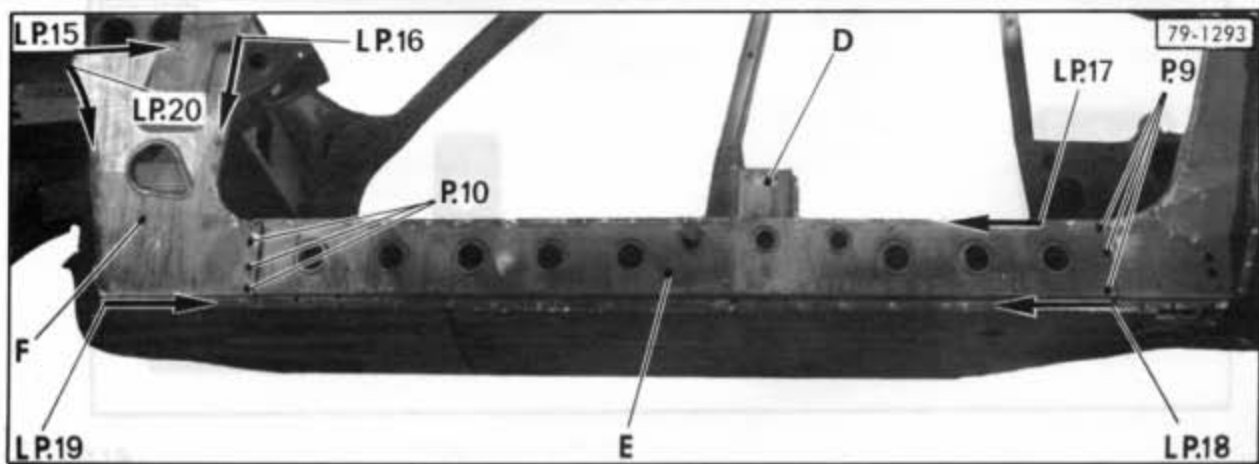
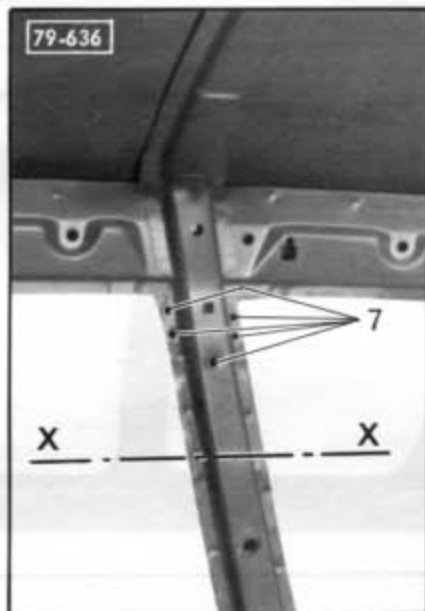
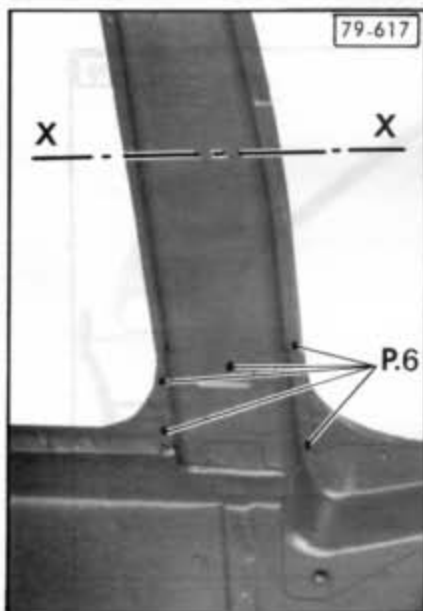
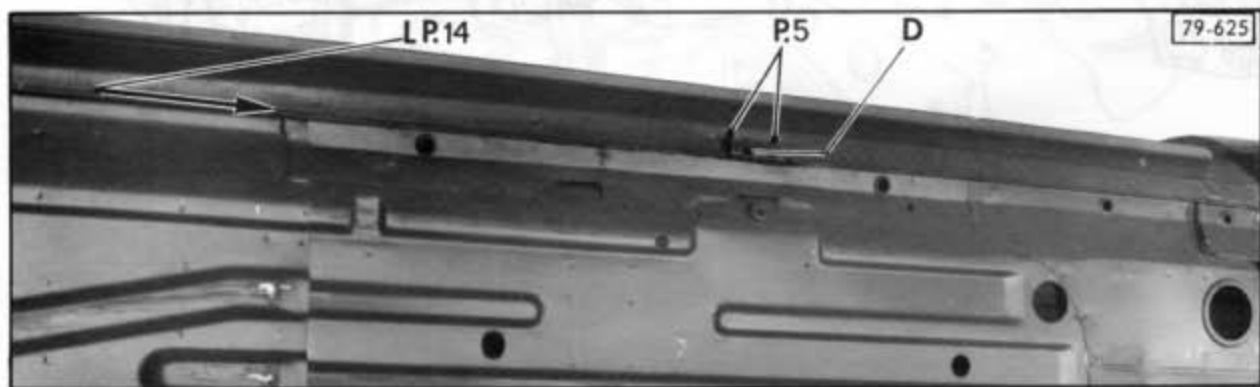
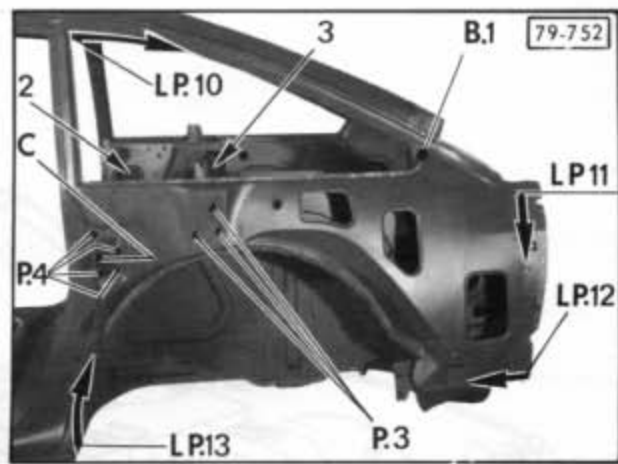
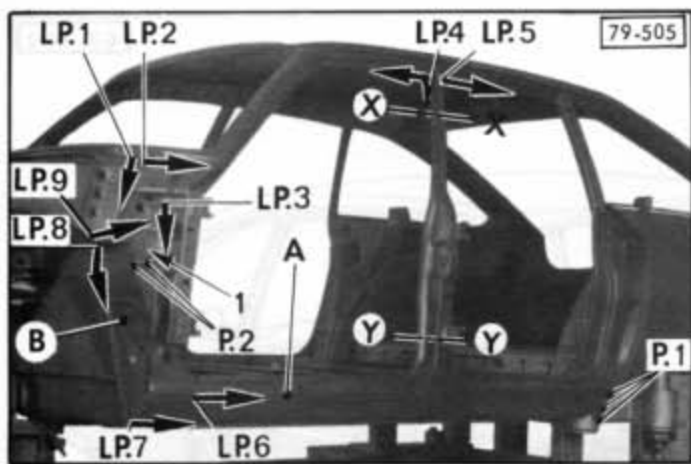


79-998



79-1283





REPLACEMENT OF A SIDE PANEL, COMPLETE

REMOVAL

- 1. Remove rear wing :**
(See Operation GX. 824-1)
- 2. Remove side panel :**
Drill and break the spot-welds, following lines :
- LP. 4 (front door rebate from X-X to Y-Y)
- LP. 5 (rear door rebate from X-X to Y-Y)
- LP. 10 (rear quarter glass panel, complete)
- LP. 1 - LP. 2 - LP. 3 - LP. 11 - LP. 12 - LP. 13,
- LP. 7 - LP. 14 - LP. 8 (at same time remove panel B)
- LP. 9,
and points :
- P. 1 - P. 2 - P. 3 - P. 6 - P. 7 - P. 5.
(fold back jack support lug D)
Eliminate brazed spot B. 1.
Remove side panel.
- 3. Remove side sill lining E (if necessary) :**
Drill and break the spot-welds, following lines :
- LP. 17 and LP. 18,
and points :
- P. 9 and P. 10.
Remove side sill lining E.
- 4. Remove front pillar lining F (if necessary) :**
Drill and break the spot-welds, following lines :
- LP. 16 - LP. 19 - LP. 20 and LP. 15,
and points :
- P. 10 (if side sill lining E has not been removed),
Remove front pillar lining F.
- 5. Remove jack support panel D (if necessary) :**
Drill and break the spot-welds, following points P. 8.
Remove jack support panel D.

PREPARATION

- 6. Fit and fasten the body shell to the body jig (if necessary).**
Jack up the body shell (if necessary).
- 7. Prepare the previously separated welding seams.**
Reshape the panels if necessary.
Scour the weld zones on body shell and new components.
Apply a conductive primer coat on the inner face of all the edges to be spot-welded.
Spot-weld body shell bottom section A on the new side panel, following LP. 6.

- 8. Fit front pillar :**
(See Operation GX. 812-1)
- 9. Fit centre pillar :**
(See Operation GX. 812-4)

FITTING

- 10. Fit jack support plate D (if it has been removed) :**
Put the jack support plate into place, centre it in relation to the side panel) and hold it with the panel clamps.
Spot-weld, following points P. 8.
- 11. Fit side sill lining E and front pillar lining F (if they have been removed).**
Join the two linings by points P. 10.
Put the linings into place and hold them with the panel clamps.
Spot-weld, following lines :
- LP. 15 - LP. 16 - LP. 17 - LP. 18 - LP. 19 and LP. 20.
Oxyacetylene « plug » weld (MIG) following points P. 9.
- 12. Fit side panel :**
Position the side panel on the body shell and hold it with the panel clamps.
(Check the side door frames using the doors as template).
Weld the panel :
a) Spot-weld, following lines :
- LP. 1 - LP. 2 - LP. 4 - LP. 5 - LP. 7 - LP. 8 (at the same time weld protection panel B) - LP. 10 - LP. 11 - LP. 12 - LP. 13 and LP. 9 (passing through opening (1)),
and points :
- P. 1 - P. 6 - P. 7 - P. 2 (passing through opening (1) and P. 3 (passing through opening (3)).
b) Oxyacetylene « plug » weld (MIG), following lines:
- LP. 3 - LP. 8 and LP. 14,
and points :
- P. 5 (fold back jack support D).
c) Make a brazed spot following B. 1.
- 13. Fit rear striker plate support C :**
Line up the door and adjust the striker plate supports, hold it in place and weld it, following points :
- P. 4 (to opening (2)).
- 14. Fit rear wing :**
(See Operation GX. 824-1)
- 15. Finish off body shell seal-tightness and protection.**
- 16. Paint.**
- 17. Fit and adjust the previously removed elements.**

OPERATION

RECOMMENDATION

This operation only requires checking the body shell on the body jig if :

- the inner face of the body shell side sill is distorted,
- distortions appear in the fastening zones for the rear axle elements.

It is important, in all cases, to make sure of this by checking the geometry of the vehicle.

PREPARATION (if need be) FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- bonnet,
- air manifold grille,
- side doors,
- side doors striker plates,
- front wing,
- front and rear seat belts
- door check straps,
- rear quarter glass,
- scuttle side trim,
- quarter panel, centre pillar and rear wheelarch trim,
- front seat,
- rear bench seat,
- tailgate,
- windscreen glass,
- headlining,
- dashboard,
- drip moulding embellishment section.

(side involved)

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot weld cutter
- Oxyacetylene set
- « MIG » welding set
- Spot-welding head
- Panel clamps

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig

ENS. 158-000 : Body shell checking equipment

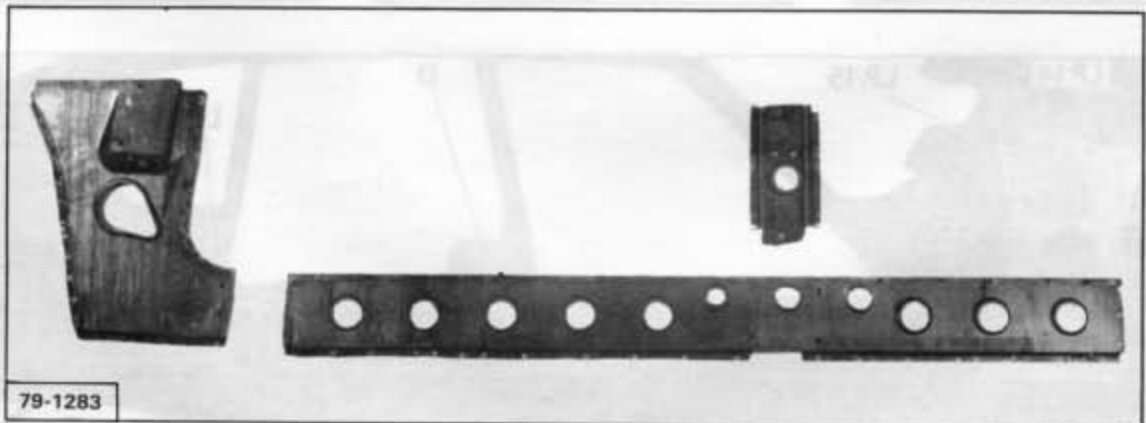
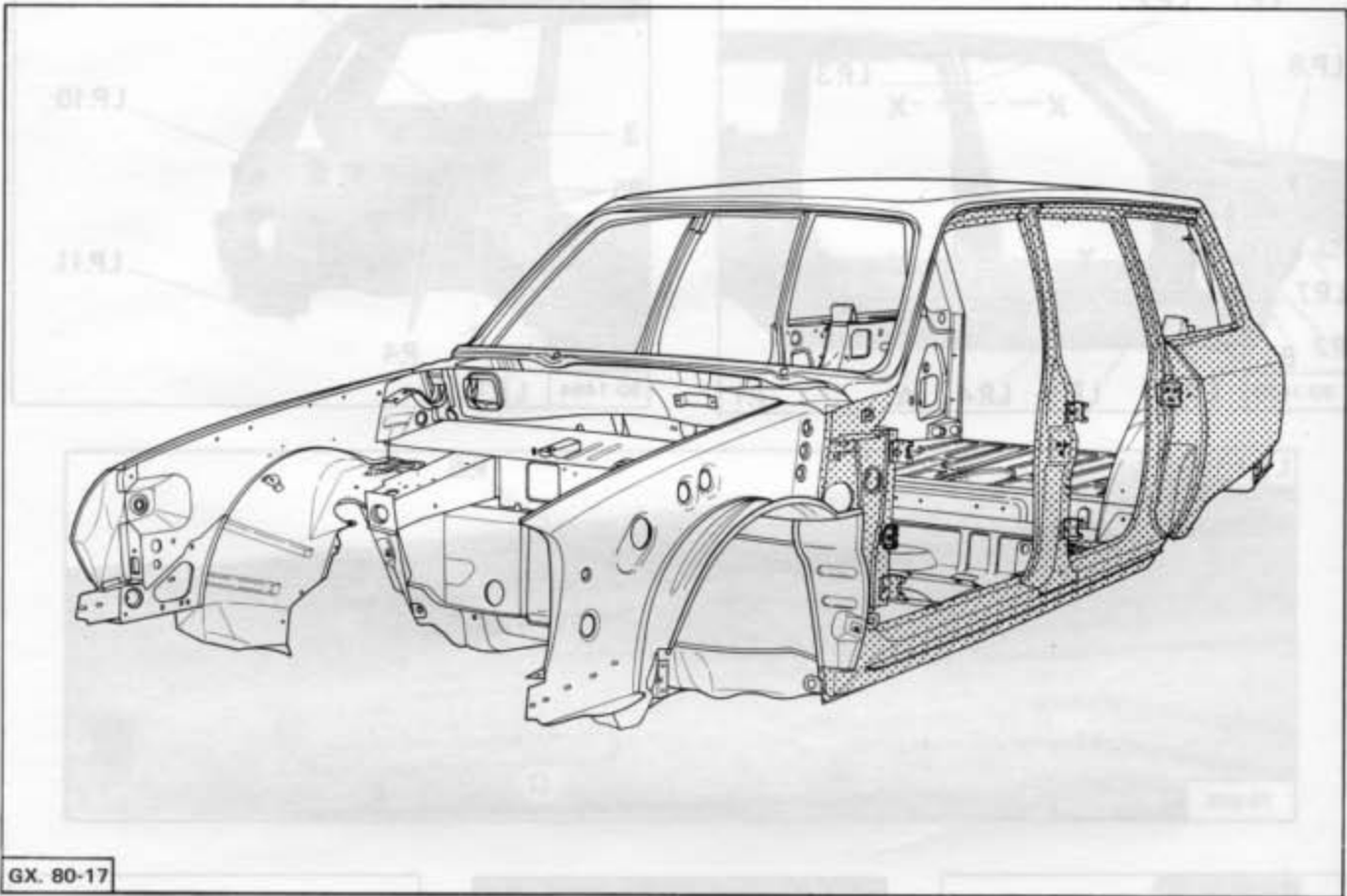
ENS. 158-008 : Front wheelarches support

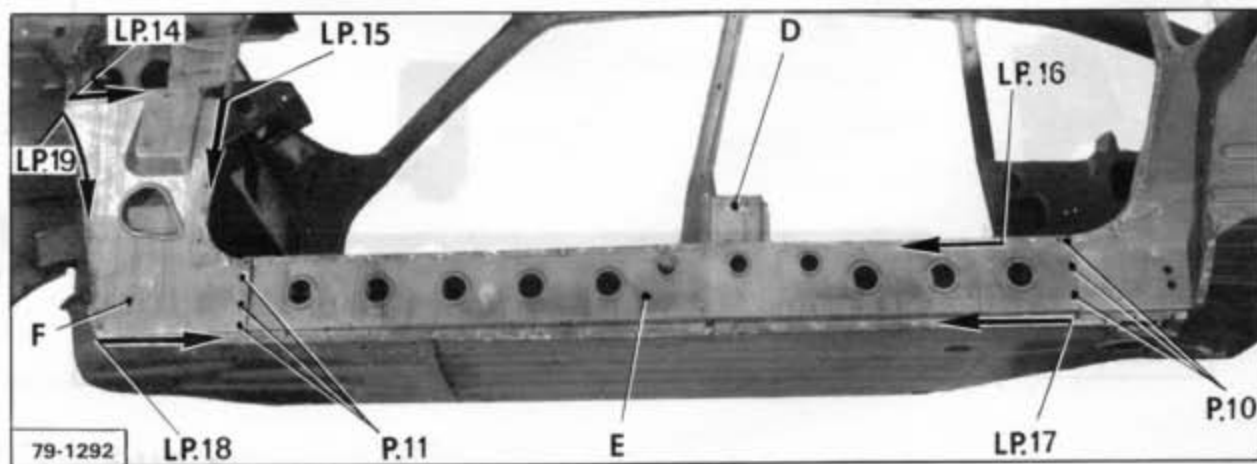
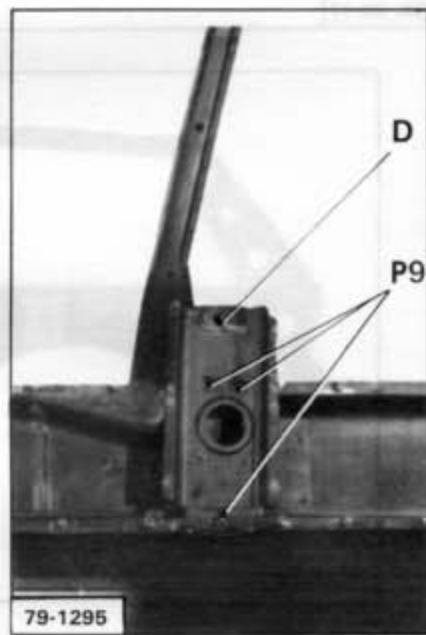
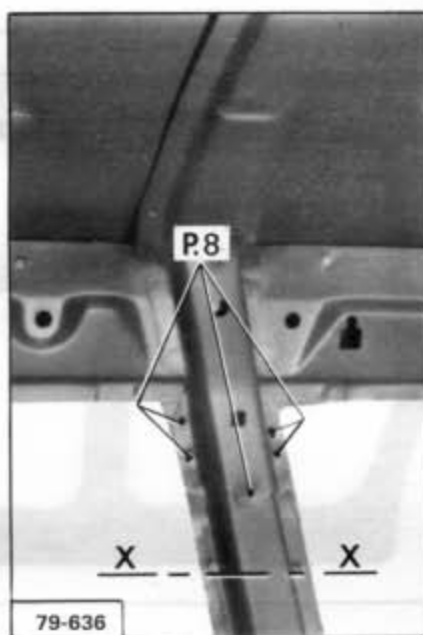
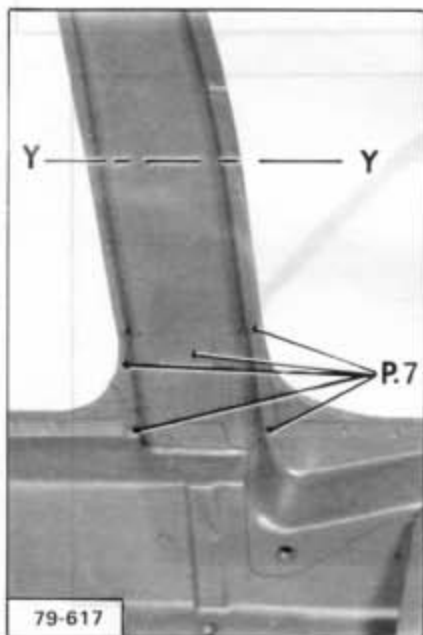
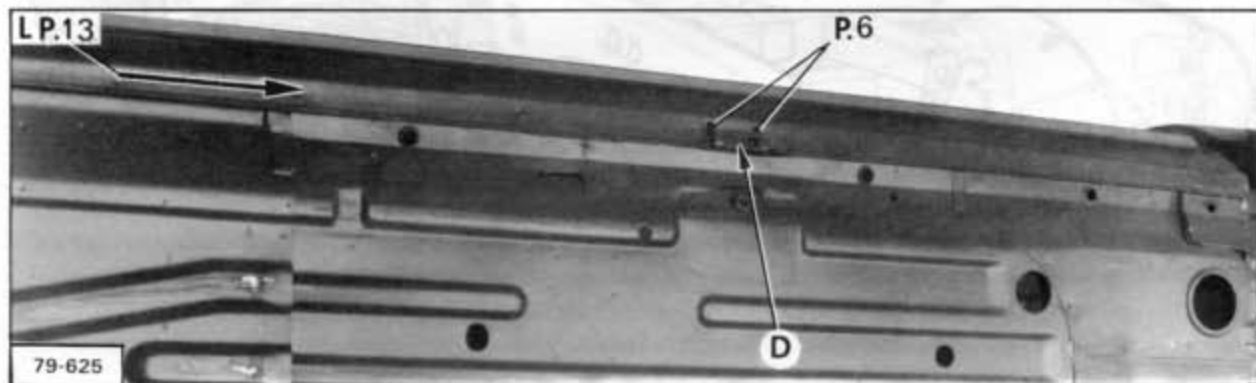
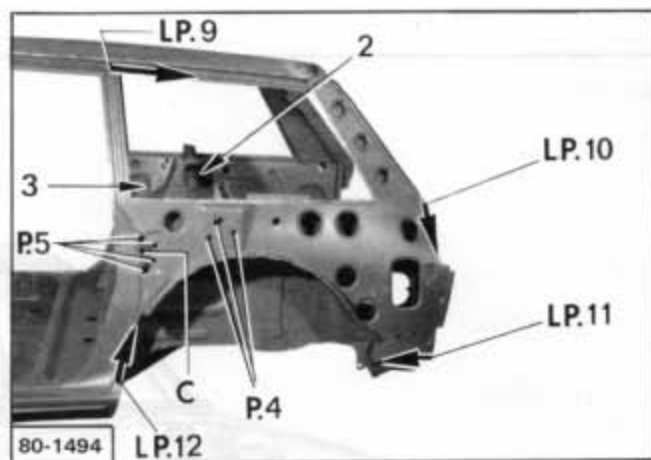
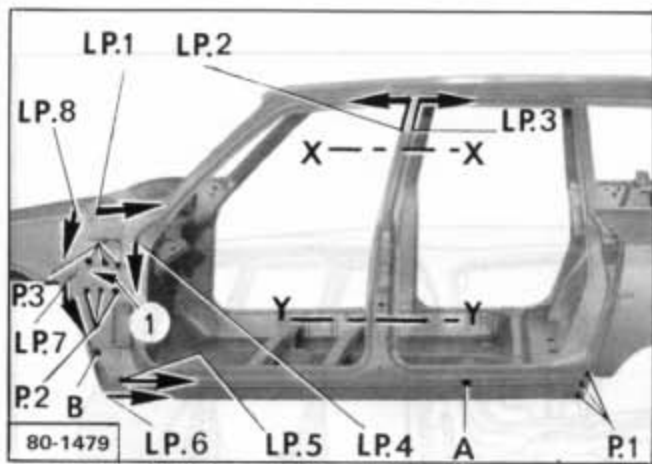
or

- 2600-T : « FENWICK » body jig

- 2628-T : Checking equipment for « GX » vehicle.

REPLACEMENT OF A SIDE PANEL COMPLETE





REPLACEMENT OF A SIDE PANEL, COMPLETE

REMOVAL

- 1. Remove rear wing :**
(See Operation GX. 824-1)
- 2. Remove side panel :**
Drill and break the spot-welds, following lines :
- LP. 2 (front door rebate from X-X to Y-Y)
- LP. 3 (rear door rebate from X-X to Y-Y)
- LP. 9 (rear quarter glass panel, complete)
- LP. 4 - LP. 6 - LP. 8 - LP. 1 - LP. 10 - LP. 11 - LP. 12 - LP. 13,
- LP. 7 (at same time remove panel B)
and points :
- P. 1 - P. 2 - P. 3 - P. 4 - P. 7 - P. 8,
- P. 6 (fold back jack support lug D)
Remove side panel.
- 3. Remove side sill lining E (if necessary) :**
Drill and break the spot-welds, following lines :
- LP. 16 and LP. 17,
and points :
- P. 10 and P. 11.
Remove side sill lining E.
- 4. Remove front pillar lining F (if necessary) :**
Drill and break the spot-welds, following lines :
- LP. 14 - LP. 15 - LP. 18 and LP. 19,
and points :
- P. 11 (if side sill lining E has not been removed).
Remove front pillar lining F.
- 5. Remove jack support panel D (if necessary) :**
Drill and break the spot-welds, following points P. 9.
Remove jack support panel D.

PREPARATION

- 6. Fit and fasten the body shell to the body jig (if necessary).**
Jack up the body shell (if necessary).
- 7. Prepare the previously separated welding seams.**
Reshape the panels if necessary.
Scour the weld zones on body shell and new components.
Apply a conductive primer coat on the inner face of all the edges to be spot-welded.
Spot-weld body shell bottom section A on the new side panel, following LP. 5.

- 8. Fit front pillar :**
(See Operation GX. 812-1)
- 9. Fit centre pillar :**
(See Operation GX. 812-4)

FITTING

- 10. Fit jack support plate D (if it has been removed) :**
Put the jack support plate into place, centre it in relation to the side panel) and hold it with the panel clamps. Spot-weld, following points P. 9.
- 11. Fit side sill lining E and front pillar lining F (if they have been removed).**
Join the two linings by points P. 11.
Put the linings into place and hold them with the panel clamps.
Spot-weld, following lines :
- LP. 16 - LP. 17 - LP. 18 - LP. 19 - LP. 15 and LP. 14.
Oxyacetylene « plug » weld (MIG) following points P. 10.
- 12. Fit side panel :**
Position the side panel on the body shell and hold it with the panel clamps.
(Check the side door frames using the doors as template).
Weld the panel :
a) Spot-weld, following lines :
- LP. 1 - LP. 2 - LP. 3 - LP. 9 - LP. 6 - LP. 8 (at the same time weld protection panel B) - LP. 10 - LP. 11 - LP. 12.
and points :
- P. 2 and P. 3 (passing through opening (1) P. 1, P. 7,
P. 8 and P. 4 (passing through opening (2)).
b) Oxyacetylene « plug » weld (MIG), following lines :
- LP. 4 - LP. 13,
and points :
- P. 6 (fold back jack support D).
- 13. Fit rear striker plate support C :**
Line up the door and adjust the striker plate supports, hold it in place and weld it, following points :
- P. 5 (through opening (3)).
- 14. Fit rear wing :**
(See Operation GXB. 824-1)
- 15. Finish off body shell seal-tightness and protection.**
- 16. Paint.**
- 17. Fit and adjust the previously removed elements.**



RECOMMENDATION

This operation only requires checking the body shell on the body jig if :

- the inner face of the body shell bottom sill is distorted,
- the vehicle geometry when checked is incorrect.

PREPARATION (if need be) FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- front door,
 - front wing,
 - front door check strap,
 - rebate switch,
 - windscreen pillar trim beading
 - centre pillar interior trim,
 - front door sealing joint,
 - drip moulding embellishment section,
 - front pillar side trim,
 - front seat,
 - dashboard,
 - windscreen,
- } (side involved)
- Protect the interior trim against flying sparks by means of a tarpaulin.

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Oxyacetylene station
- « MIG » welding set
- Spot-welding head
- Panel clamps

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig

ENS. 158-000 : Body shell checking equipment

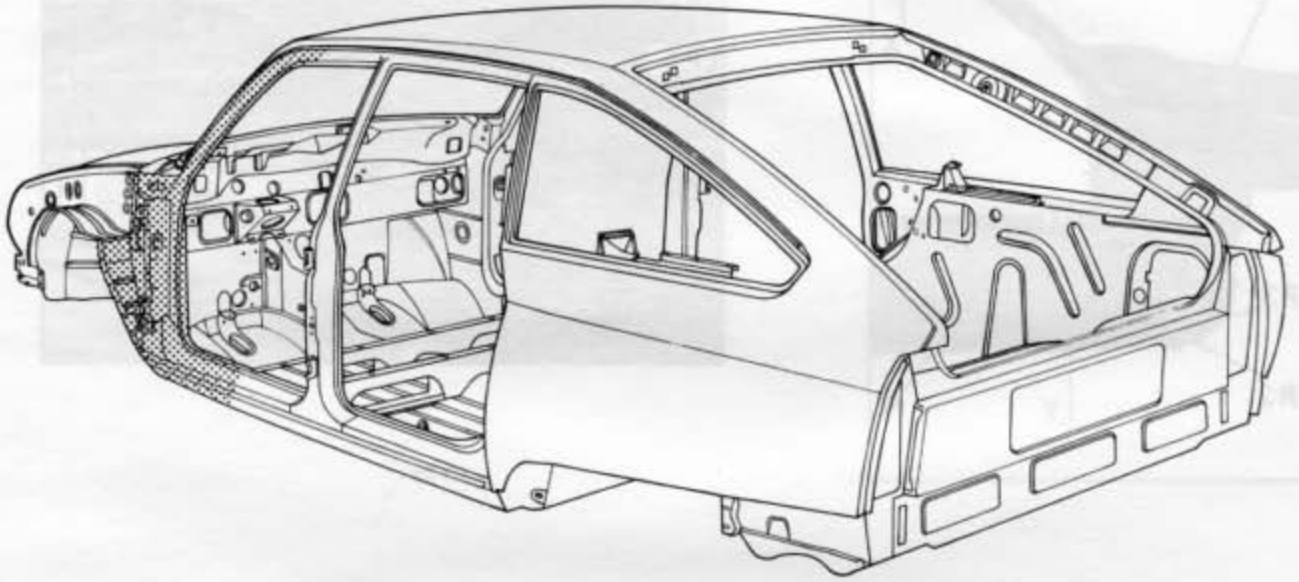
ENS. 158-008 : Front wheel arches support

or

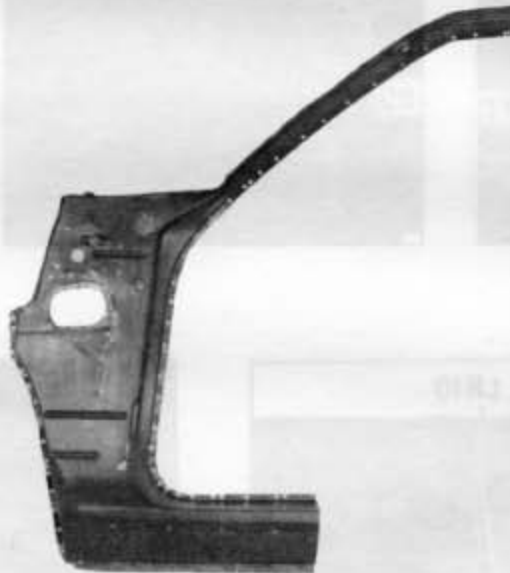
- 2600-T : « FENWICK » body jig

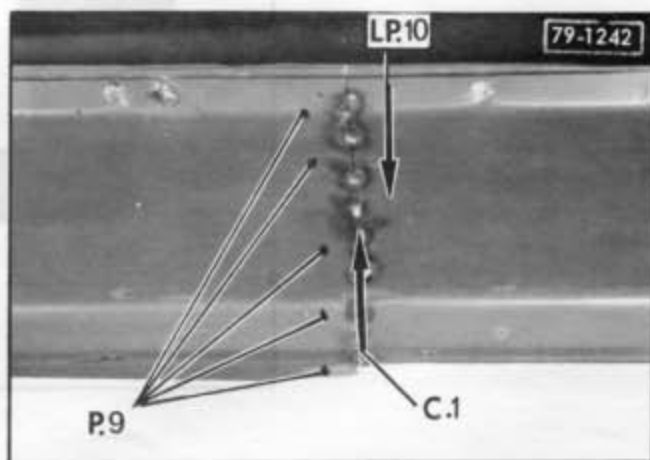
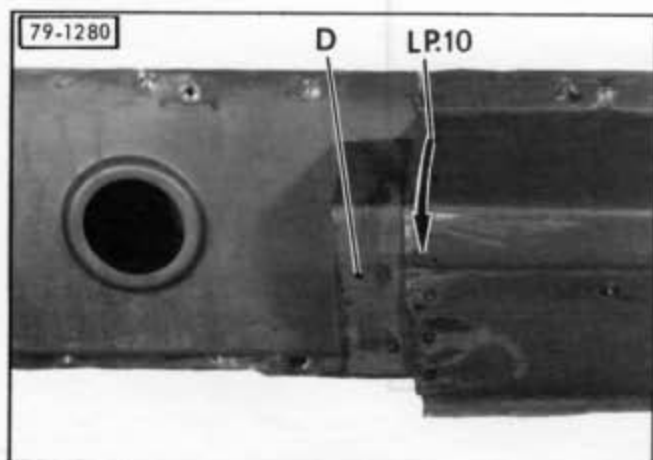
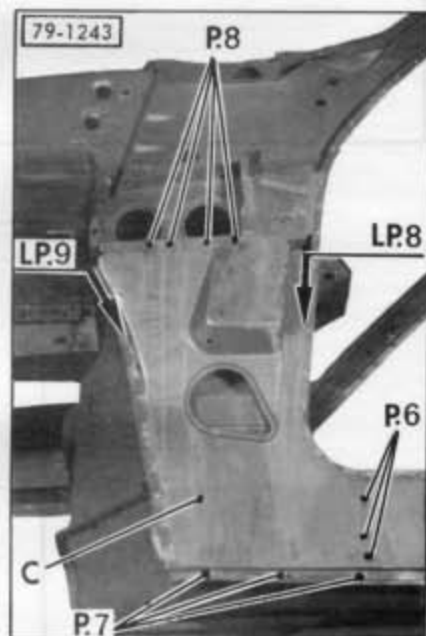
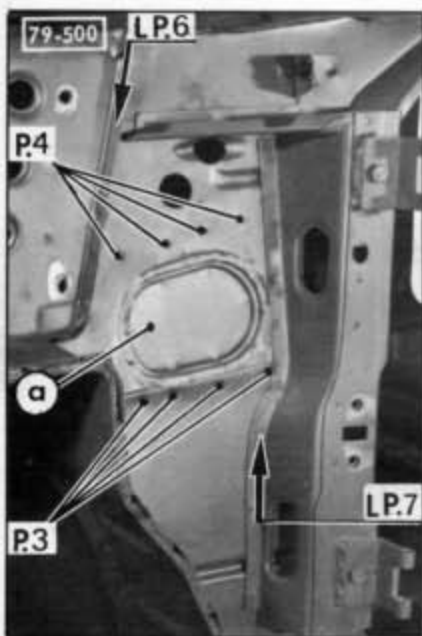
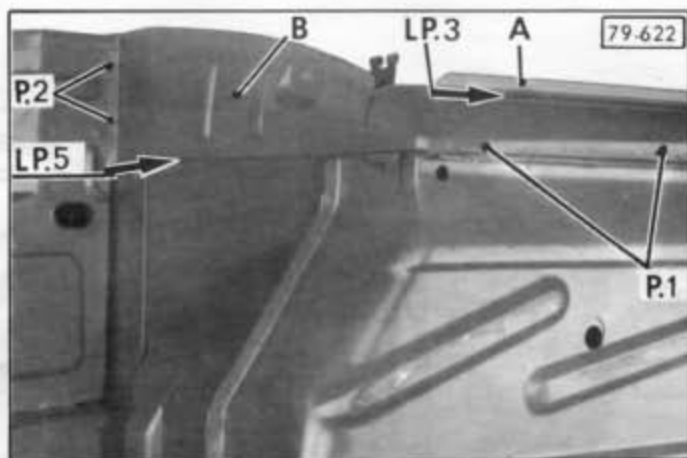
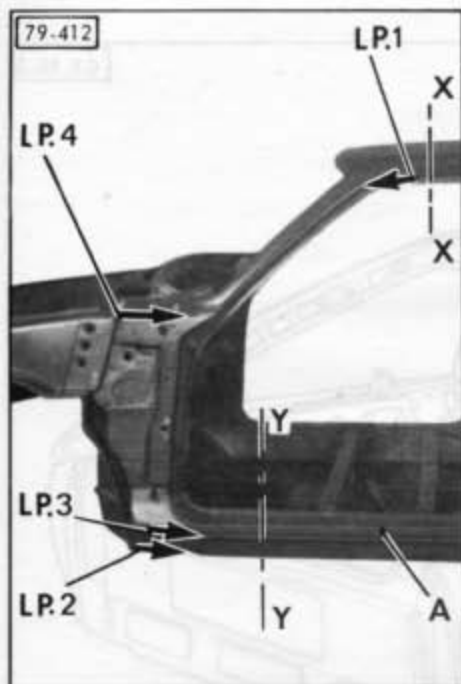
- 2628-T : Checking equipment for « GX » vehicle.

GX.80-3



79-1240





REPLACEMENT OF A SIDE PANEL FRONT PART

REMOVAL

1. Remove side panel front part :

Make temporary traces of sections **X-X** and **Y-Y** (set back slightly from the final cuts).

Drill and break the spot-welds, following lines :

- LP. 4, (break slightly beyond section **X-X**
- LP. 1, in order to enable a chisel to pass)
- LP. 3, (remove section **A**)
- LP. 2,
- LP. 5,
- LP. 6,
- LP. 7, (link with stiffener **C**)

Cut the panel according to the temporary traces **X-X** and **Y-Y** using a chisel and a saw and remove the front part of the side panel together with inner panel **B**.

2. Remove lining C from front pillar (if necessary) :

Drill and break the spot-welds, following lines :

- LP. 8,
 - LP. 9,
- and points :
- P. 6,
 - P. 7,
 - P. 8.

Remove the front pillar lining.

PREPARATION

3. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face off all the edges to be welded.

FITTING

4. Fit front pillar lining C :

Put lining **C** into place and hold it with the panel clamps.

Spot-weld, following lines :

- LP. 8,
 - LP. 9,
- and points :
- P. 6,
 - P. 7,
 - P. 8.

5. Prepare side panel :

Put the front part of the side panel in place (overlapping over sections **X-X** and **Y-Y**). Hold it with panel clamps.

Line up and adjust the door in its frame.

Reposition the panel if necessary.

Trace the final sections **X-X** and **Y-Y** on the body shell and recut according to these outlines.

6. Prepare a stiffener D, 60 mm long for the section Y-Y.

Position it and spot-weld, following line LP. 10, on the remaining part of the side panel.

7. Fit the new side panel with inner panel B :

Put the new panel into place and hold it with panel clamps.

Check the front door frame.

Weld :

a) Spot-weld following lines :

- LP. 1 - LP. 2 - LP. 4 - LP. 5 - LP. 6,
- and points :
- P. 2 - P. 3 - P. 4

b) Oxyacetylene « plug » weld (MIG) following lines

and points :

- P. 1 - P. 9
- LP. 7 - P. 5 (link between interior stiffener **C** and side panel).

Carry out oxyacetylene weld beads **C. 1** following sections **X-X** and **Y-Y**.

Grind the welds and finish with solder (if necessary).

8. Fit side sill section A :

Put section **A** into place and oxyacetylene « plug » weld (MIG) following line LP. 3.

9. Fit body shell front pillar :

(See Operation GX. 812-1)

10. Fit blanking flange « a » on the side panel and apply sealing compound along its surround.

Finish off the body shell seal-tightness and protection.

11. Paint.**12. Fit and adjust the previously removed elements.**

OPERATION
TYPE 8XD

RECOMMENDATION

This operation only requires a check on the body jig if :

- the inner face of the body shell bottom side sill is distorted,
- there are distortions in the rear axle fastening nailing strips.

PREPARATION (if need be) FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- tailgate,
 - rear side door,
 - sealing joints of side door and tailgate,
 - rear quarter glass,
 - headlining rear part,
 - trim from quarter panel rear pillar and wheelarch,
 - rear bench seat,
 - lamp cluster and bumper section (*side involved*)
 - fuel filler pipe and air vent pipe (*R.H side*).
- } (*side involved*)

Protect the inner trim against flying sparks during welding.

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot welds extractor
- Oxyacetylene set
- Spot-welding head
- « MIG » welding unit
- Panel clamps.

SPECIAL TOOLS

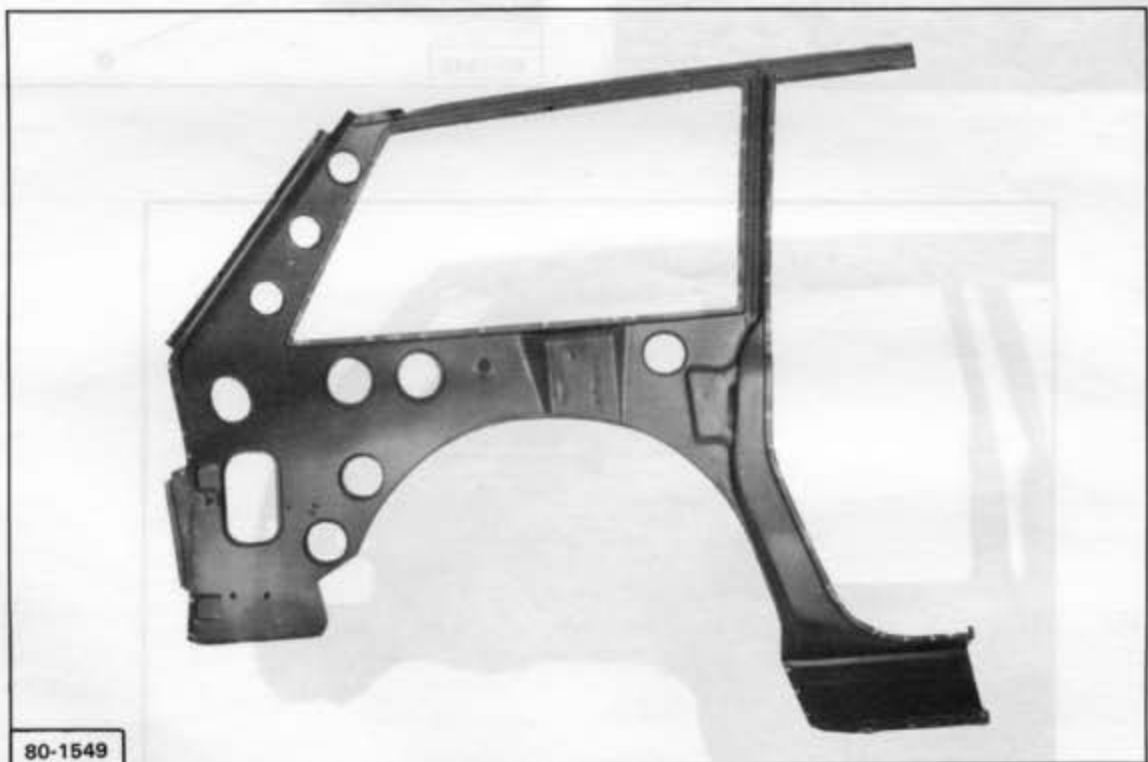
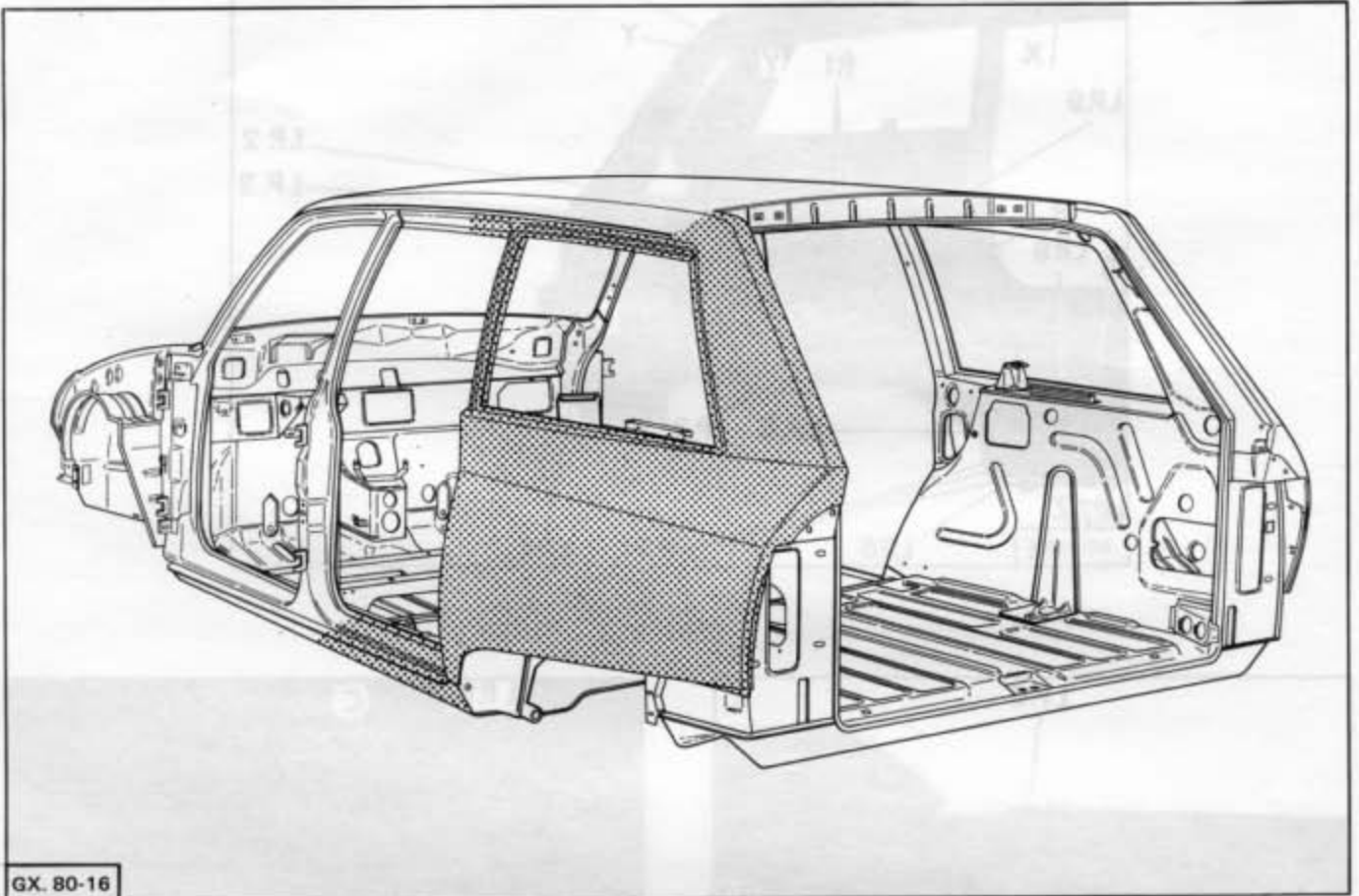
MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig.

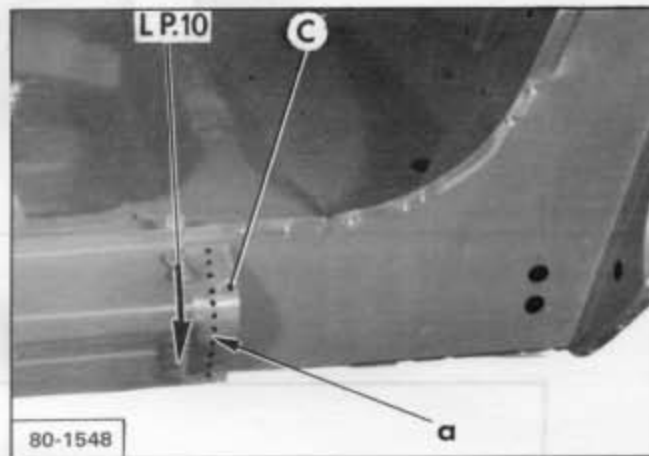
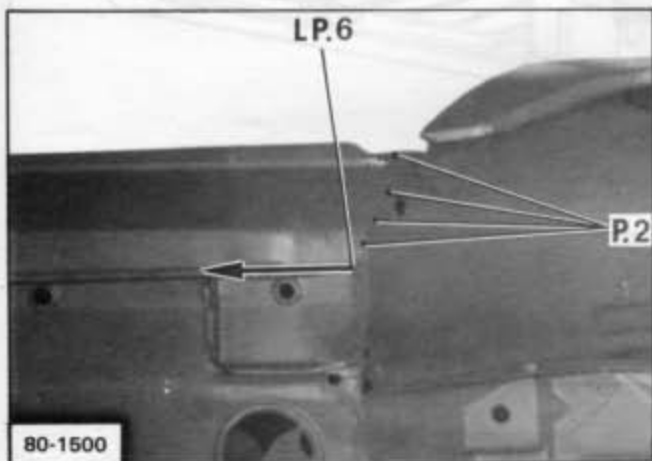
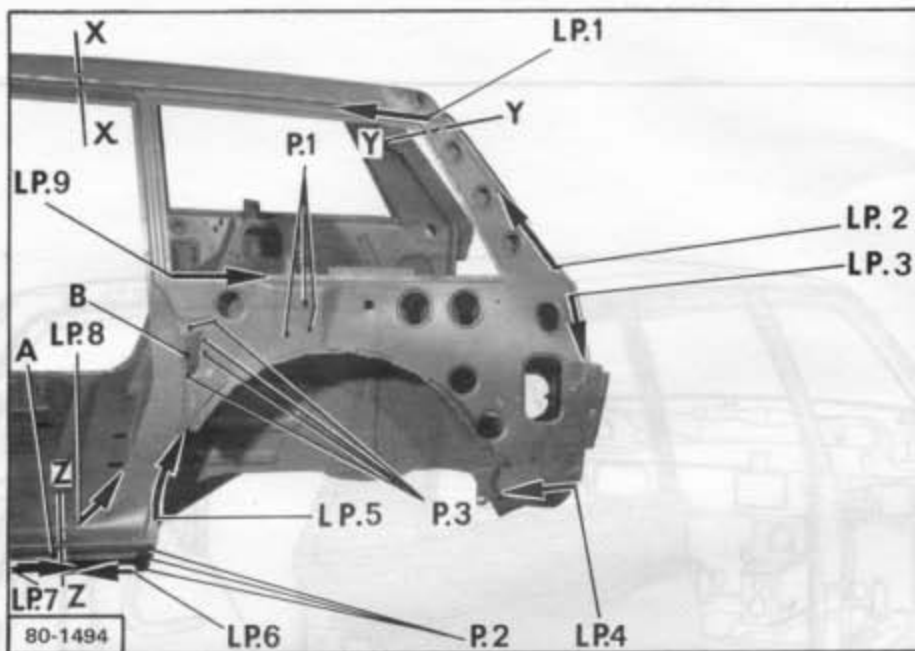
ENS. 158-000 : Body shell checking equipment

or

- 2600-T : « FENWICK » body jig
- 2628-T : Checking equipment for « GX » vehicles

REPAIRMENT ON A SIDE PANEL REAR PART





REPLACEMENT OF A SIDE PANEL REAR PART

REMOVAL

1. Remove rear wing :

(See Operation GXB. 824-1)

2. Remove body shell bottom section B :

Drill and break the spot-welds, following line : -LP. 7.

3. Remove side panel rear part :

Make temporary tracings of sections **X-X** and **Y-Y** (slightly set back from the final cuts)

a) Drill and break the spot-welds, following lines :

- LP. 9.
 - LP. 5.
 - LP. 2.
 - LP. 3.
 - LP. 4.
 - LP. 1 (up to **X-X**)
 - LP. 6 (up to **Z-Z**)
 - LP. 8 (from **Z-Z** to **X-X**),
- and points :
- P. 1.
 - P. 2.

Cut the panel according to the temporary outlines **Y-Y** (with saw) and **X-X** (with shears).

NOTE : Cut along section **Y-Y** if the roof is not distorted.

PREPARATION

4. Check body shell on body jig and realign (if necessary) :

(See Operation GX. 800-0)

5. Prepare new part :

Line up the rear part of the new side panel and hold it with panel clamps.

Check the tailgate frame and trace on the body shell the final sections **X-X** and **Y-Y**.

Mark the position of tailgate striker plate support **B**. Remove the rear part of the panel.

Weld striker plate support **B** onto the new part, following points :

- P. 3.

Cut according to final outlines **X-X** and **Y-Y**.

6. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all edges to be spot welded.

FITTING

7. Prepare a stiffener C :

Prepare a stiffener **C** (length = 60 mm) for section **Z-Z**.

Position the stiffener on the body and spot weld along line : LP. 10.

8. Fit rear part of side panel :

Line up the rear part of the side panel and hold it in place with panel clamps.

a) Spot weld, following lines :

- LP. 1.
 - LP. 8.
 - LP. 9.
 - LP. 2.
 - LP. 3.
 - LP. 4.
 - LP. 5.
 - LP. 6.
- and points :
- P. 1.
 - P. 2.

b) Oxyacetylene "plug" weld (MIG) the body shell bottom side sill at « a » on stiffener **C** (in parallel with line : LP. 10).

Make oxyacetylene weld beads, following **X-X** and **Z-Z**.

9. Fit body shell bottom section A and weld by means of "plug" spot welds (MIG) following line :

- LP. 7.

10. Fit rear wing :

(See Operation GXB. 824-1)

11. Finish off the body shell and protection :

(See Operation GX. 800-00)

12. Paint.**13. Fit and adjust the previously removed elements.**

MOYIARNO
S. 128. 20

RECOMMENDATION

This operation only requires a check on the body jig if :

- the inner face of the body shell bottom side sill is distorted,
- there are distortions in the rear axle fastening nailing strips.

PREPARATION (if need be) FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- rear bench seat,
- rear door,
- rear door sealing joint,
- rear quarter glass and sealing strip,
- rear wheel arch trim,
- rear light,
- drip moulding finish nailing strip,
- rear bumper.

} (side involved)

Protect the inner trim against flying sparks during welding.

TOOLS REQUIRED

- Wheel
- Sanding machine
- « 2662-T » or « PICKAVANT » spot welds extractor
- Oxyacetylene set
- Spot-welding head
- « MIG » welding unit
- Panel clamps.

SPECIAL TOOLS

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig.

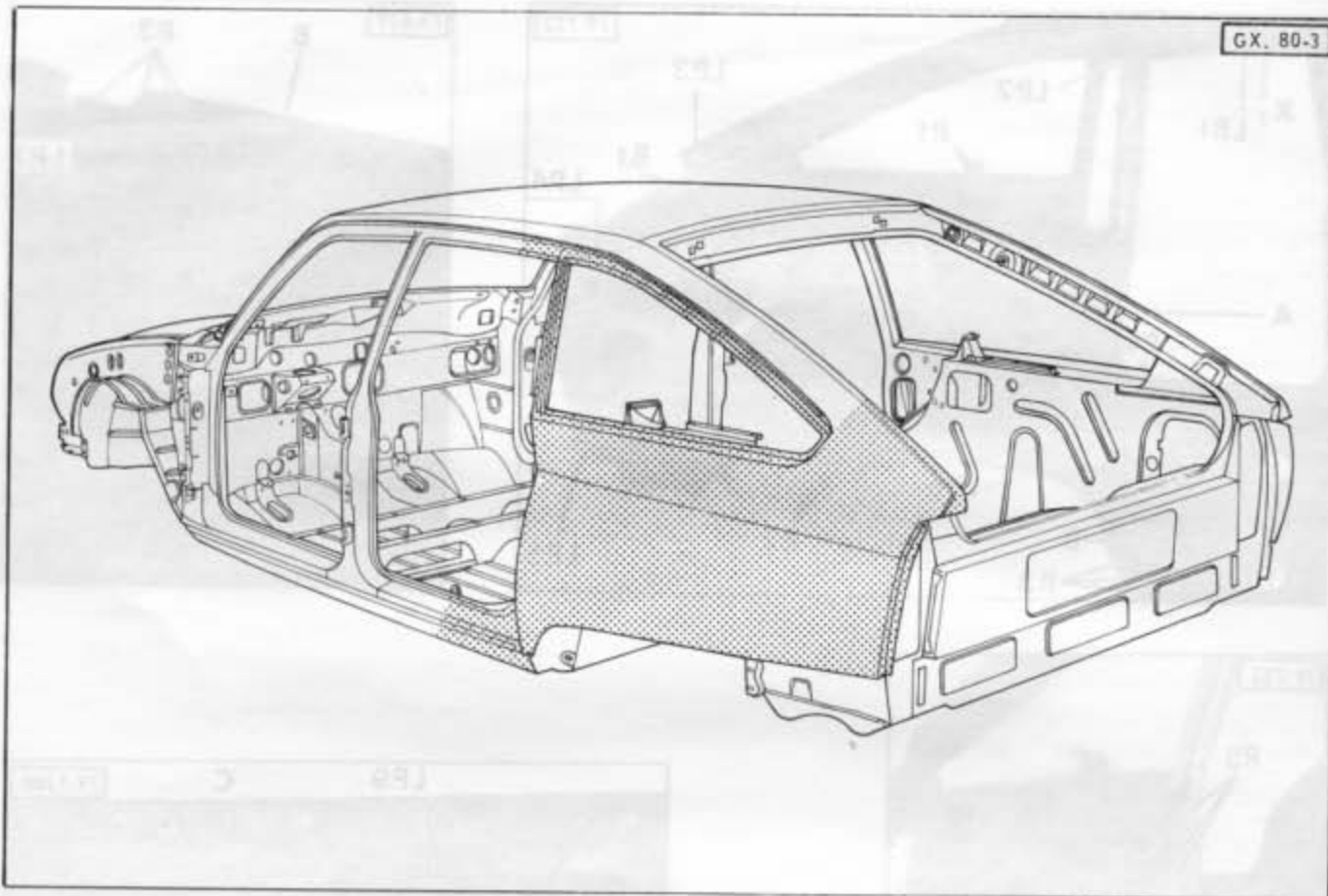
ENS. 158-000 : Body shell checking equipment

or

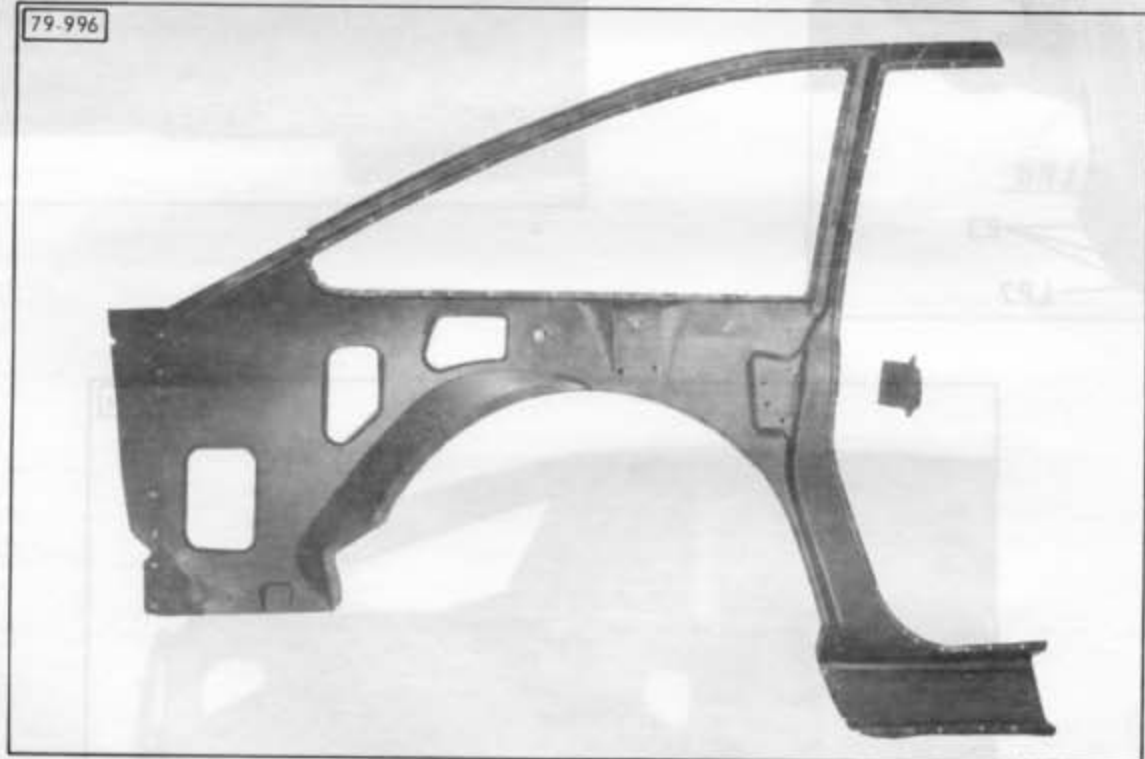
- 2600-T : « FENWICK » body jig
- 2628-T : Checking equipment for « GX » vehicles

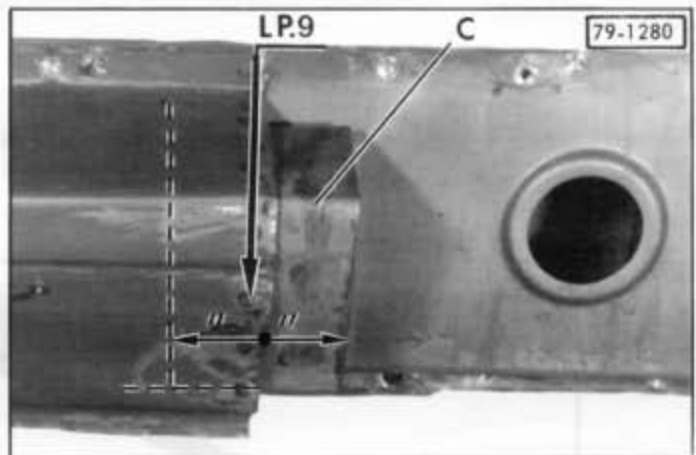
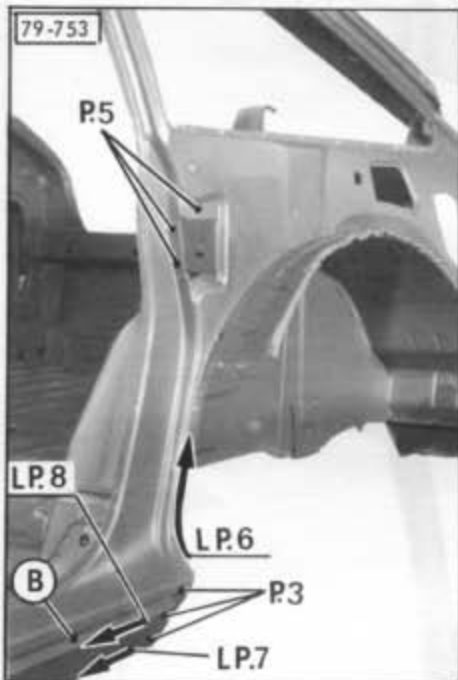
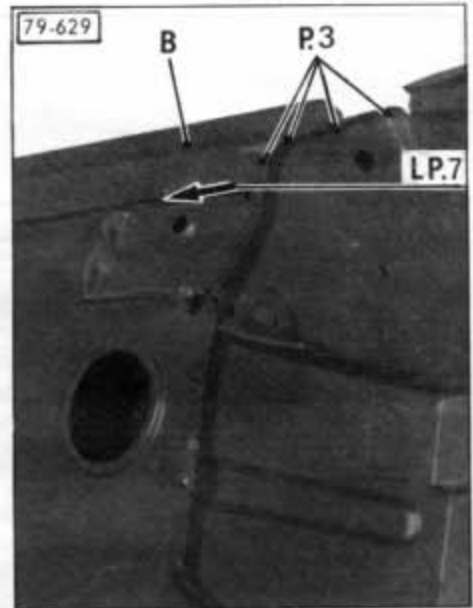
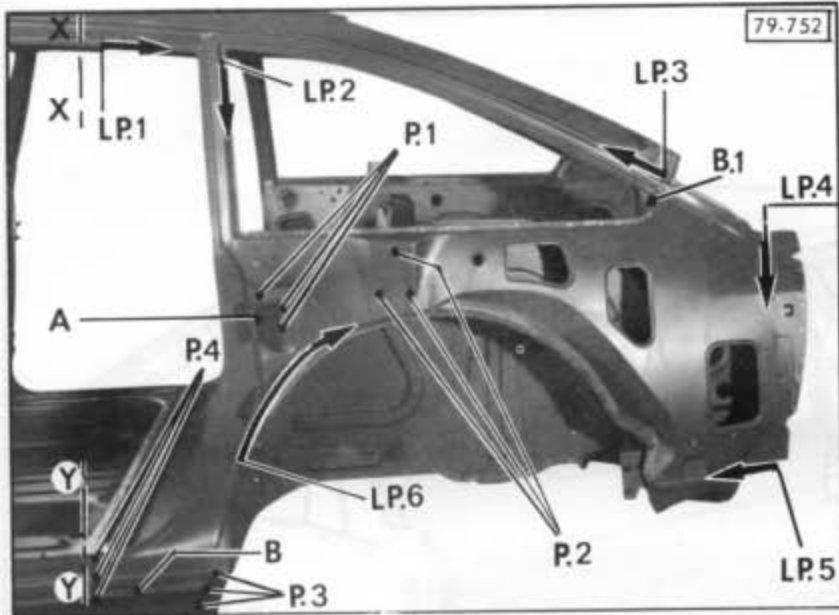
TRUCKS, BUSES, TRAILERS, TRUCKS & TRAILERS

GX. 80-3



79.996





REPLACEMENT OF A SIDE PANEL REAR PART

REMOVAL

1. Remove rear wing :

(See Operation GX. 824-1)

2. Remove body shell bottom section B :

Drill and break the spot-welds, following line : -LP. 8.

3. Remove side panel rear part :

Make temporary tracings of sections **X-X** and **Y-Y** (slightly set back from the final cuts)

a) Drill and break the spot-welds, following lines :

- LP. 1 (from **X-X** to **Y-Y**)
- LP. 7 (up to **Y-Y**)
- LP. 6,
- LP. 5,
- LP. 4,
- LP. 3,
- LP. 2

and points :

- P. 2 and P. 3

b) Eliminate the brazing spot at :

- B. 1

Cut the panel according to the temporary outlines **Y-Y** (with saw) and **X-X** (with chisel).

