INTRODUCTION

This manual provides service information on Bedford CF van and chassis/cab models. The information is compiled principally for the experienced mechanic who is conversant with normal workshop procedure and therefore, mention of certain accepted practices are omitted to avoid repetition.

Specifications, torque wrench data and adjustment information is given in Technical Data Book TS1233, which will be kept up to date with the issue from time to time of replacement pages.

All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of preparation. The right is reserved to make changes, at any time, without notice. This manual or any portion thereof may not be reproduced without the written consent of Vauxhall Motors Ltd.

SPECIAL SERVICE TOOLS

Reference is made in the Manual to Special Tools designed to facilitate service operations. Enquiries and orders for these tools should be addressed to Kent-Moore U.K. Ltd, 19-21 Stockfield Road Acocks Green, Birmingham, B27 6AJ, England.

BEDFORD CF

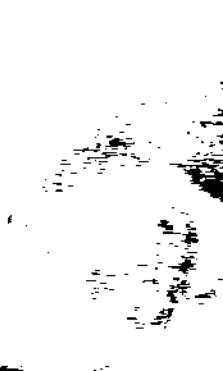
SERVICE MANUAL

BEDFORD CF

SERVICE MANUAL

GROUP 1

BODY



CONTENTS

INTERIOR TRIM AND FITTINGS

CAB HEADLINING

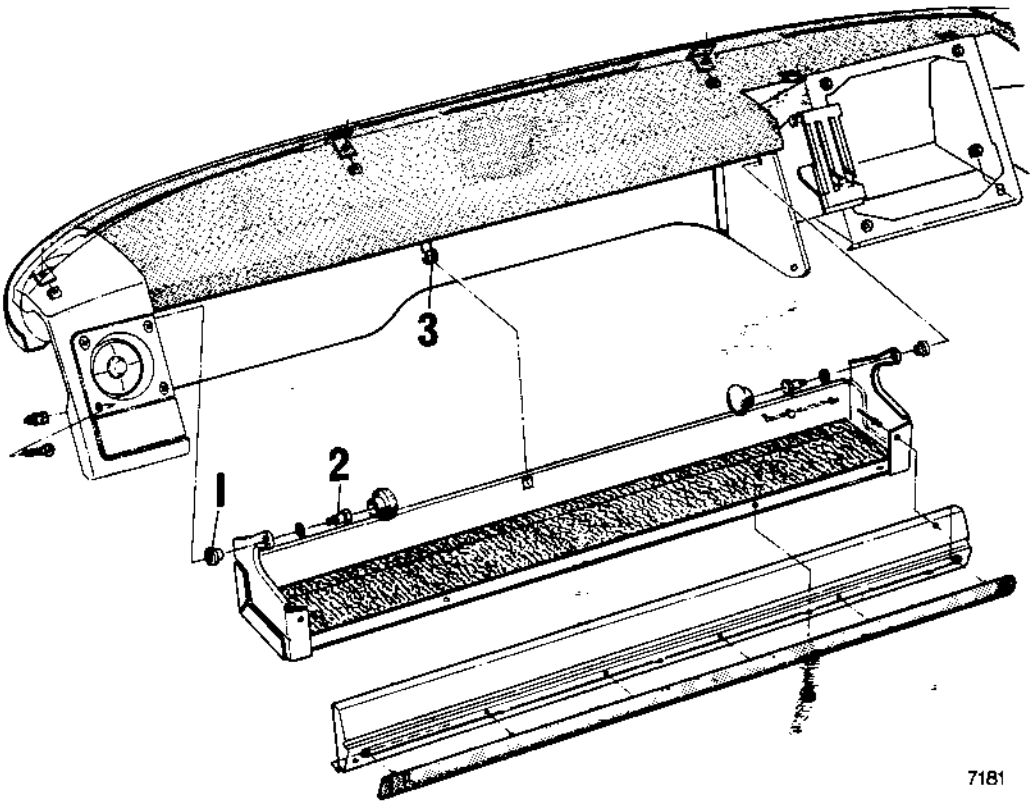
The cab headlining is attached to the roof panel with Plus Bond 68 adhesive, which is formulated to withstand extreme changes in temperature.

To ensure headlining does not stick to cab fittings when being installed, apply adhesive to headlining centre area only, leaving approximately three inches around the edge uncoated.

Brush a three inch wide band of adhesive on to periphery of roof panel.

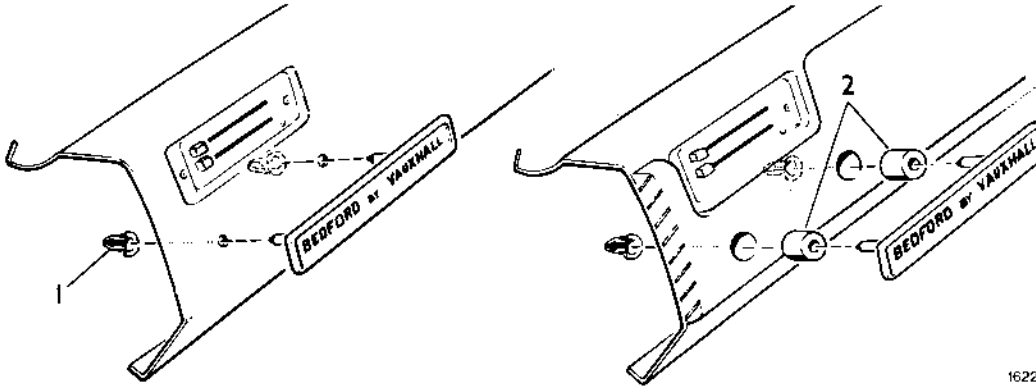
Warm headlining to 75°C maximum, and press into position. On cooling, any small wrinkles will disappear.

PARCEL SHELF (Later Models)



The parcel shelf is pivoted at each end by shouldered bolts (2) screwed into captive nuts located in the dash panel and held in the horizontal position by a spring clip (3). Access to pivot bolts is gained after prising off rubber caps. On installation ensure nylon bushes (1) are located between parcel shelf and dash panel.

INSTRUMENT PANEL NAMEPLATE (Early Models)

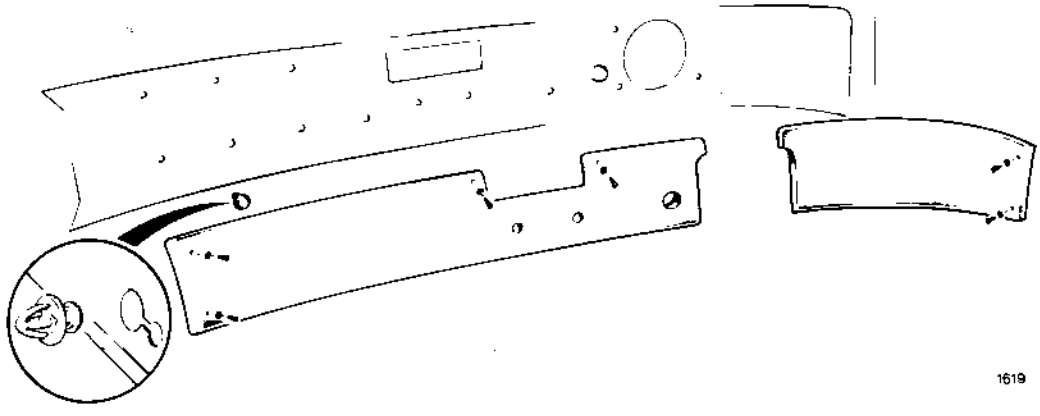


The instrument panel nameplate is secured to the panel by two friction bushes (1).

Where an instrument panel cover is installed, distance pieces (2) are used between the nameplate and the panel.

When removing nameplate, prise out retaining pegs from friction bushes evenly.

INSTRUMENT PANEL COVER (Early Models)



The instrument panel cover of De-luxe models is in two sections, retained by 14 trim fasteners and six screws.

Before large section of cover can be removed, nameplate must be withdrawn. Use a thin blade to ease trim fasteners out of instrument panel.

INSTRUMENT PANEL COVER (Later Models)

The instrument cover panel is adhered to the dash panel by a contact adhesive. To remove the cover it is necessary to remove both face level ventilator retaining panels, instrument binnacle and parcel shelf. Details of instrument binnacle removal are given in Group 13 (Electrical Equipment and Instruments).

VAN BULKHEAD

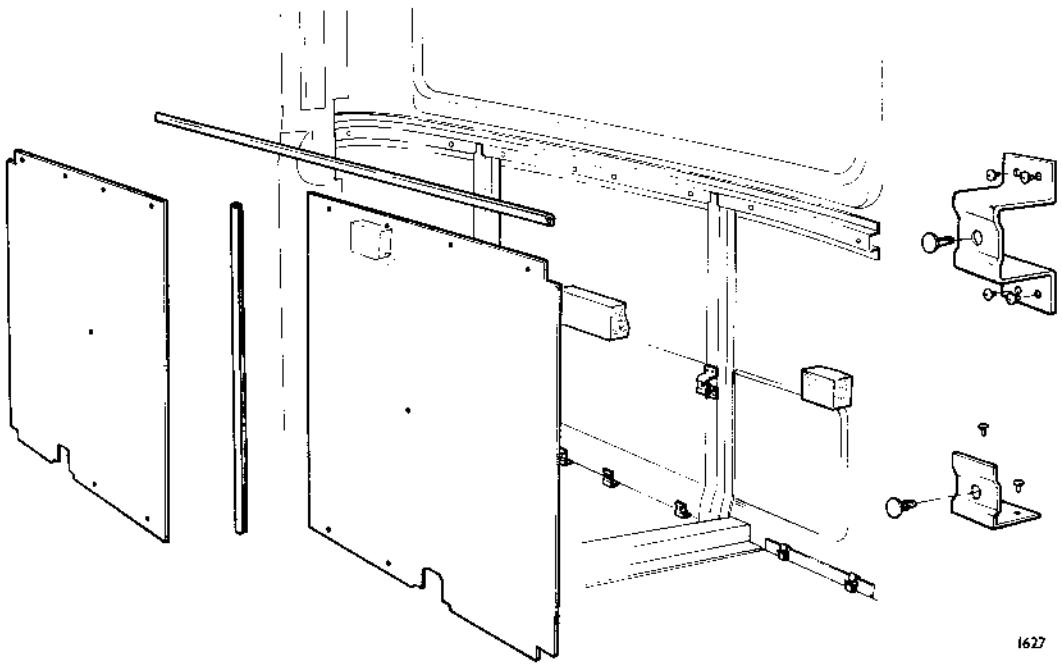
The van bulkhead consists of three panels attached to the body by angle supports.

A window is mounted in the centre section, and retained by a glazing channel of identical section to the cab backlight glass.

For removal and installation details of bulkhead window glass, see under 'Cab Backlight Glass'.

A foamed back insulator panel is adhered to the bulkhead lower section with plastic trim buttons retaining the top edge.

CAB BACK PANEL COVERS



On early models, de-luxe cabs are provided with covers on the back panel.

The covers are retained by trim fasteners and clips, with a joint finisher between them. A finisher also covers the top edge of the covers.

The cover brackets are attached to the cab by pop rivets.

Three polystyrene distance pieces are secured to the cab back panel by adhesive.

On later models the same type back panel covers are used except that they are backed up with a sponge insulation. No polystyrene spacers and bottom cover brackets are used.

ENGINE COVER

The cover is a one piece insulated assembly held to the floor panel by three toggle-type latches. To remove cover it is necessary to unclip parcel shelf and tilt shelf to its highest position.

SEATS

Two types of drivers seat are available, one being a shaped sheet metal frame with foam padding and cover, the other having a separate squab and cushion frame with lumber and height adjustment. The padding and covers are attached separately to a cushion spring platform and a squab frame.

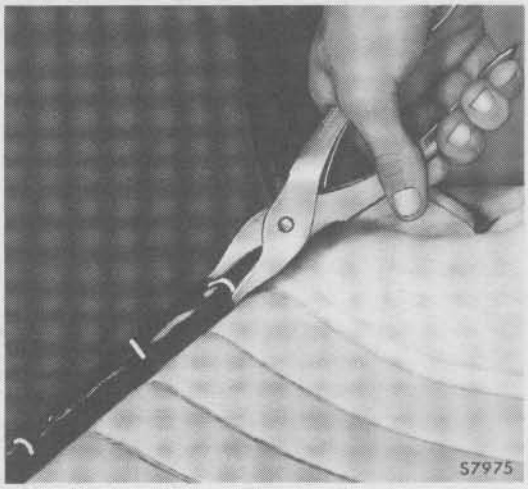
The single or double passenger seats have padding and cover attached to a shaped sheet metal frame being rigidly mounted to a seat platform, whereas the drivers seat is mounted on runners.

On sheet metal framed seats the padding is in two separate sections adhered to the cover, which is secured to the frame centrally by hog rings. The cover edge is held by spring clips and a finisher strip.

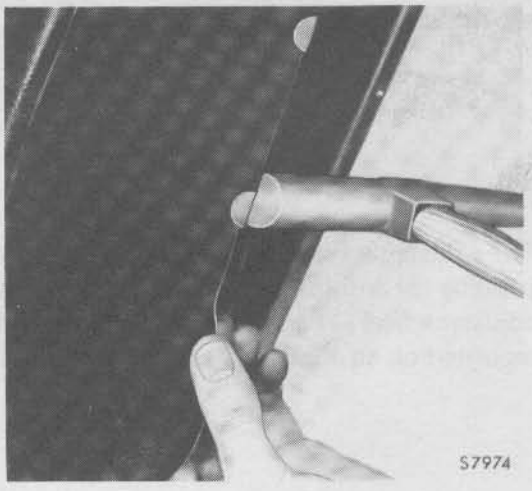
On reassembly of seat, apply two parallel strips of glue to both squab and cushion padding as illustrated.

Place cover on padding ensuring cover edge seam is centrally aligned with padding.

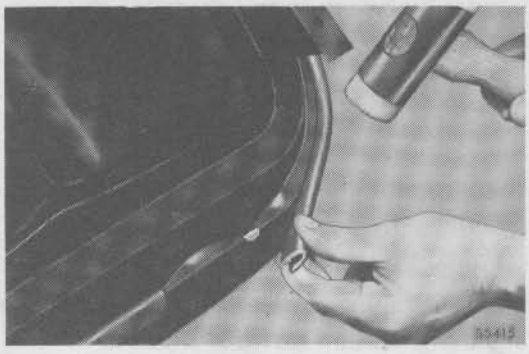
Insert the steel rod in the pocket provided at the joint of the seat and squab cover and secure to the anchor holes in the rear of the frame with hog rings using Pliers UM9 or similar.

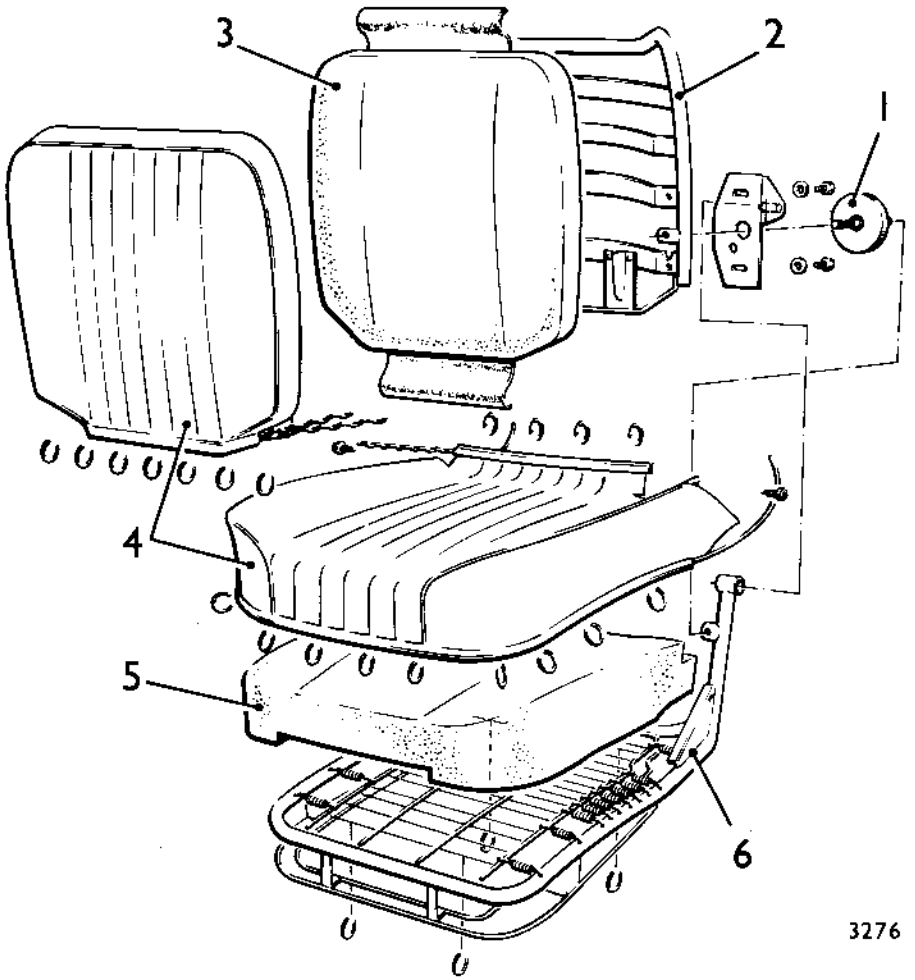


Assemble squab and cushion in position and stretch the outer section of the cover over the flange frame and secure with clips.



Finally attach finisher strip firmly over the edge of the frame flange and trim off excess material.



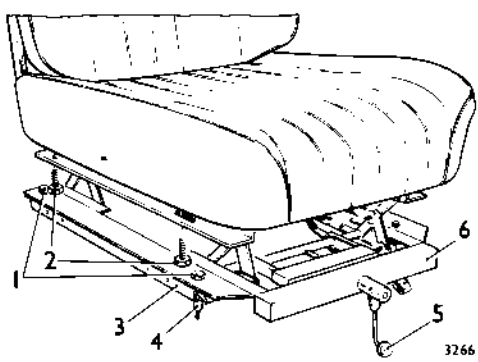


The adjustable type seat comprise a frame and spring assembly (6), a squab frame (2), foam padding (3) and (5), and covers (4). The rake of the squab can be altered by means of an adjuster wheel (1) and screwed shaft positioned on the outer side of the seat. The seat is mounted on an adjuster frame which provides both height and fore and aft adjustment.

The seat can be removed with or without seat adjuster frame (6). If the seat is to be released from the frame, rotate handle (5) to raise the mechanism and remove bolts (2).

To release adjuster from seat slides (3), remove bolts (1).

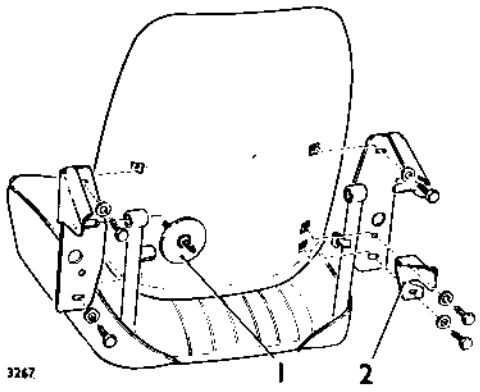
The seat slides are attached to the cab seat support by two nuts and studs (4) and two nuts and bolts at the rear.



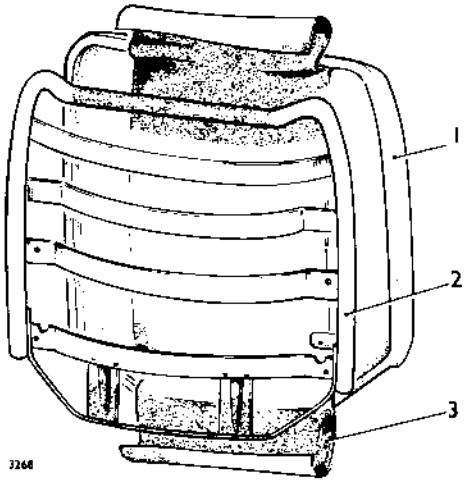
When installing seat slides, smear a little grease on bearing surfaces of slides and ensure that they move freely. Wipe off excess lubricant and assemble slide and handle assembly on the left-hand side.

Before installing seat adjuster, smear screwed shaft with high melting point grease and lubricate remaining friction surfaces with oil.

The seat can be removed from seat frame after removing stop bracket (2) and rotating squab rake adjusting wheel (1) until its screwed shaft is disengaged, and removing remaining bolts from mounting brackets.



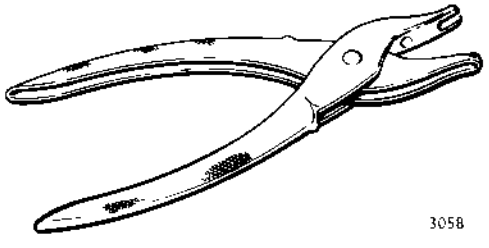
The squab padding (1) is shaped for location over the squab frame (2) and has two flaps (3) for attachment to the frame.



When installing padding, attach it to the squab frame after applying trim adhesive over the shaded areas of the flaps and frame.

Before installing squab cover, place a polythene envelope over upper end of squab padding to prevent padding being dragged out of position.

