GROUP 23 — BODY

SECTION 0 — INDEX

SERVICE BULLETIN REFERENCE

DATE	NUMBER	SUBJECT	CHANGES

SECTION 1 — SHEETMETAL

GENERAL INFORMATION

The body and frame are combined into a welded and reinforced shell which offers strength and twist resistance. Reinforcements are used throughout the lower body structure to carry driving, braking and suspension loads. They are formed of heavy box sections which distribute the major road forces to broad areas of the body structure. The box sections also provide solid supports for the bumpers, springs and shock absorbers.

All door pillars, sills, roof rails, windshield headers, and belt line rails are fully boxed to provide maximum strength. The front fender side shields are welded to the dash panel side sills, and radiator yoke to form a rigid front end structure. The side shields also protect the engine from road splash. The deck lid and hood are reinforced for greater strength, rigidity, and twist resistance. Spot welds and seam welds are used to join the many steel stampings which make up the body structure. Two structural members are bolted in place, one is the engine support cross-member, and the other is the short member which supports the transmission. The front fenders and grille are attached with bolts which provides ease and low cost in replacement.

HOOD, HOOD LOCK AND HINGES

The hood is attached to the cowl panel through two hinges. The attachment bolt holes of the hinges are oversize, permitting movement of the hood panel for alignment purposes.

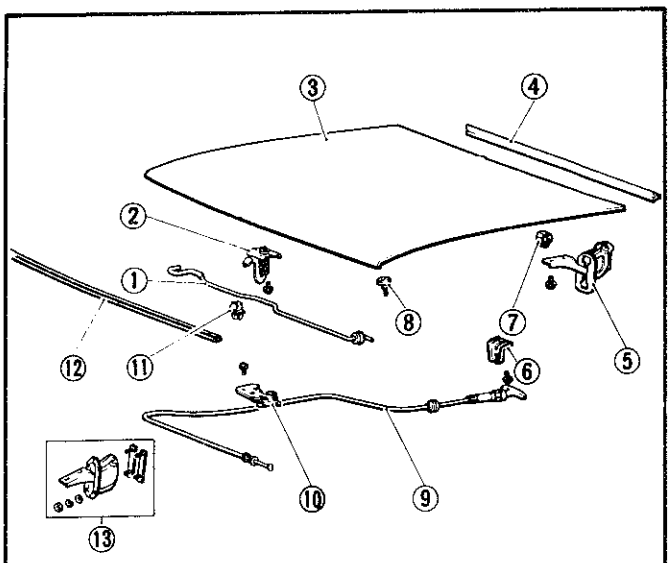


Fig. 1—Hood assembly exploded view

The hood hinge assemblies are spot welded to the cowl panel, if replacement is necessary, refer to Hood Hinge Replacement.

Hood Removal

(1) Support the front edge of the hood in the full open position and protect paint finish area.
(2) Scribe location of hinge on hood panel.
(3) With the aid of an assistant, remove the hood attaching bolts from both hinges.
(4) Remove the hood from the vehicle.

Hood Installation

(1) Protect paint finish then with the aid of an assistant, place hood on hinges and install attaching bolts.
(2) Align scribe marks and tighten attaching bolts.
(3) Close hood and check alignment at all edges, adjust if necessary.

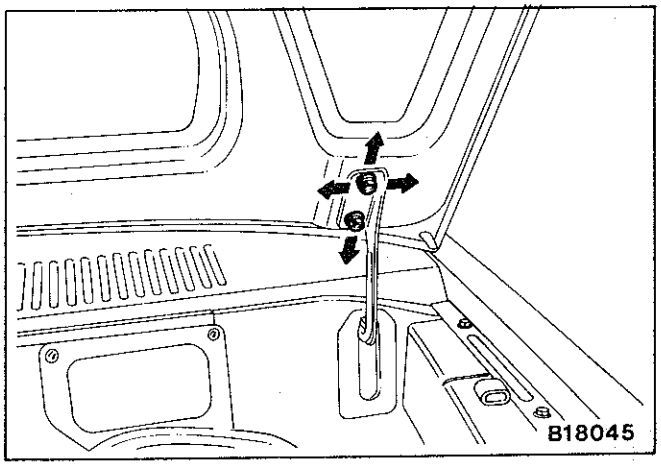


Fig. 2—Hood hinge adjustment

Hood Lock

The hood lock is mounted on an extension just above the radiator grille. The hood dowel and catch is mounted on the forward edge of the hood and is released by an internal catch operated from within the vehicle by a pull release cable.

Adjustment

The hood lock and catch have elongated bolt holes to allow for adjustment.

(1) To adjust the hood lock, loosen the hood lock retaining bolts and move the hood lock as required to align it with the lock dowel, the position of the dowel can also be adjusted.

(2) Tighten the retaining bolts, open and close the hood several times to ensure that the hood is latching securely.

NOTE: To close the hood, release it from a height of approximately 30 cm (12").

(3) If the front of the hood can be lifted off the leveling bumper when closed, adjust the length of the dowel.

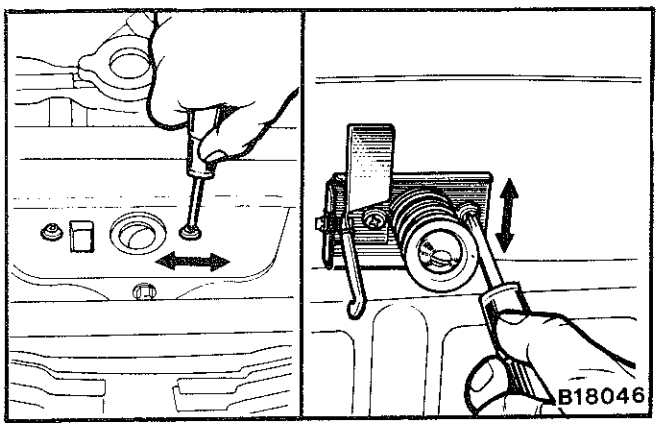


Fig. 3—Hood lock and catch adjustment

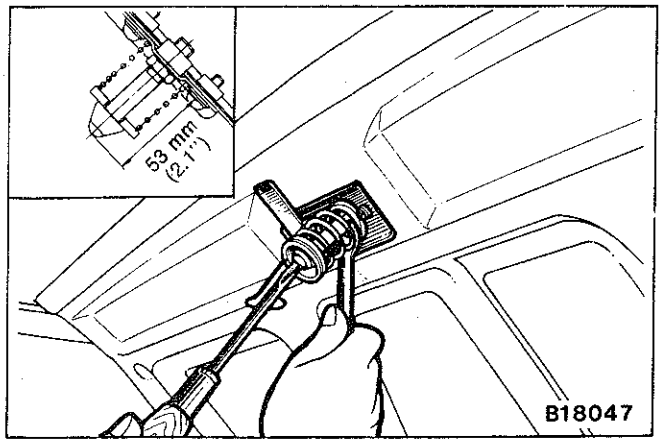


Fig. 4—Hood dowel adjustment

Hood Adjustment

Prior to making any hood adjustment, inspect and note clearances and alignment of all sides of the hood in relation to cowl, fenders and grille.

Hood position can be adjusted at the hinges and hood lock and catch assembly. Hood height can be adjusted at the leveling bumpers and lock dowel.

Hood Hinge Replacement

The hood hinge is welded to the cowl panel, if replacement is necessary proceed as follows using a hinge replacement package.

(1) Drill the hood hinge spot welds with a 8 mm (5/16") drill and remove the hood hinge.

NOTE: After removing the hinge ensure the cowl panel has a smooth hinge mounting surface.

(2) Using the cowl panel to inner guard joint as a datum line, position the hinge and drill four 8 mm (5/16") holes as shown in Fig. 5.

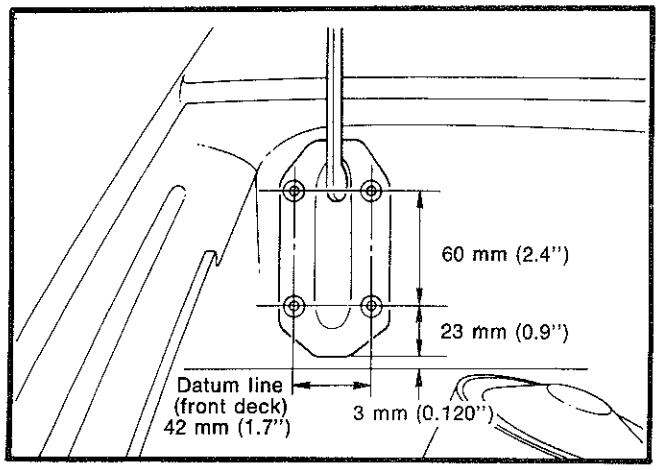


Fig. 5—Hood hinge attachment holes

(3) Remove the access hole cover or wiper motor from the cowl panel, install the bolt brackets from inside the plenum chamber and install the hood hinge.

NOTE: Application of a suitable adhesive to the bracket contacting surface will ease future hinge removal.

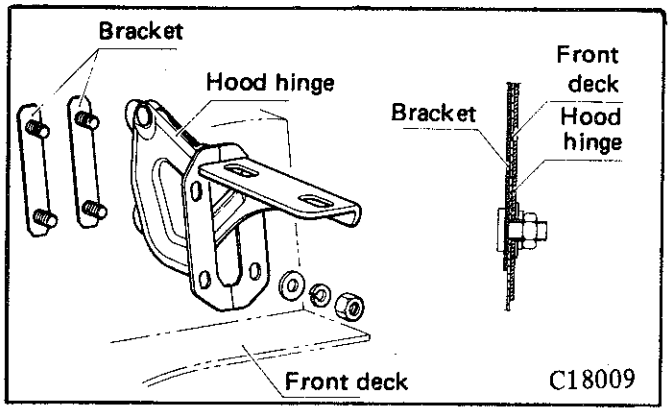


Fig. 6—Hood hinge assembly

FRONT FENDERS

Removal

(1) Disconnect the front turn signal lamps and remove the front bumper bar.

(2) Remove the radiator grille and park/turn signal lamp assembly.

(3) Remove the bolts securing the stone shield/air dam to the front fender.

(4) Remove the bolts securing the fender to the body and remove the fender.

Installation

Install by reversing removal procedure and note the following:

(1) When installing the fender, fit the four bolts marked * in Fig. 7 and adjust all margins, then install the remaining bolts.

(2) Excessive clearances should be adjusted using dry adhesive, except in the water drain hole area.

RADIATOR GRILLE

Replacement

(1) Raise the engine hood.

(2) Remove the screws attaching the grille and remove the grille.

(3) Install by reversing removal procedure.

BUMPER BARS

Front — Removal

(1) Remove the bolts securing the bumper bar mounting brackets to the body and slide the bumper bar forward.

(2) The bumper bar can now be disassembled.

Installation

Install by reversing removal procedure ensuring correct bar to body alignment.

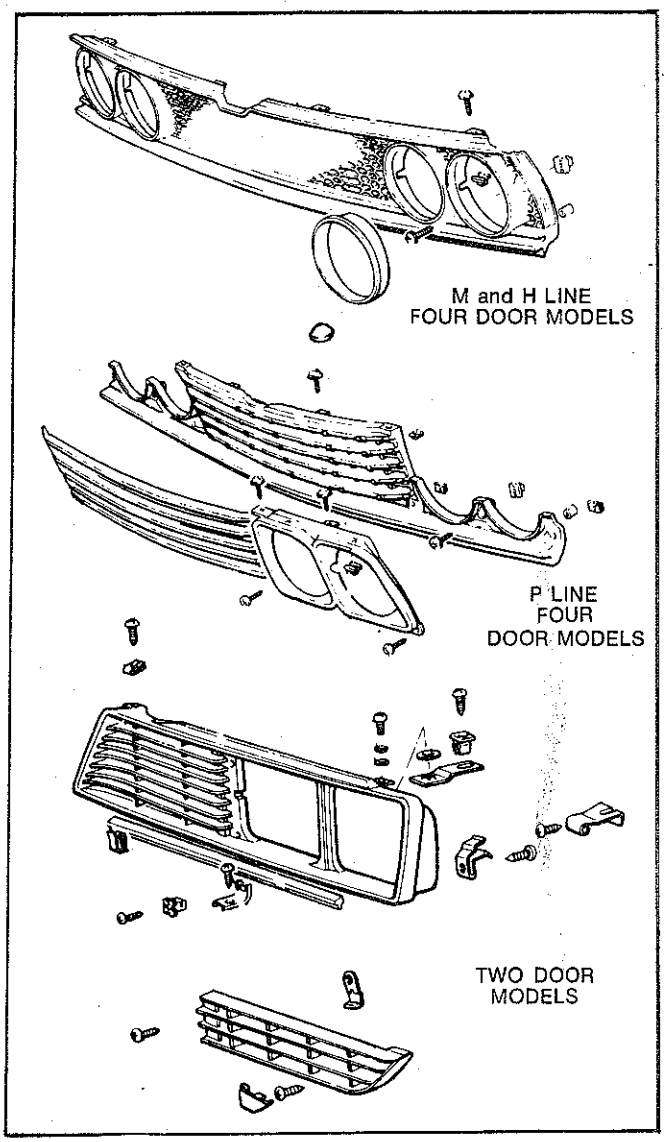
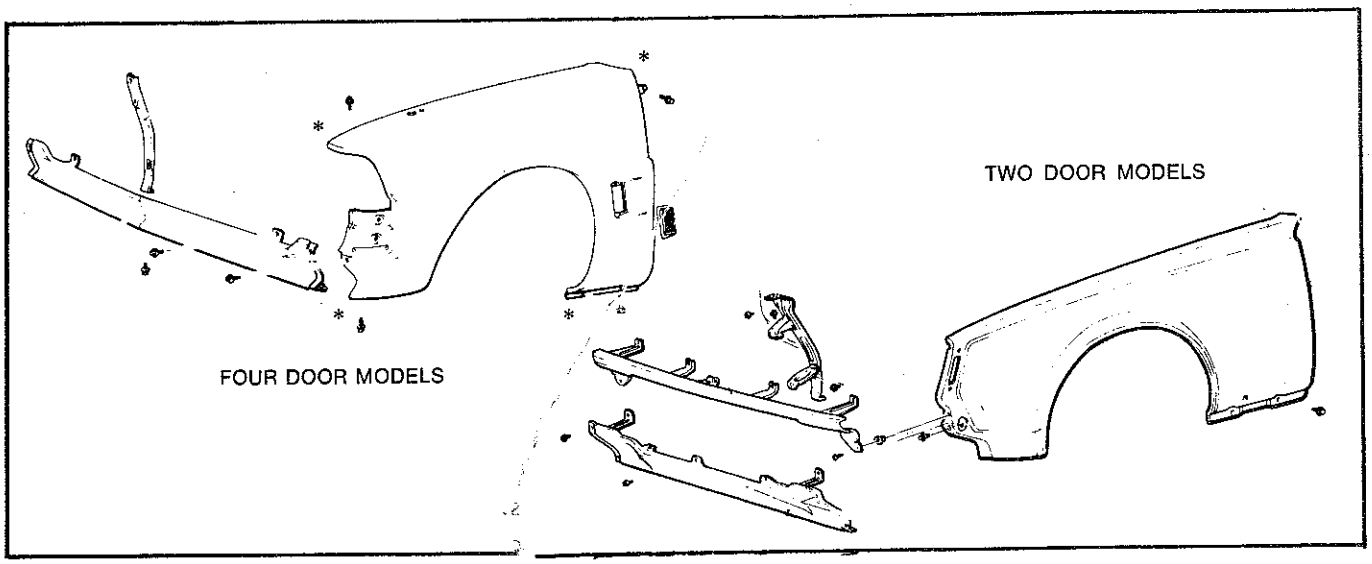


Fig. 8—Grille components and screw location



ig. 7—Front fender assembly

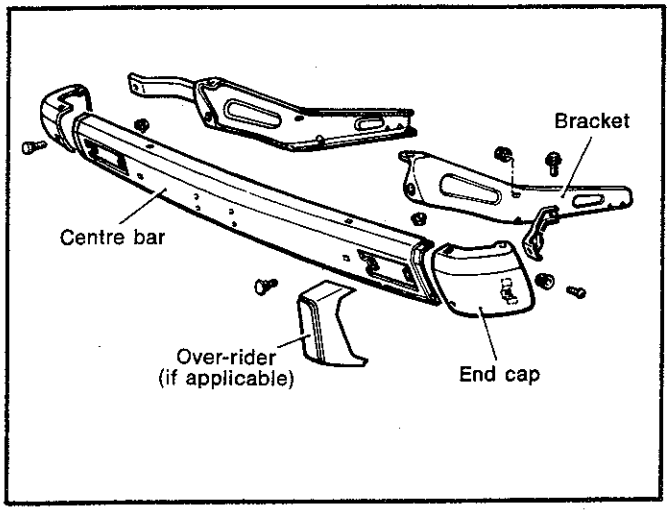


Fig. 9—Front bumper bar assembly

Rear — Removal (Sedan)

(1) Gaining access through the luggage compartment remove the four bolts securing the bumper bar brackets to the body.

(2) Remove the two bolts securing the bumper bar ends to the rear guards and remove the bumper bar.

(3) The bumper bar can now be disassembled.

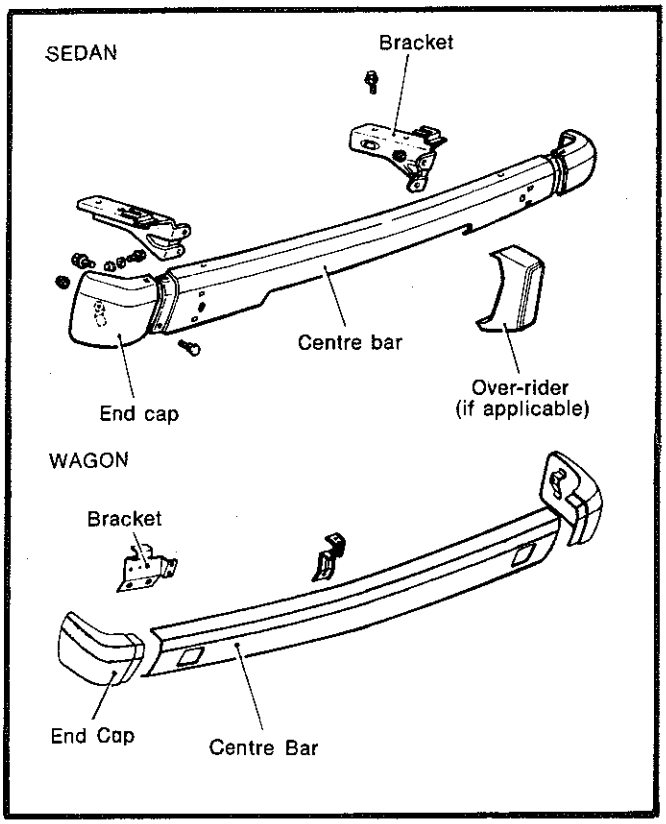


Fig. 10—Rear bumper bar assembly

Rear — Removal (Wagon)

(1) Remove the four bolts securing the bumper bar brackets to the body.

(2) Remove the centre stay to bumper bar attaching bolt and slide the bumper bar rearward.

(3) The bumper bar can now be disassembled.

Installation

Install by reversing removal procedure ensuring correct bar to body alignment.

EXTERIOR MIRROR

Replacement

(1) Remove the mirror base retaining screws and remove the mirror assembly.

(2) The mirror head tension can be increased or decreased by tightening or loosening the adjusting screw located in the mirror base.

NOTE: Do not remove the tension screw as reassembly will not be possible.

(4) Install by reversing removal procedure.

DOORS

The service procedures outlined in this section do not include the removal, installation or adjustment of side glass (refer Section 3).

All models are equipped with side door impact bars. These bars are welded to the inside of the door and give extra protection in the event of a side collision.

Removal

(1) With door wide open, place a jack (with a block of wood on the jack lifting plate) under door for support.

(2) Scribe a line around upper and lower hinge on door panel.

(3) Using a suitably shaped spanner, remove the door hinge bolts and remove the door.

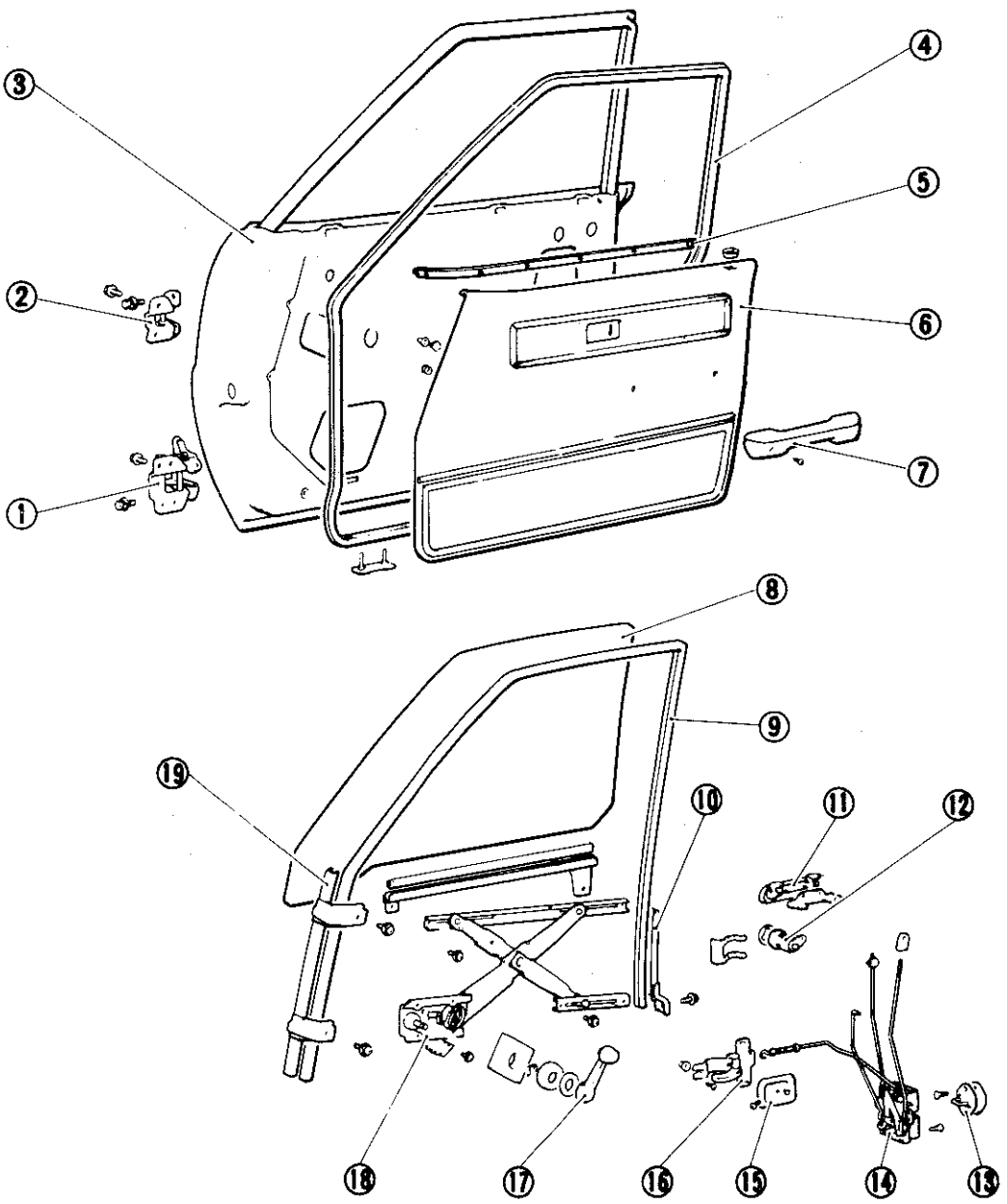
Installation

(1) With door hardware installed, place door (supported by a padded jack) in position in the door opening.

(2) Position hinge to door panel and install bolts finger tight only.

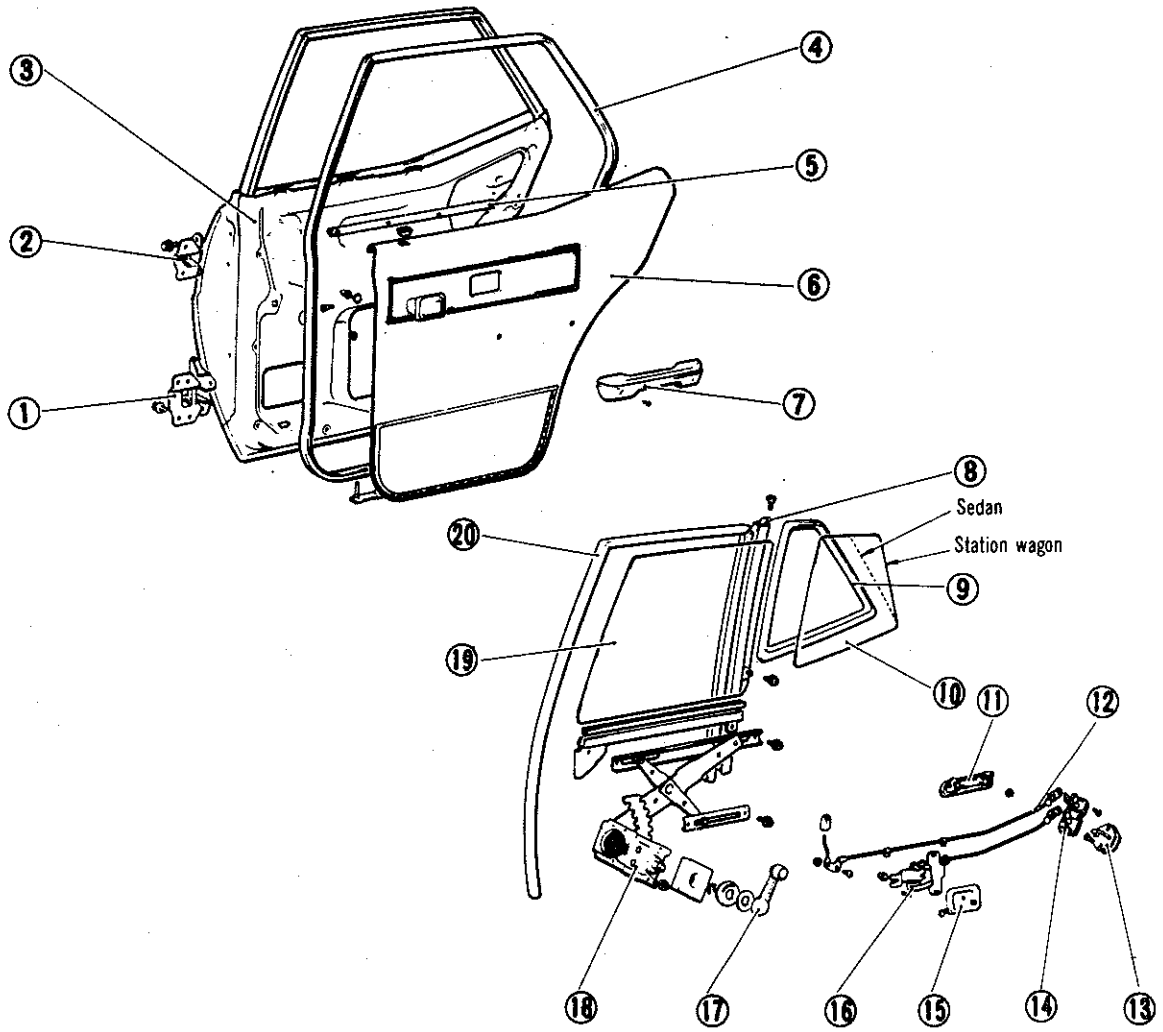
(3) Adjust jack to align hinge to scribe marks on door panel and securely tighten bolts.

(4) Check door margins when door is closed and readjust if necessary.



1. Lower hinge
2. Upper hinge
3. Door body
4. Weatherstrip
5. Anti-rattler
6. Door trim
7. Arm rest
8. Window glass
9. Run channel
10. Rear lower sash
11. Outside handle
12. Lock cylinder
13. Striker
14. Door latch
15. Inside handle cover
16. Inside handle
17. Regulator handle
18. Regulator
19. Front lower sash

Fig. 11— Front door components



*1. Lower hinge
*2. Upper hinge
3. Door body
4. Weatherstrip
5. Anti-rattler
6. Door trim
7. Arm rest
8. Run channel
9. Quarter window weatherstrip
10. Quarter window glass
*11. Outside handle
12. Inside lock rod
*13. Striker
*14. Door latch
15. Inside handle cover
*16. Inside handle
*17. Regulator handle
18. Regulator
19. Window glass
20. Run channel

Note: * Common parts with sedan.