NOTE : To facilitate the passage of the chisel, slightly break beyond **X-X**.

Remove the rear part of the side panel.

PREPARATION

4. Check body shell on body jig and realign (if necessary) :

(See Operation GX. 800-0)

5. Prepare new part :

Line up the rear part of the new side panel and hold it with panel clamps.

Check the rear door frame and trace on the body shell the final sections **X-X** and **Y-Y**.

Mark the position of rear door striker plate support **A**.

Remove the rear part of the panel.

Weld striker plate support **A** onto the new part, following points :

- P. 1,
- P. 5.

Cut according to final outlines **X-X** and **Y-Y**.

6. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Prepare a stiffener **C** (length = 60 mm) for the section **Y-Y**.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all edges to be spot welded.

Put the stiffener into place on the body shell and weld it following LP. 9.

FITTING

7. Fit rear part of side panel :

Line up the rear part of the side panel and hold it in place with panel clamps.

a) Spot weld, following lines :

- LP. 1,
- LP. 2,
- LP. 3,
- LP. 4,
- LP. 5,
- LP. 6,
- LP. 7,

and points :

- P. 2 and P. 3

b) Oxyacetylene "plug" weld (MIG) the body shell bottom side sill to stiffener **C** following P. 4.

Make oxyacetylene weld beads, following **X-X** and **Y-Y**.

c) Make a brazed spot at :

- B. 1

8. Fit body shell bottom section B and weld by means of "plug" spot welds (MIG) following line :

- LP. 8.

9. Fit rear wing :

(See Operation GX. 824-1)

10. Finish off the body shell and protection :

(See Operation GX. 800-00)

11. Paint.**12. Fit and adjust the previously removed elements.**

OPERATION

RECOMMENDATION

This operation requires checking the body shell on the body jig only if the inner face of the side sill is distorted or if the geometry after checking is incorrect.

PREPARATION (if need be) FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- side doors and sealing joints,
 - front door stricker plate,
 - front seat belt (side part)
 - pillar interior trim,
 - front seat
 - rear bench seat,
 - floor trim and roof panel headlining.
- } (side involved)

Protect the passenger compartment with a tarpaulin.

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Oxyacetylene set
- « MIG » welding set
- Spot-welding head
- Panel clamps

SPECIAL TOOLING (if need be)

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig.

ENS. 158-000 : Body shell checking equipment

ENS. 158-008 : Front wheel arches support

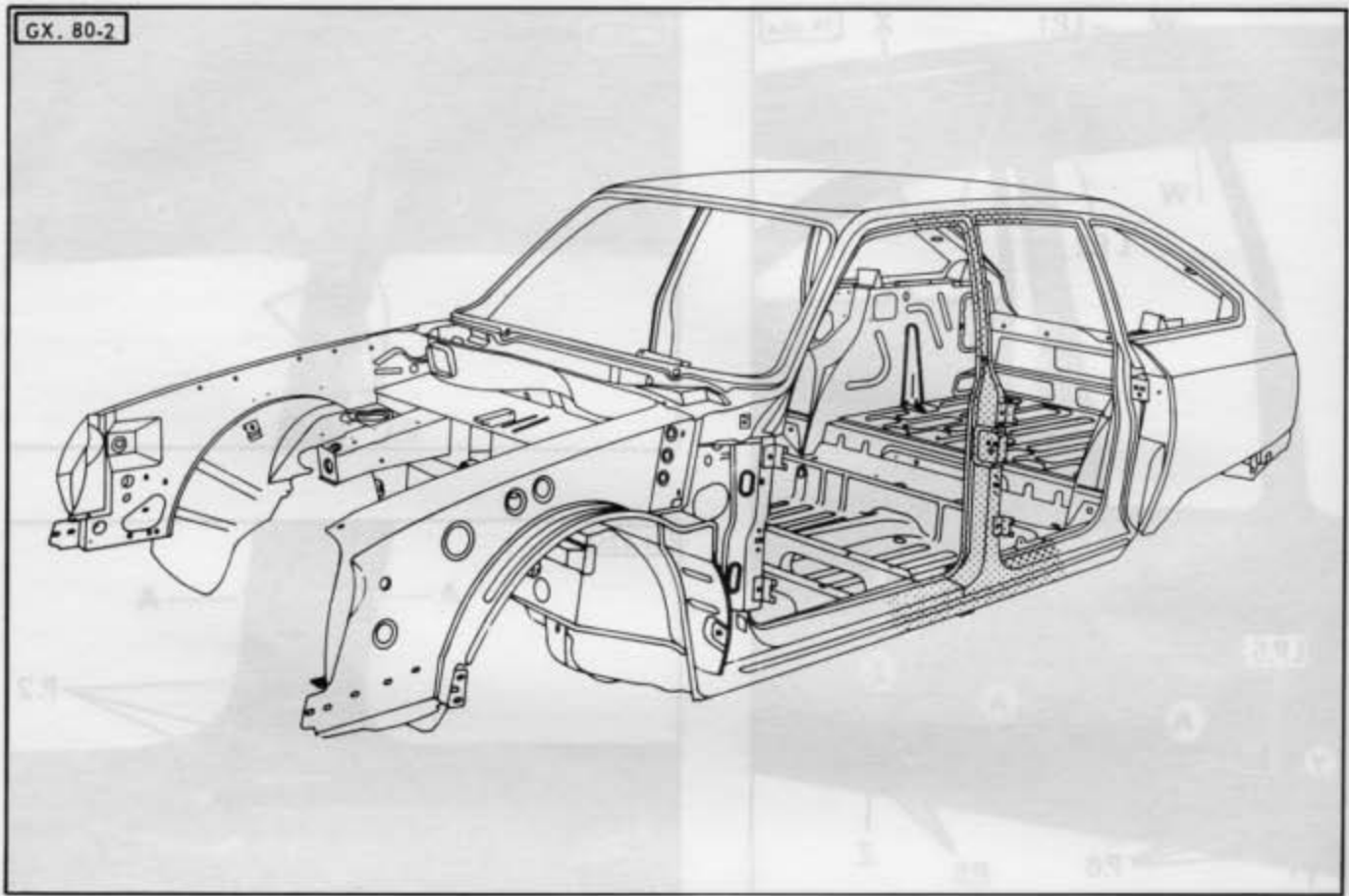
or

- 2600-T : « FENWICK » body jig

- 2628-T : Checking equipment for « GX » vehicle.

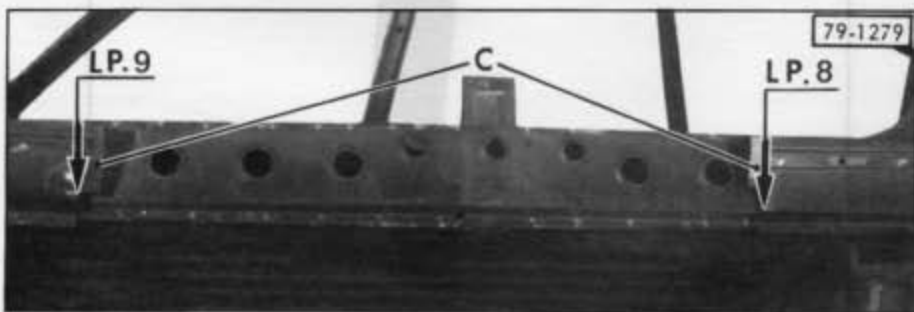
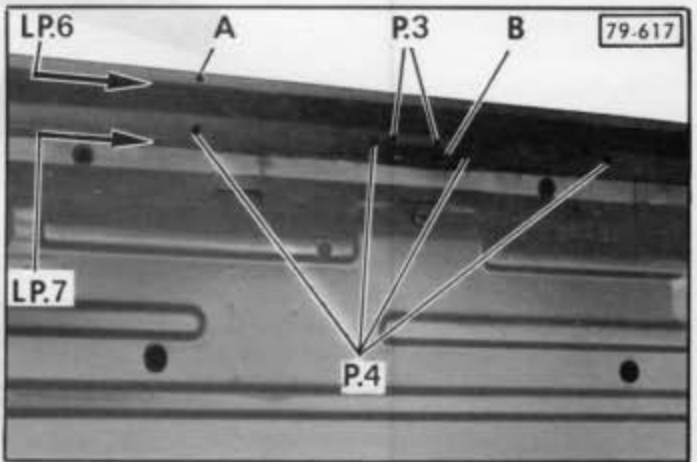
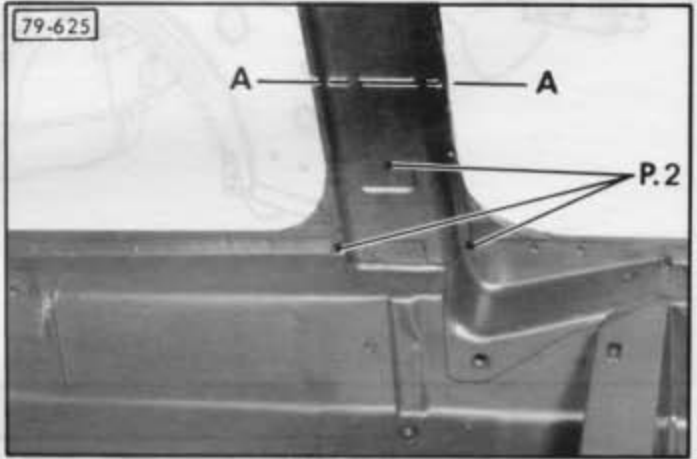
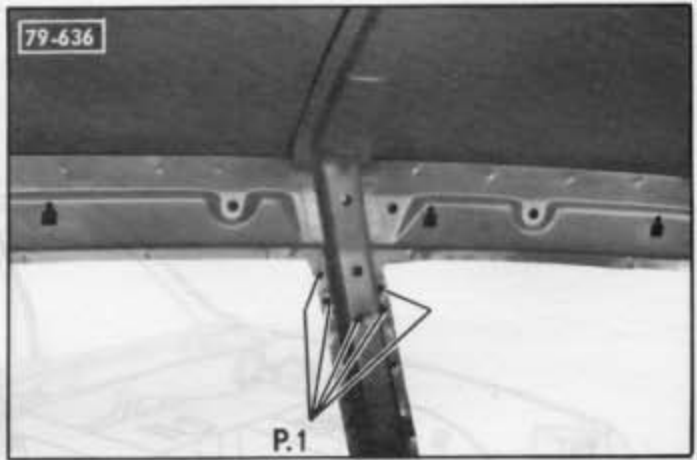
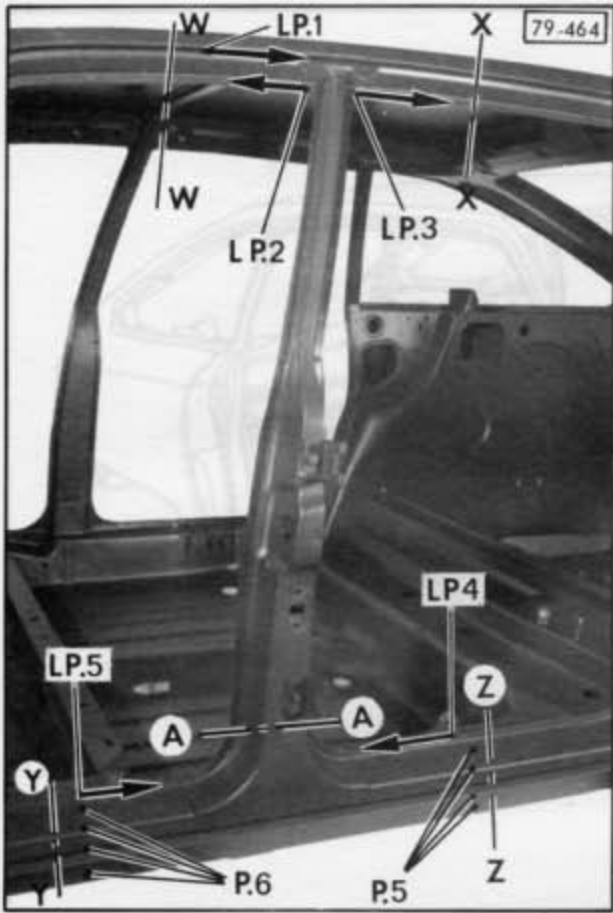
REPARATION DE LA CARROSSERIE A LA TOITURE

GX. 80-2



79-1278





REPLACEMENT OF A SIDE PANEL CENTRAL PART

REMOVAL

1. Remove central part of side panel :

Line up the new part on the body shell and approximately trace the four sections **W-W**, **X-X**, **Z-Z** and **Y-Y** to be carried out on the side panel.

Drill and break the spot-welds, following lines :

- LP. 1 (from **W-W** to **X-X**)
- LP. 2 (as far as **W-W**)
- LP. 3 (as far as **X-X**)
- LP. 4 (from **Z-Z** as far as **A-A**)
- LP. 5 (from **Y-Y** as far as **A-A**)
- LP. 7 (from **Y-Y** to **Z-Z**)

and points :

- P. 1.
- P. 2.
- P. 4.
- P. 3 (and raise jack support **B**).

Cut the panel following **W-W**, **X-X**, **Y-Y** and **Z-Z**, using a saw and a chisel.

Remove the central part of the side panel.

- 2.** Drill and break the spot-welds, following line LP. 6, and remove the remaining parts of body shell bottom section **A**.

PREPARATION

3. Realign body shell on body jig (if necessary) :
(See Operation GX. 800-0)

- 4.** Prepare the previously separated welding seams.
Reshape the panels if necessary.
Scour the weld zones on body shell and new components.
Apply a conductive primer coat on the inner face of all the edges to be spot welded.

5. Adjust new part on body shell :

Line up central part of the side panel on the body shell and hold it with panel clamps.

Check the front and rear door frames (use the doors as templates).

Make the final tracing of sections **W-W**, **X-X**, **Y-Y** and **Z-Z**.

Cut according to the outline.

6. Prepare stiffeners C for side sill sections :

Cut and form two stiffeners **C** 60 mm long from a 1 mm thick sheet metal plate in order to reinforce the body shell bottom side sill sections.

Engage half of their length on the interior of the side sill and spot weld them, following lines :

- LP. 8 and LP. 9.

FITTING

7. Fit central part of side panel :

Position the central part of the side panel on the body shell.

Check the door frames (use the doors as templates).
Hold the new part by means of plate closer tongs.

Spot weld, following lines :

- LP. 1,
- LP. 2,
- LP. 3,
- LP. 4,
- LP. 5,
- LP. 7,

and points :

- P. 1,
- P. 2.

Make « plug » spot-welds using a welding unit (MIG) at :

- P. 4,
- P. 5,
- P. 6.

Fold back jack support **B** and weld it at P. 3.

Make weld beads following four sections **W-W**, **X-X**, **Y-Y** and **Z-Z**.

8. Fit centre pillar :

(See Operation GX. 812-4)

9. Grind the oxyacetylene welds on the four sections carried out :

Finish with solder if necessary.

10. Fit body shell bottom section A :

Put section **A** into place and oxyacetylene « plug » weld (MIG) following line LP. 6.

11. Finish off the body shell seal-tightness and protection.**12. Paint.****13. Fit and adjust the previously removed elements.**

OPERATION

RECOMMENDATION

This operation only requires checking the body shell on the body jig if :

- the inner face of the body shell side sill is distorted,
- distortions appear in the axles fastening zones.

It is advisable to make sure of this by means of a check of the geometry.

PREPARATION (if need be) FOR CHECK ON THE BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- front wing,
 - side doors,
 - side doors sealing joints,
 - rear wheel arch trim,
 - front pillar and centre pillar trim,
 - rear seat belt bottom side stalk,
 - front seat belt inertia reel,
 - front seat,
 - rear bench seat,
 - front and rear carpet, (disengage them partially).
- } (side involved)

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-welds cutter
- Oxyacetylene set
- « MIG » welding set
- Spot-welding head
- Panel clamps.

SPECIAL TOOLING (if need be)

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig.

ENS. 158-000 : Body shell checking equipment

ENS. 158-008 : Front wheel arches support

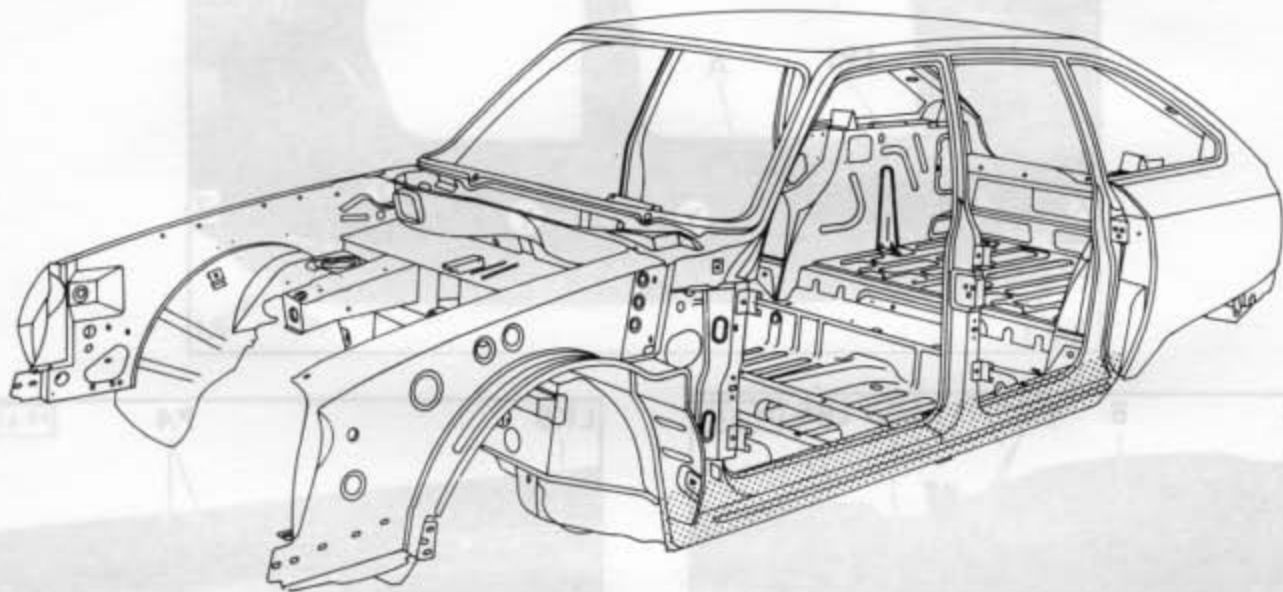
or

- 2600-T : « FENWICK » body jig

- 2628-T : Checking equipment for « GX » vehicle.

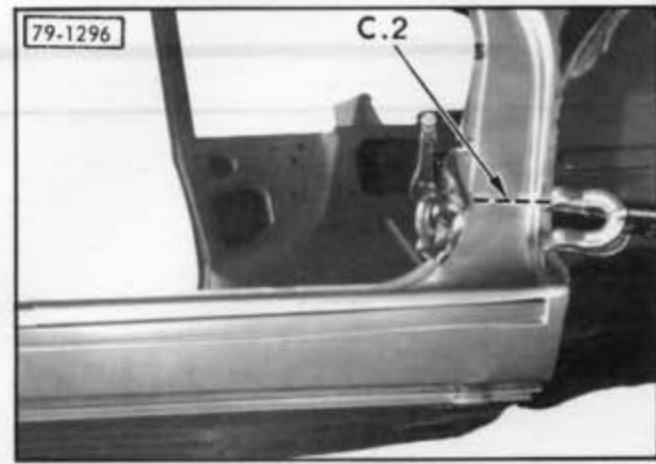
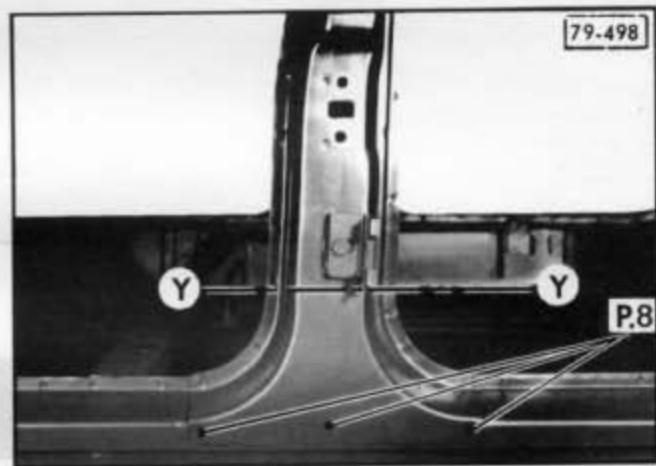
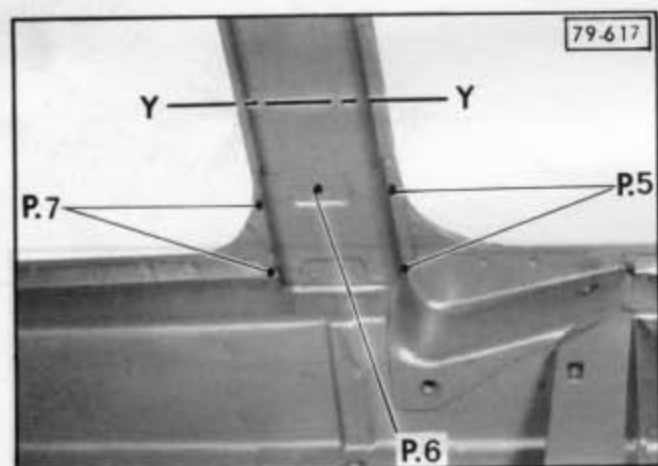
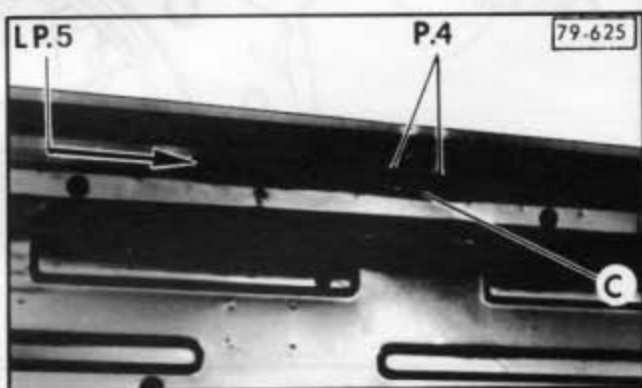
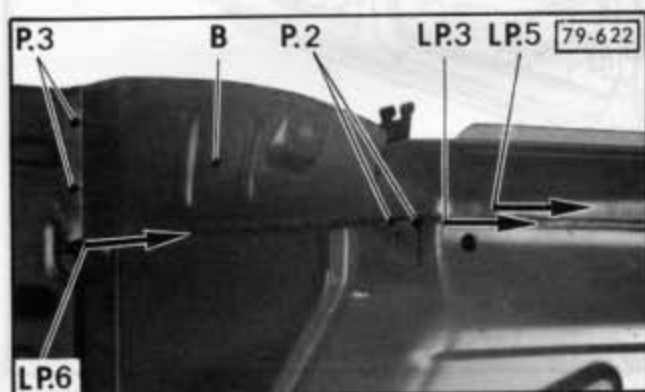
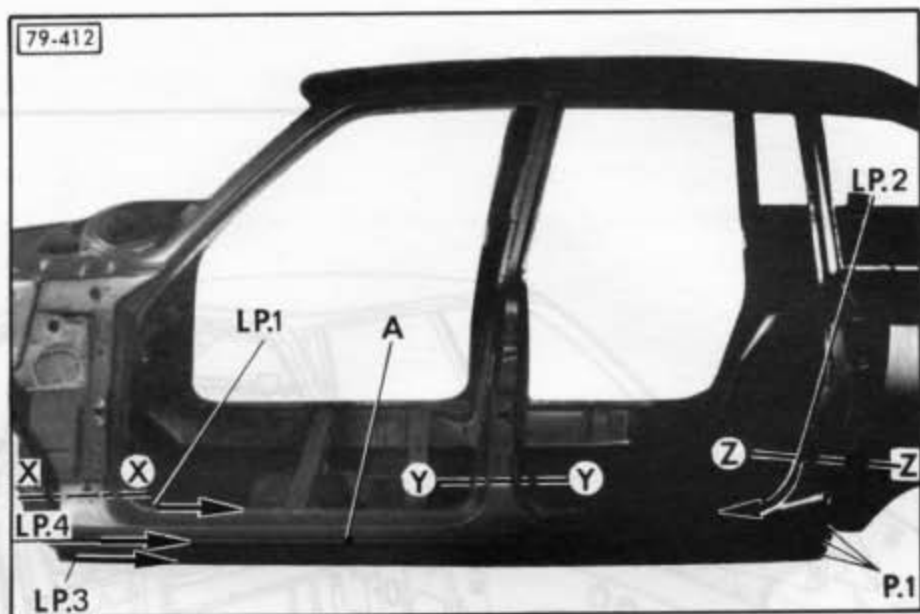
RECOMMENDATION

GX. 80-2



79-1282





REPLACEMENT OF A BODY SHELL SIDE SILL

ATTENTION : The complete replacement of the body shell side sill is dealt with in this operation which does not mean that it must be fully replaced in all cases.

It is possible and even recommended (depending on the case to be dealt with) to make vertical sections of the same type as those carried out in the case of replacement of side panel front, central or rear parts so as to avoid the removal of certain elements.

REMOVAL

1. Remove rear wing (in the sole case where it is essential to replace the rear end of the side sill; if this is not the case, a vertical section must be made in front of the wing).

(See Operation GX. 824-1).

2. Remove protection plate B :

Drill and break the spot-welds, following line LP. 6 and points P. 3.

Remove protection plate **B**.

3. Remove body shell side sill :

a) Trace sections X-X, Y-Y and Z-Z on the body shell using the new side sill.

b) Remove the side sill :

Drill and break the spot-welds, following lines :

- LP. 1, (from X-X as far as Y-Y)

- LP. 2, (from Z-Z as far as Y-Y)

- LP. 3,

- LP. 5,

and points :

- P. 1,

- P. 2,

- P. 5,

- P. 6,

- P. 7,

- P. 4, (fold back jack support **C**)

- P. 8.

Cut the side sill as follows :

- X-X, Y-Y and Z-Z approximately 15 mm below the traced outline.

Remove the body side sill.

PREPARATION

4. Check and realign the shell body on the body jig

(if necessary).

(See Operation GX. 800-0)

5. Prepare the new side sill :

Swage approximately 15 mm on each end of the new side sill so as to engage it in the front and rear pillars resting on the body shell.

Trace the section Y-Y through the inside of the centre pillar.

Cut according to the outline.

6. Fit body shell bottom section A :

(In case the side sill is completely replaced)

Put the section in place on the new side sill and spot weld following LP. 4.

7. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all the edges to be welded by using a spot-welding head.

FITTING

8. Fit body shell side sill :

Engage the side sill in the front and rear pillars and inside the centre pillar. Hold it by means of panel clamps.

a) Spot weld following lines : LP. 1, LP. 2, LP. 3.

and points :

- P. 2 and P. 1.

b) Make « plug » welds (MIG) following lines LP. 5

and points :

- P. 5, P. 6, P. 7, P. 8 (points drilled when unseaming).

c) Make oxyacetylene weld beads (MIG) following C.1, C.2 and the line Y-Y.

d) Fold back jack support **C** and make oxyacetylene weld spots (MIG) following P. 4.

9. Grind oxyacetylene welds :

Finish with solder on the side sill sections (if necessary).

10. Fit body shell bottom section A :

(In the case of partial replacement of the side sill).

Put the section **A** into place and « plug » weld (MIG), following line LP. 4.

11. Fit protection plate B :

Put protection plate **B** into place and spot weld following LP. 6 and LP. 3.

12. Finish off the body shell seal-tightness and protection.

13. Paint.

14. Fit and adjust the previously removed elements.

RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

- rear bumper,
- rear signalling lights,
- tail-gate striking plate and weather strip,
- rear wheel arch trim,
- boot bottom trim, } (*partially*)
- rear quarter panel pillar trim.

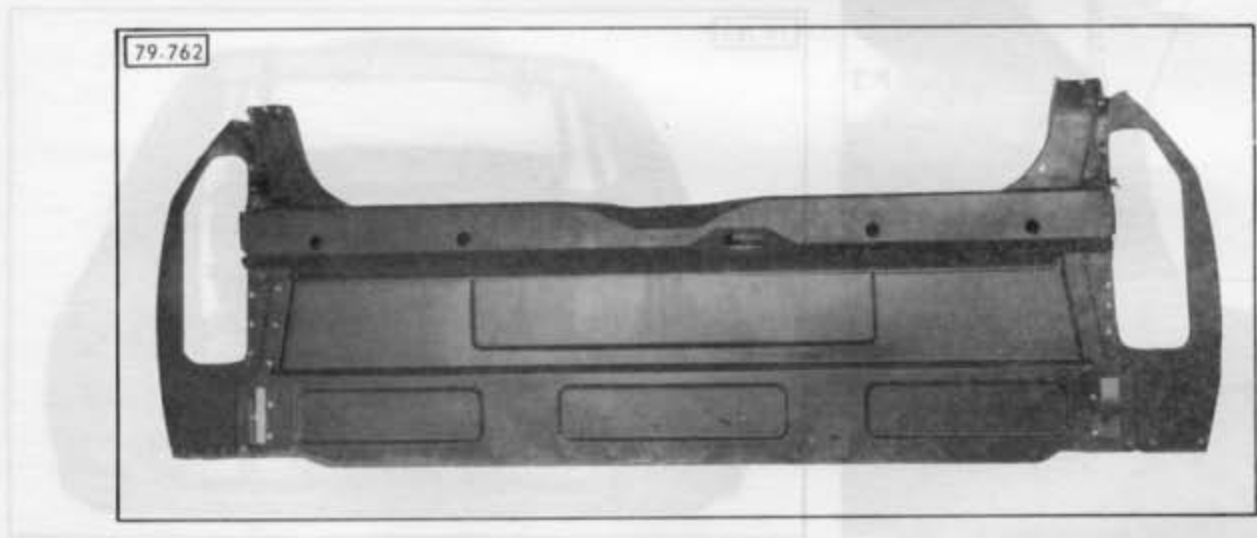
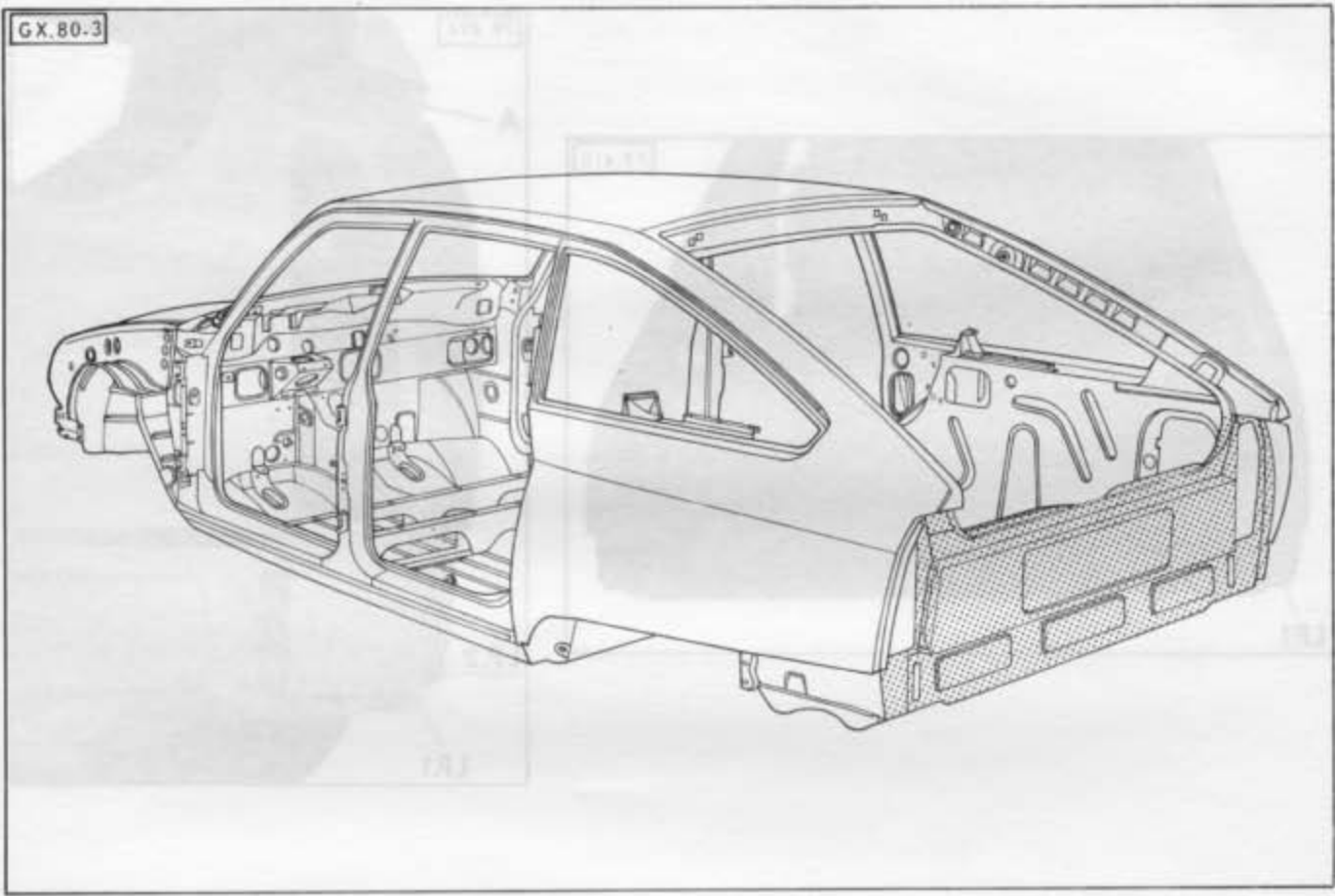
TOOLS REQUIRED

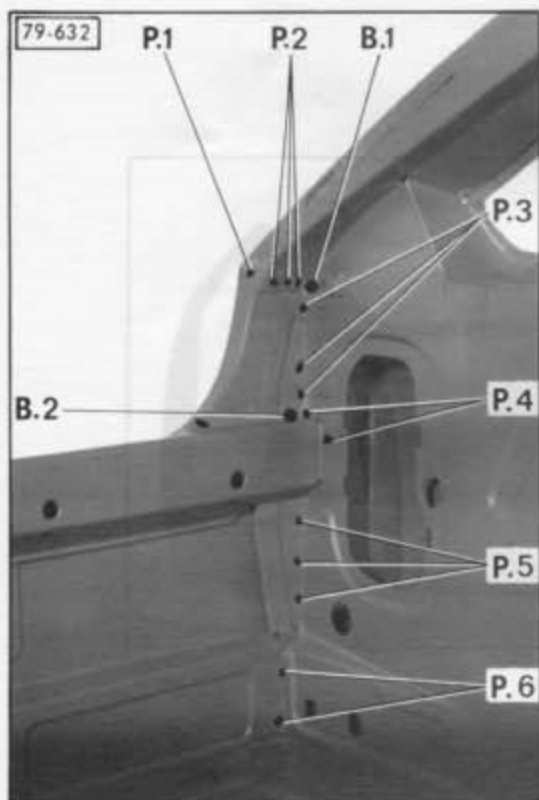
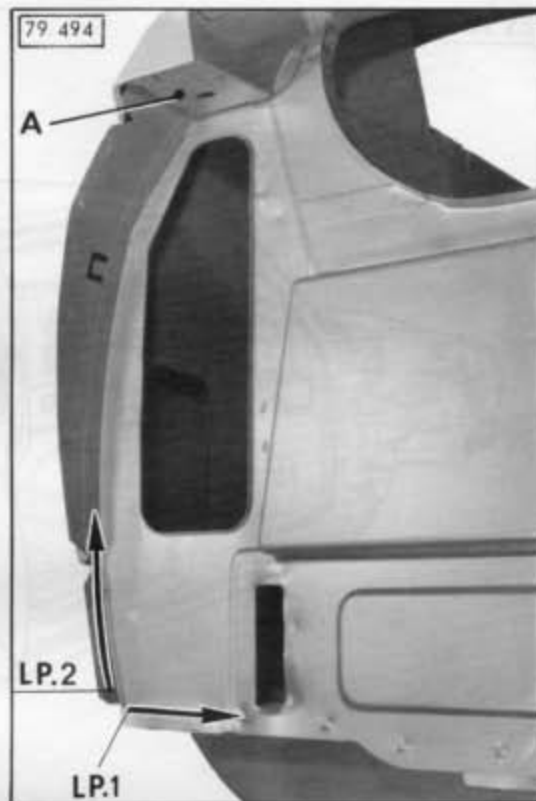
- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Oxyacetylene set
- « MIG » welding unit
- Spot-welding head
- Panel clamps.

ATTENTION :

This operation applies more particularly to vehicles having rear wings to be replaced.

In the case where the two rear wings remain in place, refer to Operation GX. 823-4.





REPLACEMENT OF A REAR PANEL, COMPLETE

REMOVAL

1. Remove rear wings :*(See Operation GX. 824-1).***2. Remove rear panel :**

a) Drill and break the spot-welds, following lines :

- LP. 1,
 - LP. 2 *(on each side)*
- and points :
- P. 1,
 - P. 2,
 - P. 3,
 - P. 4,
 - P. 5,
 - P. 6.
- (on each side)*

b) Eliminate the following brazing spots :

- B. 1 }
- B. 2 } *(on each side)*

Remove the rear panel.

PREPARATION

3. Prepare the previously separated welding areas.

Reform the edges to be welded, if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all the edges to be welded by using a spot-welding head.

FITTING

4. Fit rear panel :

Put the panel into place and hold it by means of panel clamps.

5. Weld rear panel :

a) Spot-weld following lines :

- LP. 1,
 - LP. 2 *(on each side)*
- and points :
- P. 2,
 - P. 1,
 - P. 3,
 - P. 4,
 - P. 5,
 - P. 6.
- (on each side)*

b) Make the following brazed spots :

- B. 1 }
- B. 2 } *(on each side)*

6. Fit rear wings :*(See Operation GX. 824-1)***7. Paint.****8. Fit and adjust the previously removed elements.****NOTE :** It is possible to replace the rear panel complete, even if the two wings remain in place; it is necessary then to :

- slightly fold back wing closing plate A in order to give access to the last spot weld of the line LP. 2.
- Oxyacetylene "plug" weld (MIG) the line LP. 2.

W01TARESD
8-558 3D

RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

- rear bumper,
 - rear signalling lights,
 - hatchback door striker plate and weather strip,
 - boot bottom trim,
 - rear wheel arch trim
 - rear quarter panel pillar trim
- } (partially, on each side)

TOOLS REQUIRED

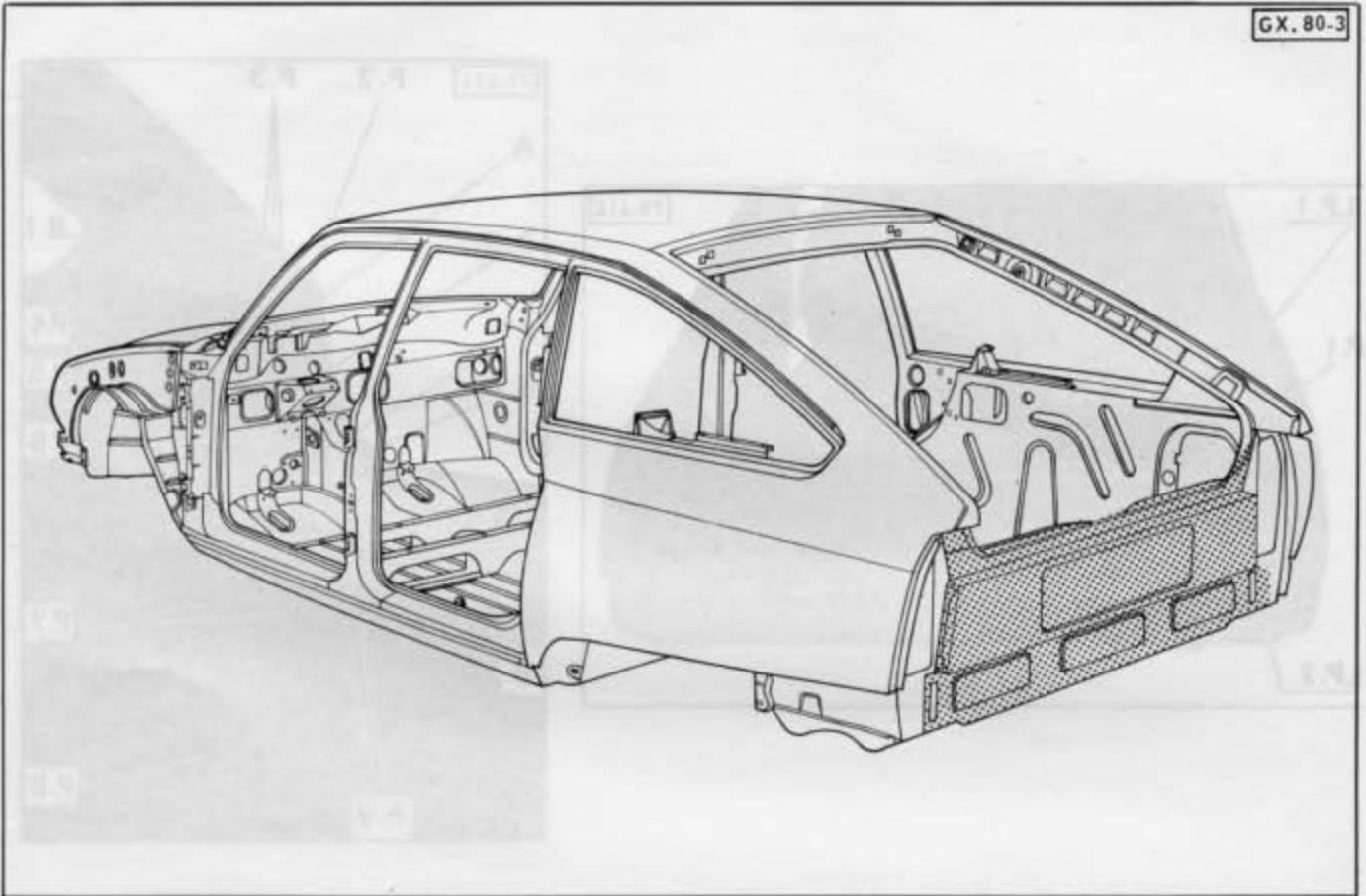
- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot welds cutter
- Oxyacetylene set
- Spot-welding head
- Panel clamps

NOTE :

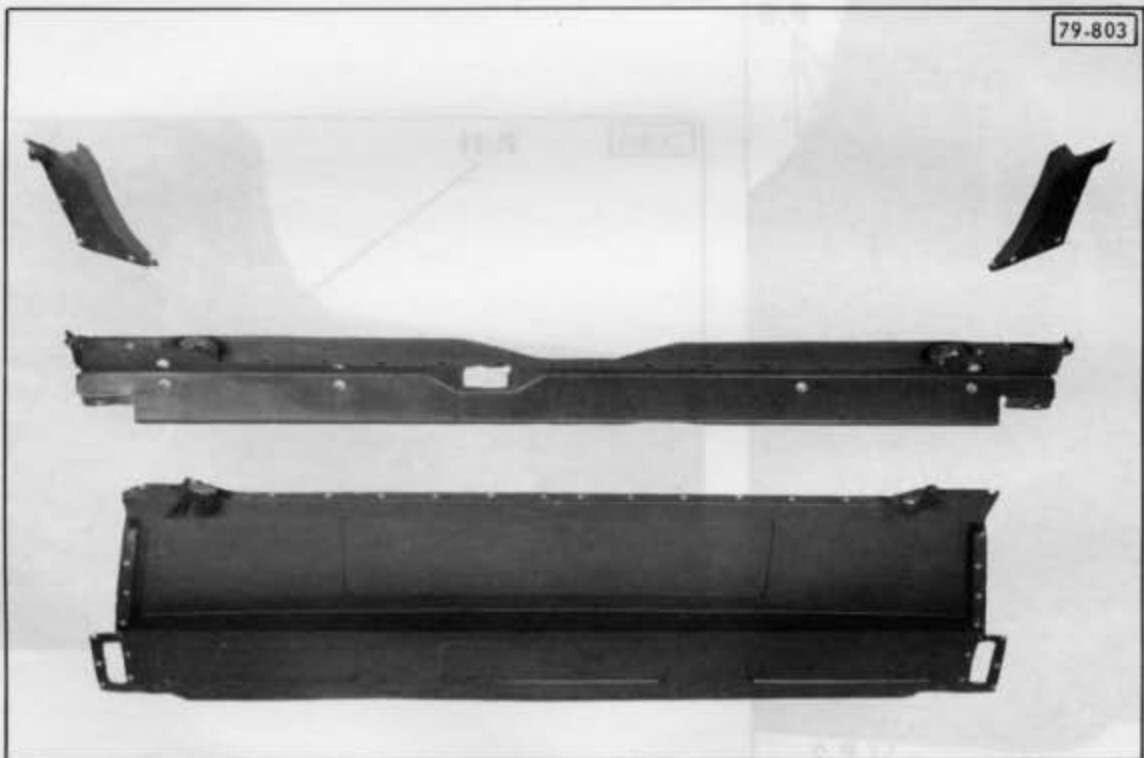
This operation is applicable in the case where the two rear wings remain in place.

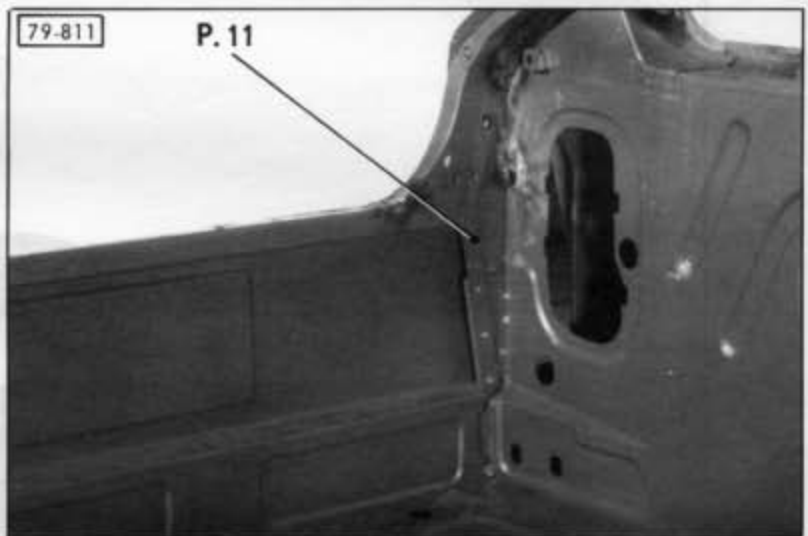
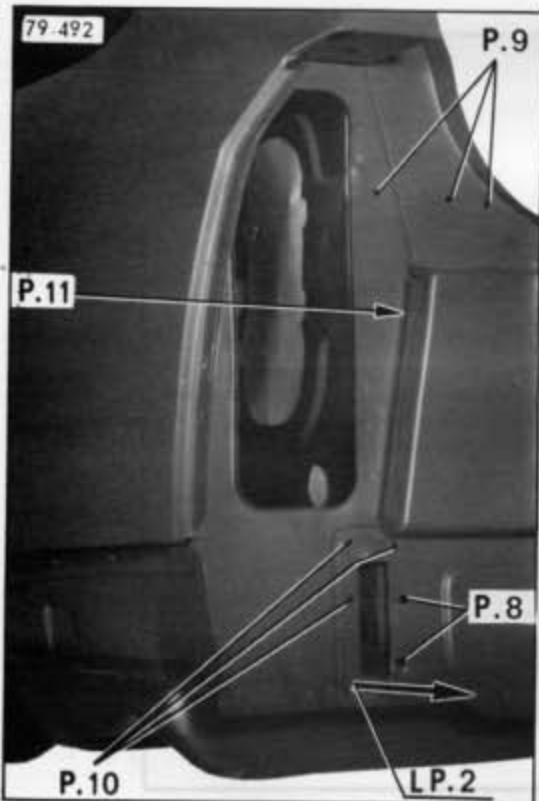
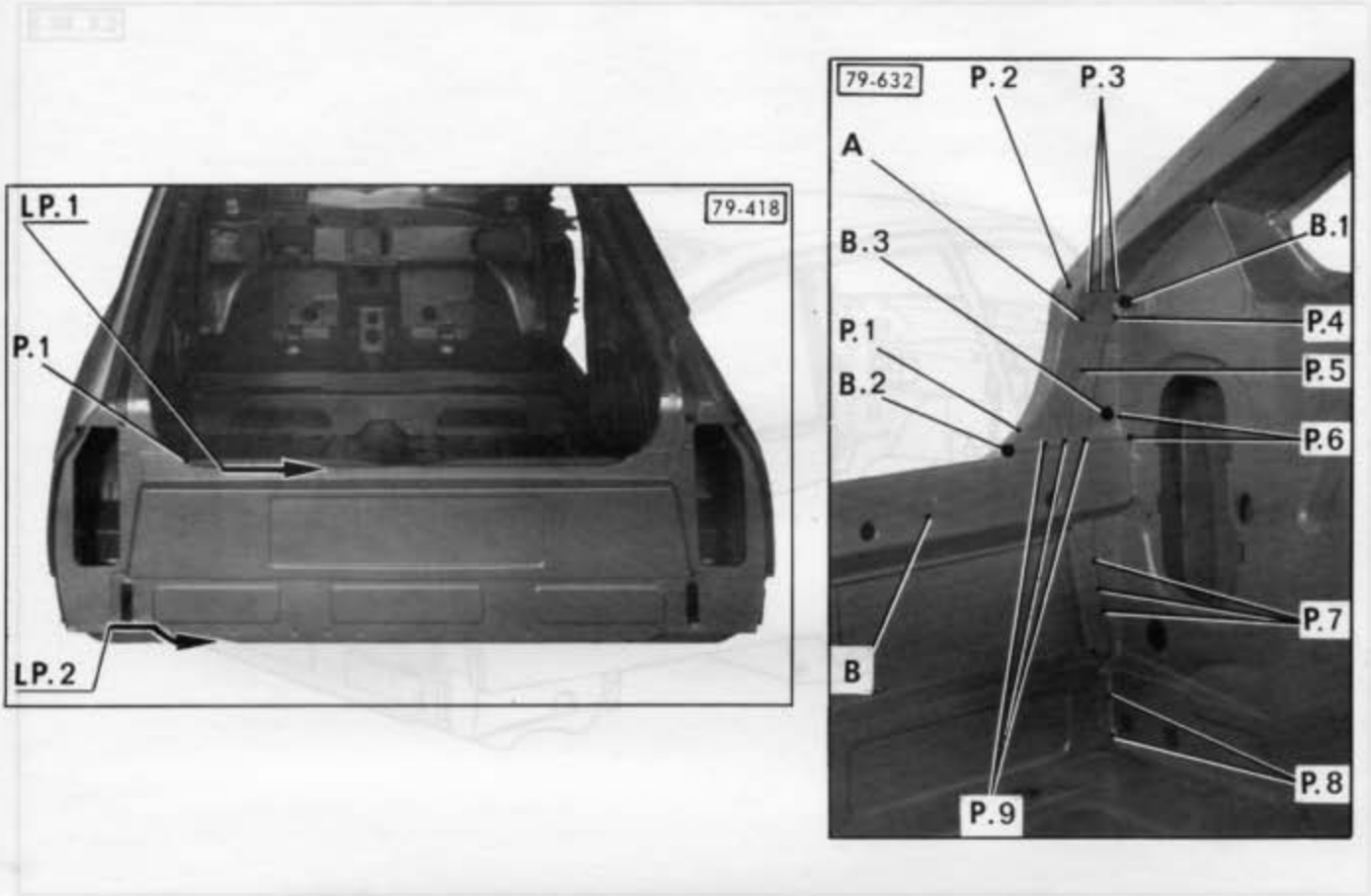
W01TARESD
8-558 3D

GX.80-3



79-803





REPLACEMENT OF A REAR PANEL BARE

REMOVAL

1. Remove rear panel :

a) Drill and break the spot-welds, following line :

- LP. 2

and points :

- P. 1, } (if gusset A is not
- P. 9, } removed)

- P. 6,

- P. 7,

- P. 8,

- P. 10,

- P. 11 (break with chisel)

} (on each side)

b) Eliminate the brazing spots at :

- B. 2.

- B. 3.

Remove the rear panel with crossmember B.

2. Remove gusset A :

(on each side, if necessary).

a) Drill and break the spot-welds, following points :

- P. 2,

- P. 3,

- P. 4,

- P. 5.

b) Eliminate the brazing at :

- B. 1.

Remove gusset A.

PREPARATION

3. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of the edges to be welded by using a spot-welding head.

FITTING

4. Fit rear panel :

Put the rear panel into place, without crossmember B.

Hold it by means of panel clamps.

5. Weld rear panel :

Spot weld following line :

- LP. 2

and points :

- P. 11,

- P. 7,

- P. 8,

- P. 10.

} (on each side)

6. Fit and weld gusset A : (in the case where it has been removed)

Put gusset A into place, hold it by means of panel clamps.

Spot weld following points :

- P. 3,

- P. 2,

- P. 4,

- P. 5.

7. Fit and weld crossmember B :

Put crossmember B into place, hold it by means of plate closer tongs.

a) Spot weld following line :

- LP. 1,

and points :

- P. 1,

- P. 9,

- P. 6.

b) Make brazing spots following :

- B. 1,

- B. 2,

- B. 3.

8. Finish off the body shell seal-tightness and protection.**9. Paint.****10. Fit and adjust the previously removed elements.**

WOLFRUM
1-773-48

RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

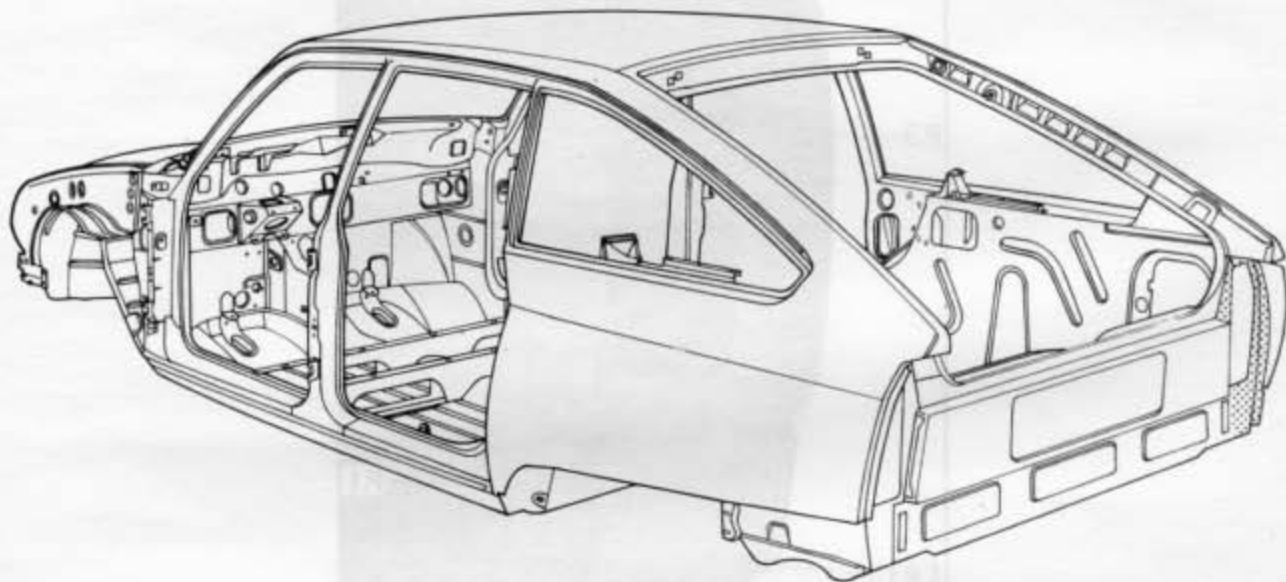
- rear bumper,
 - rear signalling lights,
 - rear wheel arch trim,
 - side window pillar trim,
 - boot bottom trim,
 - hatchback door weather-strip.
- } (*side involved*)

TOOLS REQUIRED

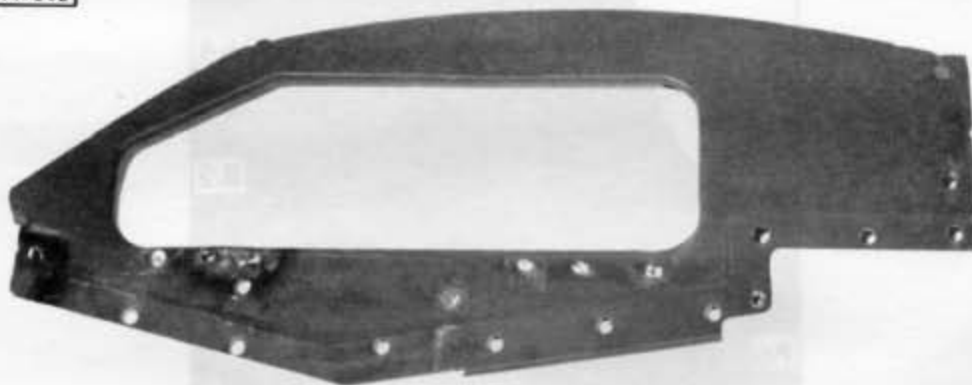
- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Oxyacetylene set
- « MIG » welding unit
- Spot-welding head
- Panel clamps.

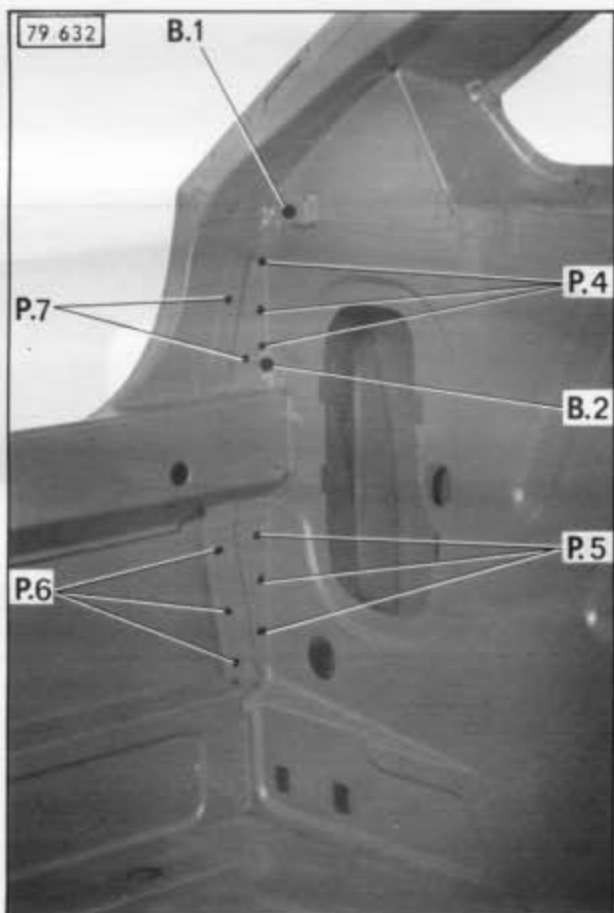
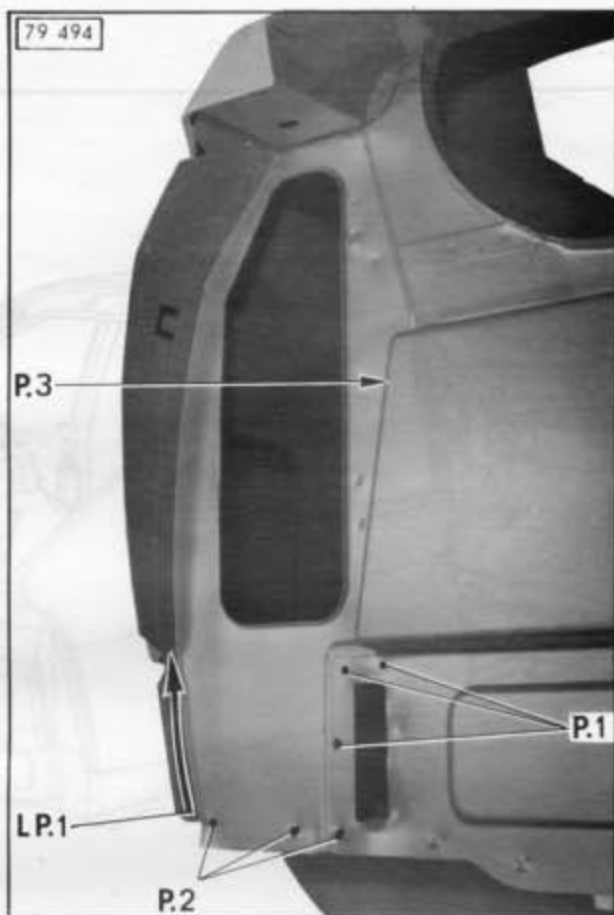


GX.80-3



79-802





REPLACEMENT OF A REAR LIGHT CLUSTER PANEL

REMOVAL

1. Remove rear light plate :

a) Drill and break the spot-welds, following line :

- LP. 1.
- and points :
- P. 1.
- P. 2.
- P. 3.
- P. 4.
- P. 5.
- P. 6.
- P. 7.
- P. 3 (with chisel)

b) Eliminate the brazing spots following :

- B. 1.
- B. 2.

Remove the rear light cluster panel by pulling it downwards.

PREPARATION

2. Prepare the previously separated welding seams.

Reshape the edges to be welded, if necessary.
Scour the weld zones on body shell and new components.
Apply a conductive primer coat on the inner face of all the edges to be welded.

FITTING

3. Fit rear light cluster panel :

Put the rear light cluster panel into place.
Hold it by means of panel clamps.

4. Weld rear light cluster panel :

a) Pinch-weld following line :

- LP. 1 (in the case where the rear wing is removed)
- and points :
- P. 1.
- P. 2.
- P. 4.
- P. 5.
- P. 6.
- P. 7.

b) Oxyacetylene spot weld (MIG) at the place of point :

- P. 3

c) Make brazing spots following :

- B. 1.
- B. 2.

NOTE: In the case where the rear wing is not removed, make the welding line LP. 1 with "plug" spot welds (MIG).

5. Paint**6. Fit and adjust the previously removed elements.**

OPERATION
RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

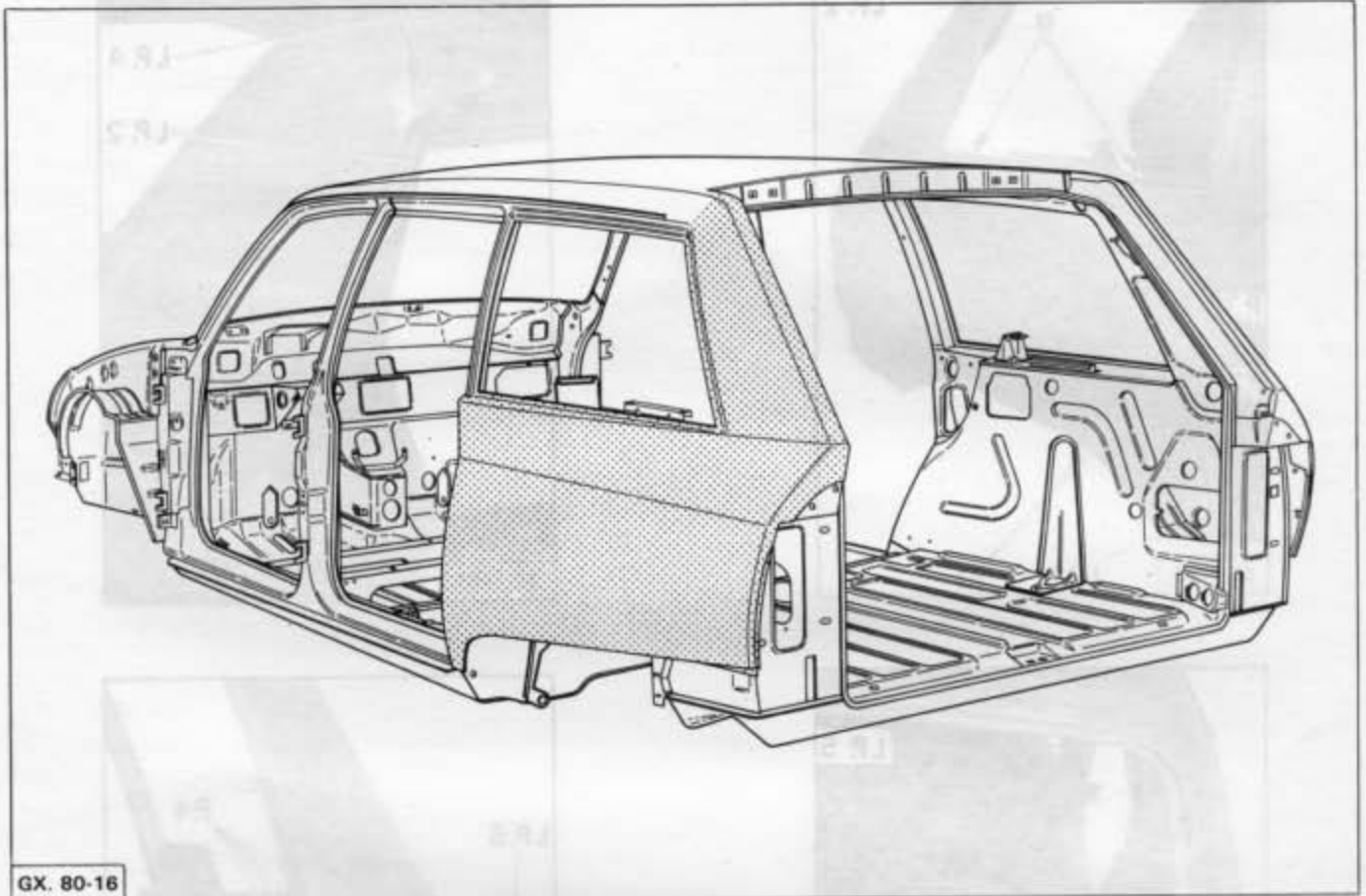
- Tailgate and its weather-strip,
- rear bumper,
- headlining rear part (up to centre pillar),
- rear quarter glass and its sealing strip,
- rear lamp cluster,
- trim from rear wheelarch and rear pillar } *(side involved)*
- rear side door weather-strip,
- fuel tank cap,
- fuel filler pipe and its air vent pipe } *(R.H. side)*

Fold back and protect the rear bench-seat.