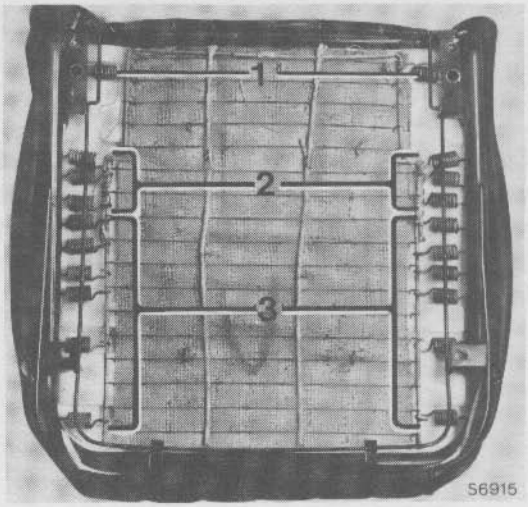
Ease cover into position, then insert a trim rod into each trim pocket and secure the pockets together with seven hog rings with Pliers UM9 or similar



If a new squab cover has been installed, cut a 19 mm (0.75 in.) square hole in cover around each of the five squab fixing bolt holes.

When installing squab rake adjusting wheel, ensure the left-hand threaded end of the shaft is screwed into the seat frame and that both ends of the shaft are started simultaneously.

The coil springs connecting the seat platform to the frame are of three different tensions. Each spring is coloured for identification and installed as follows: Orange (1), white (2) and grey (3).

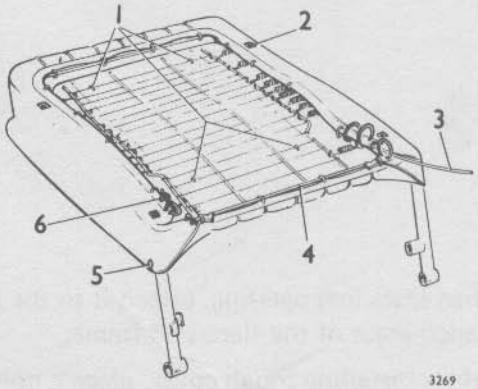


When installing driver's seat or single passenger seat cushion padding, attach the hession-covered side to spring unit with four hog rings (1).

After placing cushion cover in position over padding, insert a trim rod in pocket at rear of cushion and secure to rear rail (4) with hog rings, using Pliers UM9. The seaming cord (3) should then be pulled taut and the front and side edges of cover secured to inner rail with hog rings. Ends of seaming cord should be folded back and secured with one hog ring (6) each side.

The cover side panels should be secured to seat frame by a screw and washer (5) each side.

If a new cushion cover has been installed cut a 19 mm (0.75 in.) square hole (2) in cover around each of the four seat fixing bolt holes.



The single and dual passenger seats are of the same design as the shaped sheet metal drivers type.

VENTILATION AND HEATING SYSTEM

Ventilation of the vehicle interior with cool air is by face level adjustable ventilators at each end of the instrument panel, supplied from an intake ducting mounted behind the front grille panel. Additional ventilation is provided by a ventilator assembly, incorporating a heater radiator mounted to the front bulkhead panel.

A thermostatically operated water valve controls the temperature of the engine coolant passing through the heater radiator.

BLEEDING THE HEATER

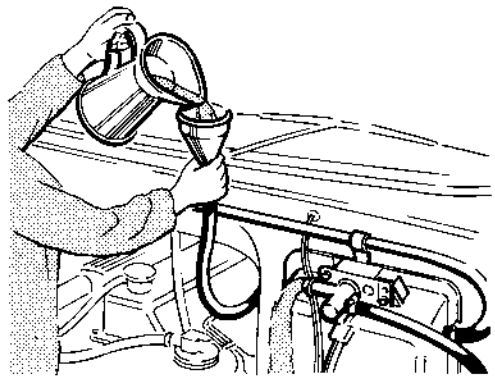
When refilling the engine cooling system it is possible for air to become trapped in the heater radiator thus causing a substantial reduction in the flow of heated water through the radiator.

If insufficient hot air is passing into the car through the heater when the engine coolant is at normal operating temperature and the heater controls are in the 'hot' position, the heater water system should be checked to ensure that all air is expelled from the system before removing or renewing the heater radiator. The following recommendations should be carried out to ensure all air is expelled from the system.

With the engine at rest, ensure that radiator is completely filled and install filler cap.

Disconnect heater hose from heater water valve outlet and place water valve control lever in the 'hot' position.

With end of heater hose raised above heater, add coolant to water system slowly until coolant flows from the water valve outlet.



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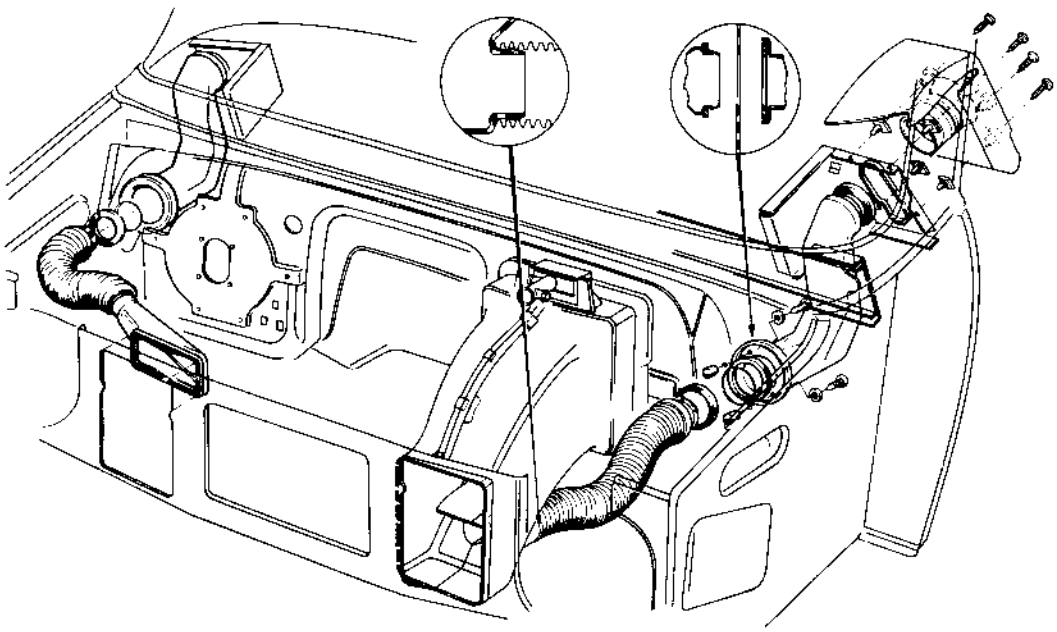
Reconnect heater hose to water valve then run engine for a few minutes and check operation of the heater.

Stop engine and check level of coolant in radiator which should be 25 mm (1.0 in.) below bottom of radiator filler neck.

INSTRUMENT PANEL VENTS



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On later models instrument panel face level vents are situated either side of the instrument panel. Both vents are integral with the mounting panel, which when screwed to the dash panel, allows the vent to locate into the ducting. The ducting on both vents is supported at the bulkhead by two screws and surrounded by a watertight seal.

Air intake is by ducts mounted behind the front grille panel, the left hand side utilizing the heater intake.

Interconnection of intake and bulkhead ducts is by convoluted clip on tubing.

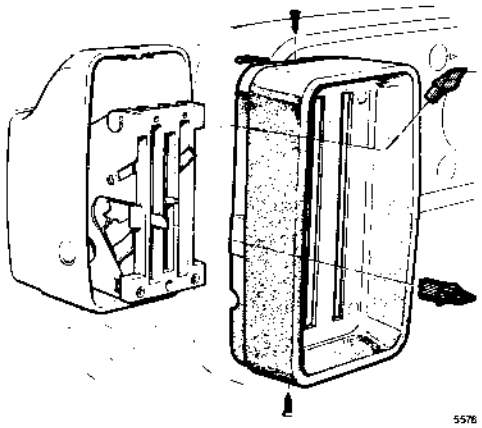
VENTILATOR AND HEATER CONTROLS

On later models, the ventilator and heater controls are mounted in a control panel which is secured to the instrument panel by two bolts behind the instrument binnacle.

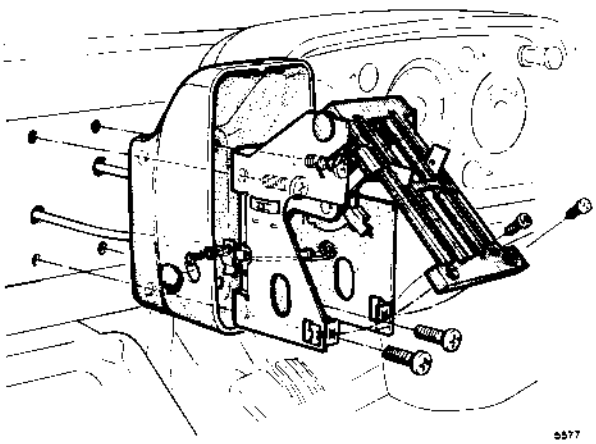
To renew heater controls or cables it is necessary to remove instrument binnacle. For removal details see 'Group 13 – Electrical Equipment and Instruments'.

On earlier models, the ventilator and heater controls are incased in an independant housing mounted adjacent to the instrument cluster panel.

To gain access to controls, remove control knobs and escutcheon. Control knobs are a push fit on levers and escutcheon is retained by two screws.



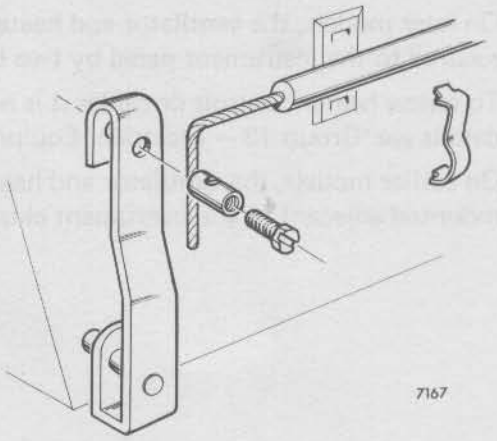
Remove the two retaining screws from control lever guide and lift guide out of control assembly. Control assembly can be withdrawn after removing four mounting screws. On later models only two bolts secure control assembly.



The adjustment procedure is the same for earlier and later models.

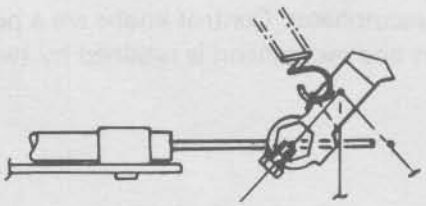
Adjustment of distribution box flap should be made with the control lever at the instrument panel set to the 'OFF' position. With air distribution flap lever in the fully forward position secure cable to lever.

After final adjustment of cable, bend cable down at right angles and secure outer cable to distribution box with clip.

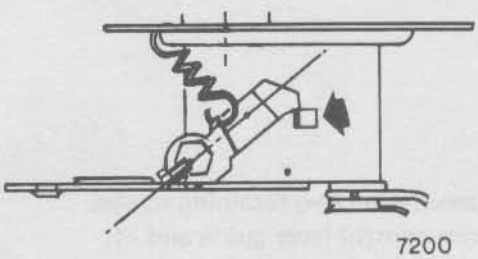


To adjust water valve cable, set instrument panel heat control lever to the fully cold position.

Release cable clamping screws and position valve operating lever at cold position, with nipple clamping screw toward cable clamp.



Lock inner cable at nipple, pull outer cable to ensure valve operating lever is at the stop locator position (arrowed) and lock outer cable clamp.

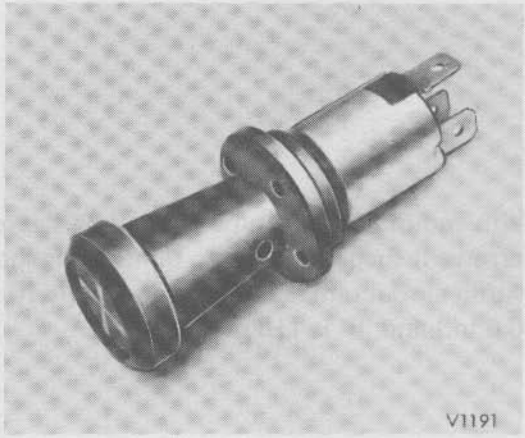


VENTILATOR FAN SWITCH

On early models the switch is retained by a locking ring.

Switch knob can be withdrawn whilst depressing spring plunger in switch shaft.

The switch is of the two-position, push-pull type, with three terminals. The heater switch wire (green) is connected to the single terminal and the ground wire (black) to one of the dual terminals.



On later models the switch is of the three position rotary-type secured in the instrument binnacle by spring clips incorporated in the switch.

The switch can be eased out of panel after depressing spring clips with a small screw-driver.

After withdrawing switch the harness connecting plug can be detached.

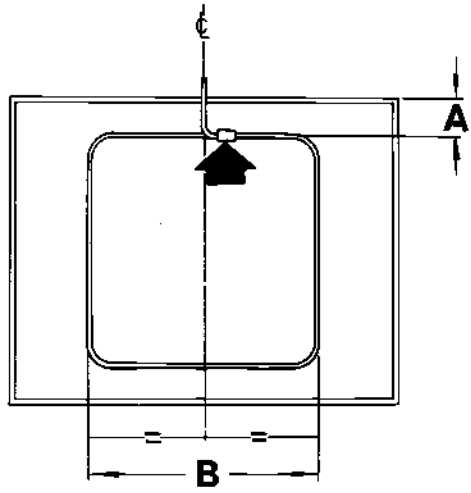
HEATER WATER VALVE

The heater water valve is a sealed unit and cannot be dismantled or adjusted. It is cable operated from a lever on the instrument panel and on later models thermostatically operated by means of a capillary tube attached to the radiator core. The water valve controls the flow of engine coolant supplied to the heater radiator and the thermostat unit maintains the flow at any given setting of the heater control lever.

To ensure correct sensing of the thermostatic unit, the end of the capillary tube must be coiled to the correct size and shape, and coil attached by clips correctly positioned on the radiator core.

HEATER WATER VALVE (contd)

With end of capillary tube secured by sleeve (arrowed) shape the tube to dimensions shown within air duct intake. Dimension 'A' is 16 mm (0.6 in.) and 'B' is 118 mm (4.6 in.).



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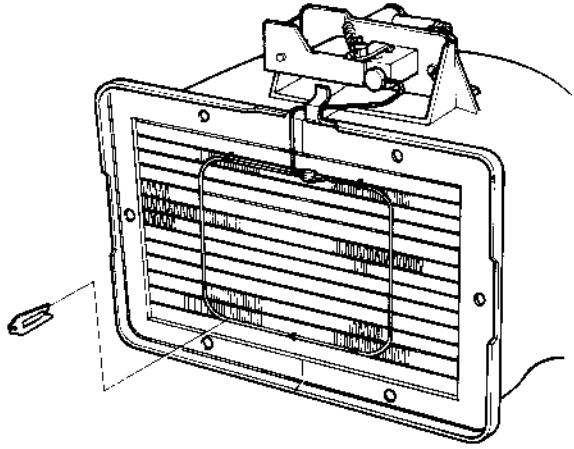
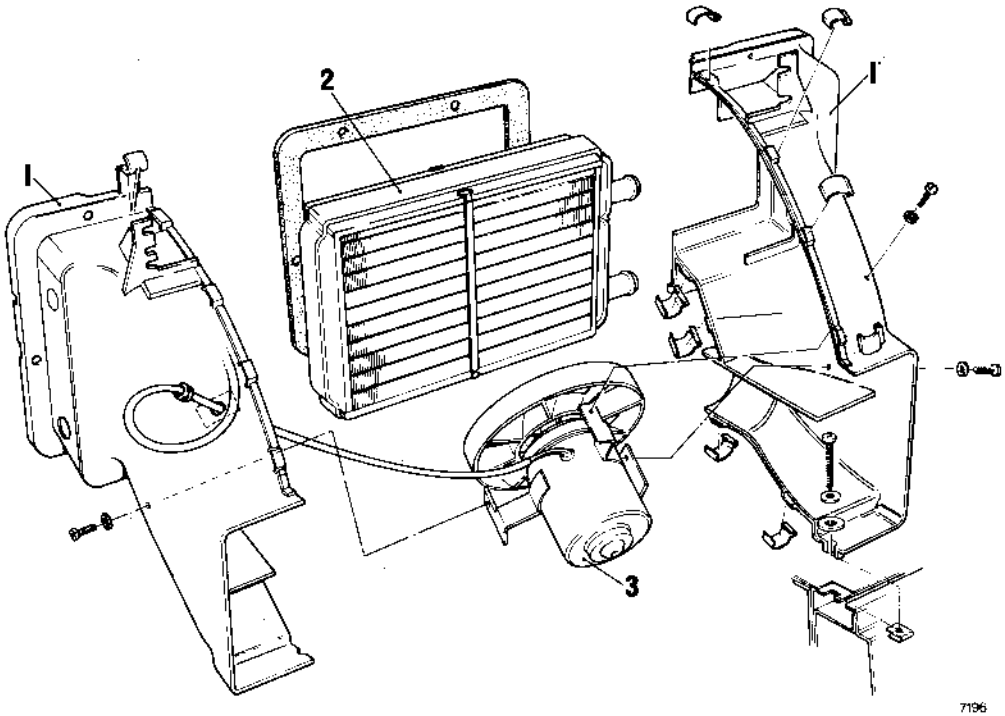
Retain capillary tube to front side of radiator with clips as shown.



VENTILATOR AND HEATER ASSEMBLY



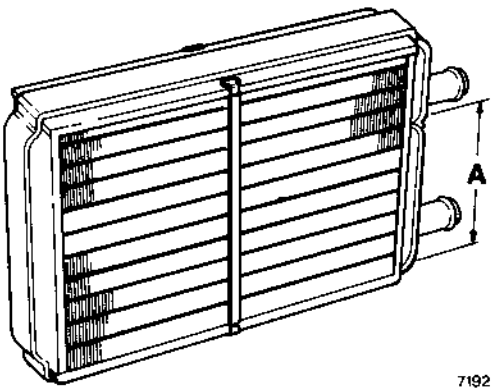
The heater casing (1) is in two halves held together by spring clips. The casing contains a radiator (2) and heater motor and fan assembly (3), the motor and fan assembly is bolted to the sides of the casing. The whole assembly is held by screws to the engine side of the bulkhead. The water valve is mounted on the top of the casing having hoses routed from heater radiator and the engine thermostat housing. Also a hose is routed from the heater radiator to water pump inlet.

The two speed fan motor is attached to the heater intake ducting by three screws. To facilitate removal of ventilator fan motor or heater radiator the front panel assembly must first be removed. For removal details see under 'Front Panel'.

Detach heater hoses and disconnect fan switch wiring connections, attach draw wire before pulling switch harness through bulkhead panel to facilitate installation. After removing six screws securing duct and ventilation casing to bulkhead panel, the complete heater assembly can be removed.

After removal of air intake duct outer cover and three screws securing heater motor fan, the air intake duct can be separated after detaching spring clips.

If radiator on later models is to be renewed, ensure, on installation, that larger section 'A' is at the bottom and the capillary tube is correctly positioned.



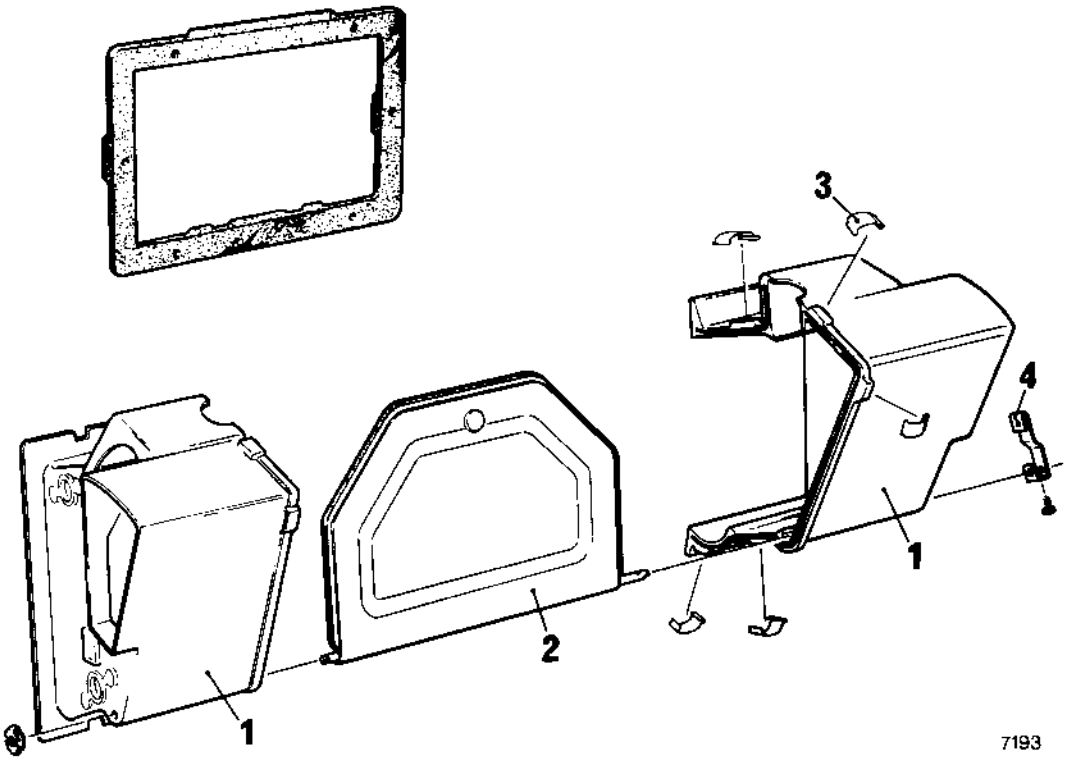
On heater reassembly ensure all gaskets are correctly positioned at bulkhead panel.