Fig. 12—Rear door components

DOOR WEATHERSTRIP

Replacement

(1) Remove damaged weather strip from the periphery of the door.
(2) Clean **all** the old solution from the door weatherstrip area with a suitable weak solvent.
(3) Fit the weatherstrip clips into the locating holes.
(4) Apply adhesive to the window frame door seal recess (four door models).
(5) Commencing at the moulded corner, fit the door seal to the recess making sure the seal is pushed solidly into the bottom recess.
(6) Clean excess adhesive from the finished job.

DOOR HINGES

Both front and rear door hinges are constructed to permit up and down, fore and aft and in and out adjustment. This permits close alignment and weather control. All hinge adjustments are exposed in the door opening. Access difficulty of the front door pillar hinge bolts can be overcome by suitably bending a ring spanner as shown in Fig. 13.

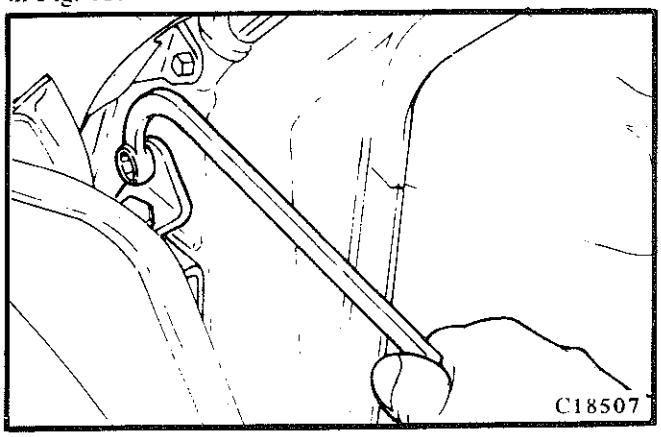


Fig. 13—Adjusting door hinge

Adjustment

(1) Scribe a line around the hinge to be adjusted, this will assist in determining how far the door is moved.
(2) Loosen the door hinge attaching bolts.
(3) Observing the scribe mark, position the door in the desired location.
(4) Tighten the attaching bolts and check the door fitment and operation, readjust if necessary.

DOOR LOCKS AND HANDLES

Lock Removal

(1) Position the door glass in the up position and remove the arm rest and inside door handle cover.
(2) Remove the window regulator handle by removing the clip located behind the handle plastic cover
(3) Remove the remote control lock knob and then remove the door trim by levering it off with a screw driver. Peel back the water/dust seal from the door panel.
(4) Disconnect the inside and outside handle operating linkage, the remote control lock linkage and the lock cylinder control linkage (front doors only) from the door lock assembly.
(5) Remove the lock retaining screws and remove the lock assembly from the door.

Installation

(1) Position lock assembly into door and install retaining screws.
(2) Fit all linkages to their respective positions.
(3) Refit water/dust shield and all door trim hardware.

Adjustment

NOTE: Door lock adjustments should be made only after door hinges have been adjusted.

To test the engagement of the door latch with the striker, close the door and watch if the door rises or lowers as the latch passes over the striker. If door movement is observed, the striker must be moved up or down.

The striker can be moved in or out to control the fit of the door against the body.

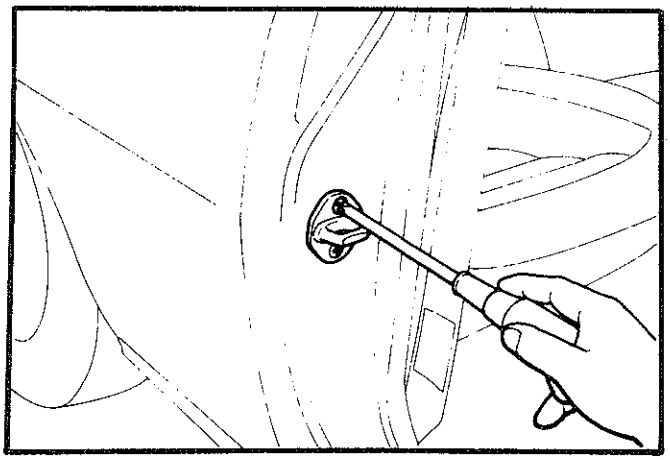


Fig. 14—Adjusting door striker

Inner Door Handle

Removal

(1) Perfom steps 1 to 3 of Lock Removal.
(2) Disconnect the inner handle operating linkage at the door lock.
(3) Remove the handle retaining screws and remove the handle.

Installation

Install by reversing removal procedure, adjusting the handle free play by the mounting screws as shown in Fig. 16.

Exterior Door Handle

Removal

(1) Perfom steps 1 to 3 of Lock Removal.
(2) Disconnect the outer handle operating linkage at the door lock.
(3) Remove the handle retaining screw and remove the handle.

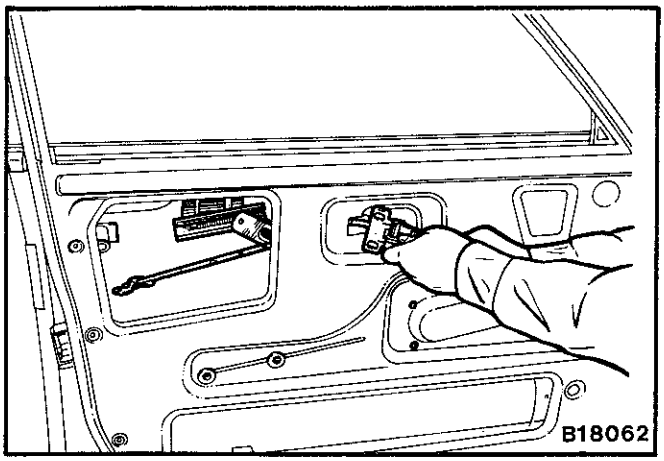


Fig. 15—Removing inner door handle

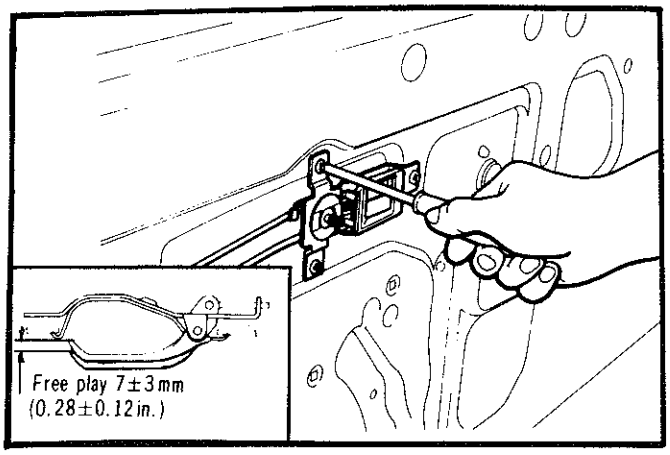


Fig 16—Adjusting inside handle free play

Installation

Install by reversing removal procedure adjusting the handle free play at the lock linkage joint on the handle as shown in Fig. 17.

DOOR WATER/DUST SHIELD

The door water/dust shield (plastic sheet) is attached to the inner door panel with an indefinitely tacky type of adhesive. If care is taken when peeling back the water/dust shield, when gaining access to internal door components, it is only necessary upon installation to reposition the shield and press firmly into place.

Removal

Remove the plastic sheet from the inner door panel and clean off the tacky adhesive using toluol.

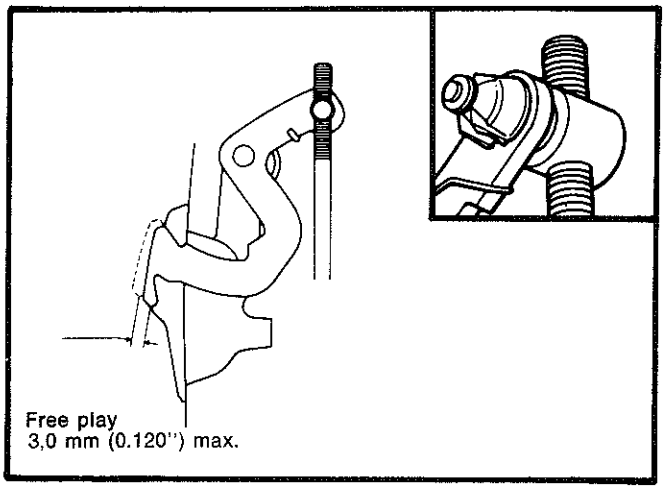


Fig. 17—Exterior handle adjustment

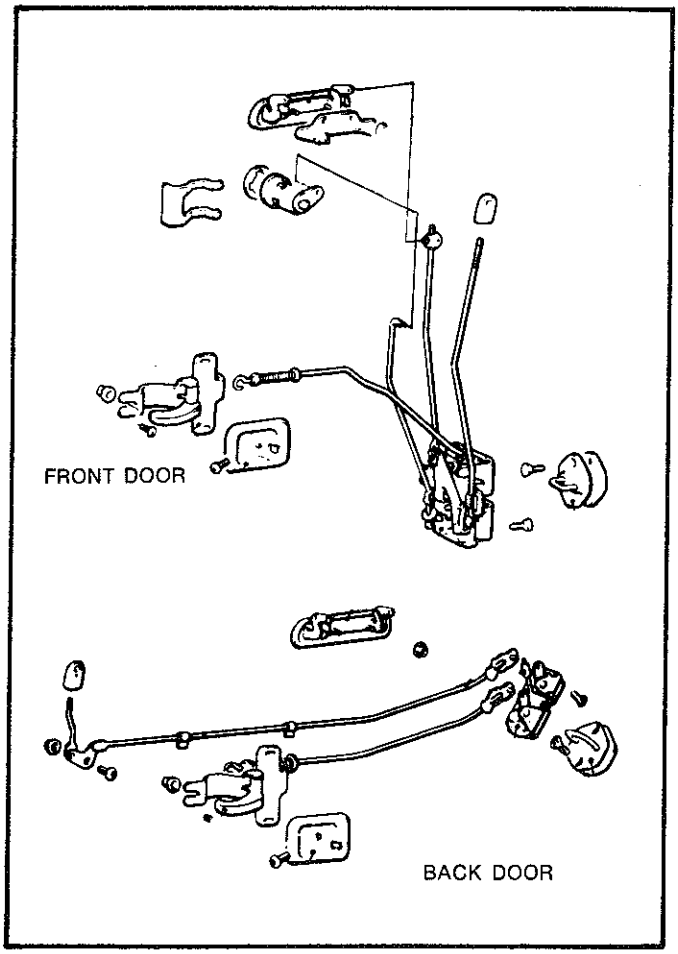


Fig. 18—Door lock and handle assemblies

Installation

(1) Cut a piece of plastic to suit the inner door panel.

(2) Apply indefinitely tacky adhesive around the inner door panel.

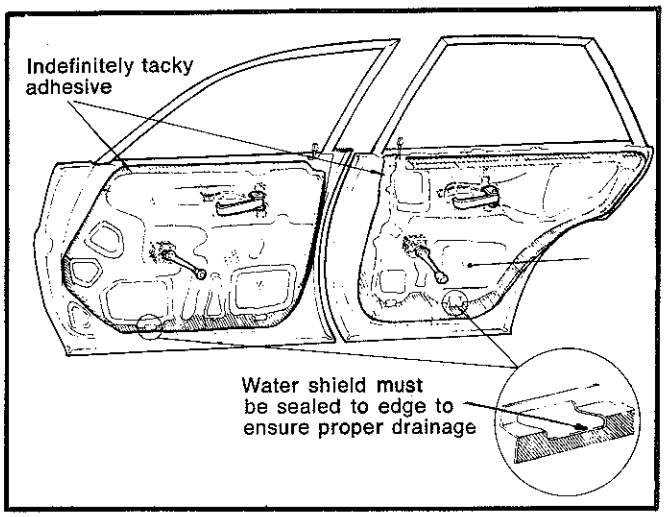


Fig. 19—Water/dust shield installation

(3) Position sheeting on door panel taking care that wrinkles do not form in the cemented areas.

(4) Press the sheeting firmly into place and tuck the lower edge between the inner panel and tape. Cut the sheeting at the edge of the cutouts allowing it to enter the door, thus providing a water run off.

(5) Position 50 mm (2") water proof tape along the lower bottom edge of the door panel thus adhering the plastic sheeting to the door panel.

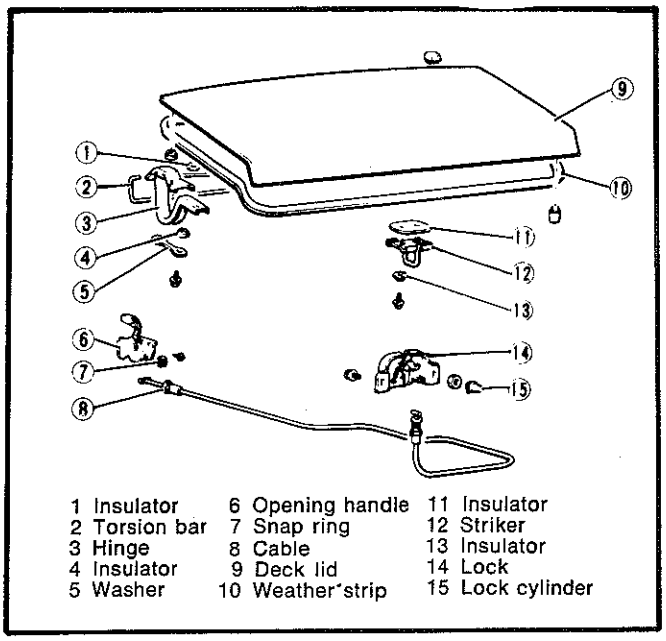


Fig. 20—Deck lid components

DECK LID

The weight of the deck lid is counter-balanced by torsion bars. Fore and aft and side adjustment of the deck lid is achieved through slotted holes in the hinge arms. Vertical height is adjusted by placing washers between the hinge and deck lid.

Removal

(1) Scribe the location of hinge to deck lid securing bolt washers.

(2) With an assistant supporting one side of the deck lid, remove the hinge to deck lid attaching bolts.

(3) Remove the deck lid from the vehicle.

Installation

(1) With an assistant supporting one side of the deck lid, place the deck lid on the hinge arms.

(2) Install the attaching bolts and align the scribe marks.

(3) Tighten the attaching bolts and check the deck lid adjustment, readjust if necessary.

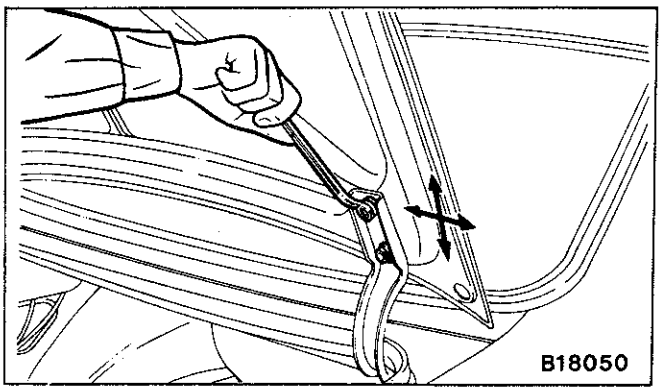


Fig. 21—Deck lid adjustment

Lock and Striker Adjustment

Vertical adjustment of the deck lid lock is made at the lock attaching screws, side adjustment is made at the striker attaching screws.

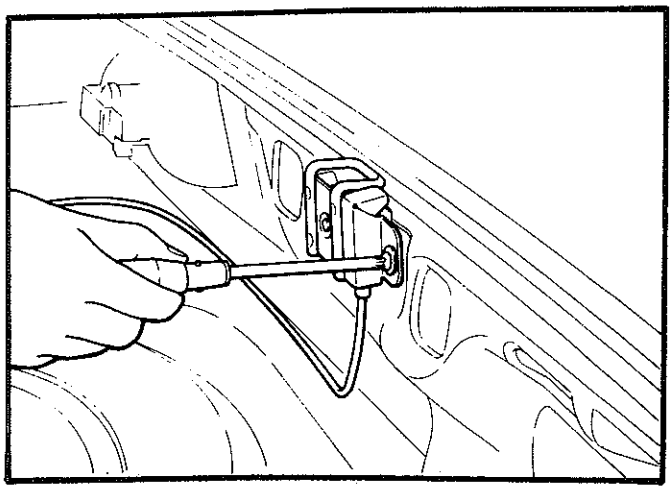


Fig. 22—Deck lid lock adjustment

Vehicles fitted with a cable release deck lid lock should have the cable adjusted at the handle to release the deck lid with a pull of 8 kg (18 lb.) or less at the operating lever.

Deck Lid Torsion Bar (Sedan Models)

Removal

(1) With a suitable lever installed between the torsion bar and hinge, where the torsion bar is connected to the hinge, lever the bar down and disconnect the torsion bar adjusting block from the deck lid hinge.

NOTE: The deck lid should be securely supported in the fully open position prior to removing the torsion bar as when the bar is disconected the deck lid will drop down.

(2) Unclip the torsion bar from the body and remove the bar.

Installation

(1) Lubricate all contact positions prior to installing the bar.

(2) Insert the torsion bar into the body securing clips.

(3) Using a suitable lever position the torsion bar adjusting block in one of the hinge slots.

(4) Place the deck lid in several open positions and check the tension of the torsion bars, readjust the bar position if necessary.

Deck Lid Torsion Bar (Two Door Models)

Removal

(1) Using a suitable lever, release the torsion bar mounting on the body.

NOTE: The deck lid should be securely supported in the fully open position prior to removing the torsion bar, as when the bar is disconected the deck lid will drop down.

(2) Remove the torsion bar from the hinge and then remove the torsion bar from the vehicle.

Installation

(1) Lubricate all contact positions prior to installing the bar.

(2) Insert the bar into the hinge.

(3) Using a suitable lever position the torsion bar into the body retaining bracket.

(4) Place the deck lid in several open positions and check the tension of the torsion bars, readjust the bar position if necesary.

TAILGATE (Station Wagon)

The tailgate is held in the open position by cylinders filled with high pressure gas.

CAUTION: Never attempt to repair, puncture or burn these cylinders.

Removal

(1) Remove the headlining rear end clips, cargo lamp screws, disconnect the tailgate wiring harness and washer hose (if fitted).

(2) Unscrew the balljoints at the lower end of the gas cylinders, (do not lever off studs). Remove the upper gas cylinder attaching screws.

(3) Scribe a line around the tailgate hinges to mark the location of the hinges as an aid in re-assembly.

(4) With the aid of an assistant, remove the hinge to body bolts and tailgate assembly.

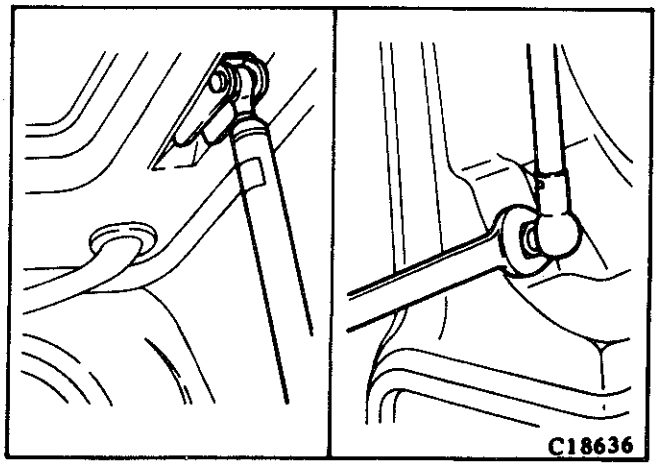


Fig. 23—Removing tailgate gas cylinders

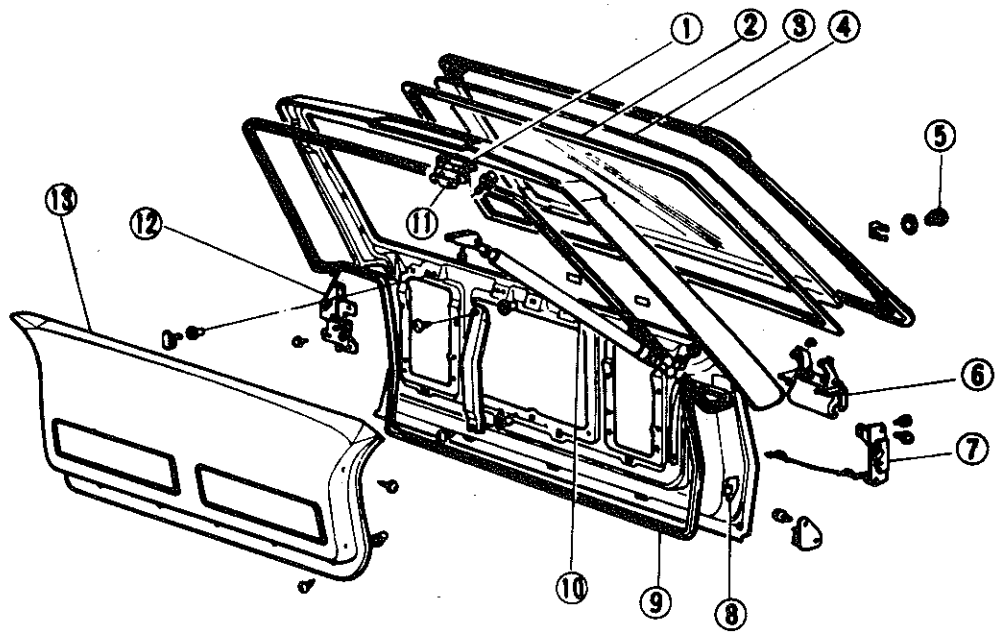
Installation

Re-assemble by reversing the removal procedure, noting the following:

(1) Lubricate the tailgate hinges and balljoints of the gas filled cylinders.

Alignment

(1) The longitudinal and lateral positions of the tailgate can be adjusted by utilizing the enlarged holes of the hinges. The vertical position of the tailgate can be adjusted by installing shims between the body panel and hinges.



1. Tail gate hinge
2. Window glass weatherstrip
3. Window glass
4. Window glass moulding
5. Cylinder lock
6. Handle
7. Latch
8. Tail gate panel
9. Gate opening weatherstrip
10. Stopper
11. Shim
12. Link assembly
13. Tail gate trim

Fig. 24—Tailgate components

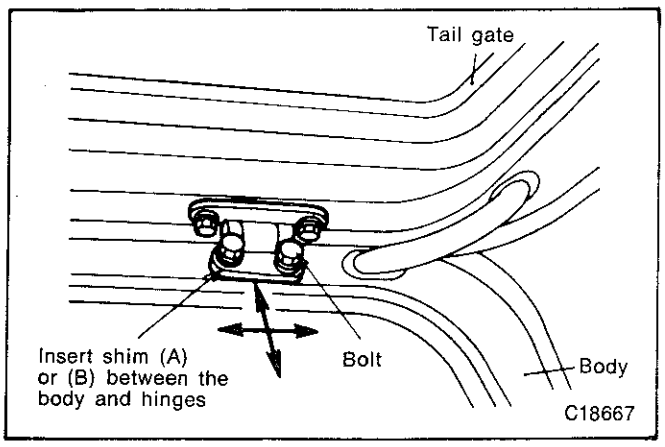


Fig. 25—Adjusting tailgate hinges

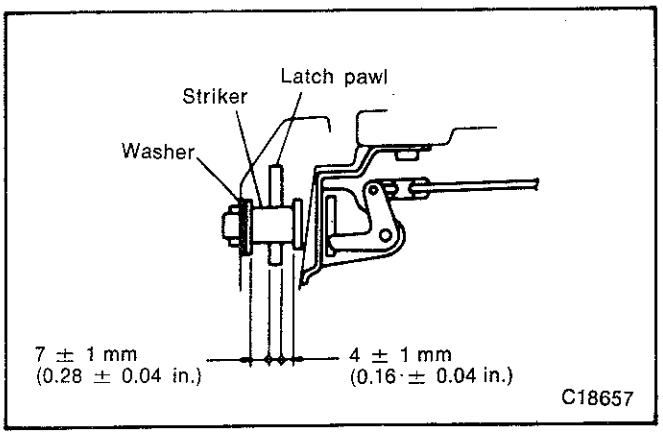


Fig. 26—Adjusting tailgate striker

Adjustment of Tailgate Striker

(1) Adjust the latch to striker clearance with washers as shown in Fig. 26 and ensure that the R.H. side clearance is well balanced with the L.H. side clearance.

Adjustment of Tailgate Bump Rubber

(1) Adjust the height of the bump rubber attaching screw to ensure flush alignment of the tailgate with the surrounding body panels.

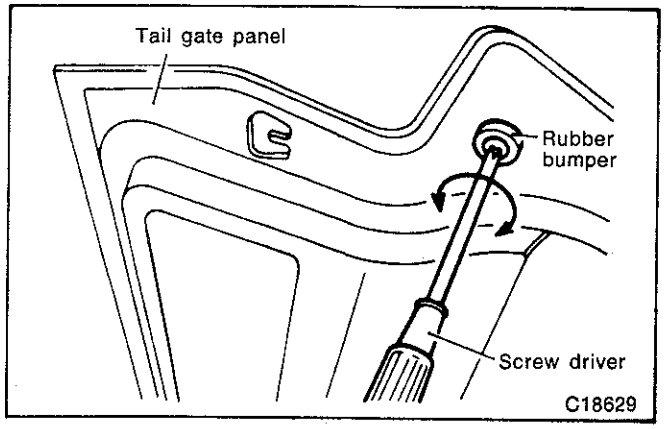


Fig. 27—Adjusting rubber bumper

Tailgate Lock

Removal

(1) Remove the tailgate trim.

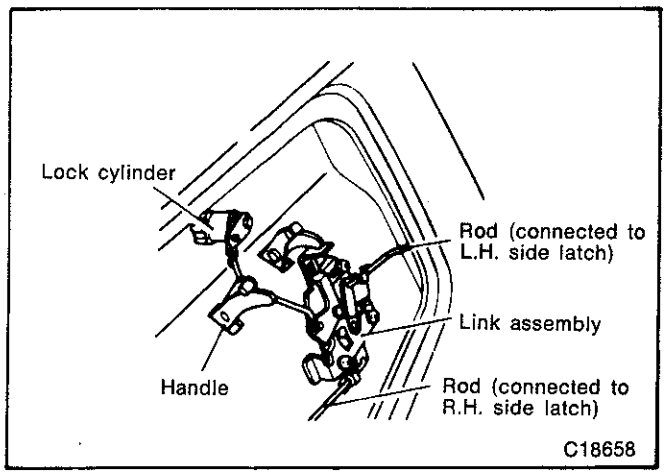


Fig. 28—Removing lock assembly

(2) Disconnect the tailgate lock operating rod.

(3) Remove the tailgate lock retainer and lock assembly.

(4) Disconnect the L.H. and R.H. latch operating rods from the link assembly and remove the link assembly.

(5) Remove the tailgate handle.

(6) Remove the L.H. and R.H. latch assemblies.

Installation

Re-assemble by reversing the removal procedure, noting the following:

(1) Apply grease to the rotating and sliding components of the tailgate handle, link and latch assemblies.

(2) Adjust the tailgate handle to link assembly clearance to 1mm to 2mm (0.040" to 0.080") as shown in Fig. 29.

(3) When installing the link assembly ensure that the L.H. and R.H. latch assemblies operate simultaneously.