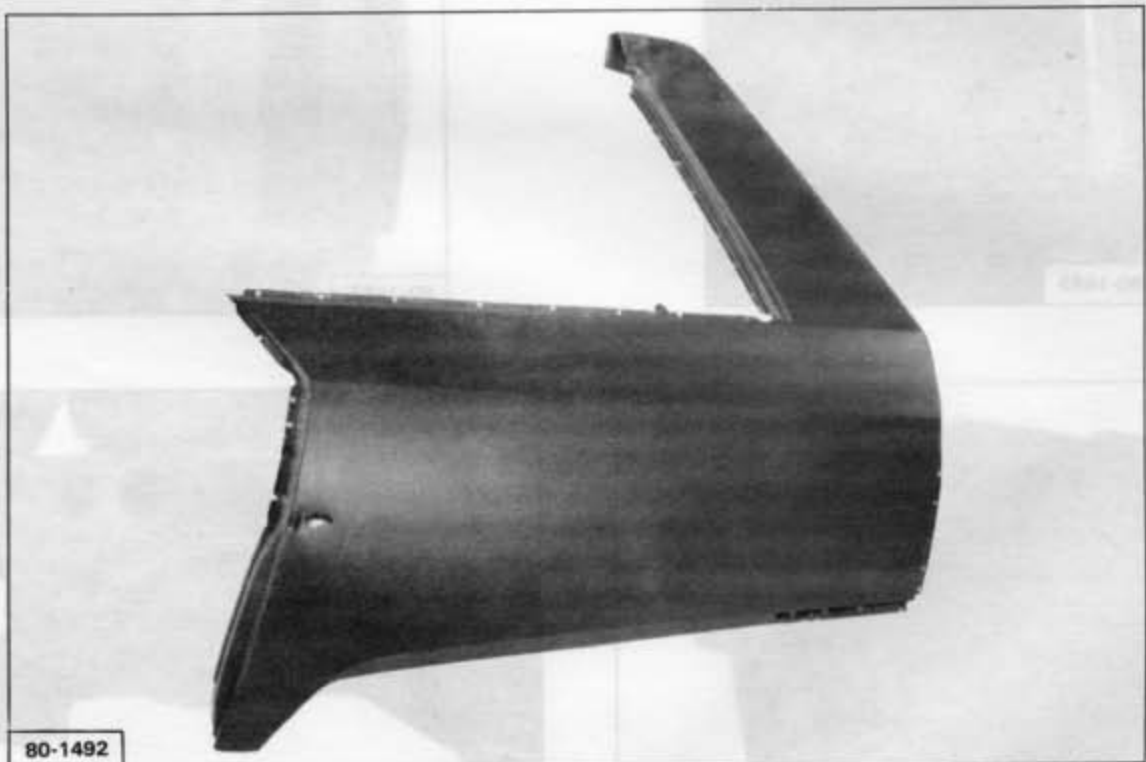
TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Oxyacetylene set
- « MIG » welding unit
- Spot-welding head
- Panel clamps.

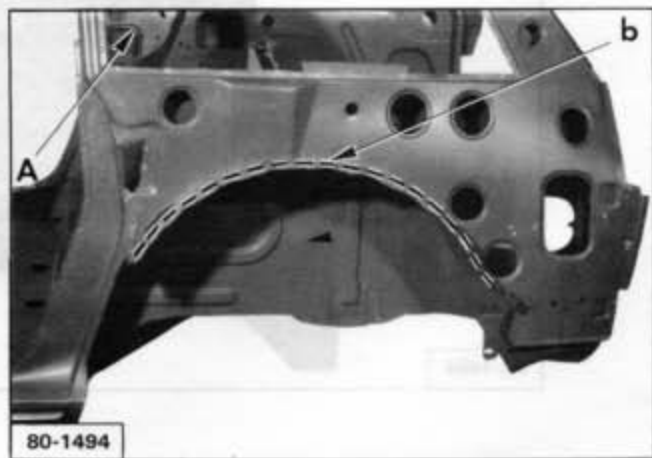
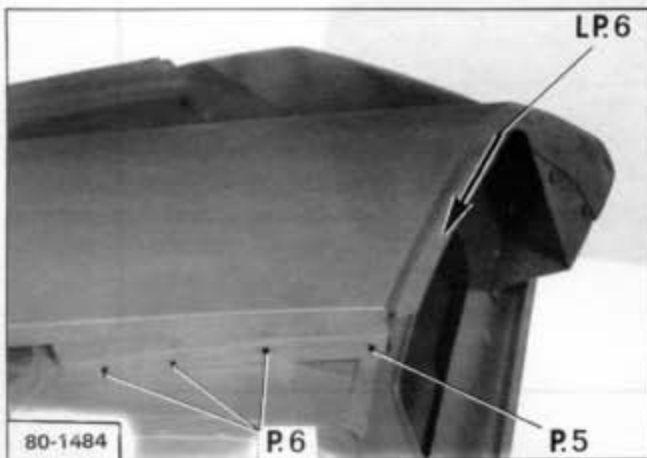
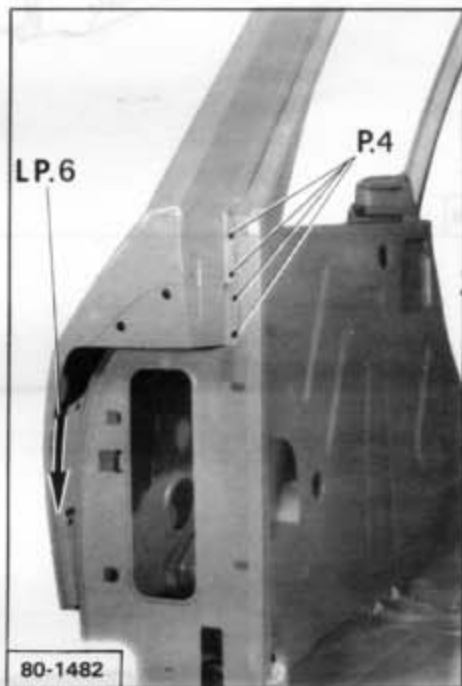
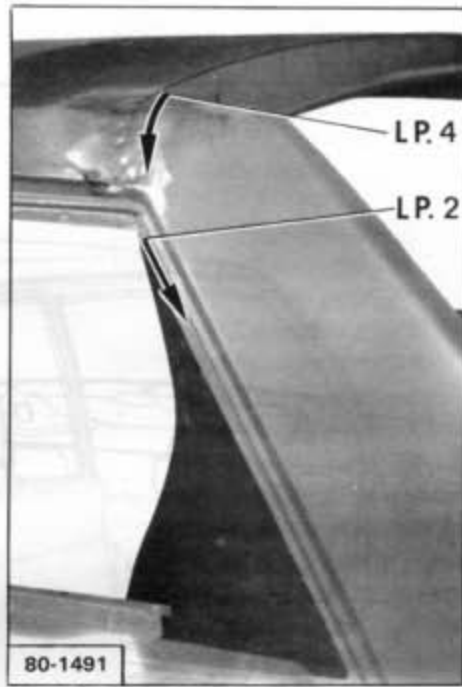
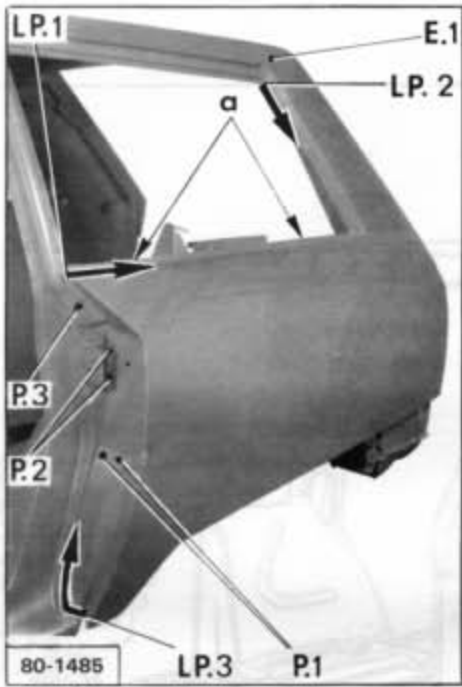




GX. 80-16



80-1492



REPLACEMENT OF A REAR WING

REMOVAL

1. Remove rear wing :

a) Eliminate the solder at :

- E. 1.

b) Drill and break the spot-welds, following lines :

- LP. 1.

- LP. 2.

- LP. 3.

- LP. 4.

- LP. 5.

- LP. 6.

and points :

- P. 1.

- P. 2.

- P. 3.

- P. 4.

- P. 5.

- P. 6.

c) Raise the two tabs « a ».

Remove the rear wing.

PREPARATION

2. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Drill to dia. = 5 mm for plug welding in the place of points :

- LP. 4 and P. 6.

Eliminate the sealing compound remaining on the wheelarch at « b ».

Put back into place a strip of preformed sealing compound dia. = 12 mm on the wheelarch.

E.g. : Prestik S.S. (BOSTIK)

Terostat II (TEROSON)

Apply a conductive primer coat on the inner face of the edge to be welded by using a spot-welding head.

FITTING

3. Position the rear wing :

Put the wing into place and adjust in relation to the side door and the boot lid.

After positioning, hold the wing in place by means of panel clamps.

4. Weld rear wing :

a) Spot-weld, following lines :

- LP. 1.

- LP. 2.

- LP. 3.

- LP. 5.

- LP. 6.

and points :

- P. 1.

- P. 2. } (through opening A)

- P. 3. }

- P. 4.

- P. 5.

b) Oxyacetylene "plug" weld (MIG) following :

- LP. 4 and P. 6.

c) Fold back the two tabs « a ».

d) Grind and surface the "plug" points at :

- LP. 4.

e) Tin solder at :

- E. 1.

5. Finish off the body shell seal-tightness and protection.

Spray a semi-liquid soundproofing agent on the inner face of the wing.

6. Paint.**7. Fit and adjust the previously removed elements.**

OPERATION

RECOMMENDATION

This operation does not require checking the body shell on the body jig.

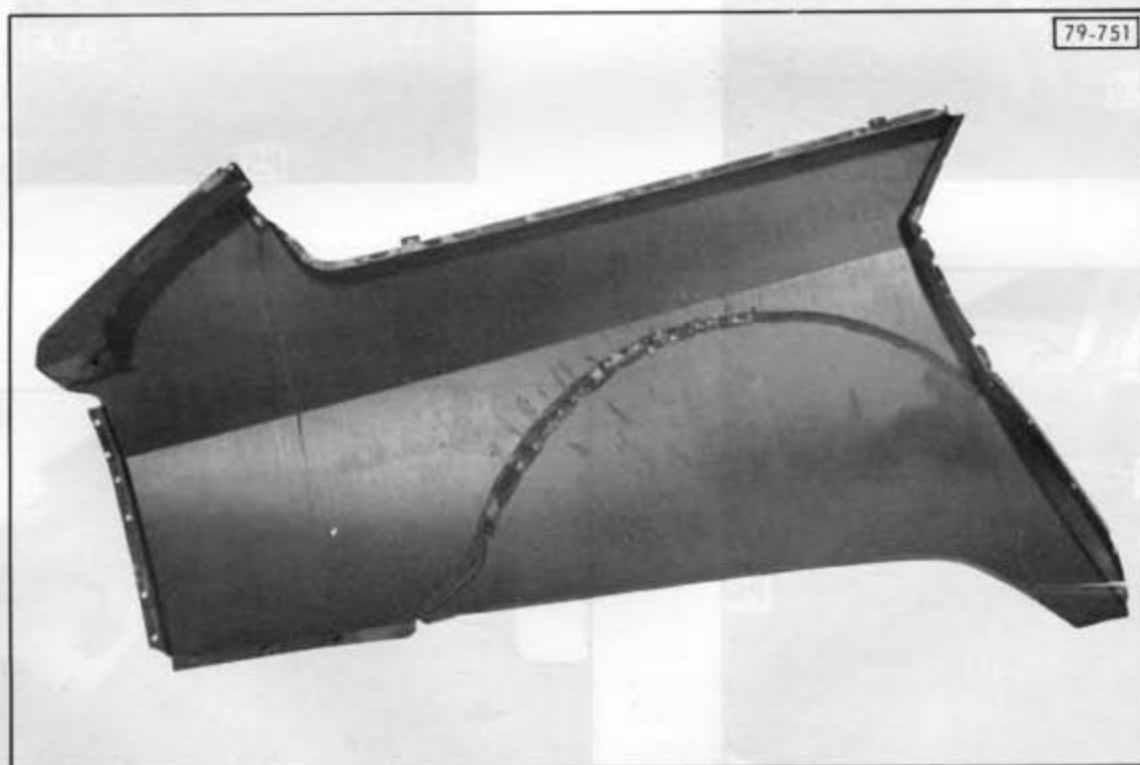
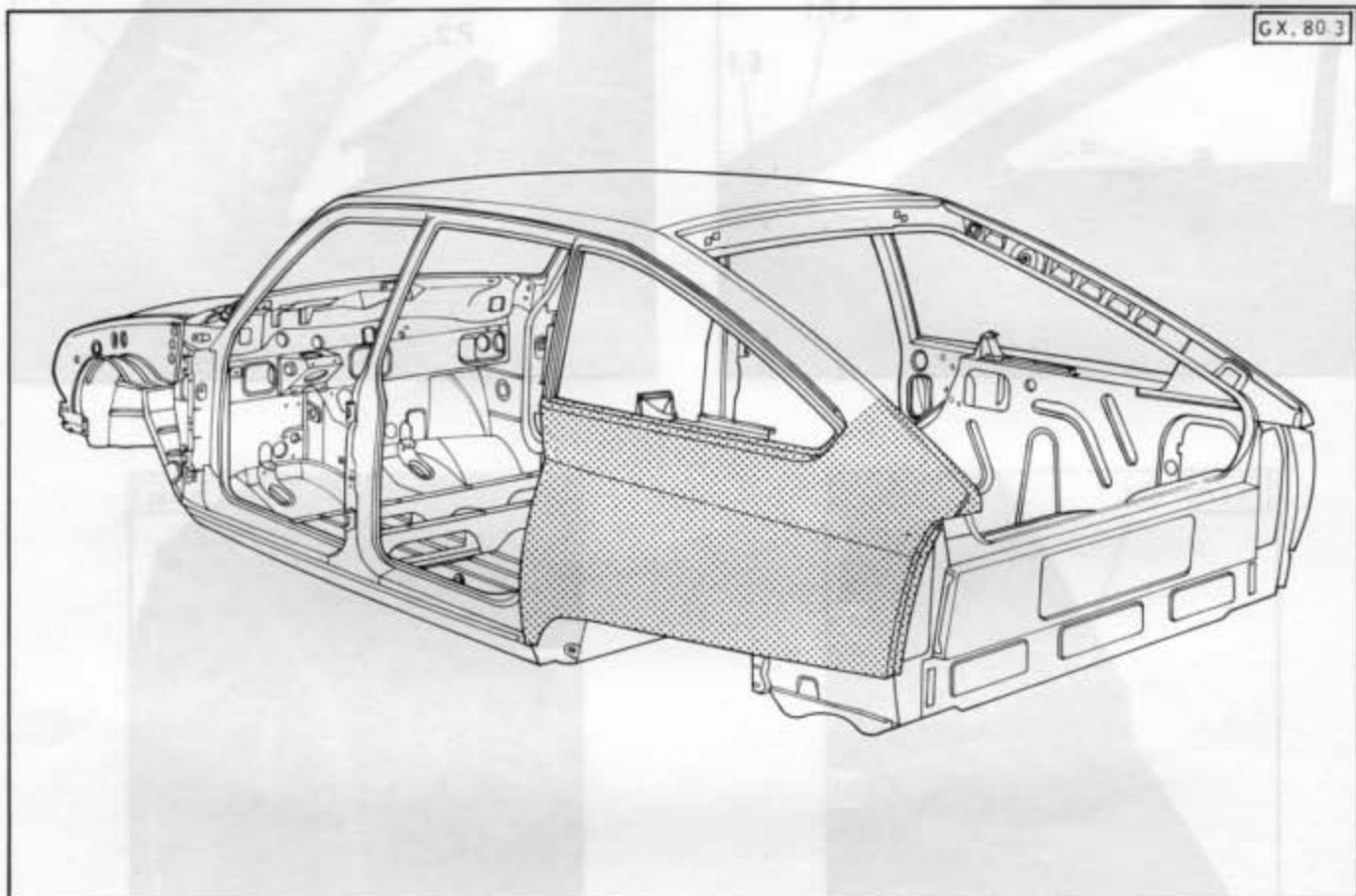
PRELIMINARY REMOVALS

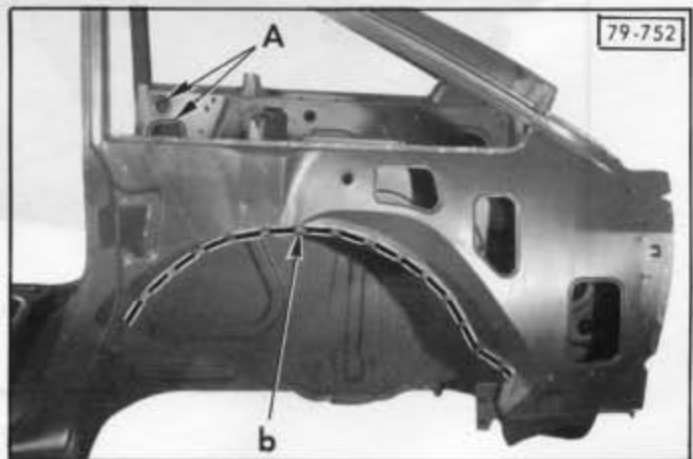
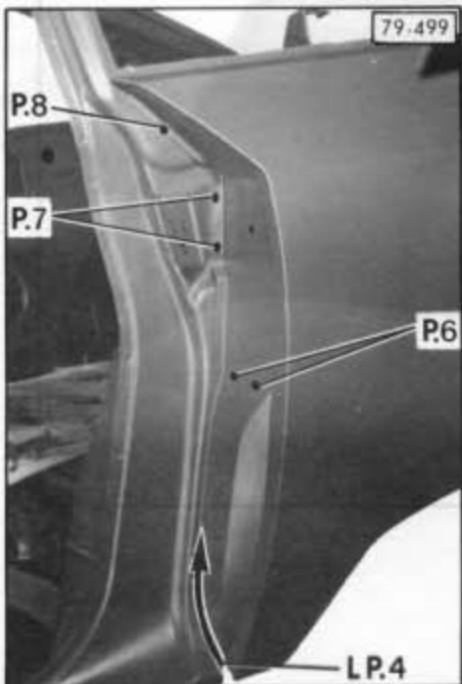
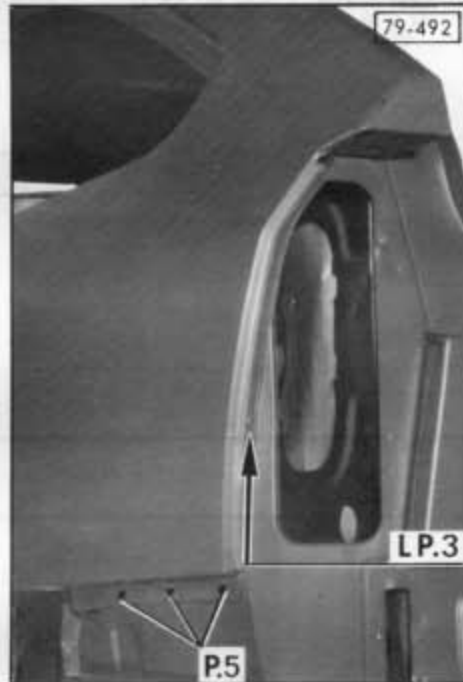
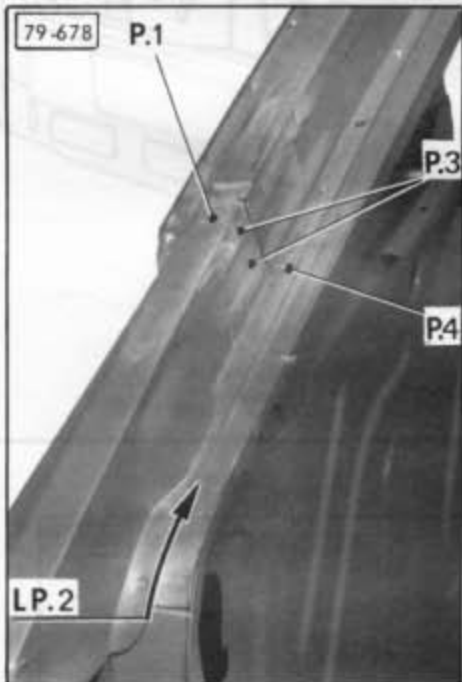
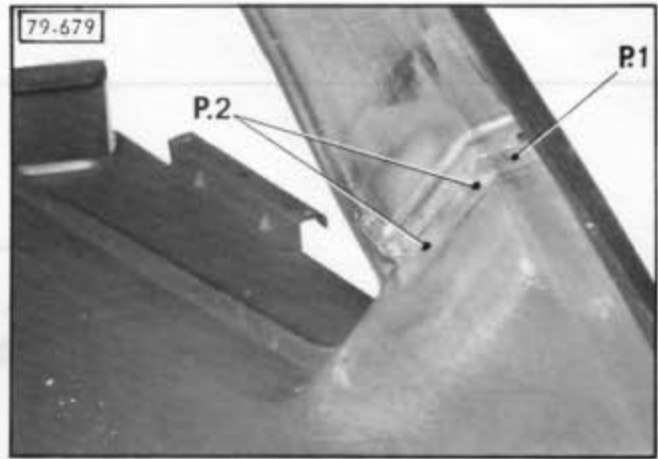
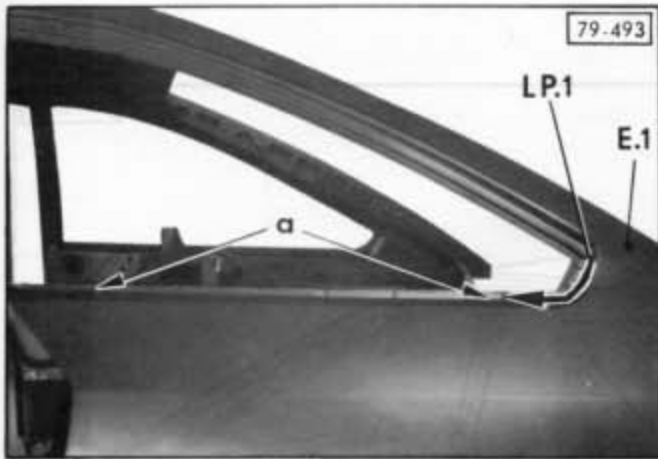
- rear signalling light,
 - rear quarter glass and sealing strip, } (*side involved*)
 - rear door and hatchback door weather strips (*partially*),
 - boot trim,
 - rear bumper,
 - fuel tank filler spout (*right-hand side*),
- Fold back and protect the rear bench seat.
- wing embellishment beading.

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Oxyacetylene set
- « MIG » welding unit
- Spot-welding head
- Panel clamps.







REPLACEMENT OF A REAR WING

REMOVAL

1. Remove rear wing :

- a) Eliminate the solder at :
 - E. 1.
- b) Drill and break the spot-welds, following lines :
 - LP. 1,
 - LP. 2, (as far as P. 4)
 - LP. 3,
 - LP. 4,
 and points :
 - P. 1,
 - P. 2,
 - P. 3,
 - P. 4, (point under the roof panel)
 - P. 5,
 - P. 6,
 - P. 7,
 - P. 8.
- c) Raise the two tabs « a ».
Remove the rear wing.

PREPARATION

2. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Drill to dia. = 5 mm for plug welding in the place of points :

- P. 1,
- P. 2,
- P. 3,
- P. 5.

Eliminate the sealing compound remaining on the wheel arch at « b ».

Put back into place a strip of preformed sealing compound dia. = 12 mm on the wheel arch.

E.g. : Prestik S.S. (BOSTIK)

Terostat II (TEROSON)

Apply a conductive primer coat on the inner face of the edge to be welded by using a spot-welding head.

FITTING

3. Position the rear wing :

Put the wing into place and adjust in relation to the side door and the boot lid.

After positioning, hold the wing in place by means of panel clamps.

4. Weld rear wing :

- a) Spot-weld, following lines :
 - LP. 1,
 - LP. 2,
 - LP. 3,
 - LP. 4,
 and points :
 - P. 4,
 - P. 6,
 - P. 7, } (through openings A)
 - P. 8, }

b) Oxyacetylene "plug" weld (MIG) following :

- P. 1,
- P. 2,
- P. 3,
- P. 4, (to plug the hole in roof panel)
- P. 5.

c) Fold back the two tabs « a ».

d) Grind and surface the "plug" points at :

- P. 1, P. 2, P. 3 and P. 4.

e) Tin solder at :

- E. 1.

5. Finish off the body shell seal-tightness and protection.

Spray a semi-liquid soundproofing agent on the inner face of the wing.

6. Paint.**7. Fit and adjust the previously removed elements.**

MOITAW3PD
3.458.30

RECOMMENDATION

This operation requires checking the body shell on the body jig, only in the case where there is distortion of the sub-frame floor or wheel arch (interior side) in front of the rear axle fastenings.

PREPARATION FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- rear bumper,
- interior shelf, boot and floor trim (disengage partially),
- rear light, } (side involved)
- rear quarter panel, }
- rear bench seat,
- fuel tank filler spout and venting tube (right-hand side).

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Spot-welding head
- « MIG » welding unit
- Oxyacetylene set
- Panel clamps

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig.

ENS. 158-000 : Body shell checking equipment

ENS. 158-008 : Front wheel arches support

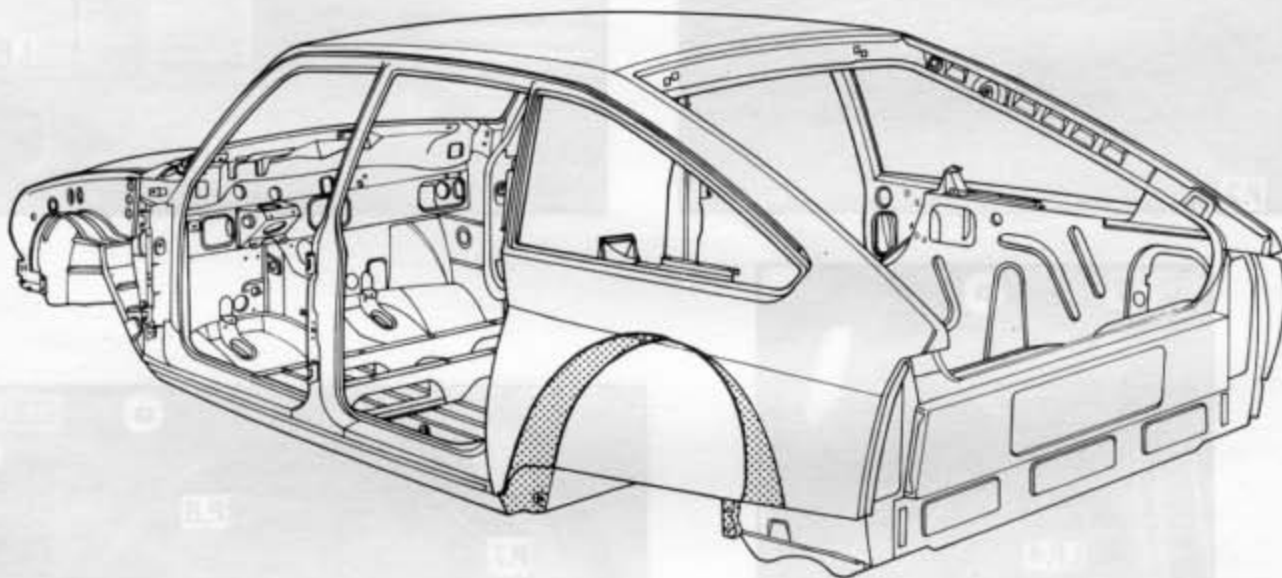
or

- 2600-T : « FENWICK » body jig

- 2628-T : Checking equipment for « GX » vehicle.

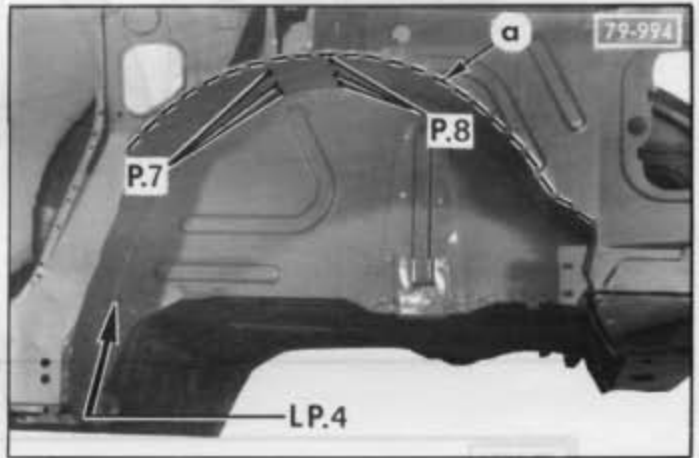
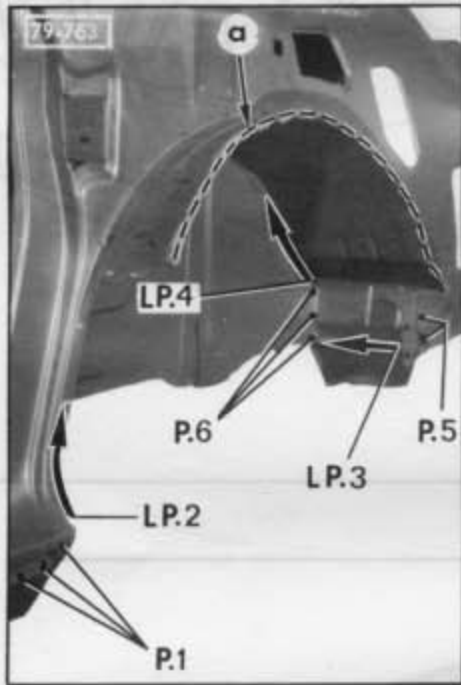
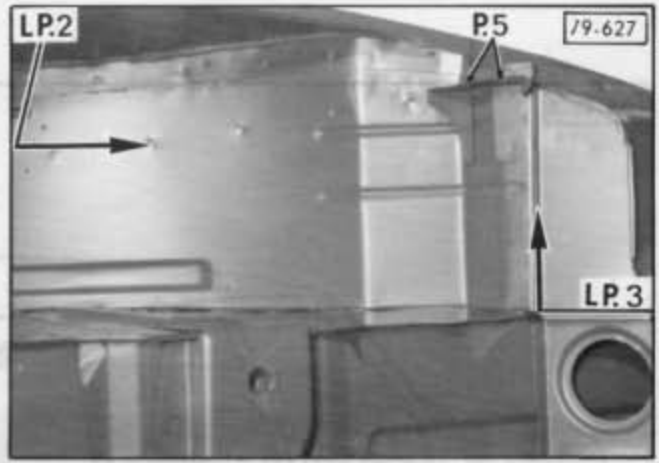
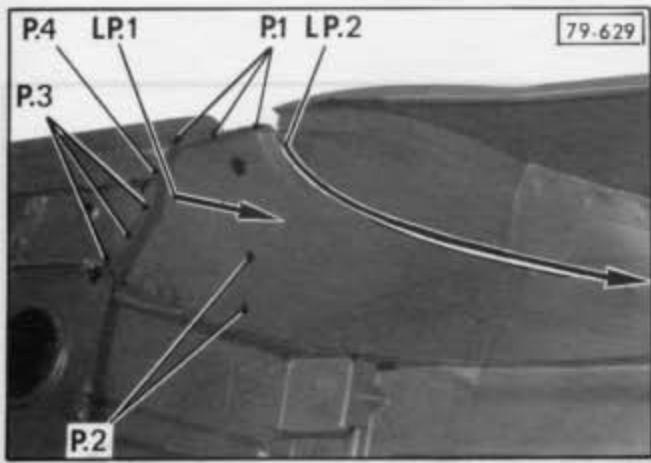
NOT NOW BEING MADE IN THE UNITED KINGDOM

GX.80.3



79.1051





REPLACEMENT OF A REAR WHEEL ARCH TOP

REMOVAL

1. Remove rear wing :

(See Operation GX. 824-1).

2. Remove wheel arch top :

Drill and break the spot-welds, following lines :

- LP. 1,
- LP. 2,
- LP. 3,
- LP. 4,

and points :

- P. 1,
- P. 4,
- P. 3,
- P. 2,
- P. 5,
- P. 6,
- P. 7,
- P. 8.

Remove the wheel arch top.

PREPARATION

3. Prepare the previously separated welding seams.

Reshape the panels if necessary

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of the edges to be spot welded.

FITTING

4. Position wheel arch top :

Put the wheel arch top into place and hold it with panel clamps.

5. Weld wheel arch top :

a) Spot weld, following lines :

- LP. 2,
- LP. 4,
- LP. 3,

and points :

- P. 1,
- P. 3,
- P. 4,
- P. 5,
- P. 6.

b) Oxyacetylene « plug » weld (MIG) following line :

- LP. 1,

and points :

- P. 2,
- P. 7,
- P. 8.

6. Put into place a preformed strip of sealing compound
dia. = 12 mm into the groove « a ».

E.g. Prestik S.S. (BOSTIK)

Terostat II (TEROSON)

7. Fit rear wing :

(See Operation GX. 824-1).

8. Finish off the body shell seal-tightness and protection :

(See Operation GX. 800-00).

9. Paint.**10. Fit and adjust the previously removed elements.**



RECOMMENDATION

This operation requires checking the body shell on the body jig.

PREPARATION FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- tailgate and sealing strip,
 - rear bench seat,
 - rear seat belts,
 - rear quarter glass,
 - trim for centre pillar, quarter panel and wheelarch
 - rear lamp cluster and bumper section,
 - rear door with sealing strip,
 - headlining rear upper section,
 - fuel tank filler spout and venting tube (*right-hand side*)
- } (*side involved*)

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- « MIG » welding unit
- Panel clamps
- Spot-welding head
- Oxyacetylene set

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig.

ENS. 158-000 : Body shell checking equipment

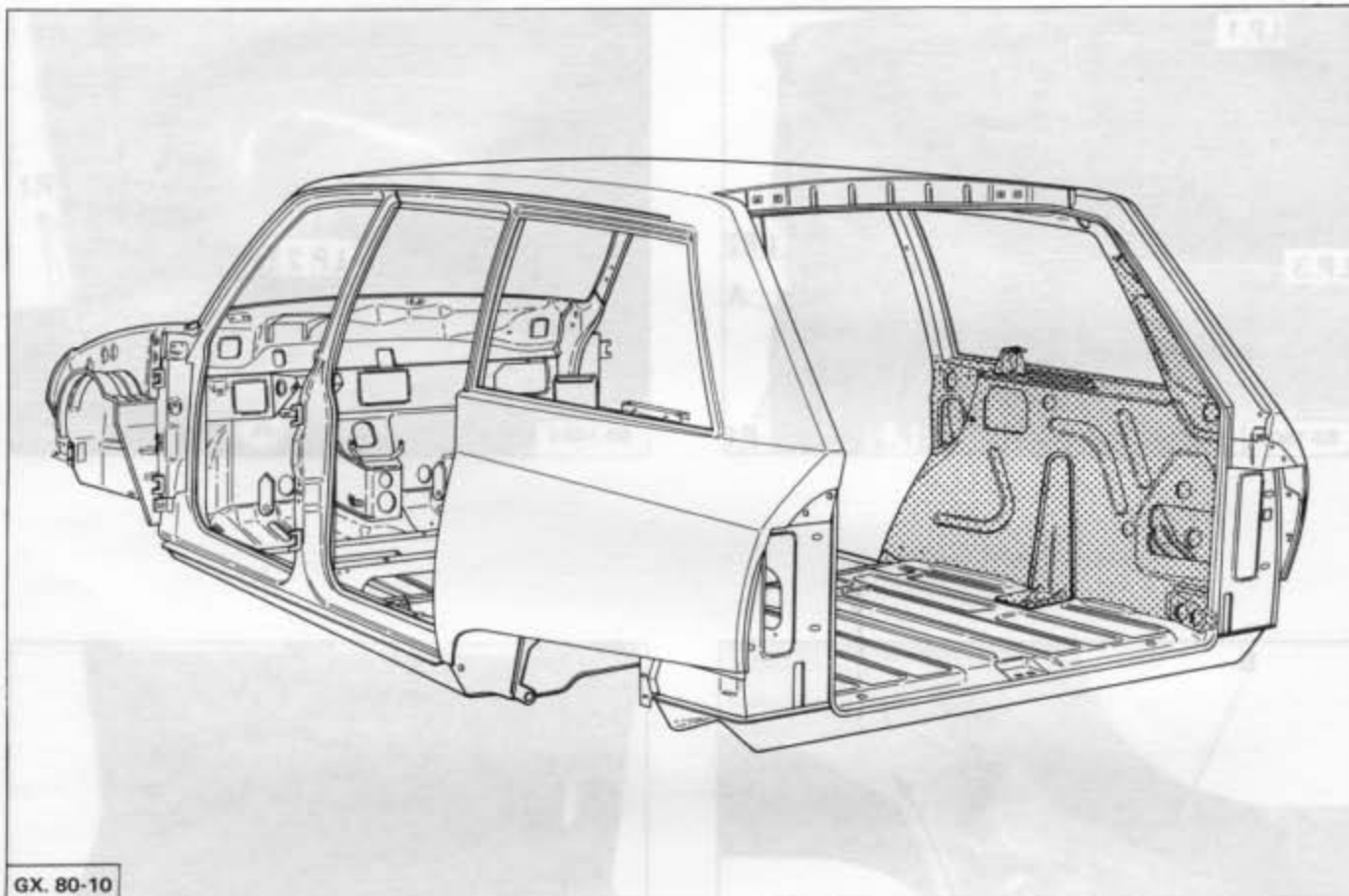
ENS. 158-008 : Front wheelarches support

or

- 2600-T : « FENWICK » body jig

- 2628-T : Checking equipment for « GX » vehicle.

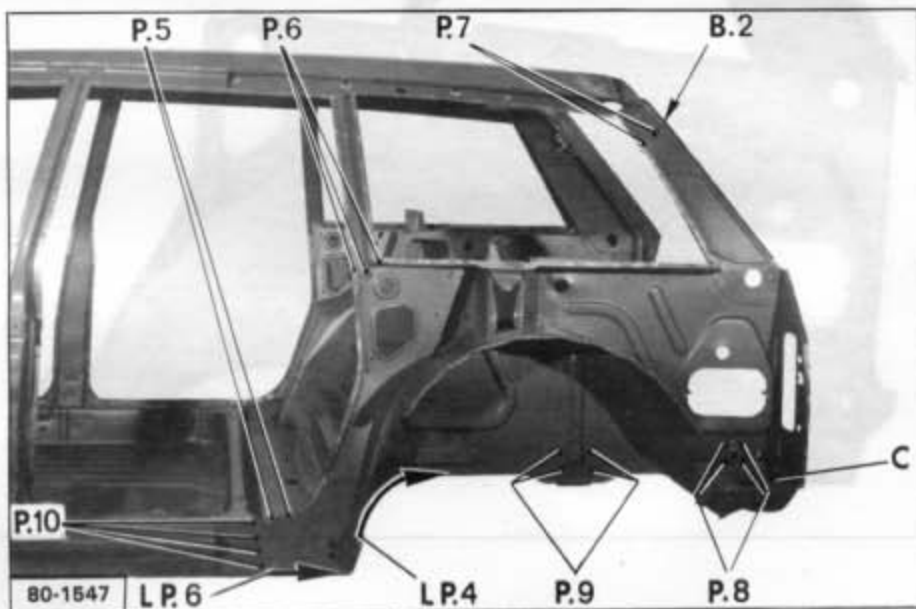
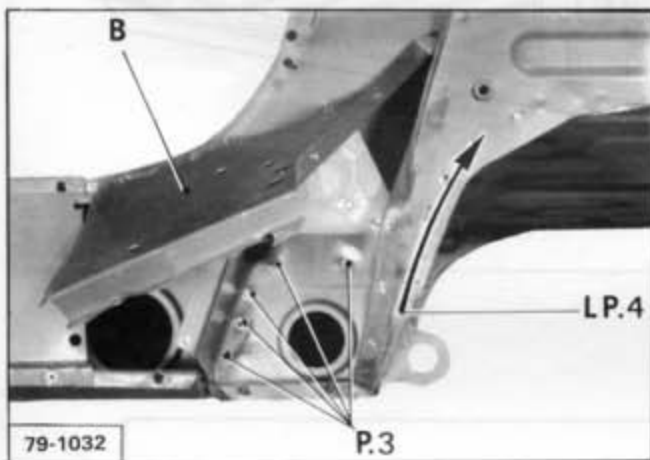
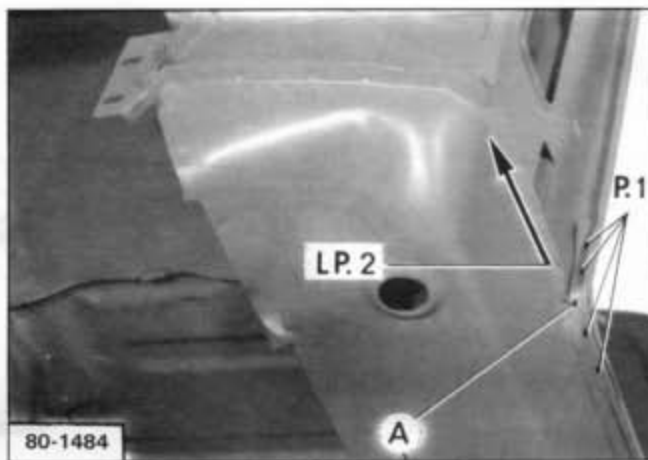
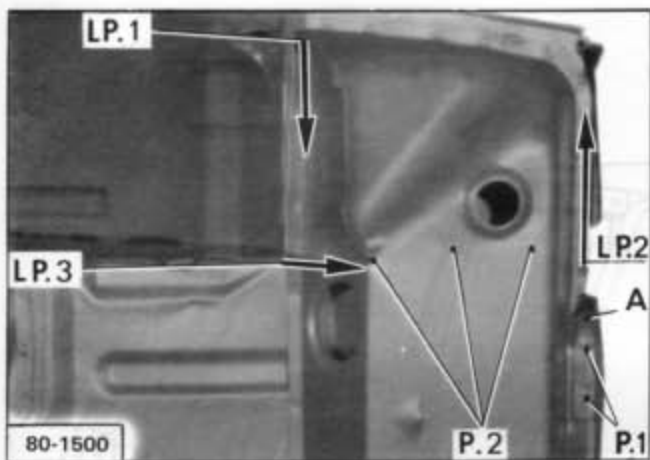




GX. 80-10



80-1611



REPLACEMENT OF A REAR WHEELARCH, COMPLETE

REMOVAL

1. Remove rear wing :

(See Operation GXB. 824-1)

2. Remove rear part of side panel :

(See Operation GXB. 821-7)

3. Remove rear crossmember closing panel C :

Drill and break the spot-welds, following line :
- P. 8.

4. Remove floor stiffener A :

Drill and break the spot-welds, following line :
- P. 1.

5. Remove rear wheelarch :

- LP. 1,
 - LP. 2,
 - LP. 3,
 - LP. 4,
 - LP. 5,
 - LP. 6,
- and points :
- P. 2,
 - P. 3, (raise panel B to give access)
 - P. 10,
 - P. 5,
 - P. 4,
 - P. 9,
 - P. 6,
 - P. 7.

Eliminate the brazing spots at :

- B. 1,
- B. 2.

Remove the rear wheelarch.

PREPARATION.

6. Prepare the previously separated welding seams.

Reshape the panels, if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all the edges to be welded by using a spot-welding head.

7. Put body shell on body jig :

Put the body shell on the body jig and check the subsisting fastening points (See Operation GX. 800-0).

Realign the body shell if necessary.

FITTING.

8. Fit rear wheelarch :

Put the wheelarch into place and hold it with panel clamps.

Weld :

a) Spot weld following the lines :

- LP. 4,
- LP. 1,
- LP. 3, LP. 6

and points :

- P. 2,
- P. 3, (fold back panel B)
- P. 5,
- P. 6,
- P. 7.

b) Oxyacetylene « plug » weld (MIG) following points :

- P.4,
- P. 9, P. 10.

and line :

- LP. 5.

c) Braze at :

- B. 1,
- B. 2.

9. Fit rear cross-member closing panel C :

Weld following line :

- LP. 2,

and points :

- P. 8.

10. Fit floor stiffener :

Spot weld following points :

- P. 1 and P. 2.

11. Fit rear part of side panel :

(See Operation GXB. 821-7)

12. Fit rear wing :

(See Operation GXB. 824-1)

13. Finish off body shell seal-tightness and protection :

(See Operation GX. 800-00)

14. Remove body shell from body jig.**15. Paint.****16. Fit and adjust the previously removed elements.**

RECOMMANDATION
 1-401-30

RECOMMENDATION

This operation requires checking the body shell on the body jig.

PREPARATION FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- rear seat,
 - boot bottom trim,
 - rear bumper,
 - hatchback door and sealing strip,
 - rear carpet,
 - rear quarter glass,
 - rear seat assembly,
 - rear door with sealing strip,
 - rear light,
 - rear wheel arch trim,
 - fuel tank filler spout and venting tube (*right-hand side*)
- } (*side involved*)

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- « MIG » welding unit
- Panel clamps
- Spot-welding head
- Oxyacetylene set

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig.

ENS. 158-000 : Body shell checking equipment

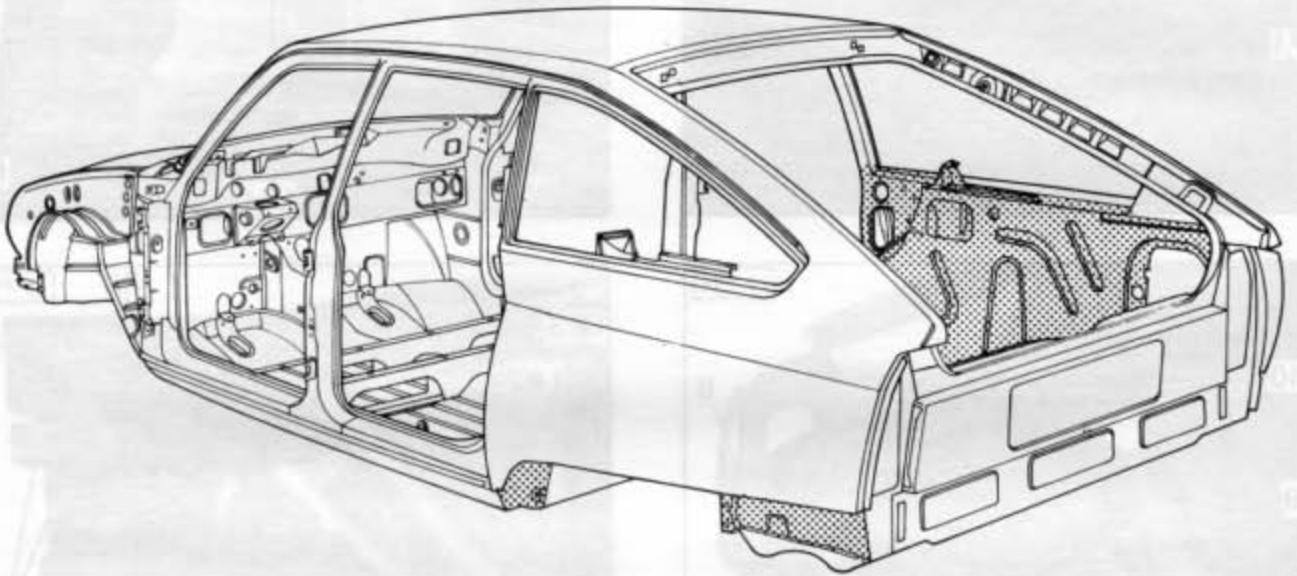
ENS. 158-008 : Front wheel arches support

or

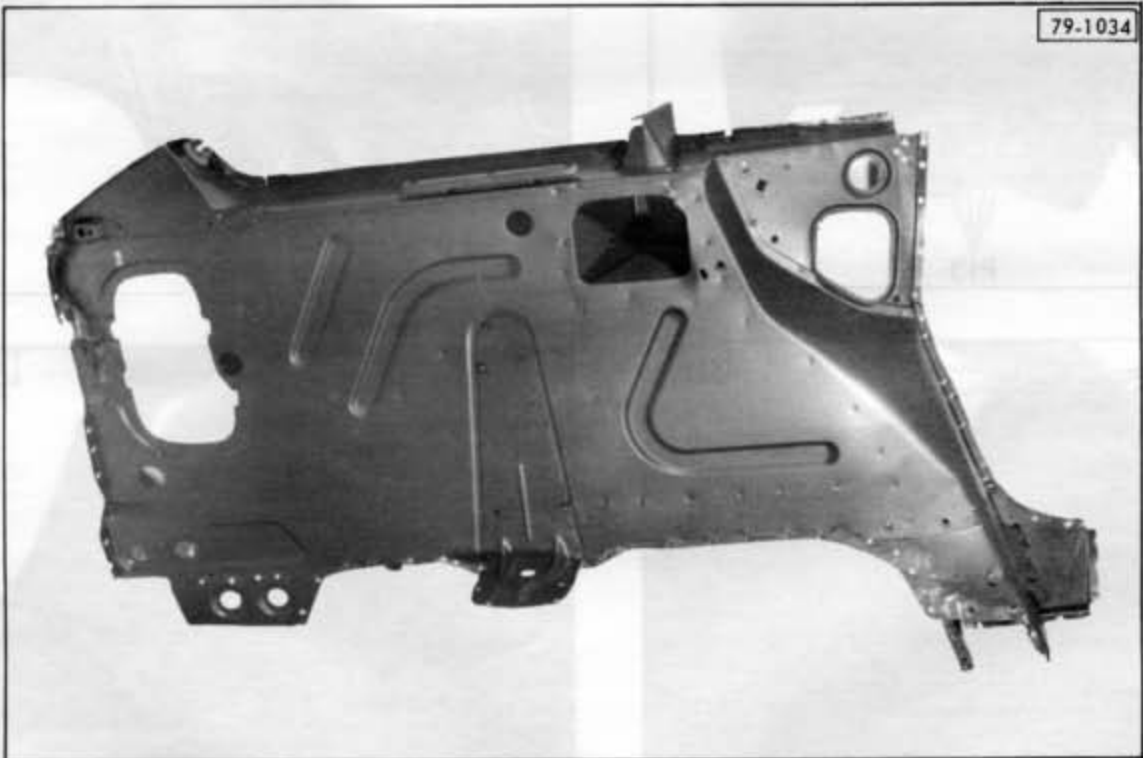
- 2600-T : « FENWICK » body jig
- 2628-T : Checking equipment for « GX » vehicle.

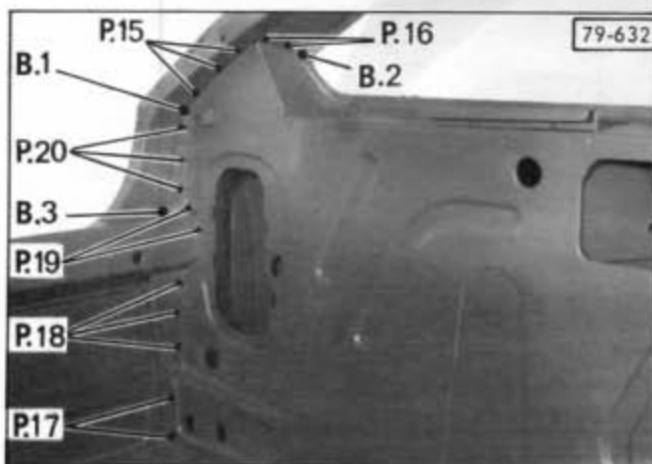
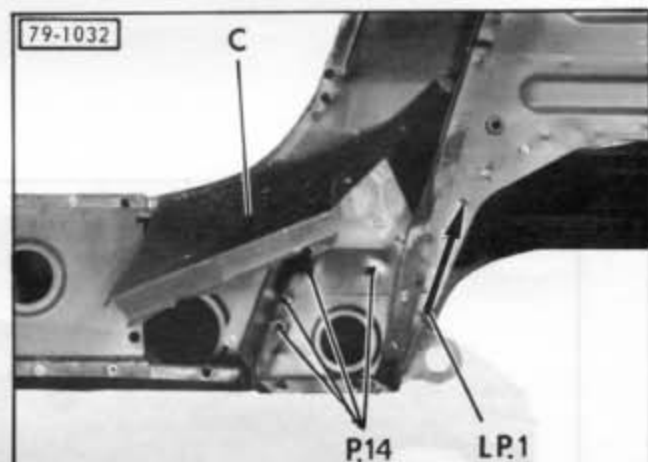
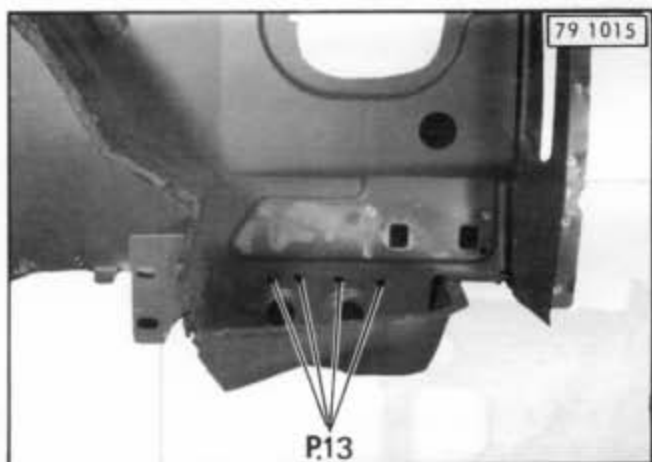
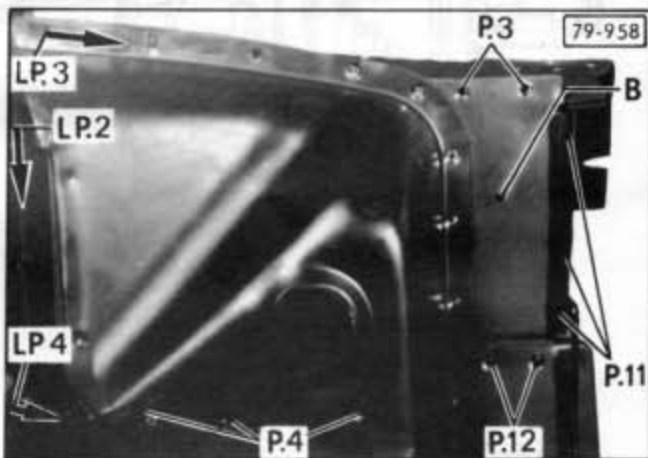
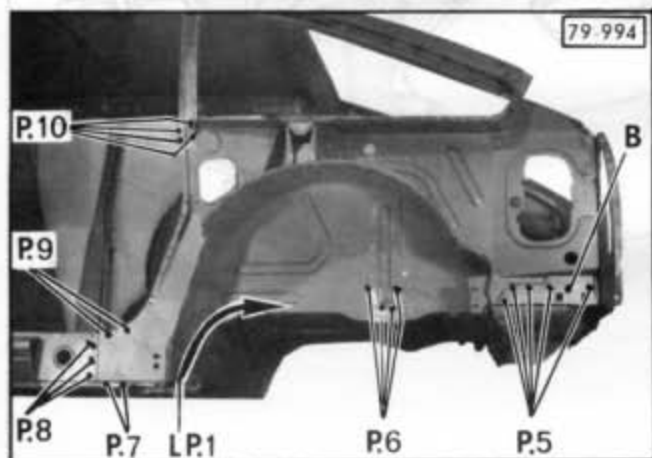
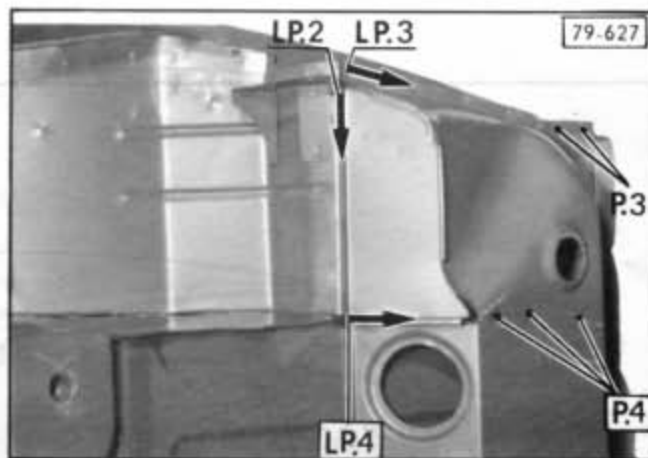
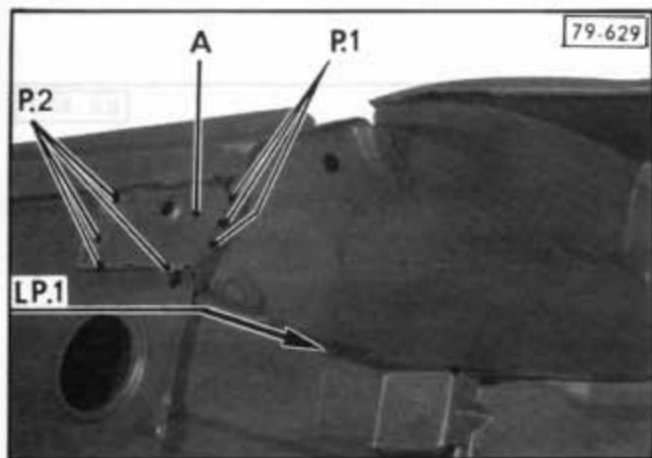
RECOMMANDATION
 1-401-30

GX. 80-3



79-1034





REPLACEMENT OF A REAR WHEEL ARCH, COMPLETE

REMOVAL

1. Remove rear wing :

(See Operation GX. 824-1)

2. Remove rear part of side panel :

(See Operation GX. 821-7)

3. Remove closing panel A :

Drill and break the spot-welds, following points :

- P. 1,

- P. 2.

4. Remove rear crossmember closing panel B :

Drill and break the spot-welds, following line :

- LP. 3,

and points :

- P. 3,

- P. 11,

- P. 5.

5. Remove rear wheel arch :

a) Drill and break the spot-welds, following lines :

- LP. 1,

- LP. 2,

- LP. 4,

- LP. 5,

and points :

- P. 4,

- P. 6,

- P. 7,

- P. 8,

- P. 9,

- P. 10,

- P. 12,

- P. 13,

- P. 14, (raise panel C to give access)

- P. 15,

- P. 16,

- P. 17,

- P. 18,

- P. 19,

- P. 20,

- P. 21.

b) Eliminate the brazing spots at :

- B. 1,

- B. 2,

- B. 3.

Remove the rear wheel arch.

PREPARATION

6. Prepare the previously separated welding seams.

Reshape the panels, if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all the edges to be welded by using a spot-welding head.

7. Put body shell on body jig :

Put the body shell on the body jig and check the subsisting fastening points (See Operation GX. 800-0).

Realign the body shell if necessary.

FITTING

8. Fit rear wheel arch :

Put the wheel arch into place and hold it with panel clamps.

Weld :

a) Spot weld following the lines :

- LP. 1, LP. 2, LP. 4,

and points :

- P. 4, P. 13, P. 14 (fold back plate C), P. 7, P. 8,

P. 9, P. 10, P. 16, P. 15, P. 17, P. 18, P. 10 and

P.20.

b) Oxyacetylene « plug » weld (MIG) following

points :

- P.6 and P.21,

and line :

- LP. 5.

c) Braze at :

- B. 1, B. 2 and B. 3.

9. Fit rear cross-member closing panel B :

Weld following line :

- LP. 3,

and points :

- P. 3, P. 11 and P. 5.

10. Fit closing panel A :

Spot weld following points :

- P. 1 and P. 2.

11. Fit rear part of side panel :

(See Operation GX. 821-7)

12. Fit rear wing :

(See Operation GX. 824-1)

13. Finish off body shell seal-tightness and protection :

(See Operation GX. 800-00)

14. Remove body shell from body jig.**15. Paint.****16. Fit and adjust the previously removed elements.**



RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

- windscreen glass and sealing strip,
- rear quarter glass and sealing strips,
- boot lid and rubber weather strip,
- drip moulding section (*on each side*),
- sun visors,
- roof panel headlining,

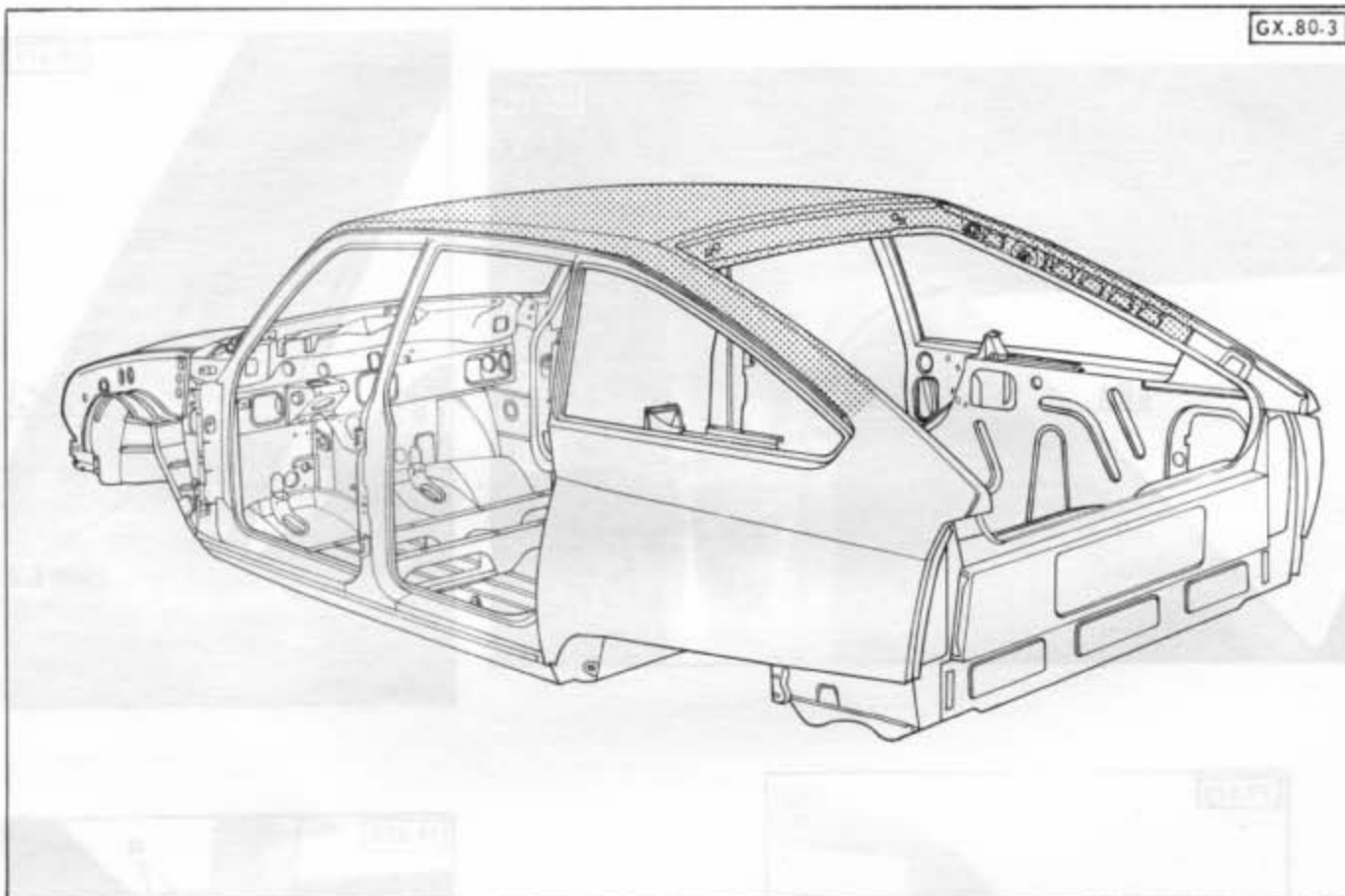
Protect the interior trim and front and rear doors against flying sparks during welding.

TOOLS REQUIRED

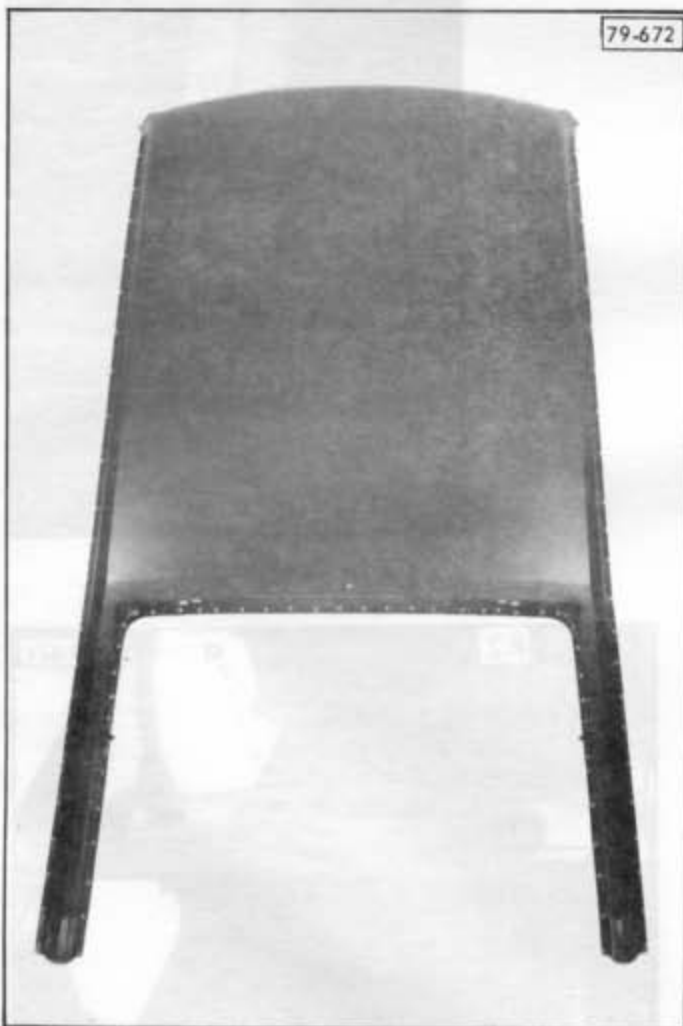
- Drill
- Sanding machine
- «2662-T » or « PICKAVANT » spot-weld cutter
- Spot-welding head
- Oxyacetylene set
- « MIG » welding unit
- Panel clamps



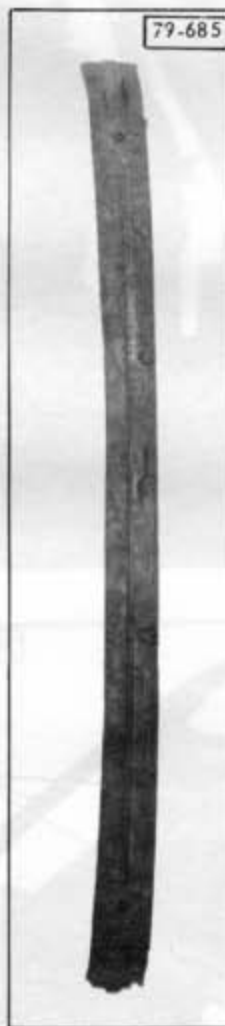
GX.80-3



79-672

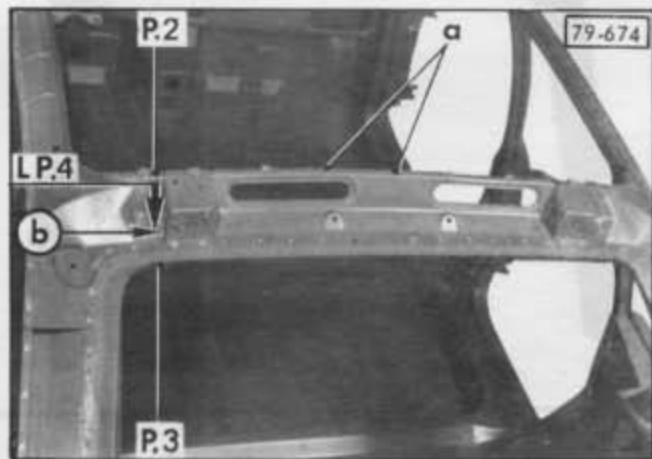
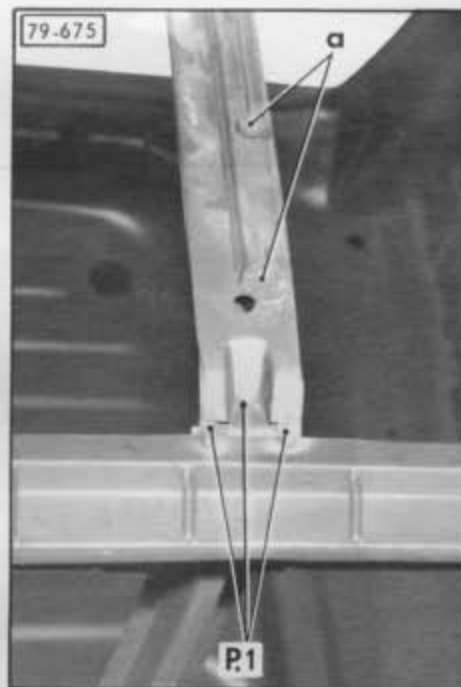
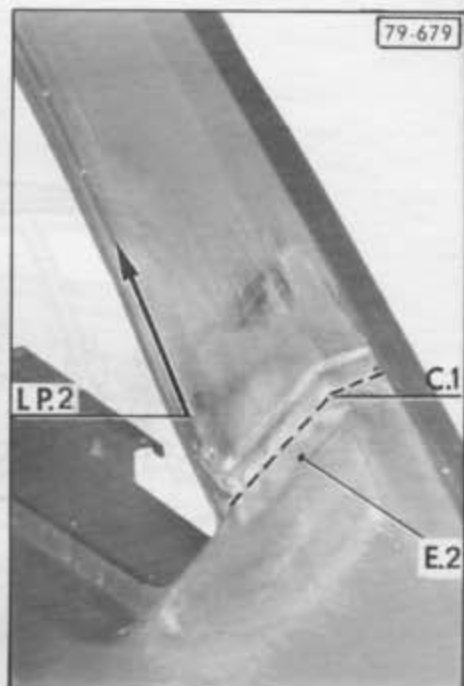
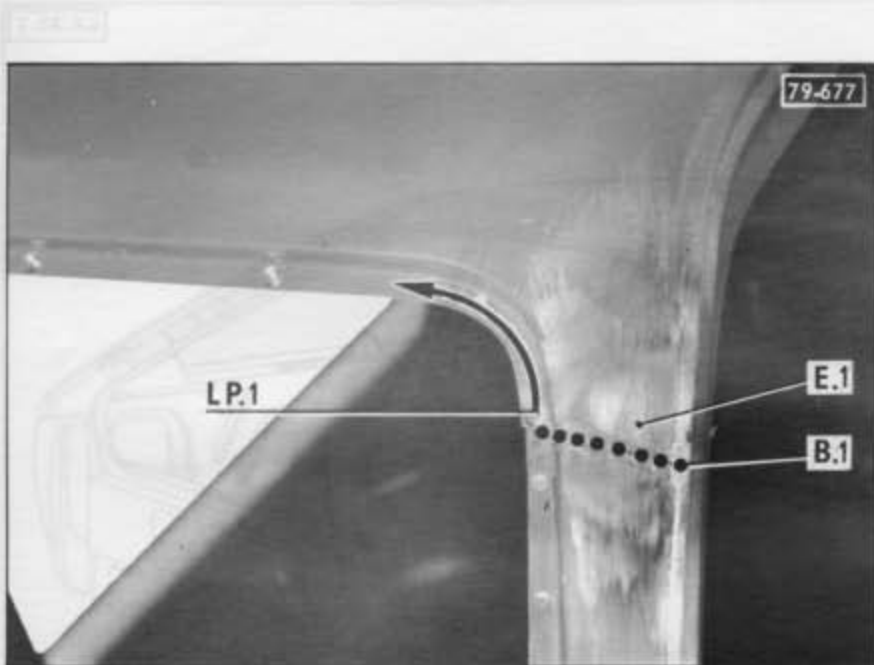


79-685



79-685





REPLACEMENT OF A ROOF PANEL

REMOVAL

1. Remove roof panel :

On each side :

- a) Eliminate soldering at :
 - E. 1,
 - E. 2.
- b) Eliminate brazing at :
 - B. 1,
- c) Cut the weld bead (MIG) with a chisel at :
 - C. 1.
- d) Drill and break the spot-welds, following lines :
 - LP. 1,
 - LP. 2,
 - LP. 3.