Adjust controls as previously described.

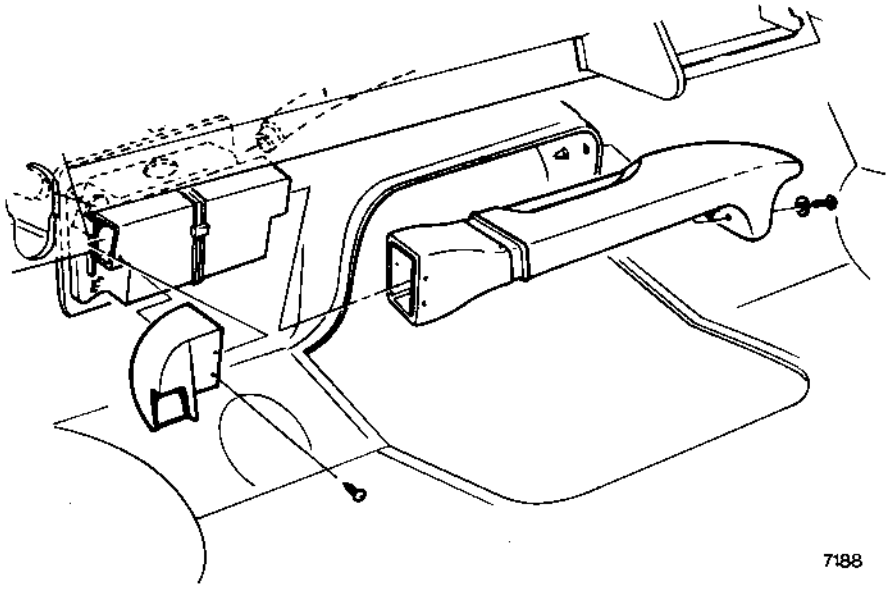
VENTILATOR FAN

The motor and fan is secured inside the air intake duct by three screws, for removal details see under 'Ventilator and Heater Assembly'. The motor and fan is serviced as a complete assembly.

VENTILATOR DISTRIBUTION CASING



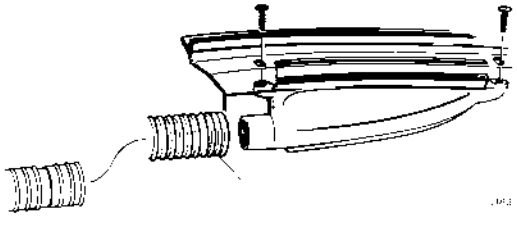
The heater distribution casing is mounted to the inside of the bulkhead panel and held in position by the heater casing retaining screws. The distribution casing (1) is in two halves held together by spring clips (3). The casing contains a flap (2) controlled by a cable connected to a control lever (4). The flap routes the flow of air either to the windscreen demist ducting or to cab foot well area.

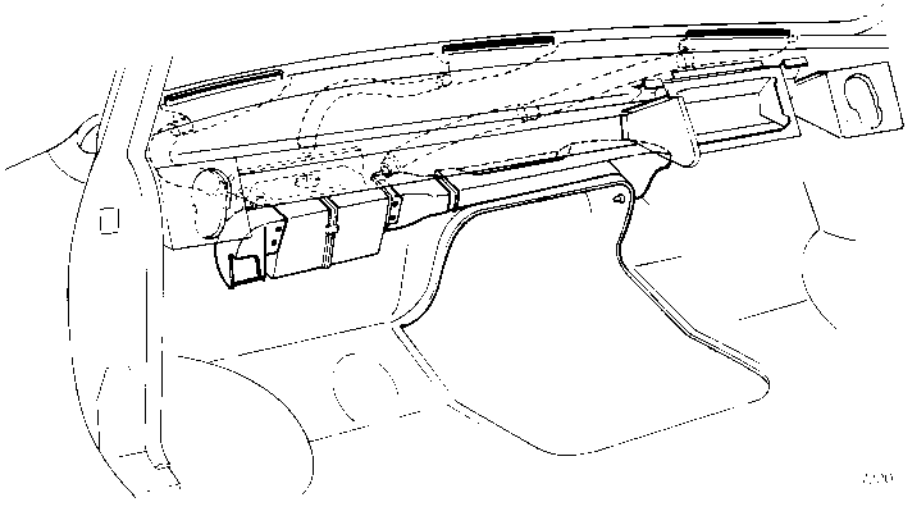


Footwell ducting tubes are secured to the distribution box by screws. The drivers side ducting is of two sections routed over the floor tunnel and secured to the floor panel by a screw and rivet.

DEMIST DUCTS AND HOSES

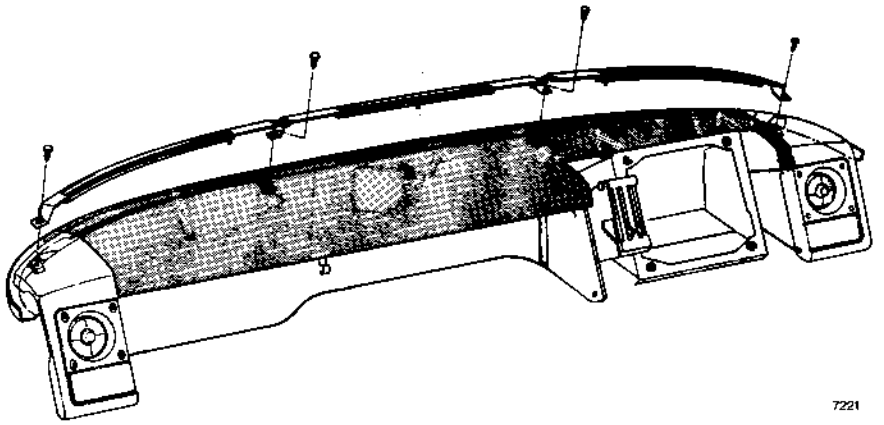
Three demist ducts are each secured to the instrument panel by two screws, with convoluted hoses routed from the distribution box.





The hoses are a push fit in the distribution box and onto the ducts. The drivers duct hose consists of two sections snapped together.

DEMIST DUCTS HOSES (contd)

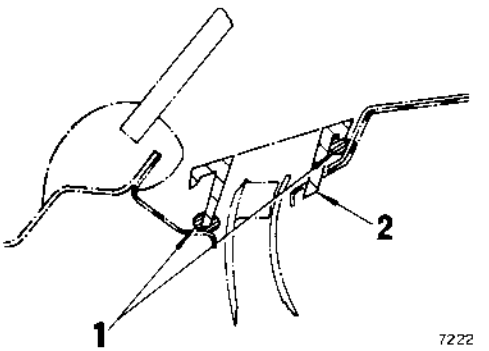


On later models the demist ducts have three escutcheons secured to the instrument panel by screws.

The centre escutcheon is secured at both ends with the two outer ones interlocked with the centre escutcheon and secured at either end.

When replacing or renewing the escutcheons ensure three beads of plastisol, approximately 30 mm (1.2 in.) in length are placed in the positions shown.

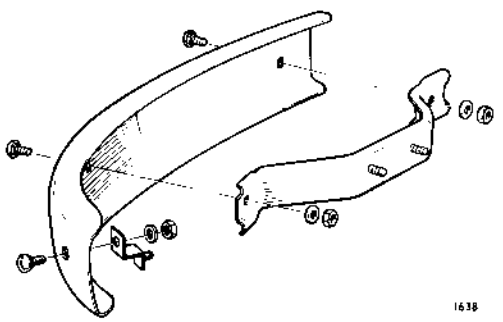
Each escutcheon has a locating peg (2) for correct alignment. Also indicated is the correct location of the plastisol sealer (1).



BUMPERS, RADIATOR GRILLE AND NAMEPLATES (Early Models)

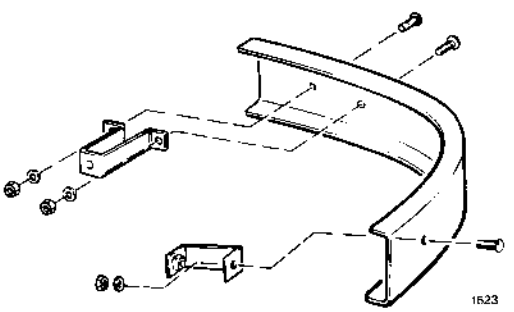
FRONT BUMPERS

The front bumpers are attached to brackets on the front crossmember by round head bolts and nuts.

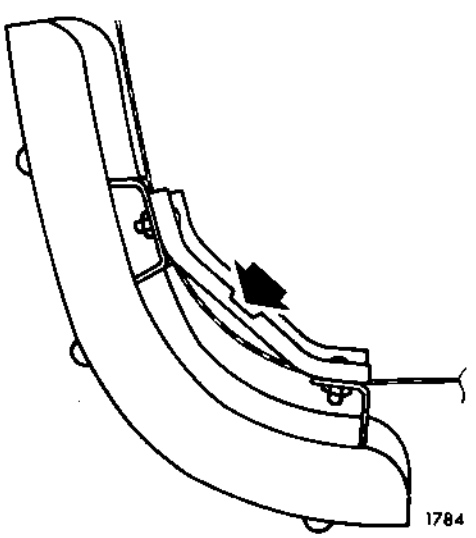


REAR BUMPERS

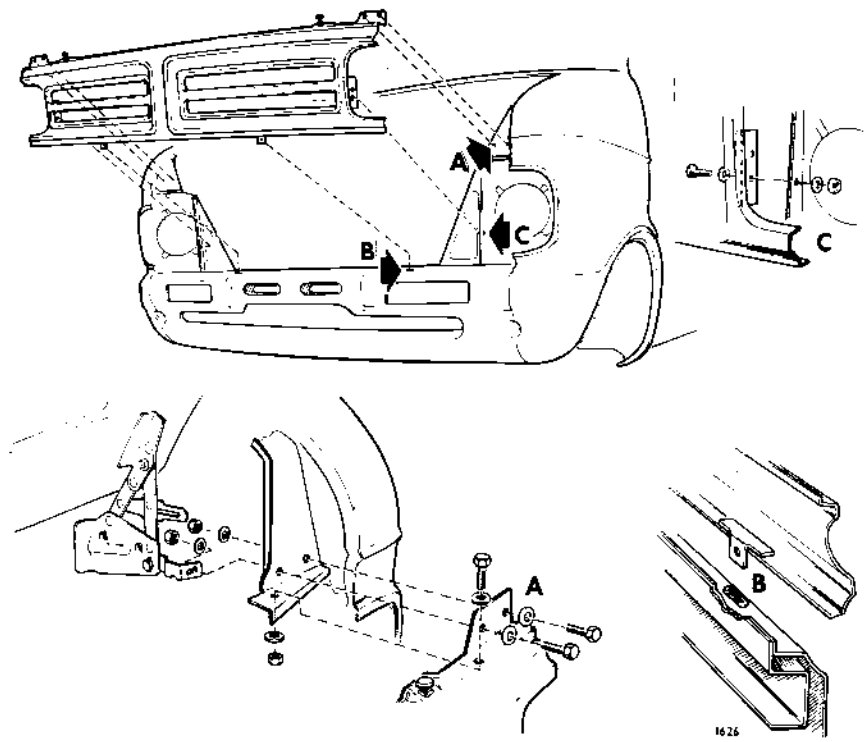
The rear bumpers are located on two brackets which are bolted to the body with reinforcing brackets inside the body.



Reinforcing bracket must be installed with notched flange uppermost.



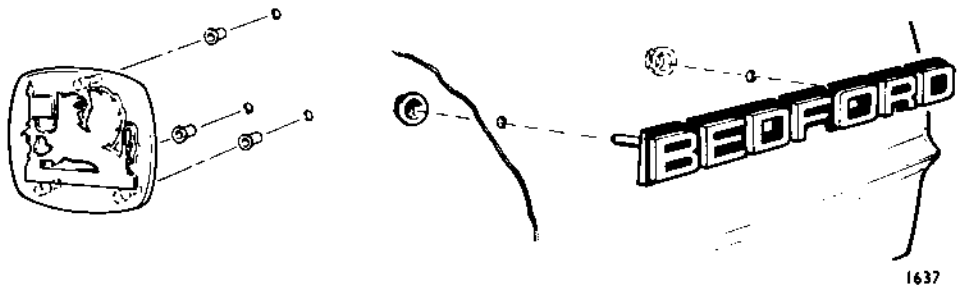
RADIATOR GRILLE



The radiator grille is located at its lower edge by two tongues (B) which engage rubber grommets in the front panel. The grille is retained by three bolts and nuts (A) at each top corner, and a bolt and nut (C) at each side.

To remove grille, head lamp bezels and the three screws securing bonnet catch support to upper edge of grille must be withdrawn.

NAMEPLATES AND EMBLEMS

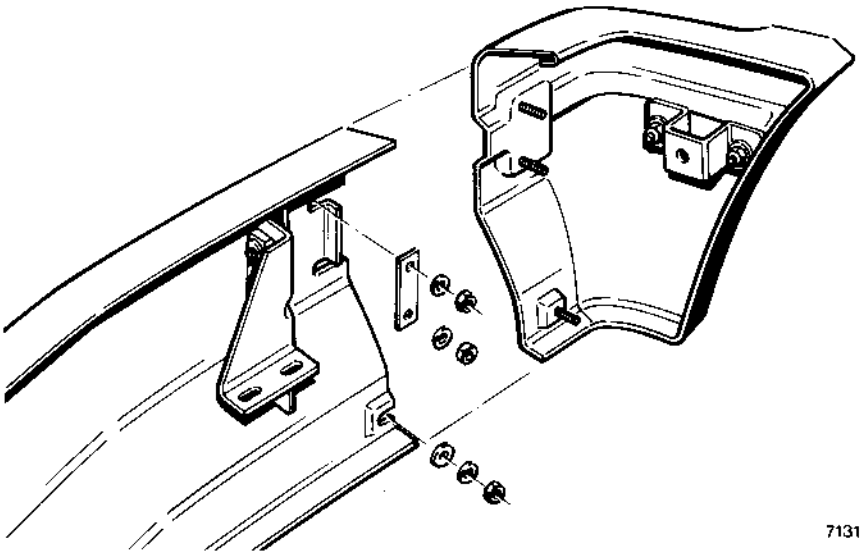


The bonnet emblem is retained by three friction bushes, and the Bedford nameplate by thread-cutting nuts.

On De-luxe models, an emblem is secured to each front wing by two friction bushes.

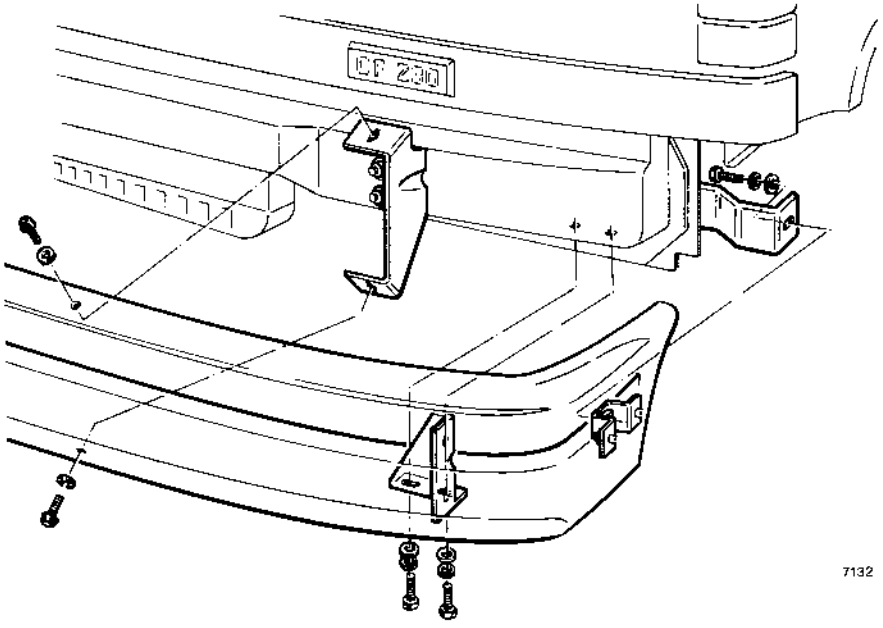
BUMPERS, RADIATOR GRILLE AND NAMEPLATES (Later Models)

FRONT BUMPER



7131

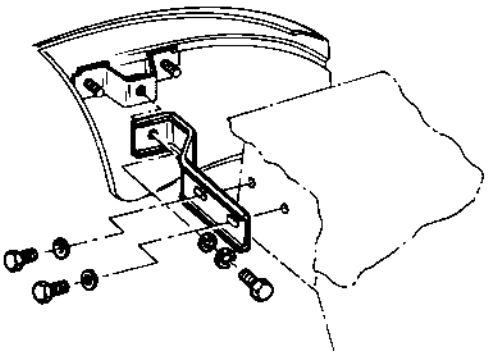
The front bumper assembly consists of a centre section and two outer sections bolted together.



7132

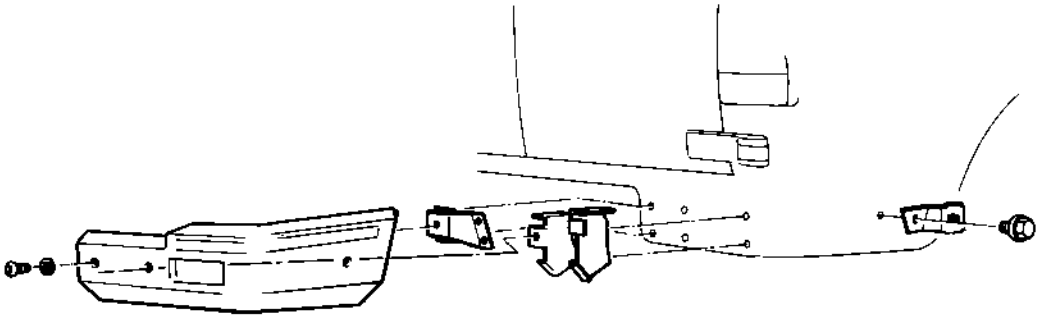
The complete bumper assembly is secured to the body by four hexagon recessed bolts visible from the front of bumper, four bolts under front panel crossmember and one bolt behind each front wing panel.

The outer brackets are bolted to the vehicle under-body, which align with brackets bolted to the bumper.



7185

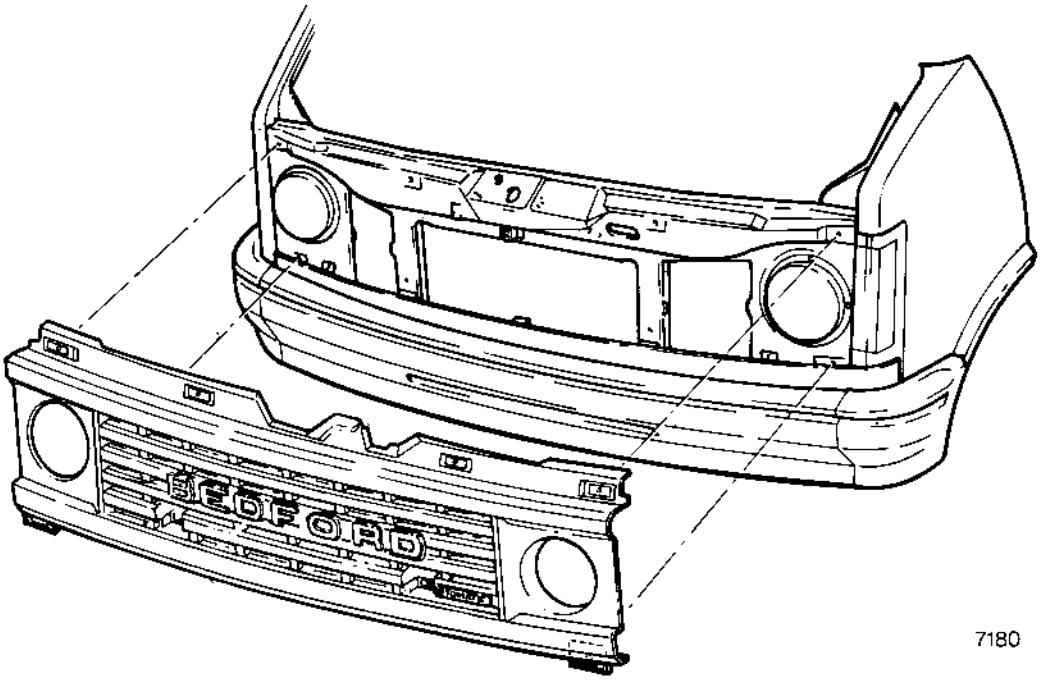
REAR CORNER BUMPERS



7184

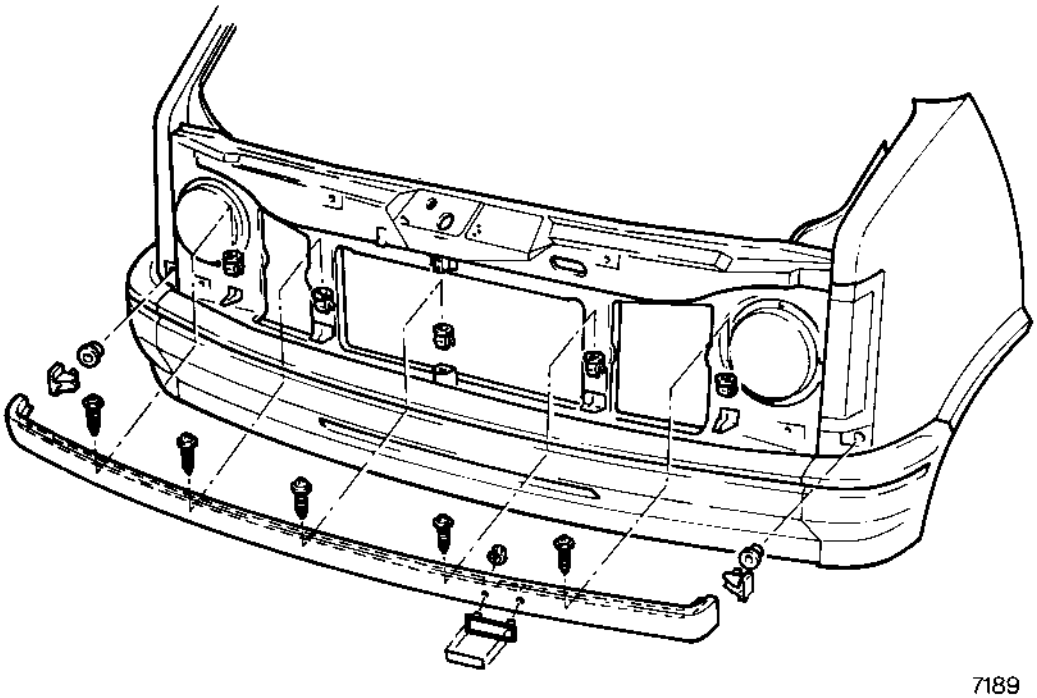
The bumper is supported by brackets bolted to the body. Three hexagon recessed bolts secure each bumper to the brackets. A reflector is bolted into each bumper assembly accessible after bumper is removed.