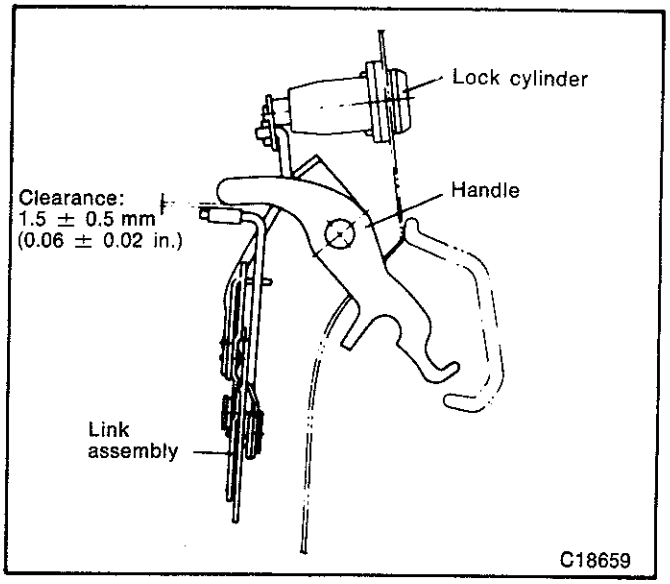


Fig. 29—Adjusting tailgate handle to link assembly clearance

SECTION 2 — INTERIOR TRIM

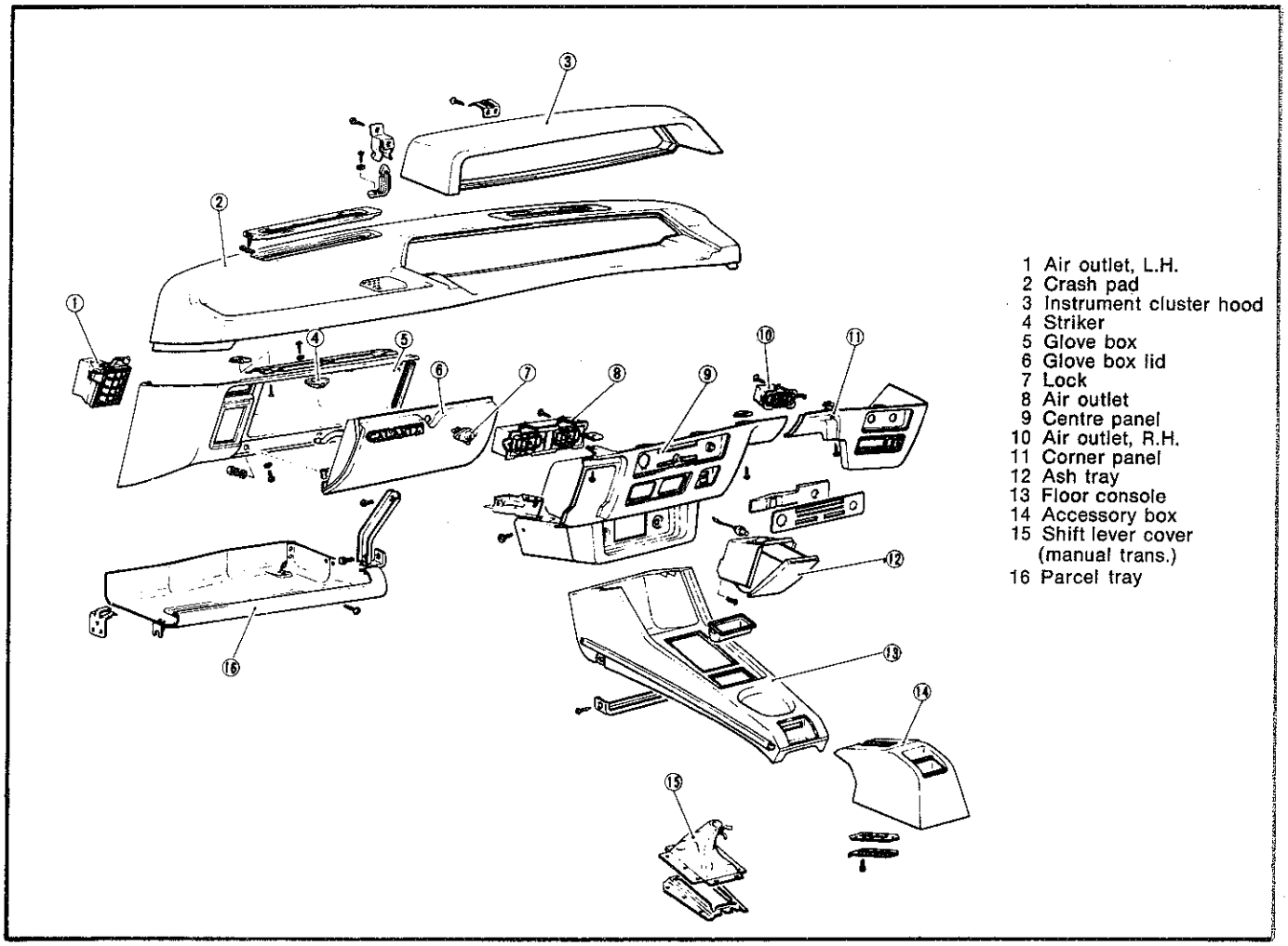


Fig. 1—Instrument panel disassembled view (four door models)

INSTRUMENT PANEL (Four Door Models)

Glove Box

Removal

(1) Remove the three upper glove box retaining screws.

(2) Loosen the three lower glove box retaining screws several turns, then pull out the glove box.

Adjustment

The following adjustments should be made prior to glove box installation.

(1) Loosen the lid retaining nuts and adjust the lid to give a uniform clearance around the glove box.

(2) Adjust the glove box lock by repositioning the striker to achieve acceptable opening and closing of the lid.

(3) If the glove box lid does not open or close smoothly after making the above adjustment, check the lock spring for breakage or deformation.

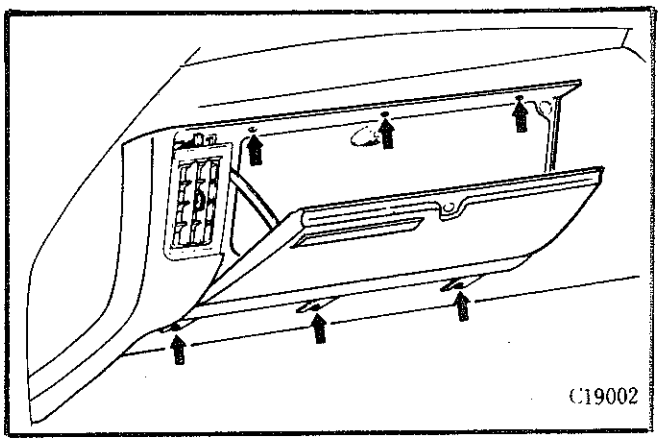


Fig. 2—Glove box retaining screws

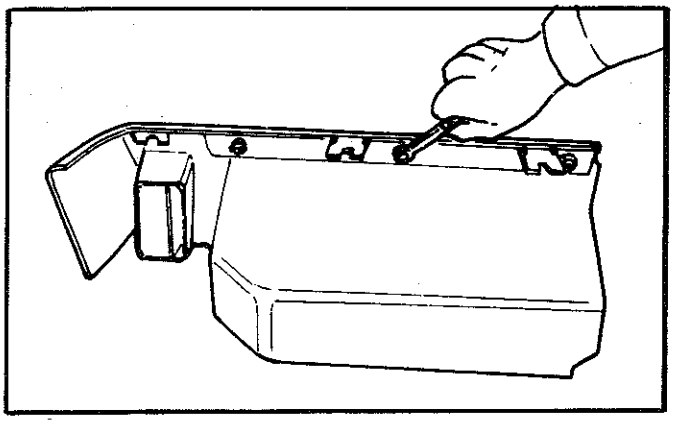


Fig. 3—Lid to glove box clearance adjustment

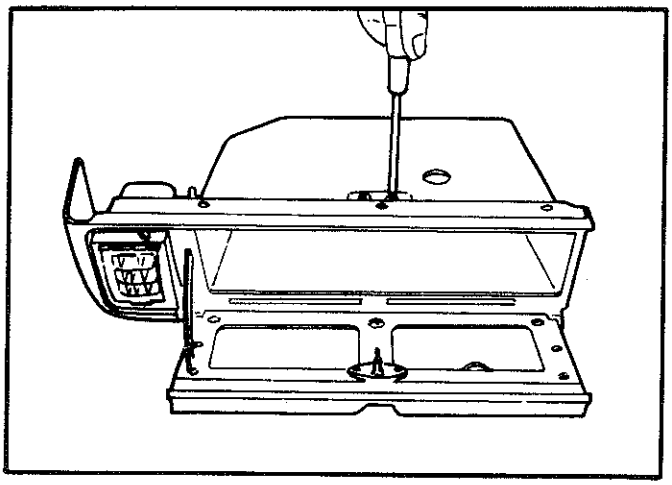


Fig. 4—Adjusting lock striker

Installation

(1) Install the glove box into the instrument panel and install the retaining screws.

(2) Prior to tightening the screws, position the glove box to give a uniform 2,0 mm (0.080") clearance between the glove box and the centre panel (ash tray).

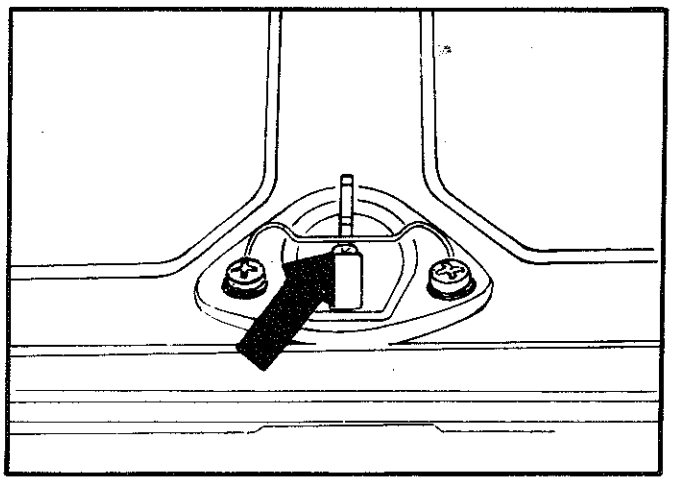


Fig. 5—Glove box lock spring

Centre Panel

Removal

(1) Remove the heater control knobs.

(2) Remove the ash tray and ash tray inner panel.

(3) Remove the centre panel upper attaching screws and loosen the lower attaching screws.

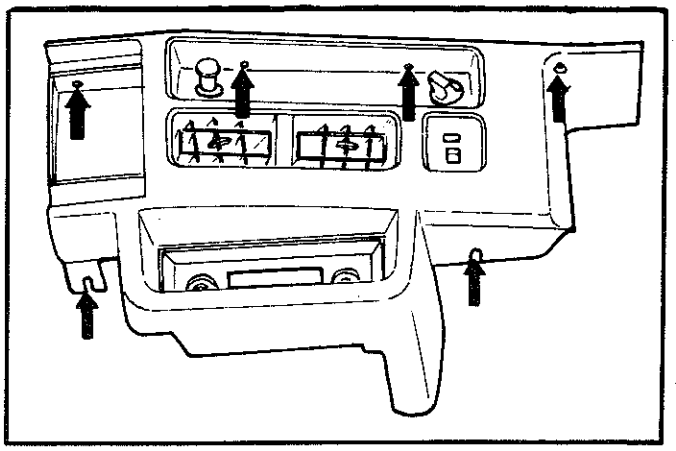


Fig. 6—Centre panel retaining screws

(4) Pull the centre panel out far enough to disconnect the wiring connector from the back, then remove the centre panel.

(5) The cigar lighter, air outlet, fan switch, rear window defogger switch and heater panel can be removed from the centre panel if necessary.

Installation

Install by reversing removal procedure noting the following:

(1) Ensure the wiring connector is fitted correctly to the centre panel.

(2) When positioning the centre panel, ensure the heater levers are correctly inserted through their respective slots.

Corner Panel

Removal

Remove the corner panel retaining screws and pull the panel out far enough to disconnect any wiring (if applicable), the corner panel can now be removed.

Installation

Install by reversing removal procedure.

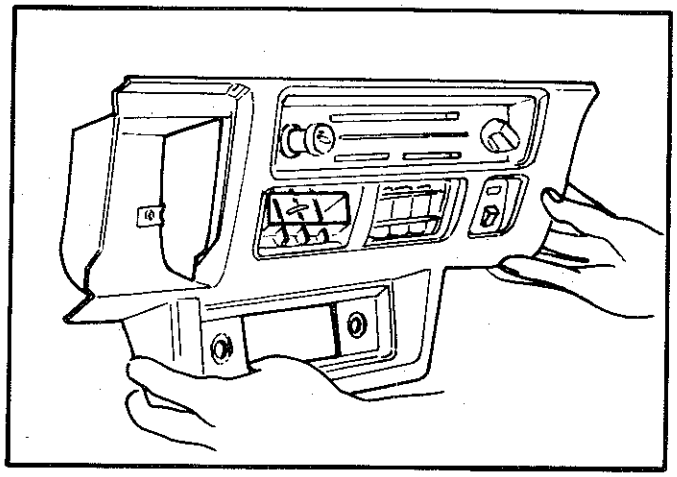


Fig. 7—Removing centre panel

(2) Remove the instrument cluster hood by raising it slightly and then pulling it forward.

NOTE: When removing the hood use care to avoid damage to the clock or trip meter, reset knobs and shafts.

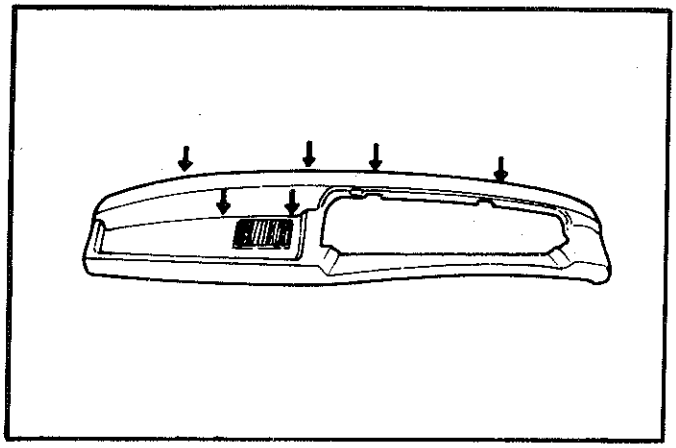
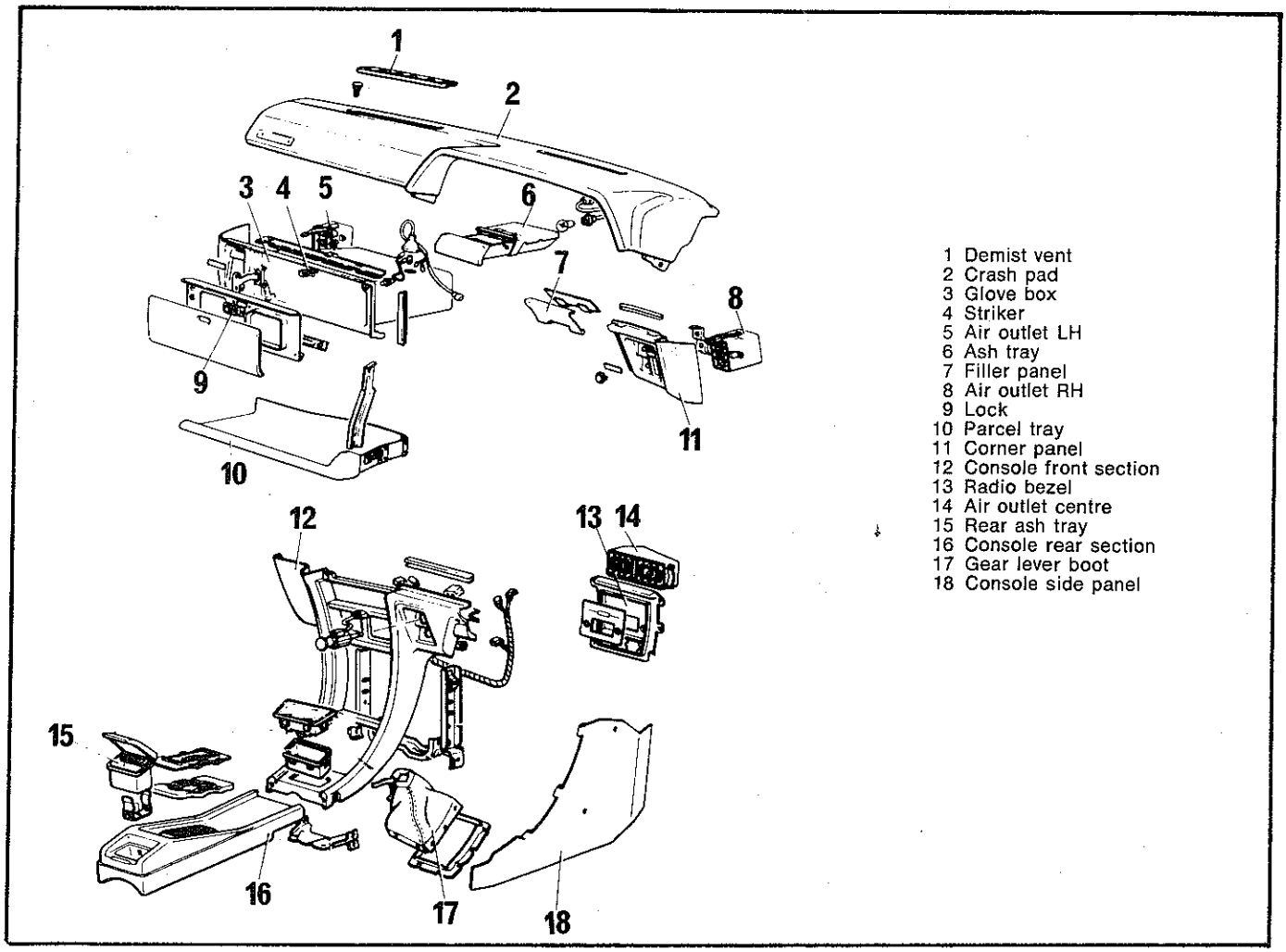


Fig. 8—Crash pad attaching nuts

Crash Pad

Removal

(1) Remove the glove box, centre panel and corner panel as previously described.



1 Demist vent
2 Crash pad
3 Glove box
4 Striker
5 Air outlet LH
6 Ash tray
7 Filler panel
8 Air outlet RH
9 Lock
10 Parcel tray
11 Corner panel
12 Console front section
13 Radio bezel
14 Air outlet centre
15 Rear ash tray
16 Console rear section
17 Gear lever boot
18 Console side panel

Fig. 9—Instrument panel disassembled view (two door models)

(3) Remove the instrument cluster retaining screws and pull the cluster forward far enough to disconnect the speedometer cable and wiring connectors, remove the cluster.

(4) Remove the demister vents attaching nuts and the radio speaker attaching nuts from under the crash pad.

(5) Lift the pad at the demister vents and pull the pad rearward to remove it from the vehicle.

Installation

Install by reversing removal procedure noting the following:

(1) Install the demister vents to the crash pad and secure them with the retaining clips to fit closely to the pad without creasing it.

(2) When installing the cluster hood ensure the side retaining clips engage the stays correctly and that the top retaining clips correctly engage the slots in the instrument cluster.

INSTRUMENT PANEL (Two Door Models)

Glove Box

Removal

(1) Remove the four upper glove box retaining screws.

(2) Loosen the three lower glove box retaining screws several turns, then pull out the glove box.

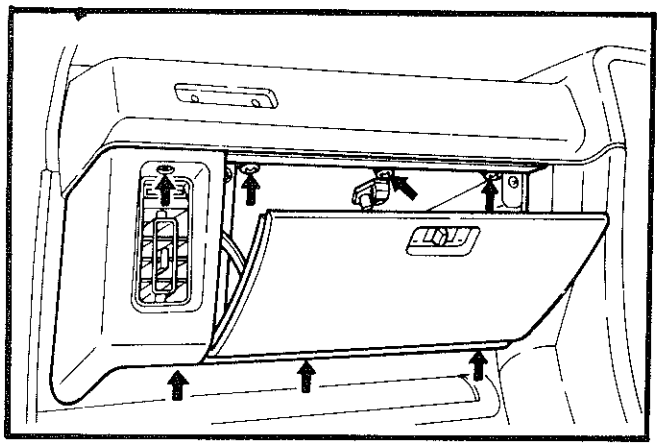


Fig. 10—Glove box attaching screws

Adjustment

The following adjustments should be made prior to installing the glove box.

(1) Disconnect the lid stop arm, loosen the lid attaching screws and adjust the lid to give a uniform clearance around the glove box.

(2) After performing the above adjustment, adjust the lock by loosening the striker attaching screws.

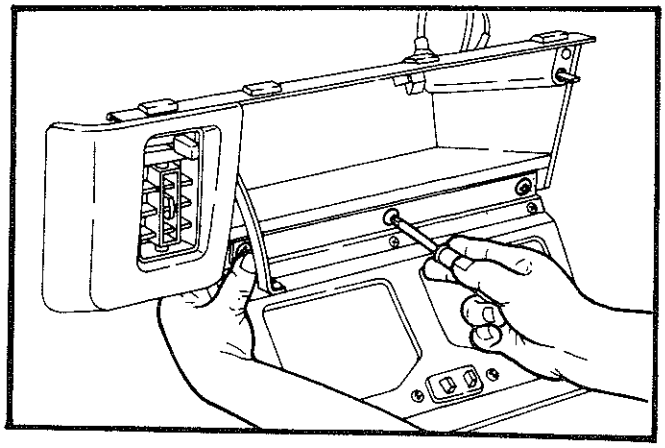


Fig. 11—Adjusting lid to glove box clearance

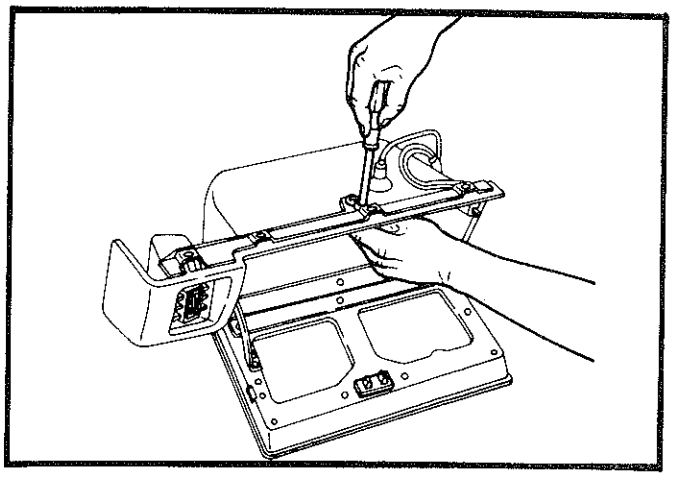


Fig. 12—Adjusting the glove box lock

Installation

(1) Install the glove box into the instrument panel and install the retaining screws, the long screw is fitted above the vent outlet.

(2) Prior to tightening the screws, position the glove box to give a uniform clearance between the glove box and console panel (refer Fig. 13).

Corner Panel

Removal

Remove the corner panel retaining screws and pull the panel out far enough to disconnect any wiring, the corner panel can now be removed.

Installation

Install by reversing removal procedure.

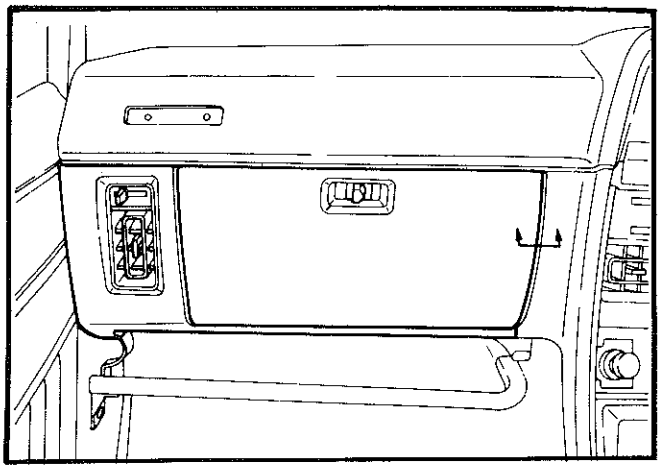


Fig. 13—Glove box alignment

Crash Panel

Removal

(1) Remove the glove box and corner panel as previously described.

(2) Remove the ash tray, remove the two retaining plate screws and remove the plate from the aperture. Remove the plug on the left of the tray and remove the screw.

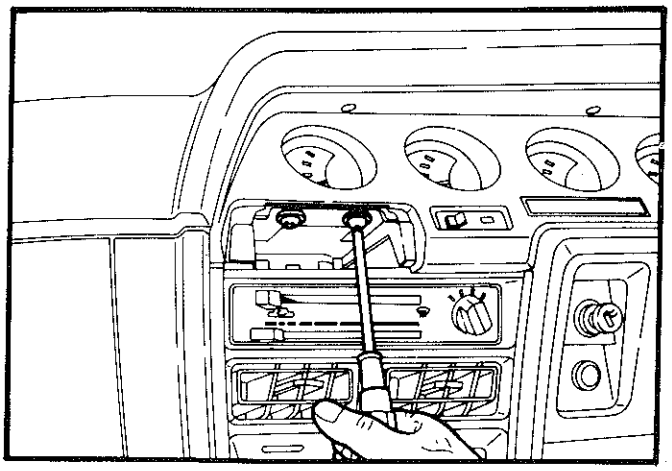


Fig. 14—Removing plate retaining screws

(3) Using a suitable screw driver in the slots provided at the outer end of the warning lamp lenses, unclip and remove the lenses.

(4) Remove the screws located behind the lenses.

(5) From under the instrument panel disconnect the speedometer cable by pressing the releasing clip and pulling the cable from the head.

(6) Remove the screws retaining the top of the instrument cluster and pull the instrument cluster forward.

(7) Disconnect the wiring loom and remove the instrument cluster.

(8) Remove the screws retaining the ends of the crash pad to the instrument panel.

(9) Remove the nuts retaining the demisting tubes to the demisting vents.

(10) Lift the pad at the demister vents to disengage the vent studs from the instrument panel, then pull the crash pad rearward to remove.

Installation

Install by reversing removal procedure, noting that if the demister vents have been removed, they must be refitted to the crash pad and secured with the retaining clips to fit closely to the pad without creasing it.

GEAR SHIFT CONSOLE

Small Type Console (Auto. Trans.)

Removal

(1) Loosen the gear shift lever retaining screw and remove the knob.

(2) Remove the console retaining screws and remove the console from the gear shift lever.

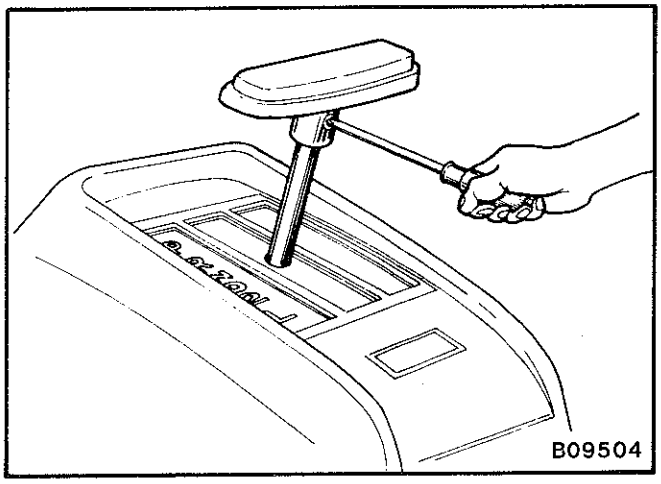


Fig. 15—Removing gear shift lever knob (early type)

(3) Disconnect the transmission shift linkage from the gear shift linkage under the vehicle.

(4) Remove the selector assembly retaining screws and remove the assembly, disconnecting associated wiring.

Installation

Install by reversing removal procedure ensuring the gear linkage is correctly adjusted to permit engine starting in "P" and "N" only.

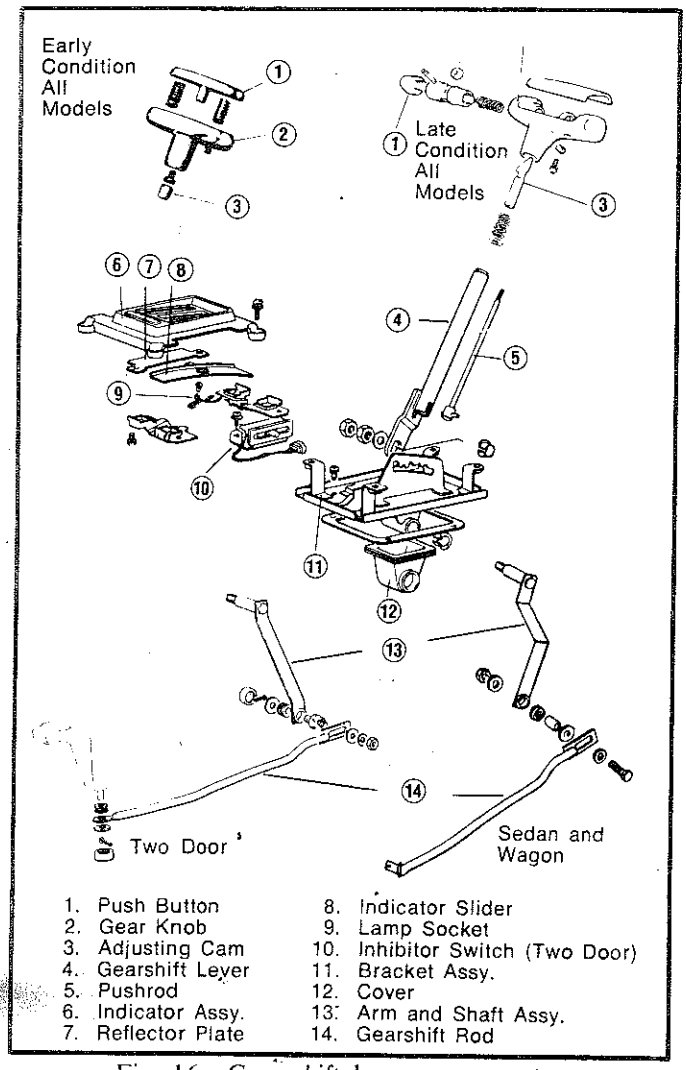


Fig. 16—Gear shift lever components

Large Type Console (Four Door Models)

Removal

(1) Apply the hand brake lever fully.