Remove the roof panel.

2. Remove central crossmember (if necessary) :

Drill and break the spot-welds, following :
- P. 1 (on each side).
Remove the central crossmember.

3. Remove rear crossmember (if necessary) :

- a) Drill and break the spot-welds, following line :
 - LP. 4 (on each side)

and points :

 - P. 2, } (on each side)
 - P. 3, }
- b) Break tab « b » (on each side).
Remove the rear crossmember.

PREPARATION

4. Prepare the previously separated welding seams.
Reshape the panels if necessary.
Scour the weld zones on body shell and new components.
Do away with soundproofing compound points « a » and remake them (if the crossmembers are not replaced).
Apply a conductive primer coat on the inner face of all the edges to be welded.

FITTING

5. Fit rear crossmember :

Put the rear crossmember into place.
Hold it by means of panel clamps.

- a) Assemble it by spot-welds, following line :
 - LP. 4 (on each side),

and points :

 - P. 2, (on each side)
 - P. 3.
- b) Fold back tab « b » (on each side).

6. Fit central crossmember :

Put the central crossmember into place.
Hold it by means of panel clamps.
Assemble it by spot-welds, following :
- P. 1 (on each side).

7. Remove the soundproofing compound at the different points « a » on the central and rear crossmembers.

8. Fit roof panel :

Put the roof panel into place.
Hold it by means of panel clamps.
Check the windscreen frame (use the glass as template).

9. Assemble roof panel :

On each side :

- a) By spot-welds, following lines :
 - LP. 1,
 - LP. 2,
 - LP. 3.
- b) Braze following :
 - B. 1.
- c) Make a weld bead (MIG) following :
 - C. 1.

10. Grind and surface the welding and brazing beads (MIG).**11. Tin solder finish at :**

- E. 1,
- E. 2.

12. Finish off the body shell seal-tightness :

(See Operation GX. 800-00).

13. Paint.**14. Fit and adjust the previously removed elements.**

OPERATION

RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

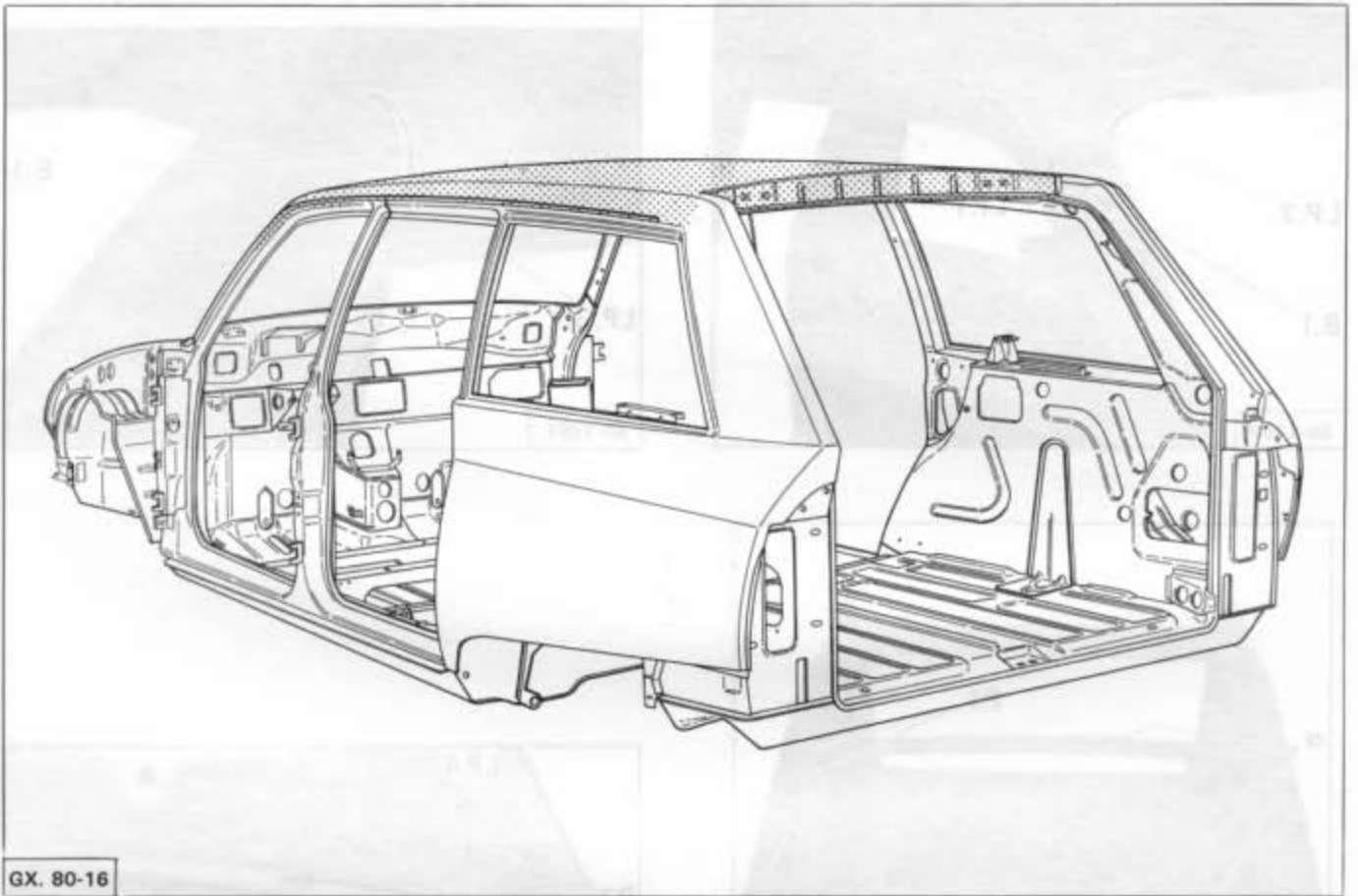
- windscreen glass and sealing strip,
- rear quarter glass and sealing strips,
- tailgate and rubber weather strip,
- drip moulding sections (*on each side*),
- roof panel headlining and sound deadening felt.

Protect the interior trim and front and rear doors against flying sparks during welding.

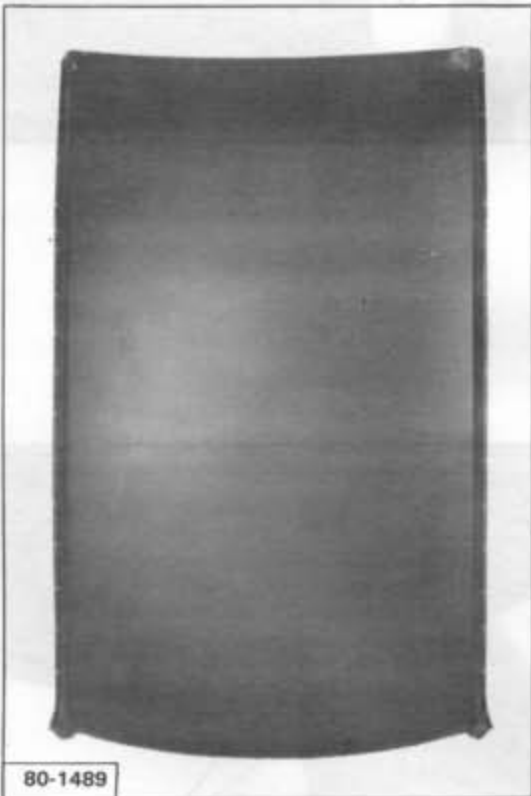
TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Spot-welding head
- Oxyacetylene set
- « MIG » welding unit
- Panel clamps

RETURN TO THE WORK PAGE



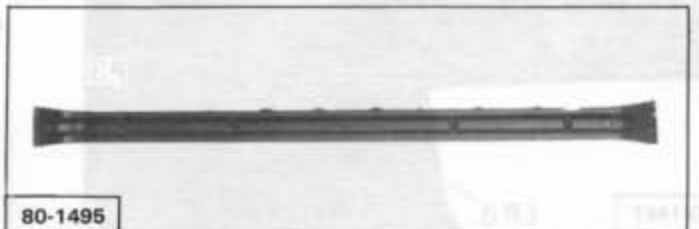
GX. 80-16



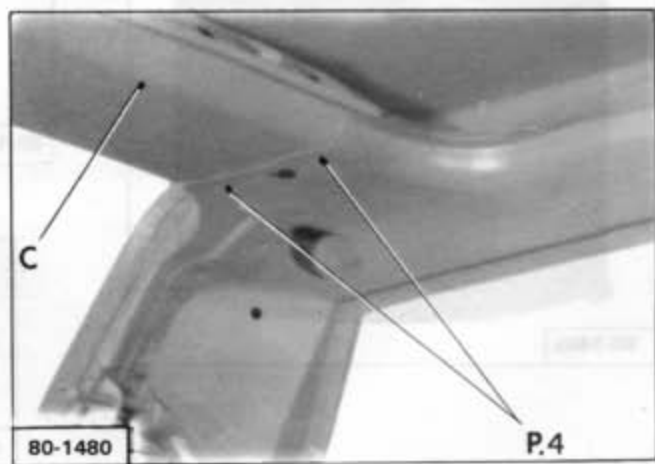
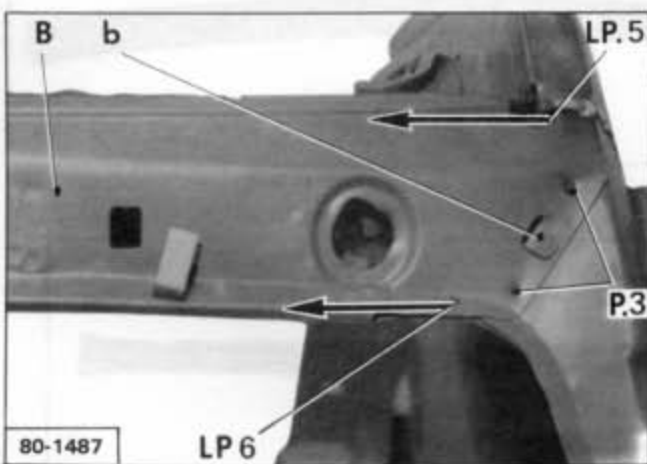
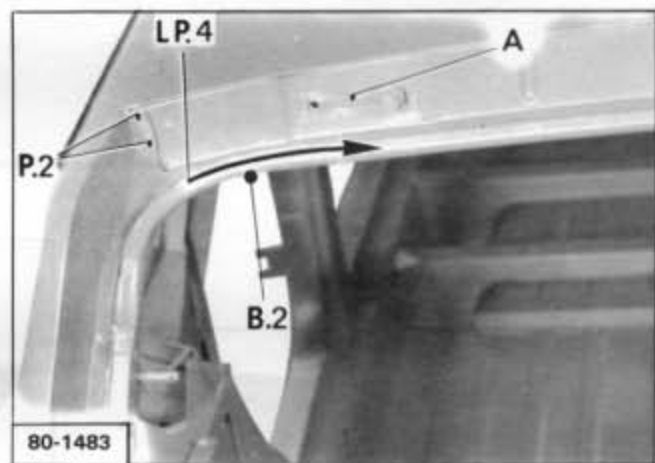
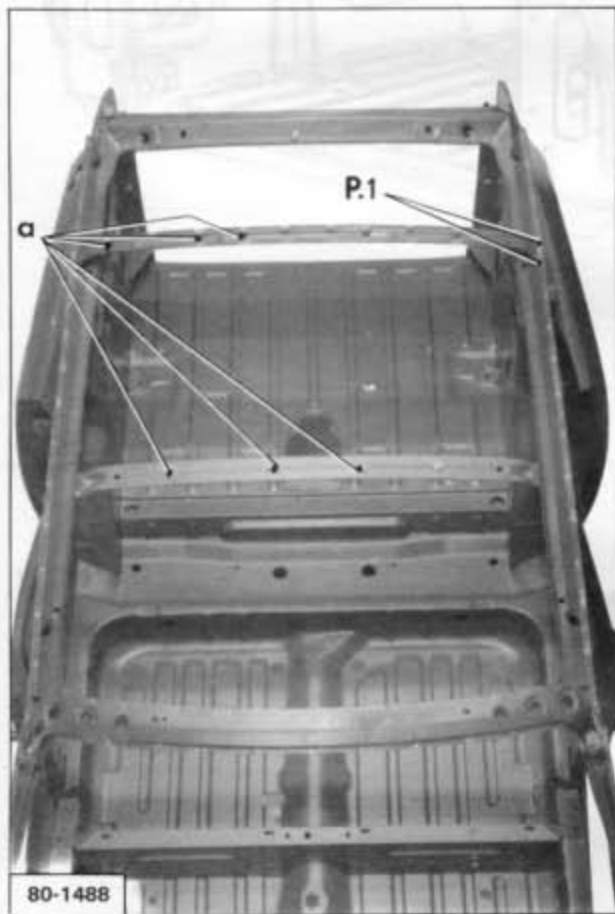
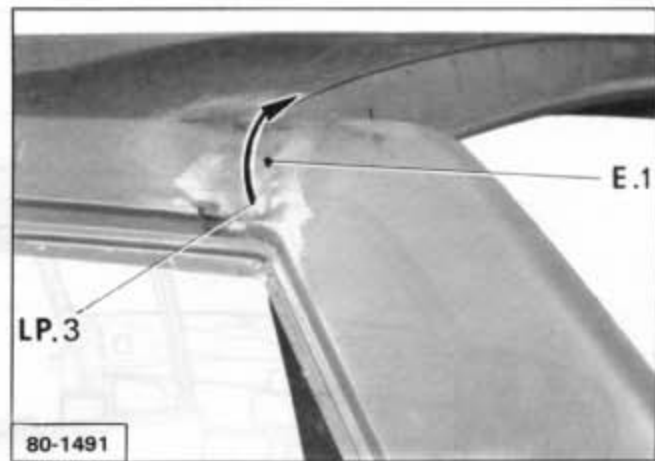
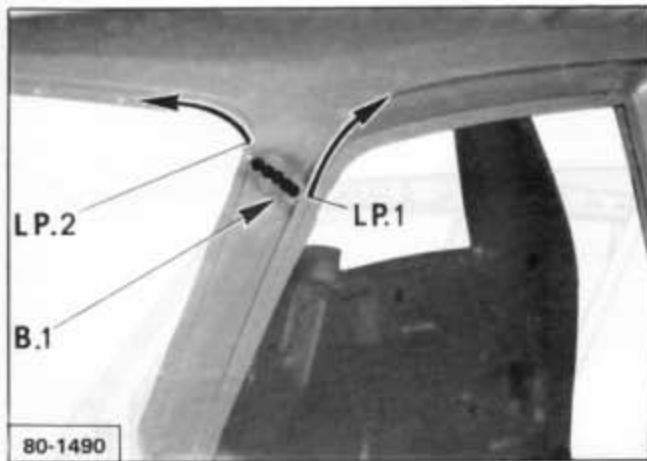
80-1489



80-1496



80-1495



REPLACEMENT OF THE ROOF PANEL

REMOVAL

1. Remove roof panel :

On each side :

- a) Eliminate brazing at :
 - B. 1.
- b) Eliminate soldering at :
 - E. 1.
- c) Drill and break the spot-welds, following lines :
 - LP. 1 (*on each side*)
 - LP. 2,
 - LP. 3 (*on each side*).

Remove the roof panel by pushing it backwards to disengage it from the rear crossmember.

2. Remove roof panel stiffener :

(if necessary)

Drill and break the spot-welds, following points :

- P. 1 (*on each side*)

Remove the roof panel stiffener.

3. Remove rear crossmember :

Remove, in the sequence below :

- a) Closing panel **B**.
 - Drill and break the spot-welds, following lines :
 - LP. 5,
 - LP. 6,
 - and points :
 - P. 3 (*on each side*)
 - Lift up tab « b ».
- b) Crossmember **A**, bare :
 - Drill and break the spot-welds, following line :
 - LP. 4,
 - and points :
 - P. 2 (*on each side*).
- c) Crossmember lining **C**.
 - On each side :*
 - Drill and break the spot-welds, following points :
 - P. 4.
 - Eliminate brazing at :
 - B. 2.

PREPARATION.

4. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Do away with soundproofing compound points « a » and remake them.

Apply a conductive primer coat on the inner face of all the edges to be welded.

FITTING.

5. Fit rear crossmember :

Remove, in the following order :

- a) Crossmember lining **C** and assemble it by spot-welds, following points :
 - P. 4.

Braze along B. 2.

- b) Bare crossmember **A** and assemble it by spot-welds, following line :

- LP. 4,

and points :

- P. 2 (*on each side*)

- c) Closing panel **B** and assemble it by spot-welds, following lines :

- LP. 5,

- LP. 6,

and points :

- P. 3 (*on each side*).

Fold back tab « b ».

6. Fit roof panel stiffener :

Put the stiffener into place and assemble it by spot-welds, following P. 1.

7. Fit roof panel :

Put the roof panel into place.

Hold it by means of panel clamps.

Check the windscreen frame (use the glass as a template).

8. Assemble roof panel :

On each side :

- a) By spot-welds, following lines :

- LP. 1,

- LP. 2,

- LP. 3.

- b) Braze following :

- B. 1.

- c) Clinch the roof panel on the rear crossmember.

9. Grind and surface the brazing beads.**10. Tin solder finish at :**

- E. 1 (*on each side*).

11. Finish off the body shell seal-tightness :

(See Operation GX. 800-00).

12. Paint.**13. Fit and adjust the previously removed elements.**

OPERATION

RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

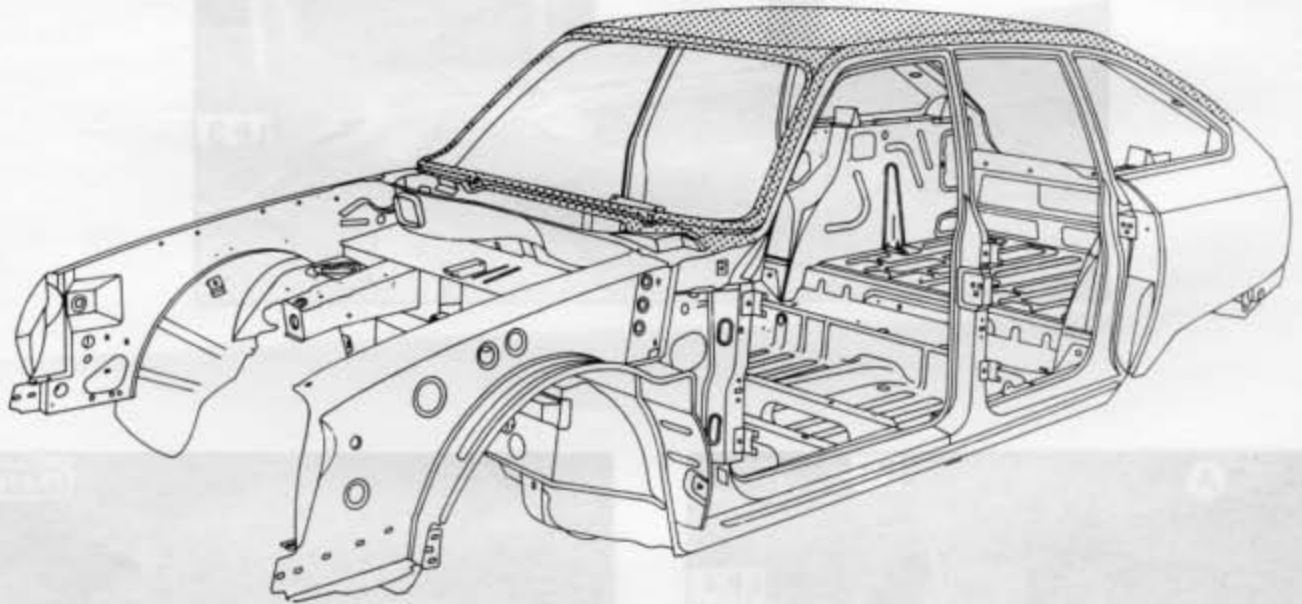
- front side doors and rubber sealing strips,
- front wings,
- bonnet,
- windscreen wiper and nuts and washers fastening the shafts,
- air intake grille,
- windscreen and weather strip,
- dashboard,
- roof panel headlining and windscreen pillar trim,
- front seats
- protect the passenger compartment with a tarpaulin.

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Spot-welding head
- Oxyacetylene set
- « MIG » welding unit
- Panel clamps

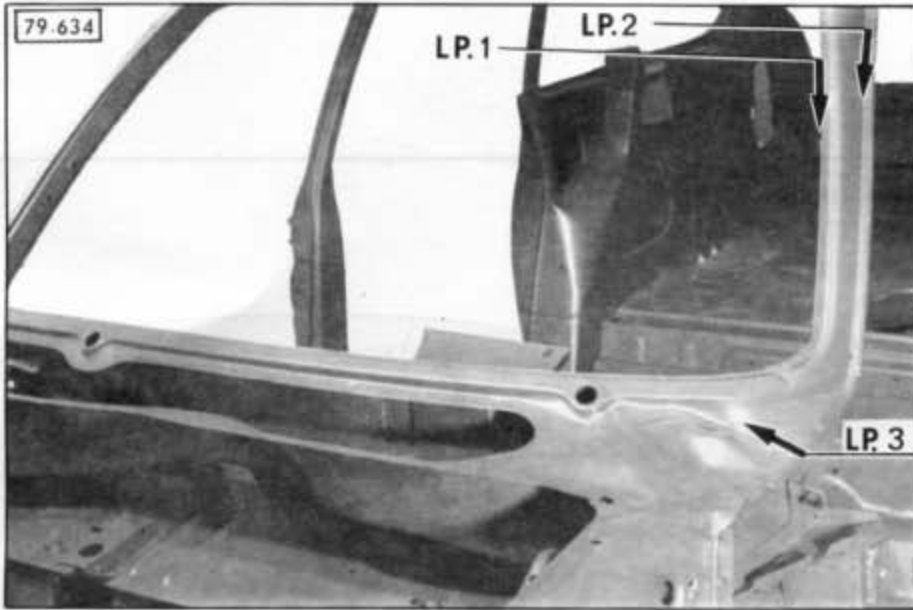
REPARAZIONE E RITROVAMENTO
CARRICATA IN UNO DEI

GX.80-2

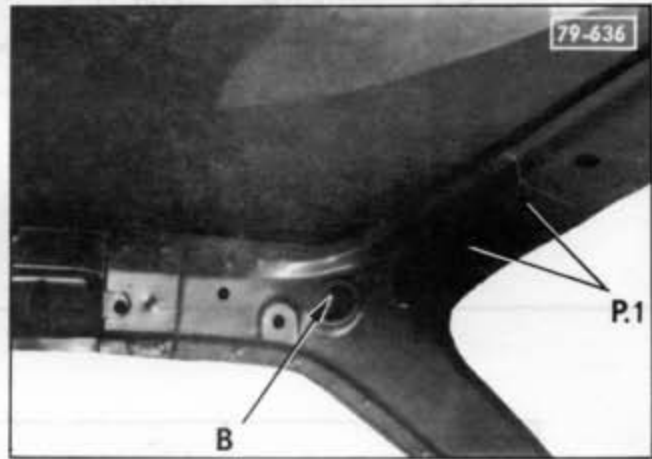
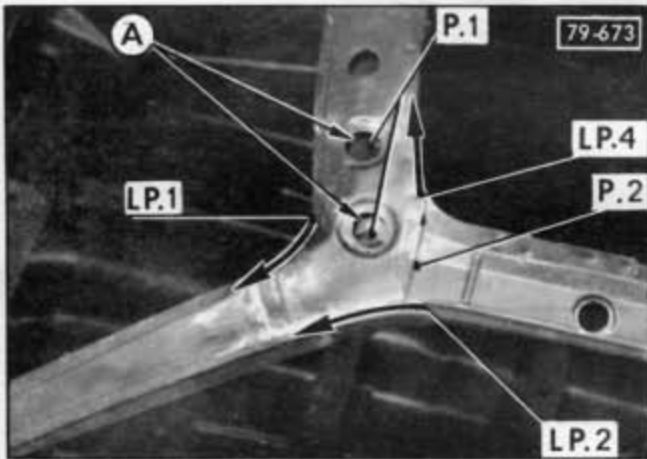


79-822





79-635



REPLACEMENT OF A ROOF PANEL - WINDSCREEN FRAME ASSEMBLY

REMOVAL

1. Remove roof panel :*(See Operation GX. 825-1)***2. Remove windscreen frame :**

Drill and break the spot-welds, following lines :

- LP. 3,
- LP. 2, } (on each side)
- LP. 4, }
- LP. 1, }

and points :

- P. 1, } (on each side)
- P. 2, }

Remove the windscreen frame.

PREPARATION

3. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all the edges to be welded by using a spot-welding head.

FITTING

4. Fit windscreen frame :

Put windscreen frame into place and hold it by means of panel clamps.

Check its positioning using the windscreen as template

5. Assemble windscreen frame :

Spot-weld, following lines :

- LP. 1, }
- LP. 2, } (on each side)
- LP. 4, }
- LP. 3,

and points :

- P. 1 (on each side) passing the clamp through openings **A**
- P. 2 (on each side) passing through opening **B**

6. Fit roof panel :*(See Operation GX. 825-1).***7. Paint.****8. Fit and adjust the previously removed elements.**

OPERATION
0X-212-30

RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

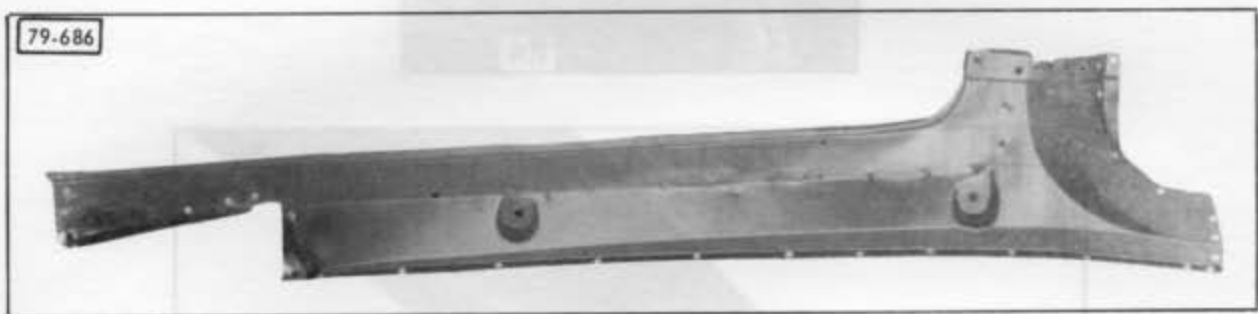
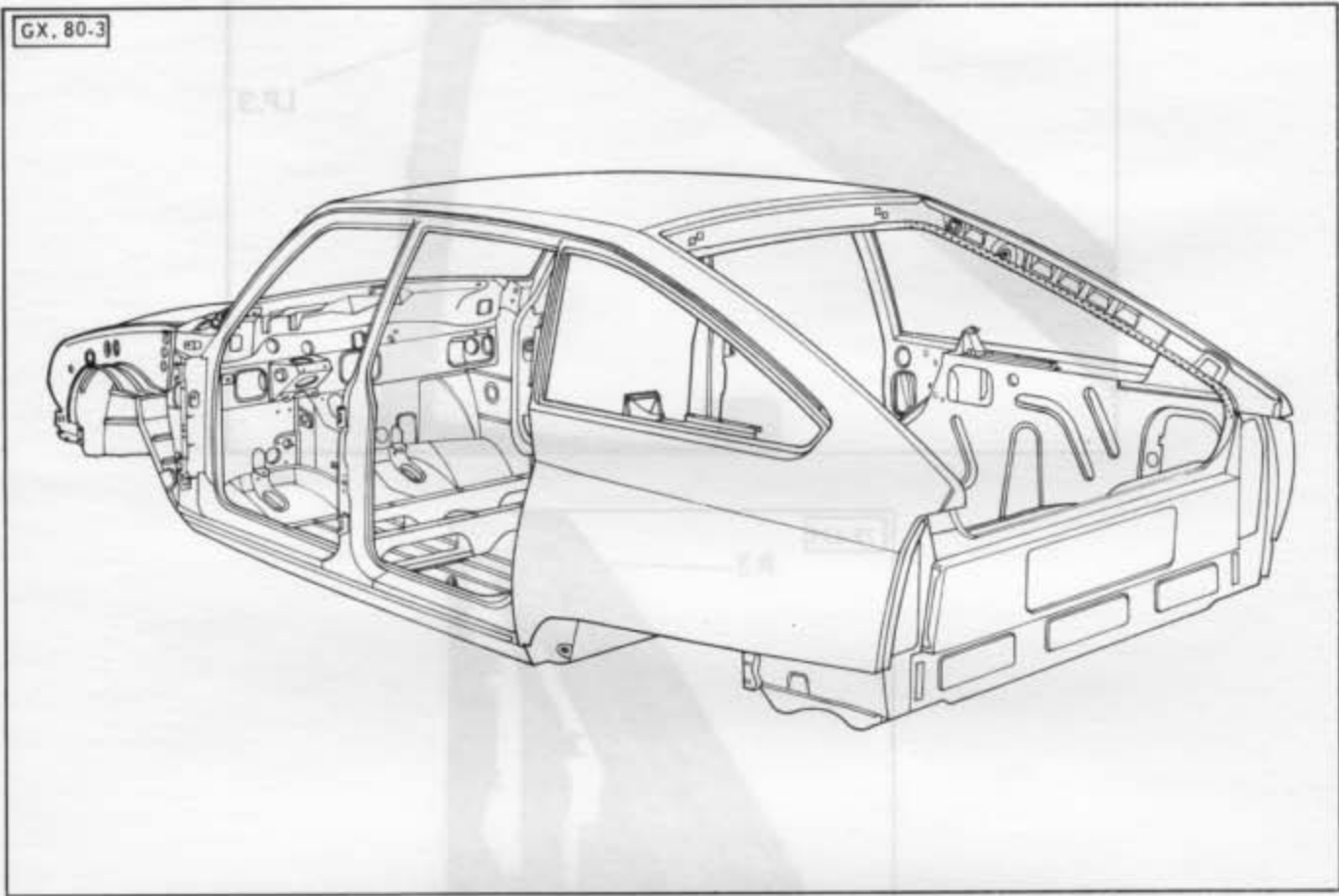
- windscreen glass and sealing strip,
- rear quarter glass and sealing strips,
- hatchback door and rubber weather strip,
- drip moulding section (*on each side*),
- sun-visors,
- interior roof panel headlining and rear pillar trim.

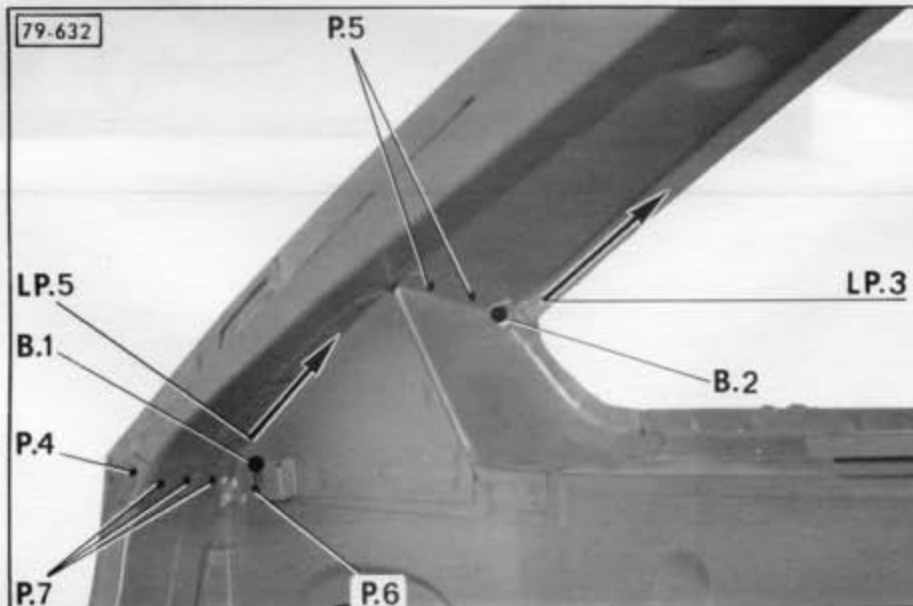
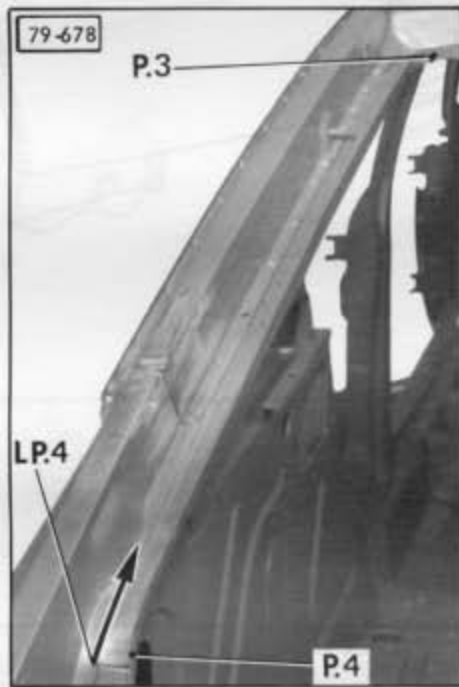
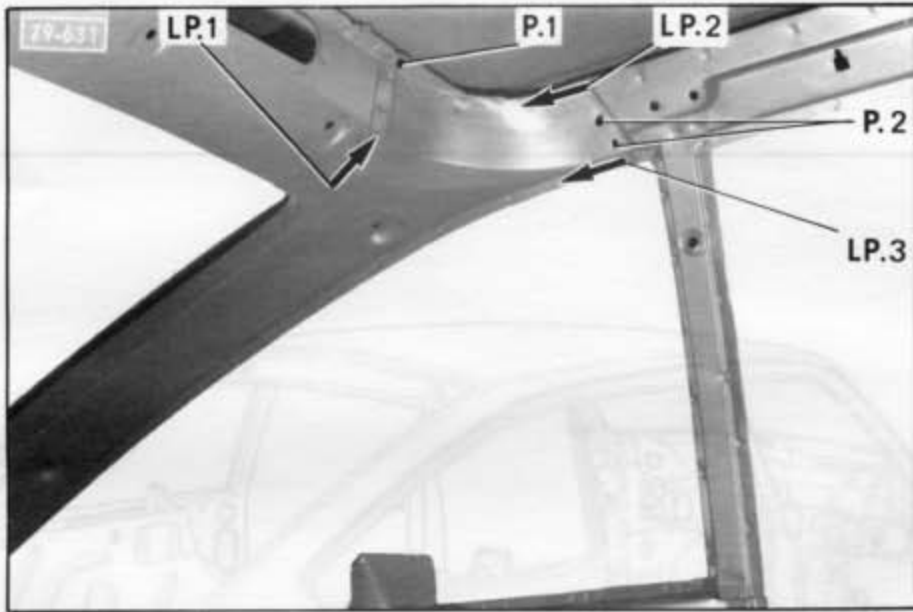
Protect the front seats, rear bench seat, front and rear doors against flying sparks during welding.

TOOLS REQUIRED

- Drill
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Wheel
- Spot-welding head
- Oxyacetylene set
- « MIG » welding unit
- Panel clamps







REPLACEMENT OF THE LINING OF A REAR QUARTER CANT MEMBER
OPERATION COMPLEMENTARY TO THE REPLACEMENT OF A ROOF PANEL

REMOVAL**1. Remove roof panel :**

(See Operation GX. 825-1)

2. Remove the lining of the cant member :

a) Drill and break the spot-welds, following lines :

- LP. 4,
 - LP. 3,
 - LP. 1,
 - LP. 2,
 - LP. 5,
- and points :
- P. 4,
 - P. 7,
 - P. 6,
 - P. 5,
 - P. 3,
 - P. 1,
 - P. 2.

b) Eliminate the brazing spots :

- B. 1,
- B. 2.

PREPARATION**3. Prepare the previously separated welding seams.**

Reshape the panel if necessary

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all the edges to be welded by using a spot-welding head.

FITTING**4. Fit the lining of the cant member :**

Put the lining into place and hold it by means of plate closer tongs.

Line up the roof panel to check its positioning.

5. Weld the lining of the cant member :

a) Spot-weld, following lines :

- LP. 1,
 - LP. 2,
 - LP. 3,
 - LP. 5,
 - LP. 4
- and points :
- P. 5,
 - P. 6,
 - P. 7,
 - P. 4,
 - P. 3,
 - P. 1,
 - P. 2.

b) Spot braze at :

- B. 1,
- B. 2.

6. Fit roof panel :

(See Operation GX. 825-1)

7. Paint.**8. Fit and adjust the previously removed elements.**

RECOMMENDATION

This operation requires checking the body shell on the body jig.

PREPARATION FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- bonnet,
- front wings,
- front bumper,
- lower front valance
- valance support bracket,
- front axle unit with engine/gearbox assembly,
- rear axle unit assembly,
- petrol tank,
- front seats and rear bench seat,
- floor trim,
- centre console,
- pedal gear,
- cowl lower trim,

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Spot-welding head
- « MIG » welding unit
- Panel clamps

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig.

ENS. 158-000 : Body shell checking equipment

ENS. 158-008 : Front wheel arches support

or

- 2600-T : « FENWICK » body jig

- 2628-T : Checking equipment for « GX » vehicle.

REPLACEMENT OF A FRONT FLOOR STIFFENING PLATE

REMOVAL

1. Remove front floor stiffening plate :

Drill and break the spot-welds, following lines :

- LP. 1.
- LP. 2.
- LP. 3.
- LP. 4.
- LP. 5.
- LP. 6.
- LP. 7.
- LP. 8.
- LP. 9.
- LP. 10.
- LP. 11.

and points :

- P. 1 (raise tab **A**)
- P. 2.
- P. 3.

Remove the front floor stiffening plate.

2. Remove front axle fastening stiffener (if necessary) :

Drill and break the spot-welds, following the points :

- P. 4.
- P. 5.

Remove the front axle fastening stiffener.

PREPARATION

3. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all the edges to be spot welded.

4. Put body shell on body jig :

Position the body shell on the body jig.

Inspect the subsisting front fastening points.

If necessary, jack up and straighten sheet-metal elements remaining in place.

FITTING

5. Position front axle fastening stiffener :

Put the front axle fastening stiffener on the body jig and hold on the body shell by means of panel clamps.

6. Weld axle fastening stiffener :

Oxyacetylene « plug » weld (MIG) following points :

- P. 4. } (from the inside of the vehicle)
- P. 5. }

7. Position front floor stiffener plate :

Put the stiffener plate into place and hold it by means of panel clamps.

8. Weld floor stiffener plate :

a) Spot weld following lines :

- LP. 1.
- LP. 2.
- LP. 4.
- LP. 5.
- LP. 6.
- LP. 7.
- LP. 11 (passing through opening **B**)

and points :

- P. 2.

b) Oxyacetylene « plug » weld (MIG) following lines :

- LP. 3.
- LP. 8. } (lines of points not accessible with
- LP. 9. } welding head)
- LP. 10. }

and points :

- P. 1.
- P. 3.

Fold back tab **A**.

9. Centre and through template, drill front axle unit fastening holes, as follows :

dia. 1 = 9 mm ; dia. 2 = 14 mm ; dia. 3 = 13 mm.

10. Remove body shell from body jig.**11. Finish off body shell seal-tightness and protection :**

(See Operation GX. 800-00)

12. Paint.**13. Fit and adjust the previously removed elements.**

OPERATION
RECOMMENDATION

This operation does not require checking the body shell on the body jig.

PRELIMINARY REMOVALS

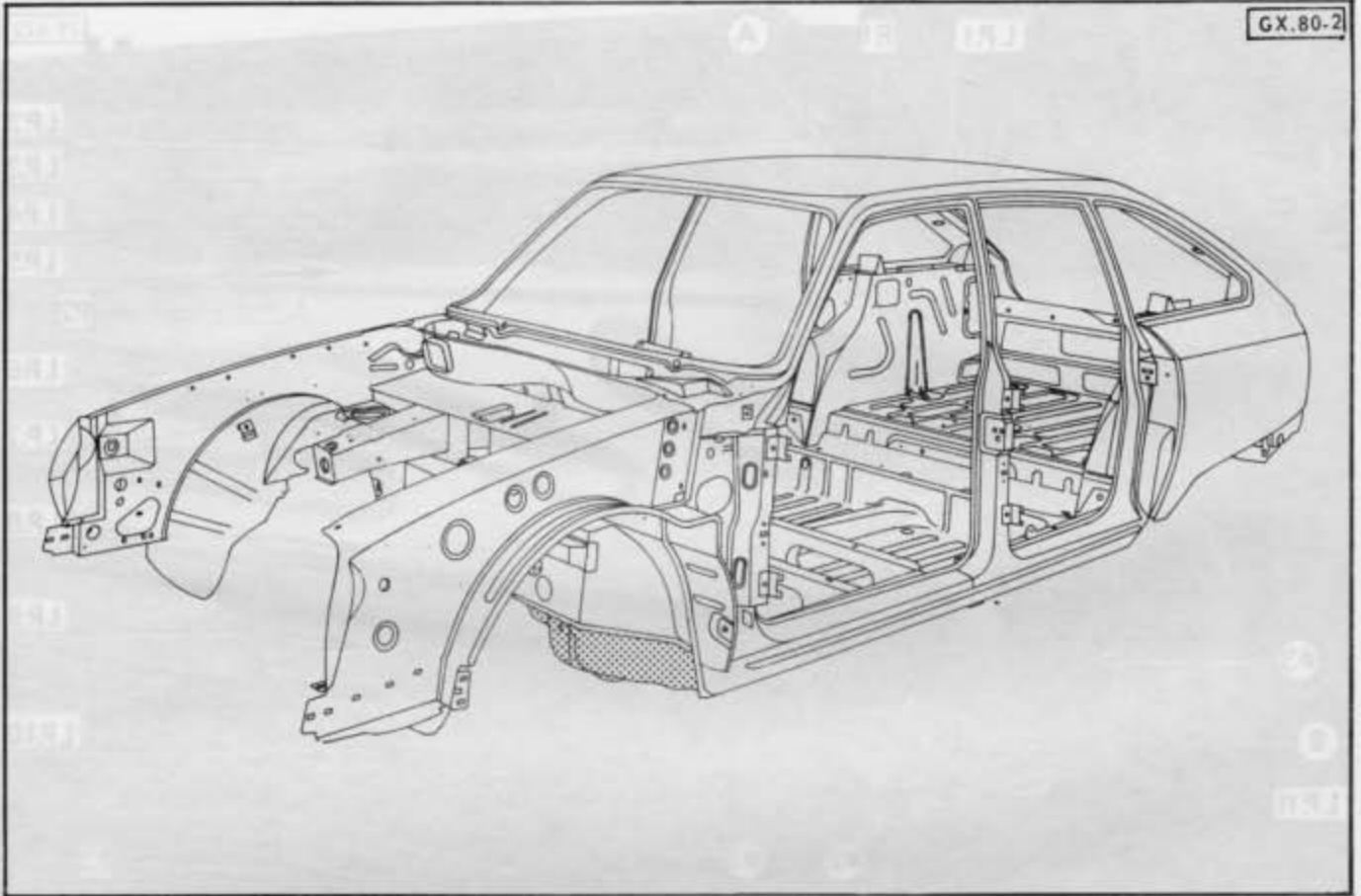
- front seats,
- centre console,
- front carpet,
- rear carpet,
- front doors sealing joints.

TOOLS REQUIRED

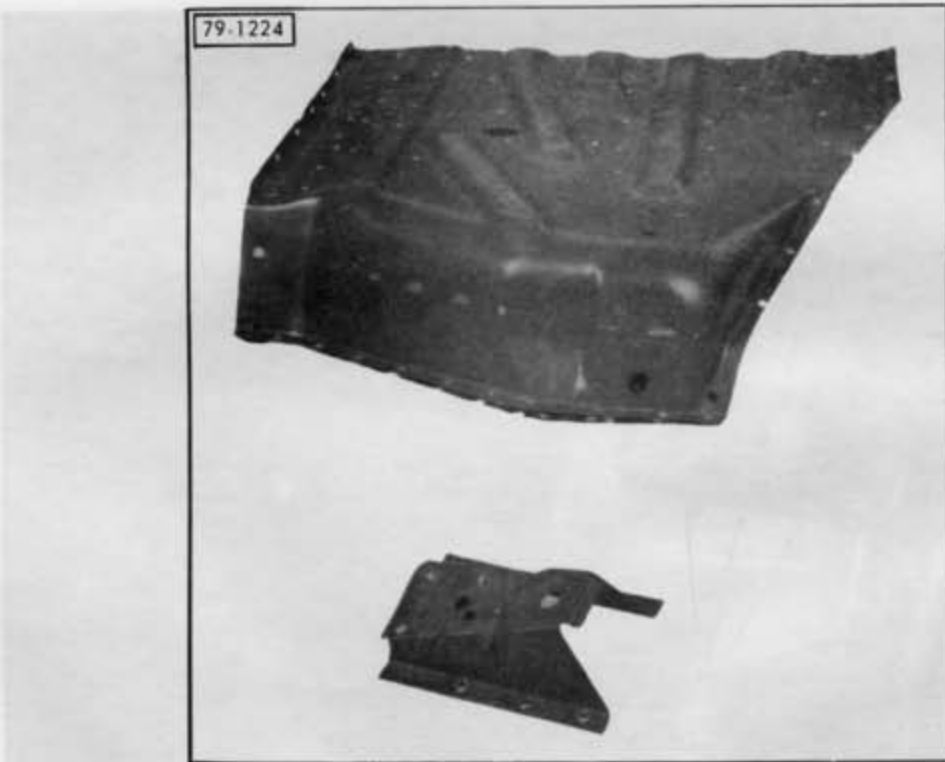
- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Panel clamps
- « MIG » welding unit
- Spot welding head

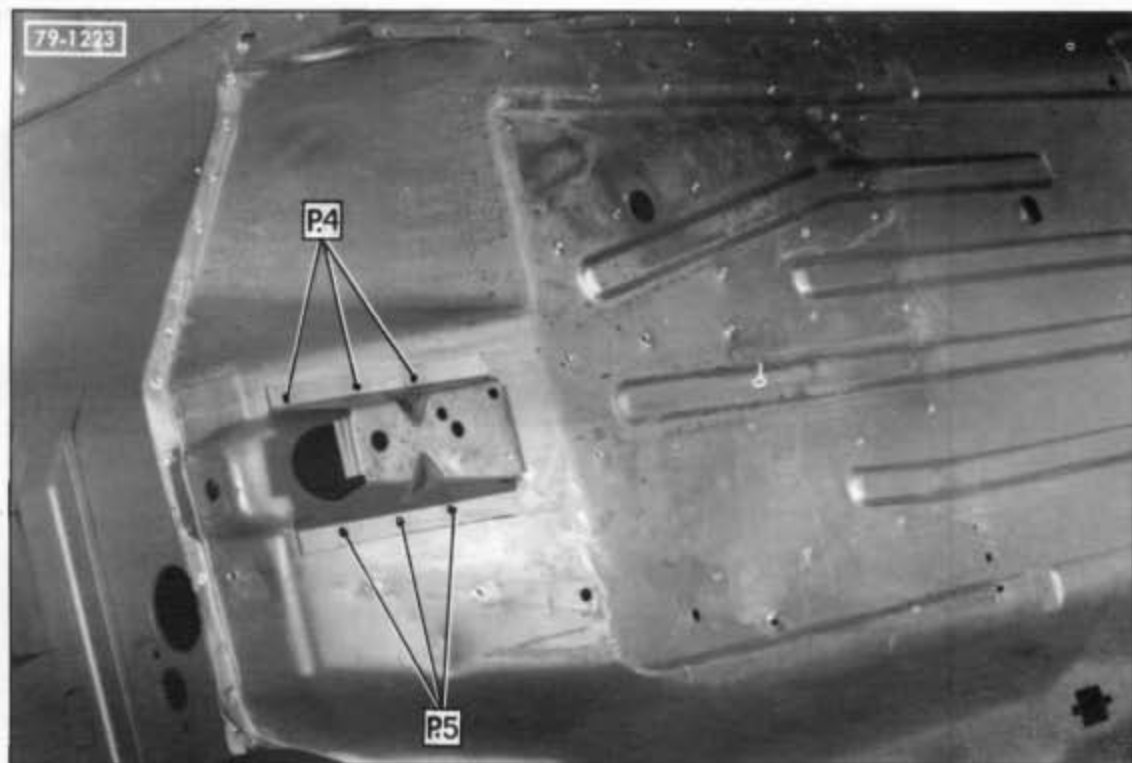
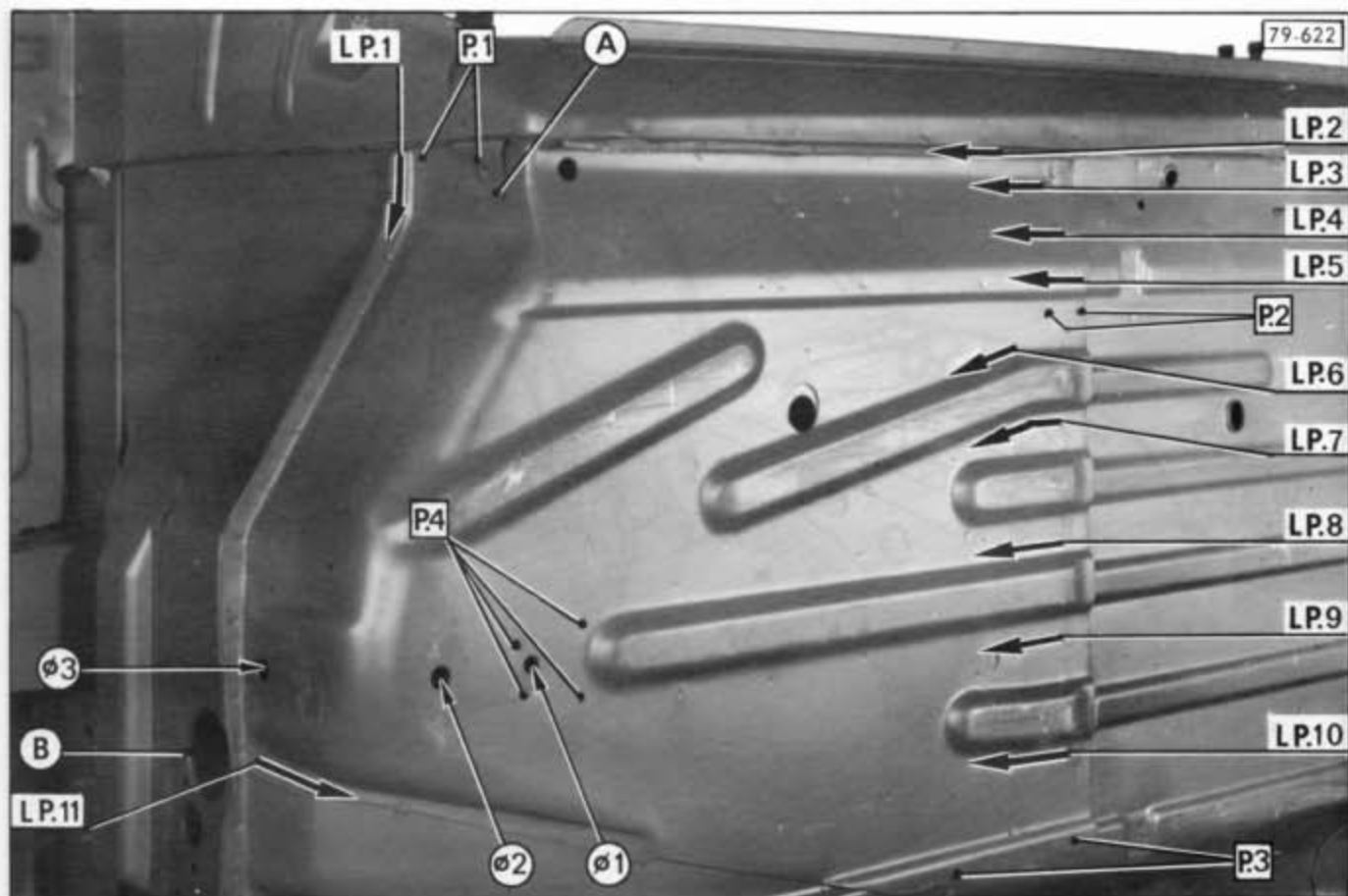


GX.80-2

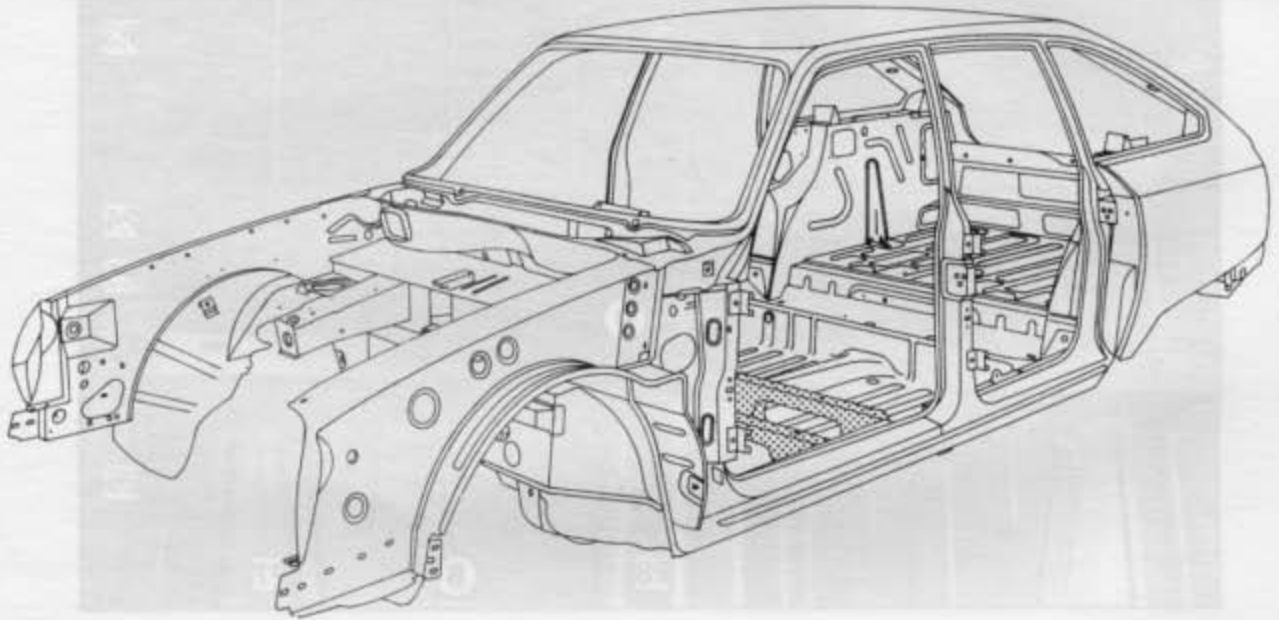


79.1224



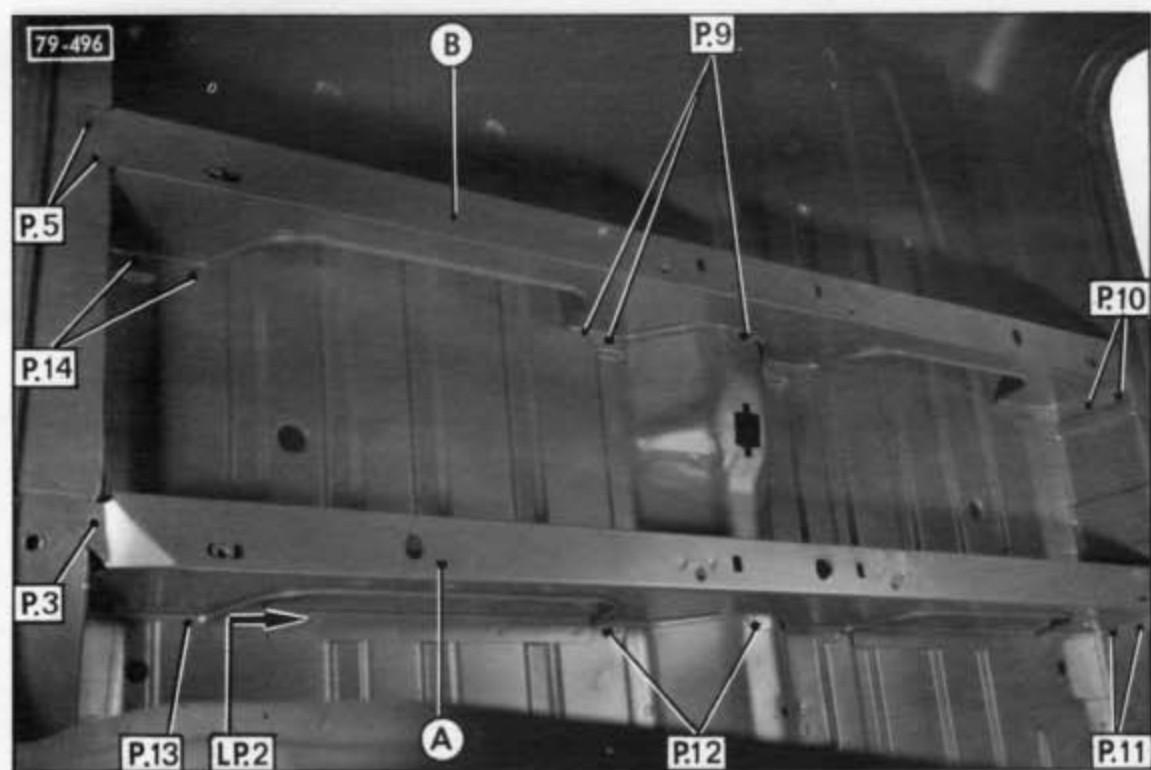
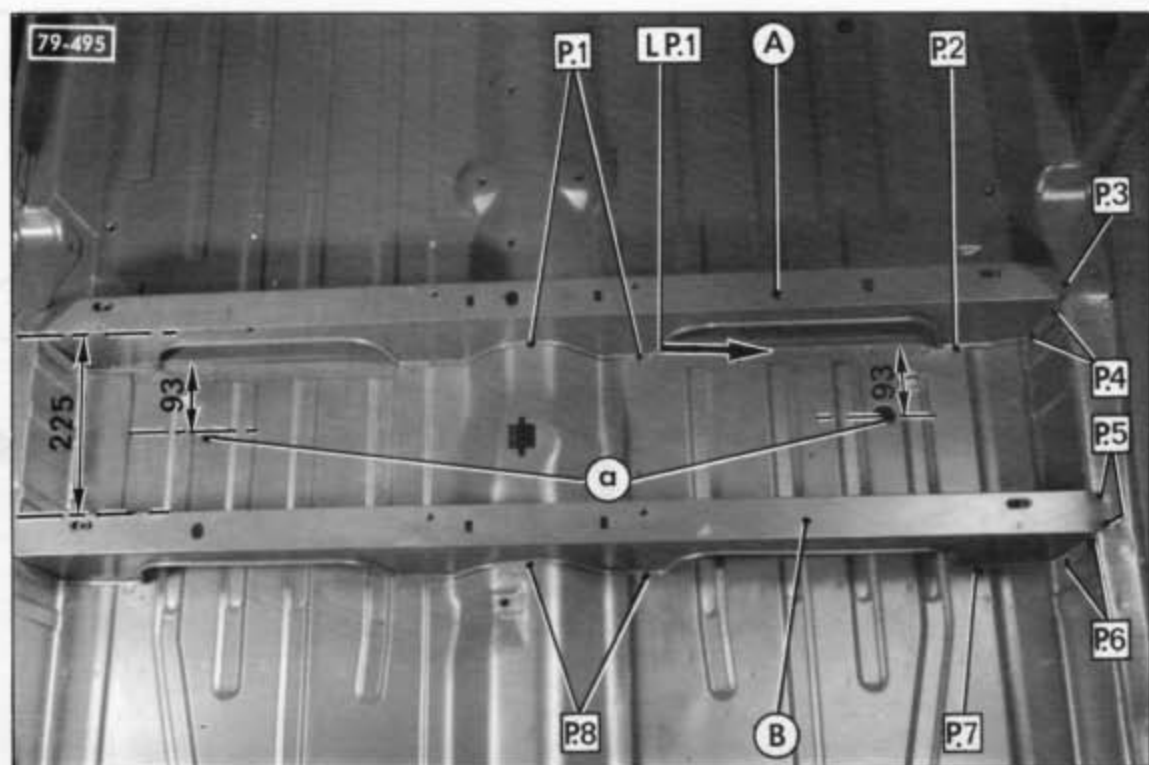


GX. 80-2



79-1221





REPLACEMENT OF CROSSMEMBERS UNDER FRONT SEATS

REMOVAL

1. Remove crossmembers under front seats :

Drill and break the spot-welds, following lines :

- LP. 1. } (and symmetrically)
- LP. 2. }

and points :

- P. 1. }
 - P. 2. }
 - P. 3. }
 - P. 4. }
 - P. 5. }
 - P. 6. }
 - P. 7. }
 - P. 8. }
 - P. 9. }
 - P. 10. }
 - P. 11. }
 - P. 12. }
 - P. 13. }
 - P. 14. }
- (and symmetrically)

Remove crossmembers **A** and **B**.

PREPARATION

2. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

FITTING

3. Fit and assemble new crossmembers :

Position rear crossmember **A** at a dimension of 93 mm in relation to the centre line of holes « a » and front crossmember **B** at a dimension of 225 mm in relation to the rear crossmember.

Line up a seat reinforcement so as to make sure of the proper spacing between the two crossmembers.

Weld the crossmembers :

Spot weld following lines :

- LP. 1. } (and symmetrically)
- LP. 2. }

and points :

- P. 2. }
 - P. 7. }
 - P. 13. }
 - P. 14. }
- (and symmetrically)

"Plug" weld (MIG), following lines :

- LP. 1. } (on each side, the parts inaccessible to
- LP. 2. } welding head)

and points :

- P. 1. }
 - P. 2. }
 - P. 3. }
 - P. 4. }
 - P. 5. }
 - P. 6. }
 - P. 7. }
 - P. 8. }
 - P. 9. }
 - P. 10. }
 - P. 11. }
 - P. 12. }
- (and symmetrically)

4. Finish off the protection under body shell :

(See Operation GX. 800-00)

5. Paint.

6. Fit and adjust the previously removed elements.

OPERATION
OX_003-T

RECOMMENDATION

This operation does not require checking the body shell on the body jig.