RADIATOR GRILLE



7180

The grille is retained to the front panel by nine self captive screws, five at the top, two between grille bars and two below the head lamps.



7189

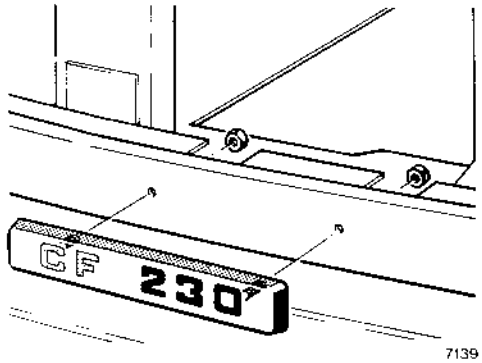
A lower grille bar is mounted below the radiator grille, secured to the front panel by five screws and aligned by pegs at each end which locate into retainers below the front turn signal lamps.

NAMEPLATES

7190

The Bedford nameplate on the radiator grille is retained by two nuts (A) and two clips (B).

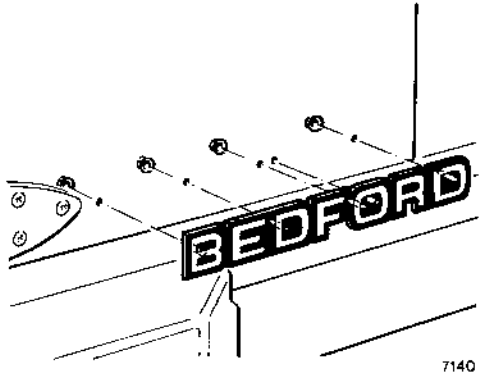
The vehicle weight nameplate is retained by clips to the lower grille bar.



7139

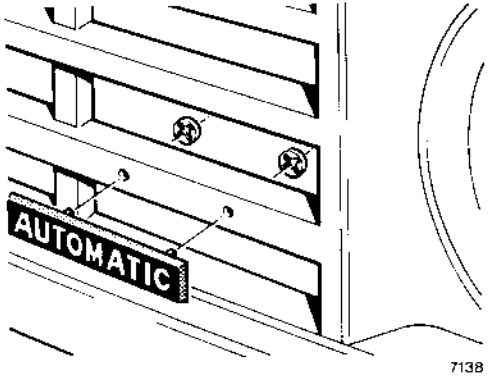
NAMEPLATES (contd)

The back door nameplate is retained by four thread cutting nuts.



7140

On vehicles equipped with automatic transmission a nameplate is retained to the radiator grille by spring clips.



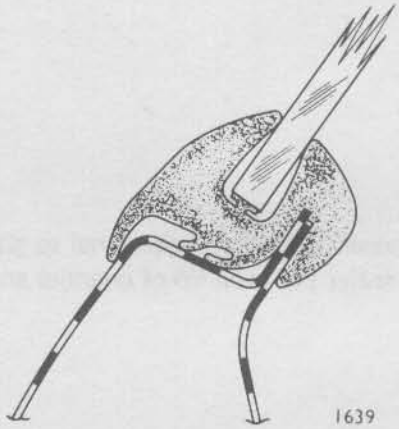
7138

WINDSHIELD AND BACKLIGHT GLASSES

WINDSHIELD GLASS

The windshield glass is either toughened plate incorporating a wide safety zone, or laminated glass. The type of glass can be identified by the manufacturer's symbol etched on the glass centrally positioned along the lower edge.

The glass is mounted in its aperture in a rubber glazing channel which incorporates a double sealing lip.



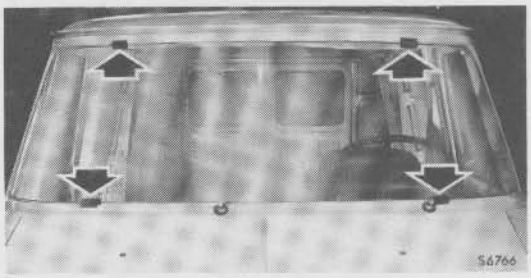
WINDSHIELD GLASS – Removal and Inspection

To remove an unbroken glass, use a broad blade to ease off lip of glazing channel from inside of aperture flange. Glass can then be removed complete with glazing channel.

Before removing a shattered glass, cover bonnet ventilator grille and demist ducts, and protect surrounding paintwork from damage.

WINDSHIELD GLASS – Removal and Inspection (contd)

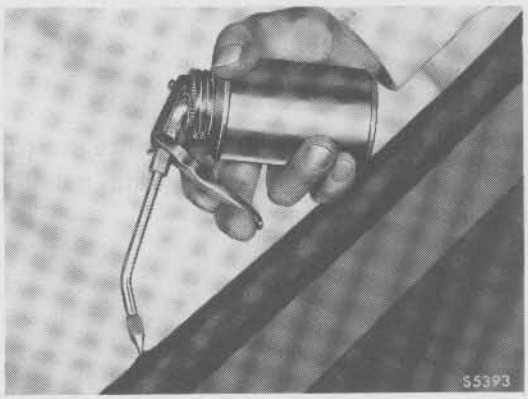
To check windshield aperture for distortion or damage, mount glass in aperture with short lengths of glazing channel.



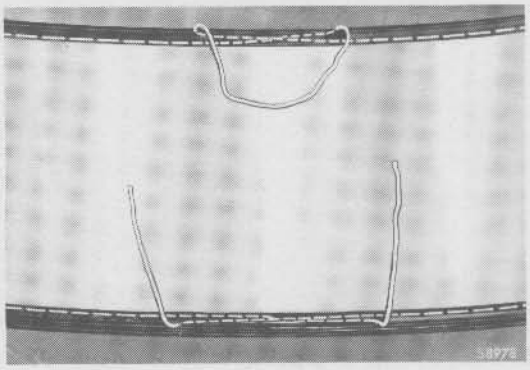
Spacing between edge of glass and aperture flange should be uniform, and contour of flange should compare favourably with that of glass.

WINDSHIELD GLASS – Installation

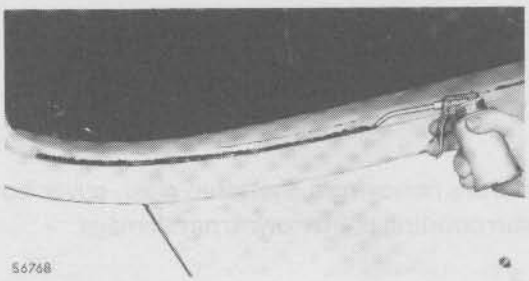
After assembling glazing channel to glass, inject sealer between lip of channel and glass.



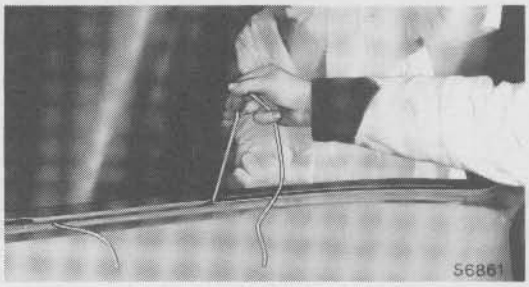
Insert a strong cord around aperture flange groove in glazing channel forming a loop at top centre and with ends of cord crossed at lower centre.



Before assembling glass to aperture, run a bead of sealer around aperture flange.

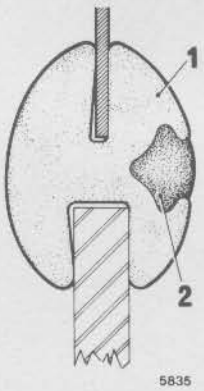


Assemble glass to aperture by pulling cord out of groove to engage lip of glazing channel with aperture flange, and firmly tap around glazing channel with a rubber mallet to make sure channel has settled into position.



CAB BACKLIGHT GLASS

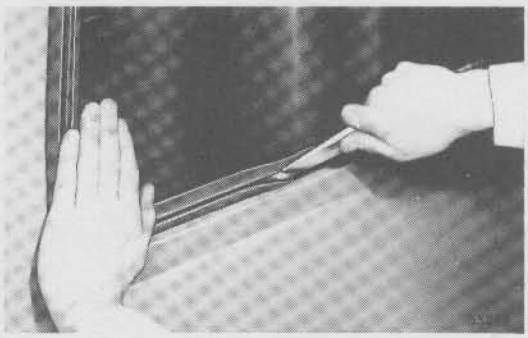
The cab backlight is of toughened plate mounted in a rubber glazing channel (1) which incorporates a filler strip (2).



To remove glass, prise out filler strip, after which glass can be pressed out of glazing channel from inside cab.

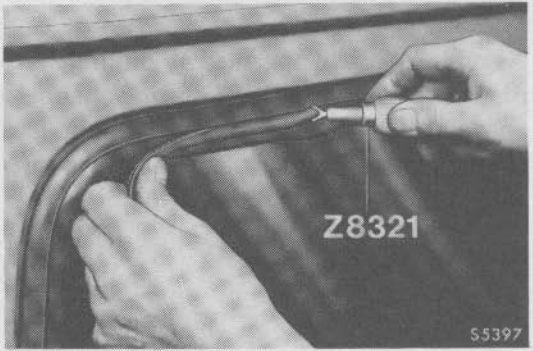
On reassembly, install glazing channel in aperture with filler groove outwards and brush soap solution around glazing channel and into filler groove.

Use a blunt tool to ease lip of glazing channel over edge of glass.



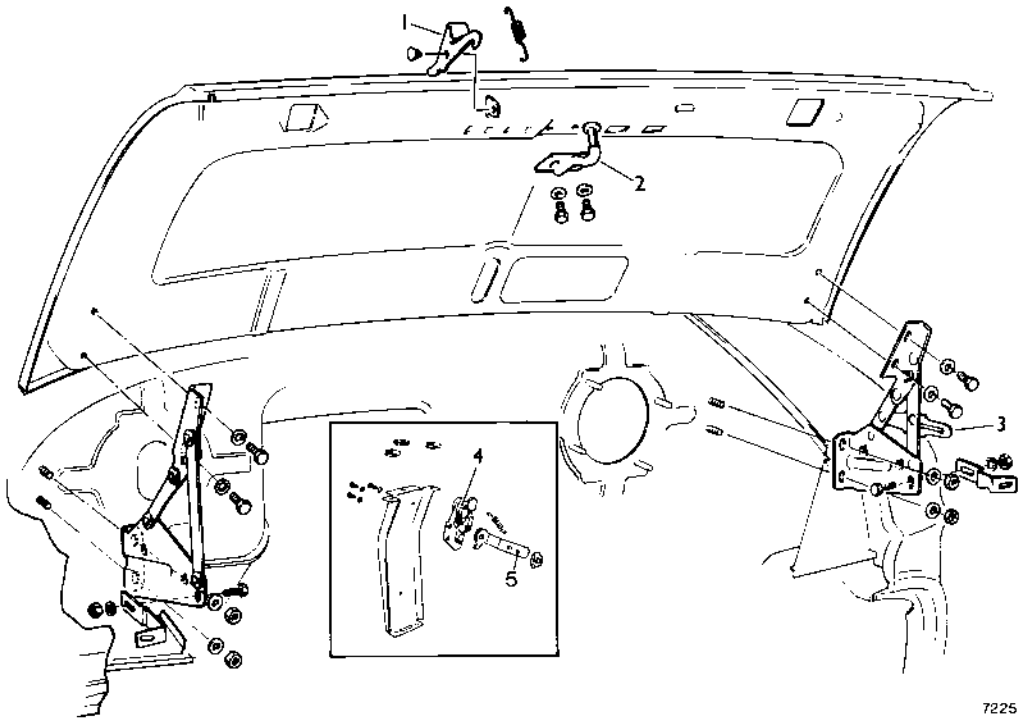
CAB BACKLIGHT GLASS (contd)

Use Installer Z8321 to assemble filler strip to glazing channel, starting at the top centre.



BONNET

BONNET



On early models the bonnet has link-type hinges bolted to the engine compartment bulkhead, one of which incorporates a slotted lever (3) to hold the bonnet in the open position.

The bonnet is secured in the closed position by a hook-type catch (4) mounted on a support attached to the radiator grille and front panel.

The catch engages a striker pin (2) on the bonnet, and is released by pressing upwards a lever (5) situated under the front panel.

A separate safety catch (1) is situated on the bonnet, and can be operated after releasing the main catch.

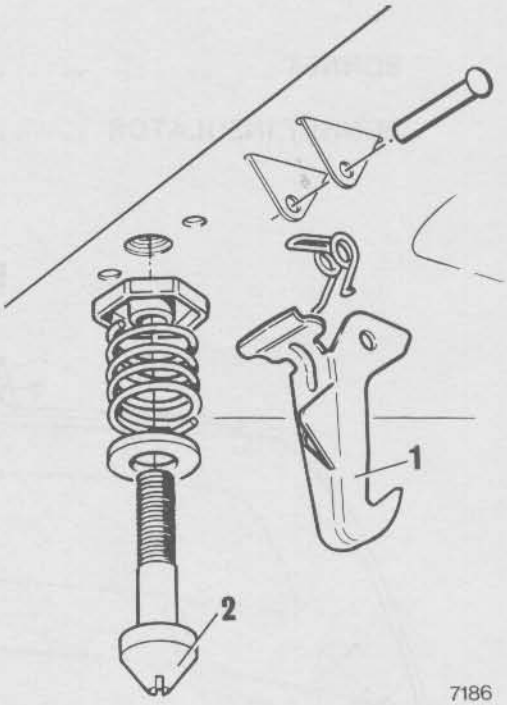
Two adjustable buffers are provided on the radiator grille.

For adjustment, slotted holes are provided in the hinge brackets and striker pin plate.

To gain access to catch support lower bolts, radiator grille must be removed.

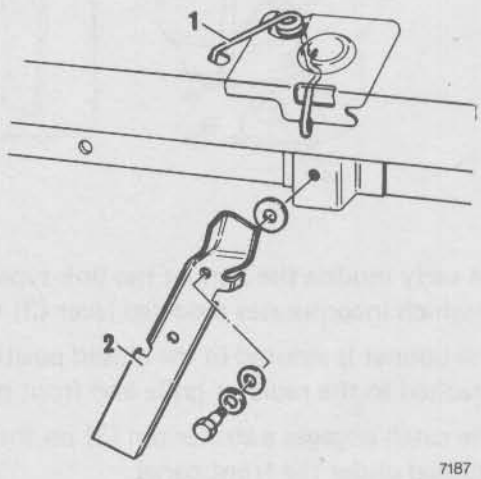
On later models the same type of hinges are used except they are bolted to the inner wing panels.

The bonnet is secured in the closed position by a spring-type lock and separate safety catch (2). The dovetail bolt (1) can be adjusted to ease bonnet closure and maintain bonnet contact to rubber buffers when closed.



Dovetail bolt head should be smeared with high melting point grease.

The dovetail bolt engages a lock spring (1) in the front panel which can be released by lever (2) accessible through the radiator grille.



Two adjustable buffers are provided on the underside of bonnet for bonnet landing adjustment, and for bonnet alignment within the aperture slotted holes are provided in the hinge brackets.

BONNET INSULATOR

On some models an insulator is clipped to the inside of the bonnet. Clips can be removed by prising out of fixing holes in bonnet inner panel.

DOORS

1

VAN SLIDING DOORS

Van sliding doors are roller-mounted at the top, with a guide rail at the bottom, and are provided with push-button outside handles and sliding windows.

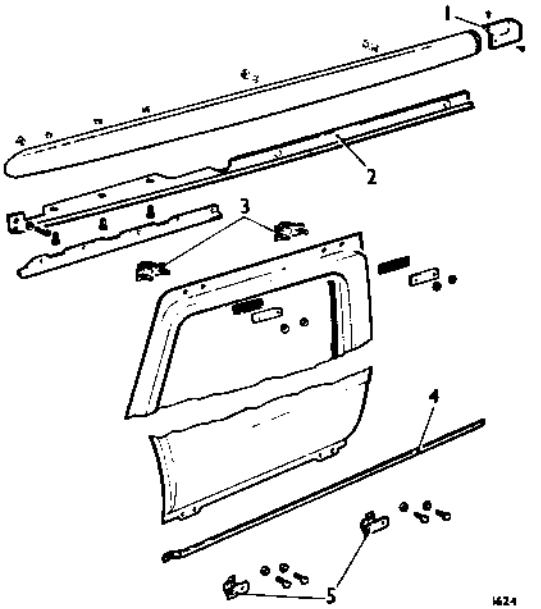
The door locks incorporate a catch to hold the door when in the open position.

VAN SLIDING DOOR ROLLERS, GUIDES AND WEATHERSTRIPS

The door is supported by two roller assemblies (3) attached to the top flange of the door and operate on a rail (2) which is attached to the body side panel and door aperture.

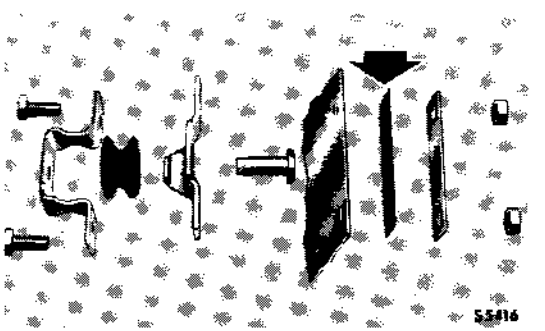
The bottom of the door is retained by two guide brackets (5) attached to the lower flange of the door. The brackets bear against a guide rail (4) bolted to the body side panel and step.

Before removing door it is necessary to remove cowl end capping (1), inside door handle, door rear striker and bottom guide brackets.

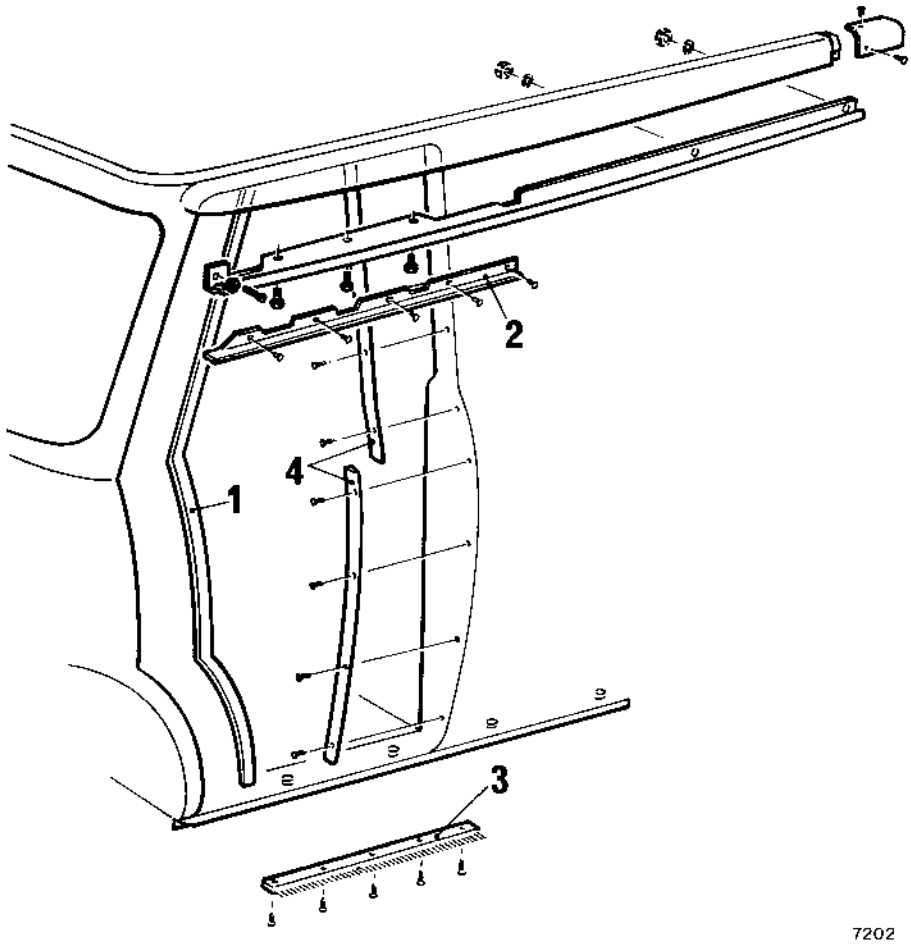


To remove, pull door outwards to avoid damaging door aperture rear weatherstrip and at the same time slide door rearwards to disengage from upper rail.