(2) Remove the rear accessory box floor cover and remove the retaining screws, the accessory box can now be removed.

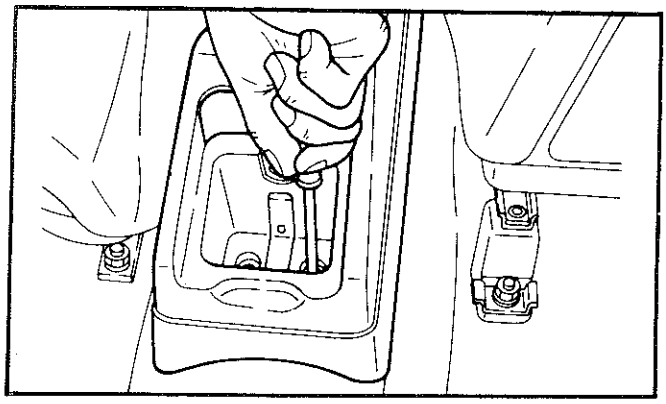


Fig. 17—Removing accessory box retaining screws

(3) Remove the hand brake lever retaining bolts and position the lever to one side.

(4) Remove the console retaining screws located at the side, in the front of the console and in the rear edge, at the back of the console.

(5) Move the console slightly rearward and disconnect any associated wiring.

(6) Position the gear lever to allow removal of the console over the gear knob and remove console assembly from the vehicle.

NOTE: On vehicles fitted with a console mounted tape player remove the tape player with the console.

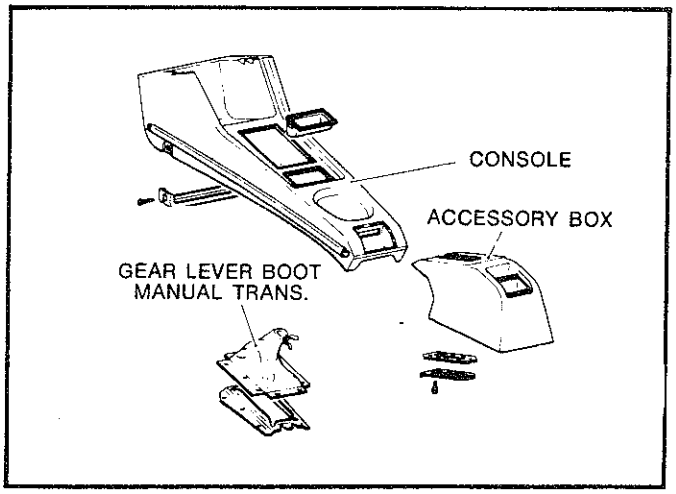


Fig. 18—Large console assembly (four door models)

(7) Remove gear shift lever and shift linkage assembly as previously described under Small Type Console.

Installation

Install by reversing removal procedure ensuring the gear linkage is correctly adjusted to permit engine starting in "P" and "N" only (auto. trans.).

Console (Two Door Models)

(1) Remove the console rear ash tray, then remove the two screws securing the console rear section to the floor, Refer Fig. 17.

(2) Remove the rear sections and disconnect the wiring.

(3) Remove the gear lever knob, the radio knobs and retaining nuts, the heater control lever knobs and fan switch knob.

(4) Remove the heater control panel by pulling the fan switch shaft, the panel is retained by a spring clip on the right hand side and a locating lug on the left hand side, disconnect the wiring.

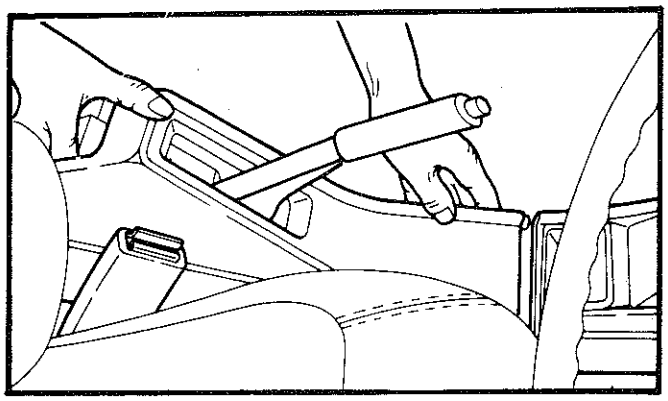


Fig. 19—Removing console rear section

(5) Remove the instrument panel ash tray and remove the rubber plug located to the left of the ash tray.

(6) Remove the console retaining screws, pull the top of the console down then pull the console rearward, disconnect associated wiring and remove the console.

(7) Remove gearshift lever and shift linkage assembly (if necessary) as previously described under Small Type Console.

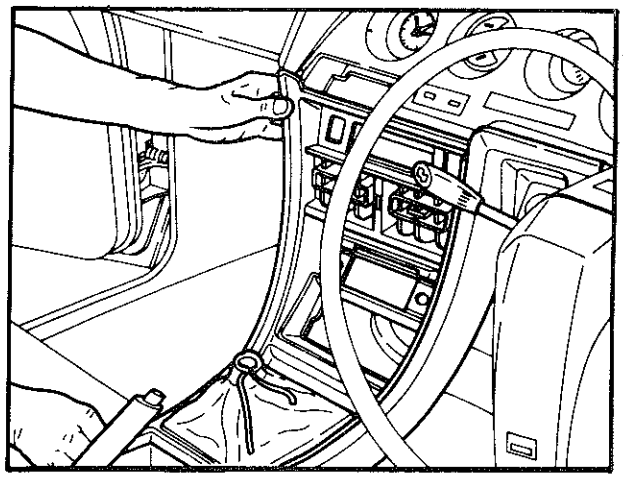


Fig. 20—Removing console

Installation

Install by reversing removal procedure ensuring the gear linkage is correctly adjusted to permit engine starting in "P" and "N" only (auto. trans.).

ROOF CONSOLE

Four Door Models

Removal

(1) Remove the rear view mirror mounting cover and remove the mirror.

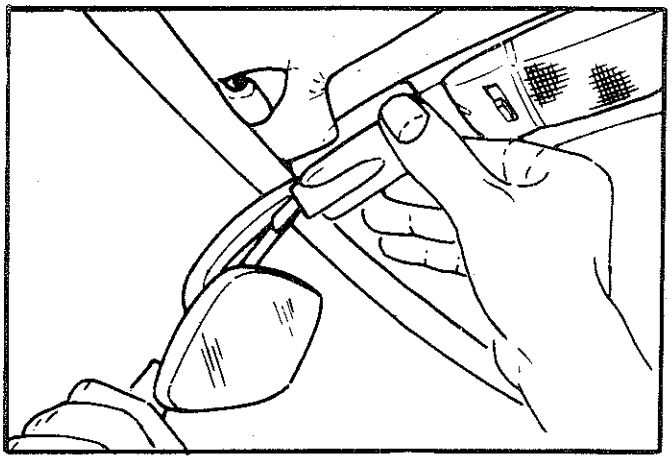


Fig. 21—Removing mirror mounting cover

(2) Pull down the front end of the console and release the two centrally located retaining clips.

(3) Slide the console forward to release the rear retaining clip.

(4) Pull the console down and disconnect the wiring loom. For lamp disassembly refer to Group 8, Electrical.

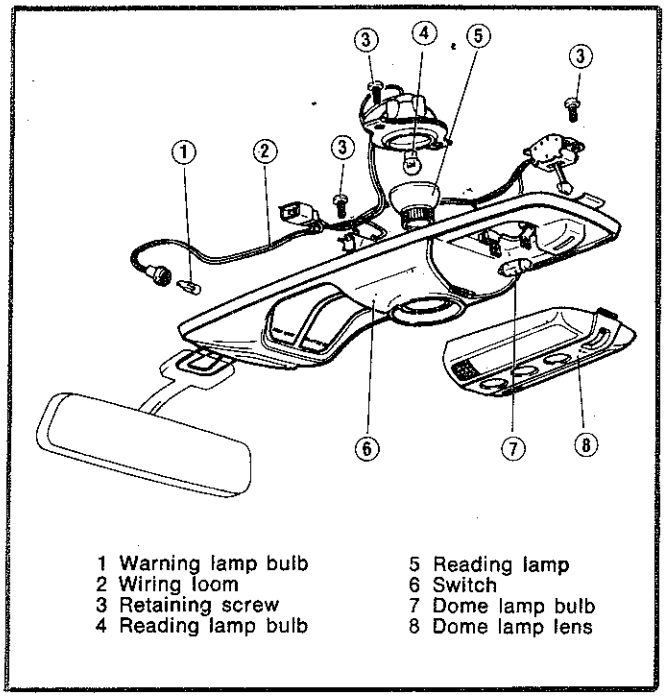


Fig. 22—Roof console disassembled view (four door models)

Installation

Install by reversing removal procedure noting that if the centre retaining clips have been removed they must be refitted with the black clip on the left hand side, white clip on the right hand side. The console housing is also marked B and W.

Two Door Models

Removal

(1) Remove the digital clock cover by pressing it to the left and pulling it downward.

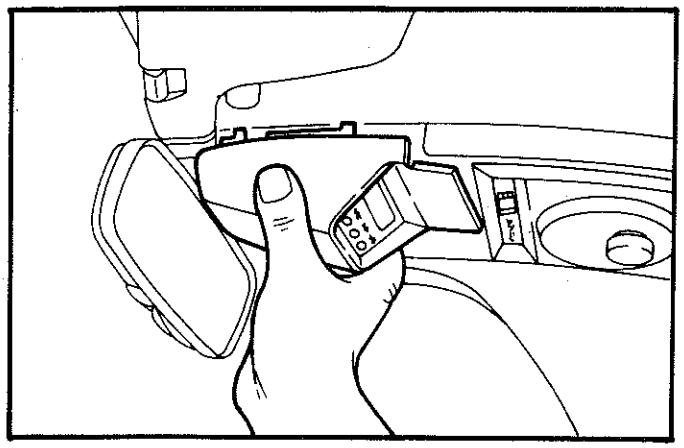


Fig. 23—Removing digital clock cover

(2) Remove the screws securing the clock assembly to the rear vision mirror bracket.

(3) Remove the console retaining screw located forward of the warning light cluster.

(4) Pull the front of the console down to release the centre retaining clips, careful use of a screw driver will assist in releasing the clips.

(5) Pull the console forward to release the rear retaining clip.

(6) Disconnect the wiring loom connector and remove the console.

(7) Console components can now be removed for repair or replacement.

Installation

Install by reversing removal procedure.

FLOOR COVERING

Removal

(1) Remove the gearshift console as previously described (if fitted).

(2) Remove the front seat belt at anchorage points in centre floor pan (if necessary).

(3) Remove the front seats and rear seat cushion.

(4) Remove scuff moulding retaining screws and remove the mouldings.

(5) Carpet and underfelt can now be removed.

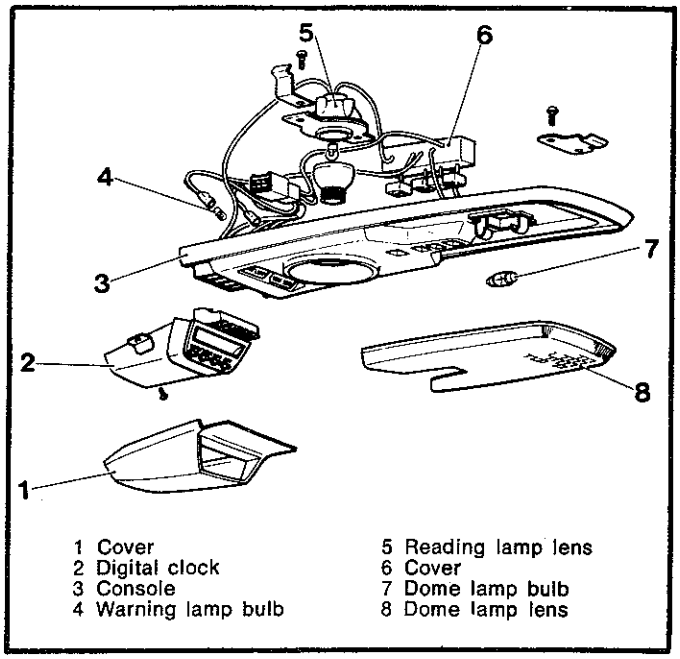


Fig. 24—Roof console disassembled view (two door models)

Installation

Install by reversing removal procedure.

NOTE: Ensure seat belt anchorage bolts are torqued to 47 Nm (35 lbs. ft.).

DOOR TRIM AND HARDWARE

Window Regulator Handle

The window regulator handle is retained by a spring clip located behind the regulator handle cover. To remove the handle pull the cover back from the door trim and remove the retaining clip, the handle can now be removed from the regulator shaft. Install by reversing removal procedure.

Arm Rest

Remove the arm rest retaining screw covers (if fitted) then remove the retaining screws and the arm rest.

Door Trim Panel

(1) Remove the window regulator handle and the remote door release handle cover plate.

(2) Remove the door arm rest.

(3) Insert a wide blade screw driver between the trim panel and the inner door panel next to the retaining clips and snap out the retaining clips around the edge of the trim panel. Remove trim panel from door.

(4) Before installing door trim panel, observe the condition of the water/dust shield cemented to the door panel.

(5) Align trim panel retaining clips with holes of door panel and bump into place with heel of hand.

(6) Install handles and arm rest.

HEAD LINING

The head lining is a moulded type which is screwed to the roof railing, making it unnecessary to remove the front and rear window glass to remove the head lining.

Removal

(1) Remove the sun visors and interior mirror.

(2) Remove the dome lamp or roof console (if fitted).

(3) Remove the front upper seat belt mounting on two door models.

(4) Remove the head lining side garnish trim.

(5) Remove the front and rear pillar trim panels.

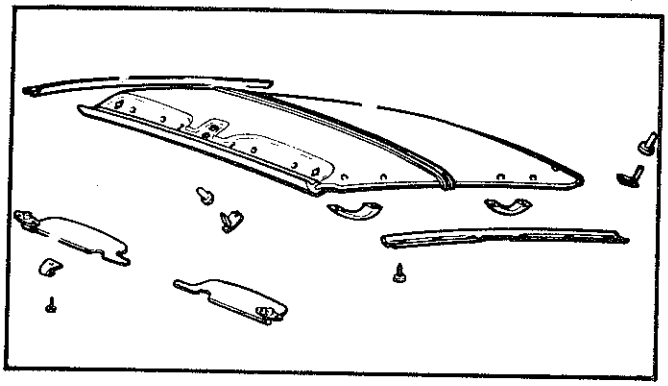


Fig. 25—Head lining assembly (Sedan)

(6) Remove the head lining centre attaching screws and the front and rear clips.

(7) Remove the head lining from the vehicle.

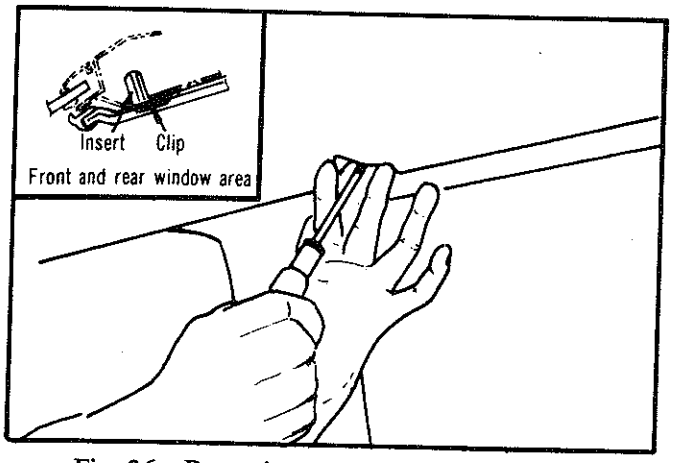


Fig. 26—Removing centre attaching screws

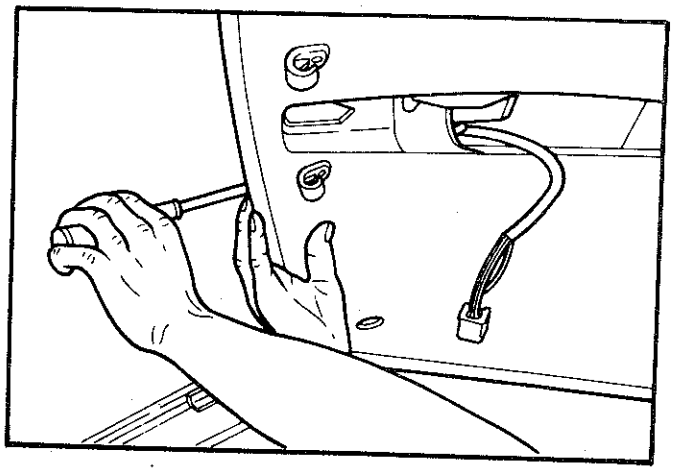


Fig. 27—Removing head lining front and rear clips

Installation

Install by reversing removal procedure ensuring that when the head lining is installed the overhang on the edges is uniform. Use care when installing the pillar trim panels to avoid creasing the head lining edge.

NOTE: Ensure seat belt anchorage bolts are torqued to 47 Nm (35 lbs. ft.).

SEAT BELTS

(1) For seat belt fitting instructions, refer to Fig. 32. to 35.

(2) Whenever fitting the seat belts, ensure that they are adjusted so that the webbing that passes across the wearer's body is not twisted and that the seat belt buckle is at or below the wearer's hip.

(3) Ensure that the inboard half of lap/sash belts and both halves of the centre seat belt are routed in accordance with the appropriate diagram.

(4) The buckle half of centre seat belt is to be fitted to the left hand side anchor point.

(5) All seat belts (except front inner and all retractor housings) must pivot freely about their anchorages.

NOTE: When removing the seat belts from the anchor points, it is essential to identify the individual bolt, spacer and wave washers, etc., in order to place them in their relevant position upon re-assembly. This is necessary due to some differences in bolt and spacer dimensions.

(6) All seat belt securing bolts are to be torqued to 47 Nm ± 7 Nm (35 lbs. ft. ± 5 lbs. ft.).

Lap/Sash with Automatic Retractors

The design of this belt allows the wearer to move the upper portion of his or her body to reach various controls, the glove compartment, etc. Locking of this type of belt is automatic and is activated by rapid speed changes, changes in vehicle direction or rapid belt withdrawal.

On occasions when the vehicle is parked or ranked on a particularly steep curb or hill, the locking mechanism of the retractor may be activated. This will prevent the wearer from pulling the belt out of the retractor. This condition is rectified by placing the vehicle on a more level surface.

Retractor Installation and Adjustment

Removal (Four Door Models)

(1) Remove the running loop mounting bolt then remove the belt guide.

(2) Remove the door scuff plates, the roof rail trim, door opening trim and the centre pillar trim.

(3) Remove the lower mounting retaining bolt and screw, then remove the retractor from the mounting.

(4) Pass the belt guide, running loop, tongue and lower mounting through the trim panel opening.

(5) Remove the retractor and holder from the centre pillar.

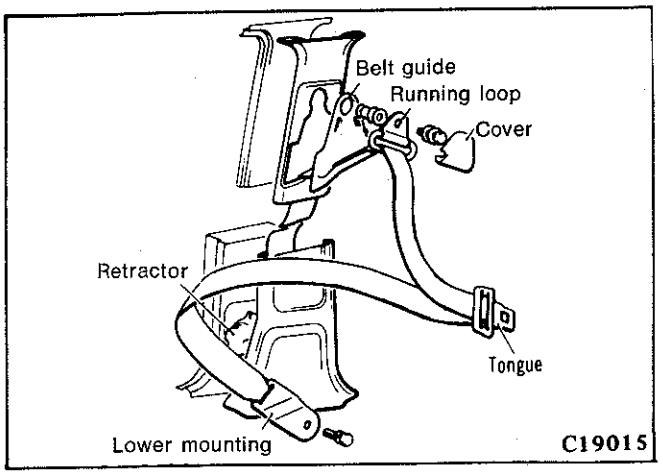


Fig. 28—Retractor belt mounting (four door models)

Installation

Install by reversing removal procedure noting the following:

(1) When installing the belt guide to the centre pillar trim ensure the belt guide pawls are set exactly in between the centre pillar trim panel.

(2) Tighten all belt anchorage bolts to 47 Nm ± 7 Nm (35 lbs. ft. ± 5 lbs. ft.).

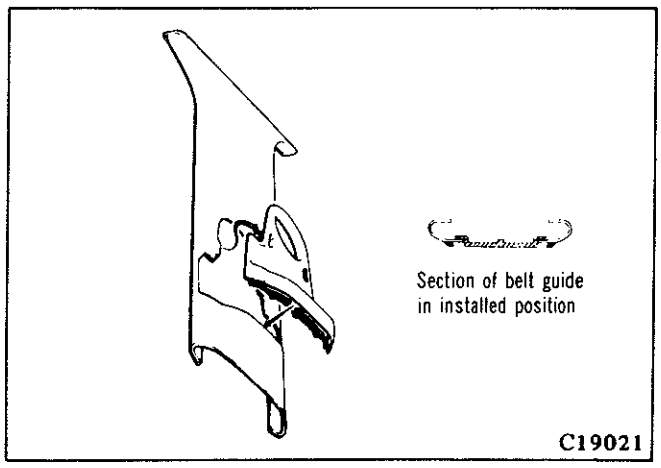


Fig. 29—Belt guide installation

Removal (Two Door Models)

(1) Remove the running loop cap and remove the mounting bolt.

(2) Remove the retractor cover screw and remove the cover.

(3) Remove the retractor mounting bolt and remove the retractor assembly from the vehicle.

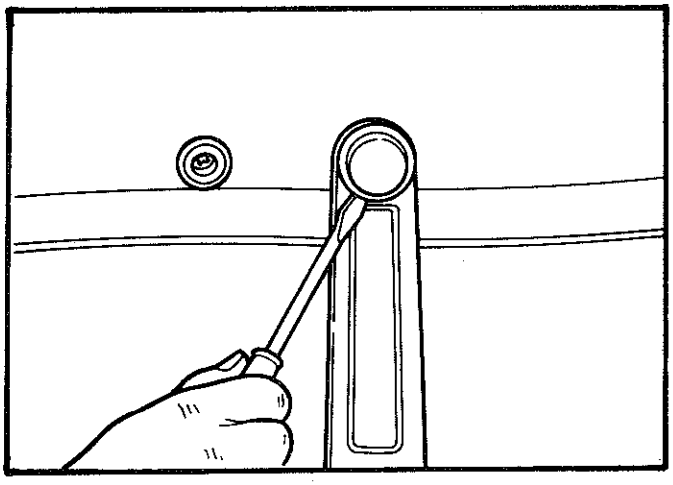


Fig. 30—Removing running loop mounting cap

Installation

Install by reversing removal procedure ensuring the mounting bolts are torqued to 45 Nm ± 7 Nm (35 lbs. ft. ± 5 lbs. ft.).

NOTE: If difficulties are experienced with belt extraction and retraction, recheck for correct installation. Under no circumstances should the retractor unit be tampered with in any way. The retractor unit is sealed to preclude un-authorised repairs. If the retractor unit is found to be faulty, a replacement retractor belt assembly must be fitted.

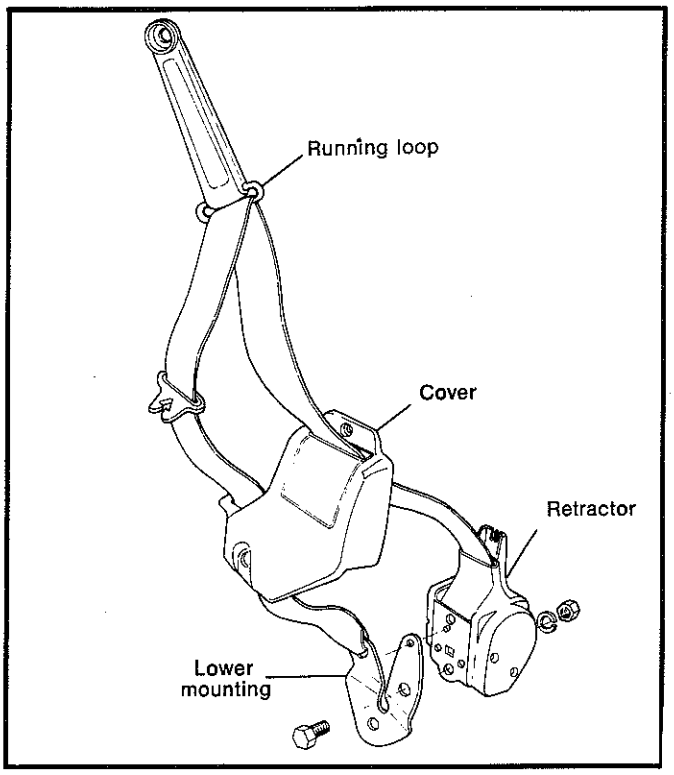


Fig. 31—Retractor belt mounting (two door models)

Bracket — Running Loop

The bracket — running loop is secured to the anchorage point on the vehicle "B" pillar or roof rail and it is essential to the correct operation of the retractor that the running loop bracket pivots freely on its anchorage bolt.

Testing

(a) Withdraw the webbing **slowly,** completely and directly from the retractor reel and allow the unit to retract the webbing by guiding evenly through the webbing aperture of the retractor.

(b) Ensure that the webbing movement between the reel and the shoulder mounting is not obstructed.

(c) The bracket-running loop on the "B" pillar or roof rail **MUST** swivel freely.

Having statically achieved satisfactory freedom of extraction and retraction of the seat belt webbing, the final effectiveness of the operation should be checked as follows: These belts are "dual sensitive" (i.e. they are activated by vehicle speed change/direction change locking mechanism or rapid belt withdrawal locking mechanism). To test, "buckle-up", select a traffic-free roadway and apply the brakes firmly — the belt will lock if you lean slowly forward whilst applying the brakes. Check the rapid belt withdrawal locking mechanism whilst the vehicle is stationary by simply pulling the belt rapidly from the retractor assembly — the belt will lock.

The vehicle speed change/direction change locking mechanism is pendulum actuated. If vehicle is parked on a steep slope or with the road wheels of one side in a deep gutter, the belt may lock. However, with retractor correctly installed, vehicle attitudes between 10°-24° off level in any direction are possible before the pendulum actuates the locking mechanism.

FITTING INSTRUCTION FOR FRONT SEAT BELTS

(1) Select appropriate diagram.

NOTE: Replacement belt must match its mating half by Vendor trade mark (i.e. (a) RMP, (b) REPA or TRW, (c) CCI).

(2) Refit the seat belt as illustrated ensuring that any defective attachments have been replaced with genuine Chrysler Replacement Parts.

(3) When refitting a retractor seat belt, the upper loop and lower anchor plate must be free to swivel around the attaching bolts. The retractor unit should be securely bolted with the retractor locating peg positioned in the hole in mounting surface.

(4) Assemblies must not be altered, modified or re-routed in any way! Where shown, buckles and centre lap tongues must pass through plastic webbing protectors and pockets in seats.

(5) Torque load on seat belt bolts to be 47 ± 7 Nm (35 ± 5 ft. lbs.).

(6) Item "M" fibre washer is not mandatory.

FITTING INSTRUCTIONS FOR REAR SEAT BELTS

(1) Select appropriate diagram.

NOTE: Replacement belt must match its mating half by vendor trade mark, i.e. RMP.

(2) Refit the seat belt as illustrated ensuring that any defective attachments have been replaced with genuine Chrysler replacement parts.

(3) When fitting rear buckles ensure that they are routed through elastic restraints attached to the seat back or cushion.

(4) Assemblies must not be altered, modified or re-routed in any way.

(5) Torque load on seat belts to be 47 Nm ± 7 Nm (35 lbs. ft. ± 5 lbs. ft.).

(6) Item "M" fibre washer is not mandatory.

(7) If fitting new cover for anchor plate item "W", it is desirable to moisture condition by boiling in water to avoid breakage.

A BELT ASSEMBLY TONGUE RETRACTOR
B BELT ASSEMBLY BUCKLE CABLE
F BOLT
H BOLT SHOULDERED
L WASHER LOCK
M WASHER FIBRE
Q SPACER NYLON
R SPACER NYLON (BLACK)
S SPACER PLAIN (STEEL)
X CAP — S/BELT ANCH COVER
AL WASHER
BE BOLT
BF WASHER — SPRING LOCK
BH SCREW — TRUSS HEAD

WHEN TIGHTENING BOLTS ENSURE THAT COMPONENTS ARE NOT JAMMED INCORRECTLY UNDER HEAD.

TORQUE FOR ALL BOLTS
47 Nm ± 7 Nm (35 lbs. ft. ± 5 lbs. ft.)