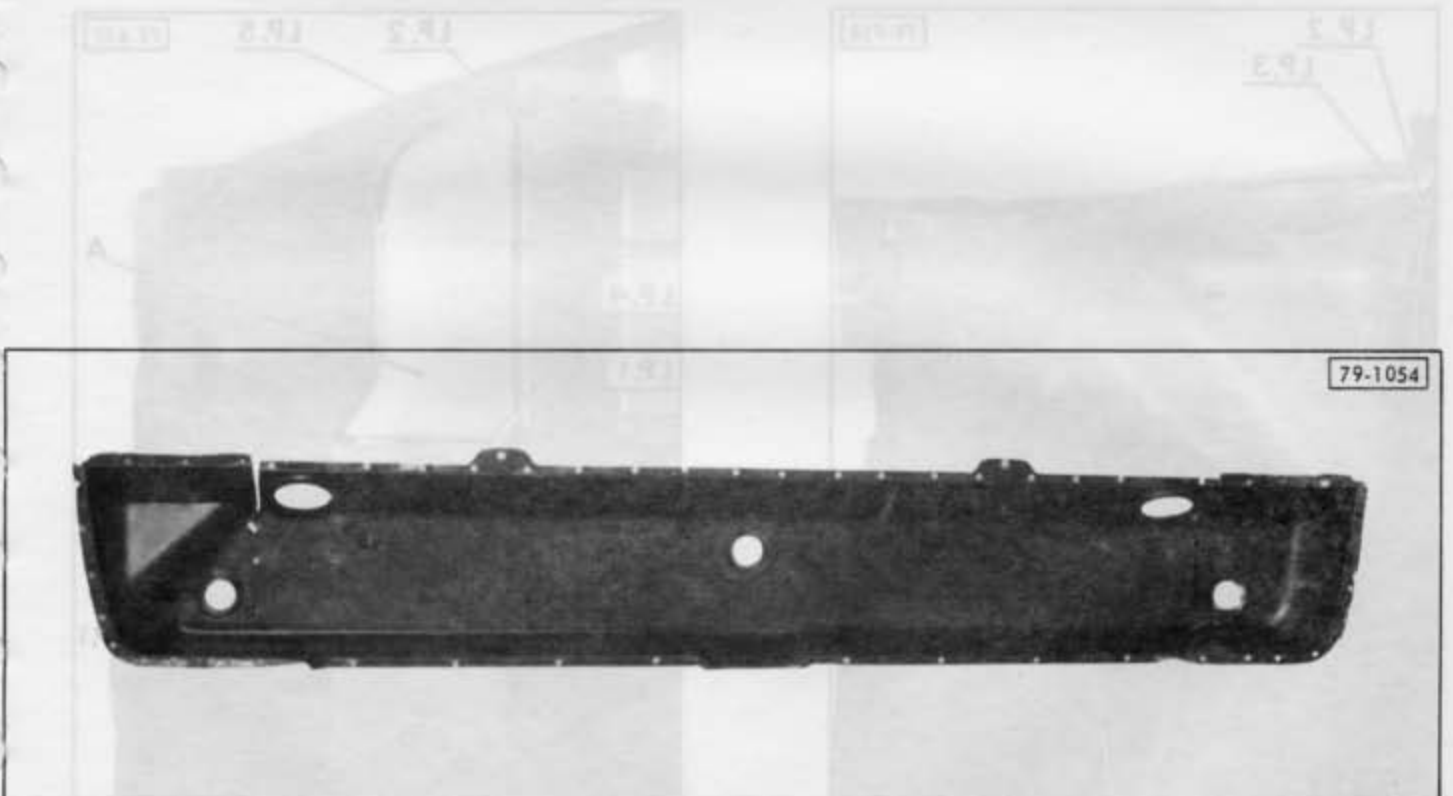
PRELIMINARY REMOVALS

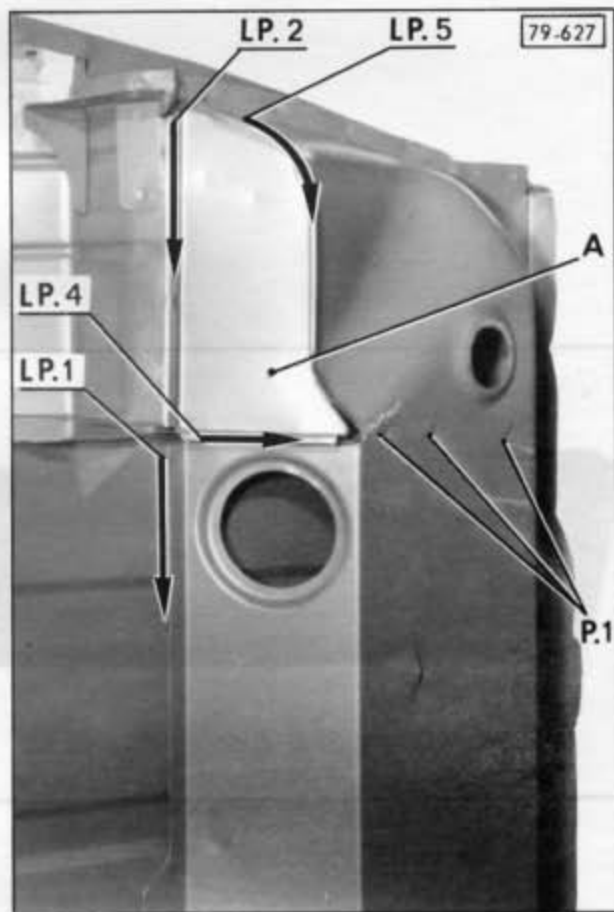
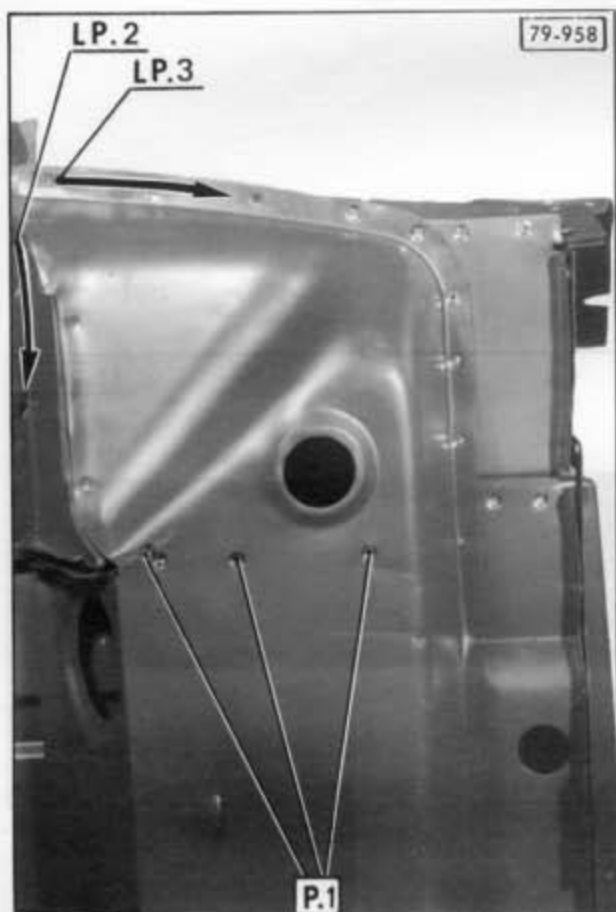
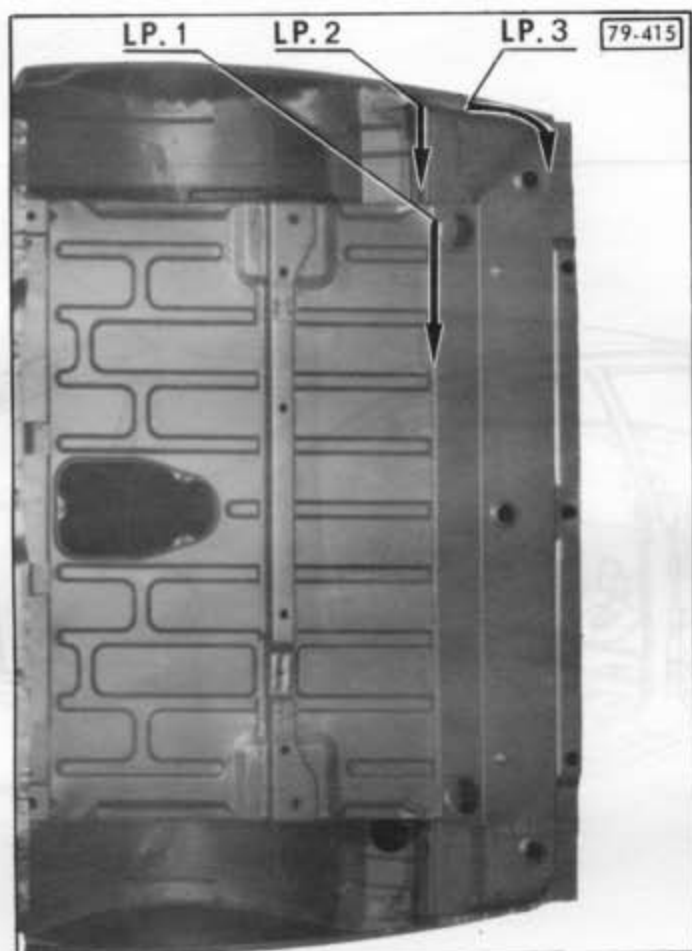
- Boot bottom and rear wheel arch trim (*partially*),
- Rear bumper,
- Exhaust expansion chamber,
- Rear signalling lights (*on each side*)

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot-weld cutter
- Spot-welding head
- « MIG » welding set
- Panel clamps.

REPLACEMENT OF BODY COMPONENTS





REPLACEMENT OF A REAR CROSSMEMBER

REMOVAL

1. Remove rear crossmember :

Drill and break the spot-welds, following lines :

- LP. 1,
- LP. 3
- LP. 2 } (on each side)
- LP. 4 }

and points :

P. 1 (on each side)

Remove the rear crossmember.

PREPARATION

2. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of the edges to be spot welded.

FITTING

3. Fit rear crossmember :

Position the rear crossmember and hold it with panel clamps.

Spot-weld following lines :

- LP. 1,
- LP. 3,

and points :

- P. 1 (on each side).

4. Fit closing panels A :

On each side :

Put closing panel **A** into place and spot-weld it, following lines :

- LP. 2,
- LP. 4,
- LP. 5.

5. Finish off protection of the body shell.**6. Paint.****7. Fit and adjust the previously removed elements.**

NOTE : In the case where this operation is not accompanied by replacement of the rear panel, « plug » weld (MIG) following the lines LP. 1 and LP. 2.

RECOMMENDATION

This operation requires checking the body shell on the body jig

PREPARATION FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- hatchback door,
- rear bumper,
- rear signalling lights,
- boot bottom and rear wheel arch trim,
- rear shelf,
- rear bench seat,
- rear seat belts,
- front and rear axle units,
- fuel tank.

TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot weld extractor
- « MIG » welding unit
- Spot-welding head
- Panel clamps
- Oxyacetylene set

SPECIAL TOOLING

MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig

ENS. 158-000 : Body shell checking equipment

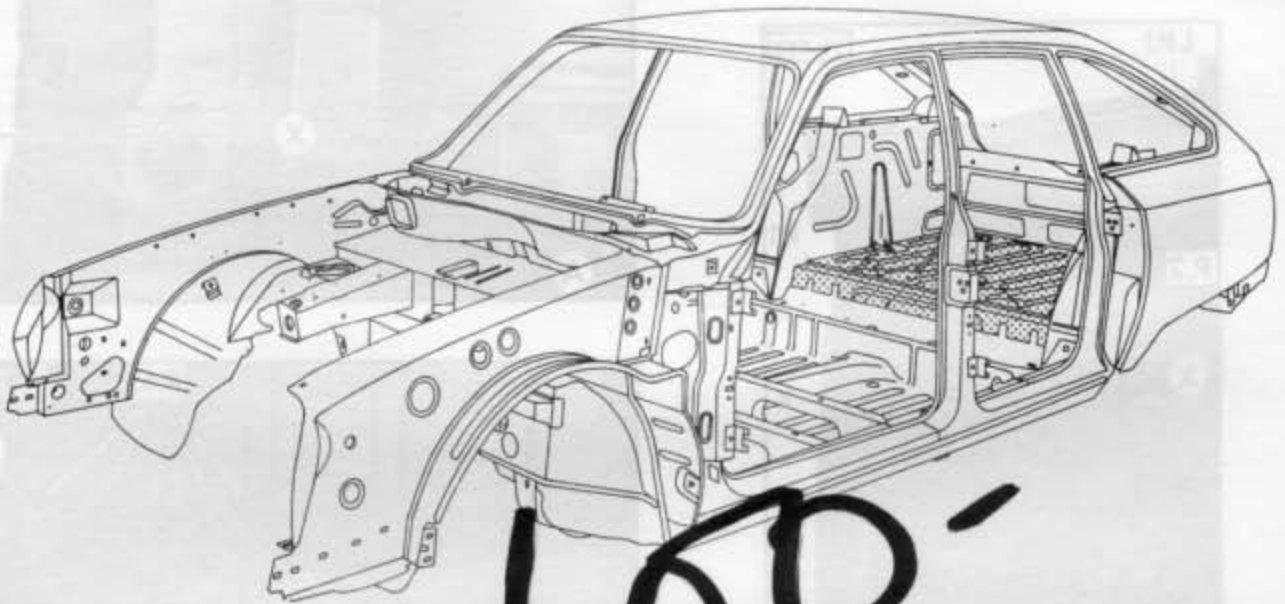
ENS. 158-008 : Front wheel arches support

or

- 2600-T : « FENWICK » body jig

- 2628-T : Checking equipment for « GX » vehicles

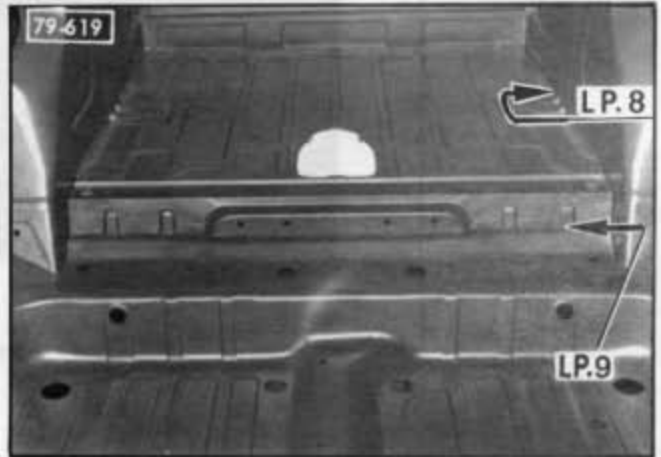
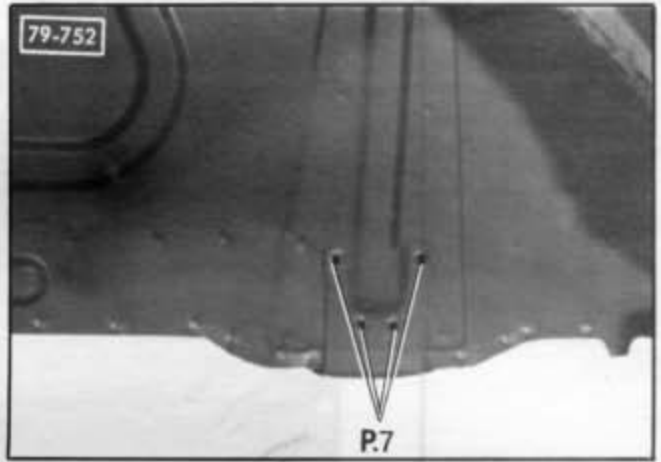
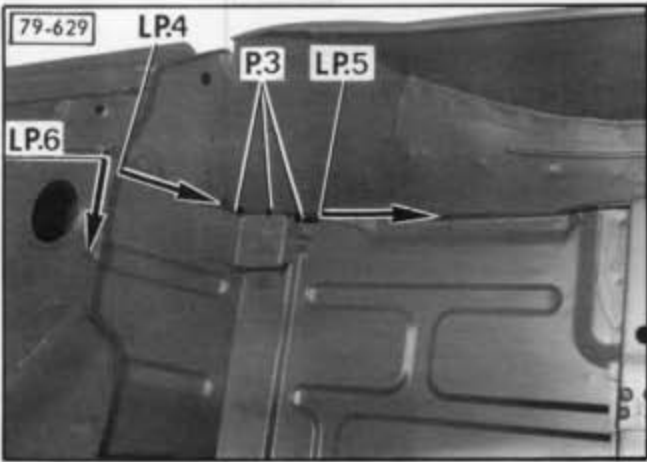
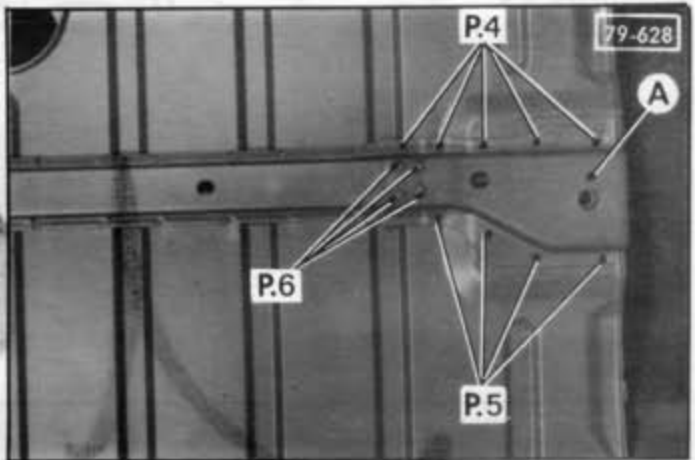
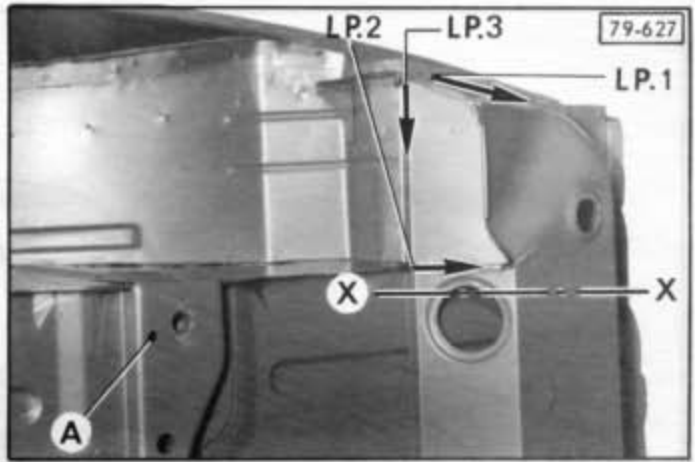
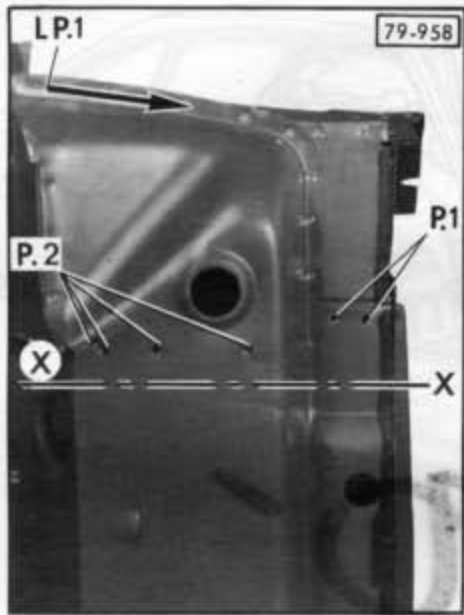
GX.80-2



79-1229



79-627



REPLACEMENT OF A REAR BOOT FLOOR

REMOVAL

1. Remove rear crossmember extremities :

On each side :

- a) Saw the rear crossmember following **X-X**.
- b) Drill and break the spot-welds, following lines :
 - LP. 11 (as far as **X-X**)
 - LP. 2.
 - LP. 3.
 and points :
 - P. 2

Remove the rear crossmember extremities

2. Remove boot floor :

Drill and break the spot-welds, following lines :

- LP. 6.
 - LP. 4 } (on each side)
 - LP. 5 } (on each side)
 - LP. 7.
 - LP. 8 (on each side)
 - LP. 9.
- and points :
- P. 1. }
 - P. 3. } (on each side)
 - P. 7. }

Remove the rear boot floor.

PREPARATION

3. Put body shell on body jig :

(See Operation GX. 800-0)

Realign the body shell (if necessary)

4. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all the edges to be spot welded.

FITTING

5. Fit boot floor :

Fit stiffeners **A** in their respective places on the rear equipment of the body jig.

Fit the rear floor on the body jig and position stiffeners **A** on the floor (lay the panels flat).

Put the body shell into place on the body jig and fasten it at the different control points.

Hold the rear floor by means of panel clamps.

Weld :

a) Spot weld following lines :

- LP. 6.
- LP. 4. }
- LP. 5. } (on each side)
- LP. 7.

and points :

- P. 1. }
- P. 3. } (on each side)

b) "Plug" weld (MIG), following the lines :

- LP. 8 (on each side)
- LP. 9

and points :

- P. 4. }
- P. 5. }
- P. 6. } (on each side)
- P. 7. }

NOTE :

To obtain correct "plug" welding it is necessary to drill the first of the panels to be assembled at (dia. = 6 mm).

6. Fit rear crossmember :

(See Operation GX. 832-1)

7. Lower body shell from body jig.**8. Finish off body shell seal-tightness and protection :**

(Fit the soundproofing plate on the boot bottom
(See Operation GX. 800-00).

9. Paint**10. Fit and adjust the previously removed elements.**

OPERATION

RECOMMENDATION

This operation requires checking the body shell on the body jig

PREPARATION FOR CHECK ON BODY JIG

(See Operation GX. 800-0)

PRELIMINARY REMOVALS

- tailgate.
- lamp cluster.
- boot bottom and rear wheelarch trim.
- rear bench seat.
- rear seat belts.
- front and rear axle units.
- fuel tank.

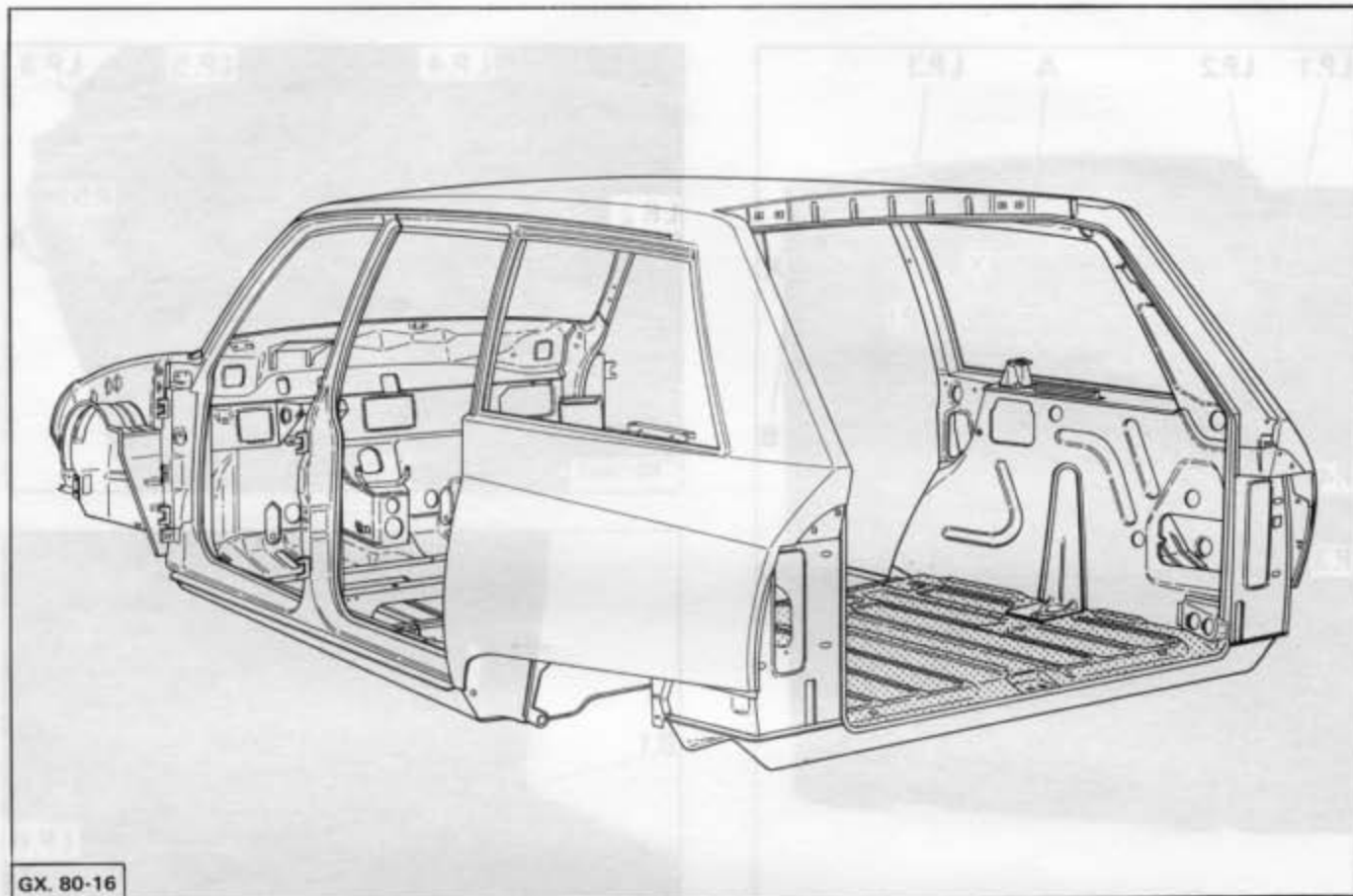
TOOLS REQUIRED

- Drill
- Sanding machine
- « 2662-T » or « PICKAVANT » spot weld extractor
- « MIG » welding unit
- Spot-welding head
- Panel clamps
- Oxyacetylene set

SPECIAL TOOLING

- MUF 4, MUF 5 or EUROMUF : « CELETTE » universal body jig
 ENS. 158-000 : Body shell checking equipment
 ENS. 158-008 : Front wheelarches support
 or
 - 2600-T : « FENWICK » body jig
 - 2628-T : Checking equipment for « GX » vehicles

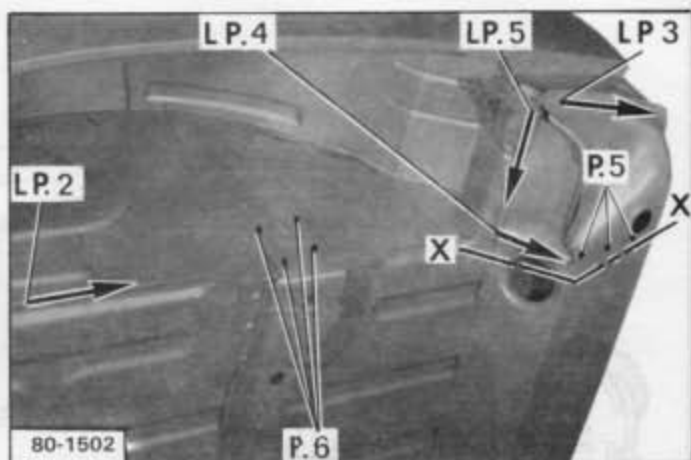
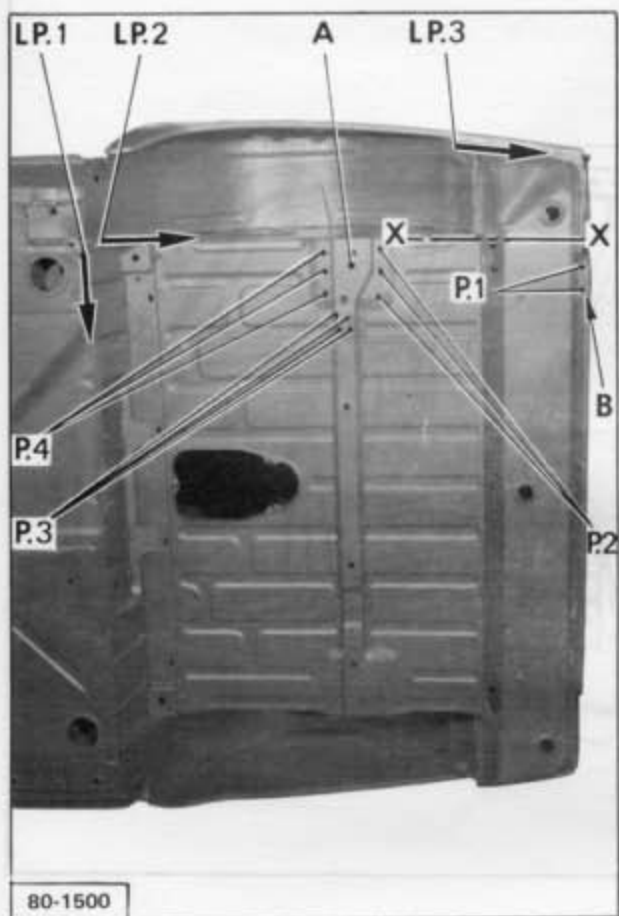
REPLACEMENT OF THE REAR BODY JIG



GX. 80-16



80-1601



REPLACEMENT OF THE REAR BOOT FLOOR

REMOVAL

1. Remove boot floor stiffener B :*On each side :*

Drill and break the spot-welds, following points P. 1.
Remove boot floor stiffeners.

2. Remove rear crossmember extremities :*On each side :*a) Saw the rear crossmember following **X-X**.

b) Drill and break the spot-welds, following lines :

- LP. 3 (as far as **X-X**)

- LP. 4,

- LP. 5,

and points :

- P. 5.

3. Remove boot floor :

a) Drill and break the spot-welds, following lines :

- LP. 1,

- LP. 2 } (on each side)

- LP. 6, }

- LP. 7,

and points :

- P. 6 (on each side).

b) Eliminate the brazing spot at :

- B. 1 (on each side).

PREPARATION.

4. Put body shell on body jig :*(See Operation GX. 800-0)*

Realign the body shell (if necessary)

5. Prepare the previously separated welding seams.

Reshape the panels if necessary.

Scour the weld zones on body shell and new components.

Apply a conductive primer coat on the inner face of all the edges to be spot welded.

FITTING

6. Fit boot floor :Fit stiffeners **A** in their respective places on the rear equipment of the body jig.Fit the rear floor on the body jig and position stiffeners **A** on the floor (lay the panels flat).

Put the body shell into place on the body jig and fasten it at the different control points.

Hold the rear floor by means of panel clamps.

Weld :

a) Spot weld following lines :

- LP. 1,

- LP. 2, (on each side)

b) "Plug" weld (MIG), following the lines :

- LP. 6 (on each side)

- LP. 7

and points :

- P. 2, }

- P. 3, }

- P. 4, } (on each side)

- P. 6, }

c) Braze at :

- B. 1 (on each side).

7. Fit rear crossmember :*(See Operation GX. 832-1)***8. Fit boot floor stiffener B :***On each side :*Fit stiffener **B** and weld following points :

- P. 1.

9. Lower body shell from body jig.**10. Finish off body shell seal-tightness and protection :***(See Operation GX. 800-00).***11. Paint****12. Fit and adjust the previously removed elements.**



SETTINGS FOR TRIM ELEMENTS

BONNET :

A : Clearance between bonnet and scuttle air intake : **A 1 = 6 ± 1 mm**

B : Clearance between bonnet and front grille **B 1 = 5 ± 1 mm**

C : Clearance between bonnet and front wing : **C 1 = 6 ± 1 mm**

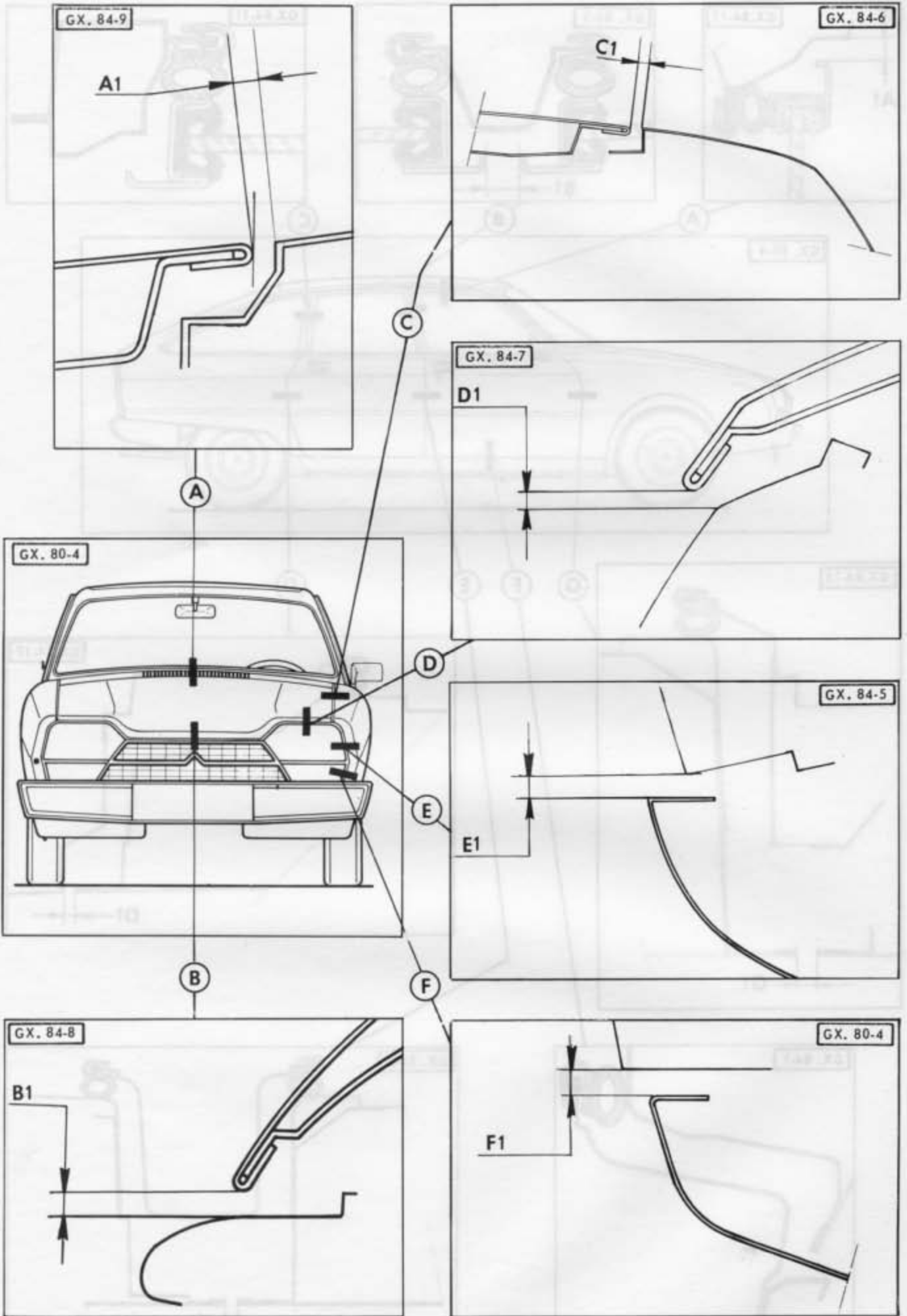
D : Clearance between bonnet and headlamp : **D 1 = 5 ± 2 mm**

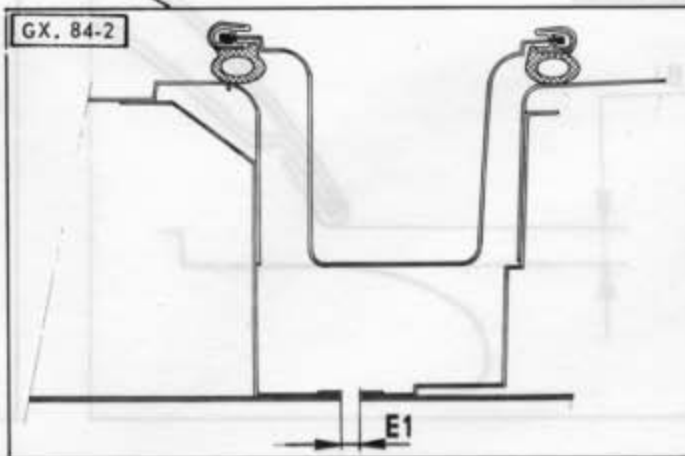
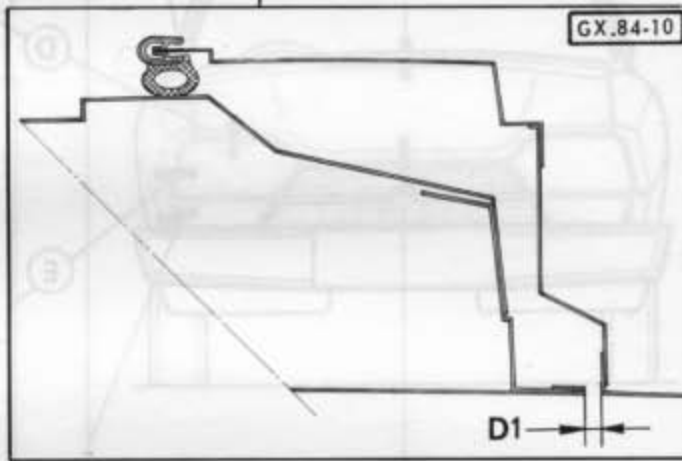
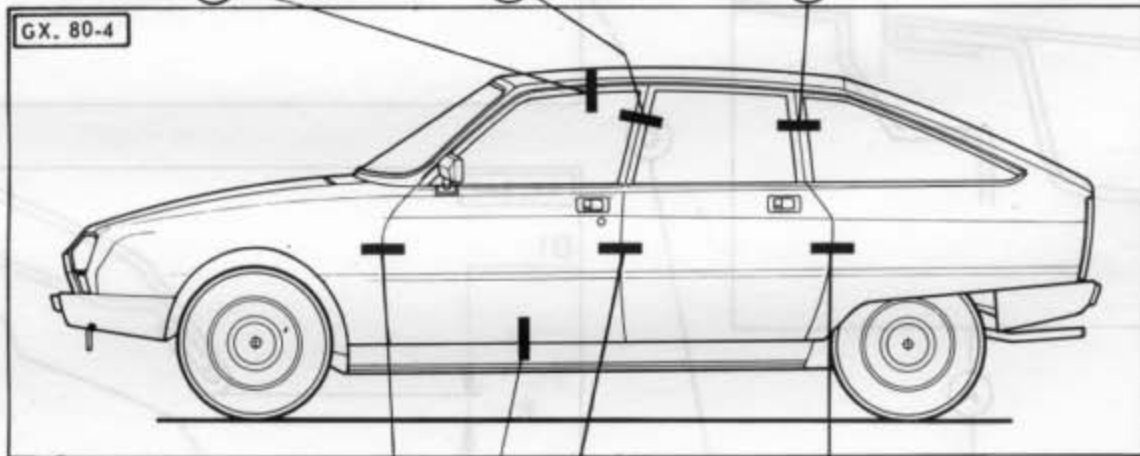
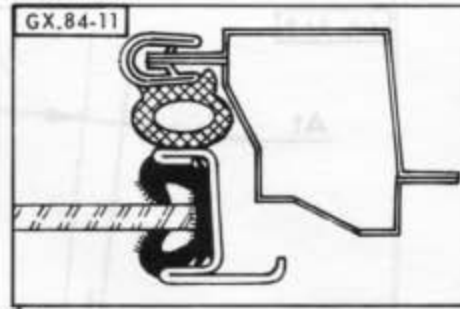
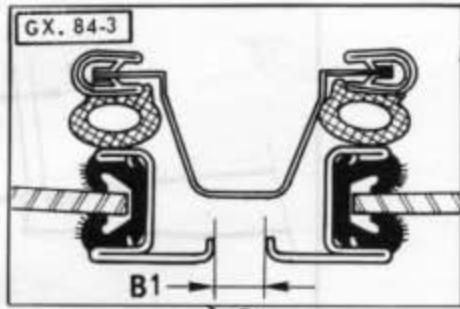
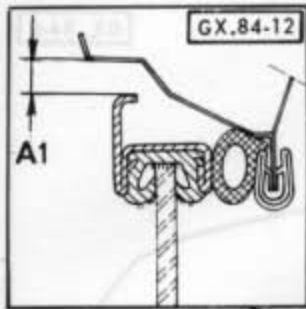
E : Clearance between front wing and headlamp : **E 1 = 5 ± 1 mm**

F : Clearance between front wing and direction indicator light : **F 1 = 6 ± 1 mm**

Out-of-level of trim elements from front to rear : from 0 to 2 mm







SETTINGS FOR TRIM ELEMENTS (Cont.)

SIDE DOORS :

A : Clearance between door and roof panel drip moulding : A 1 = 8 ± 1 mm

B : Clearance between front and rear door glass frames : B 1 = 10 ± 2 mm

C : Rear pillar and rear door glass frame section

D : Clearance between wing and rear door : D 1 = 6⁺²_{-0.5} mm

E : Clearance between front and rear doors : E 1 = 6 ± 1 mm

F : Body side sill and door section

FRONT WING :

G : Clearance between wing and front door : G 1 = 6 ± 1 mm

Out-of-level of trim elements from front to rear :

from 0 to 2 mm

SETTINGS FOR TRIM ELEMENTS (Cont.)

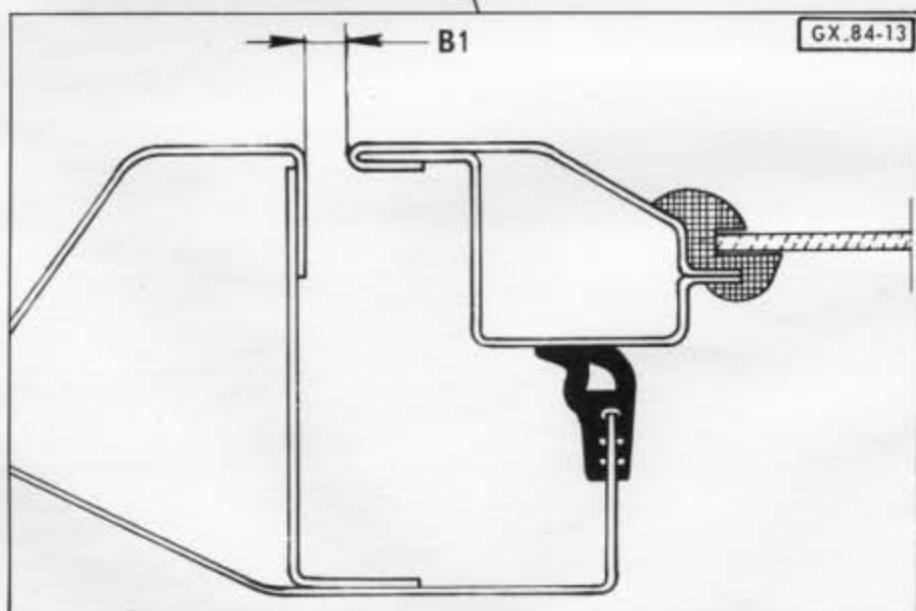
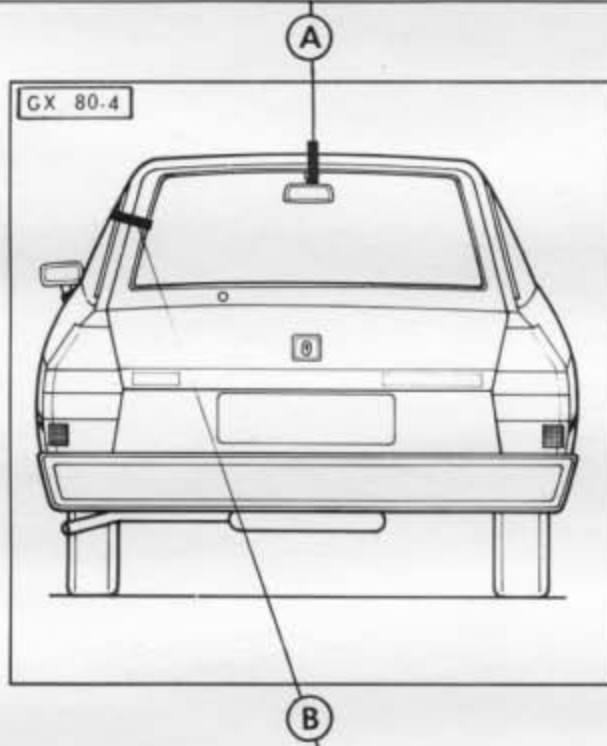
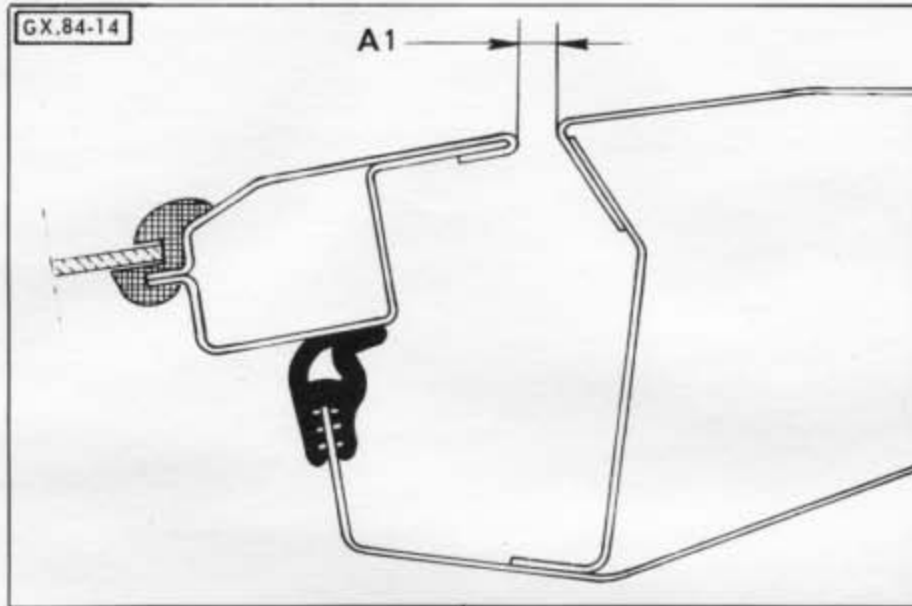
SETTINGS FOR TRIM ELEMENTS (Cont.)

HATCHBACK DOOR :

A : Clearance between hatchback door and roof panel : **A 1 = 6 ± 1 mm**

B : Clearance between hatchback door and rear quarter cant panel : **B 1 = 6 ± 1 mm**

Protrusion of each component in relation to the one immediately behind it (from front to rear) : from 0 to 2 mm



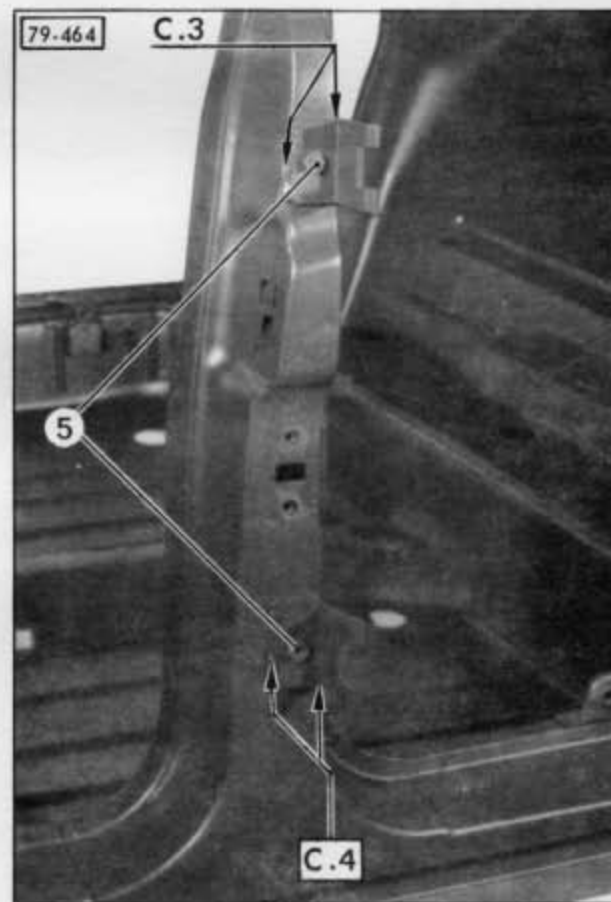
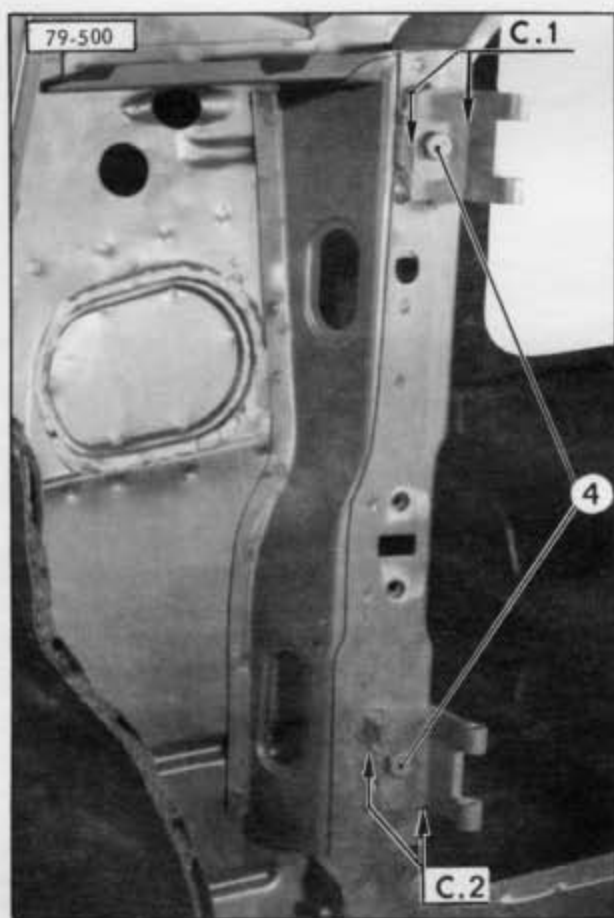
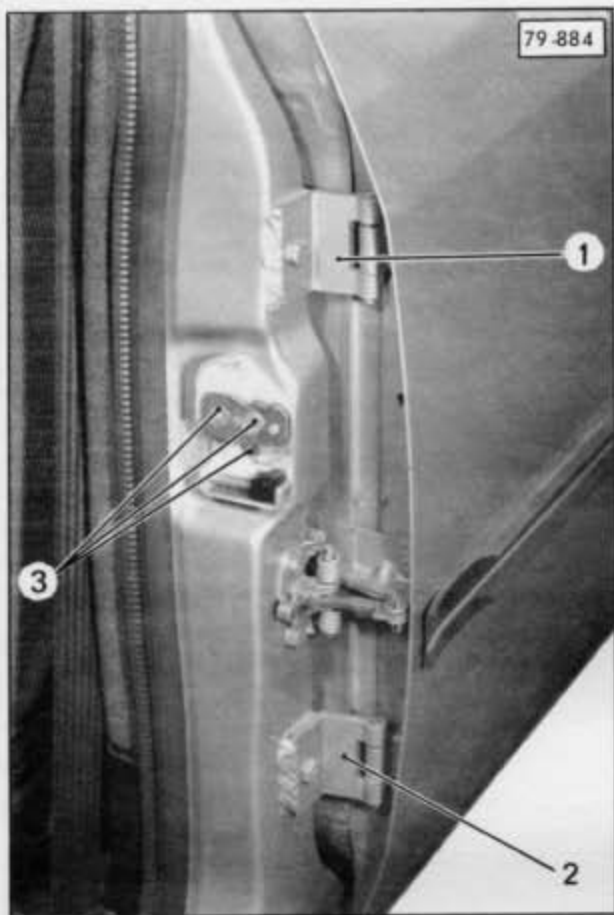
SETTINGS FOR SIDE DOORS**I. RETOUCH SUBSEQUENT TO BAD SETTING** (front and rear doors).

1. Modify the position of the lower (2) and upper (1) hinges by working on them with claw **A**.
2. Loosen screws (3) and modify the position of the striking plate.
(See Operation GX. 840-0 for adjustment conditions).

NOTE : In the case where these two operations do not suffice to obtain correct setting, one of the hinges, or both hinges, if necessary, must be unwelded.

II. ASSEMBLY AND SETTING OF SIDE DOORS FOLLOWING REPLACEMENT OF THE SIDE PANEL

1. Put the two doors into place and fasten the hinges to the body shell by means of screws (4) and (5).
2. Set all the side elements of the vehicle.
(See Operation GX. 840-0 for setting conditions).
3. Oxyacetylene weld (MIG) the hinges, following beads C. 1 - C. 2 - C. 3 and C. 4.

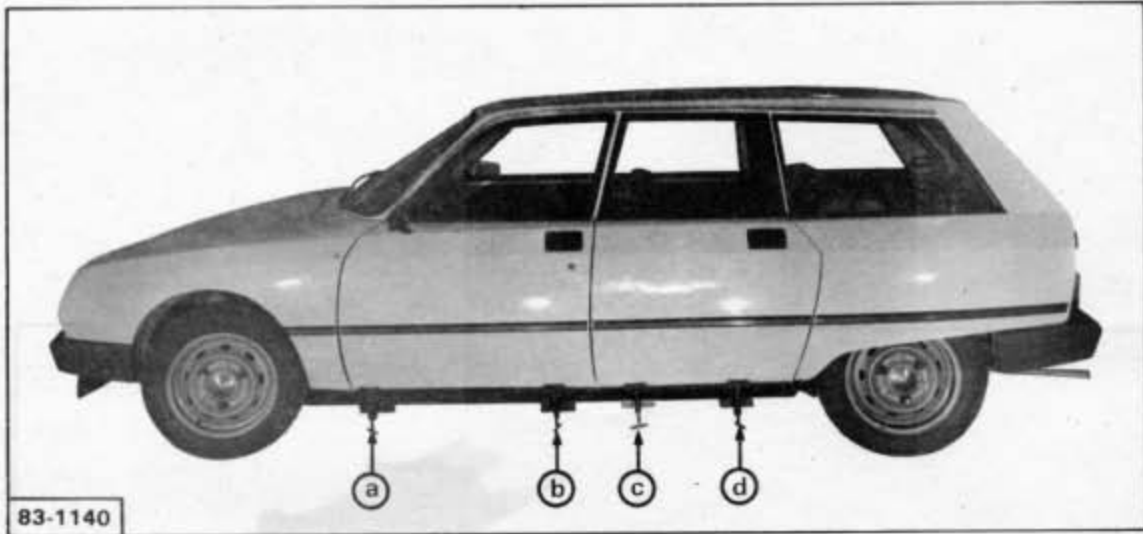




NECESSARY TOOLING

Equipment for adjusting the door height : **OUT 507 501 T** (4 apparatuses are to be used)





1. Position the apparatuses **OUT 507 501 T** used for adjusting the door height on the lower body at **a, b, c** and **d**.
2. Position the doors on these apparatuses.
3. Position the front wing.
4. Adjust all the side components of the vehicle.
(See Operation GX. 840-0).
5. Remove the front wing.
6. Weld the front door hinges on the front pillar, using a "MIG" welding equipment, along beads C1, C2.
(the rear door resting upon the apparatuses at **a** and **b**).
7. Remove the apparatuses positioned at **a** and **b**, open the front door.
8. Weld the rear door hinges on the centre pillar, using a "MIG" welding equipment, along beads C3 and C4
(the rear door resting upon the apparatuses at **c** and **d**).
9. Remove the apparatuses positioned at **c** and **d**, open the rear door.
10. Open the doors and finish the welding "MIG":
 - front door hinges, along beads C5, C6.
 - rear door hinges, along beads C7, C8.
11. Carry out the necessary paint retouching.

INSTRUCTIONS
F-100 30

REPLACEMENT OF A SIDE DOOR

REMOVAL

1. Remove door :

Remove pin (1) from the check strap by means of a pin drift (dia. = 6 mm).

Remove screws (2) and disengage parts **A** and **B** from the check strap.

Extract the upper and lower hinge pins according to the direction of arrows « a » and « b » by means of inertia device **C** (FENWICK, ref. 8 1303 AZ) and pin extractor **D** (ref. 8 1303 C).

Remove the door.

2. Strip door :

See Operations :

GX. 841-2 (front door)

GX. 841-3 (rear door)

PREPARATION

3. Paint new door.

4. Reassemble door :

See Operations :

GX. 841-2 (front door)

GX. 841-3 (rear door)

5. Fit check strap on body shell pillar :

Engage part **B** in its housing (respect the direction of assembly).

Fasten part **A** by means of its pin (1).

FITTING

6. Fit door :

Put the door into place and align the hinge pin holes. Engage the upper and lower hinge pins in their housings.

Fasten the check strap on the door by means of screws (2).

NOTE : When reassembling, engage the hinge pins in the opposite direction of « a » and « b ».

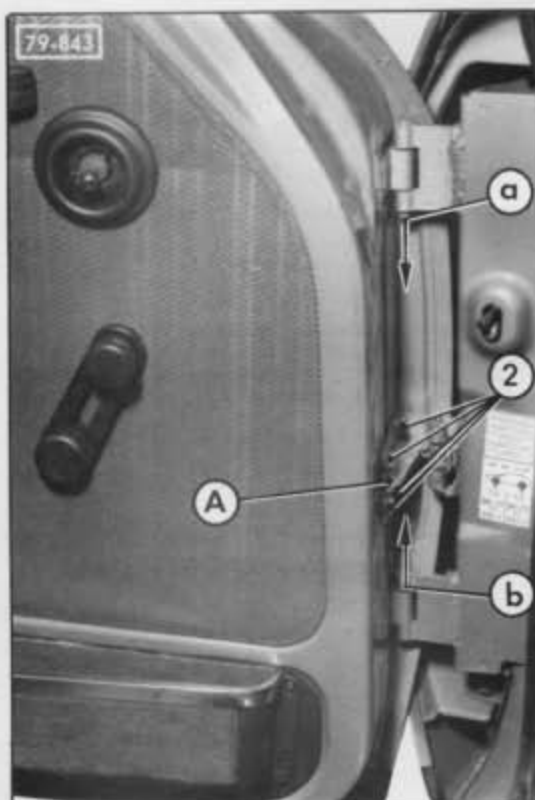
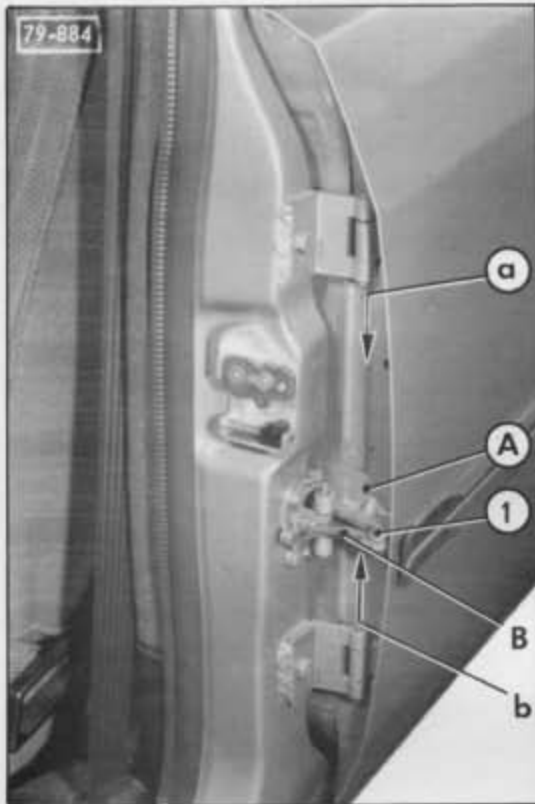
7. Set door :

(See Operation GX. 841-0)

8. Check the operation of all the controls (interior and exterior opening, locking).

9. Clean the trim and the glass (if necessary).





STRIPPING AND REASSEMBLY OF A SIDE DOOR

1. Remove door.

(See Operation GX. 841-1)

2. Remove :

- interior window seal,
- exterior window seal,
- glass frame embellishers,
- map-pocket **B** (screws (2), (3) and (4)),
- exterior embellisher section,
- door bottom adhesive strip.

3.

3. Remove rear-view mirror interior control

(front left-hand door)

Remove control fixing nut (7).

(use spanner MR. 630-14/72 and cup C).

4. Remove trimmed panel :

Remove :

- armrest trim **A** (fastened by « VELCRO » type self-adhesive strip),
- blanking plugs (1),
- arm rest **E** (screws accessible through openings (5)),
- interior handle fastening screws (6).

Disengage the remote control handle by pivoting it downwards (use a screwdriver to unhook the remote control rod).

Remove the clip holding the window winder lever **D** by means of tool MR. 630-84/29

Disengage the window winder lever and its base.

Unclip the trimmed panel and remove the spring on the window winder shaft.

Unstick the sealing sheets on the openings of the door interior lining.

5. Remove rear-view mirror :

Remove protective shield **F** from the rear-view mirror baseplate.

Remove screws (8) fastening the rear-view mirror.

Partially disengage it and remove screw (9) fastening the baseplate by means of spanner MR. 630-12/49

Disengage rear-view mirror adjustment control **G**.

6.

6. Remove detachable glass channel :

Remove screw (10) and disengage detachable channel from the door.

7. Remove window winder :

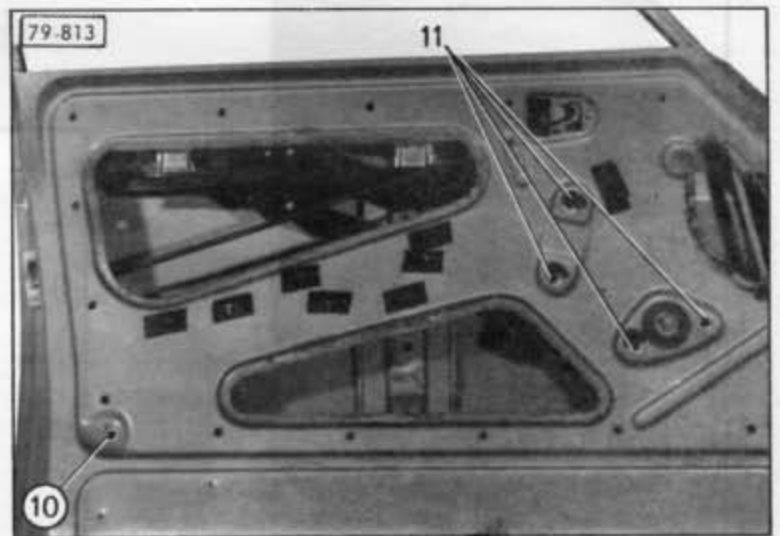
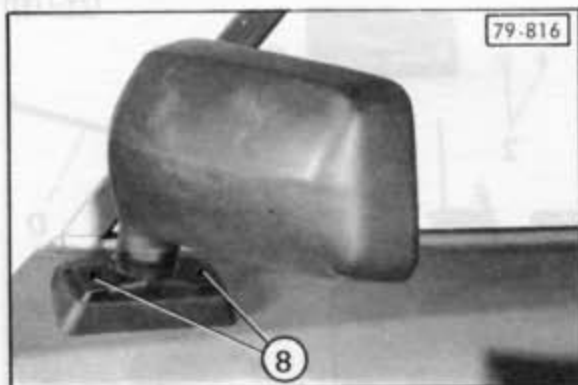
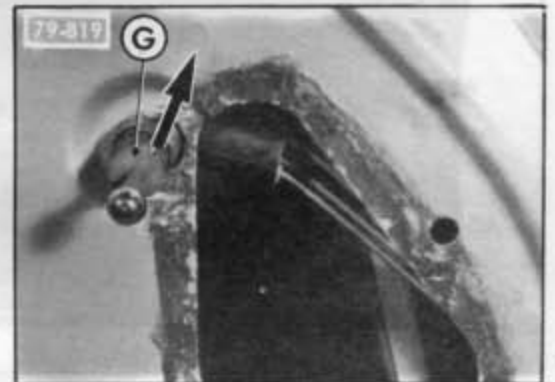
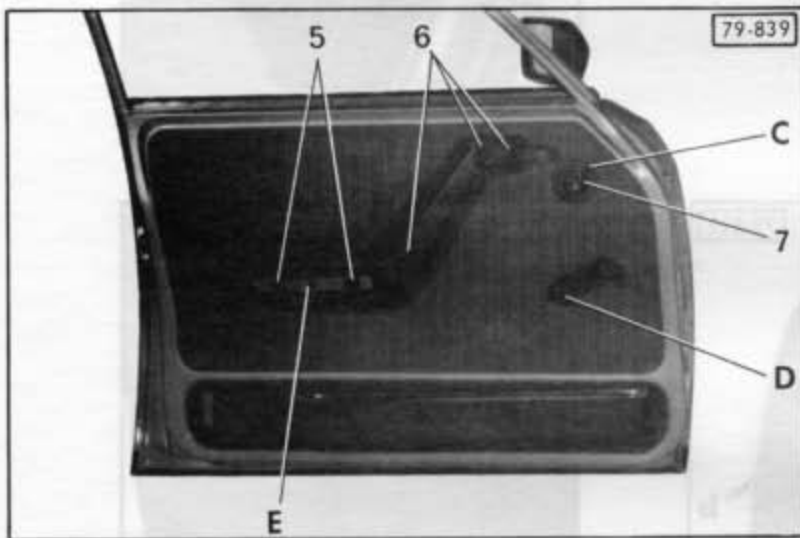
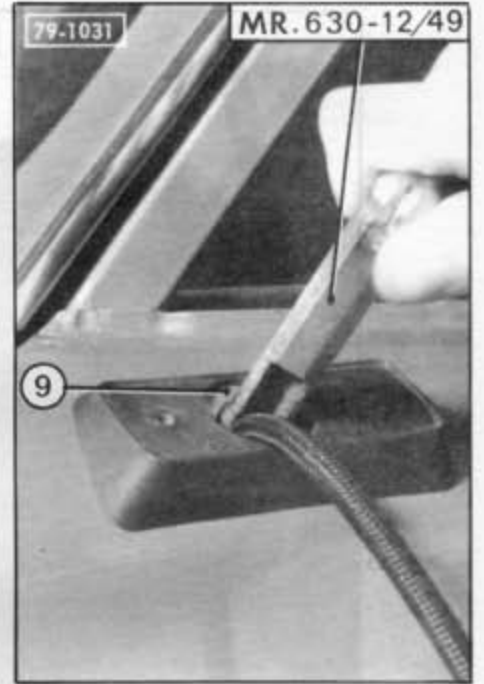
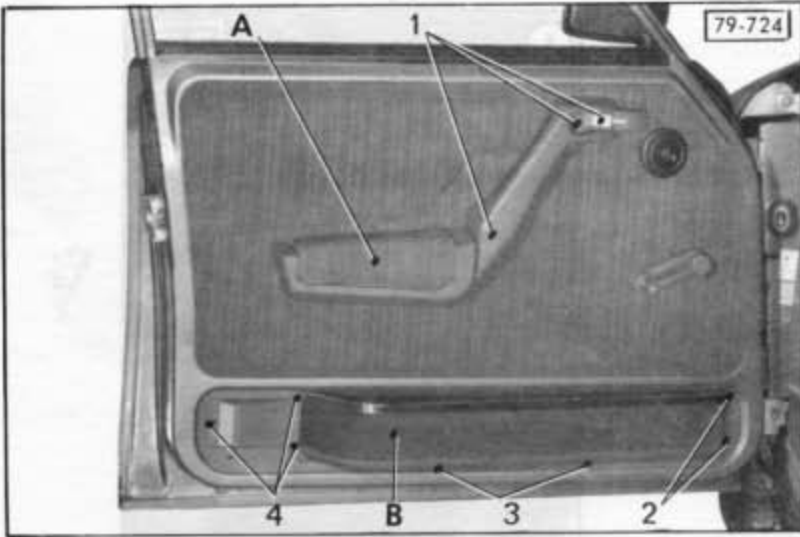
Put the window glass half-way up.