When reassembling rollers to door, ensure that friction plate (arrowed), is installed between retaining plate and door flange.



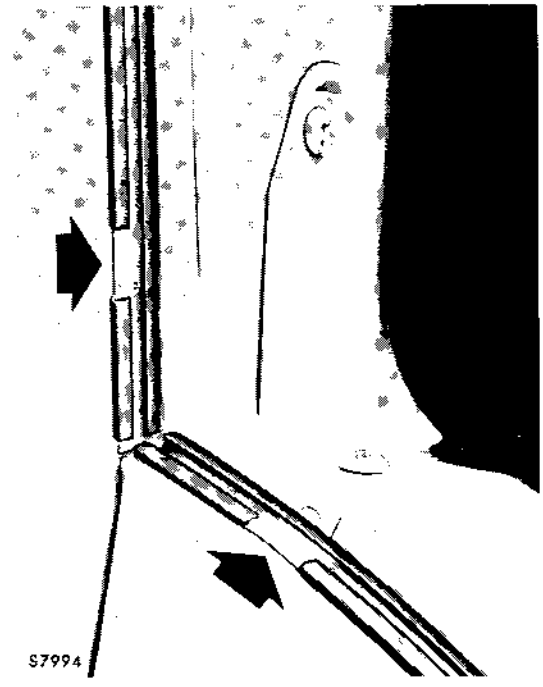
Slotted holes in the lower guide rail and packing washers between the rail and body at the front end are provided for adjustment of the door.



7202

The front weatherstrip (1) is held on the slam pillar by a channel sectioned retainer, which is welded and riveted to the pillar. Upper weatherstrip (2) is attached to the upper rail by pop rivets. A lower weatherseal (3) which is a brush type, is screwed to the underside of the step panel. The rear weatherstrip (4) is in two sections and attached to the rear door pillar by self-tapping screws.

When renewing a front weatherstrip, for ease of installation it is necessary to apply a solution of liquid soap to the channel prior to installing the weather-strip through the slots (arrowed) in the channel. Ensure that the back lip of the weatherstrip is correctly installed and progressively feed the weatherstrip into the channel. The last section of the weatherstrip between the two slots can be eased into position using a suitable tool.

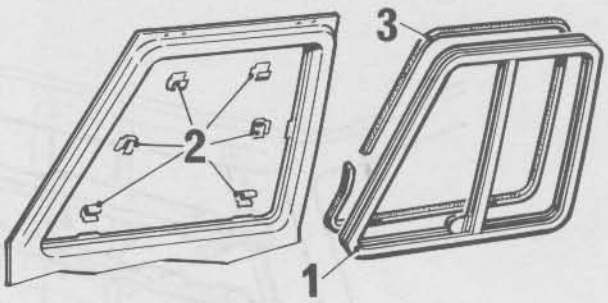


S7994

VAN SLIDING DOOR WINDOWS

The doors incorporate sliding windows in frames (1). The window frame is retained in the door by six clips (2), located in slots in the door inner panel.

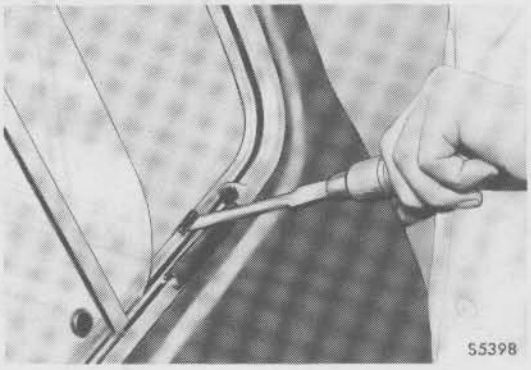
To provide a watertight seal, a length of adhesive backed foam (3) is attached to the inner face of the window frame.



7201

To renew seal, frame assembly must be removed.

To remove frame, lever out retaining clips, after protecting glass run channel with a short length of door edge finisher.



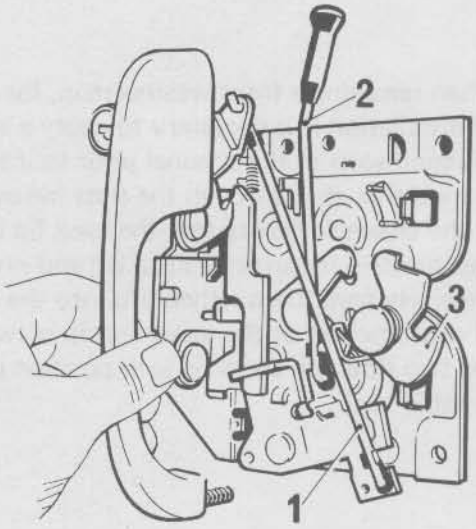
55398

VAN SLIDING DOOR LOCKS AND HANDLES

The locks on sliding doors incorporate two hook-type catches, one to retain the door in the closed position, and another (3) to hold the door open by engaging a striker on the rear pillar. The catches are operated by a push-button outside handle.

The handle on the driver's door incorporates a key lock which is connected to the locking plate by a rod (1).

Both doors can be locked from the inside by a rod (2) which is also connected to the locking plate.

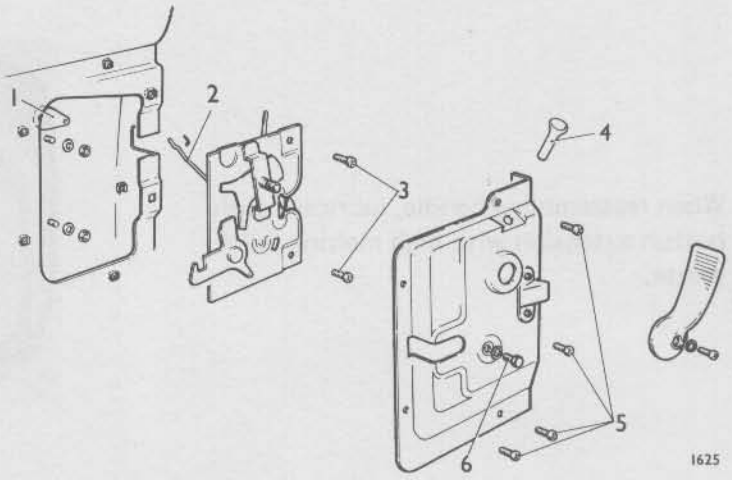


Before detaching lock from door it is necessary to remove door inside handle, lock button (4), four screws (5) around lock cover, and one bolt (6) in centre of cover.

The lock is attached to the door inner panel by two screws (3).

With door handles incorporating a key lock it is necessary to unhook rod (2) from handle lever (1).

Before installing lock, smear high melting point grease on all working parts.

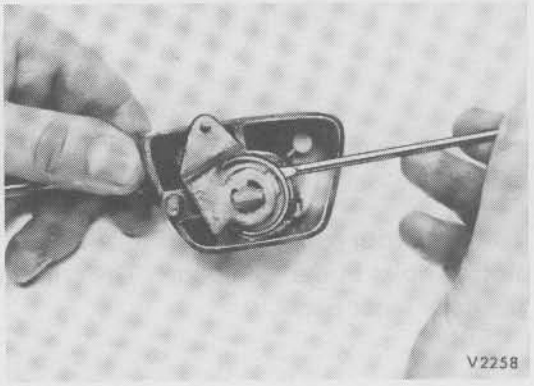


Ensure that anti-rattle springs are attached to each end of lock rods.

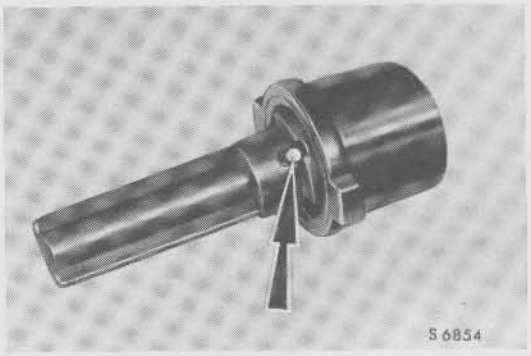
Toothed lockwashers should be installed on lock cover centre screw and door inside handle retaining screw.

To gain access to door outside handle securing nuts, door lock must be removed.

To release push button from handle, remove spring clip from boss of handle.

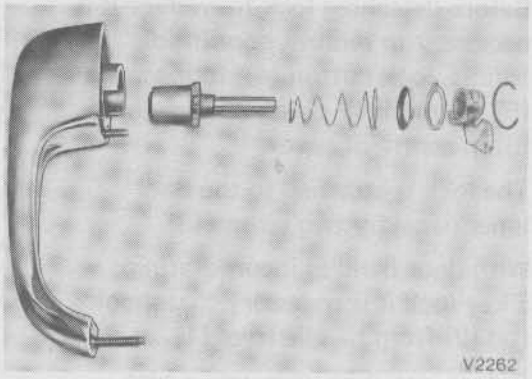


To release lock barrel from push button, press down spring-loaded plunger in end of barrel and remove extension.



When installing lock barrel lubricate internal surfaces of barrel wards with a non-greasy lubricant such as Loclube, WD-40 or dry graphite. The use of machine oil could result in damage to lock caused by grit or fluff adhering to the lock wards.

When reassembling handle, lubricate push button extension with high melting point grease.



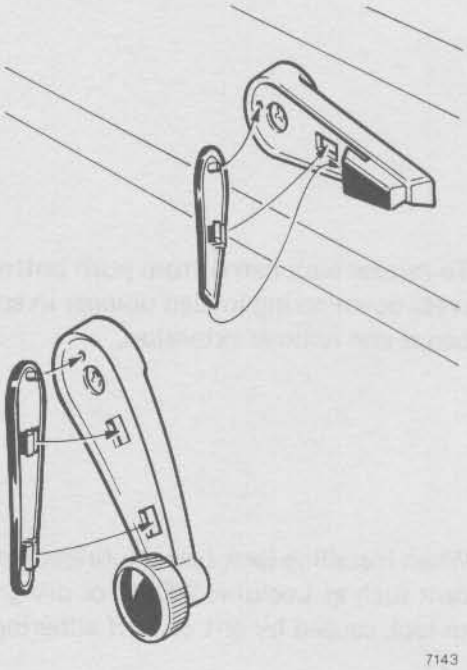
When assembling outside handle to door, ensure that gasket and spacer are in position. A reinforcing plate is installed between handle securing nuts and door panel.

Install inside handle one spline forward of vertical position.

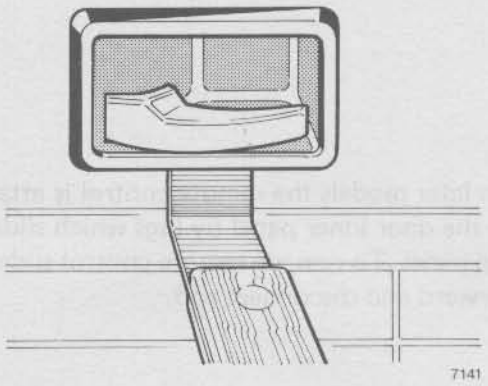
FRONT SLAM DOORS

The door trim pad is attached to the door inner panel by plastic press-type fasteners located in slotted holes in the trim panel. The arm rest is secured by two screws through the trim pad to the door inner panel.

On early models the remote control and window handles are secured by screws to their respective centre spindles and are accessible after prising out plastic inserts.

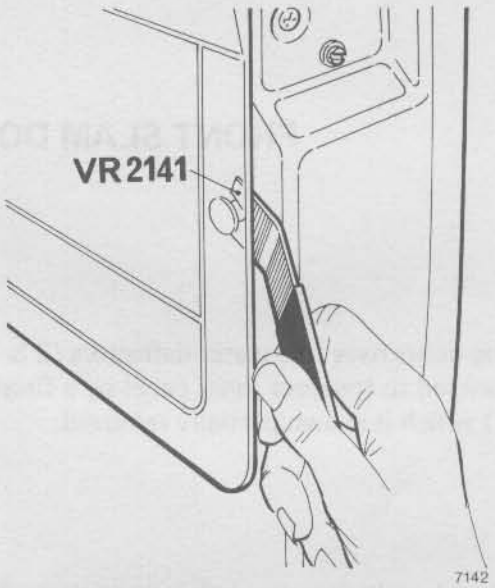


On later models the remote control has an escutcheon which clips around the remote control casing. Use a thin blade to prise off escutcheon.



After removing armrest, remote control handle or escutcheon and window regulator handle trim pad can be detached from door inner panel using Remover VR2141.

To prevent damage to door trim pad when disengaging trim fasteners from door inner panel, care must be taken to ensure that blade of remover is positioned as close as possible to fasteners.



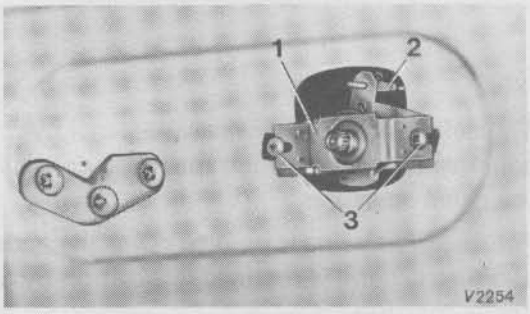
FRONT SLAM DOOR LOCK REMOTE CONTROL

On early models each door lock is operated from the inside of the vehicle by a remote control secured to the inside of the door inner panel by two screws, and connected to the lock by a rod.

When installing remote control (1) ensure anti-rattle spring (2) is assembled to rod, and lubricate friction surfaces with high melting point grease.

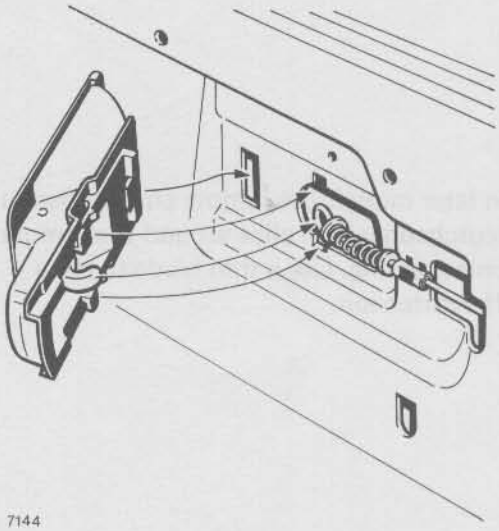
Ensure that remote control rod is situated between window regulator and door inner panel.

Before tightening screws (3), ease remote control forward to eliminate slackness in linkage.



Remote control handle should face towards front of door in the horizontal position. Screw is retained by an internal-toothed lockwasher.

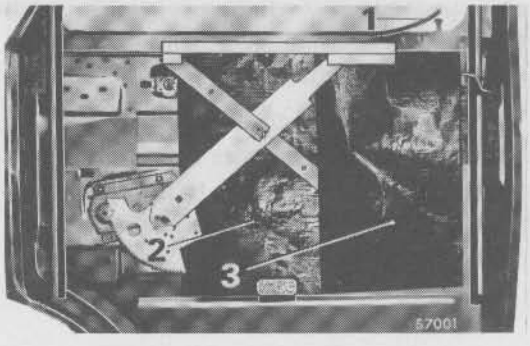
On later models the remote control is attached to the door inner panel by lugs which slide onto the panel. To remove remote control slide forward and disconnect rod.



7144

FRONT SLAM DOOR WATER DEFLECTORS

The doors have two water deflectors (2 & 3) clamped to the door inner panel by a finisher (1) which is shown partially removed.



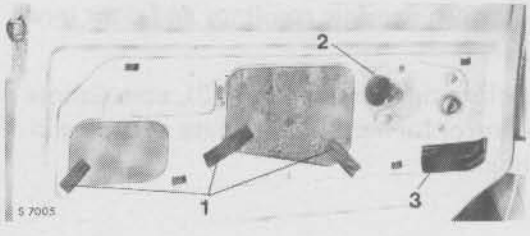
When installing water deflectors, adjust window glass regulator until glass is half-way between fully open and fully closed. Lower deflector (2) into door between window glass and inner panel, with the edge of the deflector having cut-away corners uppermost. Slide deflector towards window regulator as far as possible, then bend upper edge of deflector over edge of inner panel and secure by pressing edge finisher (1) into position.

Deflector (3) should be installed in a similar manner making sure that the lower edge of deflector passes between regulator lower balance arm and door outer panel. Also deflector (3) must be positioned so that it overlaps deflector (2) by the full width of the mating cut-away corners of the upper edges.

The deflector is held against the panel by adhesive tape (1) through the lower corners of the panel apertures.

Polythene sheeting is used to cover the panel aperture (2) and is retained in position by adhesive solution.

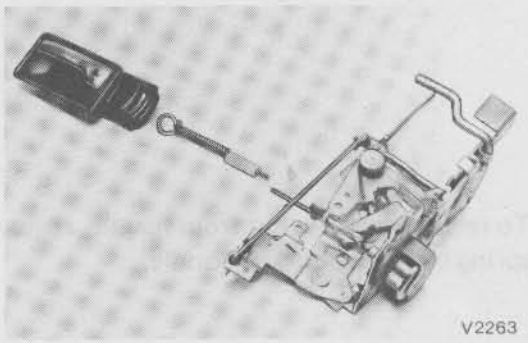
To prevent water leakage at the lower hinge screw holes, a strip of waterproof adhesive tape (3) is used to seal the area surrounding the screw heads.



FRONT SLAM DOOR LOCKS, OUTSIDE HANDLE AND STRIKER

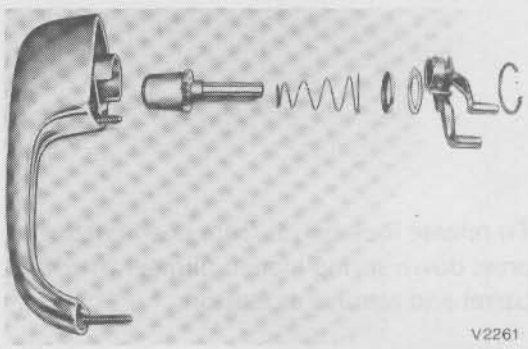
The door locks are mounted inside the door shut and have a rotary toothed pinion which engages a striker on the door rear pillar.

The lock is connected to a remote control and a locking button by two rods.



V2263

The door outside handles are of the push-button type, the handle on the driver's side incorporating a lock barrel.

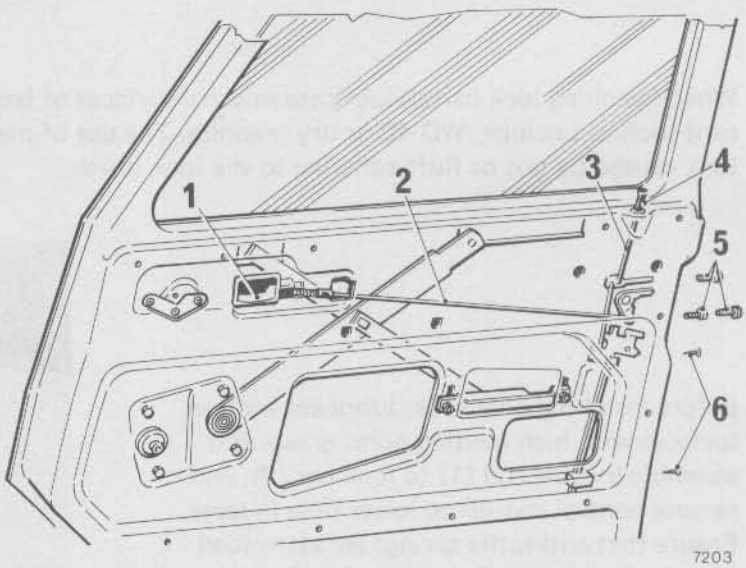


V2261

To remove door lock, it is necessary to remove locking button (4), the two screws (6) securing window glass run channel support, remote control (1), and detach remote control from rod (2). The lock is secured with three screws (5).

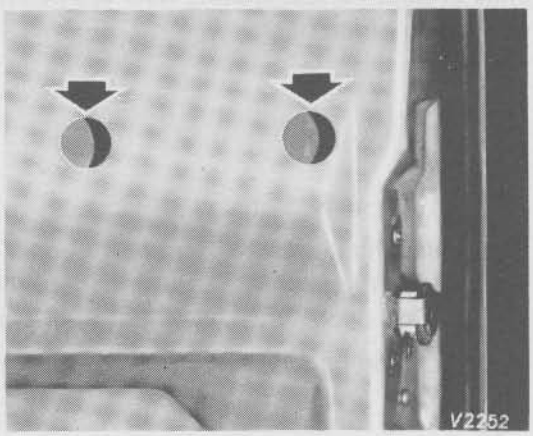
Lock can be withdrawn through large access aperture after disconnecting remote control rod and locking rod (3).

Outside handle can be left in position.