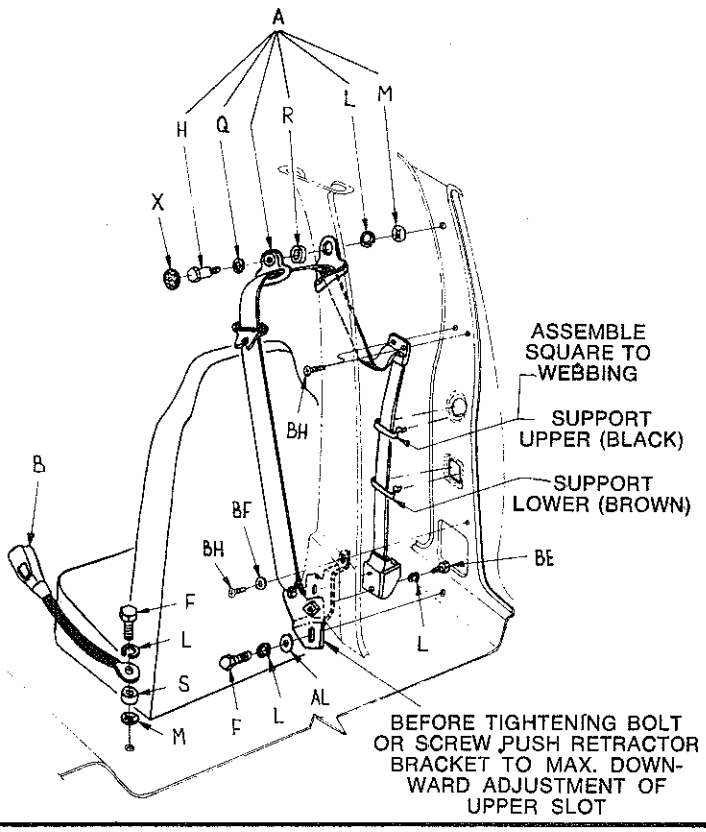


Fig. 32—Front seat belt (four door models)

A BELT ASSEMBLY TONGUE, RETRACTOR
E BOLT
H BOLT
L WASHER — LOCK
M WASHER — FIBRE
Q SPACER — NYLON
R SPACER
AL WASHER
BC NUT
BE BOLT
BJ SPACER
BM SCREW — TRUSS HEAD
BN WASHER — SPRING LOCK

WHEN TIGHTENING BOLTS ENSURE THAT COMPONENTS ARE NOT JAMMED INCORRECTLY UNDER HEAD

TORQUE FOR ALL BOLTS
47 Nm ± 7 Nm (35 lbs. ft. ± 5 lbs. ft.)

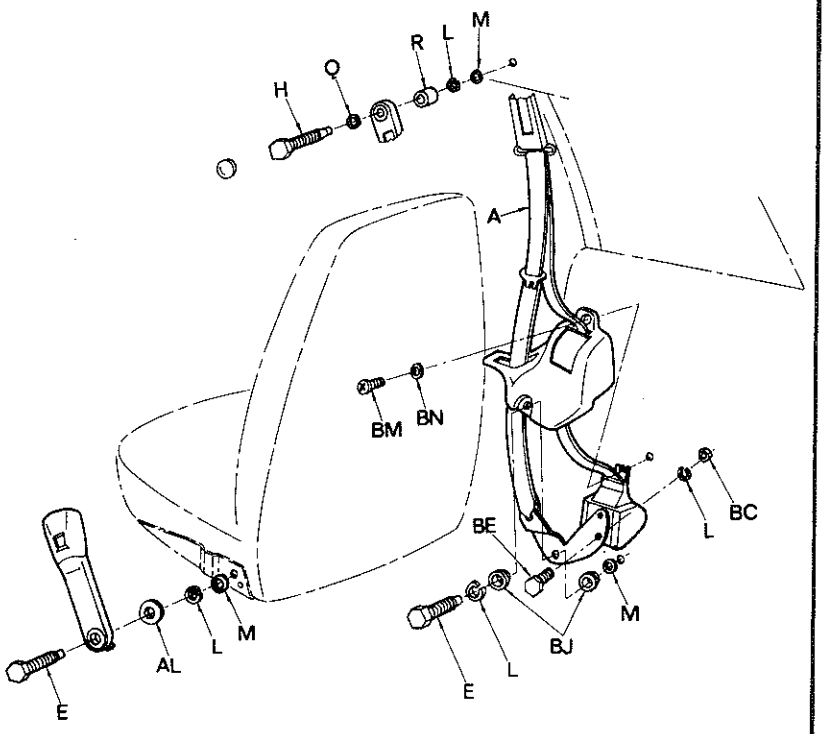


Fig. 33—Front seat belt (two door models)

A BELT ASSEMBLY TONGUE L/SASH
B BELT ASSEMBLY BUCKLE WEB
C BELT ASSEMBLY TONGUE C/LAP
G BOLT SHOULDERED
H BOLT SHOULDERED
K WASHER SPRING CURVED
L WASHER LOCK
M WASHER FIBRE
P SPACER NYLON (WHITE)
R SPACER NYLON (BLACK)
V SPACER FLANGED
W COVER — S/BELT ANCHOR PLATE
X CAP — S/BELT ANCHOR COVER

WHEN TIGHTENING BOLTS ENSURE THAT COMPONENTS ARE NOT JAMMED INCORRECTLY UNDER HEAD.

TORQUE FOR ALL BOLTS
47 Nm ± 7 Nm (35 lbs. ft. ± 5 lbs. ft.)

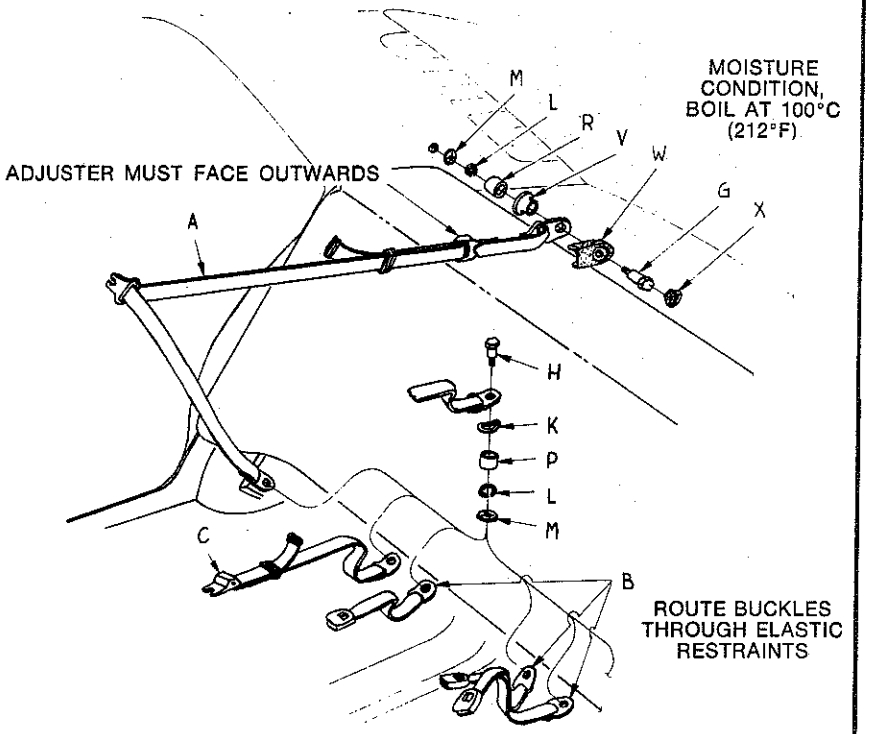


Fig. 34—Rear seat belt four door models

A BELT ASSEMBLY TONGUE L/SASH
B BELT ASSEMBLY BUCKLE WEB
C BELT ASSEMBLY TONGUE C/LAP
G BOLT SHOULDERED
H BOLT SHOULDERED
K WASHER SPRING CURVED
L WASHER LOCK
M WASHER FIBRE
P SPACER NYLON (WHITE)
R SPACER
W COVER — S/BELT ANCHOR PLATE
X CAP — S/BELT ANCHOR COVER

WHEN TIGHTENING BOLTS ENSURE THAT COMPONENTS ARE NOT JAMMED INCORRECTLY UNDER HEAD.

TORQUE FOR ALL BOLTS
47 Nm ± 7 Nm (35 lbs. ft. ± 5 lbs. ft.)

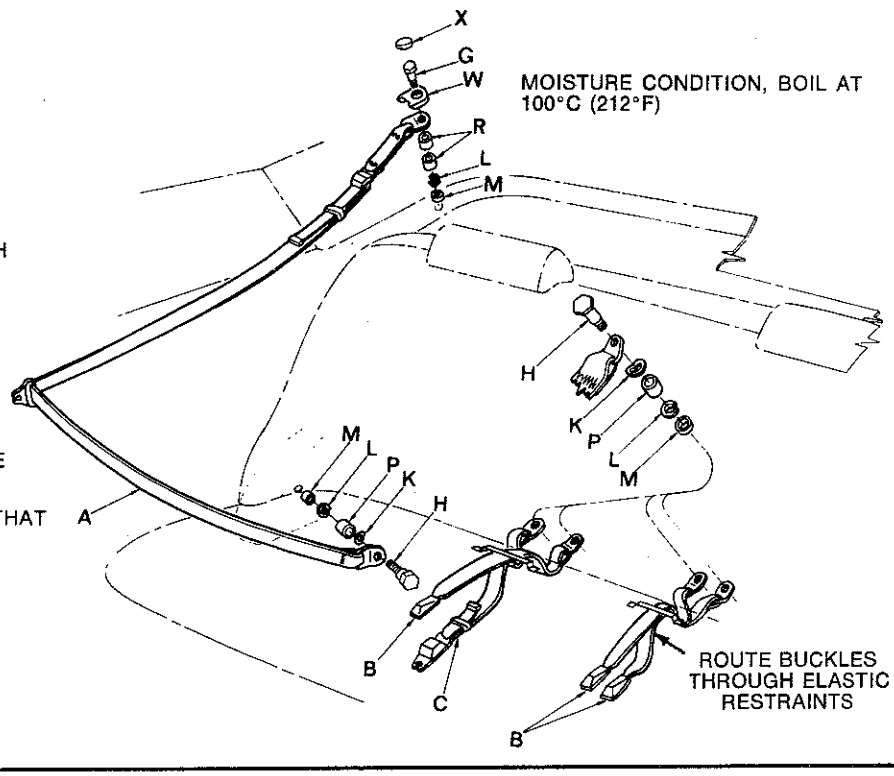


Fig. 35—Rear seat belt two door models

CHILD RESTRAINT ANCHORAGES

All vehicles have provision for the attachment of child restraints to the rear seat area.

Locations

Galant and GL Sedans — outboard locations are beneath cover plugs in rear shelf depression. For the centre location, feel the soft spot in the shelf trim panel approximately 150 mm (6") rear of the seat and pierce through the trim material.

SE Sedans — outboard location, feel for the two soft spots in the trim panel strip across the front edge of the shelf panel and pierce through the trim material. For the centre location, feel for the soft spot on the shelf panel approximately 80 mm (3.150") rearward of the front edge and pierce through the trim material.

Station Wagon — remove the three cover plugs located in the floor panel behind the rear seat.

Two Door Models — remove the three circular cover plates located on the rear shelf panel.

Approved child restraints can be anchored to these positions in conjunction with the rear seat belt.

WARNING: Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.

FRONT SEATS

Removal

Unscrew the bolts securing the seat frame to the floor pan and then carefully remove the seat assembly from the vehicle.

Installation

Position the seat on the mountings and install the retaining bolts.

Lumbar Support Mechanism (Where Fitted)

The seat back lumbar supporting pressure can be varied by the control lever on the inner side of the driver's seat squab.

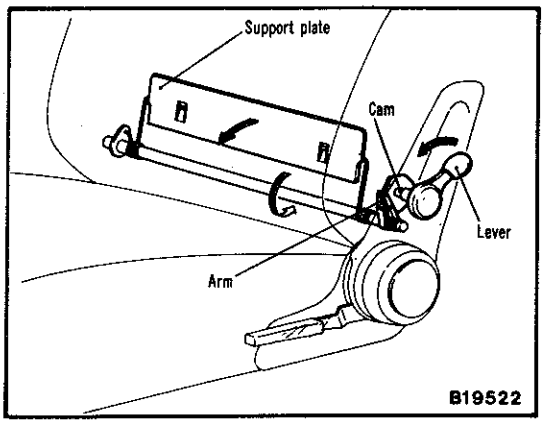


Fig. 37—Lumbar support mechanism

Turning the control lever rotates the cam which actuates the arm on the support board shaft. As the shaft turns, the support board springs are moved forward thus moving the support board and increasing the lumbar pressure.

Seat Tilt Mechanism (Where Fitted)

The seat tilt angle can be adjusted by the control lever located at the outer front of the driver's seat cushion.

When the tilting adjuster lever is moved upward, the tilting stopper (2) moves upward at the same time, disengaging it from the cam (3) (B in Fig. 38).

As the cam is set free the seat will tilt when pressure is applied to the seat back. Releasing the adjuster will engage the stopper and hold the seat in the adjusted position.

REAR SEAT

Fixed Back Type

Removal

(1) Remove the screws securing the front edge of the cushion, remove the cushion.

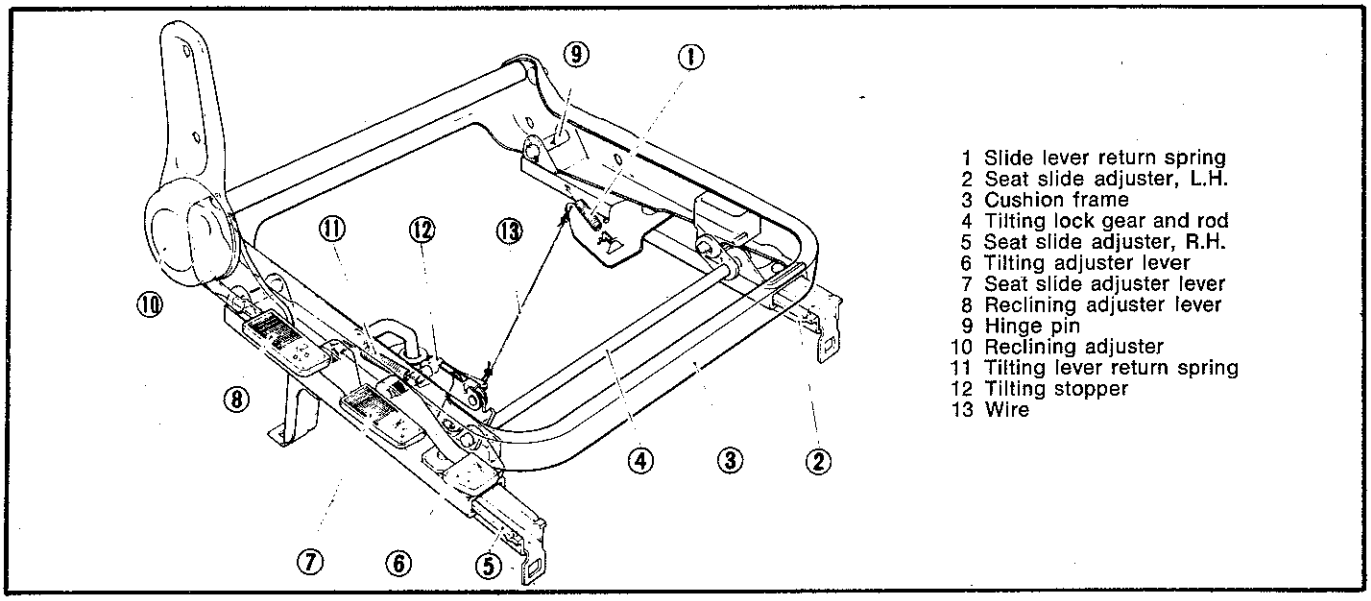


Fig. 36—Front seat adjuster mechanism

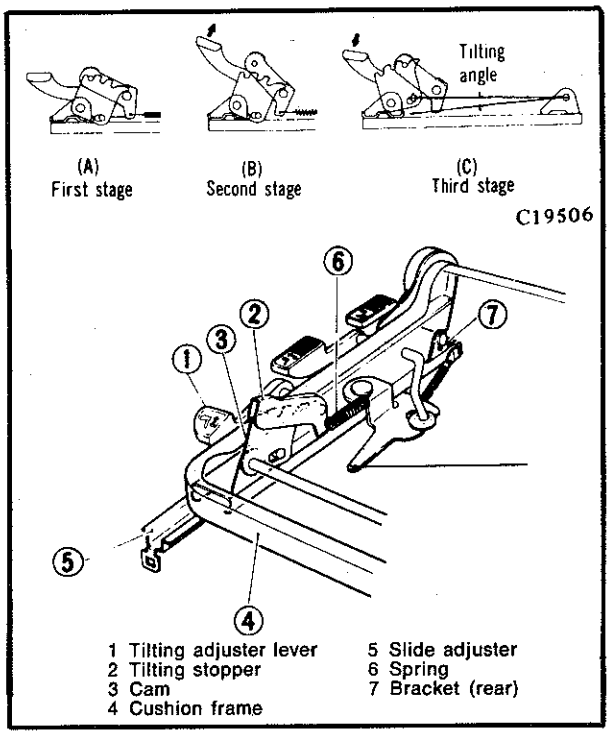


Fig. 38—Tilt adjuster mechanism

(2) Remove the screws securing the lower edge of the squab, raise the squab to release the retaining brackets and remove the squab.

Installation

Install by reversing removal procedure ensuring the centre mounted seat belt and buckles are fitted through the elastic restraints.

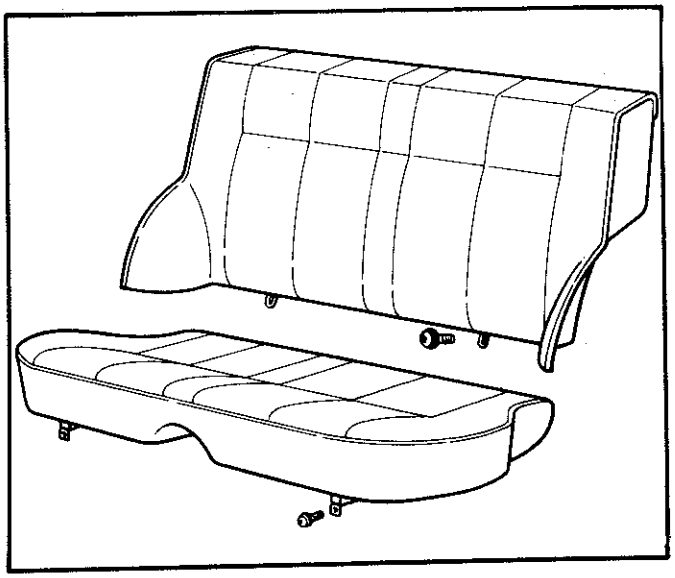


Fig. 39—Fixed back rear seat assembly

Reclining Back Type

Removal

(1) Remove the seat cushion attaching bolts and remove the cushion.

(2) Move the seat squab to the fully reclined position and remove the recliner mechanism to floor pan front attaching bolts.

(3) Remove the rear shelf attaching screw cover and then remove the attaching screws.

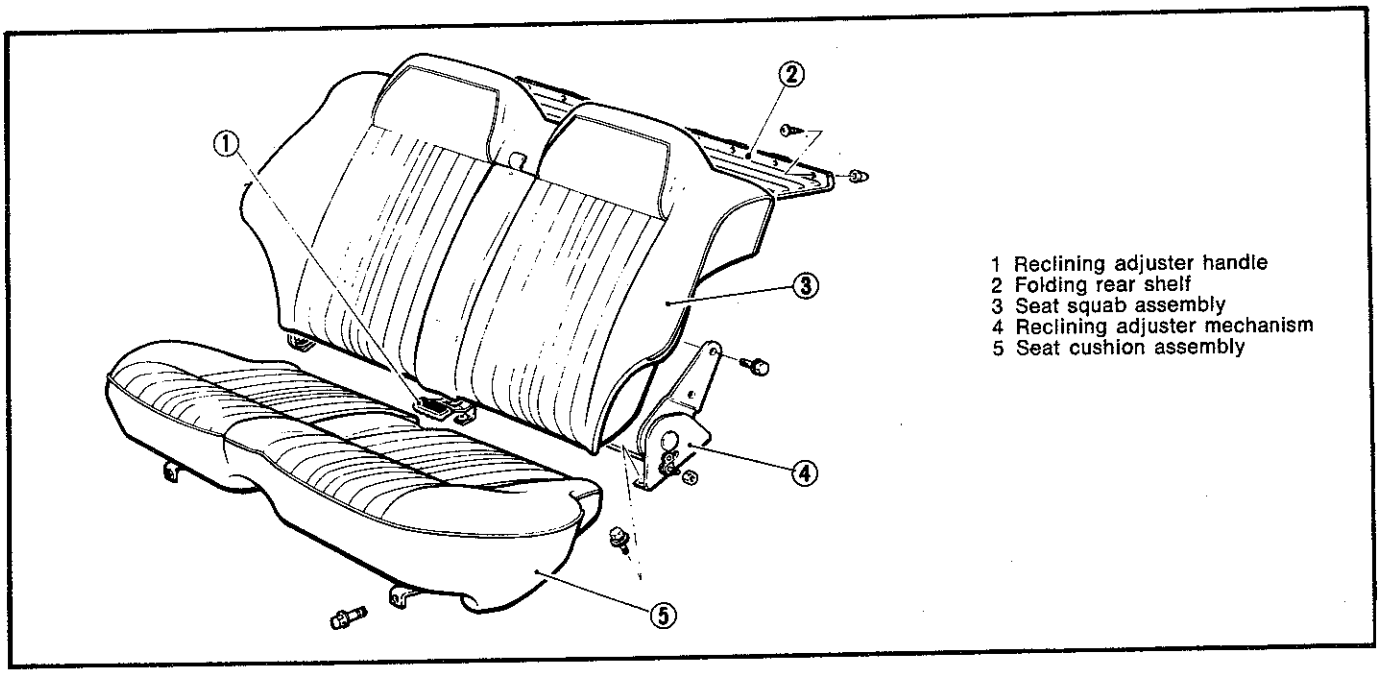


Fig. 40—Reclining back rear seat assembly

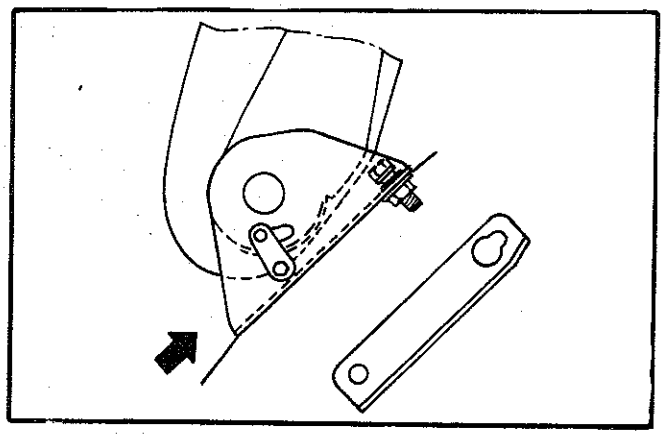


Fig. 41—Recliner bracket slotted mounting plate

(4) Pull the adjusting handle up and remove the lever attaching screws.

(5) Position the seat squab back and loosen the recliner bracket rear attaching bolts.

(6) Raise the squab assembly to disengage the slotted floor mounting bracket from the rear bolt, remove the squab.

(7) The reclining mechanism can now be removed from the seat squab.

Installation

Install by reversing removal procedure noting the following:

(1) First tighten the rear bolts securing the bracket to the floor, then move the squab forward until the rear attaching bolts can be inserted. The bracket front attaching bolts can now be tightened.

(2) When installing the folding rear shelf ensure a uniform clearance is provided between the shelf and the pillar trim. The shelf and pillar trim must also overlap evenly on either side and there should not be any creases in the shelf.

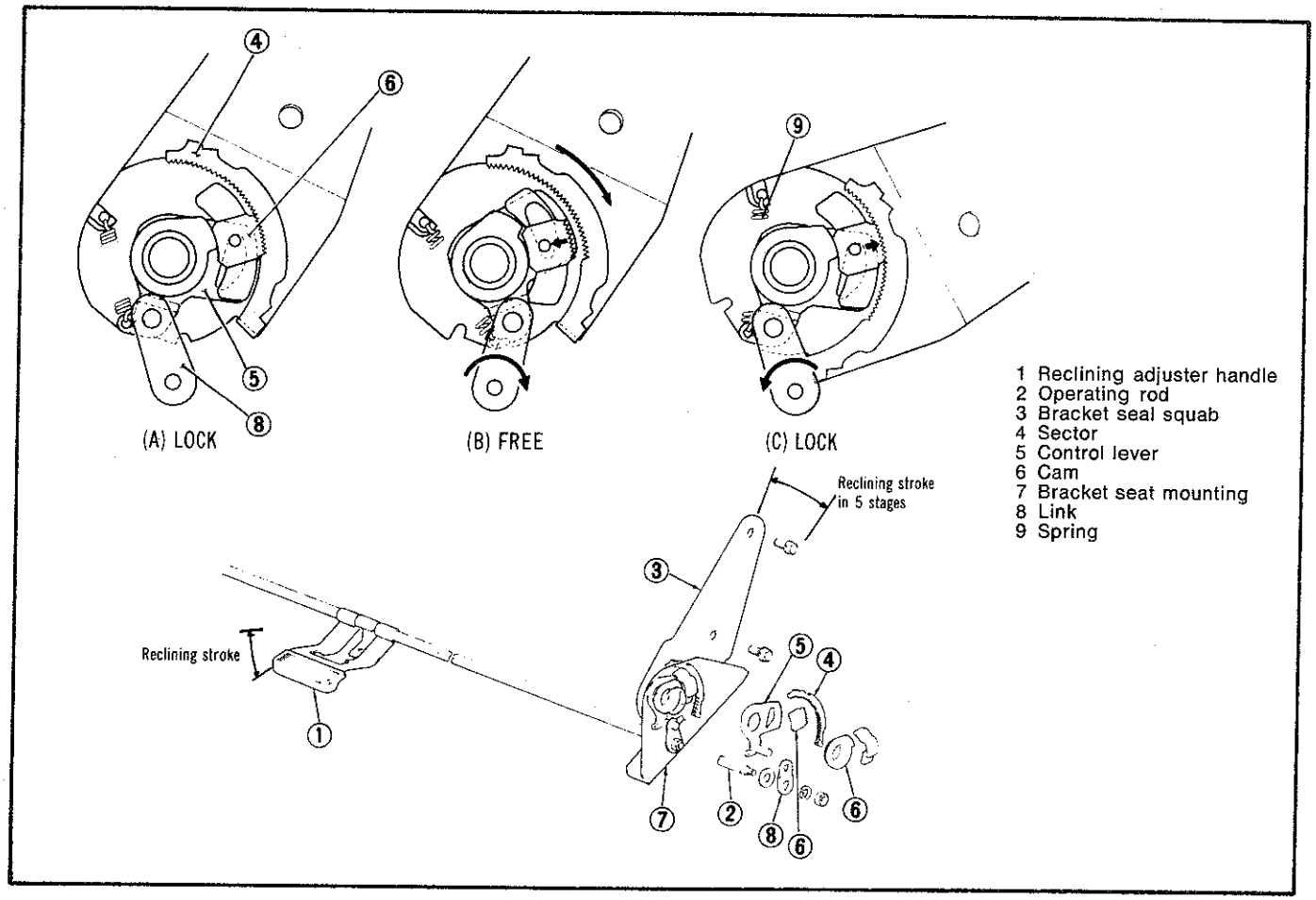


Fig. 42—Rear seat reclining mechanism

FOLDING BACK TYPE

Removal

(1) Remove the seat belt buckles from the seat squab elastic restraints.

(2) Tilt the seat squab forward and remove the screws securing the cargo carpet to the seat squab.

(3) Remove the hinge plate screws and remove the squab.

(4) Raise the seat cushion and remove the hinge to floor pan cross member screws and remove the cushion.

Installation

Install by reversing removal procedure noting the following:

(1) When installing the seat squab, fit the hinge plates on the hinge pins before the squab is installed in its correct position.

(2) Route the seat belt buckles through the squab elastic restraints prior to lowering the seat cushions.