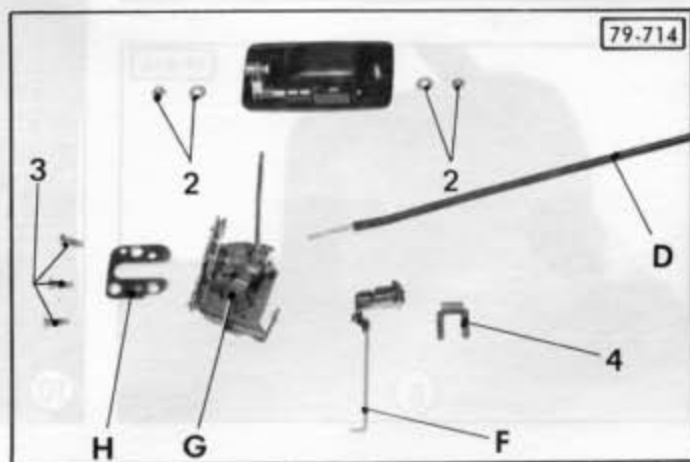
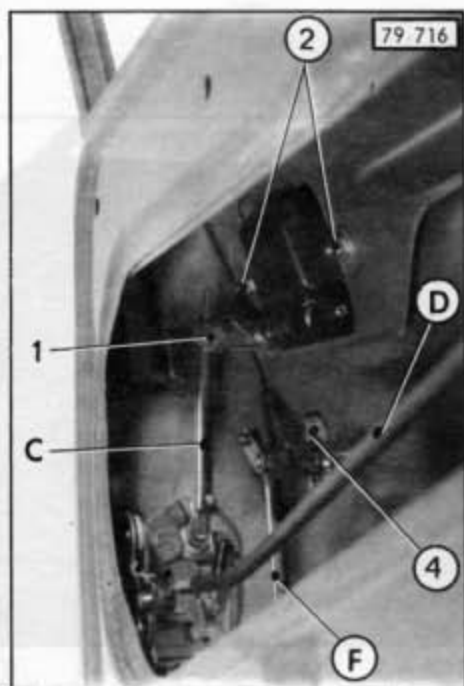
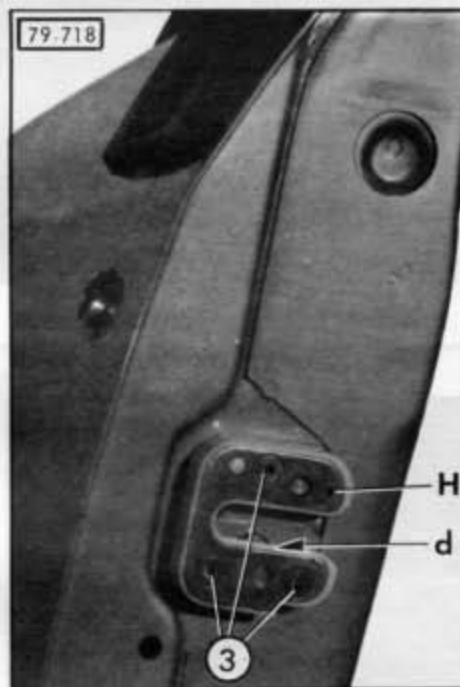
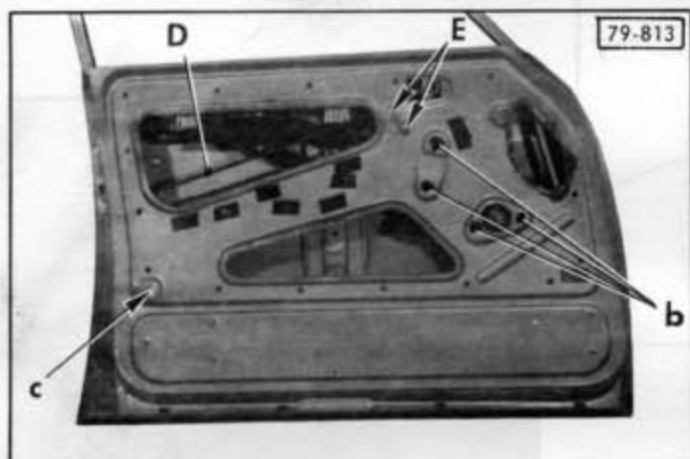
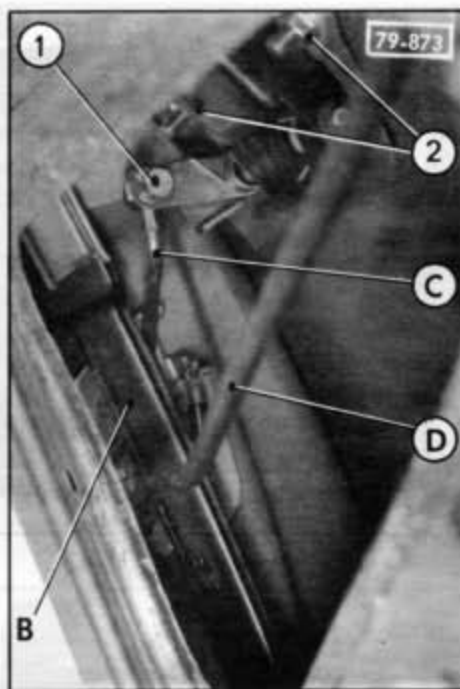
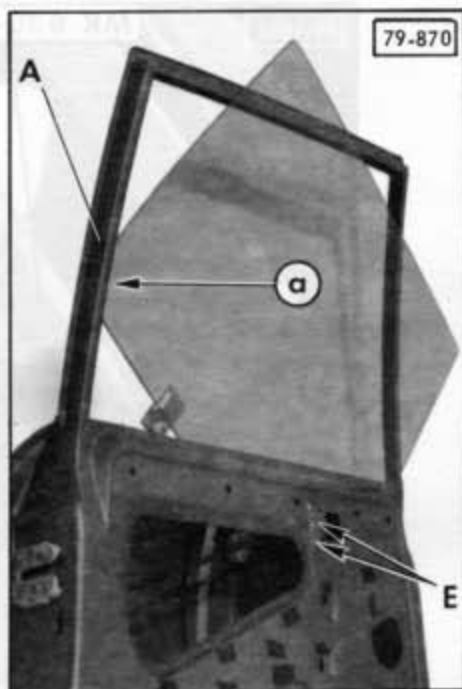
Remove screws (11).

With one hand, hold the glass half-way up and with the other hand, disengage the window winder from the interior lining of the door, then from the slide guides at the bottom of the window glass.

Disengage the window winder through the top opening of the door lining.







8. Remove glass :

Front door : Tilt the glass forwards and disengage it by pulling upwards (the glass passing on the interior side in relation to the frame).

Rear door : Disengage the upper corners of the glass from the frame and tilt the glass forwards so that the rear bottom corner « a » is opposite door stile **A**. Disengage the glass by pulling upwards. Remove the felt guides from the glass frame.

9. Remove lock :

Remove clip **E** holding remote control **D**.
 Untighten screw (1) and disengage exterior control rod **C** from its bearing.
 Unhook locking control rod **F** from lock plate **G** (*front door*).
 Remove screws (3) and disengage lock casing **H** and plate remote control assembly.

10. Remove external lock control :

Remove nuts and washers (2) and disengage the exterior control.

11. Remove locking control (front door)

Withdraw holding clip (4) and remove the barrel support with control rod **F**.

12. Remove the cage nuts used to fasten the arm-rest and the interior handle.

REASSEMBLY

13. Put into place the cage nuts used to fasten the arm-rest and the interior handle.**14. Fit exterior lock control :**

Put the control into place and fasten it with nuts and washers (2).

15. Fit exterior locking control :

Put the locking control into place and fasten it with clip (4).

16. Fit lock :

Engage control rod **C** in its housing.
 Position the lock plate **G** and casing **H**.
 Fasten the assembly with screws (3).
 Put the lock to the « closed » position with a screwdriver, while pushing the bolt back to « d ».
 Tighten screw (1).
 Hook locking control rod **F** to the lock plate (*front door*).
 Engage holding clip **E** on remote control rod **D** and fasten it to the door lining.
 Check the operation of all the lock controls.

17. Fit glass :

Fit the felt guides.
 Put the glass into place :
Front door : Tilt the glass forwards and through the interior side of the door, engage it in its housing.
Rear door : Through the interior side of the door, engage the glass in its housing by tilting it forwards so that the corner « a » of the glass is opposite stile **A**.
 Position the glass.

18. Fit window winder :

Engage the window winder in the door through the top opening.
 Engage the two rollers of the window winder arms in the glass bottom slides.
 Position the window winder on the door lining and fasten it at « b » without tightening, by means of the four nuts and washers.
 Adjust the position of the glass by tilting the window winder forwards or backwards (as required).
 Tighten the screws.

19. Fit detachable channel B

Put the glass to the « closed » position.
 Engage the channel in its housing and fasten it with the screw and washer at « c ».

20. Fit rear-view mirror (front left-hand door)

Engage rear-view mirror interior control **C** in the threaded nut used to fasten it.

Fasten rear-view mirror baseplate **A** with screw (1).
(use spanner MR. 630-12/49).

Fasten the rear-view mirror on the baseplate (screw (2).

Fit the control cable behind channel **D** and position control knob **C** on the door lining.

21. Fit sealing sheets :

Stick the corresponding sealing sheets on each of the lining openings.

Stick a strip of adhesive tape (20 mm long approx.) on each of the cage nuts and holes (3) of the door lining.

Put a pellet of sealing compound on each of the openings « a » provided to fasten the window winder.

22. Fit interior panel :

Put window winder shaft spring into place.

Clip the panel to the door.

Engage the clip holding the window winder lever in its housing and fit the lever base followed by the lever (swivel the lever forwards so that it forms an angle of approximately 30° upwards in relation to the horizontal)

23. Fasten rear-view mirror interior control :

Put cup **F** into place and fit control fastening nut (6).
Tighten the nut using serrated spanner

MR. 630-14/72.

24. Fit interior handle :

Hook handle finger (4) on the remote control rod.
Position the handle and fasten it with screws (7).

Fit blanking plugs (8).

25. Fit arm-rest :

Fasten the arm-rest with screws (5).

Fit the arm-rest trim.

26. Fit map-pocket J :

Put the map-pocket into place and fasten it with screws (9), (10) and (11).

27. Fit and adjust the door.

(See Operation GX. 841-1)

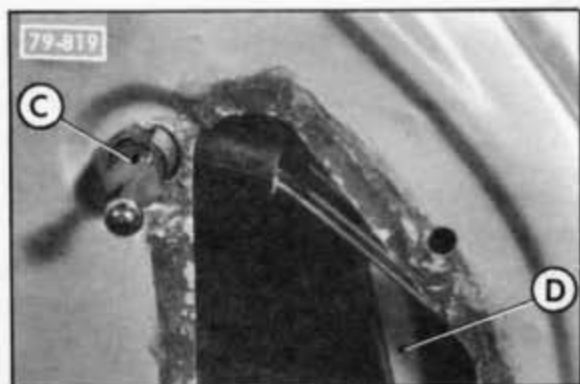
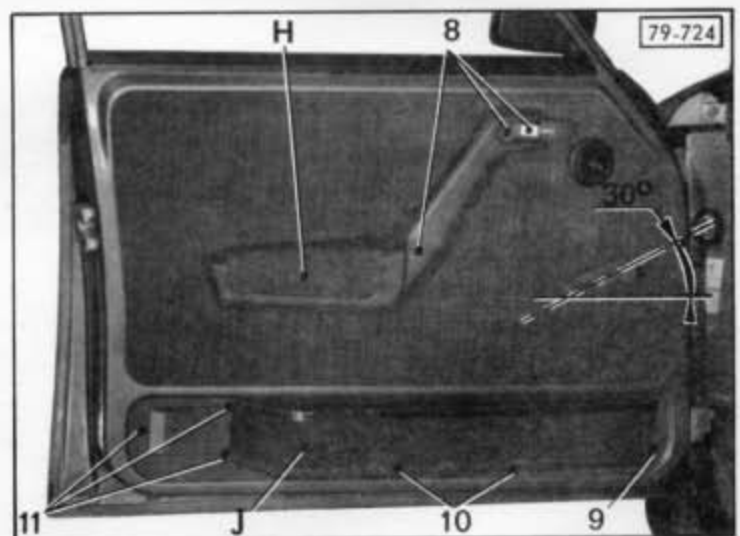
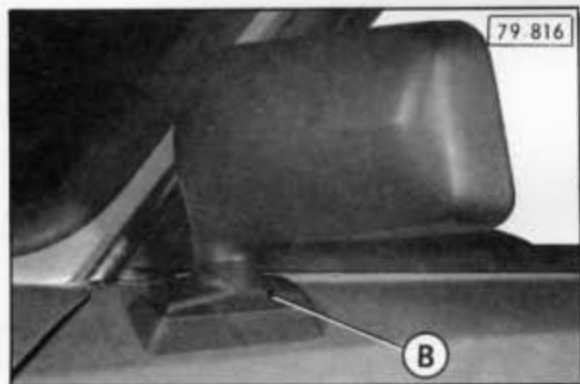
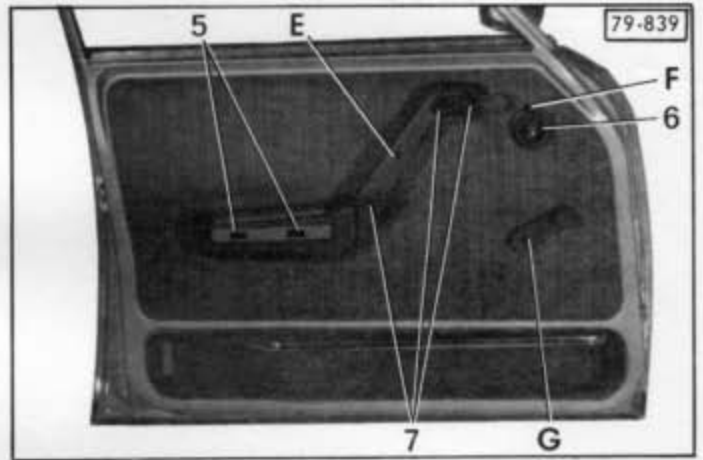
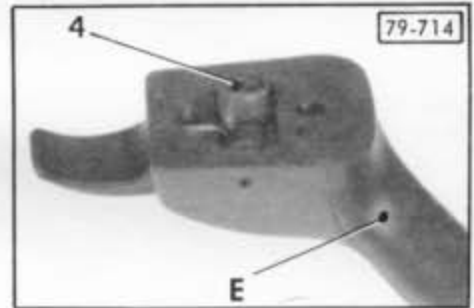
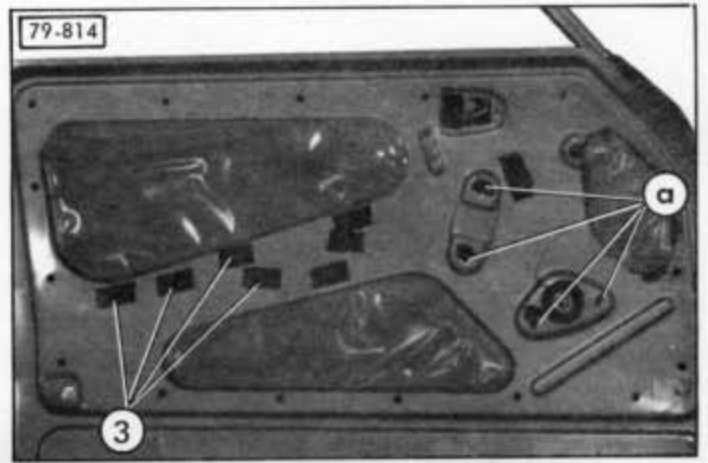
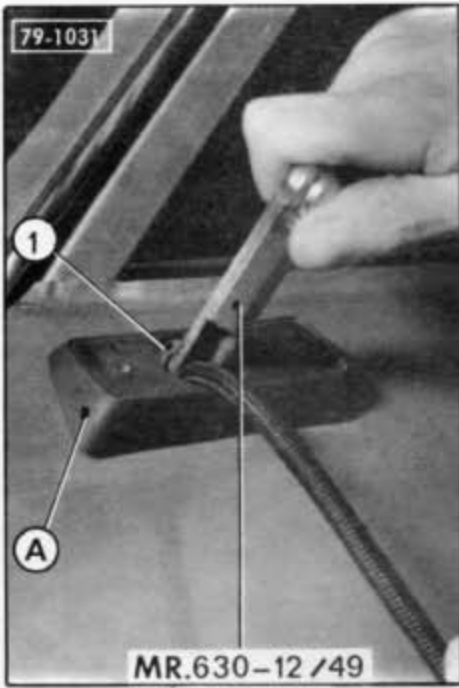
28. Fit :

- glass frame embellishers,
- interior and exterior window seals.

29. Clean the seatings of the exterior embellisher beading and the door bottom adhesive strip with methylated spirit and wipe with a rag.

Fasten the adhesive tape and the beading (use new parts and align them in relation to the other elements).

30. Check the operation of all the controls and clean the door (if necessary).



REPLACEMENT
PARTS DEPARTMENT

I. STICKING THE ROLLER SUPPORTING LUGS (fig. 1)

(Using the supporting lugs of the "standard" roller)

References of the glues sold by the R.P.D. : ZC 9 856 689 U
or ZC 9 865 105 U

These glues are used for assembling the roller supporting lugs on the door side windows.

For a correct positioning of the lugs on the relevant windows of the front or the rear doors, it is absolutely necessary to observe the dimensions indicated, **fig. I.**

II. REPLACING THE ROLLER SUPPORTING LUGS BY A METAL MOULDING fig. II.

(Repair solution)

The following parts are available at the Replacement Parts Department:

1 metal moulding ZC 9 867 385 U } for one window
1 rubber moulding GX 66 321 01 A }

PREPARATION : Unstick the roller supporting lug(s) remaining on the window.

Slightly heat the roller securing lug(s), using a torch (apply the flame on the lug only).

FRONT WINDOW:

FITTING:

- Offer up rubber ① to the window.
- Fit metal moulding ② observing the 125 mm length.

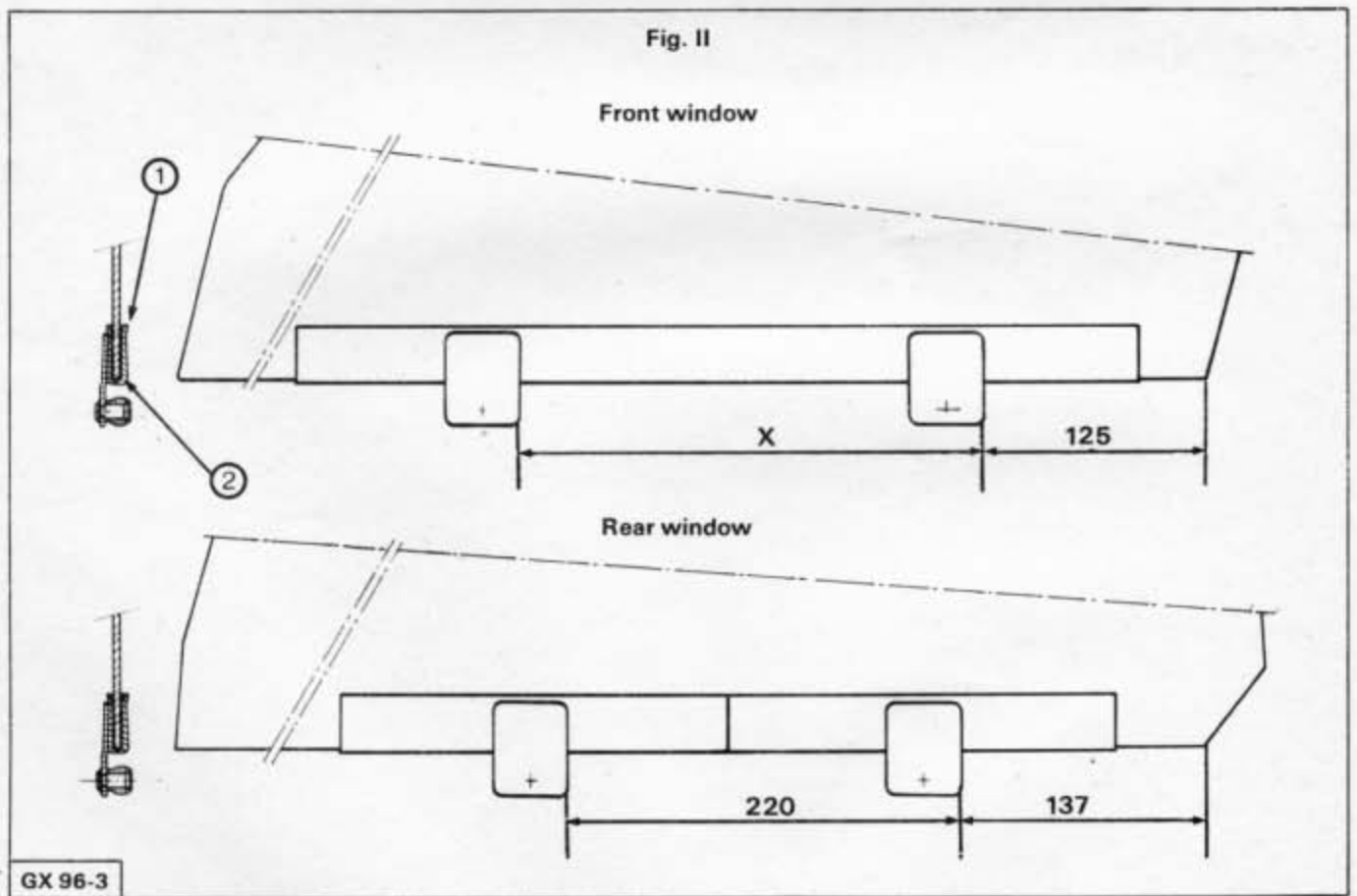
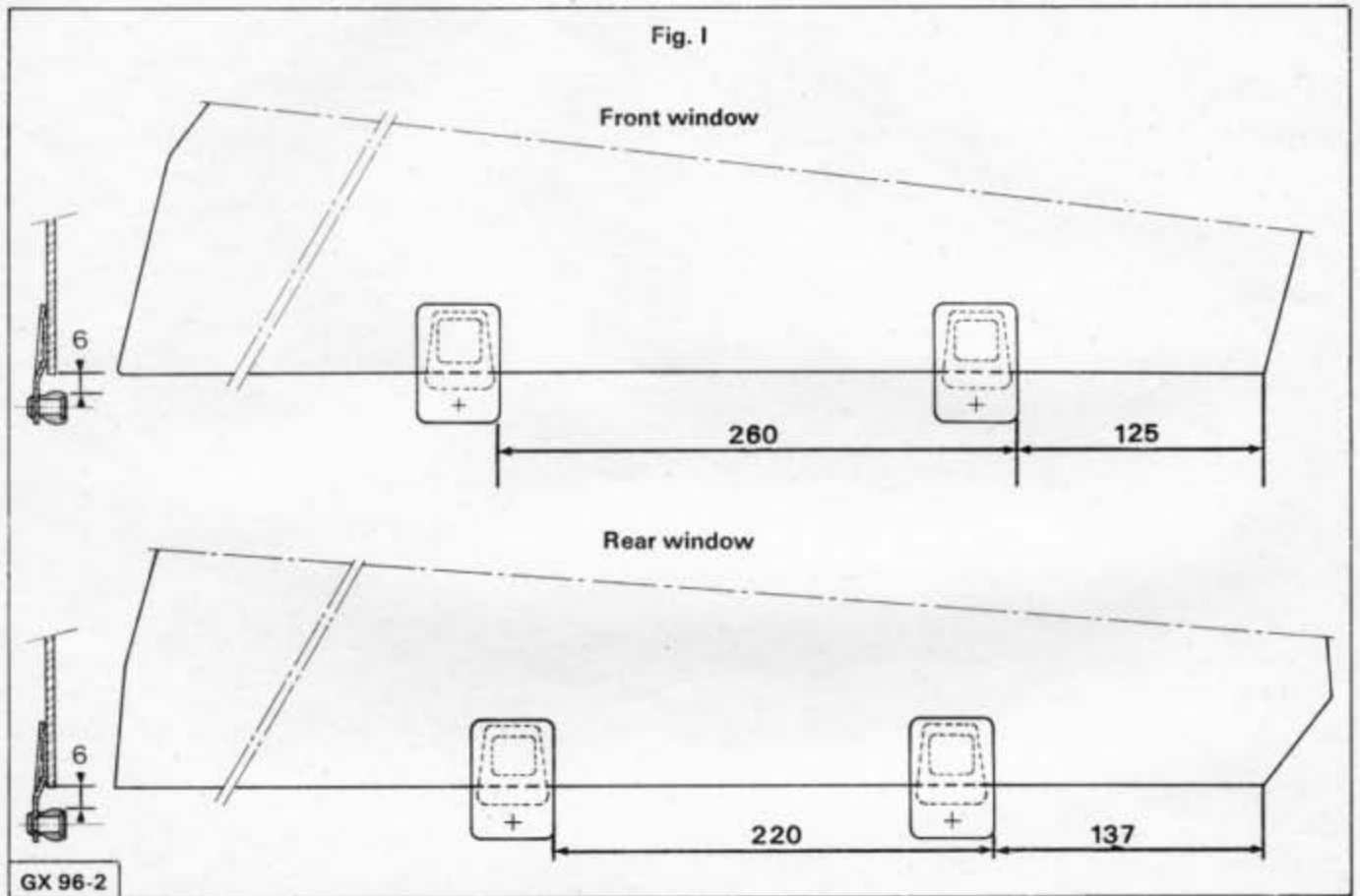
REAR WINDOW:

PREPARATION: In the centre part of the metal moulding, cut a 40 mm length so as to obtain the new dimension: 220 mm.

FITTING:

- Offer up rubber ① to the window.
- Fit metal moulding ② observing the 137 mm and 220 mm lengths.





REPLACEMENT OF A SIDE-DOOR OUTER PANEL

REMOVAL

1. Remove the following :

- inner and outer window weather-strips,
- rear-view mirror (*front door*),
- arm-rest and inner trim panel,
- exterior lock control,
- window winder, glass and felt guides,
- glass surround embellishers.

2. Remove door :

(See Operation GX. 841-1).

3. Remove door panel :

Cut the previously welded edges by grinding smooth the front, lower and rear edges of the outer panel.

Break the spot-welds along line :

- LP. 1,
- and points :
- P. 1,
 - P. 2,
 - P. 3,
 - P. 4.

Using a chisel with a side cutting edge, crack off the outer panel and what remains of the sheet-metal edges.

PREPARATION.

4. Grind off the welding remaining over the edges and the lower section of glass surround.
Eliminate glue traces from the door edges.

5. Put a soundproofing compound pellet in 7 to 8 points « d » on the door central stiffener.

6. Proceed with covering the panel borders with glue :

Carefully mix parts **A** and **B** of « TEROKAL 6015 » glue. (See Information Bulletin No. 80-94 TT).
Using a spatula, apply the glue over a width of about 20 mm on the upright and lower edges of the panel.

FITTING.

7. Fit panel on door :

Position the panel on the door and hold it in position by means of panel clamps.

Using a dolly and a bumping hammer, carry out the assembly by folding over the lower and upright edges.
Weld (using a spot-welding head) along line :

- LP. 1,
- and points :
- P. 1,
 - P. 2,
 - P. 3,
 - P. 4.

(Use a copper plate to avoid marking the panel).

8. Apply the protective sealing compound along the junction lines of inner and outer panels :

Using a pressure gun (PIPO 2 type, KREMLIN) spray the sealing compound (TEROTEX 6018) over the upright junction lines « a » and « c » and lower junction lines « b ».

(See Information Bulletin No. 80-94 TT).

9. Allow to dry for one hour.

10. Carry out door painting.

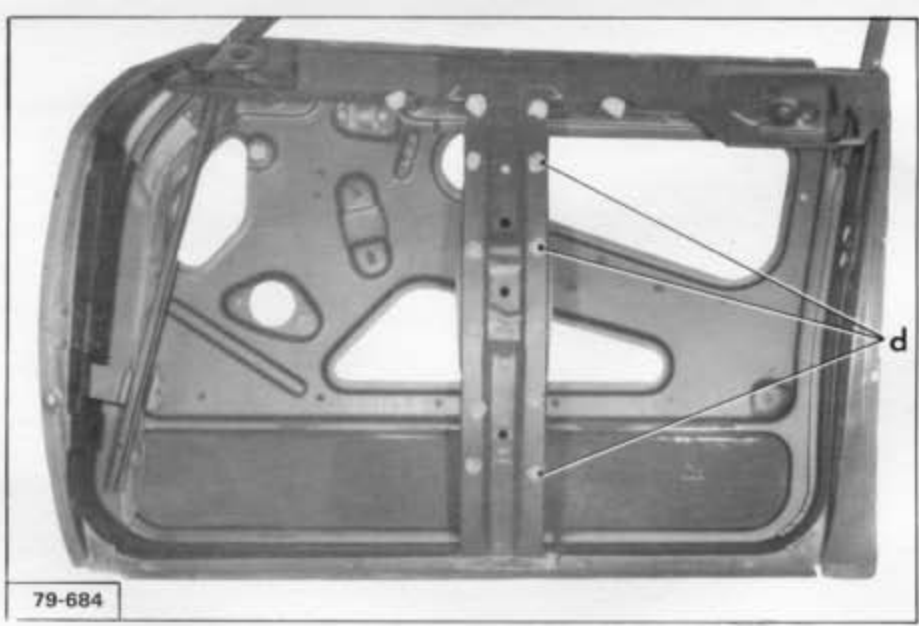
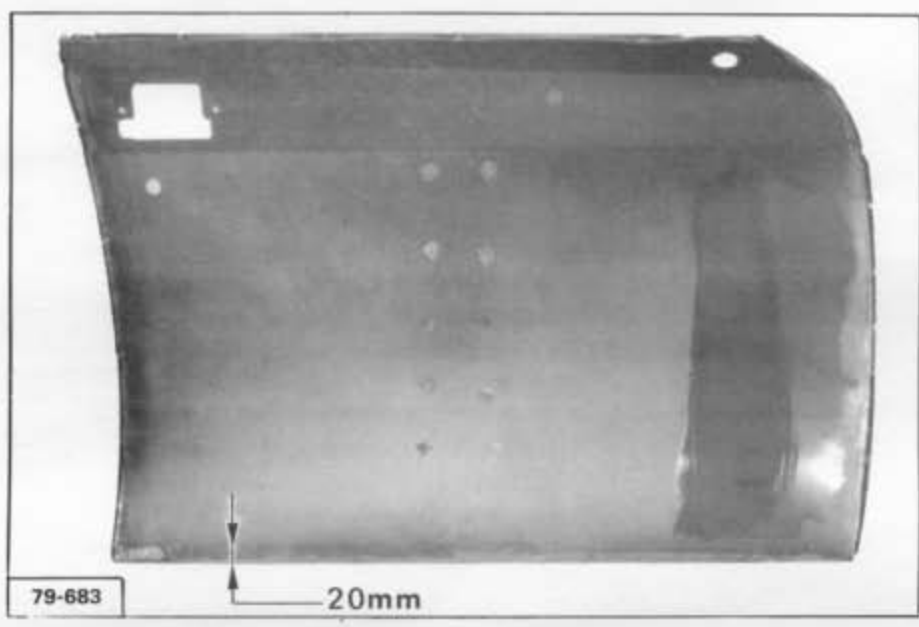
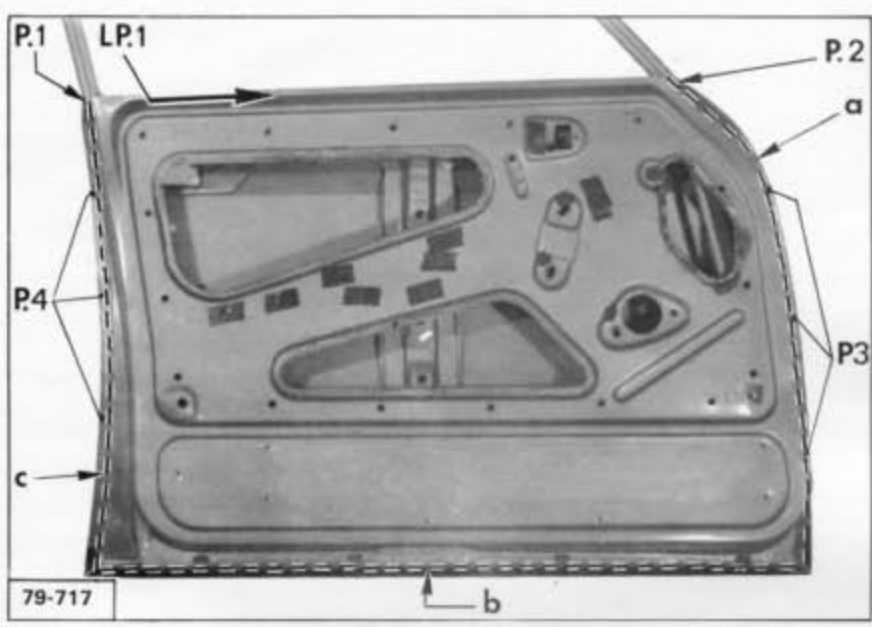
11. Fit door :

(See Operation GX. 841-1)

12. Fit the following :

- felt guides,
- glass,
- window winder,
- outer lock control,
- rear-view mirror (*front door*),
- inner trim panel,
- arm-rest,
- inner and outer weather-strips,
- glass surround embellishers.

13. Spray gun a protective product for hollow parts inside the door.



REPLACEMENT OF A SIDE DOOR EXTERIOR PANEL

REMOVAL

1. Remove door :

(See Operation GX. 841-1)

Remove :

- interior and exterior window weatherstrips,
- rear-view mirror (front left-hand door),
- arm-rest and interior trim panel,
- exterior lock control,
- window winder, glass and felt guides,
- door-frame vertical embellishers.

2. Remove door panel :

Break the electrical spot-welds, following points :

- P. 1,
- P. 2.

and following lines :

- LP. 1,
- LP. 2,
- LP. 3,
- LP. 4.

Remove the panel, grinding or straightening the four flanged edges.

FITTING

4. Fit door panel :

Put the panel into place and hold it by means of panel clamps.

Clip the top edge, bottom edge and side edges.

Spot weld following the lines :

- LP. 1,
- LP. 3,
- LP. 2,
- LP. 4.

and following the points :

- P. 1,
- P. 2.

(Use a copper plate to avoid marking the panel).

5. Paint.

PREPARATION

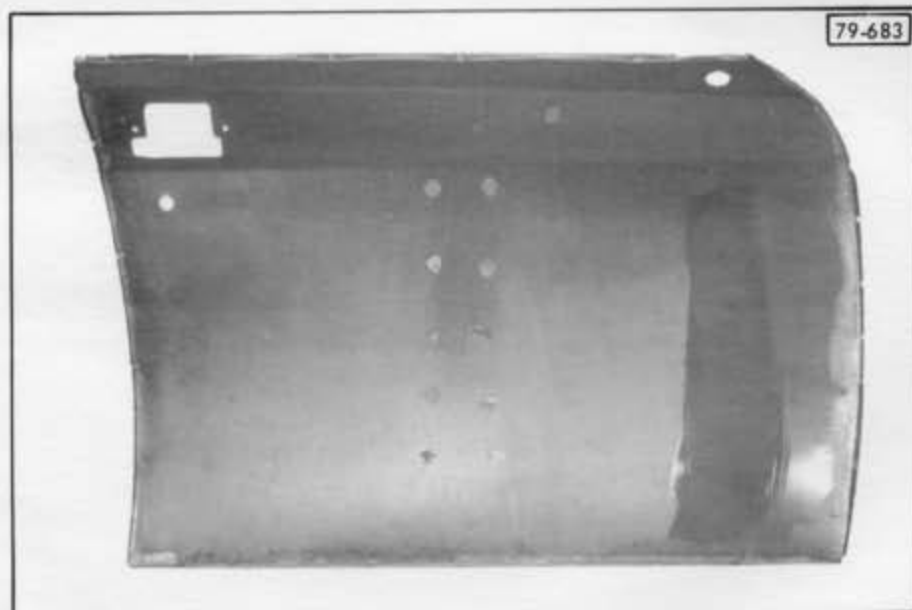
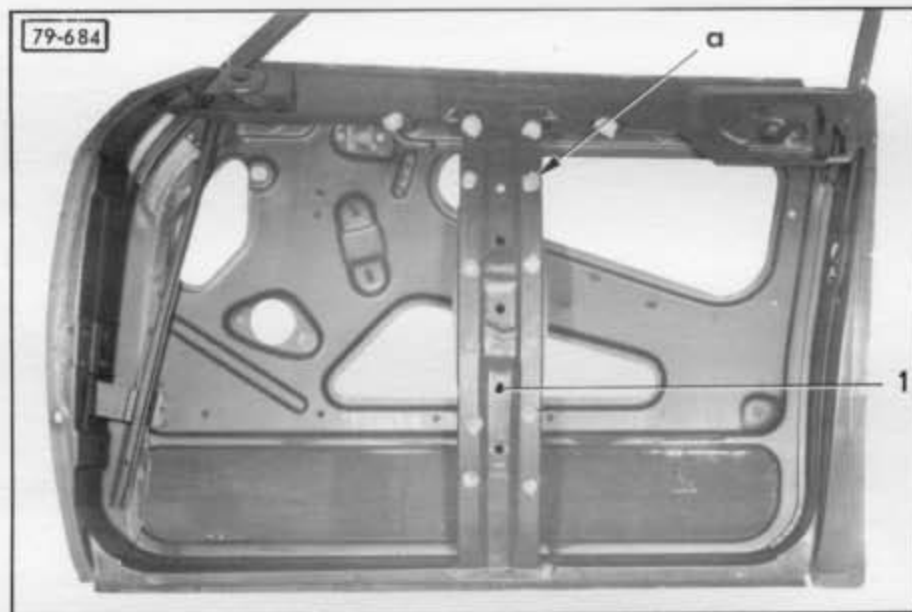
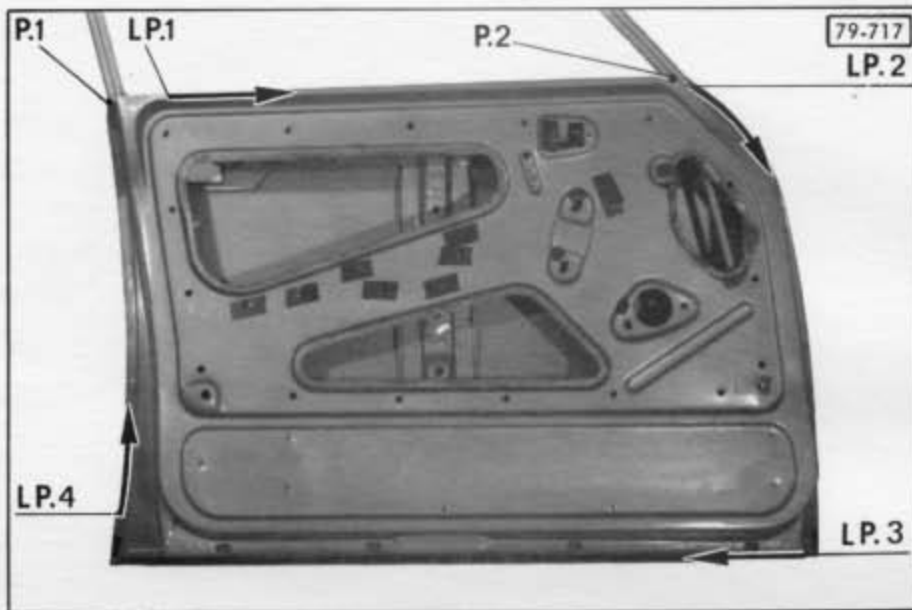
3. Straighten the edges of the interior part of the door (if necessary).

Scour the weld zones and apply a conductive primer coat on the inner face of the seamed or spot welded edges.

Put a soundproofing compound pellet in 7 to 8 points « a » on the door central stiffener (1).

6. Fit and adjust the previously removed elements :

(See Operation GX. 841-1).





I - FITTING OF THE RUBBING STRIPS

1. Clean the sticking zones of the strips with a rag impregnated with methylated spirit and wipe with a clean rag.
2. Make a mark corresponding to the top edge of the strips at « a » and « b ».

Distance over plate between bottom edge of element and top edge of strip :

Four-door saloon : $X = 290$ mm

$Y = 69$ mm

Estate : $X = 290$ mm

$Y = 76$ mm

Joint the points « a » and « b » with a line-tracing over all the side elements (avoid using instruments for there is a risk of scratching the paint).

3. For each of the strips :
 - Withdraw the protective sheeting from the self-adhesive tapes.
 - Position the strip on the corresponding element (top edge tangential to the outline, clearance identical at each end) and strongly apply to the sheet metal by hand.

NOTE : It is preferable to first of all fit the door strips.

II - FITTING OF ADHESIVE P.V.C. STRIPS

1. Clean the sticking zones.
2. Trace the top height line of the adhesive strips with a rule and a pen (felt type).
(45 ± 2 mm from the bottom edge of the elements).

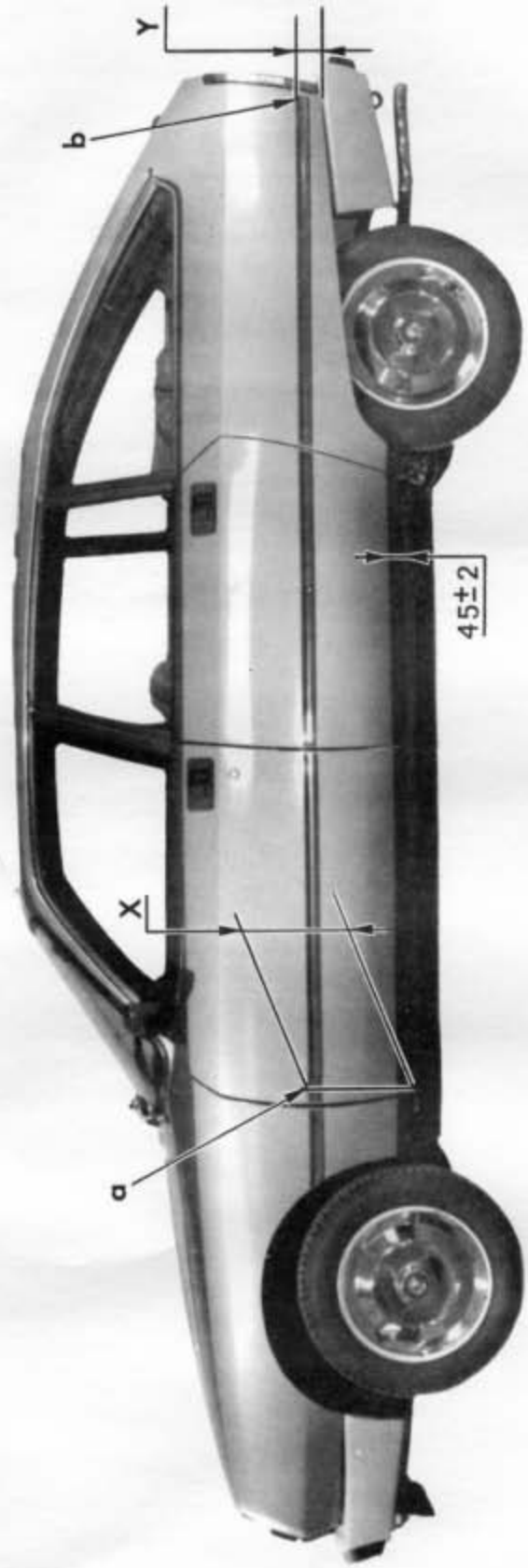
3. Fit the adhesive strips :

For each of the strips :

- Withdraw the protective sheeting from the adhesive face.
- Position the strip and apply it strongly on the sheet metal.
- Fold the edges of the strip over the inner rim of the different elements (cut if necessary).



79-710



ADJUSTMENT OF THE TAILGATE

1. To obtain (on both sides) :

- clearance $J = 6 \pm 1$ mm.
- 0 ± 2 mm alignment of tailgate with the wing upper surface at « a » : adjust hinge screws (1) and stop screws (3).
- 0 ± 2 mm alignment of tailgate with the wing rear surface at « b » : alter the number of shims (2).

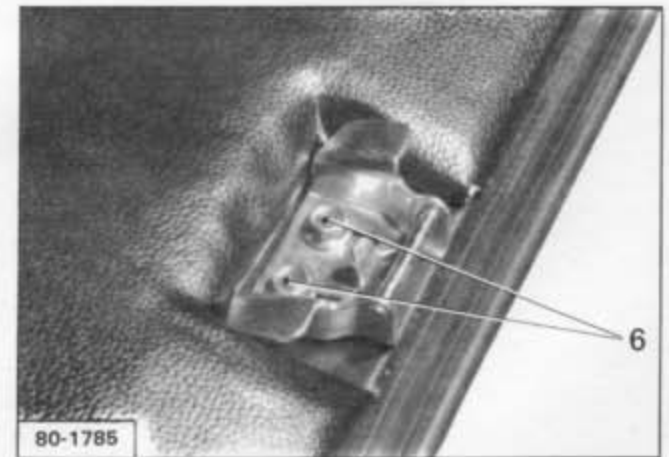
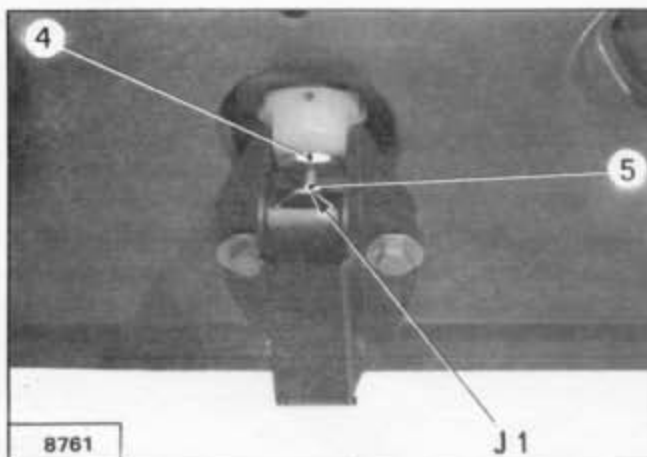
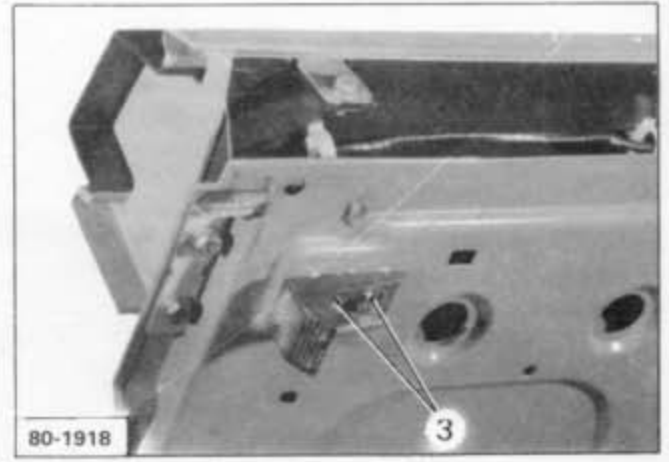
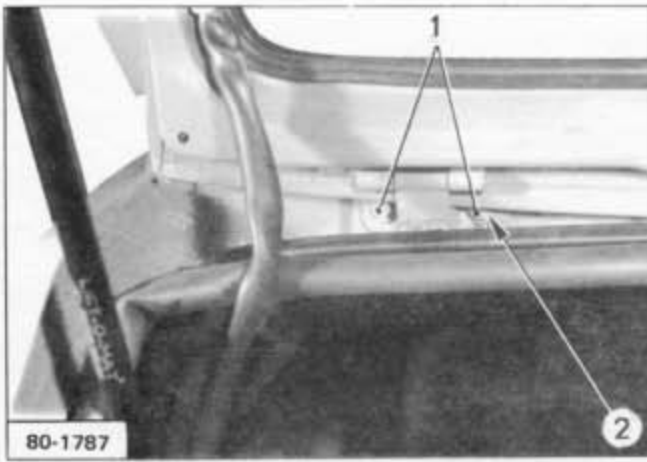
2. To obtain :

- clearance $J1 = 1 \pm 0.5$ mm between the bolt and lock control lever : adjust stop screw (5) and tighten locknut (4).

Slacken screws (6) and adjust the striking plate so that, when the tailgate is closed, there is no gap between the tailgate and its sealing strips.

NOTE : The tailgate must close and lock completely over both catches when released from the « dead centre point » of the stays and allowed to fall under its own weight.





REMOVAL AND FITTING OF THE TAILGATE

REMOVAL

1. Disconnect the following :

Left-hand side :

- feed wiring harness **A** from number plate lamp and windscreen wiper motor.

On both sides :

- feed wires from the resistor at **C** and **D**.

2. Partially remove rubber sealing strip **B**

3. *On both sides :*

Uncouple the stay (clip (3)).

4. Remove hinge screws (2) (screw at L.H. side of each hinge).

5. Slacken, without removing them, screws (1) (screw at right-hand side of each hinge).

6. Remove the tailgate.

FITTING

7. Put the tailgate and engage the hinges under screws (1).

Fit, without tightening, screws (2).

8. Fasten the stay on the tailgate *on each side*. (clip (3)).

9. Adjust the tailgate position,
(*See Operation GXB. 844-0*).

Tighten screws (1) and (2) (*on both sides*).

10. Put sealing strip **B** back into place.

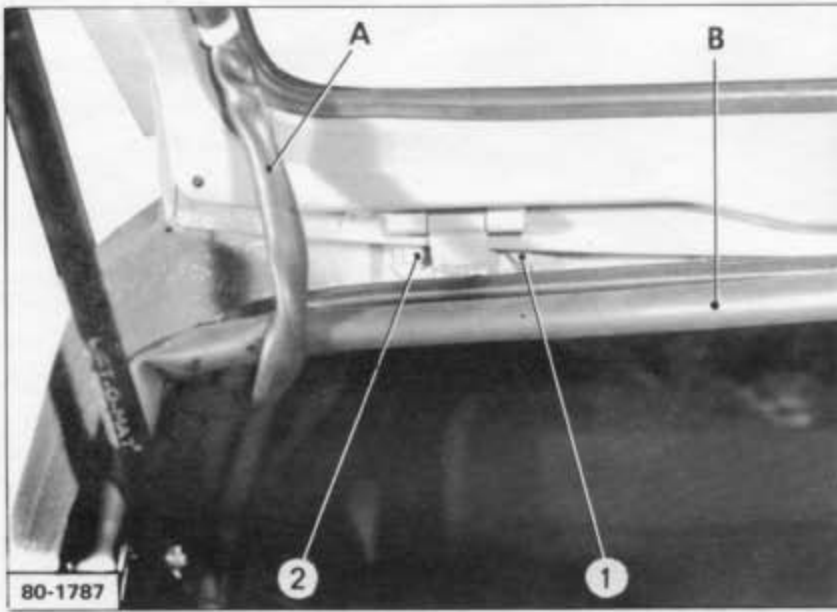
11. Connect the following :

Left-hand side :

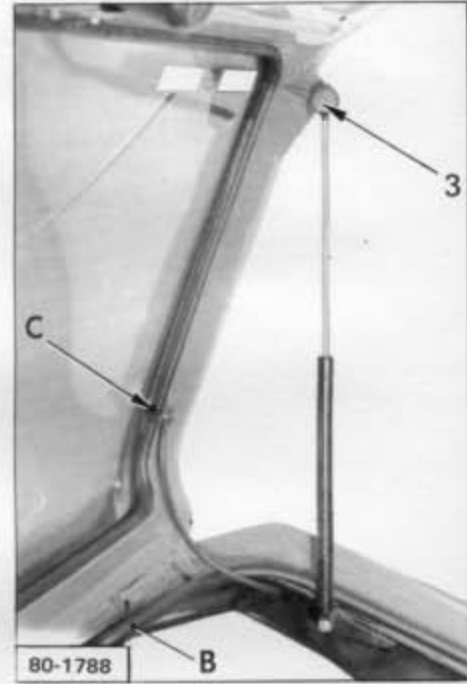
- feed harness **A** to number plate and windscreen wiper motor.

On both sides :

- feed wires to resistor at **C** and **D**.



80-1787



80-1788



80-1884

MOITARSNO
7-AME 30

REMOVAL AND FITTING OF THE HATCHBACK DOOR

REMOVAL

1. Remove the access cover on the interior face of the right-hand wheel arch and disconnect the three wires in harness **B**.

Attach a piece of string to the end of the harness. Extract the harness from the body shell pillar. Detach the piece of string and leave it inside the pillar.

Vehicles equipped with a rear window wiper :

Remove window washer motor power supply harness **D** according to the same principle.

NOTE : In case of replacement of the hatchback door, disconnect the wires directly on the accessory involved and remove the harness from the hatchback door.

2. Partially remove hatchback door rubber sealing strip **A**.

3. Remove earth wire **C** (screw (3)).

4. Uncouple the stay (*on both sides*) (clip (1) and contact washer).

5. Remove screws (2) and (4) fastening the hinges.

6. Remove the hatchback door.

FITTING

7. **Fit hatchback door :**

Put the door into place and slightly tighten screws (4) and (2).

Put rubber sealing strip **A** into place.

Adjust the position of the door (*see Operation GX. 840-0*).

Tighten screws (4) and (2).

8. Fasten the retaining stay on the door *on each side* (clip (1) and contact washer).

9. Fit earth wire **C** (screw (3)).

10. Attach harness **B** to the end of the piece of string left in the pillar.

Pull to engage the harness in the pillar.

11. Detach the piece of string and connect the three hatchback door harness wires.

12. Fit the hatch on the interior face of the wheel arch.

Vehicles equipped with a rear window wiper :

Fit harness **D** according to the same principle.

MOITARSNO 2, NO 51111R QVA, JERUSALEM



OPERATION
GXB. 844-1

STRIPPING AND ASSEMBLY OF THE TAILGATE

STRIPPING

1. Remove tailgate window glass

(See Operation GXB. 961-7).

2. Remove the following :

- bumper centre section (screws (1) after disconnecting number plate lamps at « a » and « b »),
- rest stops **A** (screws (4)),
- outer embellisher : screws (2) and screws (5) through opening **B**,
- lock **D** (screw (3)),
- water outlet pipe **F**,
- lock barrel housing **G** (clip (7)),
- wiring harness **C**,
- wiper blade,

Disconnect the feed wires from window wiper motor **E** and disengage the latter (screw (6)).

3. Remove tailgate :

(See Operation GXB. 844-1).

PREPARATION

4. Paint the new tailgate.

ASSEMBLY

5. Fit tailgate :

(See Operation GXB. 844-1).

6. Fit the following :

- lock barrel housing **G** (clip (7)),
- water outlet pipe **F**,
- lock **D** (screw (3)),
- wiring harness **C**,
- rest stops **A** (screws (4)),
- bumper centre section (screws (1) and connect number plate lamps at « a » and « b »),
- window wiper motor **E** (screws (6)) and connect the motor feed wires.
- wiper blade.

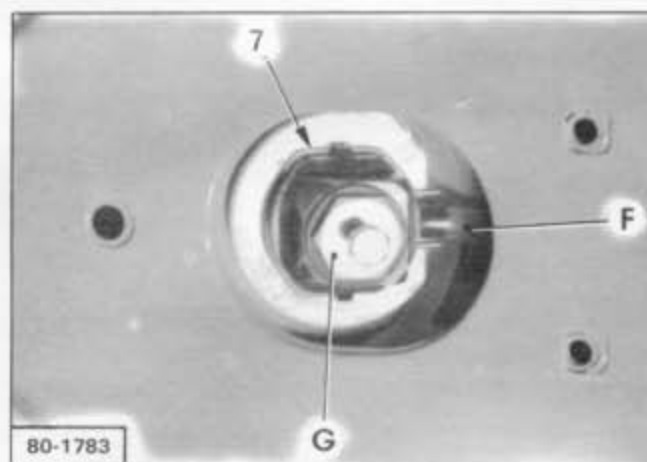
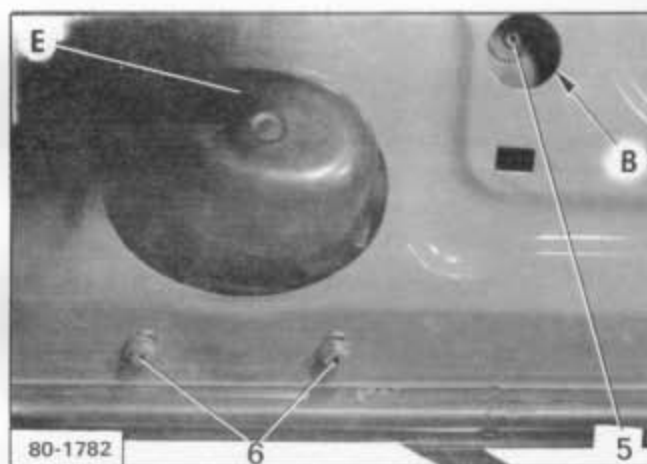
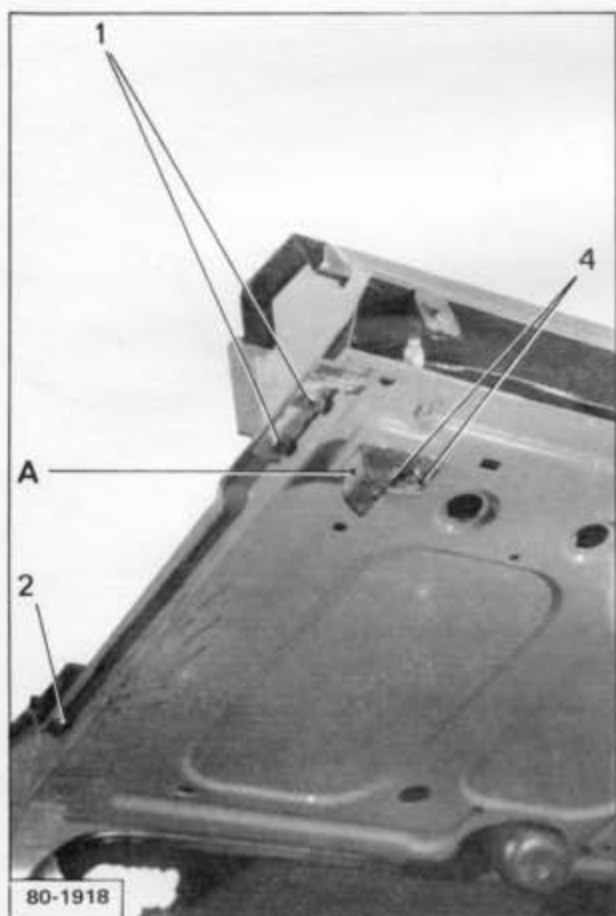
7. Fit tailgate window glass :

(See Operation GXB. 961-7).

8. Fit tailgate outer embellisher :

Fit the embellisher by means of screws (2) and screws (5) (through openings **B**).

STRIPPING AND ASSEMBLY OF THE TAILGATE



STRIPPING AND ASSEMBLY OF A HATCHBACK DOOR

STRIPPING

1. Remove rear window glass :

(See Operation GX. 961-7)

2. Remove :

- lock (screws (2)),
- trims **A** and **B**,
- lock control (nuts and washers (4)),
- rest stops **C** and **D** (screw (5)),
- earth wires and boot lighting switch (screw (3)),
- number plate lights,
- wiring harness (right-hand side),
- hatchback door embellisher.

Vehicles equipped with a rear window wiper :

- wiper blade,
- wiper shaft nut and washer,
- screws (1) fastening wiper motor,
- disconnect the motor feed wires,
- Disengage the motor and its feed harness.

3. Remove hatchback door :

(See Operation GX. 844-1)

PREPARATION

4. Paint the new door.

ASSEMBLY

5. Fit hatchback door :

(See Operation GX. 844-1)

6. Fit hatchback door lock :

Fit the lock control (nuts and washers (4)).
Fit the lock (screws (2)).
Fit side rest stops **C** and **D** (screw (5)).
Adjust the closing of the hatchback door and its alignment.

7. Fit rear window glass :

(See Operation GX. 961-7)

8. Using a metal wire, pass the right-hand harness into the side member of the door and bring out each of the wires through the corresponding hole.

Fit and connect the number plate lights.

Vehicles equipped with a rear window wiper :

Engage the wiper harness in the left-hand side member of the door.

Connect the power supply wires to the motor.

Fasten the motor and bracket assembly by means of screws (1).

Fit the wiper shaft washer and nut.

Fit the wiper blade.

9. Fasten the earth wires (screw (3)).

Connect the heated rear window power supply wires.

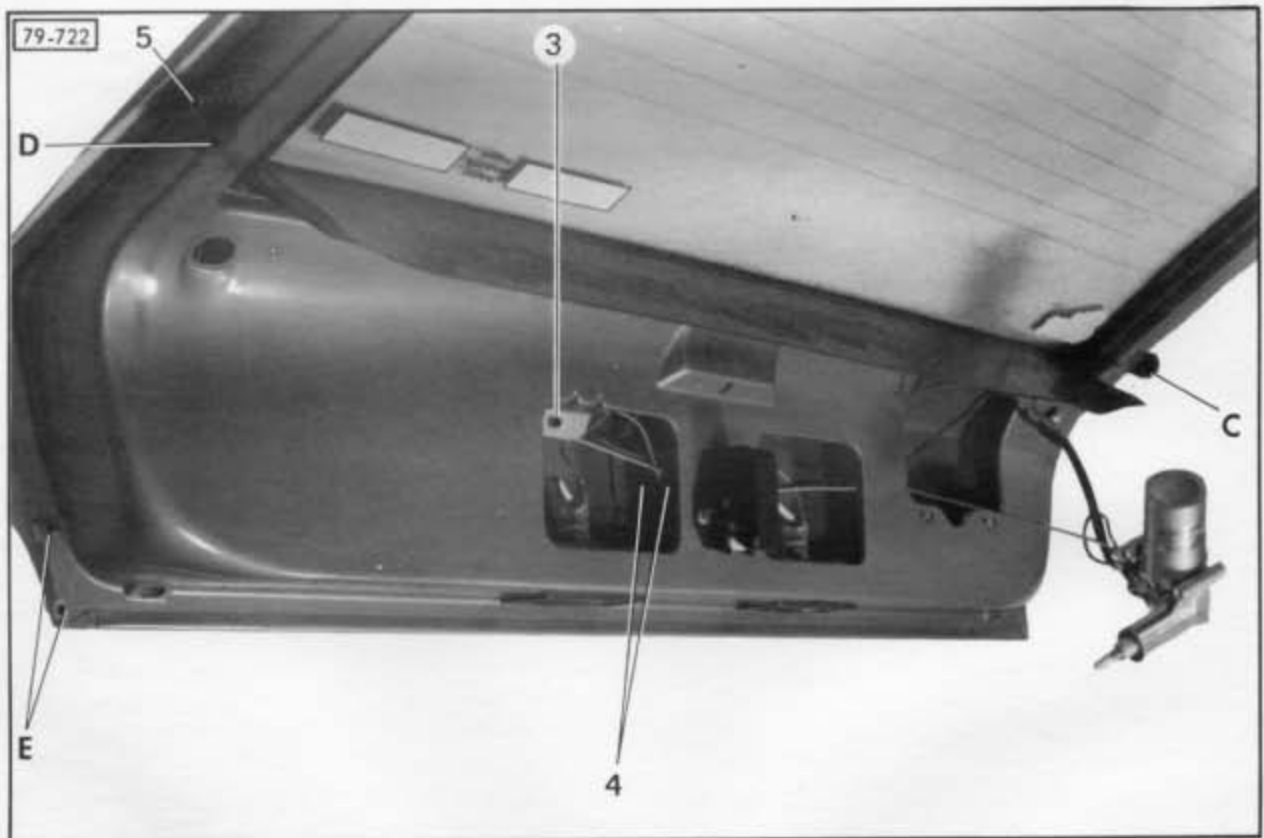
10. Fit trims **A** and **B**.

11. Fit hatchback door embellisher (use a new embellisher) :

Clean the sticking zone with alcohol and wipe with a dry rag.

Position and strongly apply the embellisher to the door.

Fold back holding lugs **E**.



FITTING OF A REAR SPOILER

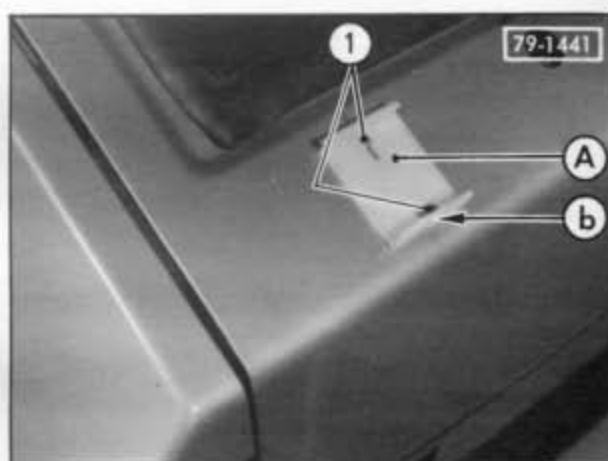
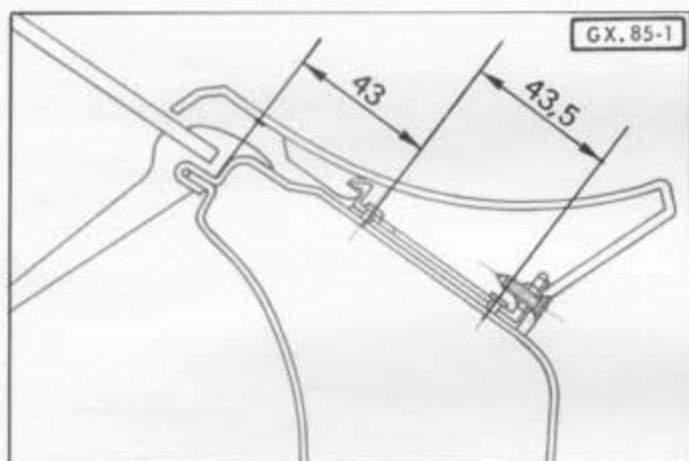
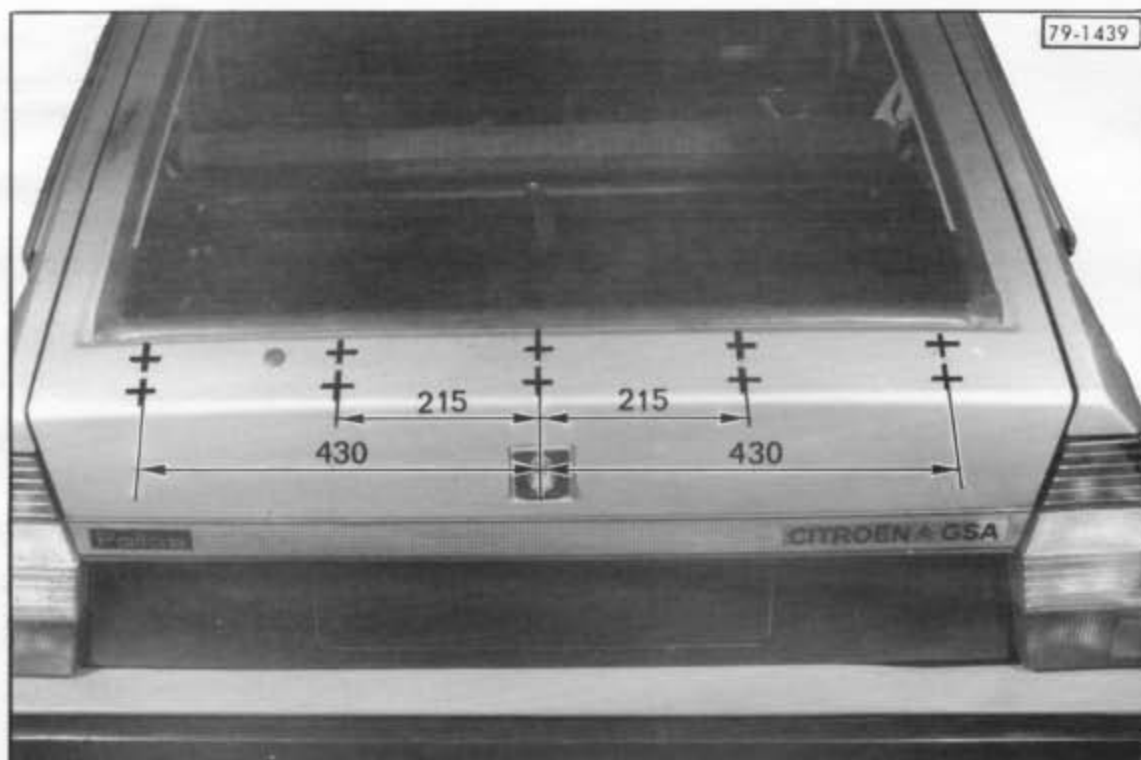
PREPARATION

1. Remove the rear window wiper blade *(if equipped)*.
2. Trace the emplacements of « POP » rivets in « Tee » on the hatchback door.
(See the dimensions on the photograph and drawing opposite).
3. Drill the ten rivet fastening holes (dia. = 2.5 mm) according to the tracings.
4. Fit the « POP » rivets in « Tee » (1) using riveting pliers.
5. Fit the five plates **A** holding the spoiler on the hatchback door.
6. Fit the nuts-clips at « b » on each plate **A**.