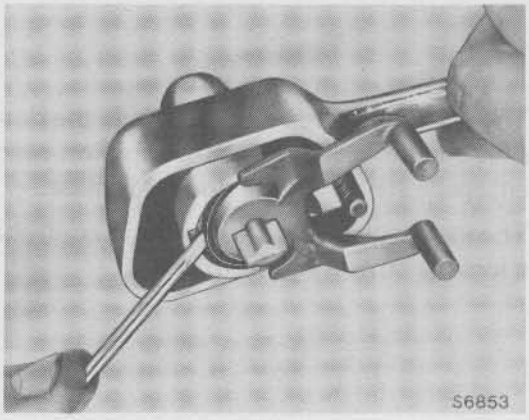
7203

Access to door outside handle retaining nuts can be gained through holes arrowed, when trim pad is removed.

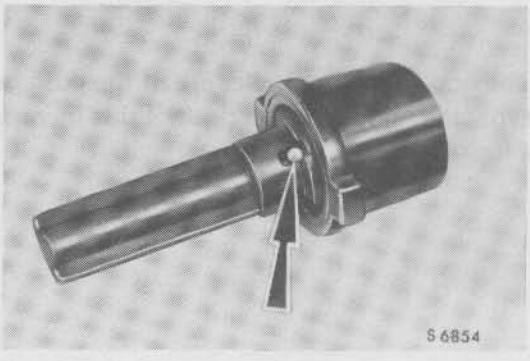


V2252

To release push button from handle, remove spring clip from boss of handle.

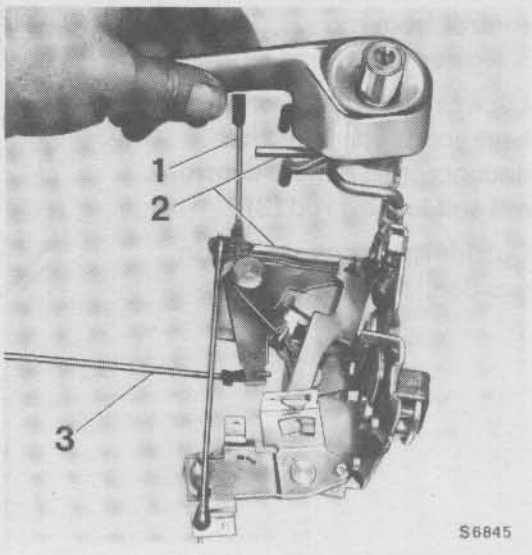


To release lock barrel from push button, press down spring-loaded plunger in end of barrel and remove extension.



When installing lock barrel, lubricate internal surfaces of barrel wards with a non-greasy lubricant such as Loclube, WD-40 or dry graphite. The use of machine oil could result in damage to lock caused by grit or fluff adhering to the lock wards.

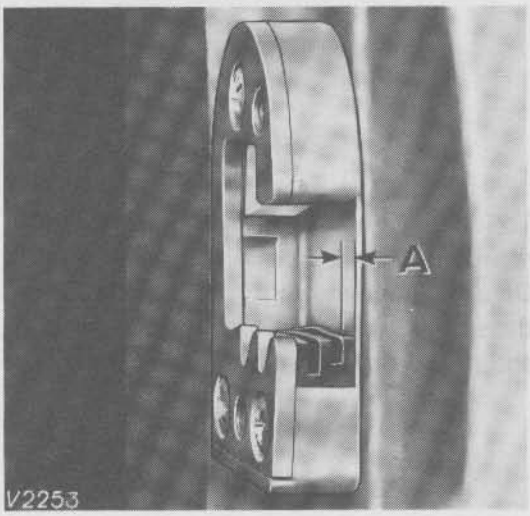
Before installing door lock, lubricate friction surfaces with high melting point grease and assemble locking rod (1) to lock bar (2), and remote control rod (3) to lower hole in lever. Ensure that anti-rattle springs are assembled to rods. On installation ensure that forked ends of door handle locking lever are positioned either side of lock bar.



Before installing a striker, ensure that door is correctly aligned in body aperture. Prior to finally tightening striker screws, ensure that striker lower face is horizontal, and with outside handle push-button depressed, check that door closes smoothly.

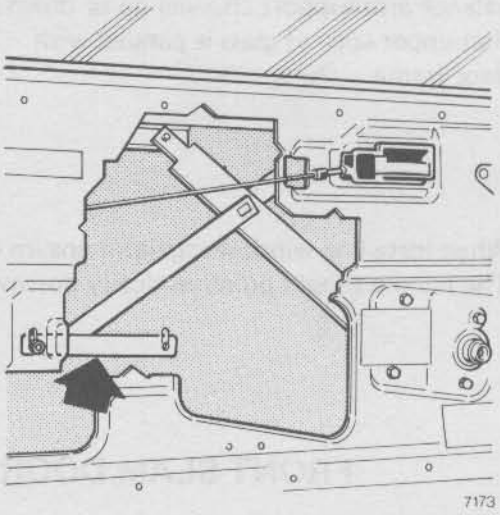
Striker should be adjusted up or down, or in or out as required.

Fore and aft location of striker can be checked with plasticine applied to notch of striker. If, after pushing door towards striker, to form an impression in plasticine, dimension 'A' is greater than 0.18 in., packing plates should be installed between striker adjusting plates and body panel.



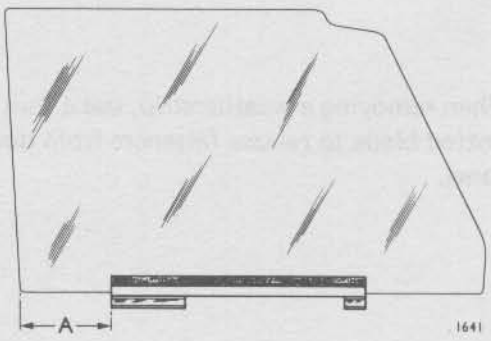
FRONT SLAM DOOR WINDOW GLASS, REGULATOR AND CHANNELS

The door window regulators incorporate two balance arms riveted to a main arm. The balance arms pivot about the rivet to ensure an equal lift at the front and rear of the glass. The lower balance arm engages an adjustable support channel (arrowed) attached to the door inner panel.

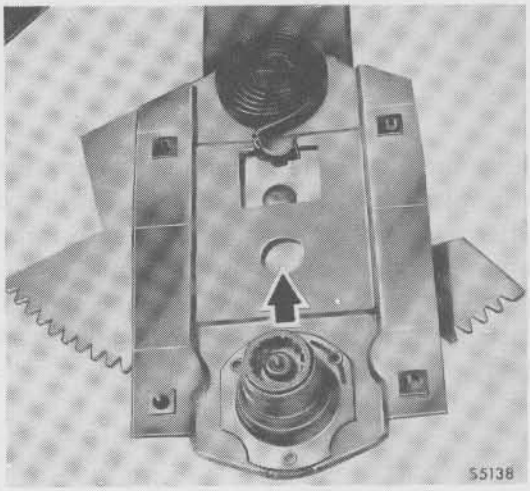


Door window glass can be withdrawn without removing sill seals.

When renewing a window glass or support channel, assemble channel so that open side of channel guides are towards inside face of glass and that dimension 'A', from end of longer guide to rear edge of glass, is 152 mm (6.00 in.).

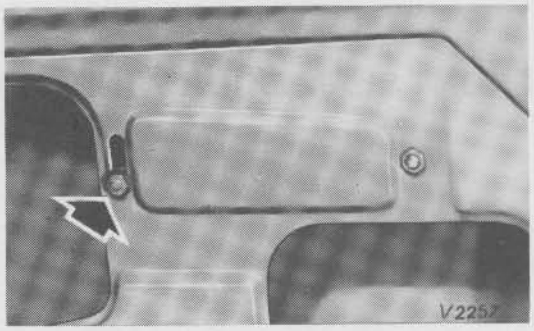


To identify a left-hand from a right-hand regulator, view it from direction arrowed. On a left-hand assembly, the curled end of the spring is to the left of the anchor point, and reversed on a right-hand assembly.



Before installing regulator, lubricate support channels and regulator with high melting point grease.

After installing regulator, adjust lower balance arm support channel up or down so that upper edge of glass is parallel with door frame.

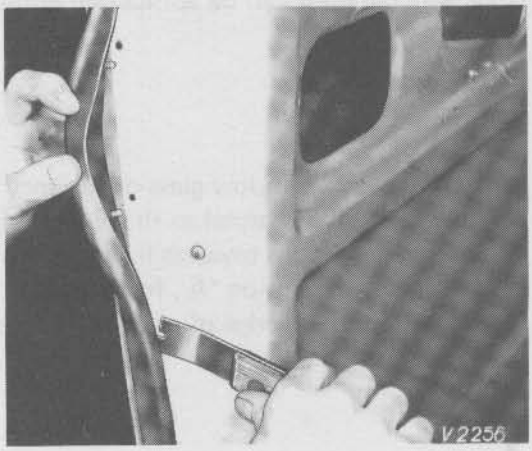


When installing window regulator ensure wearing disc is located between trim pad and handle. The handle should point vertically downward with window closed.

FRONT SLAM DOOR WEATHERSTRIPS AND SEALS

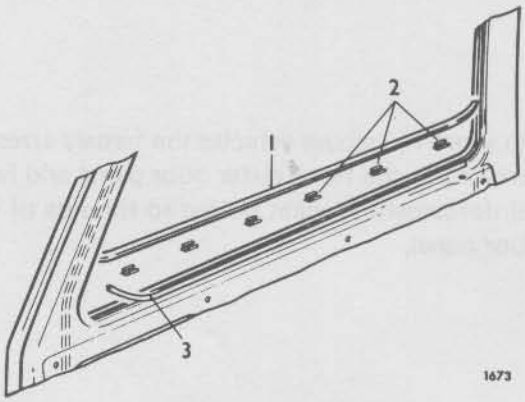
The door weatherstrip is attached around the outer edge of the door by plastic fasteners.

When removing a weatherstrip, use a thin slotted blade to release fasteners from door panel.



On installation, start at lower edge, which is identified by its reinforced and moulded corners.

The window sill outer seal (1) is attached to the door outer panel by six clips (2). The window inner seal (3) is pressed on to the door panel.



Outer seal can be prised out of clips without removing glass. Clips can then be removed from door panel.

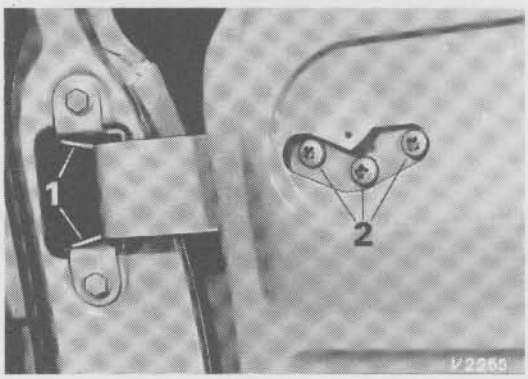
When installing seal, assemble clips to seal and press on to lip of door outer panel.

When installing inner seal ensure water deflectors are secured under seal.

FRONT SLAM DOOR HINGES

The door hinges are bolted to the door front pillar, and the upper hinge incorporates a spring (1) to hold the door in the open position.

The door is attached to the hinge arm by three screws (2) which are accessible after removing the door cover panel or trim pad.

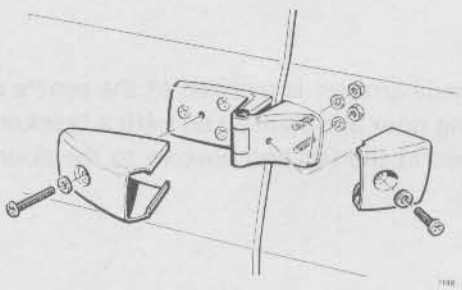


Clearance holes in the hinge arms are provided for alignment of the door in the body aperture.

SIDE LOADING SLAM DOOR

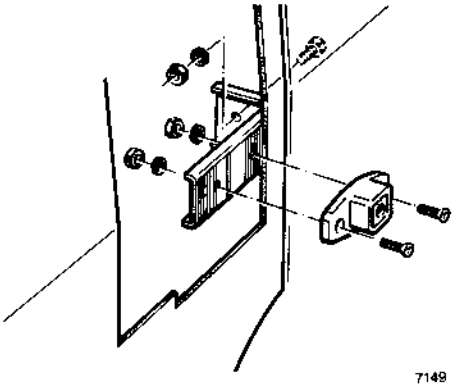
The door lock, handle, striker and weatherstrip are of the same type as the slam front doors.

The door hinges are held by screws and studs. A sliding plate held captive in the door panel facilitates door adjustment. A plastic cover clips over both halves of hinge and held by a central screw fixing.

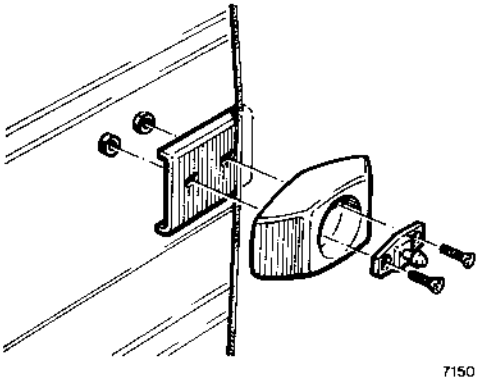


An arrestor is provided to retain the door in the fully open position. On short-wheelbase vehicles the door is retained onto the front door and long-wheelbase vehicles the door is retained on the side extension panel.

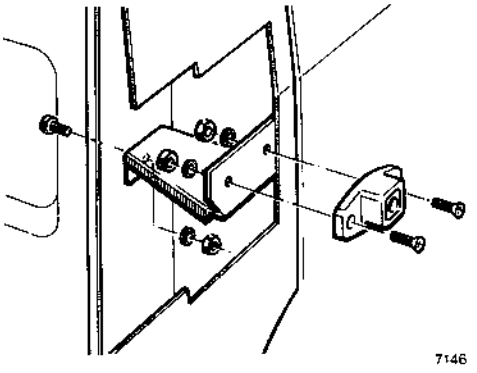
On short-wheelbase vehicles the female arrester is screwed to the front outer door panel and has a reinforcement bracket bolted to the side of inner door panel.



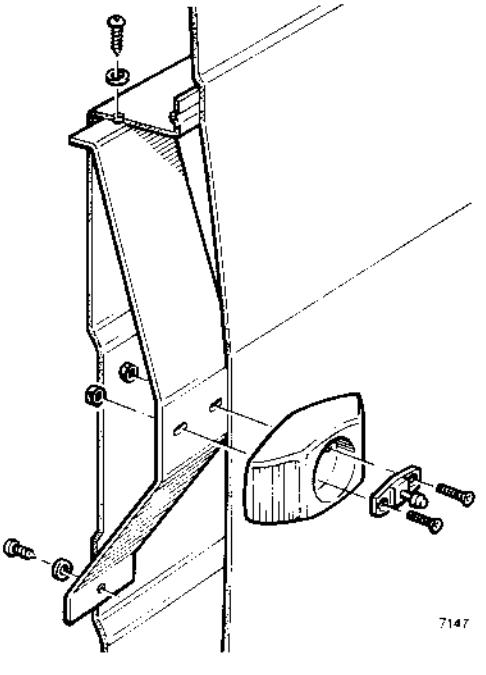
The male arrester is screwed to the edge of side loading door and also has a reinforcement plate at the rear.



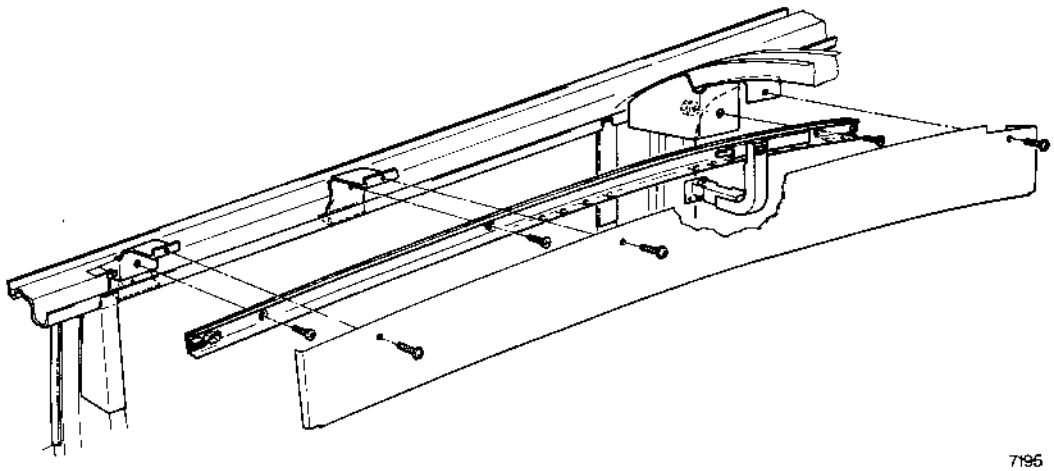
On long-wheelbase vehicles the female arrester is screwed to the side extension panel and reinforced with an angled bracket to inner panel.



The male arrester is screwed to the centre of side loading door and reinforced with a bracket screwed at the top and bottom to the door inner panel.



SIDE LOADING SLIDING DOOR



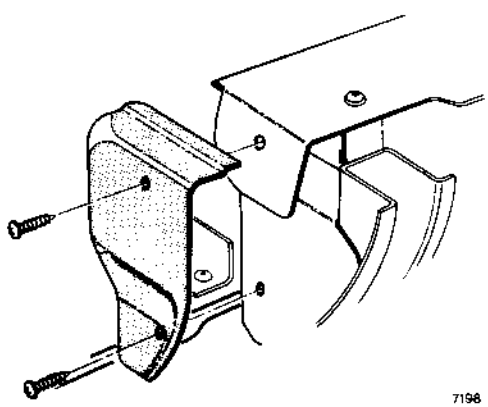
7195

The side loading door is mounted on rollers at the top centre and bottom of door and moves outwards and along the van body. The door is held in the closed position by a lock assembly and released by an identical exterior handle as the front slam door. The door is held in the open position by a spring keep at the end of the top rail.

The door weatherstrip is of the same type as the front slam door.

The top roller track is held to the van top inner rail by three screws, two having captive nuts and the front having a nut and washer.

On short-wheelbase vehicles with rear bulkhead installed, the front roller track fixing is accessible after removing cover.



7198

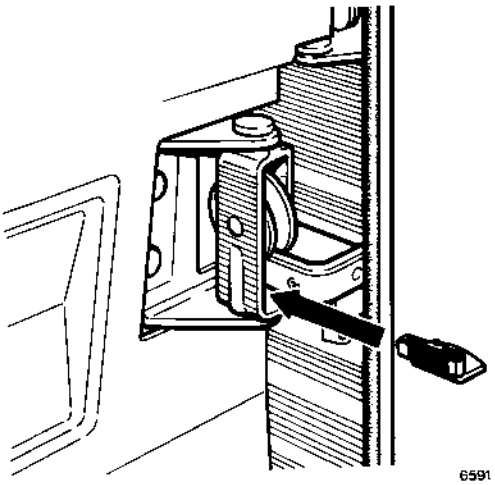
The centre arm is located into a channel which is riveted to the inner door panel and incorporates nylon stops at each end.

The outer centre track which the trolley assembly runs on is secured to the side of van by four nuts and three bolts.

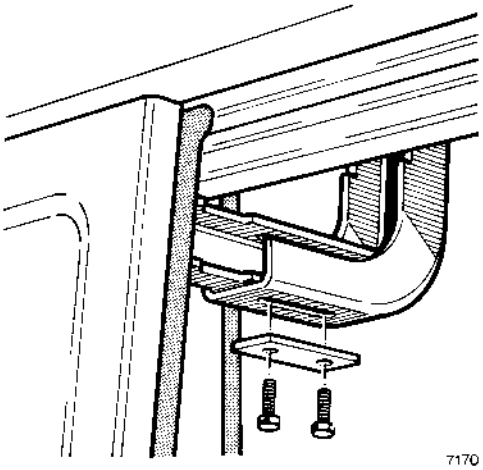
The bottom track which guides the roller assembly is partially concealed by a wood surround, to gain access to the bottom track the inner wood surround secured by two screws should be removed.

SIDE LOADING SLIDING DOOR – Removal

With the door in the closed position remove the plastic slipper from trolley bracket by releasing the retaining lugs on both ends of slipper.

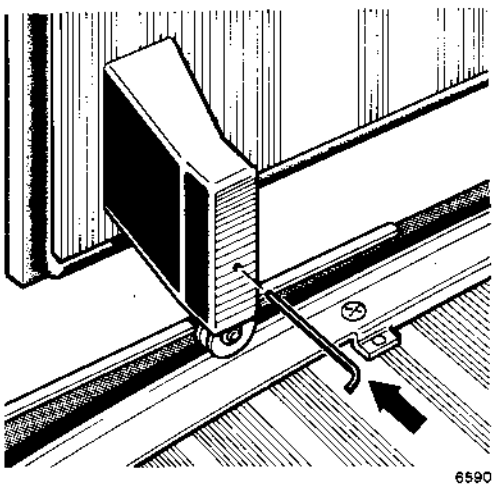


Remove the two bolts securing upper pivot bracket to arm. Door can be removed after releasing door catch and lifting door upwards while leaning slightly outwards at the top.