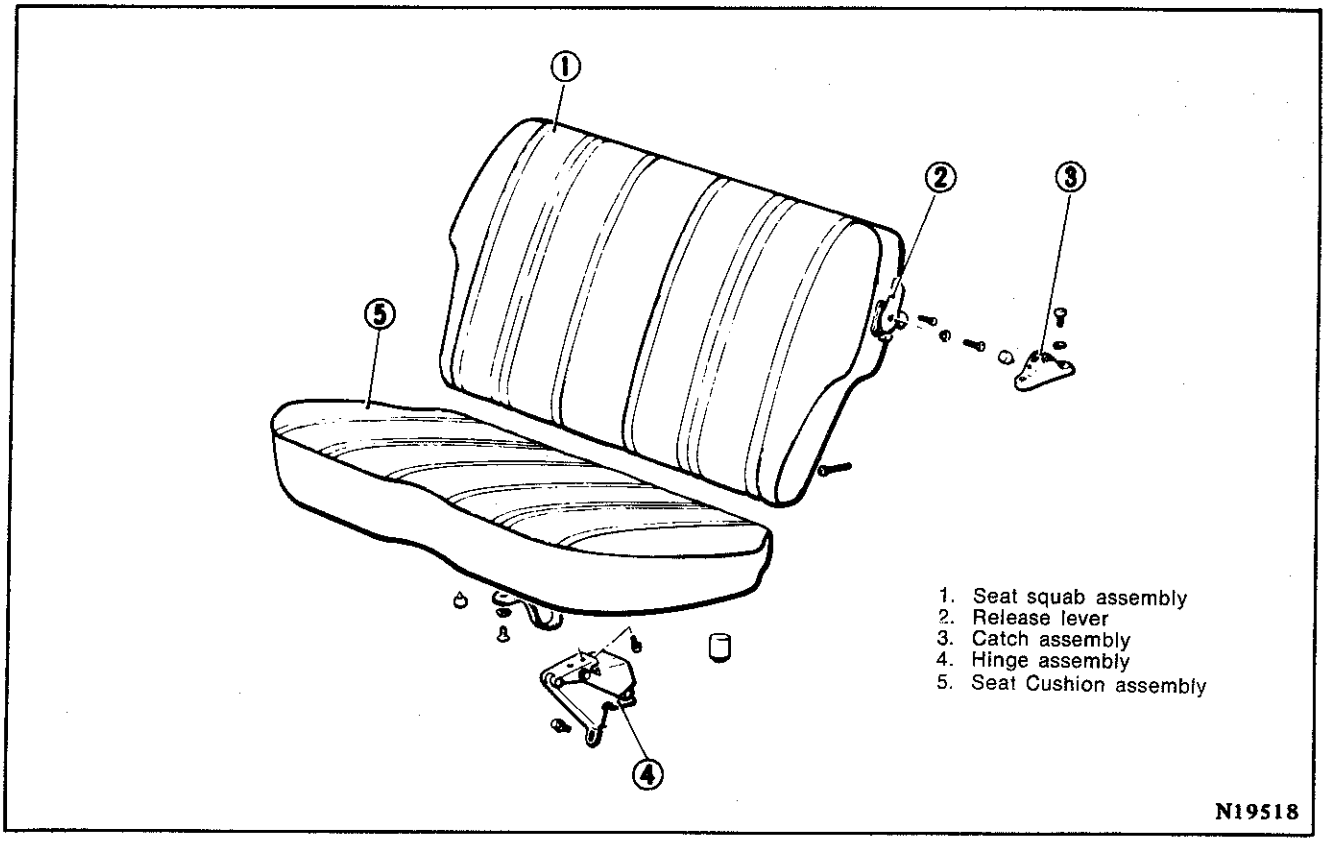


Fig. 43—Folding back seat

SECTION 3 — OPENING SIDE GLASS

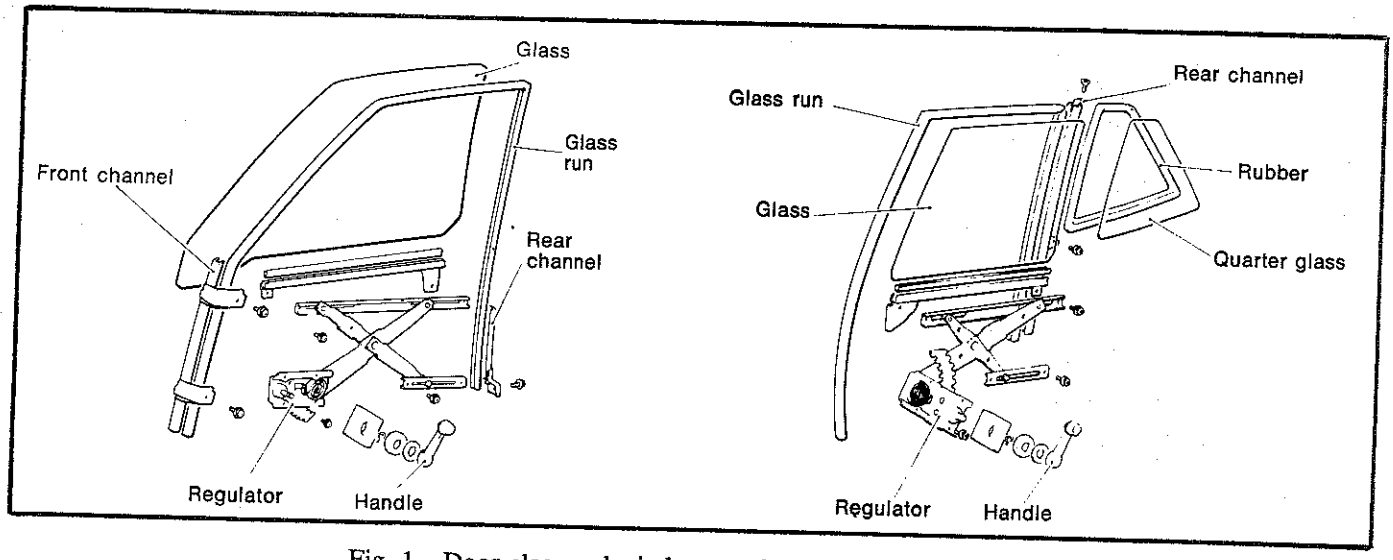


Fig. 1—Door glass and window regulator (four door models)

DOOR GLASS AND REGULATOR (Four Door Models)

Door Glass

Removal

(1) Remove the door arm rest, window regulator handle, door handle cover plate, door trim panel and water/dust shield as described in Section 2.

(2) Remove the glass rear channel retaining screw and remove the channel by pulling down (front doors). With the glass lowered, remove the rear channel retaining screws and remove the quarter glass and then the channel (rear doors).

(3) Remove the screws securing the regulator channel to the glass mounting bracket.

(4) Remove the glass from the door by tilting and lifting the rear end.

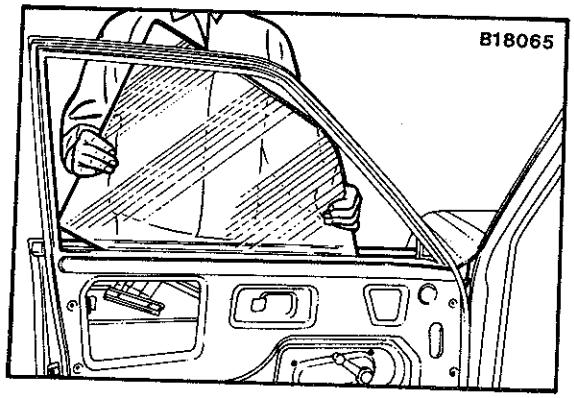


Fig. 2—Removing door glass (front door shown)

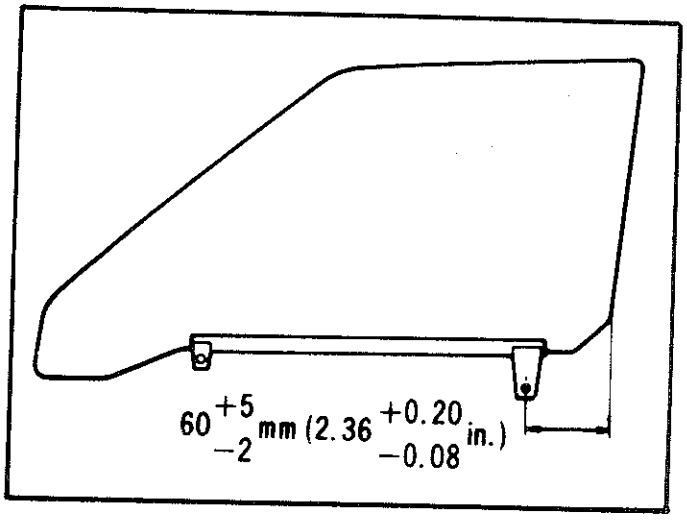


Fig. 3—Front door glass holder position

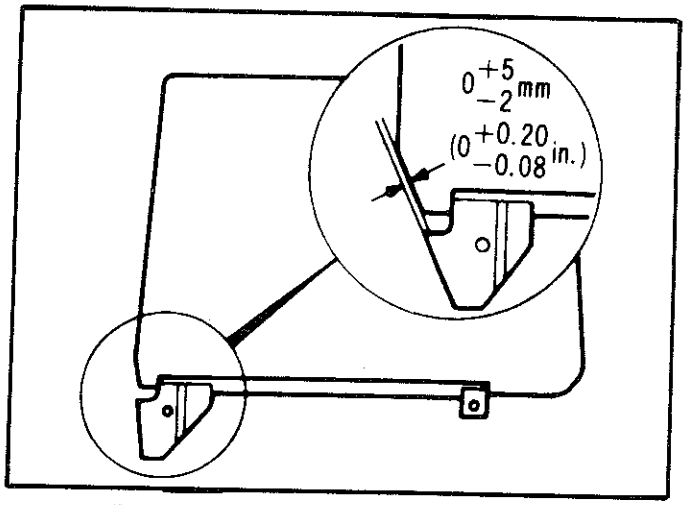


Fig. 4—Rear door glass holder position

Installation

Install by reversing removal procedure noting the following:

(1) Lubricate all rotating and sliding parts with grease prior to installation.

(2) If the glass holder has been removed, ensure it is correctly positioned onto the glass prior to installation, Refer Figs. 3 and 4. A heat resistant drying adhesive should be used on the glass holder.

Glass Adjustments

Lower the glass and position the front door front glass channel, or rear door rear glass channel to remove excessive looseness of the glass without creating a binding condition. Adjust the regulator pivot arm bracket, remove any excessive glass play in the longitudinal direction.

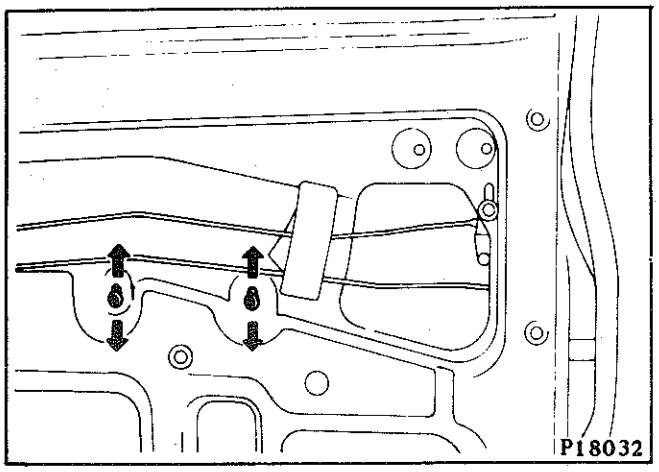


Fig. 5—Regulator pivot arm bracket adjustment

Window Regulator

Removal

(1) Remove the door arm rest, window regulator handle, door handle cover plate, door trim panel and water/dust shield as described in Section 2.

(2) Lower the glass and remove the regulator channel to glass holder attaching screws.

(3) Support the glass in the raised position.

(4) Remove the regulator pivot arm bracket attaching screws.

(5) Remove the regulator attaching screws and remove the regulator from the door panel.

Installation

Install by reversing removal procedure lubricating any rolling or sliding parts prior to installation. Adjust the regulator pivot arm bracket to remove any excessive glass play.

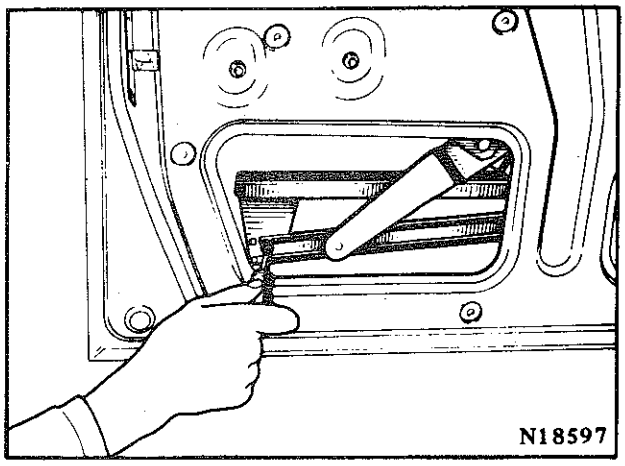


Fig. 6—Removing regulator channel to glass holder screws

Glass Run Channel Replacement

(1) Remove the door glass as previously described.

(2) Pry out the glass run channel from the door frame. (The channel is held in position by its own expansion in the door frame.)

(3) When replacing the run channel press it into place by hand.

(4) Work the channel tightly into the upper corner of the door frame.

(5) Install door glass and door hardware as previously described.

DOOR GLASS AND REGULATOR (Two Door Models)

Door Glass

Removal

(1) Remove the arm rest, window regulator handle, door handle cover plate, door trim panel and water/dust shield as described in Section 2.

(2) Disconnect the inside handle operating rod at the lock then remove the inside handle.

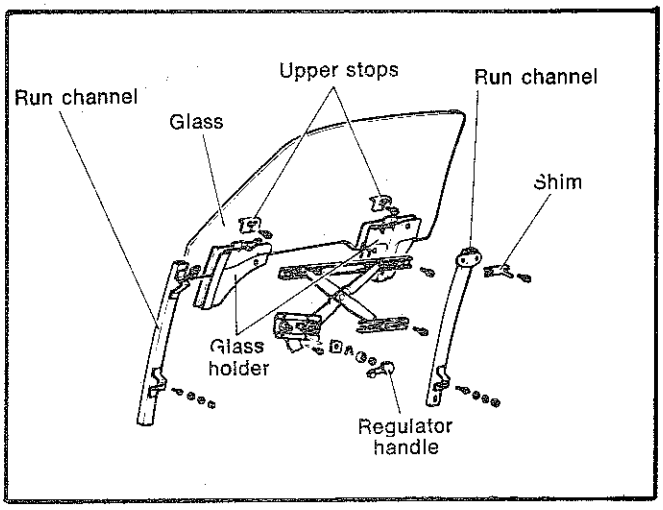


Fig. 7—Door glass components

(3) With the door glass fully lowered, remove the top ends of the door weather strip, the glass upper stoppers, the door glass stabilizer and the track upper attaching screws.

(4) Remove the glass holder attaching screws, the glass can then be removed from the door.

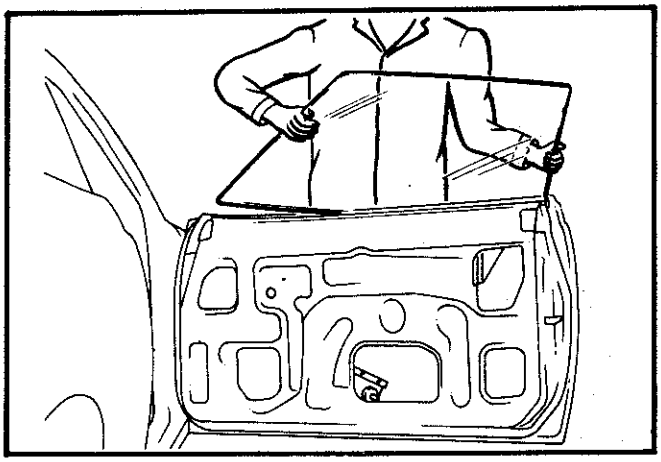


Fig. 8—Removing door glass

Installation

Install by reversing removal procedure noting the following:

(1) Lubricate all rotating and sliding parts with grease prior to installation.

(2) When installing the weatherstrip insert the clips firmly into the clip holes.

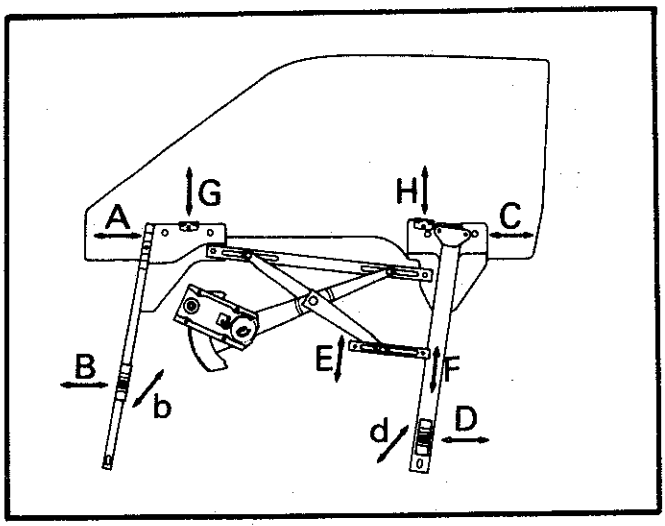


Fig. 9—Glass adjustment points

Glass Adjustment

The door glass can be adjusted at the points shown in Fig. 9, the glass movement controlled at these points is listed below.

Adjusting Points	Glass Movement
A, B, C, D	Whole of glass moves back and forth
B, D	Glass tilts to right or left from vehicle centre line.
E, F	Front of glass moves up or down.
G, H	Glass upward stop adjustment.

(1) Back and Forth Adjustment.

With the glass raised fully, move the track back and forth so that the glass overlaps the weather strip uniformly. Tighten the track upper attaching screws, lower the glass and tighten the lower adjusting bolts.

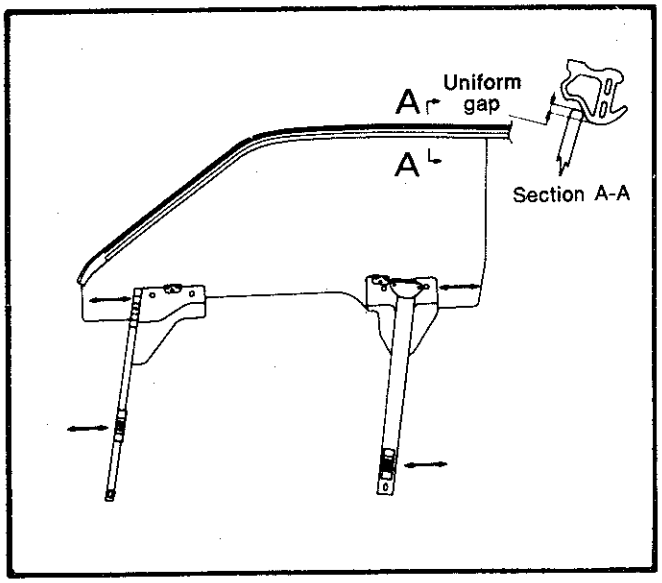


Fig. 10—Back and forth adjustment

(2) In and Out Adjustment.

With the glass fully raised and the door closed, adjust the glass in or out with the track adjusting bolts so that the glass uniformly contacts the weather strip. Tightening the adjusting bolts moves the glass inward, loosening the bolt moves the glass outward.

NOTE: If the difference in tilt between the front and rear track is excessive, the regulator will be hard to turn. The difference in tilt can be reduced by increasing or decreasing the shim thickness at the rear track upper mounting.

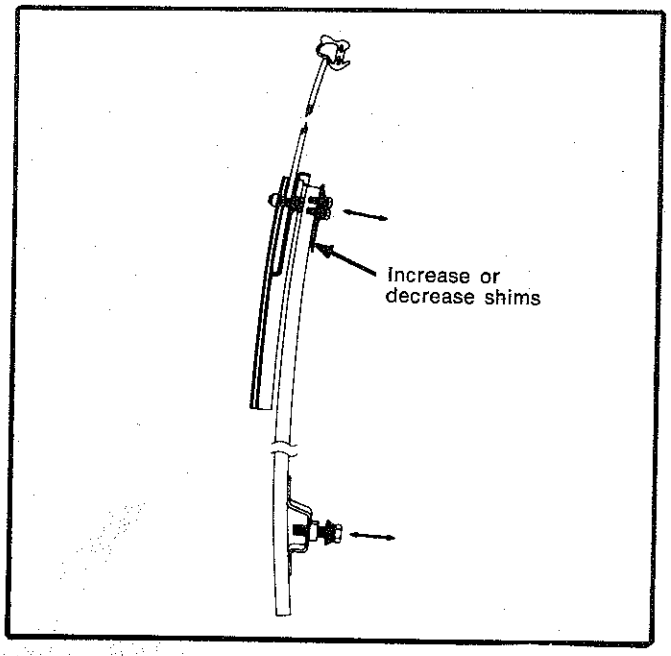


Fig. 11—Adjusting glass in or out

(3) Tilt Adjustment.

The front of the glass can be raised or lowered by moving the regulator pivot arm bracket up or down. Prior to tightening the pivot arm bracket ensure it is positioned parallel to the upper slide.

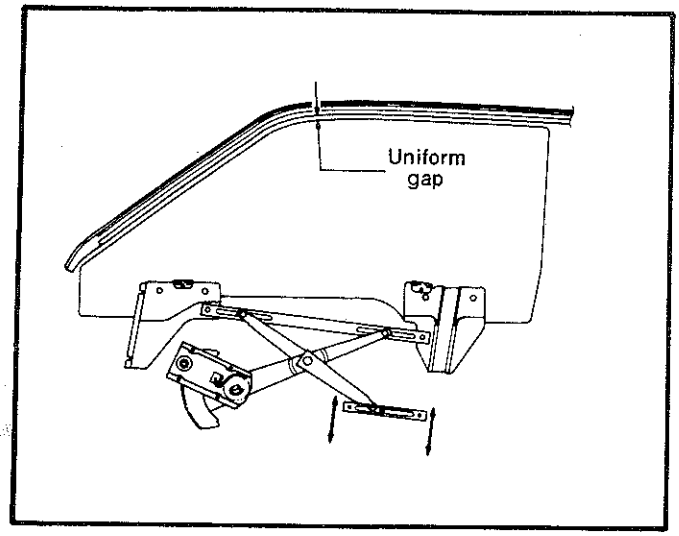


Fig. 12—Adjusting glass tilt

(4) Upper Stop Adjustment.

With the glass fully raised and proper contact maintained between the glass and weatherstrip as shown in Fig. 13, the glass upper stop must be in contact with the glass holder. If necessary readjust the stop position.

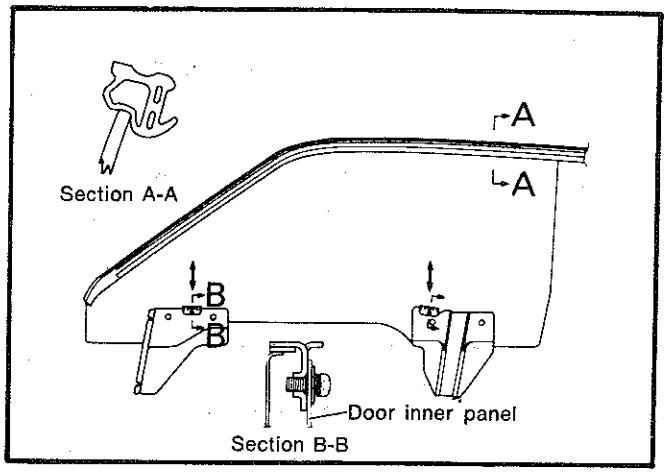


Fig. 13— Upper stop adjustment

Window Regulator

Removal

(1) Remove the door arm rest, window regulator handle, door handle cover plate, door trim panel and water/dust shield as described in Section 2.

(2) Lower the glass and remove the regulator to glass holder attaching screws.

(3) Remove the regulator to door panel attaching screws.

(4) Disengage the regulator from the pivot arm bracket and then remove the regulator from the door.

Installation

Install by reversing removal procedure, lubricating any roller or sliding parts prior to installation. If necessary adjust the glass as previously described.

REAR QUARTER WINDOW GLASS AND REGULATOR

Window Glass

Removal

(1) Remove the rear seat, regulator handle, seat belt retractor and quarter panel trim as described in Section 2.

(2) Remove the quarter trim bracket upper stop and the water/dust shield.

(3) Remove the outer bailey moulding.

(4) Raise the glass fully and remove the bracket to glass attaching screws.

(5) Lower the regulator half way, then remove the glass upward out of the opening.

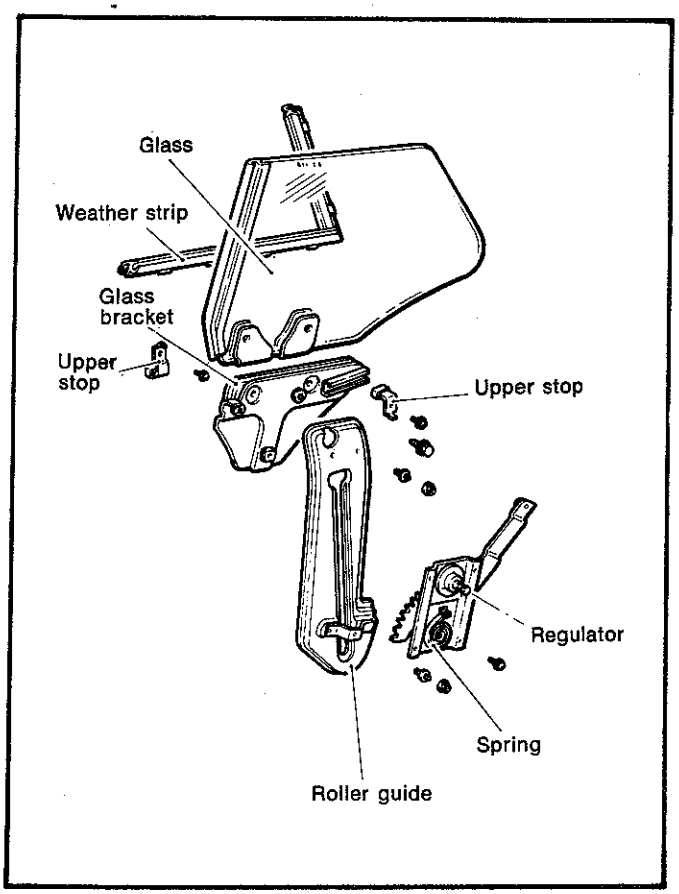


Fig. 14—Quarter window components

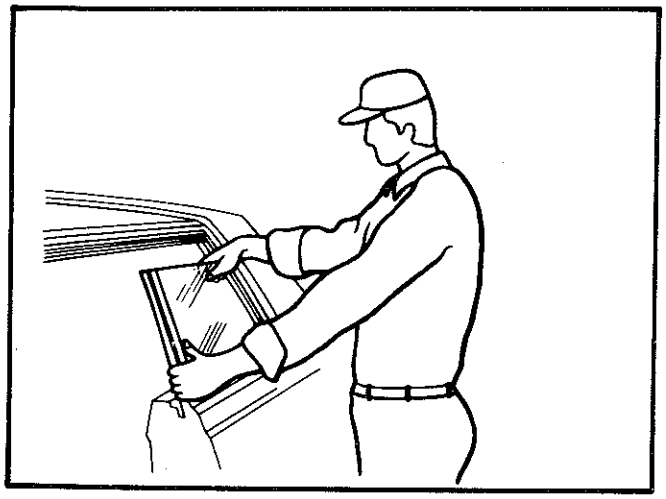


Fig. 15—Removing quarter glass

Installation

Install by reversing removal procedure.

Glass Adjustment

The quarter glass can be adjusted at the points shown in Fig. 16, the glass movement controlled at these points is listed below.

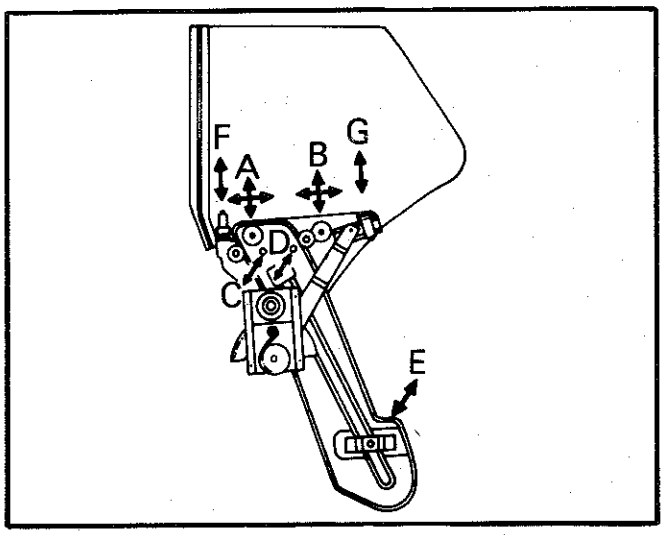


Fig. 16—Glass adjustment points

Adjusting Points	Glass Movement
A, B	Whole of glass moves up and down, back and forth.
C, D, E	Whole of glass moves backwards or forwards. Glass tilt left or right.
F, G	Glass upward stop adjustment.

(1) Back and Forth, Up and Down Adjustment.