FITTING

7. Fit the spoiler :
Secure the spoiler, starting at one of the extremities. Centre the spoiler in order to give an identical dimension on each side.
8. Engage and tighten screws (2).
9. Fit the rear window wiper blade *(depending on equipment)*.





OPERATION
GX 840-0

REPLACEMENT OF A FRONT WING

REMOVAL

1. Remove front wing :

Remove fastening screws (1), (2), (3), (4) and (5).

"Pull" the bottom edge of the wing so as to unstick the sealing compound joint « b » between wing and wheelarch then finish off by cutting it with a sharp blade.

Remove the wing.

CAUTION : In case the wing is not replaced, "pull gently", starting with the rear bottom edge and cutting the sealing compound bead progressively so as not to distort the wing.

PREPARATION

2. If necessary :

Replace the captive nuts required for fitting bolts (1) and (2) on the body shell pillar.

3. Eliminate the sealing compound remaining on the wheel arch.

4. Fit a preformed strip of sealing compound :

Following « a » :

Rectangular section (2 mm thick) or circular section (dia. = 5 mm).

Following « b » :

Circular section (dia. = 12 mm).

E.g. : Prestik S.S. (BOSTIK)

Terostat II (TEROSON)

8568 E (dia. = 6 mm) (3 M)

5. Apply a semi-liquid protecting agent on the inner face of the wing.

Paint the wing.

FITTING

6. Fit front wing :

Line up wing.

Fasten it with screws (5), (4), (3), (2) and (1) without tightening.

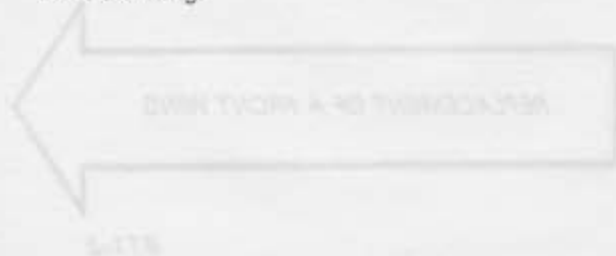
Check the clearances between the wing and the other elements (*see Operation GX. 840-0*) and, if necessary, adjust.

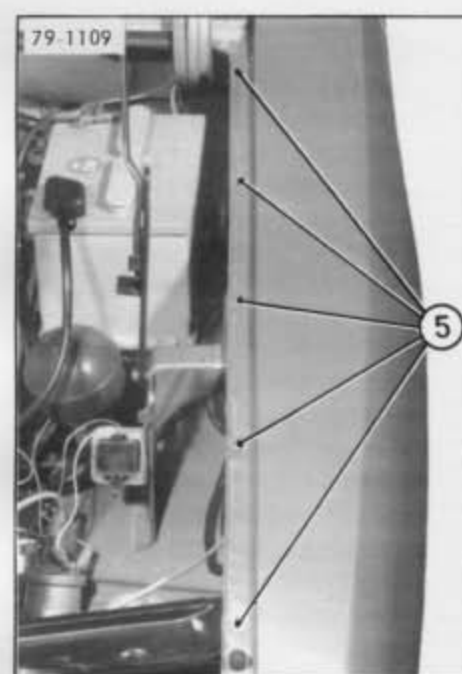
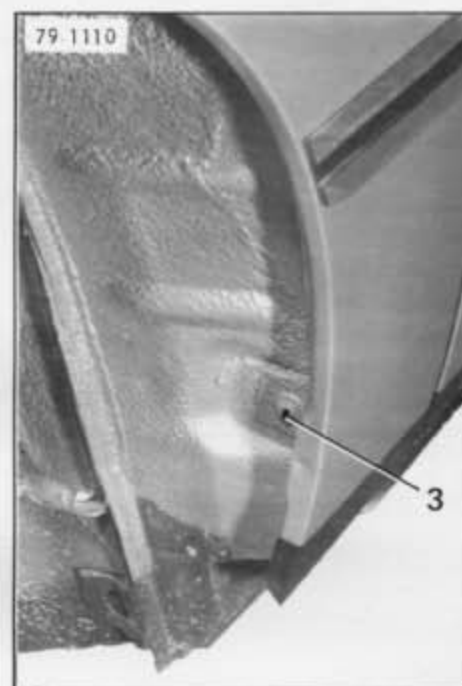
Tighten the wing fastening screws.

7. Fit :

- embellishment beading.

- wing bottom adhesive tape.





REPLACEMENT OF A BONNET

REMOVAL

1. Remove bonnet :

Disconnect the screen washer jets supply pipe on the reservoir side and bonnet side.

Remove :

- strut (screws (3) and (4)),
- screws (5) and (6) (*on each side*),
- bonnet.

2. Replace bonnet hinges (*if necessary*) :

On each side, remove :

- screws (7),
- earth wires,
- hinge.

Line up the new hinge, engage the earth wires on screws (7) and tighten the screws.

3. Replace bonnet lock (*if necessary*) :

a) Removal :

- Undo screws (8) and (9).
- Push the lock bolt to the left.
- Disengage the cable at « a ».
- Remove screws (8) and (9).
- Remove the bonnet lock.

b) Fitting :

- Line up the new lock.
- Engage screws (8) and (9), as also the extremity of the cable in its housing at « a ».
- Adjust the position of the lock and tighten screws (8) and (9).

STRIPPING

4. Remove :

- safety hook **A** (screw (1)),
- locking finger **B** (nut (2)),
- screen washer jets,
- felt **C**,

PREPARATION

5. Paint the new bonnet.

REPLACEMENT OF A BONNET

ASSEMBLY

6. Fit the screen washer pipe and jets on the bonnet.

7. Line up safety hook **A**, fasten it by means of screw (1).
Fit bonnet locking finger **B** without tightening.

FITTING

8. Fit bonnet :

Raise the hinges.

Line up the bonnet and fasten it on the hinges with screws (5) and (6) (*on each side*) without tightening
Line up and fasten the bonnet stay with screws (3) and (4).

Connect the screen washer jets supply pipe on the reservoir side.

9. Adjust bonnet :

Centre the bonnet in relation to the two front wings.
Adjust the bonnet in relation to the ventilation plate and the front end of the wings.
Tighten screws (5) and (6) (*on each side*).
Adjust the rear flush-fit of the bonnet :
undo screws (7) and adjust the height of the hinges (*see Op. GX. 840-0 : Clearance of detachable elements*).

10. Adjust closing of the bonnet :

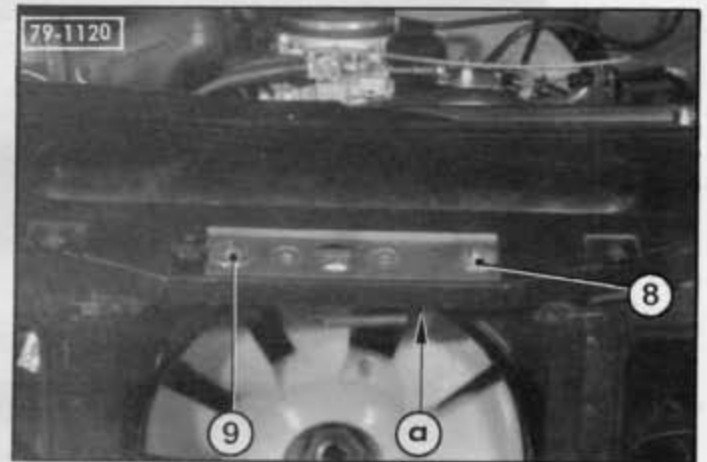
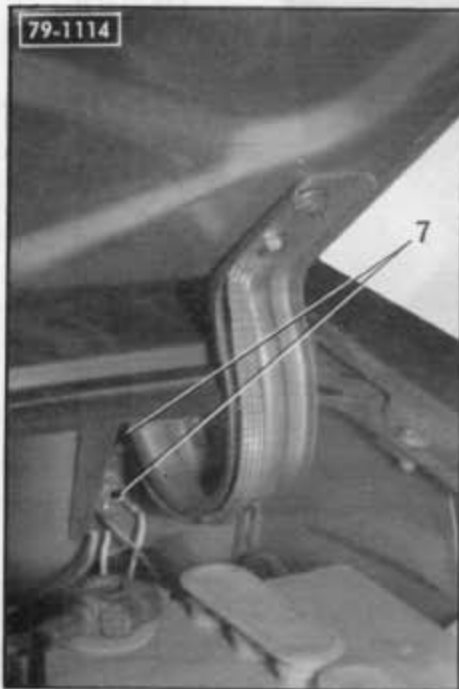
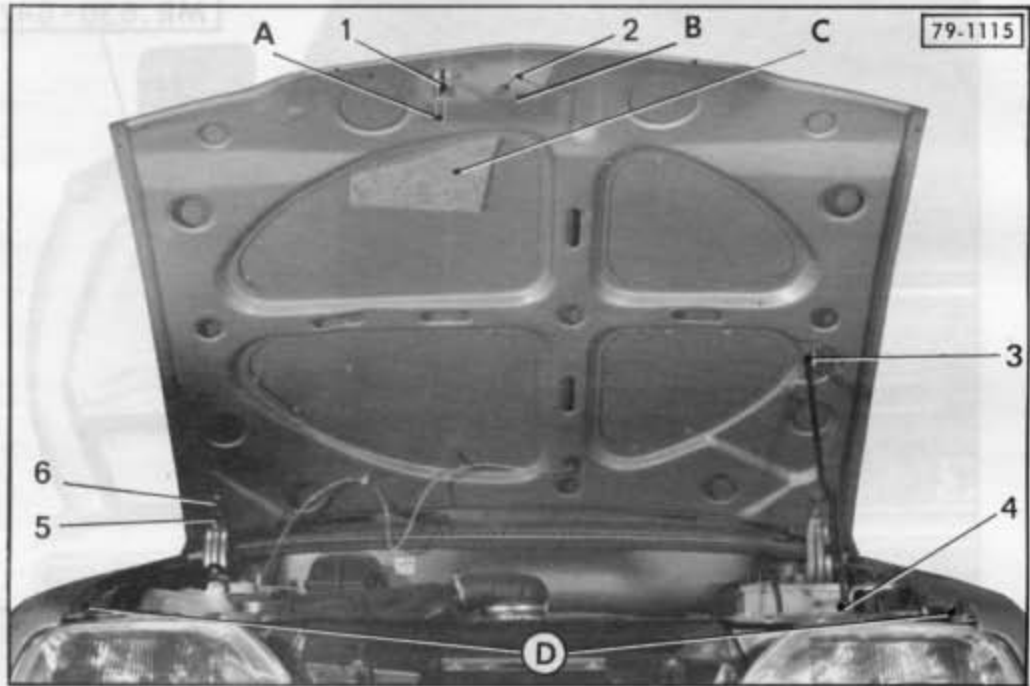
Adjust bonnet locking finger **B** so that on dropping approximately 250 mm, the bonnet closes properly.
Tighten nut (2).
Adjust the front flush-fit of the bonnet by screwing or unscrewing rest stops **D**.

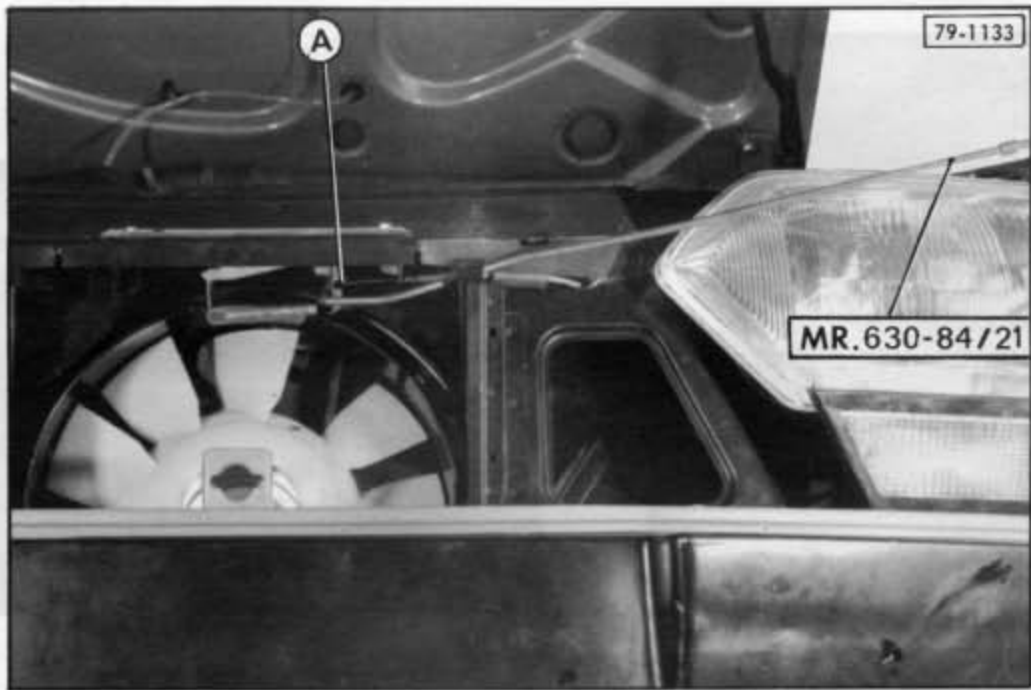
11. Adjust safety hook :

The position of the safety hook must enable correct hooking without obstructing closing of the bonnet.
Tighten screw (1).

12. Adjust screen washer jets :

(*Correct direction of water jets*).





UNLOCKING OF A BONNET
(In the case where the control is uncoupled)

REMARK :

It is possible to unlock a bonnet where the control is no longer coupled, either because the cable is no longer hooked to the bolt, or because the cable has broken.

1. Engage tool MR. 630-84/21 between the headlamp and the bonnet and hook the end of this tool on part **A** of the lock.
Pull to unlock.
Open the bonnet.
2. Overhaul the lock and its control.

REPLACEMENT OF
FRONT BUMPER

I - REMOVAL AND FITTING OF FRONT BUMPER

REMOVAL

1. Remove front grille :

Open the bonnet.

On each side, undo :

- screw (1),
- screw (2).

Disengage the front grille.

2. Remove front bumper :

Remove :

- screws (3) (on each side),
- screws (5),
- screws (4).

Remove the front bumper.

3. Remove bumper inner sections :

Unclip sections **A**, **B**, and **C** by pulling towards the front of the vehicle.

STRIPPING

4. Strip front bumper :

Remove on each side :

- lug **D** (screws (7)),
- deflector **E** (screws (6)).

ASSEMBLY

5. Assemble front bumper :

Fit on each side :

- deflector **E** (screws (6)),
- lug **D** (screws (7)).

FITTING

6. Prepare the sections :

Engage a clip **F** at each end of the sections (Respect the position, see photograph).

7. Fit sections :

Clip sections **A**, **B**, and **C** on the front crossmember.

8. Fit front bumper :

Line up front bumper.

Fasten it with :

- screws (5),
- screws (4),
- screws (3) (on each side)

9. Fit front grille :

Line up the radiator grille.

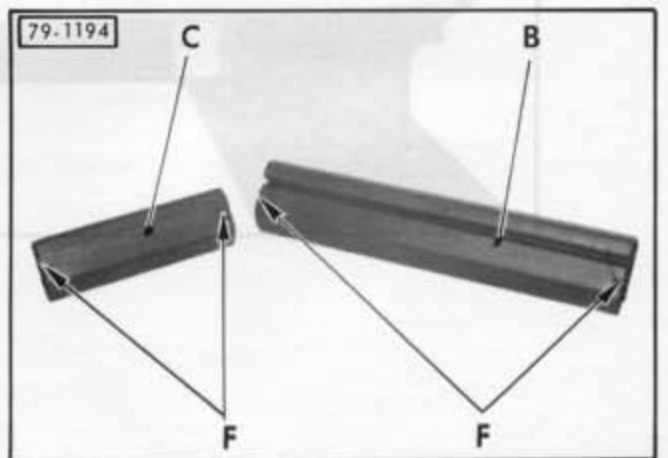
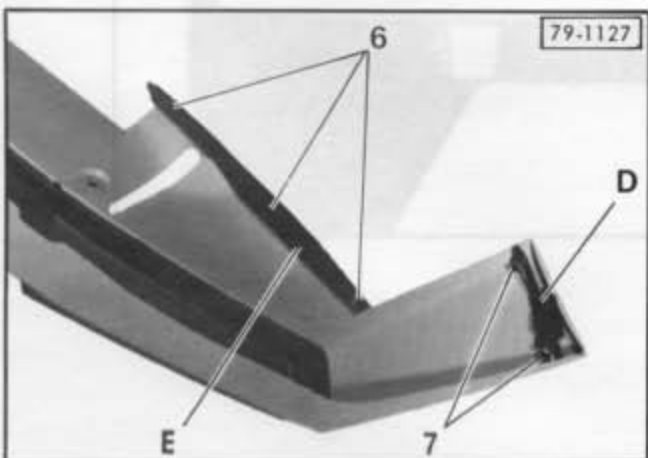
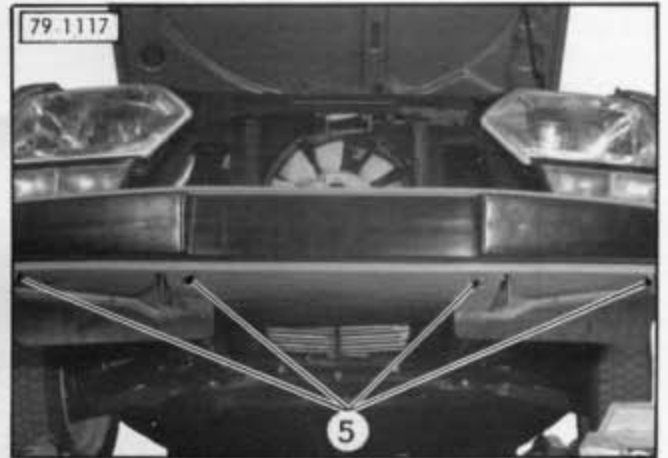
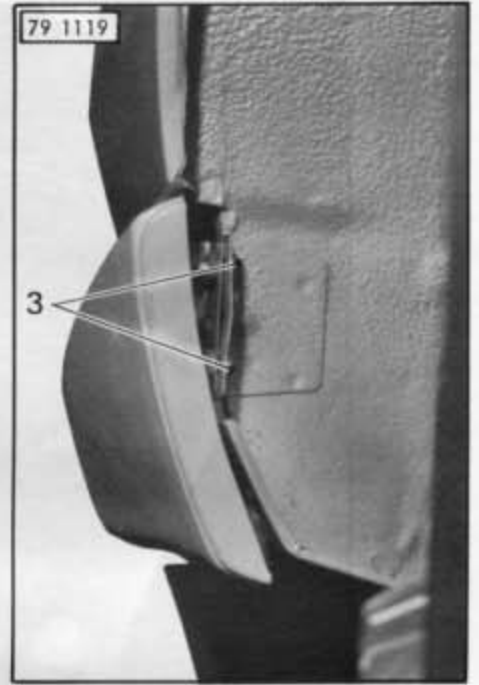
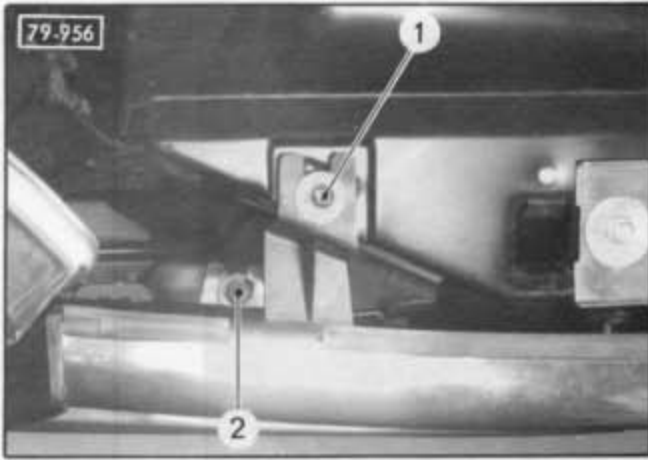
Fasten it with screws (1) and (2) (on each side).

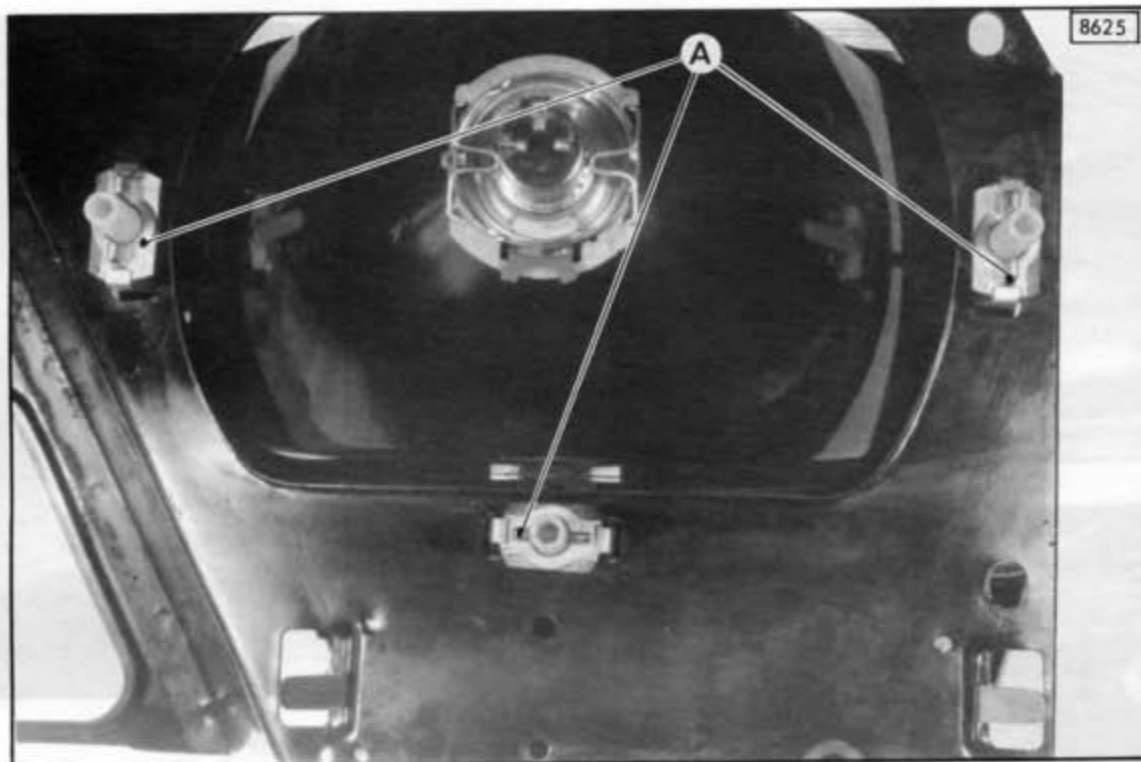
10. Fit number plate :

Use « split » rivets dia. = 5 mm, length = 15 mm min.

(R.P. reference : ZC 9 866 067 U).

REPLACEMENT OF
FRONT BUMPER





REMOVAL AND FITTING OF A FAN COWL

REMOVAL

1. Remove front bumper

(See chapter I)

2. Disconnect wiring harness :

Disconnect the cable from the negative terminal of the battery.

Remove the direction indicator lights.

Uncouple the headlamps feed harnesses connectors.

Disconnect the horn wire.

Disengage the harness from its attachment lugs on the fan cowl.

3. Remove headlamps :

Remove fixing bolts A and disengage the headlamps

4. Remove the fan cowl :

Uncouple the bonnet lock control cable **B**.

Remove screws (1) *on each side*.

Remove the horn and its support lug.

FITTING

5. Fit the fan cowl :

Line up the cowl between the wings slightly tilting the top part backwards.

Fit and tighten screws (1) *on each side*

Couple up bonnet lock control cable **B**.

Fit the horn and its support lug.

6. Fit headlamps :

Line up and fasten the headlamps by means of bolts **A**.

7. Connect wiring harness :

Fasten the harness with its holding collars on the fan cowl.

Connect the feed wires.

- for headlamps,

- for front signalling lights,

- for horn.

Connect the cable to the negative terminal of the battery.

Check the front lighting.

8. Fit front bumper (see chapter I).**9. Adjust headlamps.**

III - REMOVAL AND FITTING OF A FRONT VALANCE

REMOVAL

1. Remove front bumper :

(See chapter I)

2. Disconnect cable from negative terminal of battery.

3. Remove front signalling lights.

4. Remove front valance :

Remove :

- screws (1), (2), (3), (5) and (6) / *on each side*
- height corrector protective screen (screws (4) / *right-hand side*).

FITTING

5. Fit front valance

Put front valance into place.

Fit screws (3), (1), (2), (5) and (6) / *on each side* / without tightening.

Fit the height corrector protective screen (screws (4)).

Tighten all the screws.

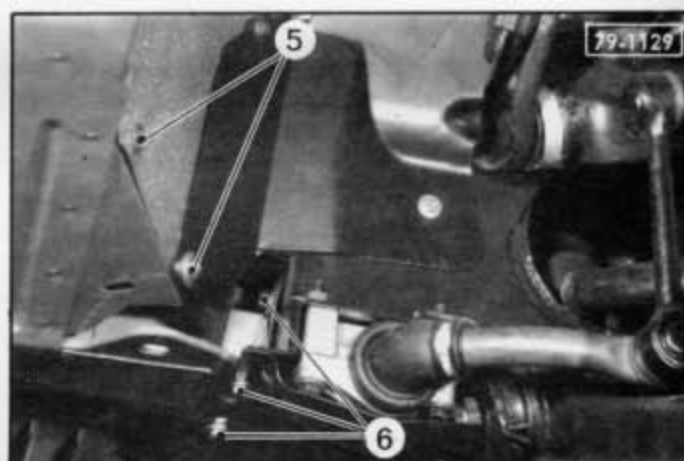
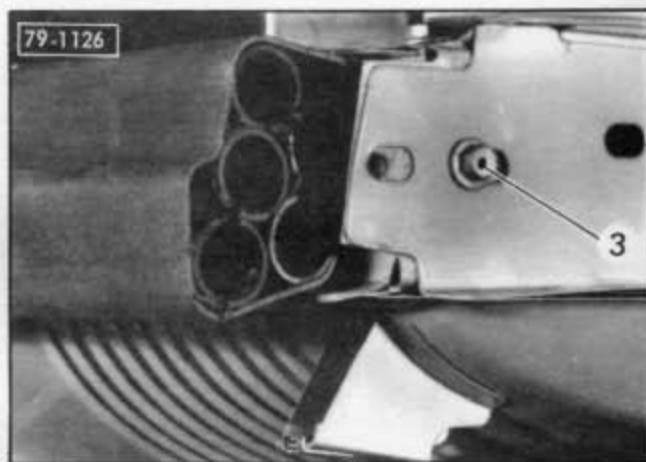
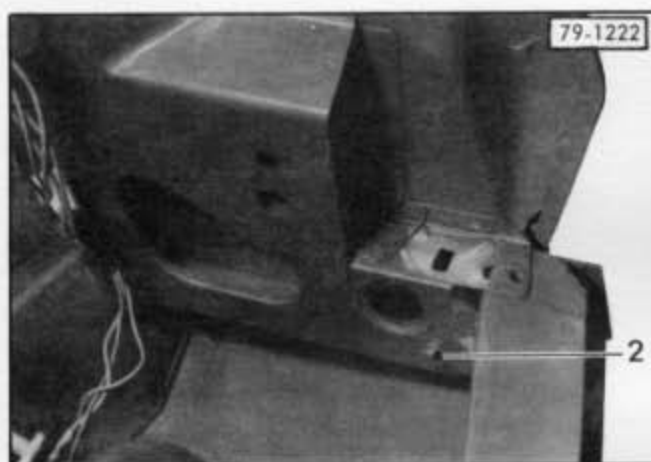
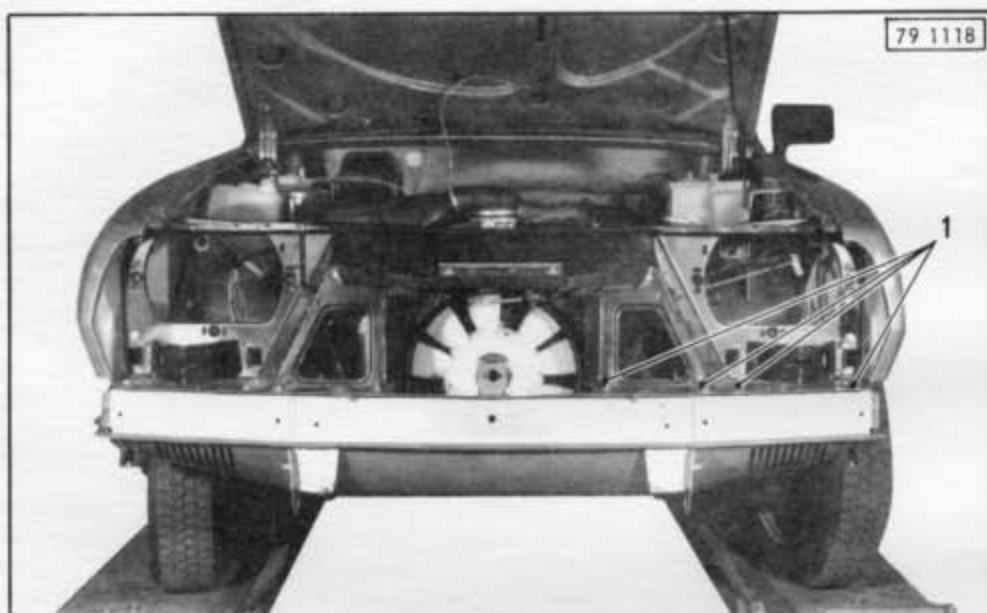
6. Fit and connect front signalling lights.

7. Fit front bumper.

(See chapter I)

8. Connect up battery.

9. Check front lighting and adjustment of head-lamps.



REPLACEMENT OF THE REAR BUMPER

REMOVAL.

1. Remove rear bumper side section :

Remove :

On each side :

- screws (1),
- screws (2).

Remove the bumper side section.

2. Remove rear bumper centre section :

Disconnect the number plate lamps.

Remove (*on each-side*) :

- screws (3).

Remove the rear bumper centre section.

STRIPPING.

3. Uncouple the bumper rear shield.

Remove :

- number plate lamps **B**,
- collars **C** for wires,
- screws (5) (*both sides*).

Remove fitting **A** (screws (4)) from bumper side section.

ASSEMBLY.

4. Line up the rear shield on the bumper.

Fasten it with screws (5) (*on both sides*).

Fit :

- number plate lamps **B**,
- collars **C** for wires.

Fit and fasten fittings **A** (screws (4)) on the bumper side section.

FITTING.

5. Fit bumper centre section :

Position the bumper centre section.

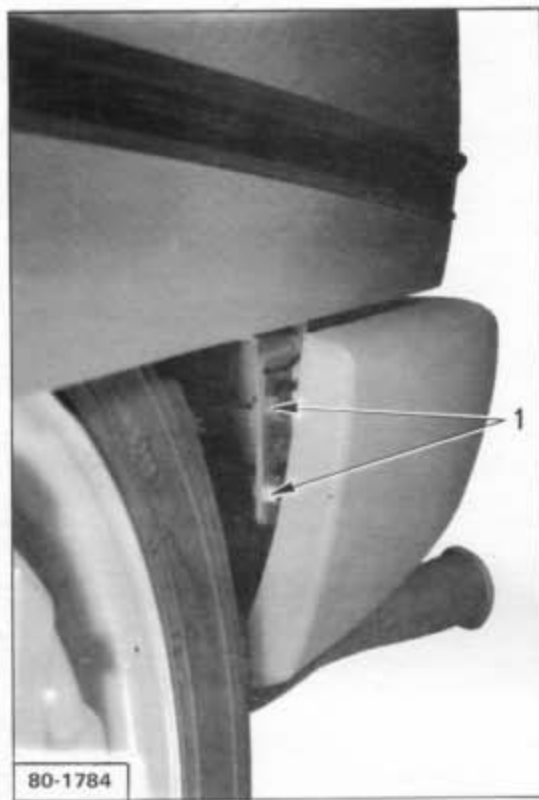
Connect the number plate lamps.

Fasten the bumper centre section (screws (3)) (*on each side*).

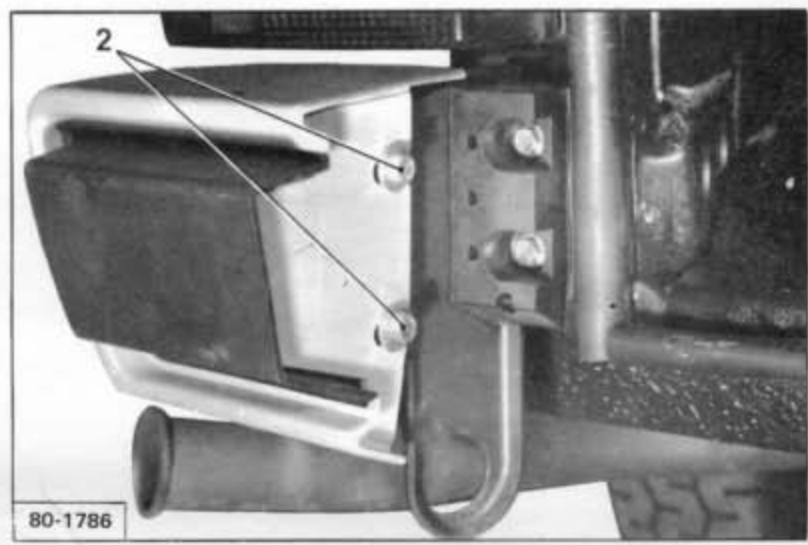
6. Fit rear bumper side section :

On each side :

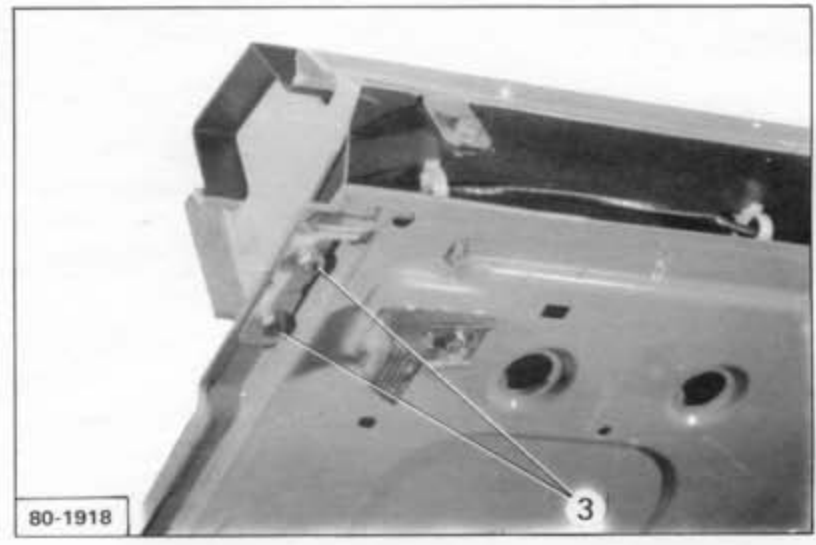
Line up and fasten the bumper side section with screws (1) and (2).



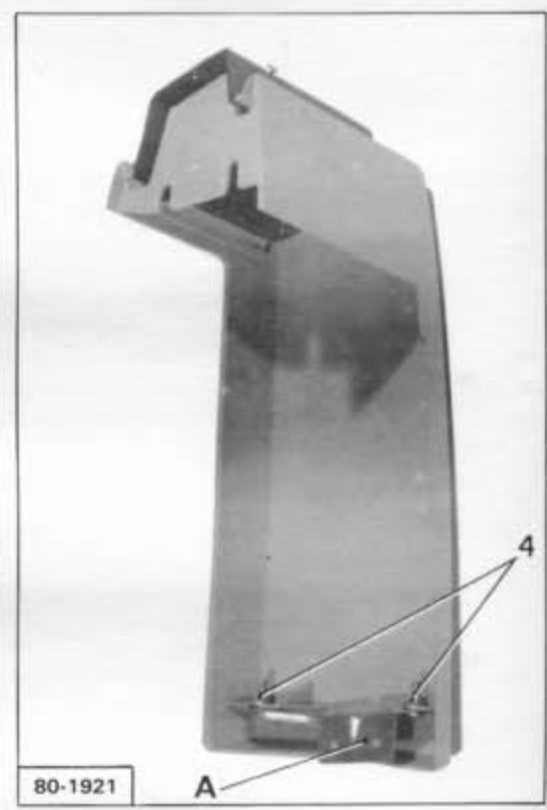
80-1784



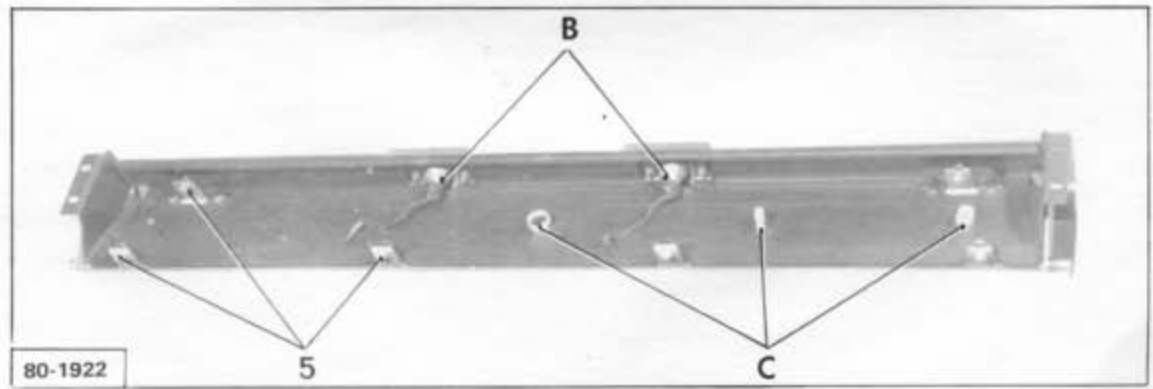
80-1786



80-1918



80-1921



80-1922

REVISION
4-2008-30

REPLACEMENT OF A REAR BUMPER

REMOVAL

1. Remove rear bumper :

On each side :

- Partially unstick the trim on the rear wheel arch
- Disengage wiring harness **A** from lug **B**.

Remove :

- screws (1),
- screws (2),
- lug **B** and back plate.

Remove the rear bumper.

ASSEMBLY

3. Line up the rear shield on the bumper and fasten it with screws (3).

Fit and fasten fittings **C** (screws (4))

Joint beading **D** on the bottom edge of the shield.

FITTING

4. Fit rear bumper :

Line up and position the rear bumper.

On each side :

Fit the back plate and lug **B** and fasten the assembly with screws (2).

Fit screws (1).

Fasten the wiring harness with holding lug **B**.

Restick the wheel arch trim

STRIPPING

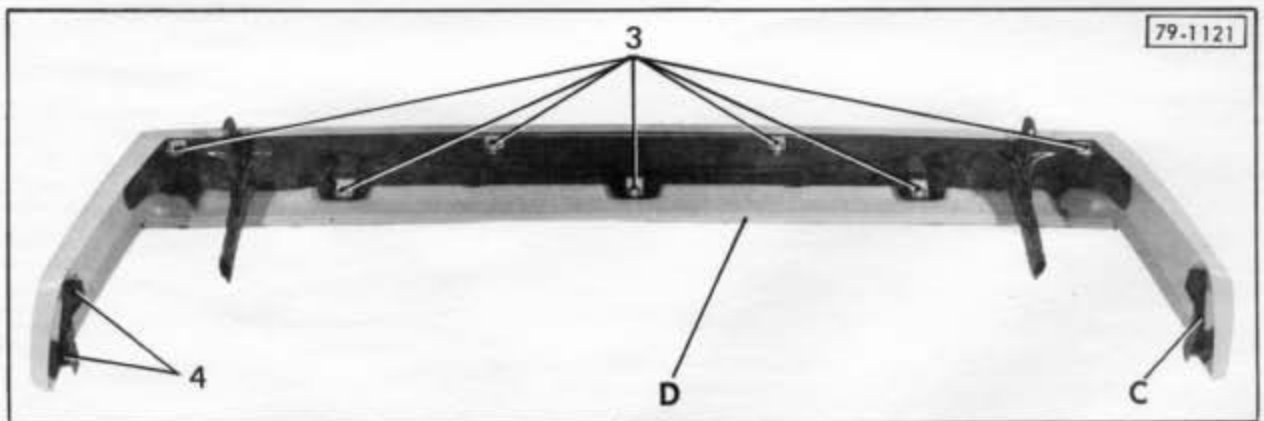
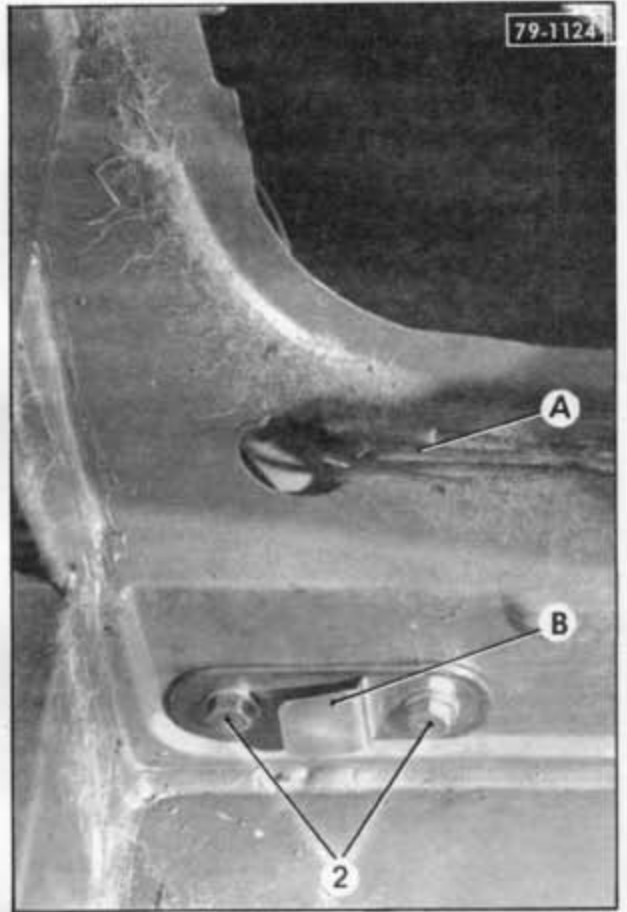
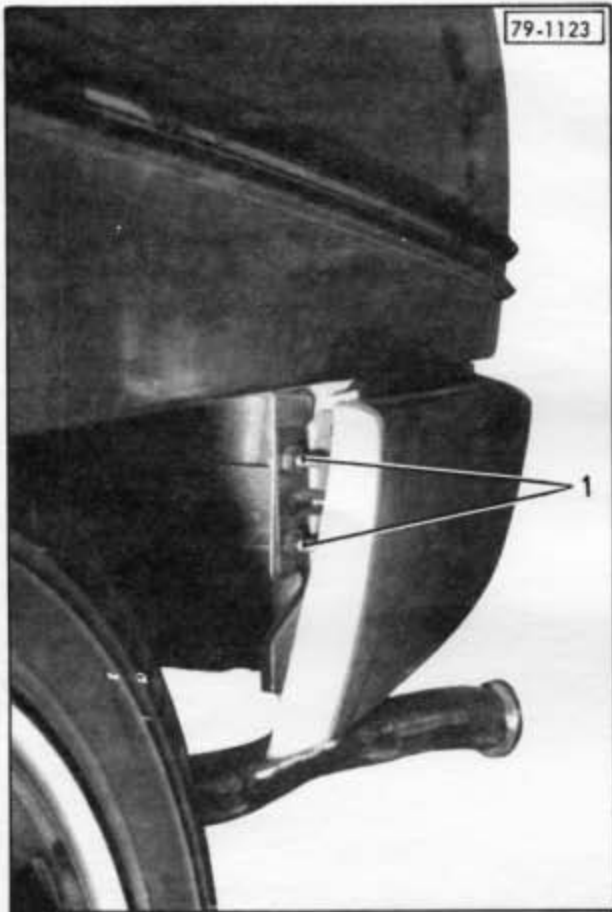
2. Uncouple the bumper rear shield.

Remove :

- screws (3),
- fittings **C** (screws (4)).

Disjoint beading **D**.





REPLACEMENT OF A DASHBOARD

REMOVAL

1. Remove instrument panel :

Disconnect the negative terminal lug from the battery.
 Disconnect the choke cable from the carburettor.
 Disconnect the speedometer cable (pulled from the engine side).
 Uncouple the handbrake control (engine side).
 Remove screws (1) and (5).
 Uncouple the connectors from the different harnesses supplying power to the instrument panel.
 Remove the instrument panel.

2. Strip dashboard :

Remove :

- ventilation grilles **A**, } (on each side)
- loudspeaker grilles **H**, }
- ashtray **B**,
- heating and ventilation controls **C**,
- grille **E** for heating and ventilation controls (screw (2)),
- door bottom light **D**,
- vent grille **F**,
- choke control **G**,
- steering wheel (for this, remove protection plate **J** (screws (4), (6) and (7)),
- ignition key light (screw (16)),
- handbrake handle (screws (13)).

3. Remove dashboard :

Remove :

- screws (3) and (15) (on each side),
 - screws (8), (9), (10), (11), (12) and (14).
- Uncouple the connectors from the different harnesses supplying power to the dashboard.
 Remove the dashboard.
 Remove vent **K**.

FITTING

4. Fit dashboard :

Fit vent **K**.
 Couple the different connectors of the harnesses supplying power to the dashboard.
 Put the dashboard into place and fasten it with screws (3) and (15) (on each side) and screws (8), (9) (10), (11), (12) and (14).

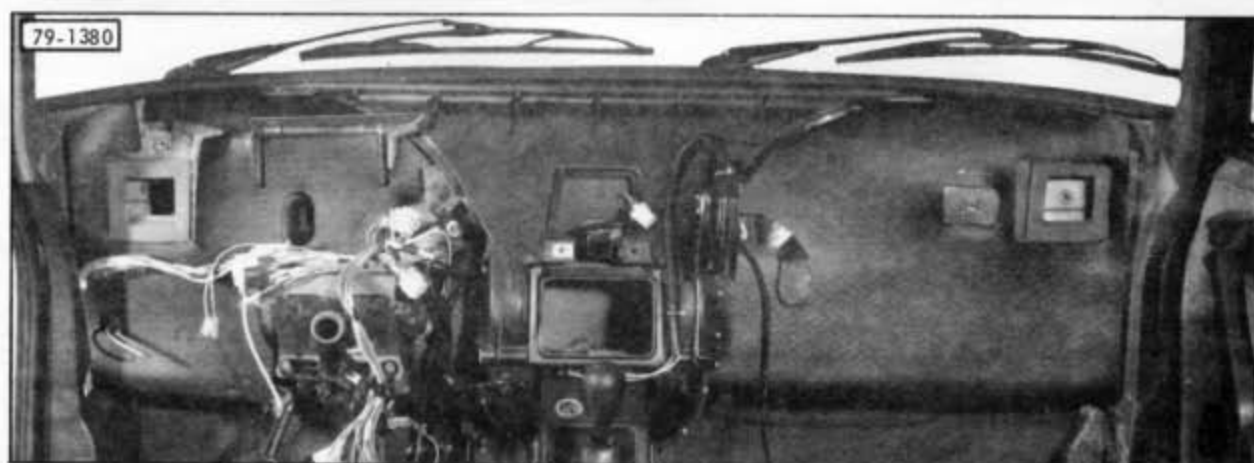
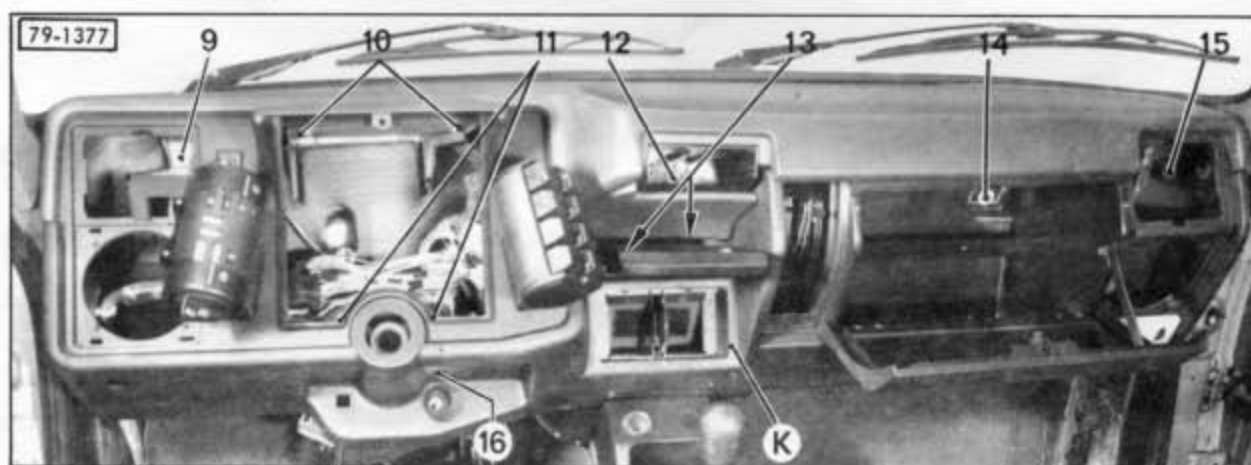
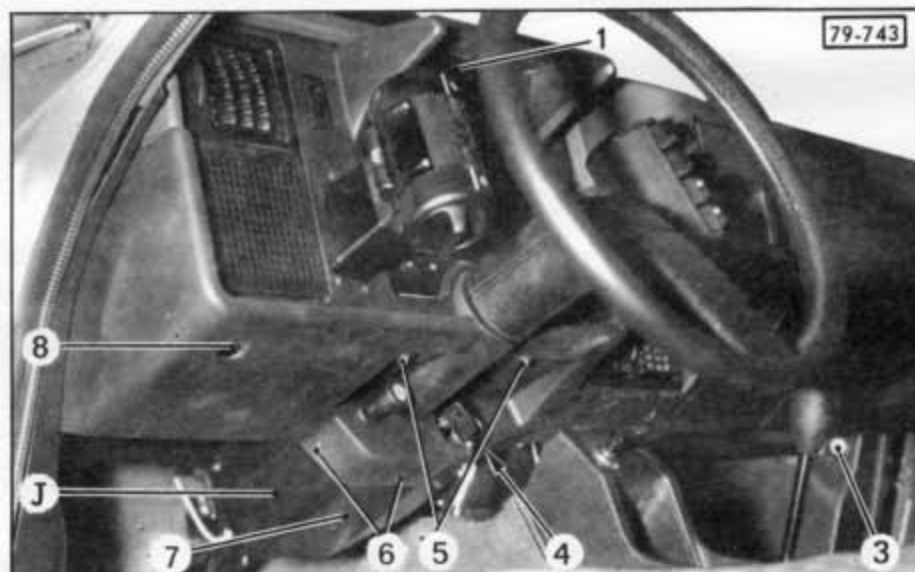
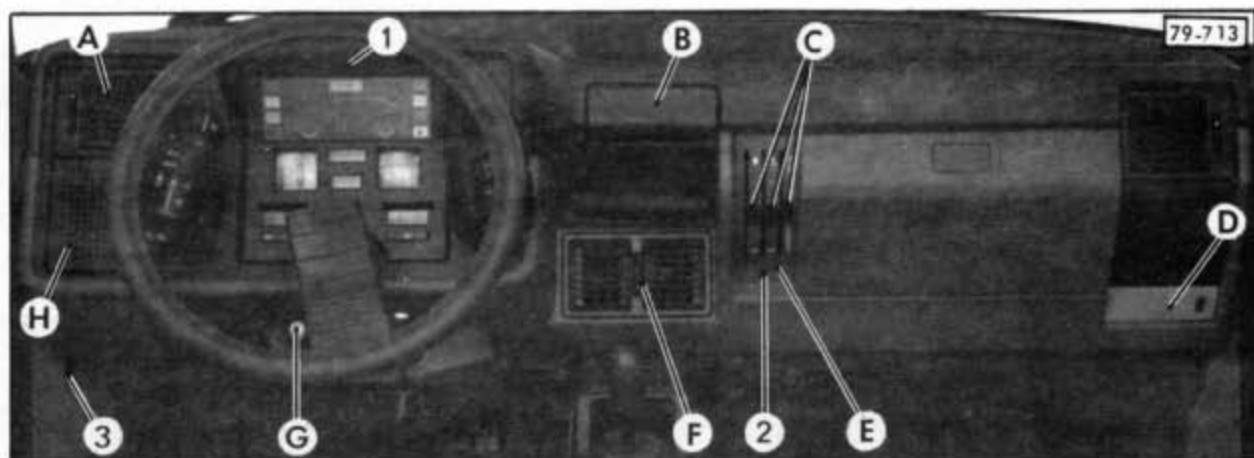
5. Assemble dashboard :

Fit :

- handbrake handle (screws (13)),
- ignition key light (screw (16)),
- choke control **G**,
- vent grille **F**,
- door bottom light **D**,
- grille **E** for heating and ventilation controls (screw (2)),
- heating and ventilation controls **C**,
- ashtray **B**,
- loudspeaker grilles **H** (on each side),
- vent grille **A** (right-hand side only).

6. Reassemble instrument panel :

Couple the different connectors of the harness supplying power to the instrument panel.
 Connect the speedometer cable (passing your hand through the space left for the vent grille **A** (left-hand side)).
 Fit and fasten the instrument panel with the screws (1) and (5).
 Fit the steering wheel and put protection plate **J** back into place (screws (4), (6) and (7)).
 Fit vent **A** (left-hand side).
 Connect the choke cable to the carburettor.
 Couple the handbrake control.
 Connect up the negative terminal lug of the battery.



REPLACING A REAR SHELF RETRACTABLE FLAP

REMOVAL

1. Remove the rear shelf.**2. Remove the retractable flap :**

Fully unfold flap **F** (hold it in this position) and bring the hole of axle **H** in front of groove **G** on left bearing **C**. Insert wire **D** (dia. = 1.5 mm) to avoid the winding of the blind.

Push back the axle of right bearing **A** at « a » and release the retractable flap.

3. Remove bearings A and C.**4. Slacken spring J :**

Fix bearing **C** in a vice.

Remove the five locking rings **I**.

WARNING :

To avoid deteriorating bearing **C**, progressively slacken the spring using pliers.

Operate by half turns, maintaining the spring with the wire after each half turn.

FITTING.

5. Tighten spring J :

Ensure that the ends of spring **J** are correctly fitted on bearing **C** and on extremity **P** of axle **H**.

Grease the spring.

Fix bearing **C** in a vice.

WARNING :

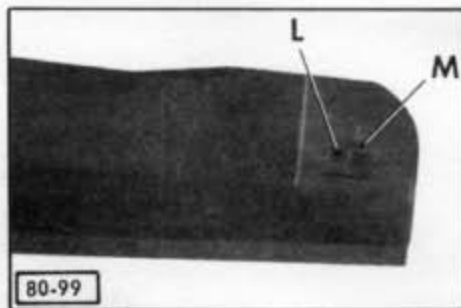
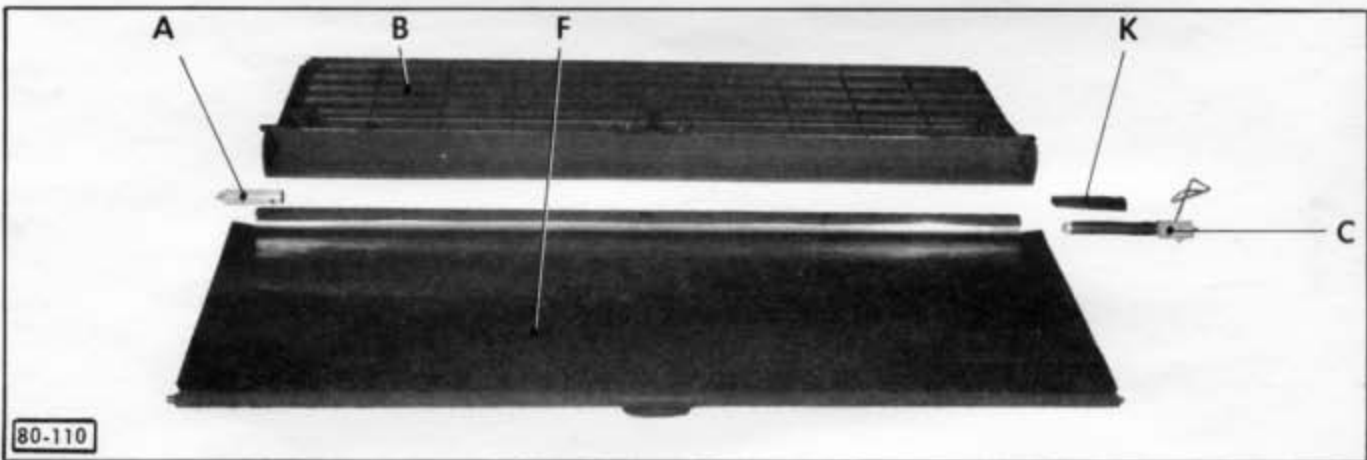
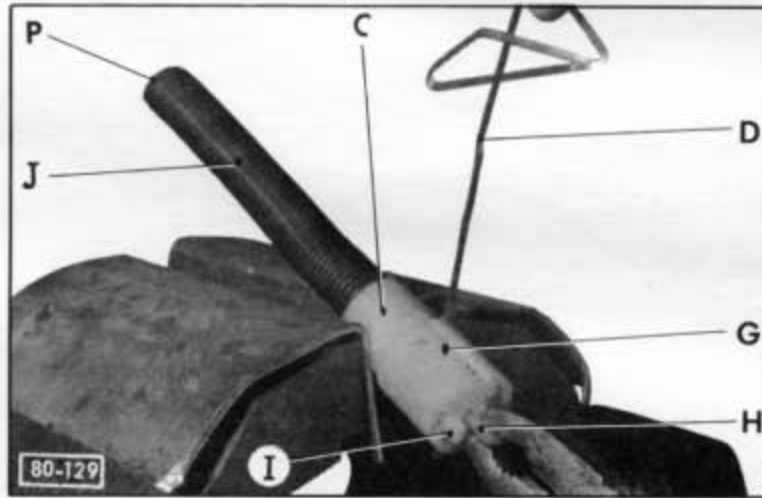
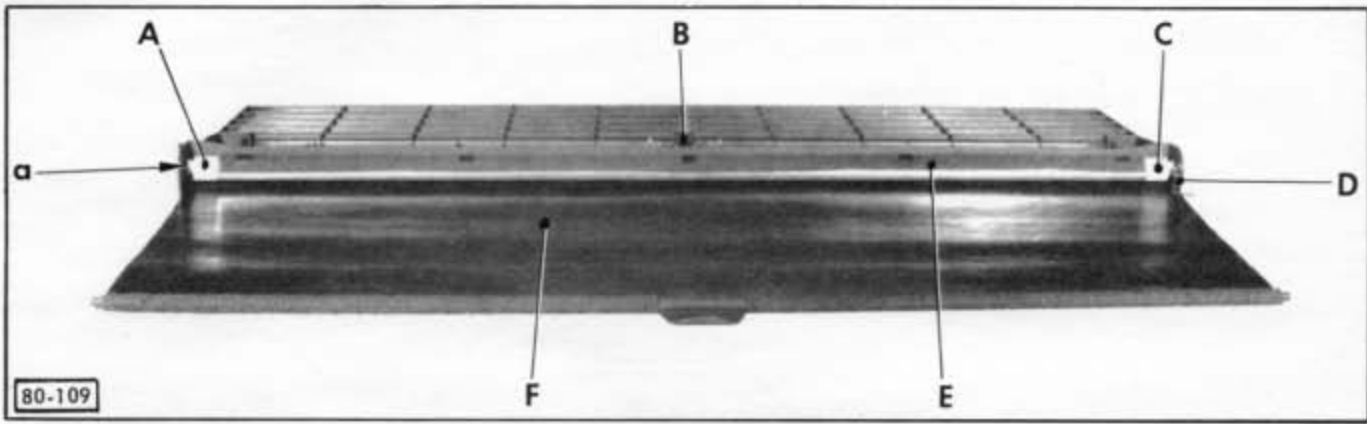
Operate in the same way as in the operation (para. 4) to tighten the spring, by turning axle **H** by seven turns and a half in the direction of the flap winding.

Maintain spring **J** tightened using wire **D**.

6. Eliminate the noise resulting from the vibration of spring J, by fitting a sleeve K of electric harness on this spring (inner diameter = 18 mm, length = 120 mm).**7. Fit five locking rings on bearings A and C. (In the correct direction).**

Using the last one, rotate these rings to a maximum, in the direction of the flap winding.

8. Fully unfold flap F.**9. Insert assembled bearings A and C in winding tube.****10. Bring the unit on shelf B. Insert axle H in its housing L, by positioning the fifth locking ring I in notch M. Insert axle N in its housing, by positioning the fifth locking ring in symmetrical notch M.****11. Remove wire D.****12. Let the flap retract.****13. Fit the shelf.**



NOTA: 1-198 3G

REPLACEMENT OF WINDSCREEN GLASS

NOTE : For any operation on the glass of a windscreen, it is essential to forbid the use of metal tools (screwdriver, hook, etc.) which risk scratching the glass or damaging the seal or the trimming. Make a wedge out of a hardwood batten to replace these tools.

REMOVAL

- 1. Lift away the windscreen wiper blades.**
Remove the interior rear-view mirror (do not recuperate the baseplate stuck on the glass).
Remove the finishing section at the front edge of the roof headlining.
- 2. Remove windscreen glass and its sealing strip :**
Exert a pressure on the interior face of the glass and, using a wooden wedge help to disengage the interior rubber sealing strip from the lip in the top corners, on the side pillars and at the top.
Remove the windscreen and its sealing strip.

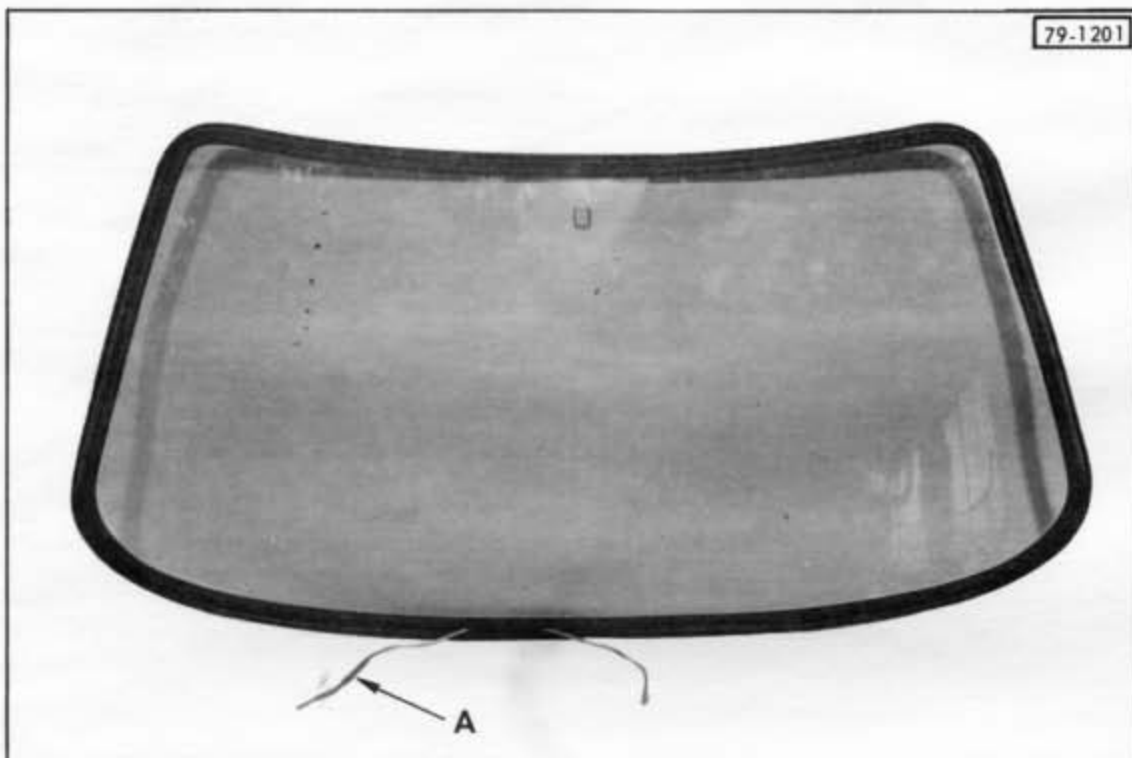
PREPARATION

- 3. Check windscreen frame :**
Straighten any distortions in the windscreen frame if necessary.
Carefully deburr any welding barbs.
Check the contour of the windscreen frame (use the windscreen as template).
Rectify the rebate if necessary.
- 4. Fit sealing strip on glass :**
Smear the sealing strip grooves with liquid soap.
Put the sealing strip on the windscreen glass.
(The rubber seam must be located in the middle of the top part of the windscreen).
Hold the sealing strip in place on the glass with adhesive tape if necessary.
- 5. Place a cord A (dia. = 4 mm) in the groove of the sealing strip (the two strands of the cord must cross in the bottom part of the windscreen).**

FITTING

- 6. Line up windscreen on frame :**
Line up the windscreen on the frame by engaging the extremities of the cord inside the vehicle.
Check the centring of the windscreen from the interior of the vehicle.
 - 7. Fit windscreen :**
With an assistant exerting a light pressure on the exterior of the windscreen ; from the interior of the vehicle, pull on each extremity of the small cord, parallel to the glass, so as to lift the inner lip of the rubber and enable the rubber to be put into place on the rebate.
 - 8. Finish fitting by tapping with the palm of your hand on the sealing strip in order to finish off its putting into place.**
 - 9. Check the positioning of the sealing strip over the periphery of the frame on the interior and on the exterior.**
 - 10. Glue the new rear-view mirror baseplate by means of a GLASS-METAL "KIT" :**
Trace the emplacement **B** of the rear-view mirror baseplate with soft chalk (exterior side of windscreen)
Clean the sticking area on the glass and the baseplate of the rear-view mirror with **SUPERCLEAN** solvent.
Spray the activator on the surfaces to be glued.
Leave to dry for one to two minutes.
Apply a drop of adhesive onto the baseplate (only deposit the necessary minimum to cover the surface).
Put the baseplate on the glass and hold it there for two or three minutes.
Leave to dry for ten minutes or so.
Clean off any traces of activator with a soft rag moistened with **SUPERCLEAN**.
- NOTE :** It is essential that the products (GLASSWORK "KIT"), components (rear-view mirror baseplate, windscreen) and ambient working conditions are at an identical temperature and greater than 18° C.
- 11. Put the rear-view mirror into place.**





REPLACEMENT OF A REAR QUARTER GLASS

REMOVAL

1. Remove rear quarter glass :

Exert pressure on the inner face of the glass and using a wooden « wedge », get out the inner lip of the sealing strip at the top of the glass.

Disengage the glass and its sealing strip.

2. Remove the rubber sealing strip from the glass.

FITTING

8. Line up rear quarter glass in its frame :

Line up the rear quarter glass in its frame while engaging the cord ends inside the vehicle.

9. Fit rear quarter glass :

While an assistant exerts a light pressure on the exterior of the glass, pull on each end of cord **A**, parallel to the glass, so as to lift the inner lip of the rubber and enable the rubber to be put into place on the rebate.

10. Finish fitting by tapping with the palm of your hand on the sealing strip in order to finish off its putting into place.**11. Check water-tightness :**

If need be, use a gun to apply a strip of recommended sealing compound between sealing rubber and rebate, without removing the glass.

12. Clean the glass.

PREPARATION

3. Clean the rear quarter rebate.**4. Check rear quarter panel :**

Get rid, if necessary, of any distortion.