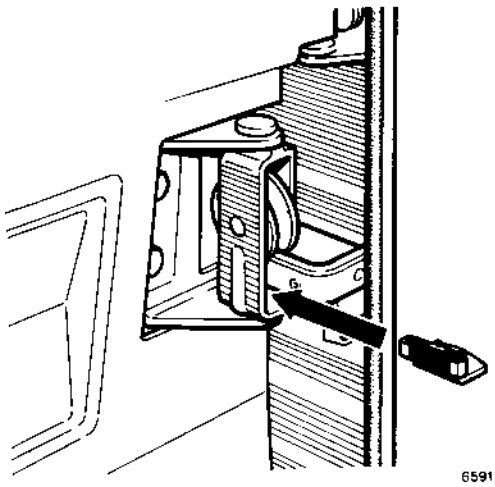
SIDE LOADING SLIDING DOOR – Installation

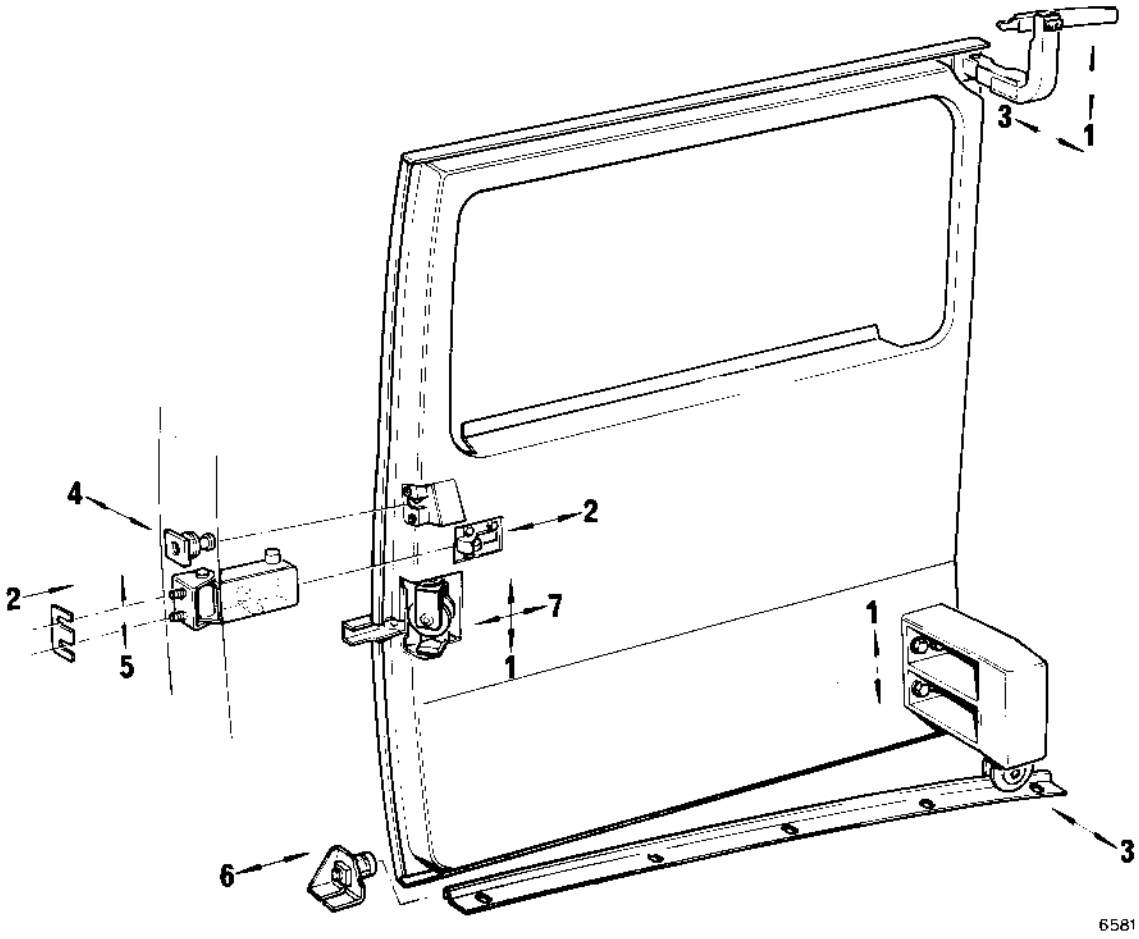
Install spring-loaded roller assembly into lower arm and while compressing the spring, insert a pin through the hole in the lower arm and into corresponding hole in the roller assembly.



Offer door into aperture, locating upper pivot bracket and engage the centre arm to inner door panel channel and trolley assembly to outer panel track. Engage bottom roller and remove pin. Carefully close door and install the two bolts securing upper pivot bracket to arm.

Reinstall plastic slipper into trolley bracket ensuring retaining lugs on both ends are securely engaged.

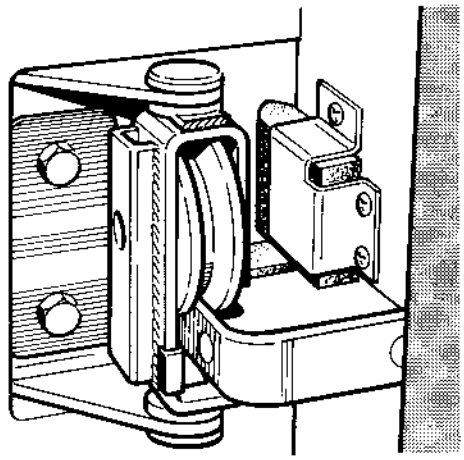




Adjust door alignment using the methods of adjustment indicated in the illustration.

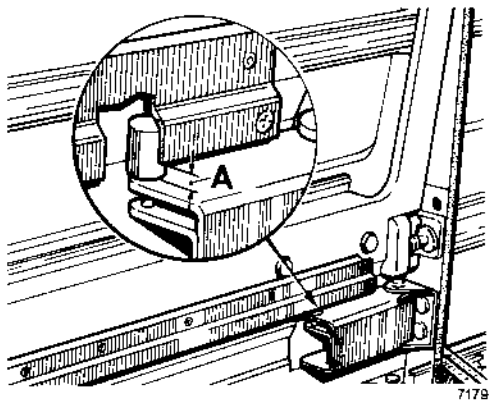
1. Door vertical adjustment in aperture.
2. Door horizontal adjustment in aperture.
3. Door front edge, inboard/outboard to body adjustment.
4. Door rear edge, inboard/outboard to body adjustment.
5. Centre arm to cam clearance.
6. Door stop on lower track, adjusted to match catch on upper track.
7. Trolley bracket horizontal adjustment, to position wheel centrally on waist track outer with door closed.

Adjust trolley bracket with door closed so that wheel lies centrally on track.



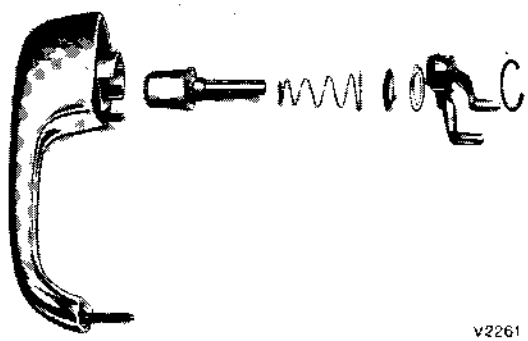
Adjust cam and centre arm so that roller on centre arm aligns with slot in cam.

With door finally adjusted, the dimension between centre arm assembly and lower edge of inner waist track 'A' must not exceed 8 mm (0.32 in.) during centre arm pivot operation or when door is closed.



SIDE LOADING SLIDING DOOR LOCK, HANDLE AND STRIKER

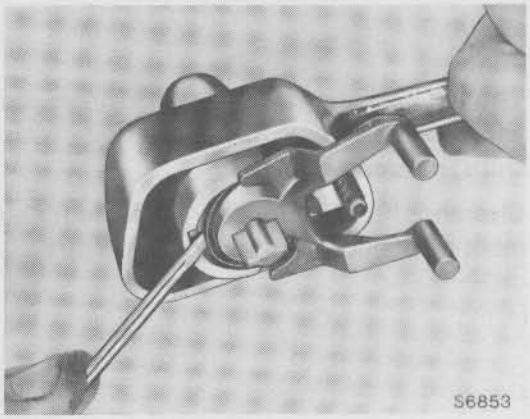
The door outside handle is of the push-button type and incorporates a lock barrel.



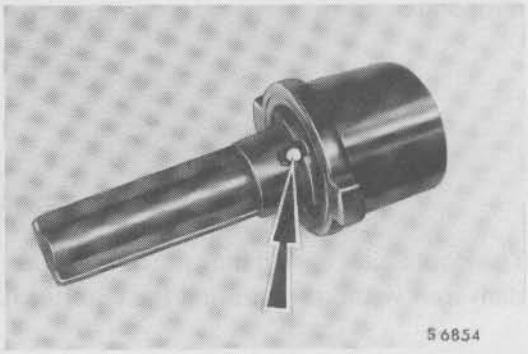
To remove door lock it is necessary to remove the outer catch assembly, inner trim cover, cam and centre arm assembly. To gain access to the outside handle retaining nuts the two rubber plugs on the inside panel must be removed.

Before installing door lock lubricate friction surfaces with high melting point grease.

To release push button from handle, remove spring clip from boss of handle.



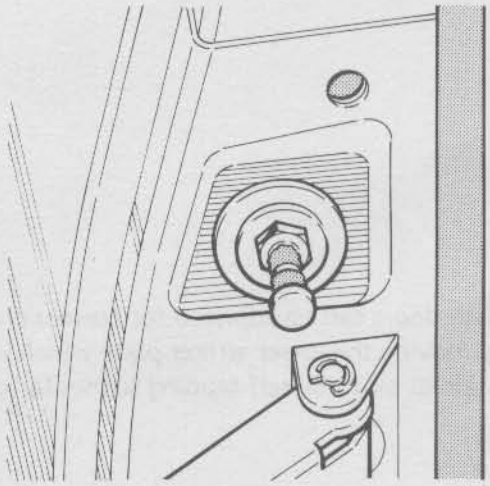
To release lock barrel from push button, press down spring-loaded plunger in end of barrel and remove extension.



When installing lock barrel, lubricate internal surfaces of barrel wards with a non-greasy lubricant such as Loclube, WD-40 or dry graphite. The use of machine oil could result in damage to lock caused by grit or fluff adhering to the lock wards.

On installation of handle assembly and lock ensure that forked ends of door handle locking lever are positioned either side of lock bar.

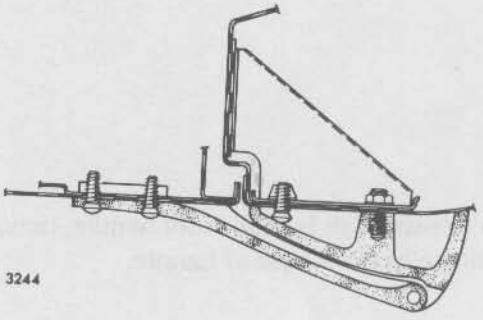
On final adjustment of door closing, plasticine can be used to indicate point of contact of door catch fork bolt. Contact should be approximately in the centre of the striker.



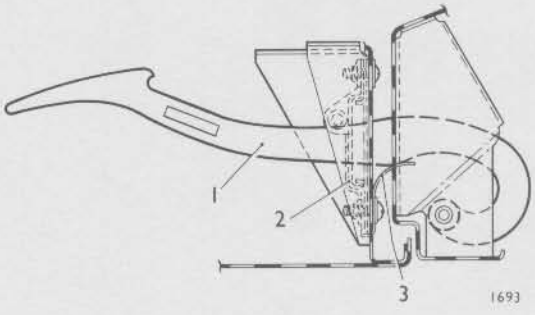
VAN BACK DOORS

The van back doors are hung on hinges screwed to the doors and secured to the body with studs, nuts and screws.

Clearance holes in the doors provide for alignment of the doors in the body aperture.



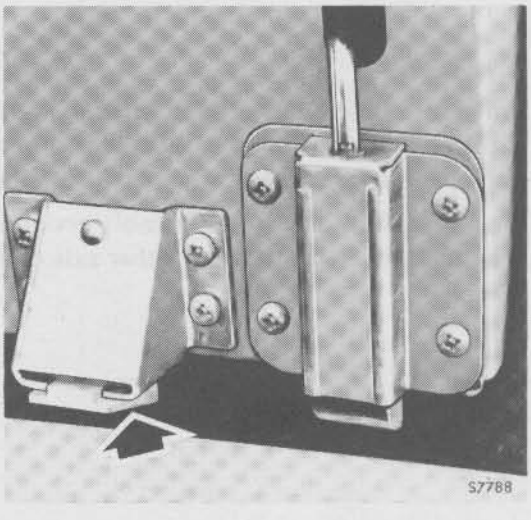
The door check links consist of a shaped bar (1) retainer (2) and a leaf spring (3) secured under the inner screw attaching the retainer to the door shut.



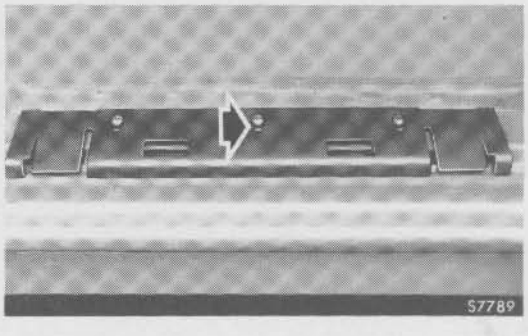
VAN BACK DOORS – Handle, Lock and Catches

The doors have spring bolt pattern locking mechanism, which enables both doors to be slam shut without operating the exterior handle.

Four wedge-shaped guides (arrowed) are attached adjacent to the catches and both locate in adjustable striker plates at the top and bottom of the door aperture.

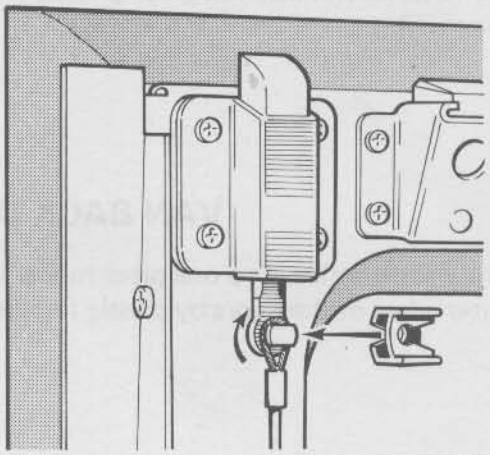


Both doors can be adjusted for correct closure by moving the lower striker plate which is retained by three self-tapping screws (arrowed).

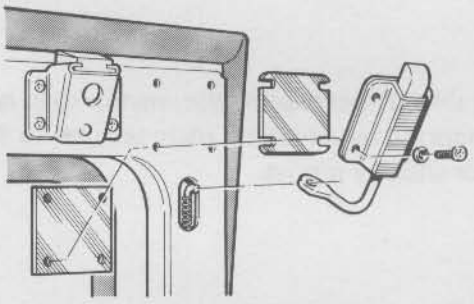


Interior door opening controls are provided by a handle on the right-hand door and a release cable on the left-hand door.

The release cable is hooked over a peg on the catch assembly and covered by a plastic retaining cap.

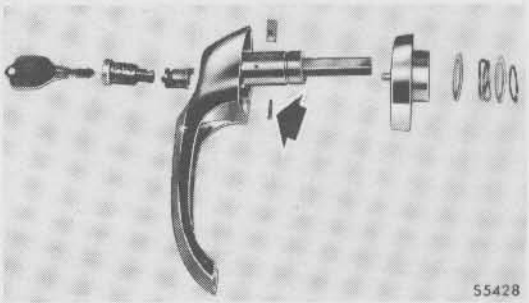


The rod on the right hand door is hooked into the catch. The catch can simply be removed by releasing screws and twisting catch from rod.



The lock, which is held by four screws, can be removed with the rods after the exterior door handle, interior door lever knob and upper and lower catches have been removed.

Before lock barrel and locking tongue can be withdrawn retaining pin must be punched out. For access to pin,circlip, flat washer, spring washer and thrust washer, escutcheon must be removed.



When installing lock barrel lubricate internal surfaces of barrel wards with a non-greasy lubricant such as Loclube, WD-40 or dry graphite. The use of machine oil could result in damage to lock caused by grit or fluff adhering to the lock wards. Other working parts should be lubricated with high melting point grease.

VAN BACK DOOR WINDOW GLASSES

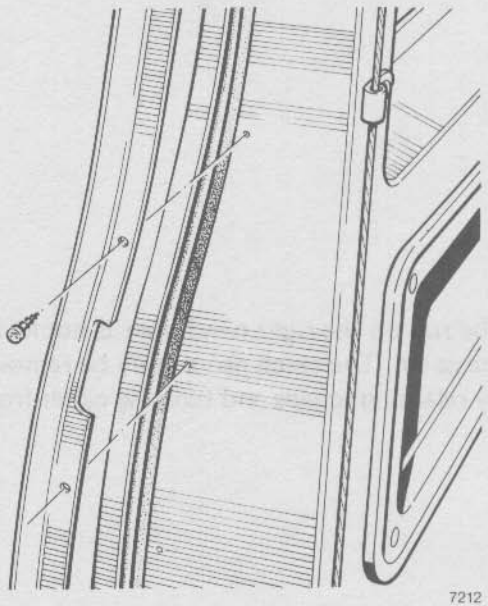
The door window glasses are mounted in glazing channels of identical section to the cab backlight glass.

For removal and installation of glasses, see under 'Cab Backlight Glass'.

VAN BACK DOOR WEATHERSTRIPS

The weatherstrips are a one piece rubber with moulded corners attached around the outer edges of the doors by plastic fasteners.

On the left-hand door, the weatherstrip is also supported by a retainer plate secured to the door shut by screws.



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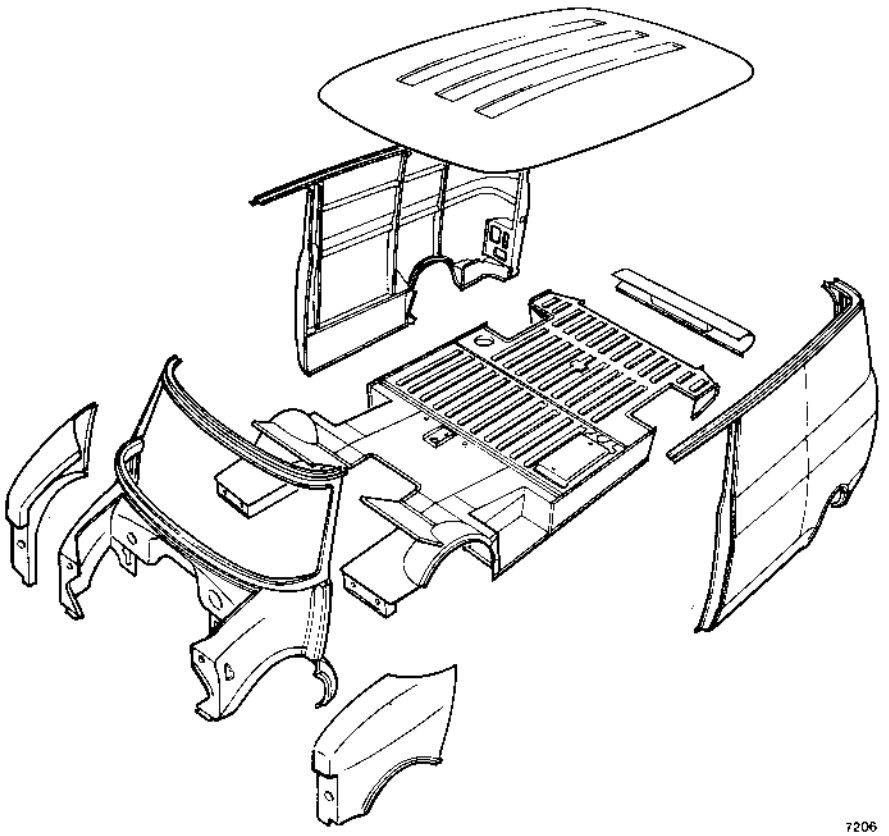
When removing weatherstrip use a thin slotted blade to release fasteners from door panel.

BODY SHELL, SEALERS, ADHESIVES AND EXTERIOR FITMENTS



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The van body is of all-steel integral construction.

The long-wheelbase variant is basically similar to the short-wheelbase model but has deeper longitudinal members and additional crossmembers and a floor extension panel. The long-wheelbase van also has additional side panels and a longer and deeper roof.

The chassis/cab and chassis/cowl underbody and front end is basically the same as the vans, less the floor and sill inner panels. The longitudinal members have additional capping sections and the crossmembers are revised.

BODY PRINCIPAL DIMENSIONS

The following dimensions quoted cover both early and late models and are applicable to all variants. All dimensions are taken from hole centres unless otherwise stated.