With the glass fully raised adjust its position at points A and B so that it fits the front door glass and the weather strip uniformly. If a large amount of backward or forward adjustment is required the regulator guide can be adjusted at points C, D and E.

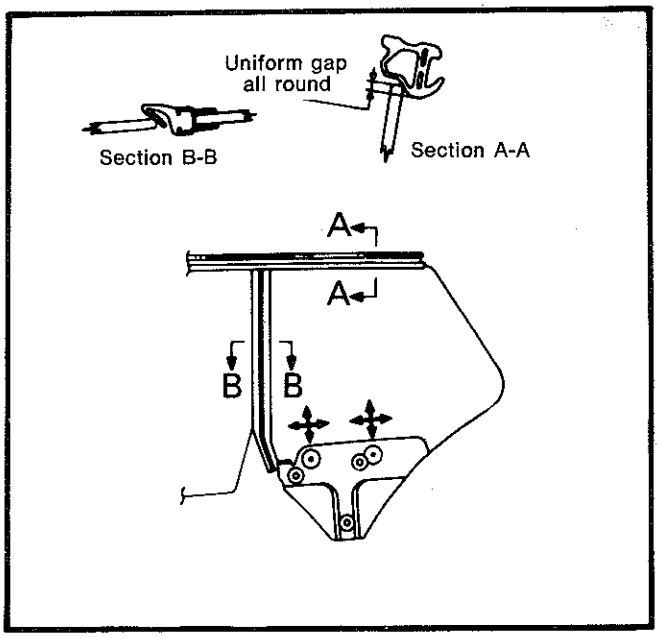


Fig. 17—Back and forth, up and down adjustment

(2) In and Out Adjustment.

With the glass fully raised adjust the in and out position of the regulator guide mounting bolts to ensure correct glass contact to the weatherstrip and front door glass. Loosening the upper bolt and tightening the lower bolt moves the glass inward, tightening the upper bolt and loosening the lower bolt moves the glass outward.

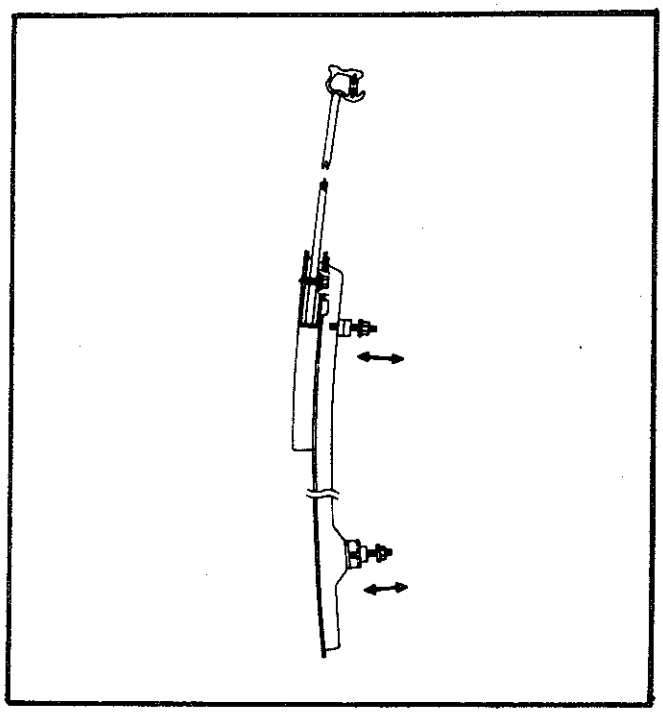


Fig. 18—In and out adjustment

(3) Upper Stop Adjustment.

With the glass fully raised and proper contact maintained between the glass and weatherstrip as shown in Fig. 19, the upper stops must be in contact with the glass holder and regulator guide. If necessary readjust the position of the stops.

Window Regulator Assembly

Removal

(1) Raise the window glass fully and remove the rear seat, regulator handle, seat belt retractor, quarter trim panel and glass as previously described.

(2) Remove the roller guide attaching and adjusting bolts, then move the assembly rearward to disengage the regulator arm from the guide.

(3) Remove the roller guide and bracket through the access hole.

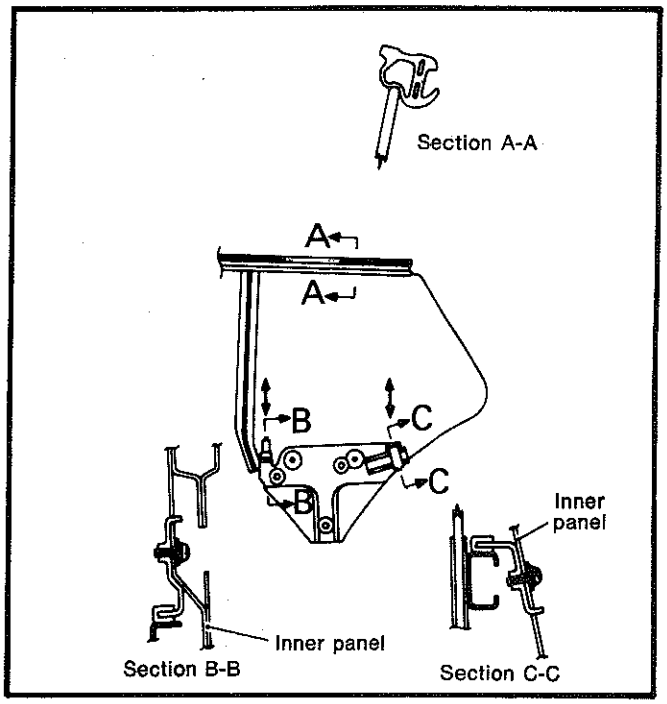


Fig. 19—Upper stop adjustment

(4) Remove the regulator mounting bolts, remove the regulator.

Installation

Install by reversing removal procedure.

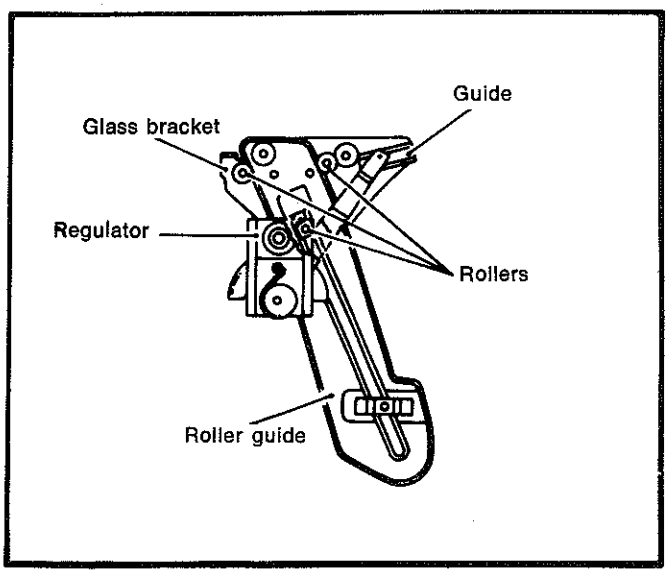


Fig. 20—Regulator components

SECTION 4 — STATIONARY GLASS

GENERAL INFORMATION

The windscreen (standard type) and all other vehicle windows are made of toughened safety glass. The standard windscreen features a zone directly in front of the driver which, if shattered, will fracture into large particles thus improving the driver's chances of stopping the vehicle safely.

The optional laminated windscreen (standard on some models) when shattered, breaks into larger sections, the sections being held into place by a plastic lamination between the layers of glass.

The factory fitted windscreen and rear window are held in position by a two compound urethane adhesive. Service kits for replacement windows use a thermo electric butyl tape.

WINDSCREEN

Removal

(1) Remove the windscreen wiper arms.

(2) Remove the interior sunvisors and rear vision mirror.

(3) Remove the front pillar interior trims and pull down the front of the head lining.

(4) Remove the windscreen lower, side and upper moulding (in that order) using Tool No. E23M5.

(5) Remove all the plastic moulding retainers from the spring clips and bend the spring clip upward as shown in Fig. 1.

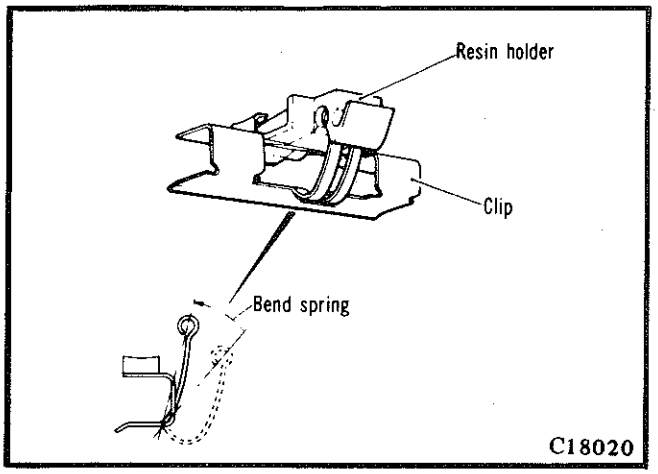


Fig. 1—Bending spring clip

(6) Apply a cloth tape around the opening perimeter as shown to protect the paint finish, refer Fig. 2.

(7) Using a sharp pointed drill, make a hole in the adhesive in the lower corner of the windscreen and insert a piano wire 0,6 mm (0.024") diameter into the adhesive from the inside.

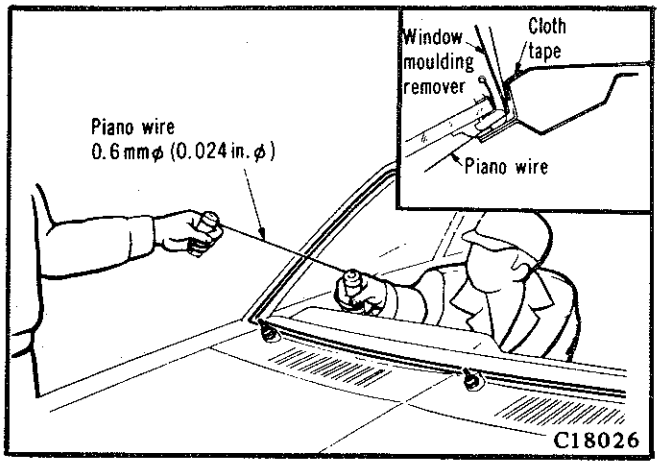


Fig. 2—Cutting adhesive

(8) Wrap the wire around a suitable blunt ended tool handle and with the aid of an assistant, move the wire around the perimeter of the window, in a sawing motion, to cut the adhesive, refer Fig. 2.

NOTE: 1. The use of blunt ended tools and heavy duty gloves are recommended to prevent injury to the operators in case of piano wire breakage. 2. When cutting around the clip holder, press the piano wire against the body using the window moulding removal tool. This ensures the piano wire clears the clip.

(9) Remove the windscreen from the vehicle.

(10) If the glass is to be reused, remove the old adhesive with a suitable knife being careful not to damage the glass surface.

(11) Remove the spring clip moulding retainers from the glass.

(12) Remove as much adhesive, from the body fence flange as possible without cutting the paint finish of the fence flange or the body.

NOTE: If the paint surface is damaged it must be repainted and baked dry, NOT air dried.

Installation

Glass Preparation

(1) Degrease the glass bonding surface 20 mm (0.8") around the perimeter of the glass, using an oil free cleaning solvent, e.g. X55.

(2) Apply a thin coating of glass primer around the glass on the bonding surface. Allow to dry for 10-15 minutes.

NOTE: The primed surface must not be touched, if this occurs it must be reprimed.

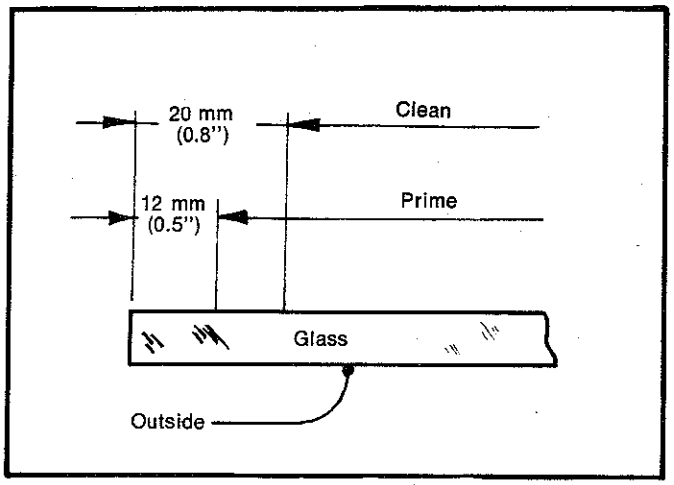


Fig. 3—Priming glass surface

(3) Position the moulding attachment clips as shown in Fig. 4. Prime the section of the clips, that come in contact with the butyl tape, with glass primer.

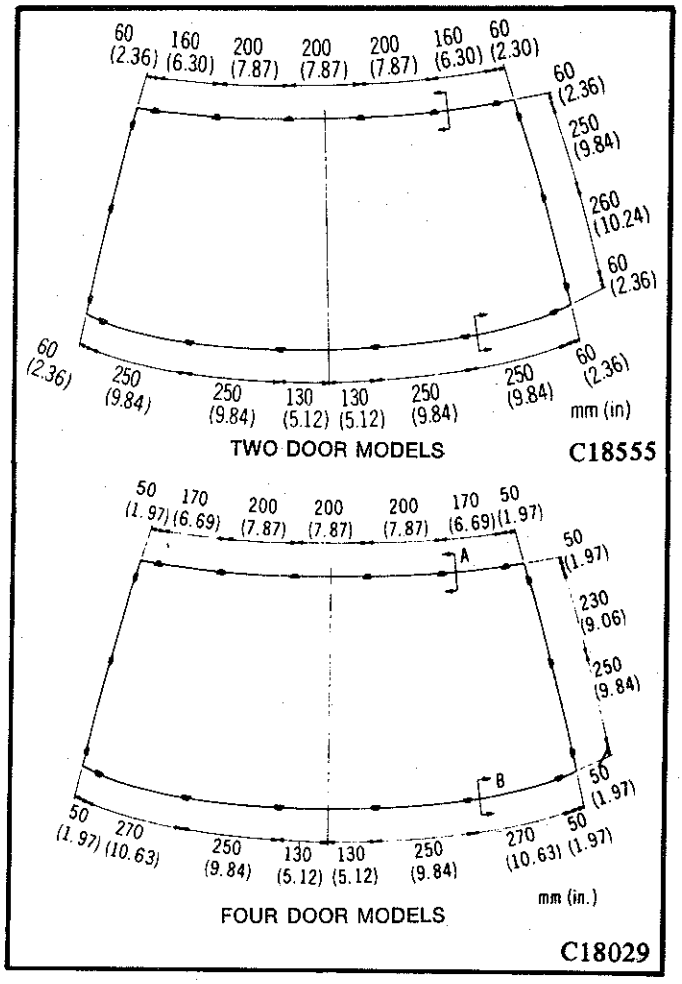


Fig. 4—Attachment clip position

(4) Bare the end of the butyl tape to the copper wire core for 30 to 40 mm (1.2" to 1.6"). Remove the cloth only for a further 30 to 40 mm (1.2" to 1.6").

(5) Starting in the bottom corner of the glass, position the tape with the cloth facing inwards as shown in Fig. 5.

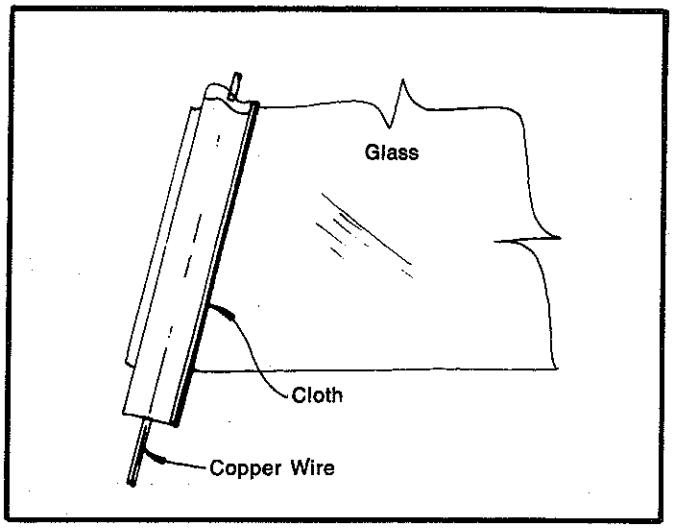


Fig. 5—Positioning butyl tape

(6) The tape must be placed carefully over the moulding attachment clips to ensure a leak proof seal. Failure to do so will cause leaks which will necessitate reinstallation of the glass with the tape correctly positioned. To ensure correct tape to glass contact inboard of the clip, slight finger pressure may be exerted on the tape over the clip.

NOTE: Excessive deformation of the tape and finger contact with the primed surface must be avoided.

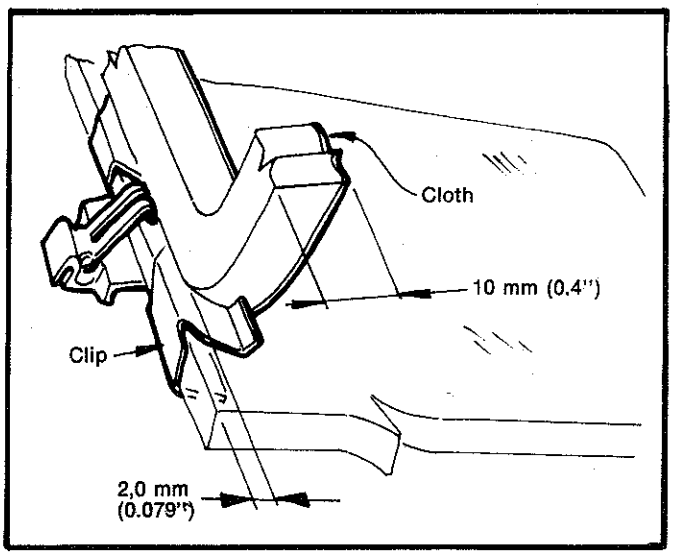


Fig. 6—Positioning butyl tape around glass

(7) With the butyl tape positioned around the window, bare the copper wire and remove the cloth as previously described.

(8) Position the ends of the tape together and keep the copper wires well separated. Do not twist the two ends of the tape together, they must be pressed against each other.

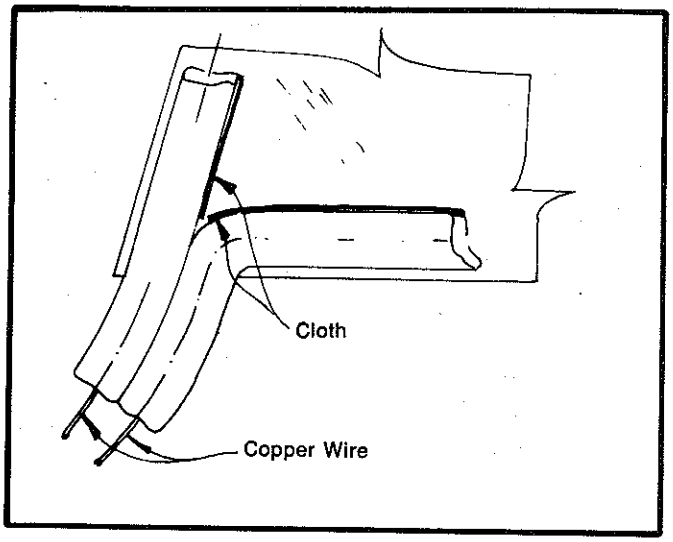


Fig. 7—Positioning ends of butyl tape

Body Opening Preparation

(1) Clean the fence flange and any remaining adhesive with X55 or a similar cleaning solvent and allow to dry for 5 to 10 minutes.

(2) Apply the body primer over the fence flange to give a total "blacked-out" appearance. Allow it to dry for 10 minutes, refer Fig. 8.

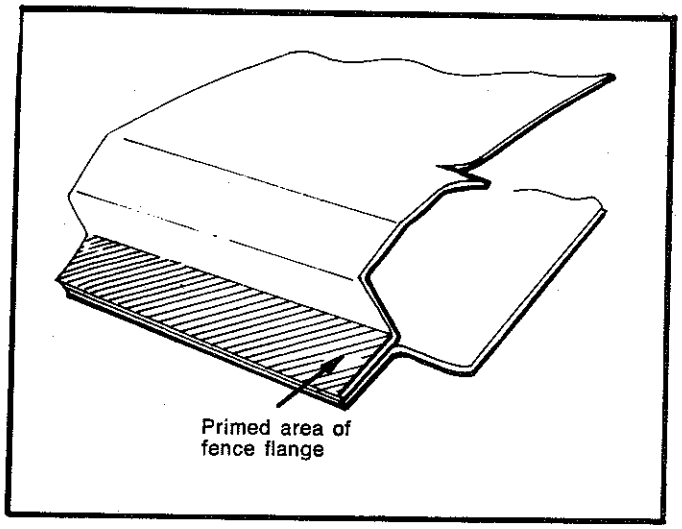


Fig.8—Priming fence flange

(3) Position the three spacer blocks as shown in Fig. 9. The spacer blocks are supplied in the kit.

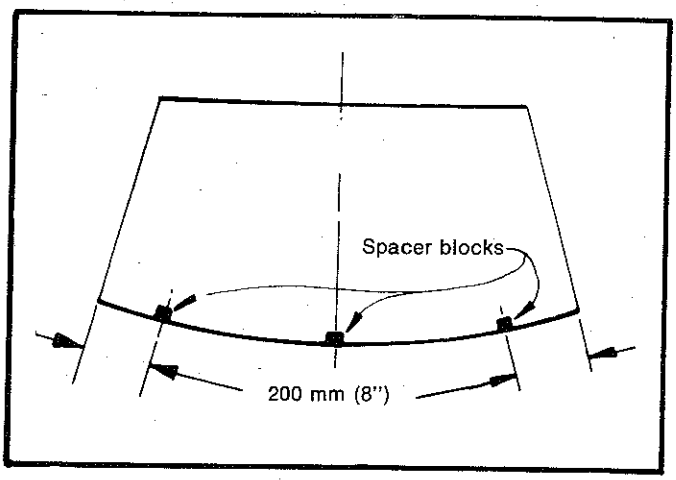


Fig. 9—Positioning glass spacers

Glass Fitment

(1) Centrally locate the windscreen in the opening on the spacer blocks.

(2) Connect the ends of the copper wire to a 32 volt, 10 amp transformer for 5 minutes ensuring the electrical connections are not in contact with, and hence damaging the paint finish. The above stated time is for an ambient temperature of 20° to 25°C (68° to 77°F). For lower temperatures it is necessary to apply the power for a longer time to allow the tape to soften.

NOTE: If a 32 volt transformer is not available, two fully charged 12 volt vehicle batteries connected in series for 6 to 7 minutes, can be used.

(3) As the butyl tape softens, apply even pressure over the glass to compress the tape to approximately 6 mm (0.250").

NOTE: Care must be taken with laminated screens. If the tape is not softened sufficiently, excess pressure thus required to ensure clip sealing could lead to bowing of the screen and cracking of the outer lamination of glass.

(4) Disconnect the electrical supply and allow the tape to cool.

(5) Water test the windscreen and note the position of any leaks.

(6) Remedy any leaks by thoroughly washing and drying the screen and either reheating and repressurizing or by secondary sealing with sealer Pt. No. 4061797 available from Chrysler dealers.

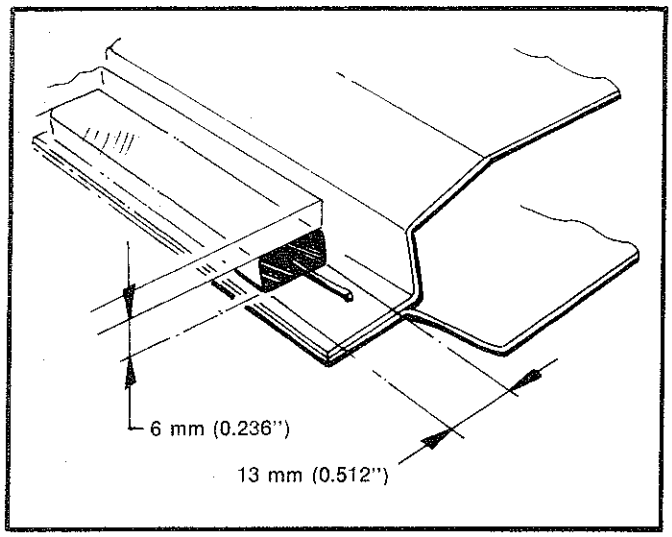


Fig. 10—Compressing tape

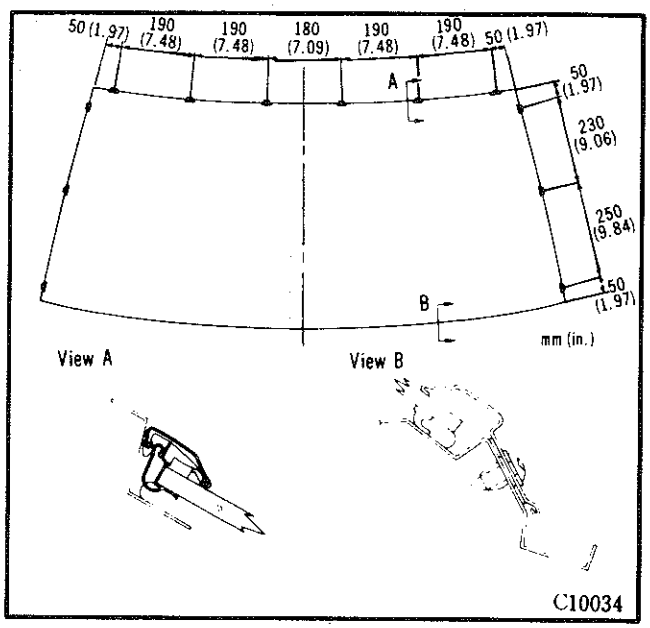


Fig. 11—Attachment clip position

NOTE: Bad or large leaks due to tape misplacement will necessitate removal and refitment of the screen.

(7) Install the upper, side and lower window mouldings (in that order) and replace head lining, front pillar trims, sun visors, inside mirror and wiper arms.

REAR WINDOW (SEDAN)

Removal

(1) Disconnect the defogger cable terminals.

(2) Remove the rear pillar interior trim panels and unclip the rear of the head lining.

(3) Remove the window upper and side mouldings, in that order using Tool No. E23M5.

(4) Raise the deck lid and remove the screws retaining the window lower moulding.

(5) The remaining removal procedure is the same as used for the front windscreen.

Installation

Install the rear window following the same procedure as front windscreen installation with the exception of the following:

(1) Install the moulding retaining clips as shown in Fig. 11.

(2) Install the lower moulding with the self-tapping screws.

(3) Install the side and upper mouldings in that order, then proceed as detailed in windscreen installation.

NOTE: Care must be taken when fitting heated rear windows. Excessive pressure can cause the copper core of the tape to come into contact with the heating circuit of the window. If an electrical short occurs resoftening of the tape can result.

REAR WINDOW (TWO DOOR)

Removal

NOTE: When removing or replacing a rear window, care must be taken to avoid damaging the defogger element.

(1) Remove the rear seat, quarter panel and unclip the end of the head lining.

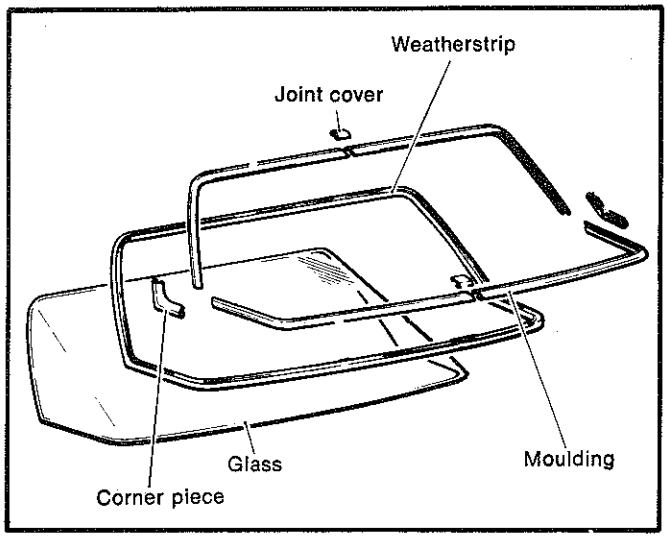


Fig. 12—Rear window components (two door)

(2) Disconnect the defogger terminal leads.
(3) Using a screw driver carefully slide the upper moulding joint to reveal the ends of the moulding.