5. Stick an adhesive gasket in the quarter panel surround at « a », « b » and « c ».

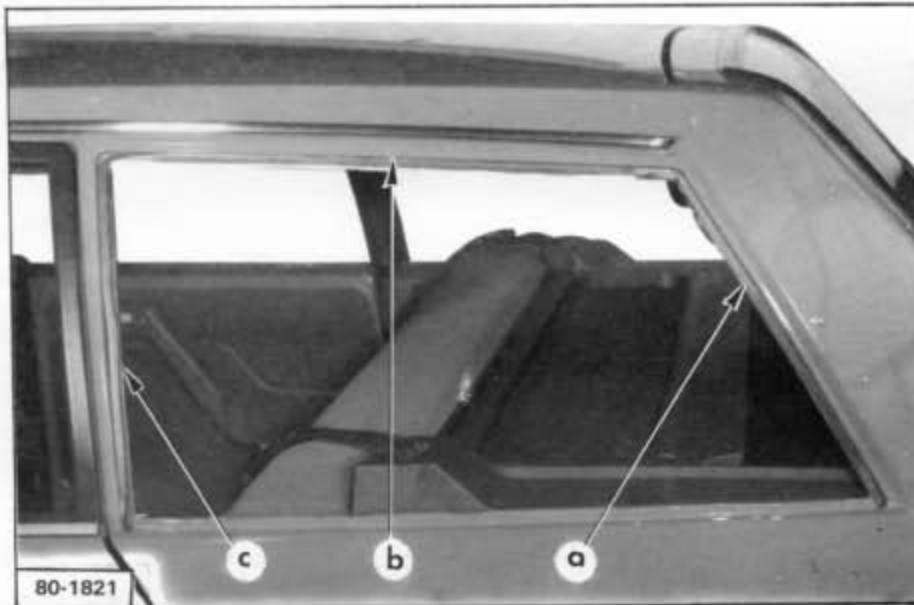
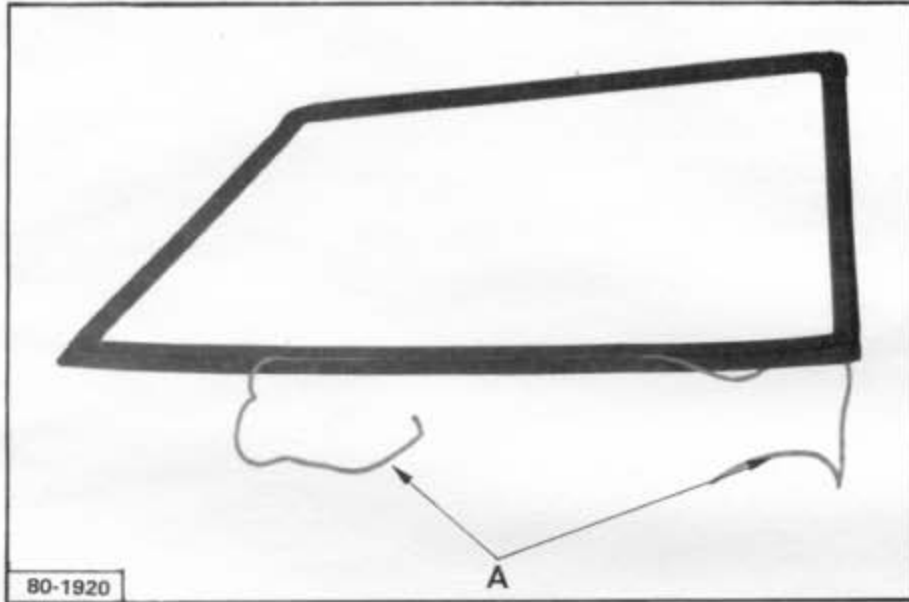
Reference : V. 560 (NORTON).

6. Fit rubber sealing strip on glass :

Smear the sealing strip grooves with liquid soap.

Fit the sealing strip on the rear quarter glass.

7. Introduce a cord A (dia. = 4 mm) in the sealing strip groove (the two strands of the cord should cross at the bottom edge of the rear quarter glass).



REPLACEMENT OF REAR QUARTER GLASS

REMOVAL

1. Remove :

- rear crossmember moulding **A**.
- body shell rear pillar trim **B**.
- roof panel cantrail moulding **C**.
- quarter panel cant member trim **D**.

2. Remove rear quarter glass :

Exert pressure on the inner face of the glass and using a wooden "wedge", get out the inner lip of the sealing strip at the top of the glass.
Disengage the glass and its sealing strip.

3. Remove rear quarter panel embellishers : (*Pallas vehicles*)

Successively remove embellishers **G**, **F**, **H** and **E**.

4. Remove the rubber sealing strip from the glass.

FITTING

5. Clean the rebate and get rid of any distortion.

6. Fit the rubber sealing strip on the glass.

7. Fit rear quarter panel embellishers (*Pallas vehicles*) :

Engage extremity « a » of the top embellisher in the corresponding grooves of the rubber strip at « b » and slide until in a suitable position on the sealing strip. Finish off putting into place with a flat screwdriver (non-cutting) if necessary.

Proceed in identical manner for assembly of embellishers **H** and **F**.

Fit butt strap **G**.

8. Put into place the cord required for assembly :

Introduce a cord (dia = 4 mm) smeared with suds into the sealing strip groove.

NOTE : To facilitate assembly, cross the cord in each of the corners of the glass leaving a generously projecting loop.

9. Fit glass :

Line up the glass on its frame and engage the extremities and loops of the cord towards the interior of the vehicle.

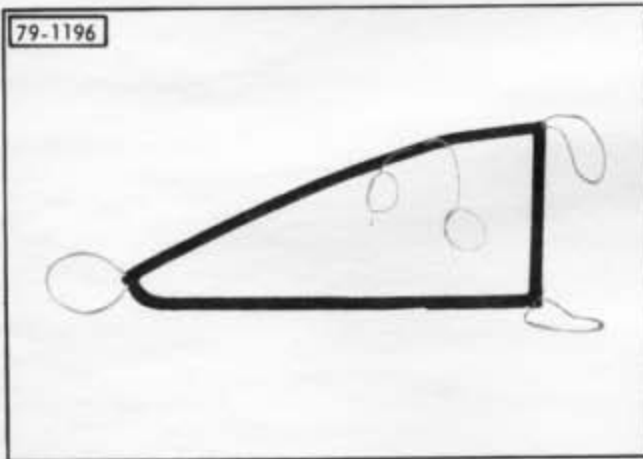
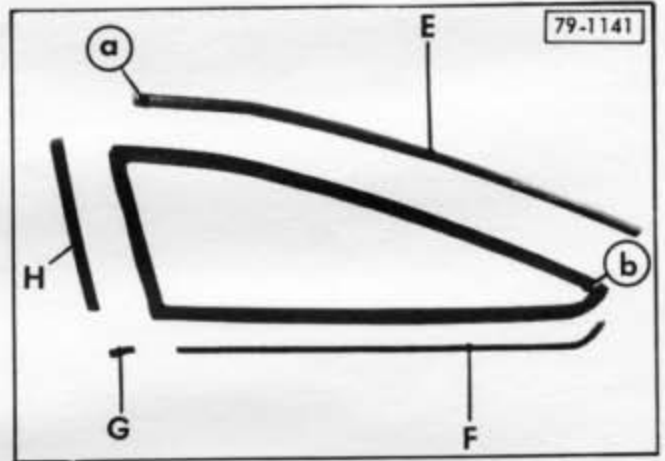
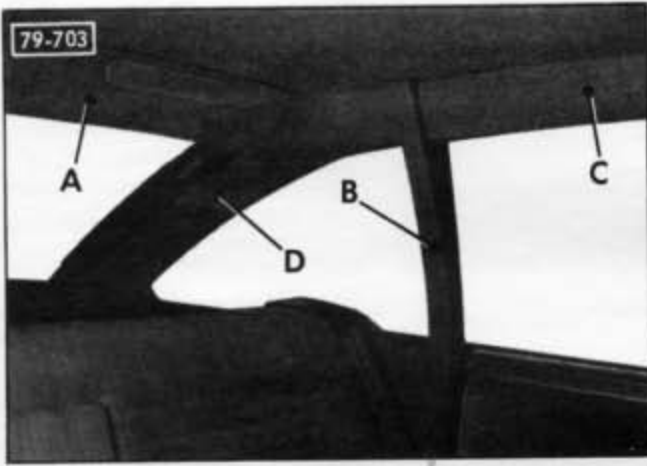
Keep the glass flat down on its frame.

Engage the inner lip of the sealing strip while pulling the extremities of the cord and the two strands of each of the loops in order to enable the rubber to be placed in the corners.

Tap with the palm of your hand over the whole periphery of the glass to finish off its putting into place.

10. Fit the interior mouldings **D**, **C**, **B** and **A**.

11. Clean the glass.



REPLACEMENT OF THE TAILGATE WINDOW GLASS

REMOVAL

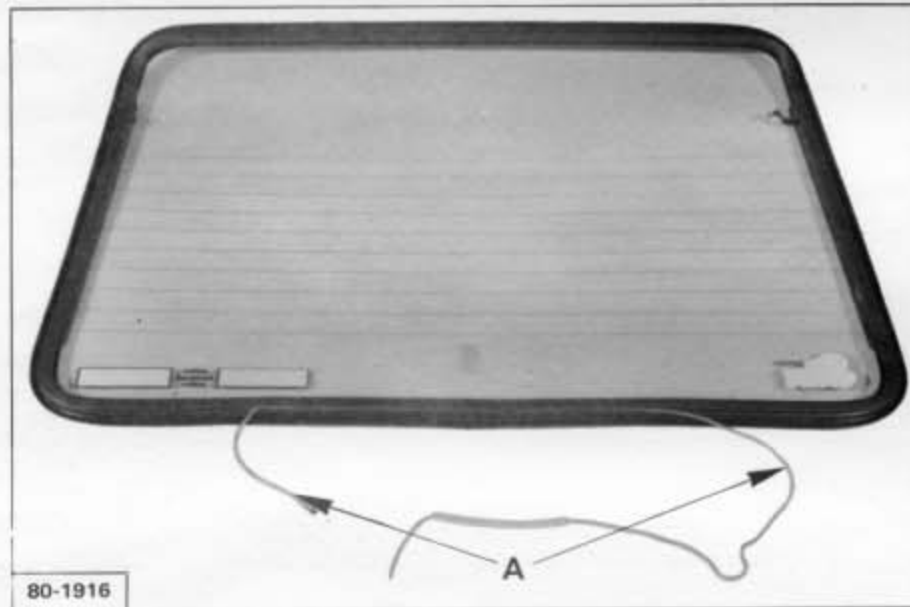
1. Lift away the rear window wiper blade.
2. Disconnect resistor feed wire (2) and remove earthing wire screw (1).
3. From the interior of the vehicle, exert a pressure on the glass in proximity to the top corners, using a wooden wedge, help disengagement of the inner lip of the sealing strip.
4. Remove the glass and its sealing strip.
5. Withdraw the rubber sealing strip from the glass.

PREPARATION

6. Prepare the tailgate window frame.
Carefully clean the rebate. If necessary, file down any welding ridges and put the rebate back into shape.
7. Assemble the rubber sealing strip on the glass.
8. Engage a cord **A** (dia = 4 mm) smeared with soapy water into the groove of the rubber strip (the two strands of the cord should cross in the middle of the bottom edge of the glass).

FITTING

9. Line up the glass in the frame, the extremities of the cord placed towards the interior of the vehicle.
10. While an assistant presses strongly on the exterior of the glass, pull one of the extremities of the cord **A** so as to engage the inner lip of the sealing strip rubber on the rebate.
11. Finish off the putting into place by pressing all around the glass and as close as possible to the rubber sealing strip.
Tap the sealing strip with the palm of your hand if necessary.
12. Connect resistor feed wire (2) and fit earthing wire screw (1).
13. Clean the glass.
14. Fold back the wiper blade.



REPLACEMENT OF REAR WINDOW GLASS

REMOVAL

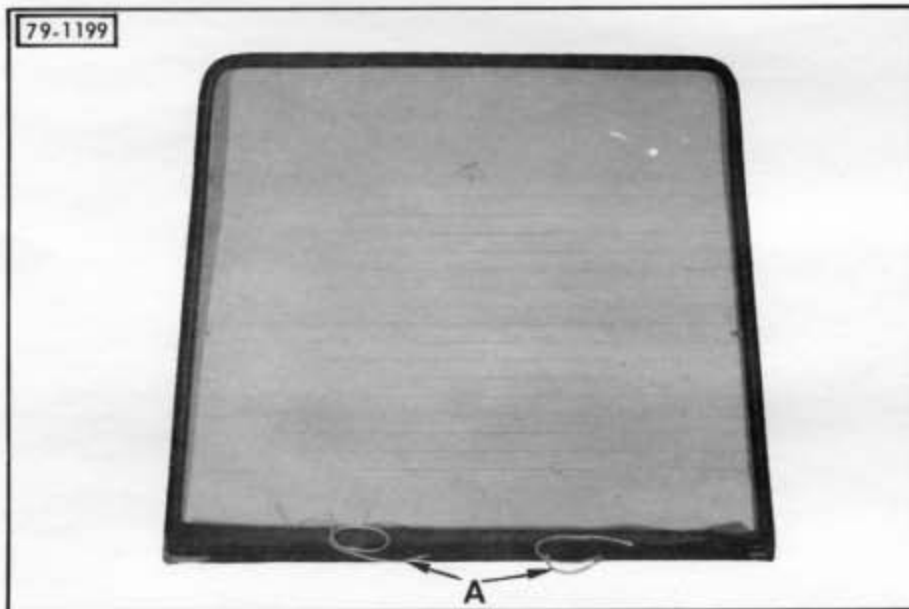
1. Lift away the rear window wiper blade *(if fitted)*.
Disconnect wires (1) supplying power to the heating resistance.
2. From the interior of the vehicle, exert a pressure on the glass in proximity to the top corners. Using a wooden wedge, help disengagement of the inner lip of the sealing strip.
3. Remove the glass and its sealing strip.
4. Withdraw the rubber sealing strip from the glass.

PREPARATION

5. Prepare the rear window frame.
Carefully clean the rebate and put back into shape if necessary.
6. Assemble the rubber sealing strip on the glass.
7. Engage a cord **A** ($\text{día} = 4 \text{ mm}$) smeared with soapy water into the groove of the rubber strip (cross the two strands of the cord in the middle of the bottom edge of the glass).

FITTING

8. Line up the glass in the frame, the extremities of the cord placed towards the interior of the vehicle.
9. While an assistant presses strongly on the exterior of the glass, pull one of the extremities of the cord so as to engage the inner lip of the sealing strip rubber on the rebate.
10. Finish off the putting into place by pressing all around the glass and as close as possible to the rubber sealing strip.
Tap the sealing strip with the palm of your hand if necessary.
11. Connect the wires (1) supplying power to the heating resistance.
12. Clean the glass.
Fold back the wiper blade *(if fitted)*.



ADJUSTMENT OF THE SUN-ROOF

The adjustment of the sun-roof sliding panel does not require any components to be removed.

Open the sun-roof.

- Slacken *on each side* the three screws (—→) so as to allow the runners (1) to be moved lengthwise and heightwise.

1. Adjusting the front edge :

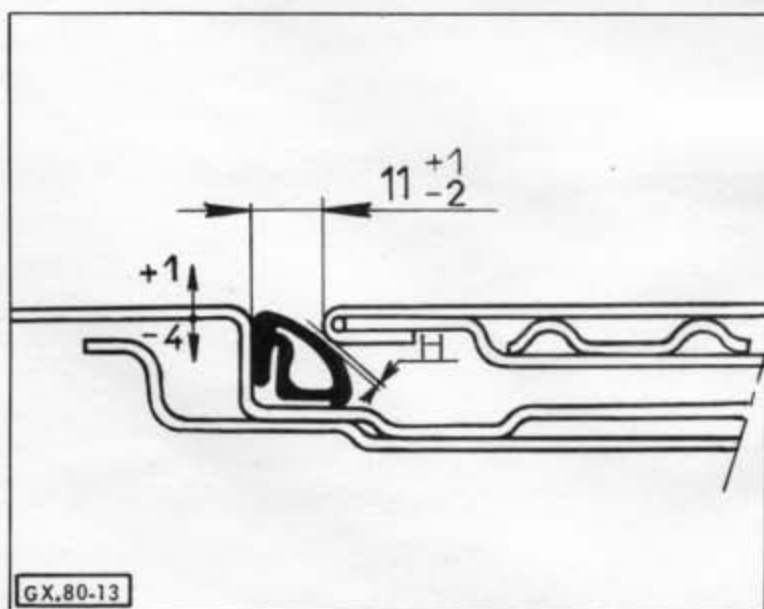
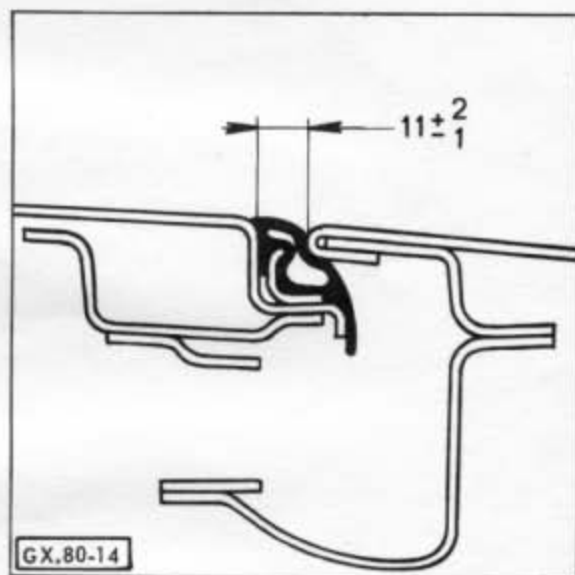
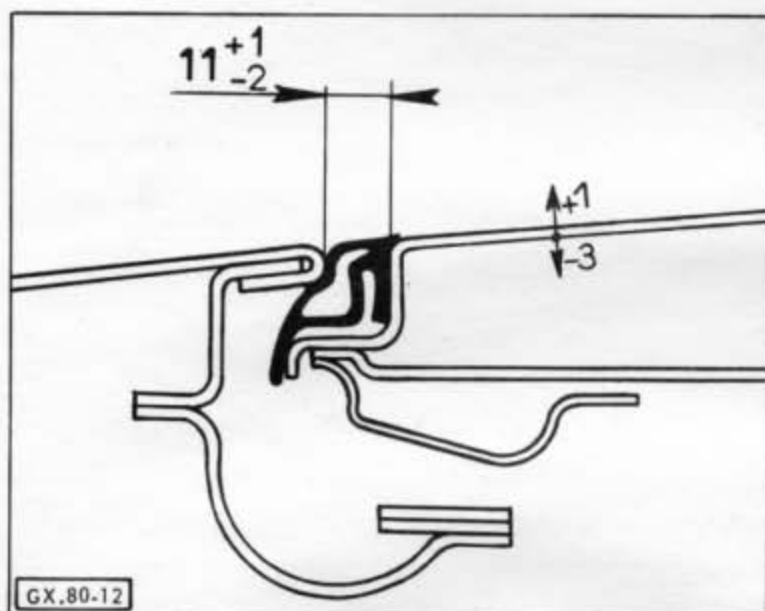
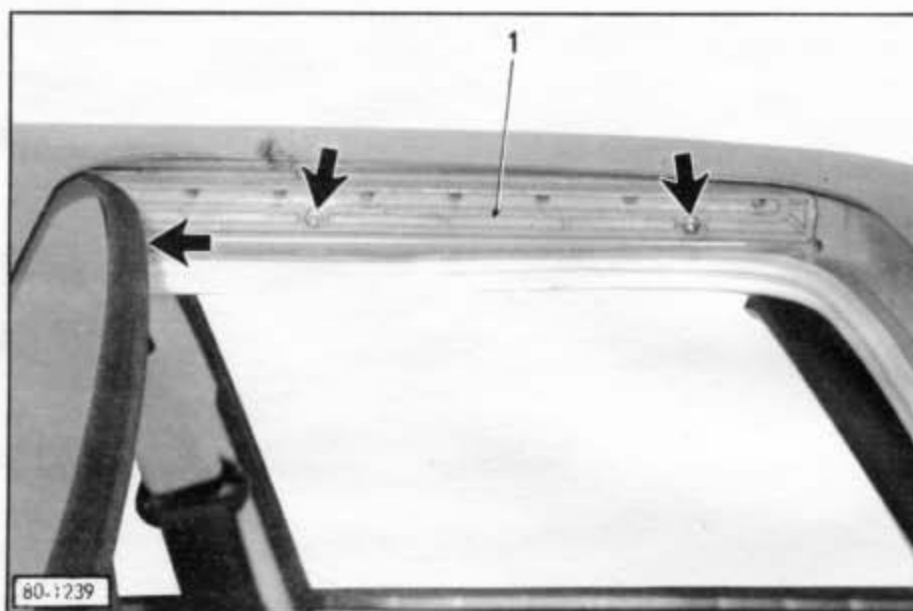
Adjust the runners so as to obtain a gap of $11 \begin{smallmatrix} +1 \\ -2 \end{smallmatrix}$ mm between the front edge of the sliding panel and the edge of the roof, with a maximum out of alignment value of 1.5 mm and a protrusion of $\begin{smallmatrix} +1 \\ -3 \end{smallmatrix}$ in relation to the roof.

Tighten the front screws (←→) *on each side*.

2. Adjusting the rear edge :

Adjust the runners at the rear so as to obtain a gap of $11 \begin{smallmatrix} +1 \\ -2 \end{smallmatrix}$ mm between the rear edge of the sliding panel and the edge of the roof, with a maximum out of alignment value of 1.5 mm and a protrusion of $\begin{smallmatrix} +1 \\ -4 \end{smallmatrix}$ mm max. in relation to the roof with a gap $H = 1$ mm max. over a length of 100 mm max.





HOITARENO
T-898 BXQ

REPLACEMENT OF ROOF PANEL HEADLINING

REMOVAL

1. Remove windscreen :

(See operation GX. 961-1)

2. Remove rear quarter glasses :

(See Operation GXB. 961-4)

3. Remove the following :

- sun-visors,
- centre interior lamp,
- centre pillar upper embellishers **F**,
- sealing rubbers of front and rear doors (in their upper section),
- tailgate sealing rubber (in its upper section),
- wire cover **B** (screws (1)),
- wiring harness **A**.

4. Unstick roof panel headlining from :

- windscreen frame upper crossmember,
- rebates of side doors and rear quarter panel (*on each side*),
- rear rebate of roof panel crossmember,
- coverings over front pillars and rear quarter panel.

5. Disengage roof panel headlining :

Tilt tensioner-bows **D** towards the front of the vehicle while exerting a pressure on their middle so as to free their ends from upper body cantrails.

6. Disengage tensioner bows **D** from the roof panel headlining.

PREPARATION.

7. Make sure all plastic end-pieces **E** are fitted on body sidemembers.

8. Position all tensioning bows in their respective sheaths.

9. Stick, if need be, trims **C** at the tensioning bows locations.

10. Position roof panel headlining :

Engage tensioning bows ends **D** in plastic end-pieces **E**, starting from the front.

11. Smear with glue rebates of :

- windscreen frame,
- front and rear side doors, } (upper section)
- rear quarter panel,
- roof panel rear crossmember, and of the coverings over front pillars and rear quarter panels.

12. Carry out roof panel headlining sticking :

Stick, in the following order :

- windscreen frame upper crossmember,
- rear rebate of roof panel crossmember,
- side rebates of front and rear doors,
- rear quarter panel rebates.

13. Fit windscreen :

(See operation GX. 961-1).

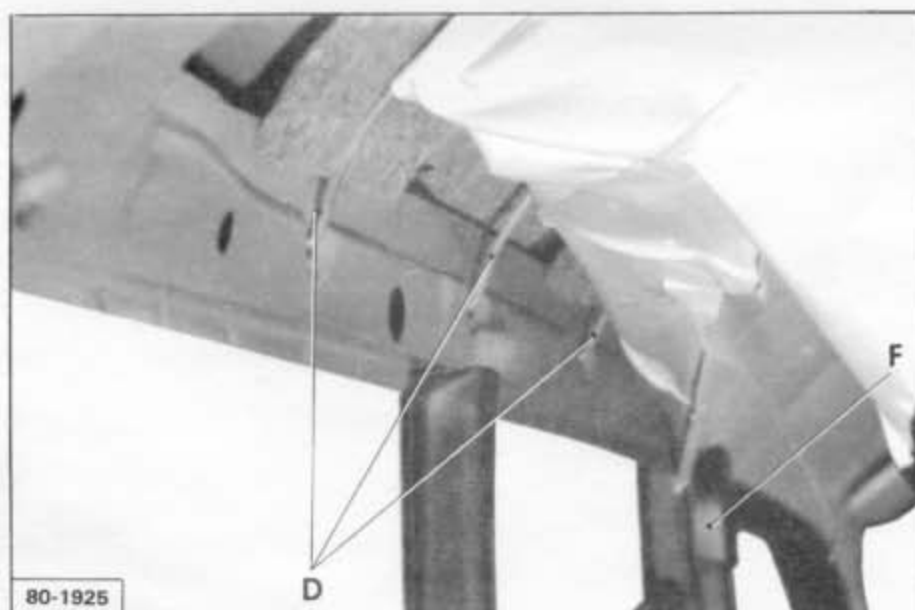
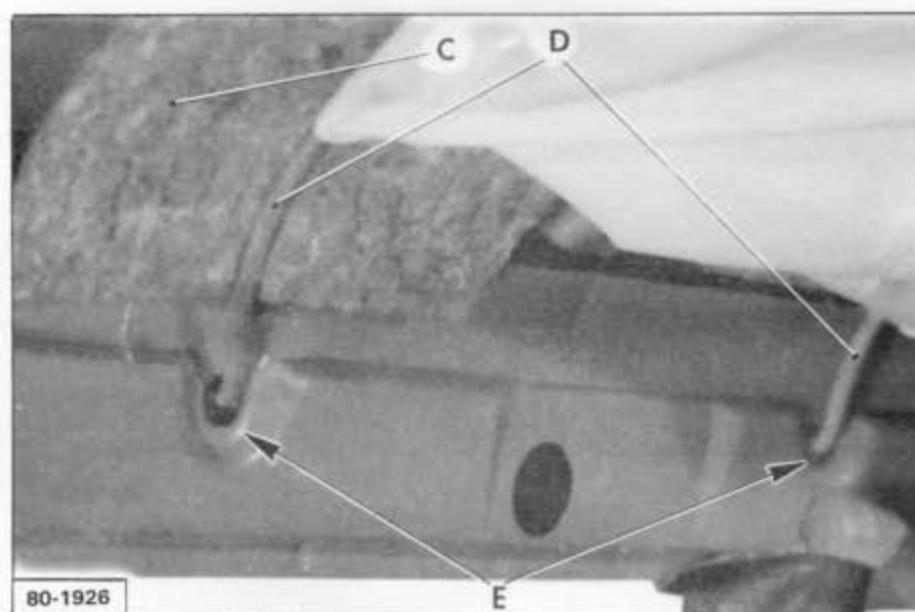
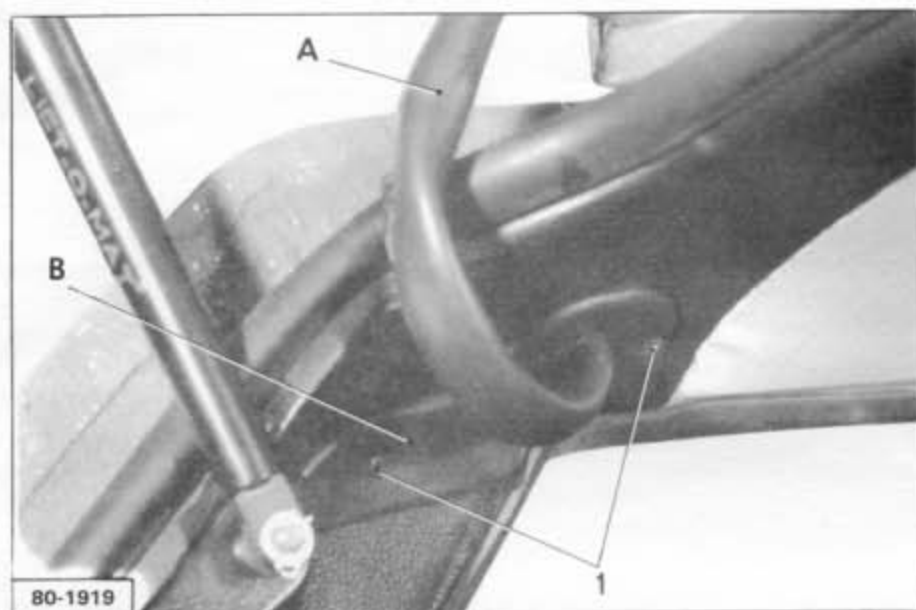
14. Fit rear quarter glasses :

(See Operation GXB. 961-4)

15. Fit the following :

- sun-visors,
- centre interior lamp,
- centre pillar upper embellishers **F**,
- sealing rubbers of front and rear doors (in their upper section),
- tailgate sealing rubber (in its upper section),
- wiring harness **A**,
- wire cover **B** (screw (1)).

HOITARENO T-898 BXQ



REPLACEMENT OF ROOF PANEL HEADLINING

REMOVAL

1. Remove :

- grab handles : using a fine screwdriver, raise tabs **A** and **B** and remove screws (1),
- sun-visors **E** (screws (3)),
- sun-visor central supports **C** (screw (2)),
- section **D** on roof panel headlining front edge,
- interior light **F** : disconnect the feed wires and remove screws (4).

2. Remove roof panel mouldings :

- Remove guards (5) and screws (6).
Disengage the front seat belts side shackle rings.
Unclip and disengage in the following order :
- centre pillar mouldings **J**,
 - roof panel side sill mouldings **H**,
 - front pillar mouldings **G**,
 - rear pillar mouldings **L**,
 - moulding **N** on rear crossmember,
 - mouldings **K** on roof panel cantrail,
 - rear quarter cant member mouldings **M**
- (Take care not to break the clips).**

3. Unstick and disengage roof panel headlining.

PREPARATION

4. Glue the hidden face of the headlining and leave to dry until it is no longer adhesive to the touch
5. Carefully clean the bottom of the roof panel.
Clean off any headlining remains that are still sticking.
6. If necessary, hold the interior light electrical wires, as also the aerial wire by means of strips of adhesive tape.

FITTING

7. Fit roof panel headlining :

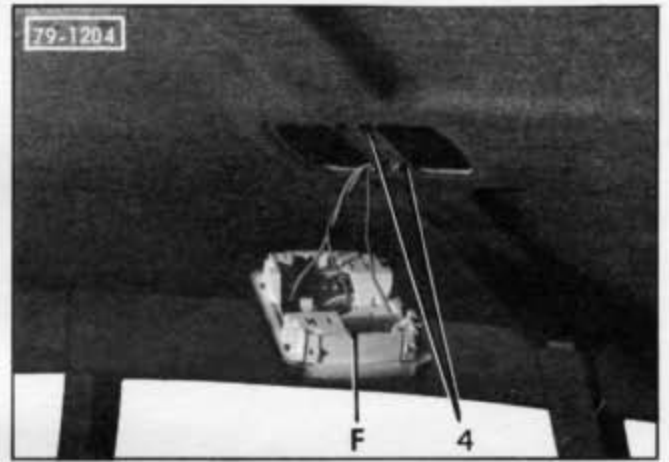
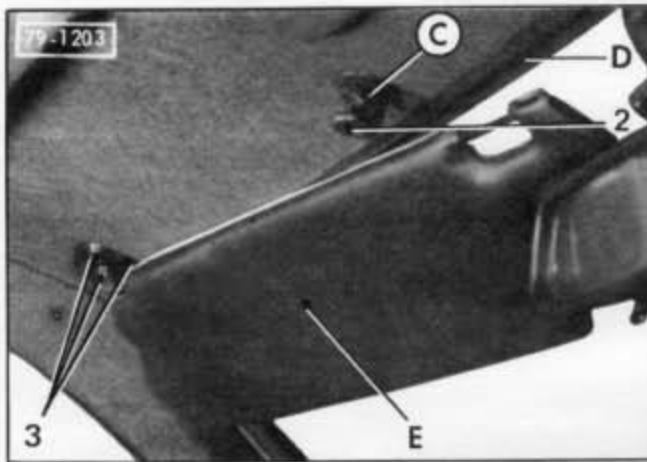
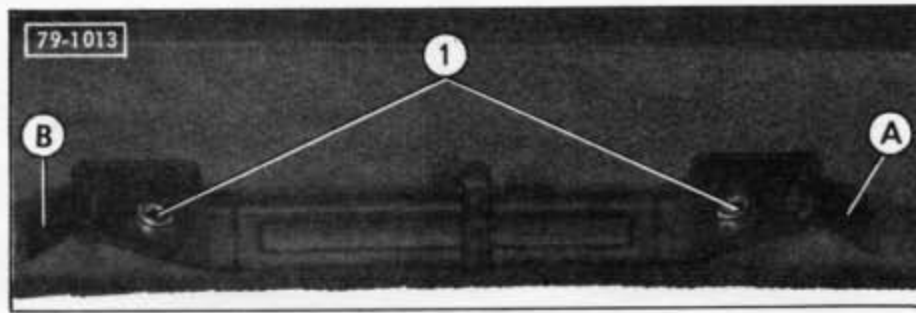
- Apply a coat of glue on the interior face of the body shell roof panel.
Line up the roof panel headlining.
Pass the electrical interior light wires through the corresponding openings.
Position the roof panel headlining taking care to get the holes of the fixing points to correspond.
Apply the headlining strongly against the body shell roof panel.
Fit screws (4).

8. Fit roof panel mouldings :

- Clip mouldings **M, K, N, L, G, H** and **J** in order.
Fasten the seat belts side shackle rings (screw (6) and guards (5).

9. Fit :

- interior light : connect the power supply wires and clip the interior light to the headlining,
- grab handles : fasten them with screws (1) and fold back tabs **A** and **B**,
- finishing section **D** on the headlining front edge,
- sun-visor central supports **C** (screw (2)),
- sun-visors (screws (3)),



MOITARFD
S-888 XJ

STRIPPING AND RE-ASSEMBLY OF THE SUN-ROOF SLIDING PANEL

STRIPPING

1. Remove sun-roof sliding panel :

(See Operation GX. 988-4)

2. Remove locking mechanism :

Remove the following :

- plugs for the finishing strip and remove the strip.
- protective felt pads **A** for the locks.
- fixing screws (1) and (3) for the locks.
- handle fixing screws (2), and remove the handle.

Unstick trim **B**.

Unstick padding **F**.

Remove the following :

- welded bolt support plate **C**,
- assembly comprising lock **D**, cables **H** and mechanism **G**,
- sealing rubbers **E**.

3. Remove the trim :

Remove fixing staples (4) on the sides of the trim and free the trim from the three edges of the panel.

Unhook bow (6) by pulling it forwards.

Fold the trim forwards and remove self-tapping screws (5) fastening the trim on front edge. Remove the trim.

Remove sound-deadening felt strips **K**.

Remove sealing strip **J**.

RE-ASSEMBLING

4. Fit locking mechanism :

Fit locking mechanism **E**.

Position the assembly of lock **D**, cables **H** and mechanism **G**.

Fit welded bolt support plate **C**.

Fit fixing screws (1) and (3) for the locks.

Stick padding **F**.

Stick trim **B**.

Fit the handle and secure it with screws (2).

Position the finishing strip and secure it by means of its plugs.

5. Fit the trim :

Stick sound-deadening felt strips **K**.

Position the trim on the panel, fix it at the front with self-tapping screws (5).

Fold the trim rearwards and hook bow (6) by pulling it backwards. Make the trim taut and fit staples (4) to hold it on the panel three edges.

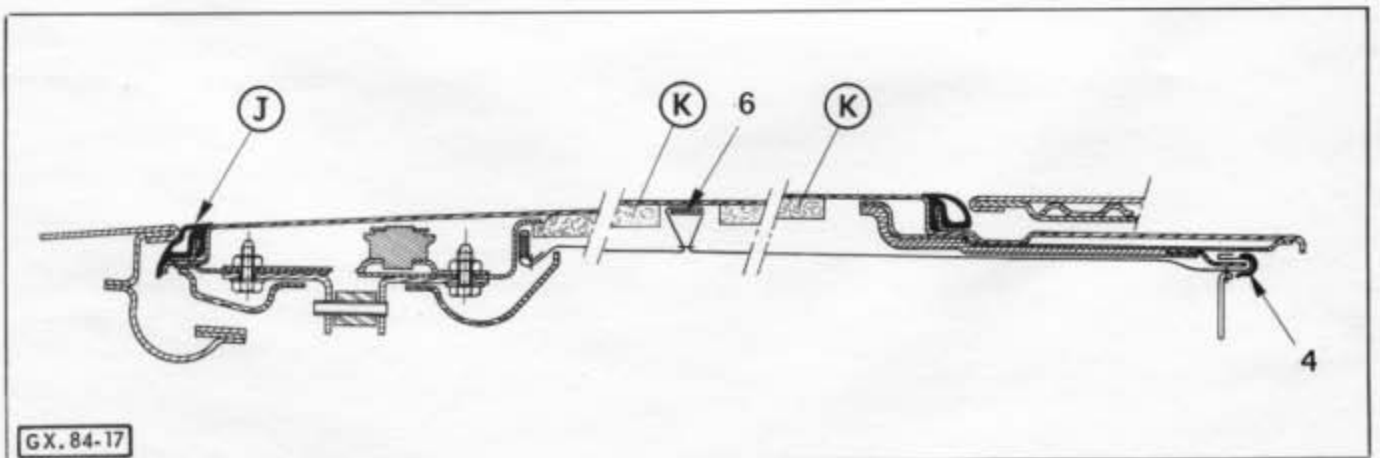
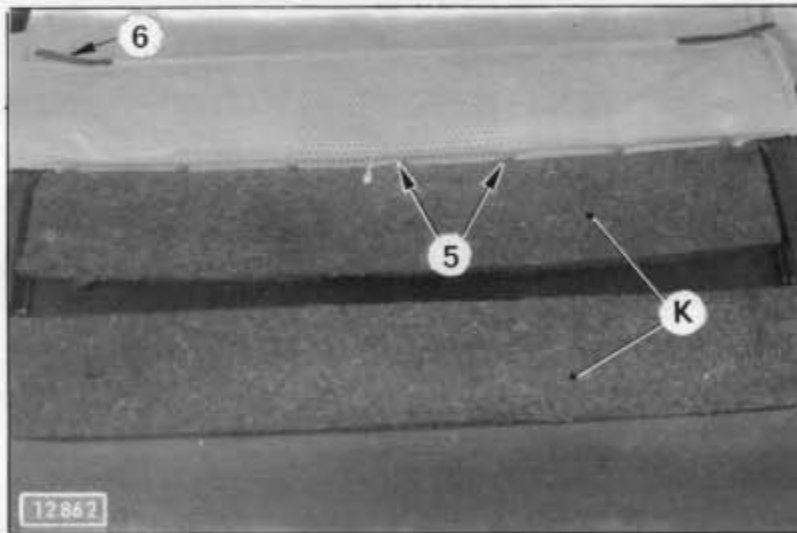
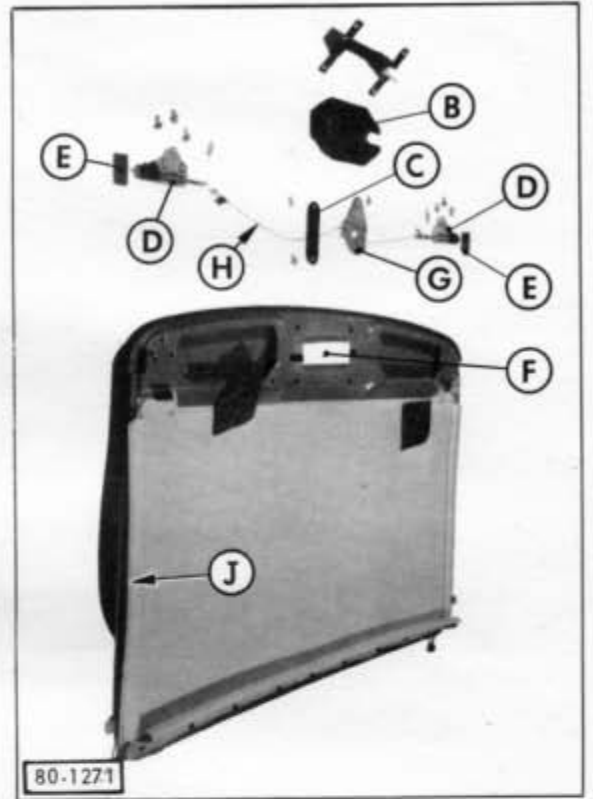
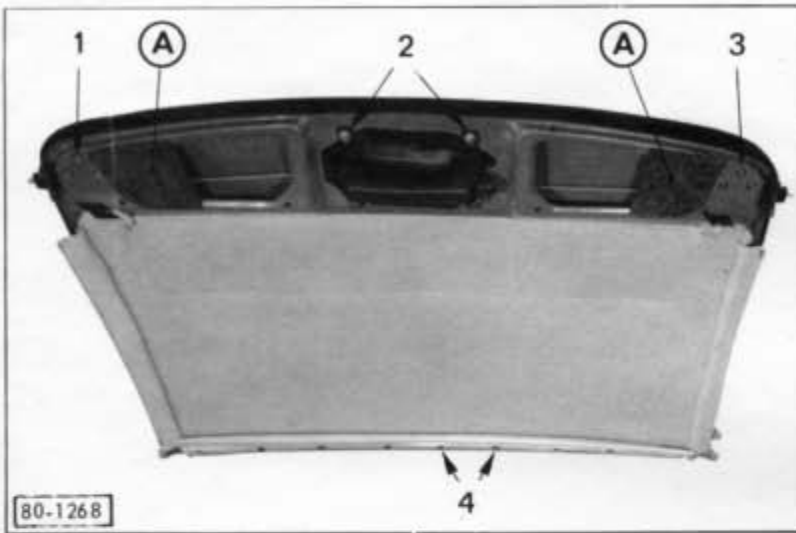
Apply sealing putty in the hollow of the housing and fit sealing strip **J**.

Clinch the trim using a round-ended tool.

6. Fit sun-roof sliding panel :

(See Operation GX. 988-4).

NO YJEMZTA-88 QAM LAMPTATE
HMAI ENIGLE MOENVA'S ME



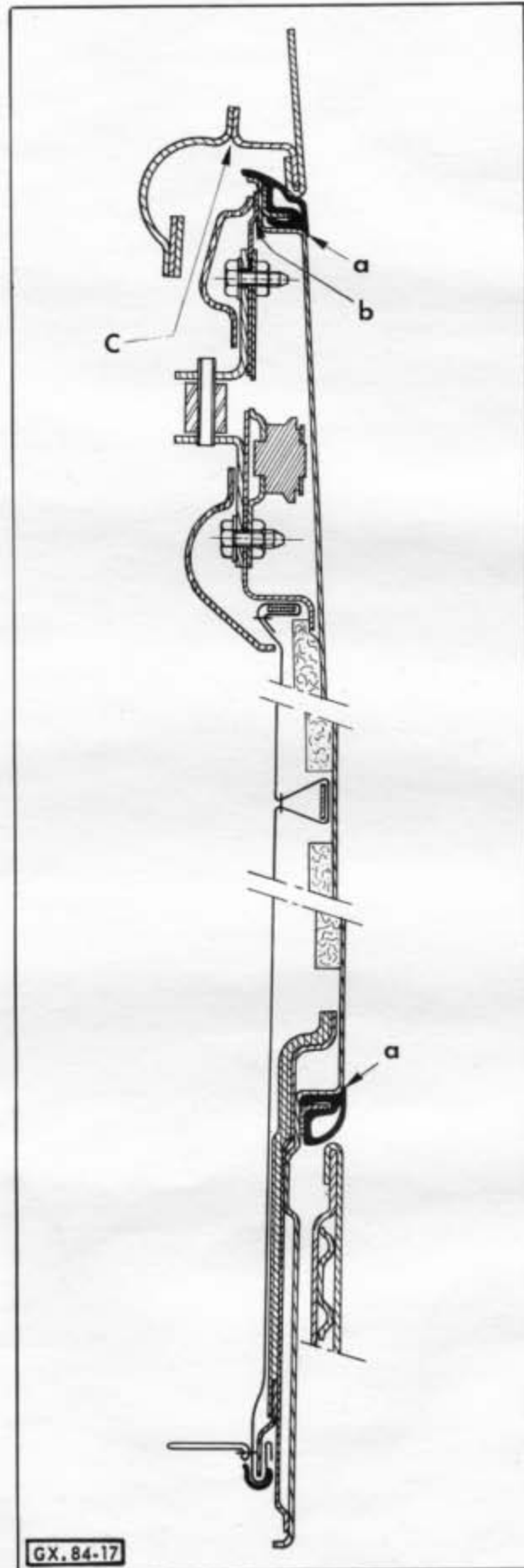
WATER-TIGHTNESS OF THE SUN-ROOF**A. LEAKS BETWEEN BODY AND SUN-ROOF.**

1. Check the adjustment of the sun-roof sliding panel (*adjust it, if necessary*).
2. Check that the sealing rubber is correctly secured in its clinching strip. If necessary, remove the sun-roof and re-clinch the sealing rubber.
3. Apply at « a » a strip of sealing compound along the whole length of the sealing rubber periphery. Clean off any surplus of compound.
4. Remove the inner finishing strip and apply a strip of sealing compound at « b », at the joint between the inner and outer panels.

B. LEAKS BETWEEN ROOF AND SUN-ROOF FRAME.

5. Ensure that the water drain pipes are not clogged. If so, clear them, using compressed air (remove roof headlining).
6. Check the height of the four outlets and make sure the water drain pipe at each corner of the frame is properly brazed. Rectify, if necessary, after removing the sun-roof.
7. Apply a strip of sealing compound between frame and roof, at « c », over all parts that can be reached when the sun-roof is open.





GX.84-17

REMOVING AND REFITTING A SUN-ROOF

REMOVAL.

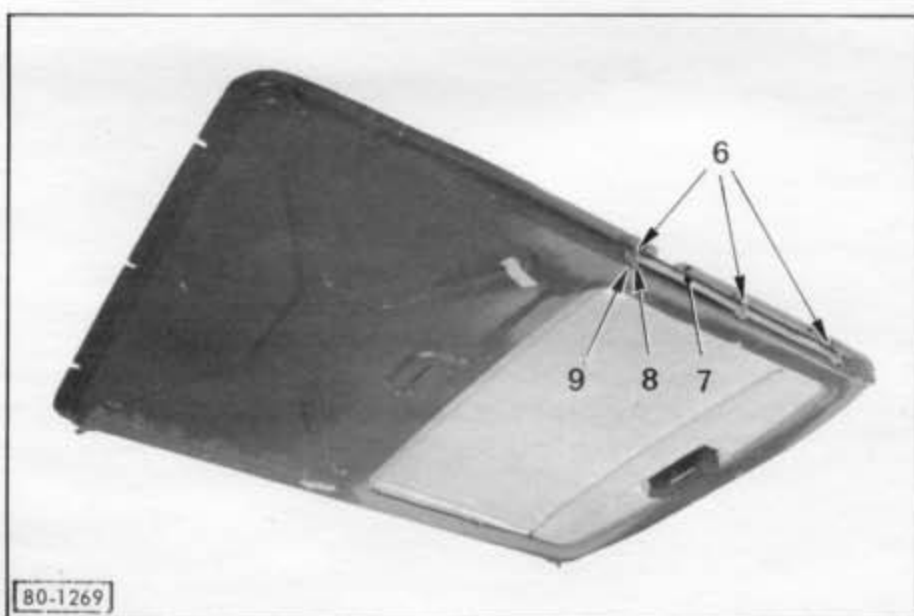
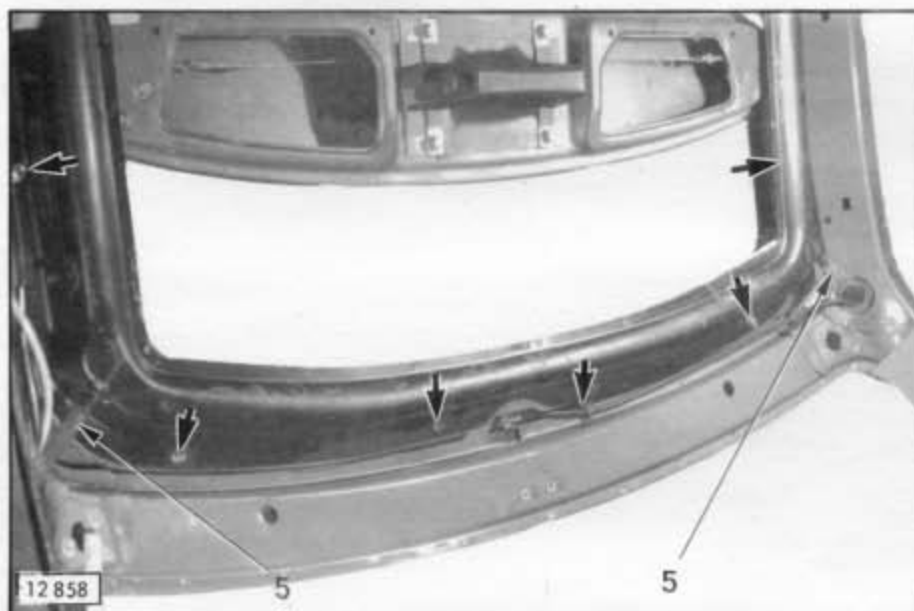
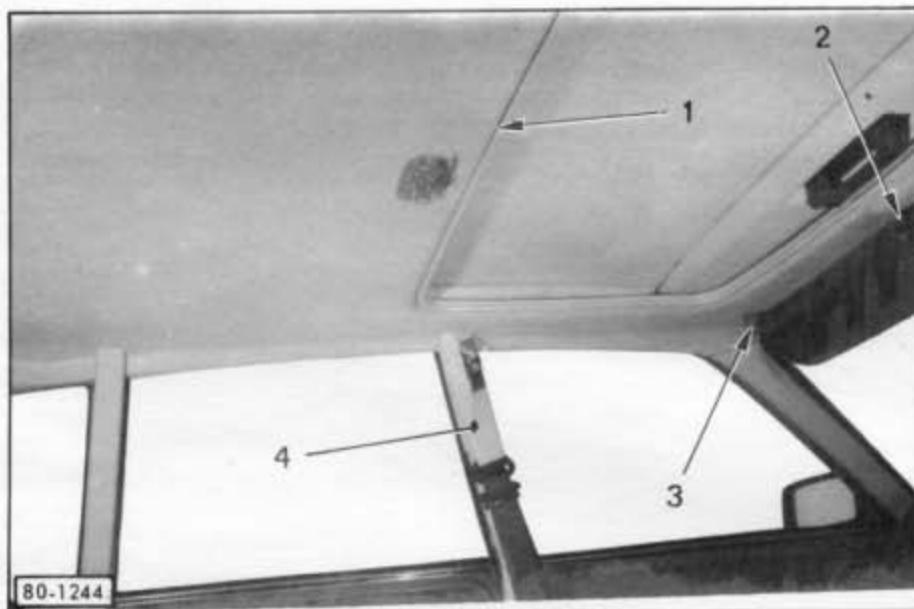
1. Open the four side doors and the boot lid.
Cover the front seats and the rear bench seat.
2. **Remove the following :**
 - sun-visors, three screws (3) and central support (screw (2)),
 - centre interior lamp (disconnect and insulate the positive wire),
 - finishing section (1),
 - side interior lamps on centre pillar (do not disconnect).

Remove upper embellishers (4) on centre pillars (two screws inside the lamps opening).
Disengage the headlining by pulling it forwards and take it out of the vehicle through the boot lid.
3. **Remove frame and sliding panel assembly :**
Disconnect drain pipes (5) located at the four corners of the frame.
Free the aerial from its staples as well as the feed wires for centre and side interior lamps (allow the wires to hang down along the centre pillar, at left-hand side).
Remove screws, nuts, washers (—→) on the front section and both side edges.
Slacken the three nuts at the rear.
Remove the frame and sliding panel assembly by pulling it forwards and take it out of the vehicle through the boot lid.
4. **Remove sliding panel from its frame :**
Remove fixing screws (6) of one of the runners.
Disengage the sliding panel and the frame runner.
Remove the second runner.

FITTING.

5. **Fit sliding panel onto its frame :**
Position the runner on the frame, secure it (*without tightening*) with screws (6), fitting in the following order :
 - rubber washers (9),
 - plain washers (8),
 - support plate (7) for the nuts.

Position the sliding panel with the second runner and secure it with (6), the washers and nut support plate. (*Do not tighten the screws*).
6. **Fit sliding panel and frame assembly :**
Position, through the boot lid opening, the pre-assembled assembly slightly smeared with sealing compound over its external boundary.
Engage the rear section under the three washers and nuts used for securing on roof panel.
Offer up the frame over the roof panel and fit screws (—→) on front and side sections.
WARNING : Fit 15 mm long screws on rear side nuts so as to avoid a roof distortion.
Using adhesive paper, secure the feed wires for the centre and side interior lamps.
Staple the aerial wire.
Connect water drain pipes (5) to each corner.
7. **Adjust sun-roof :**
(*See Operation GX. 988-0*).
8. **Fit roof panel headlining :**
Engage it in the vehicle through the boot lid opening.
Slide it on each side above the rear pillar trims and make it slide to its final position.
Fit finishing section (1).
Fit the centre interior lamp, connect it.
Fit centre pillar upper embellishers (4).
Fit the side interior lamps on centre pillar.
Fit sun-visor (screw (3)) and central support (screw (2)).



REPLACEMENT OF A SUN-ROOF RUNNER

This operation can be carried out without removing the sun-roof and frame assembly.

REMOVAL

1. Open the sun-roof :

Remove (on the relevant side) :

- sun-visor (three screws (2)),
 - side interior lamp (do not disconnect),
 - upper embellisher (3) (two screws through the side interior lamp opening).
- Partially remove finishing moulding (1).

2. Remove runner :

Remove the three screws (4) fixing the runner (plain washers, rubber washers and strip with welded nuts).

Tilt the runner round (in the direction **F**) holding the sun-roof sliding panel as high as it will go, with the handle in the « open » position. Withdraw the runner, by sliding forward.

FITTING

3. Fit runner :

Engage the runner by sliding it under the sun-roof (which must be held against the roof panel and pressed against the handle in the « open » direction). Tilt the runner in the direction **F1**, making sure the locking pin is properly inserted into its slot.

Fit fixing screws (4) and in the following order :

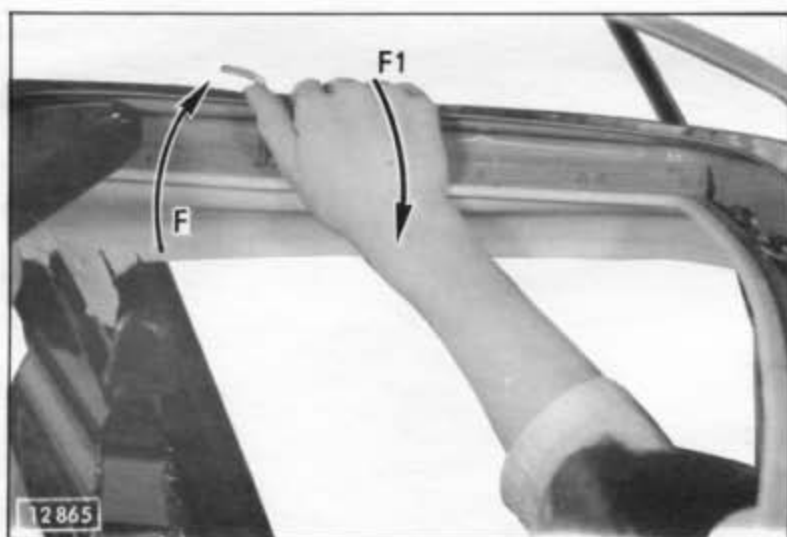
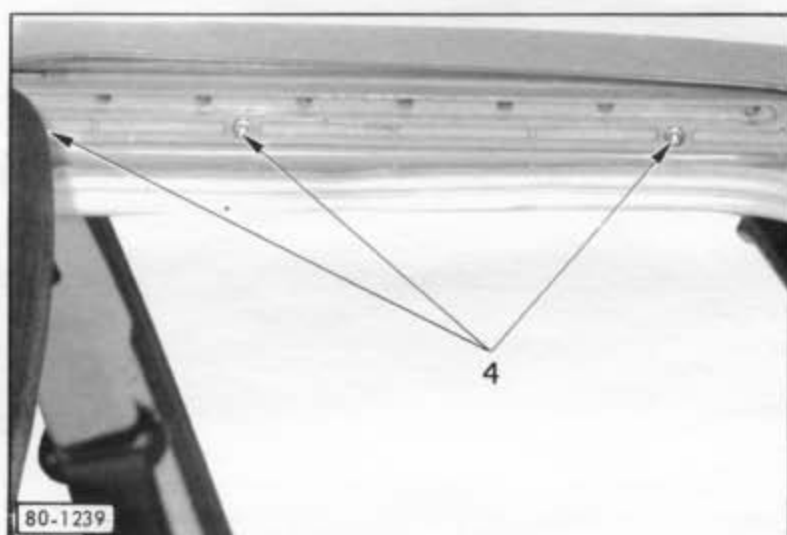
- rubber washers,
- plain washers,
- strip with welded nuts.

4. Adjust sun-roof :

(See Operation GX. 988-0)

5. Fit the following :

- finishing moulding (1),
- upper embellisher (3),
- side interior lamp,
- sun-visor (three screws (2)).



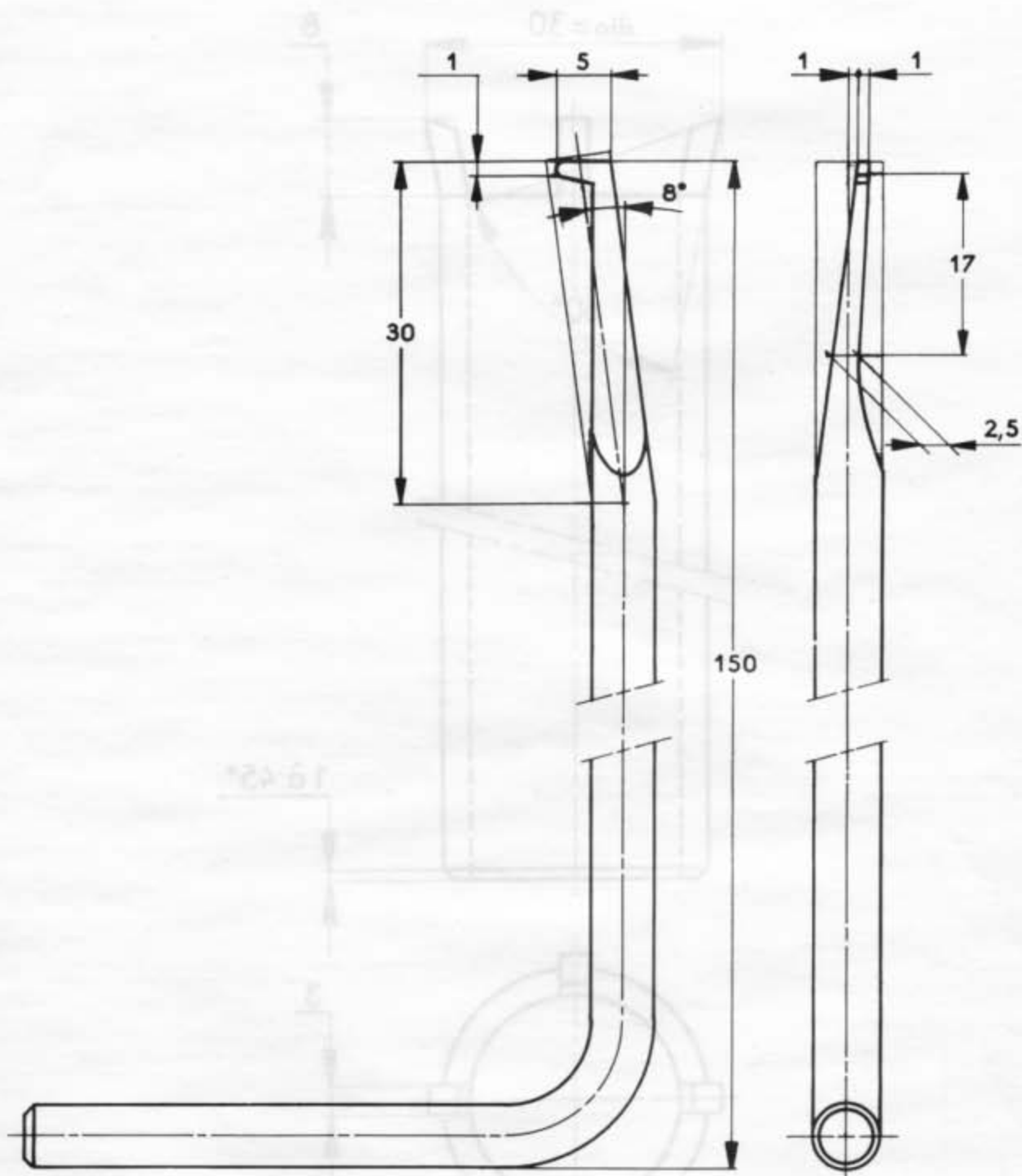
REVISIONS

**MANUFACTURING DRAWINGS FOR TOOLS NOT SOLD
MR. TOOLS**

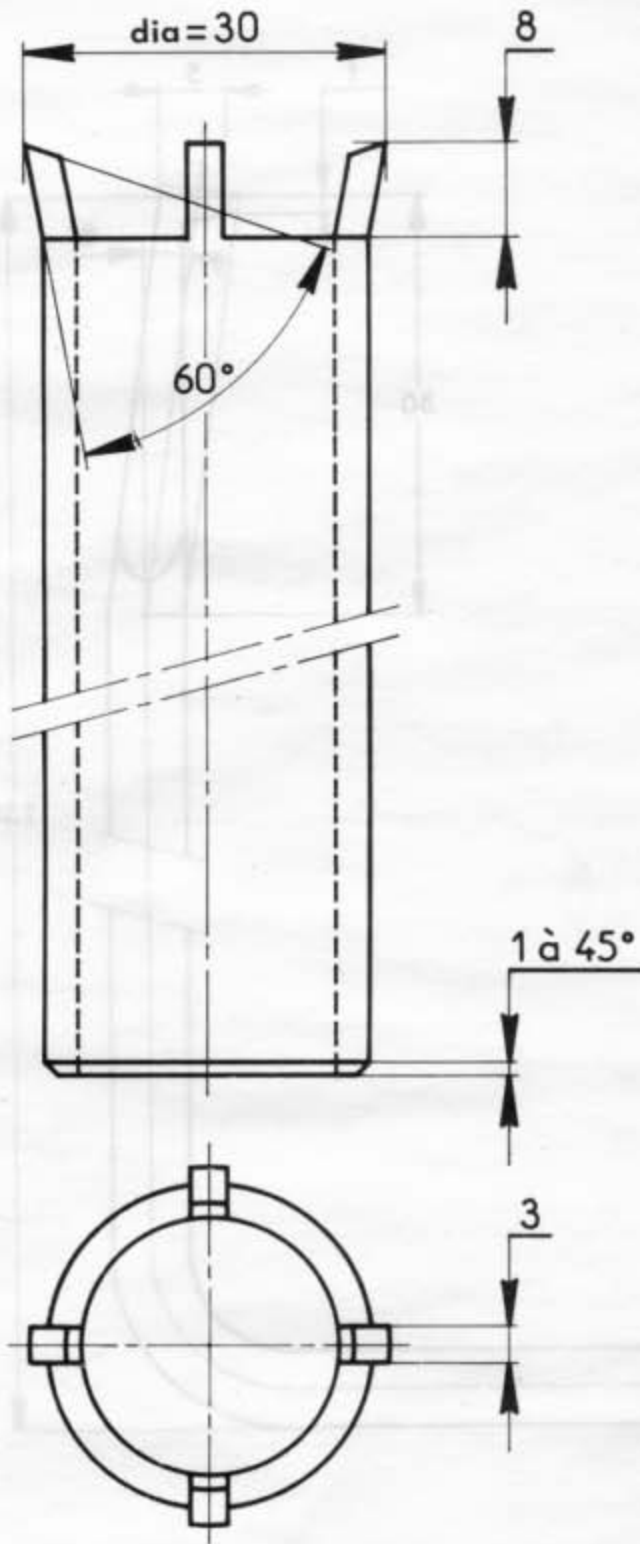
SCHEDULE

- MR. 630-84/29 : **Tool for extracting window winder lever holding clips** Page V
(Semi-hard drawn steel dia = 6 mm, length = 200 mm)
- MR. 630-14/72 : **Spanner for removing rear-view mirror interior control nut** Page VI
(Steel tube 20 X 27, length = 160 mm)
- MR. 630-12/49 : **Spanner for removing exterior rear-view mirror** Page VII
(To be held in a « NERVUS type » tube wrench 11 mm across flats)
- MR. 630-84/21 : **Bonnet unlocking tool** Page VIII
(Semi-hard drawn steel dia = 6 mm) Developed length = 636 mm
- A : Red paint reference mark

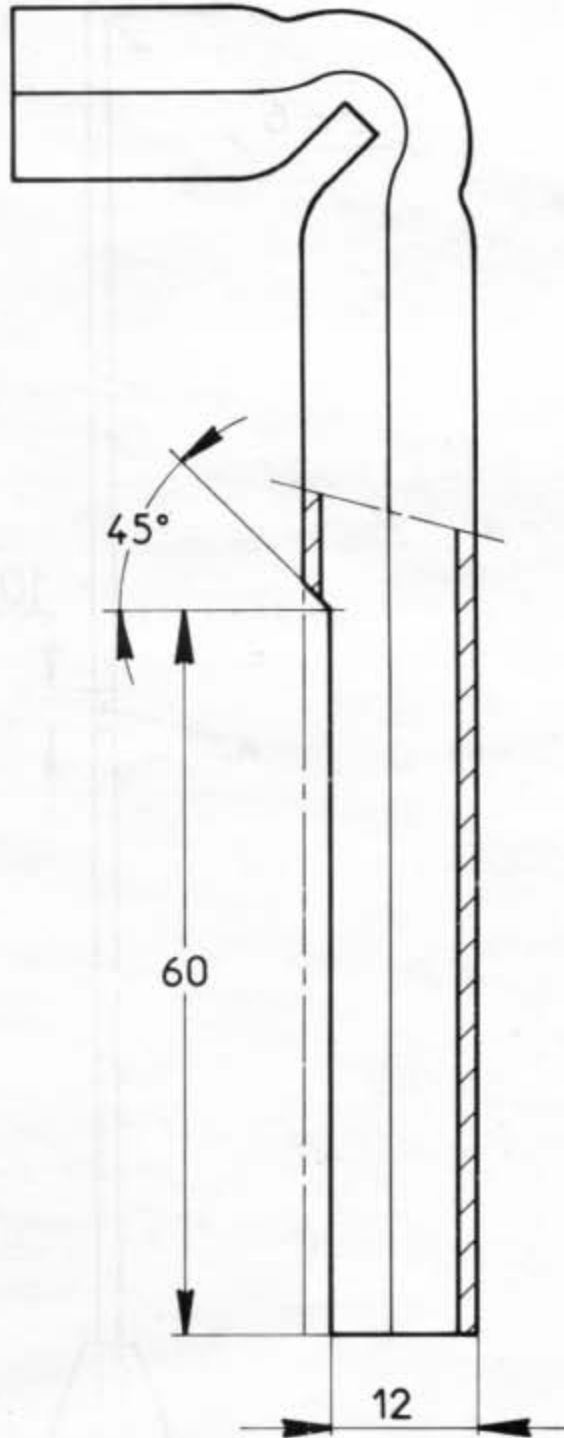
MR. 630-84/29



MR. 630-14/72



MR. 630.12/49



MR. 630-84/21