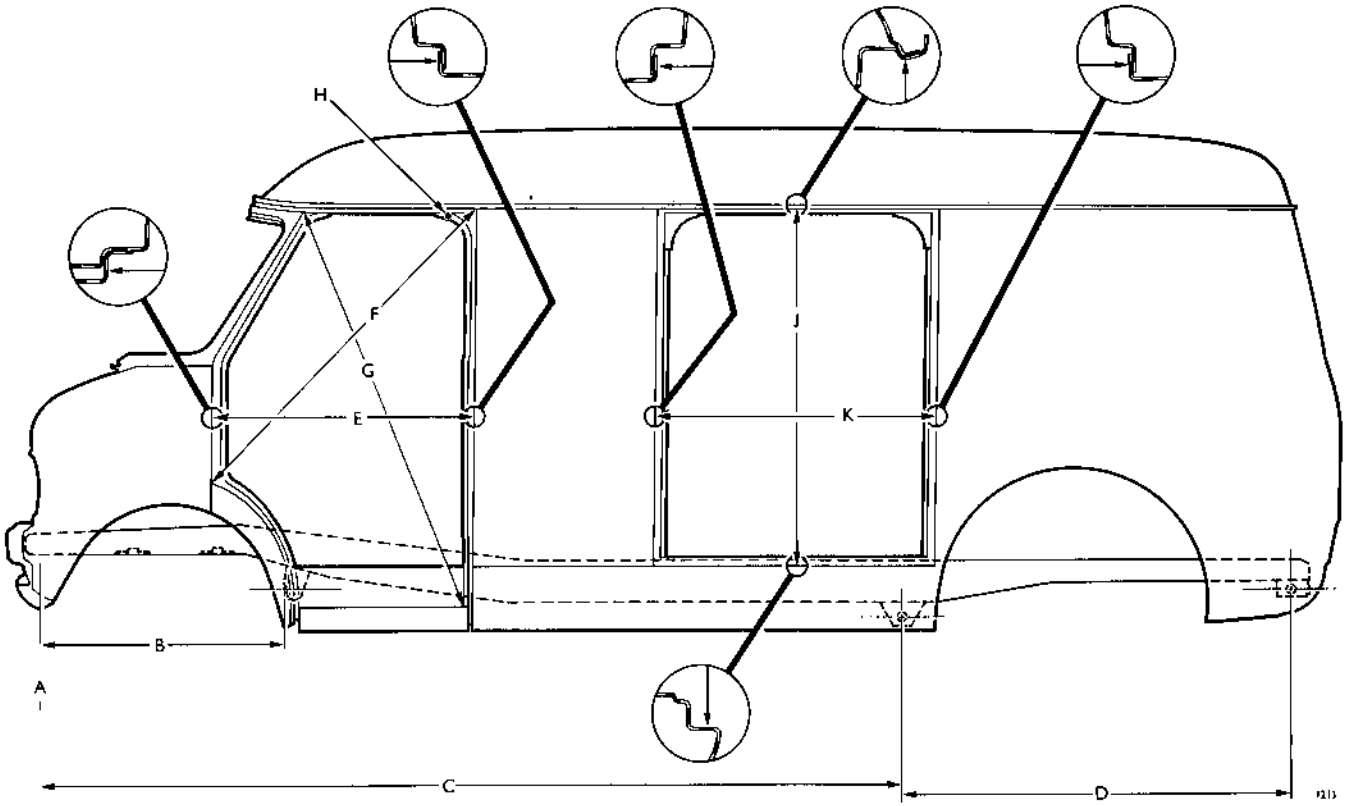
The underbody longitudinal members are parallel to each other, the distance between the inner faces of the members being 913 mm (35.94 in.)

The van body front door aperture dimensions are also applicable to the cab door apertures.

The body side loading door aperture dimensions are the same for long and short-wheelbase variants.

Datum line 'A' is taken from the manufacturing hole on underside of longitudinal member.

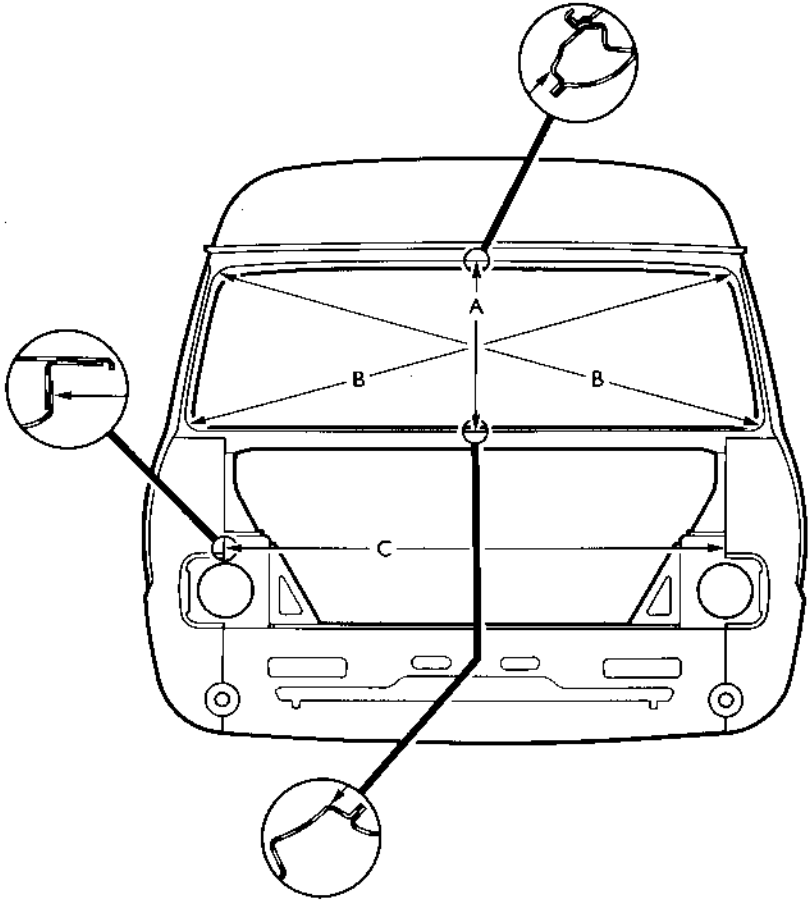
UNDERBODY AND DOOR APERTURE NOMINAL DIMENSIONS (Early Models)

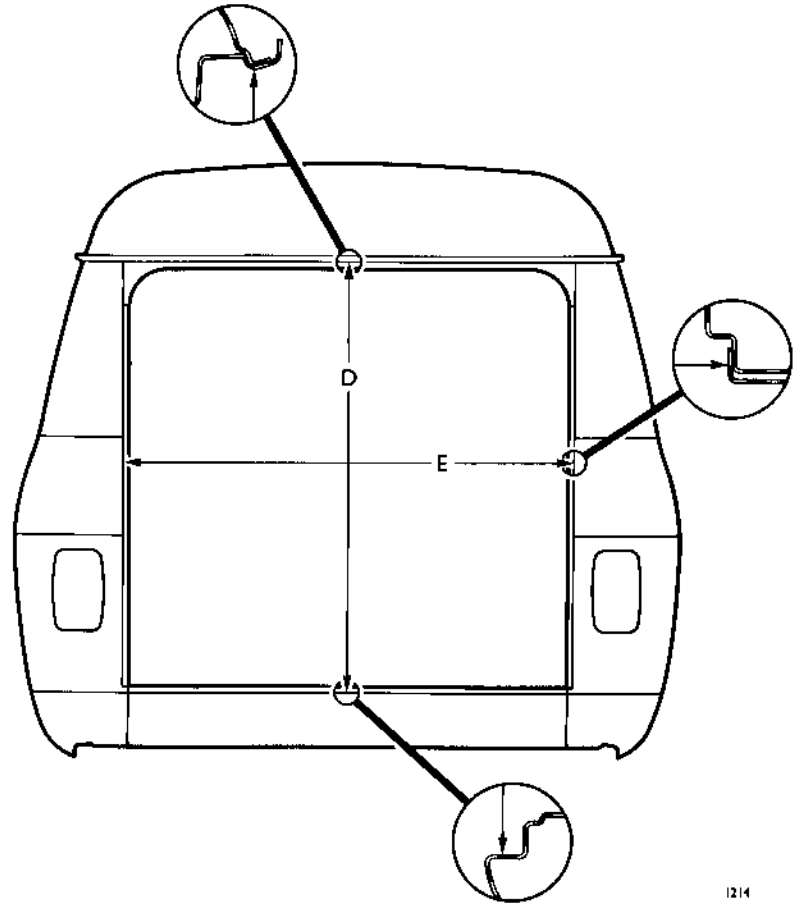


– Front axle control rod support to point 'A' – 643 mm (25.3 in.)
– Rear spring front hanger to point 'A' – 2 309 mm (90.90 in.) on 2 692 mm (106 in.) wheelbase or 2 817 mm (110.90 in.) on 3 200 mm (126 in.) wheelbase.
– Rear spring hanger shackle pin holes – 1 367 mm (53.80 in.)
– Body side front extension or lock pillar to front wing – 919 mm (36.20 in.).
– Junction of front wing and wing extension to corner of lock pillar 1 354 mm (53.30 in.)

G – Junction of windshield pillar and roof to corner of lock pillar– 1 544 mm (60.80 in.)
H – Across body between roof side rail at pinchweld flanges – 1 463 mm (57.60 in.).
J – Roof drip rail to sill – 1 280 mm (50.40 in.).
K – Body side rear panel to front extension panel or hinge pillar – 1 008 mm (39.70 in.).

FRONT END AND REAR DOOR APERTURE NOMINAL DIMENSIONS (Early Models)





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A — Between upper rebate and lower rebate of windshield aperture outer panel at centre of aperture — 650 mm (25.60 in.).

B — From side to side of windshield aperture outer panel rebate at diagonally opposed corners —1 753 mm (69.00 in.).

C — Between front wings —1 473 mm (58.00 in.).

D — From underside of roof drip rail to upper outer edge of rear end panel — 1 280 mm (50.40 in.).

E — Between flanged edges of body side rear upper panels — 1 300 mm (51.20 in.).

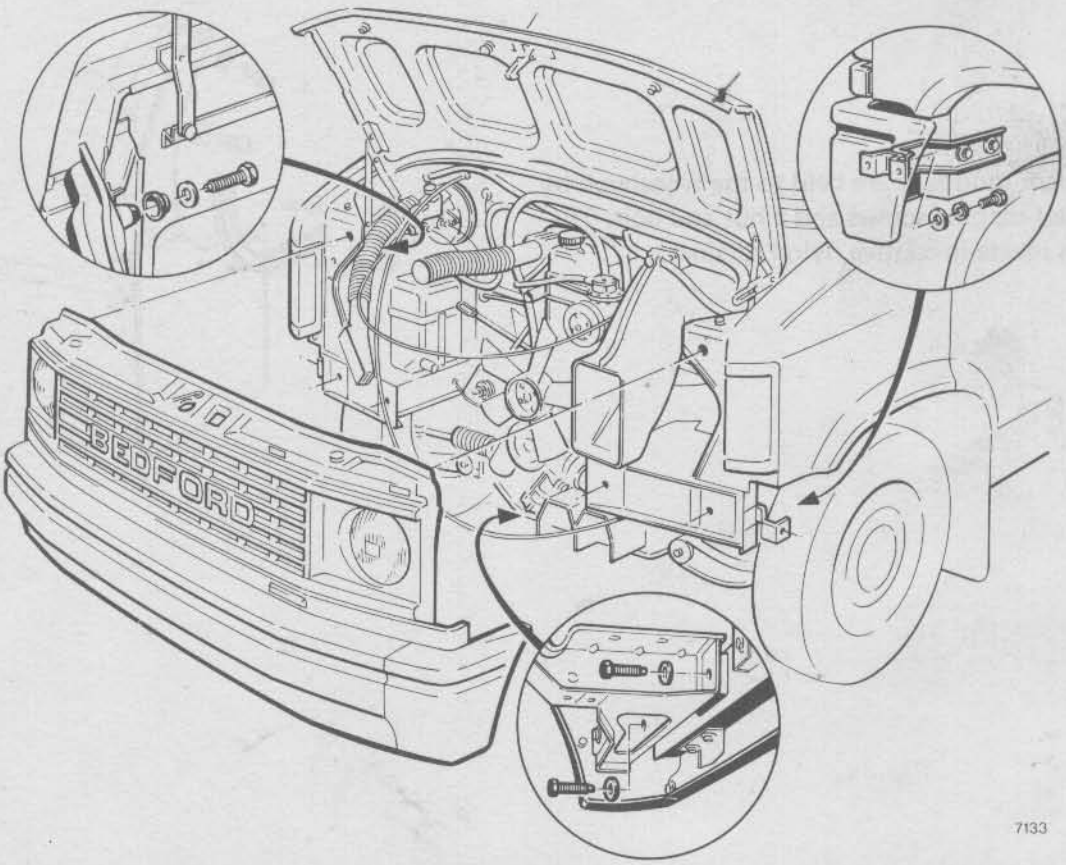
FRONT PANEL – Later Models

The front panel assembly on later models is held to the body by six bolts and can easily be removed to facilitate engine removal.

Before removal of front panel, drain radiator and disconnect inlet hose at radiator and outlet hose at thermostat housing.

Withdraw centre and left-hand headlamp plug connectors from lower row of plugs.

Release headlamp harness ties and disconnect left-hand front turn signal connection. Release throttle cable from clips and remove clutch cable clamp from radiator mounting bolt.

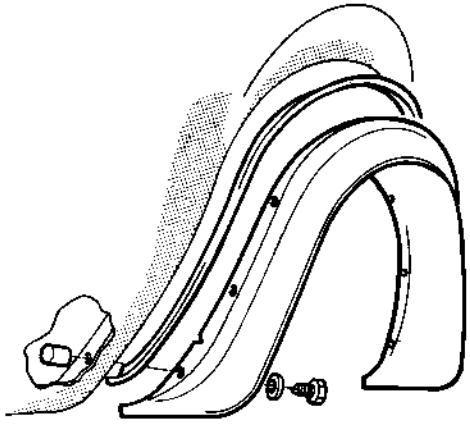


The upper bolts are accessible from behind the inner wing to front panel gusset. The lower bolts through the longitudinal end plate and outrigger are accessible from under the vehicle. With bumper installed it is necessary to remove outer bumper to bracket fixing from under front wheelarch.

The complete front panel assembly can now be removed.

REAR WINGS

On models having twin rear wheels a wing extension panel is bolted to the rear wheelarch. The self-tapping bolts locate in captive nylon retainers. A plastic piping is sandwiched between extension panel and wheelarch.



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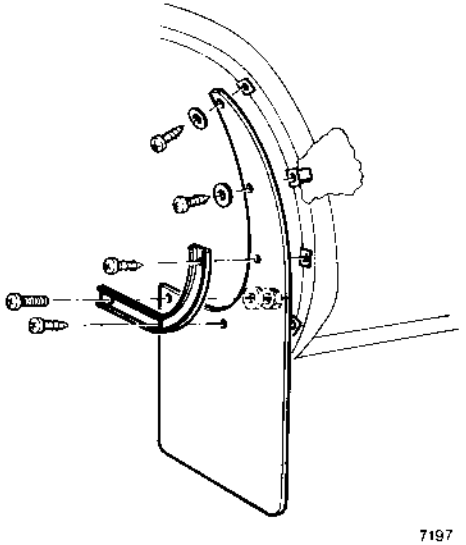
FRONT MUDFLAPS

The front mudflaps are held to the wheelarch by four self-tapping screws and a nut and bolt. The screws locate in captive nylon retainers.



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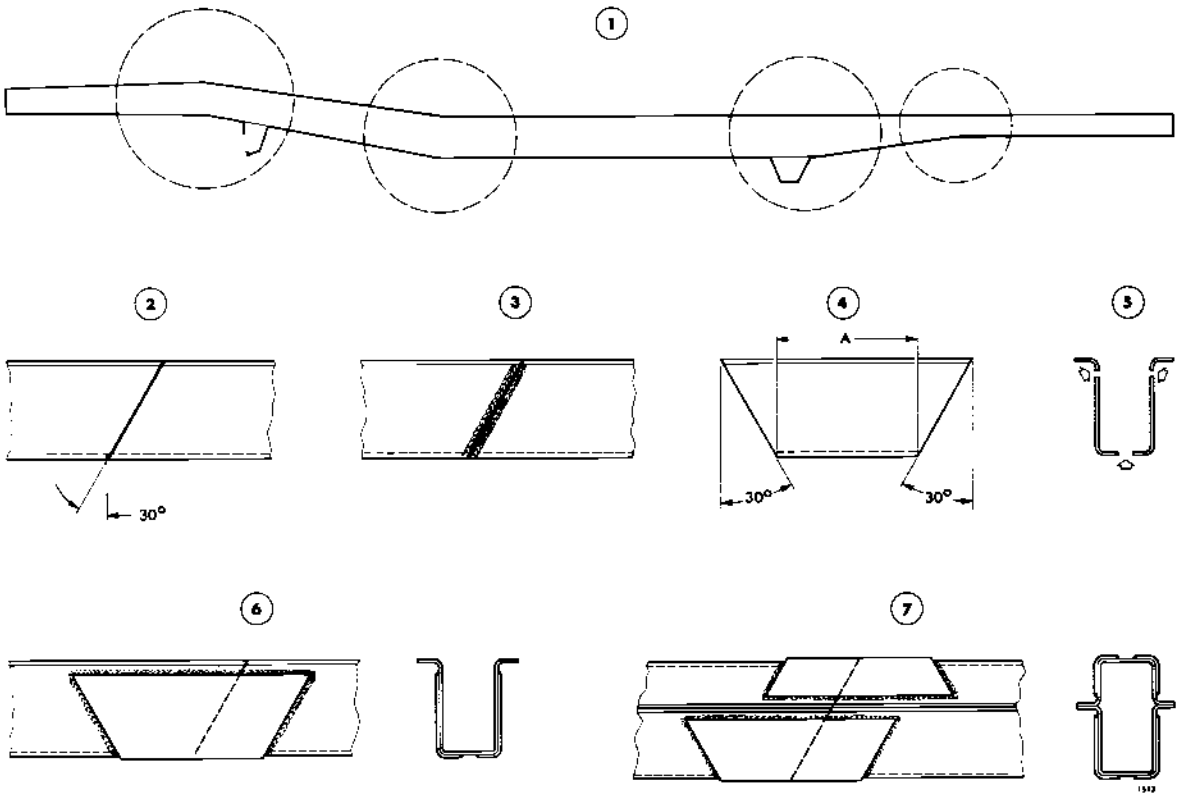
RECOMMENDED SEALERS

Usage	Bostik Ltd	Expandite Ltd	Kelseal Ltd	3M (UK) Ltd
Body Interior Caulking Applied by caulking gun or stippled with a stiff brush	Bostik 1297	Seelastik SR.51	Glasticon Gun Mastic Black	3M Auto Joint Seam Sealer
Material supplied in putty form	Bostik No.5	Seelastrip Butyl Mastic 100	Black Dum-Dum Putty	3M Body Caulking
Body Glass Sealing Glass to rubber, rubber to metal	Bostik No.6	Sealstik SR.51	Glasticon Gun Mastic Black	3M Brand Windshield/ Windscreen Sealer
Body Exterior Sealing Air drying sealant to be applied to exterior joints prior to painting	Bostik No.5	Seelastrip Butyl Mastic 100	Kelbond or Kelbond 'F'	3M Auto Joint Seam Sealer Drip Chek Sealer Regular
Air drying sealer	Bostik 1297		Kelbond or Kelbond 'F'	Super Seam Sealer Drip Chek Sealer Heavy
Heater Casing Water Deflector Sealing	Bostik No.5	Seelastrip PIB 500	Kelseal 144	3M Body Caulking
Sound Deadening & Underbody Sealing Air drying compound to be applied by spray or stippled with a stiff brush	Vauxhall Underbody Sealer			
Anti-Corrosion Sealer To be applied prior to assembly	Bostik 1652	—	—	—
Spot Welded and Overlap Joints	—	—	—	Super Seam Sealer

RECOMMENDED ADHESIVES

Usage	Bostik Ltd	Dunlop Rubber Co. Ltd	3M (UK) Ltd
Roof Headlining, Door Water Deflectors	Bostik No.3	S.810 Adhesive	3M Brand Fast Tack/ Aerosol Auto Adhesive
Floor Coverings, P.V.C. to Hardboard etc.	Bostik C Adhesive	A.517 Adhesive	3M Brand Fast Tack/ Aerosol Auto Adhesive
Sound Deadening Pads	Bostik No.2	White Latex	3M Brand Fast Tack/ Aerosol Auto Adhesive
Soft Trim Fabrics	Bostik No.3	Dunlop Rubber Solution	3M Brand Fast Tack/ Aerosol Auto Adhesive
Metal to Metal	—	—	3M Brand Metal to Metal Adhesive
Rubber to Rubber Rubber to Metal	—	—	3M Super Weatherstrip Adhesive
Expanded Polystyrene to Metal	Bostik No.2	—	—

UNDERBODY LONGITUDINAL REPAIR



The following repair procedure is recommended where an underbody longitudinal has suffered accident damage which warrants renewal of parts of the longitudinal only.

The intention is to cut away the damaged portion and to weld on an identical part removed from a new longitudinal. The joint has to be reinforced by flitch-plates. The cut must not be made in the region of sharp changes in section. These are ringed in the chassis outline (1). Nor should it be close to major brackets or crossmembers.

At the chosen location, cut through the longitudinal, the cut to be at an angle of 30° from vertical as shown at (2). An identically located cut should be made in the new longitudinal. Remove the damaged portion and in its place locate the new part.

After checking its correct positioning, butt-weld the new portion to the longitudinal (3). If necessary, clean off excess weld to permit the flitch plates to sit snugly.

From the remainder of the new longitudinal, or from an undamaged part of the discarded portion of the old, cut out a section (4) from which the flitch plates can be constructed. Dimension 'A' must not be less than 152 mm (6.00 in.). Cut this section where indicated by arrows in (5), discarding the flanges. Note that the cuts at the flanges should be away from the radius.

The two flitch plates thus provided must now be welded over the butt joint, the weld being along all edges (6). These must be a minimum of 76 mm (3.00 in.) between the butt joint and any edge of a flitch plate.

A chassis/cab model has each longitudinal rearward of the cab reinforced by a top hat section member. The procedure in this case is similar to that detailed above, four flitch plates being required as shown in (7).