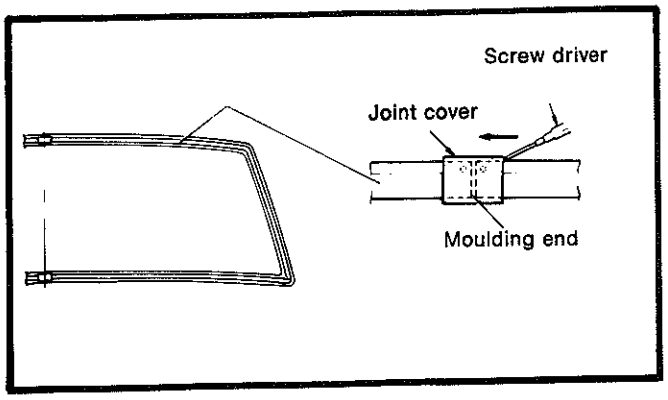


Fig. 13—Removing window moulding joint cover

(4) Insert a screw driver between the jointed ends of the moulding and pry the end of the moulding out of the weather strip, the mouldings can then be removed by hand.

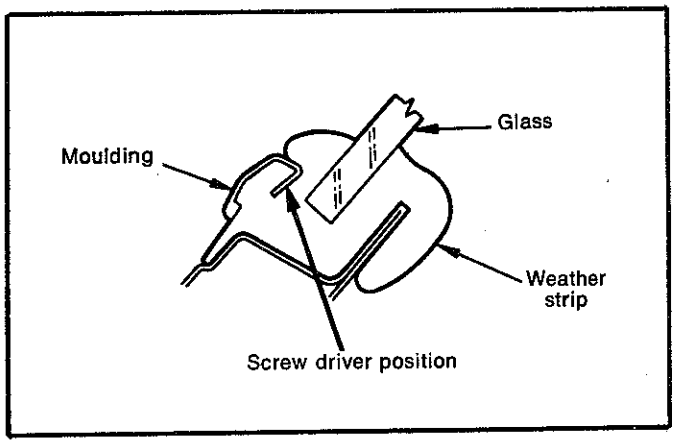


Fig. 14—Prying moulding from weather strip

(5) From both inside and outside the vehicle free the weather strip from the body using a fibre stick.
(6) With the aid of an assistant push the window out from the inside being careful not to damage the defogger element.

NOTE: The use of suction type holders on the outside of the glass will assist in handling the window.

Installation

(1) If the window or weather strip is to be reused, ensure all the old sealer is removed, also ensure the body flange is cleaned.

(2) Install the weather strip to the glass and then install the mouldings to the weather strip.

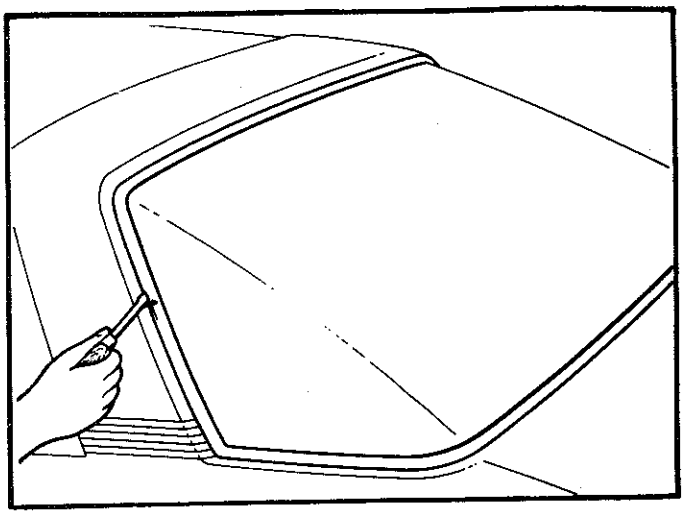


Fig. 15—Freeing weather strip from body

(3) Using two lengths of strong cord, install the cord into the weather strip body flange rebate with the ends of the cord positioned as shown in Fig. 16. Ensure both ends of the cord overlap both sides of the glass.

NOTE: The use of thin string must be avoided as this may cut the rubber weather strip.

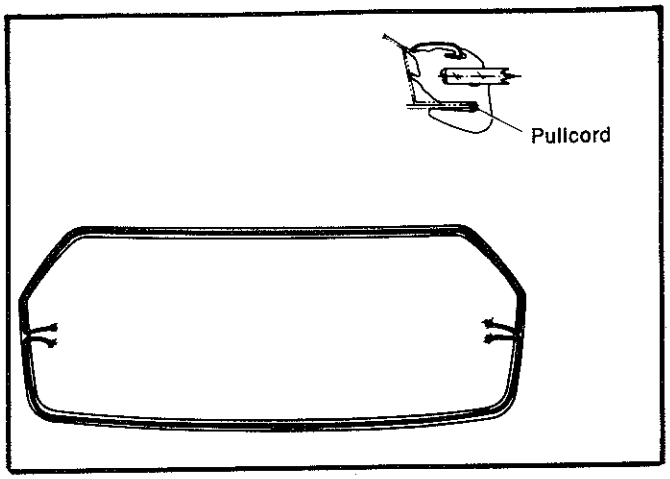


Fig. 16—Positioning cord into weather strip

(4) Apply a mixture of soap and water to the entire body flange weather strip fitting area.

(5) Position the glass to the window opening ensuring the pull cords are placed inside.

(6) With an assistant pushing the glass from the outside, commence withdrawing the cord from inside of the vehicle to work the weather strip over the body flange.

NOTE: Ensure the cords are pulled slowly and at right angles to the glass.

(7) Using a soft rubber mallet, carefully tap the glass adjacent to the weather strip all the way around ensuring it is correctly seated.

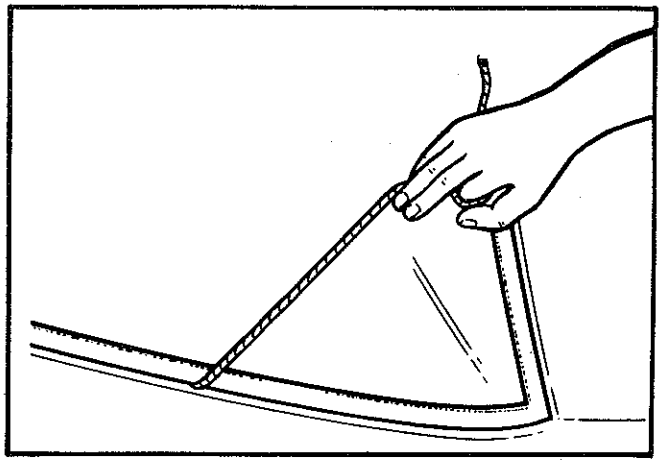


Fig. 17—Installing the window glass

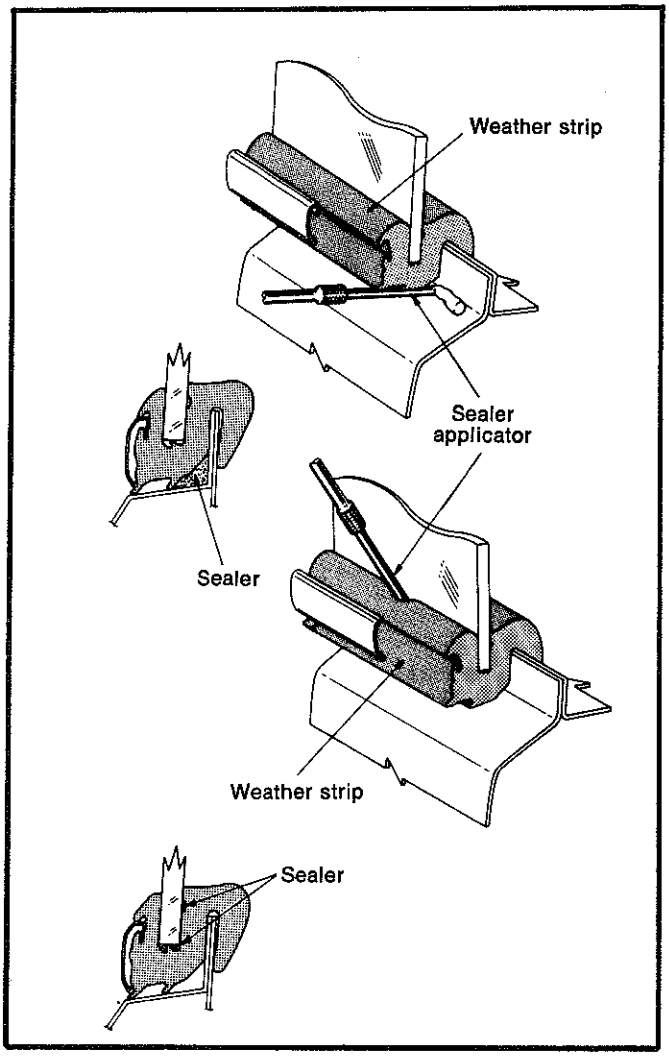


Fig. 18—Applying sealer

(8) Apply a butyl type sealant between the weather strip and body, and the weather strip and glass as shown in Fig. 18.

(9) Clean off all excess sealant and thoroughly clean window.

REAR WINDOW MOULDING (TWO DOOR)

General Information

The rear window moulding can be removed as previously described under rear window removal. If removal of the moulding has become necessary and the glass has not been removed, the moulding can be installed using the following method.

Installation

(1) Apply a mixture of soap and water to the moulding groove in the weather strip.

(2) Modify a screw driver or suitable piece of steel to the dimensions shown in Fig. 19.

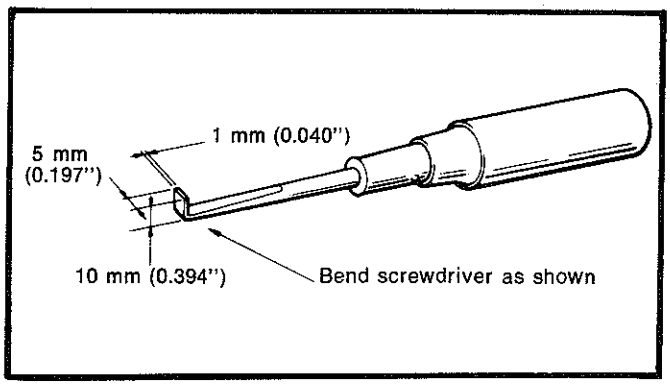


Fig. 19—Modified screw driver dimensions

(3) Insert the screw driver into the moulding groove of the weather strip and spread the weather strip as shown in Fig. 20.

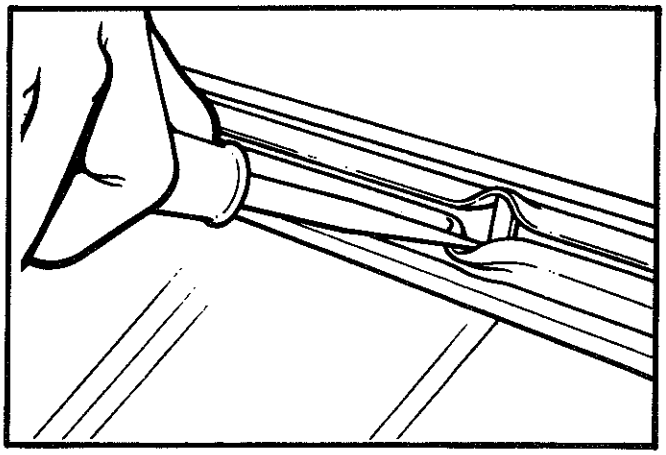


Fig. 20—Spreading weather strip

(4) Press the end of the moulding into the spread weather strip, refer Fig. 21.

(5) Slide the screw driver along the groove, keeping the weather strip open, while pressing the moulding firmly by hand, refer Fig. 22.

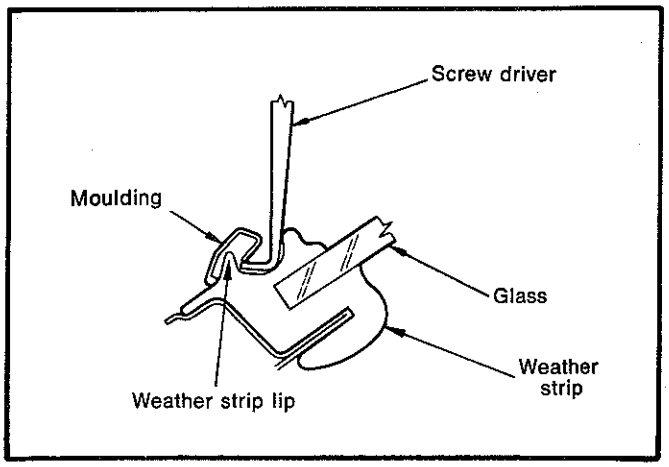


Fig. 21—Position of screw driver and moulding

NOTE: While the screw driver is slid along the groove, it should be pressed slightly inward to ensure ease of moulding installation.

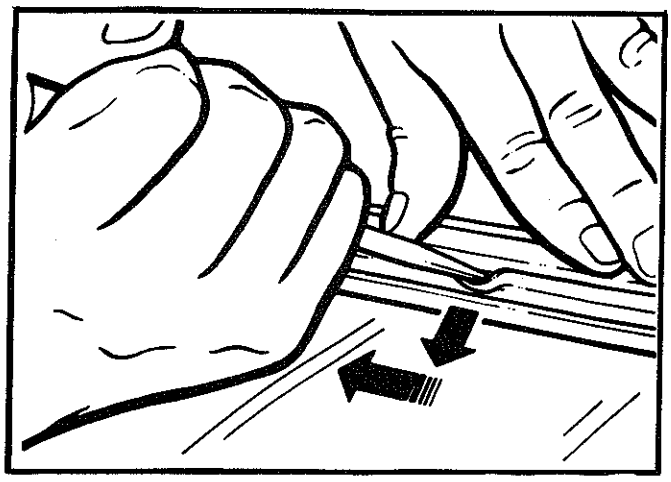


Fig. 22—Inserting moulding by sliding screw driver

(6) After the moulding has been installed to the weather strip, ensure it is correctly positioned around the corners. The joint covers can then be installed over the moulding ends.

REAR WINDOW (Station Wagon)

Removal

NOTE: When removing or replacing a rear window, care must be taken to avoid damaging the defogger element.

(1) Remove the rear window wiper arm.

(2) Disconnect the defogger cable terminals (if applicable).

(3) With the aid of an assistant ease the weather strip over the rear window opening flange and push the glass outward with the weather strip attached.

NOTE: The use of suction type holders on the outside of the glass will assist in handling the window.

(4) Remove the mouldings and weather strip from the glass.

Installation

(1) If the window or weather strip is to be re-used, ensure all the old sealer is removed, also ensure the body flange is cleaned.

(2) Apply soapy water to the weather strip and install the weather strip to the glass and then install the mouldings to the weather strip.

(3) Using two lengths of strong cord, install the cord into the weather strip body flange rebate with the ends of the cord positioned as shown in Fig. 23.

NOTE: The use of thin string must be avoided as this may cut the rubber weather strip.

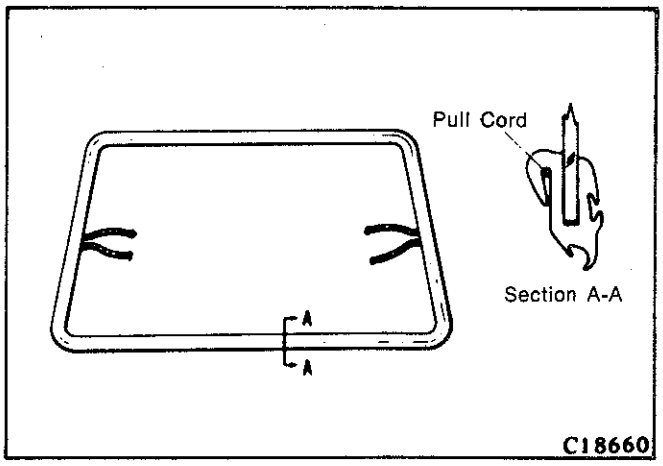


Fig. 23—Installing tail gate glass

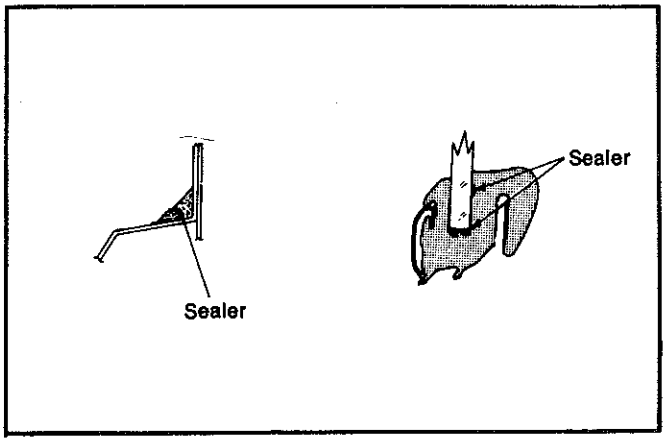


Fig. 24—Applying sealer

(4) Apply a bead of butyl type sealer to the window opening flange of the rear door and also between the weather strip and glass — refer Fig. 24.

(5) Position the glass to the window opening ensuring the pull cords are placed inside.

(6) With an assistant pushing the glass from the outside, commence withdrawing the cord from the inside of the door to work the weather strip over the window opening flange.

NOTE: Ensure the cords are pulled slowly and at right angles to the glass.

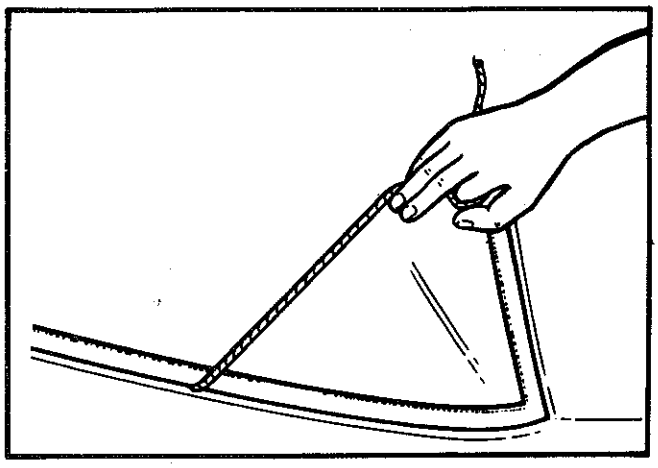


Fig 25—Installing the window glass

(7) Using a soft rubber mallet, carefully tap the glass adjacent to the weather strip all the way around, ensuring it is correctly seated.

(8) Clean off the excess sealer and thoroughly clean the window.

(9) Connect the defogger cable terminals and fit the rear window wiper arm.

REAR QUARTER WINDOW

The rear quarter window can be removed and installed as previously described under "Rear Window Removal and Installation".

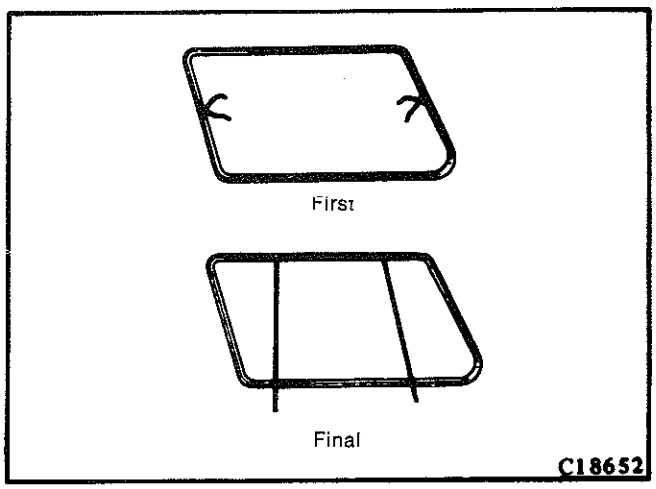


Fig. 26—Installing rear quarter window

REAR WINDOW MOULDING (Station Wagon)

General Information

The rear window moulding can be removed as previously described under rear window removal. If removal of the moulding has become necessary and the glass has not been removed, the moulding can be installed using the following method.

Installation

(1) Apply a mixture of soap and water to the moulding groove in the weather strip.

(2) Modify a screw driver or suitable piece of steel to the dimensions shown in Fig. 27.

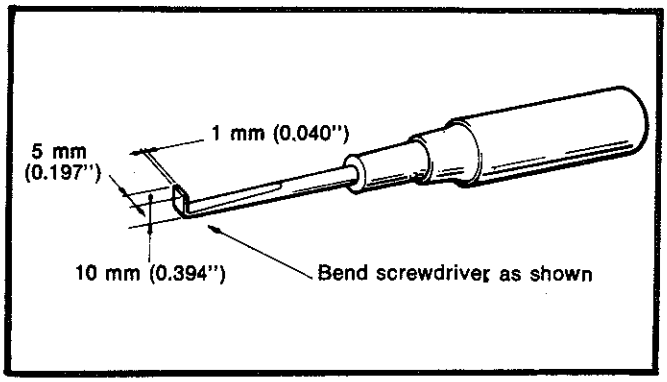


Fig. 27—Modified screw driver dimensions

(3) Insert the screw driver into the moulding groove of the weather strip and spread the weather strip as shown in Fig. 29.

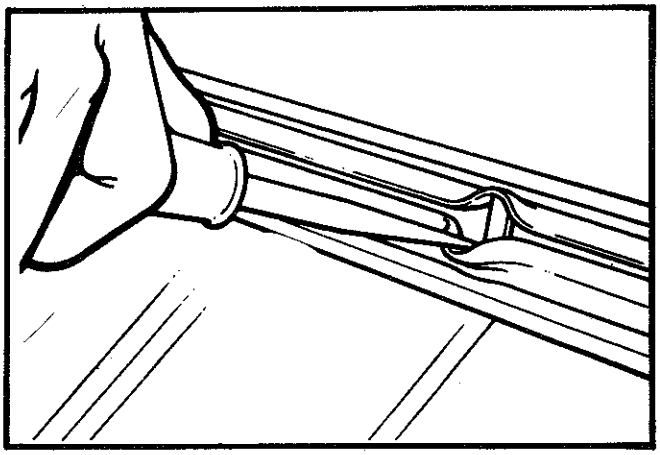


Fig. 28—Spreading weather strip

(4) Press the end of the moulding into the spread weather strip, refer Fig. 29.

(5) Slide the screw driver along the groove, keeping the weather strip open, while pressing the moulding firmly by hand, refer Fig. 30.

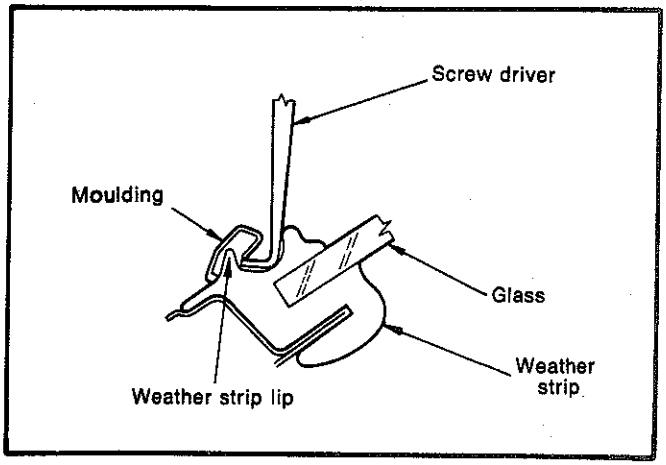


Fig. 29—Position of screw driver and moulding

NOTE: While the screw driver is slid along the groove, it should be pressed slightly inward to ensure ease of moulding installation.

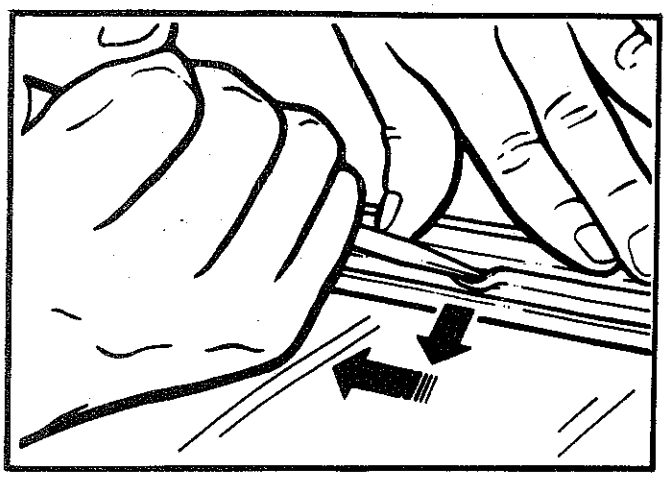


Fig. 30—Inserting moulding by sliding screw driver

(6) After the moulding has been installed to the weather strip, ensure it is correctly positioned around the corners. The joint covers can then be installed over the moulding ends.

SECTION 5 — VINYL ROOF

GENERAL INFORMATION

The roof of some models are fitted with a hard wearing, decorative and weather-resistant vinyl covering. Whenever the cover is replaced, the edges of the vinyl must be sealed effectively to prevent moisture getting under the vinyl.

Vinyl Roof Care

Do not use volatile cleaners or solvents on the vinyl.

Wash the vinyl covering with mild soap and luke-warm water, lathering well with a soft brush, cloth or sponge. Avoid heavy brushing. Rinse all traces of suds away with clear water.

VINYL COVERING

Removal

(1) Remove front windscreen and rear window mouldings.

(2) Remove moulding, emblems and clips in the cover areas.

(3) Peel old cover away from roof panel.

CAUTION: If solvents are used to remove the old covering and adhesive, care must be taken to prevent damage to surrounding areas.

(4) Remove all traces of old adhesive from the body area.

Installation

(1) Mask off areas of the vehicle which may become contaminated with adhesive during vinyl roof cover fitment (Fig. 1).

NOTE: Entire roof panel must be clean and smooth so the new cover will fit satisfactorily.

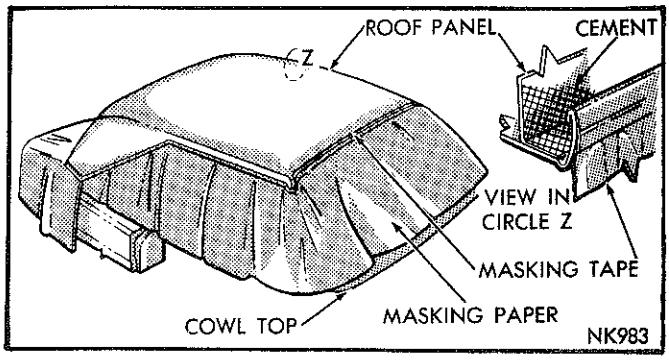


Fig. 1—Masking the body (typical)

(2) Locate and mark centreline of roof panel.

(3) Spread new cover assembly over roof panel aligning centre line notches in cover with centreline mark of roof panel (Fig. 2).

(4) Secure cover to front window opening flange.

(5) Pull cover rearwards until taut and secure in position.

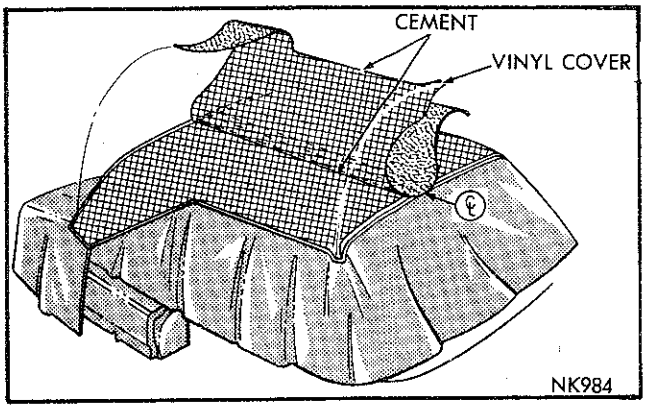


Fig. 2—Positioning cover to roof panel (typical)

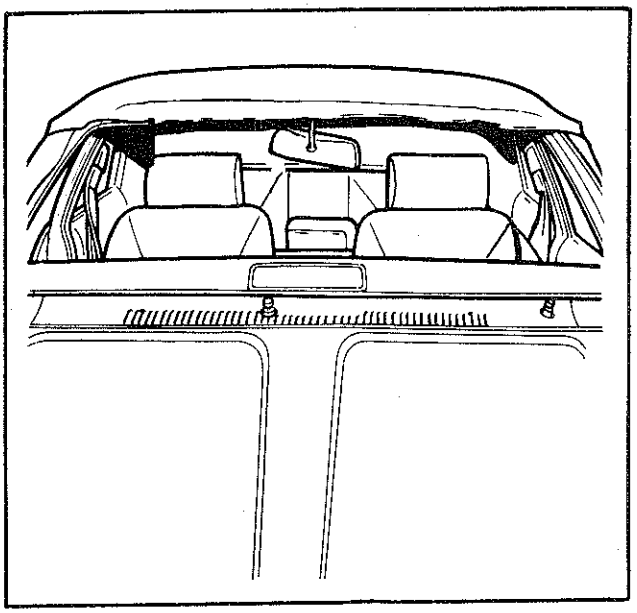


Fig. 3—Positioning cover at front

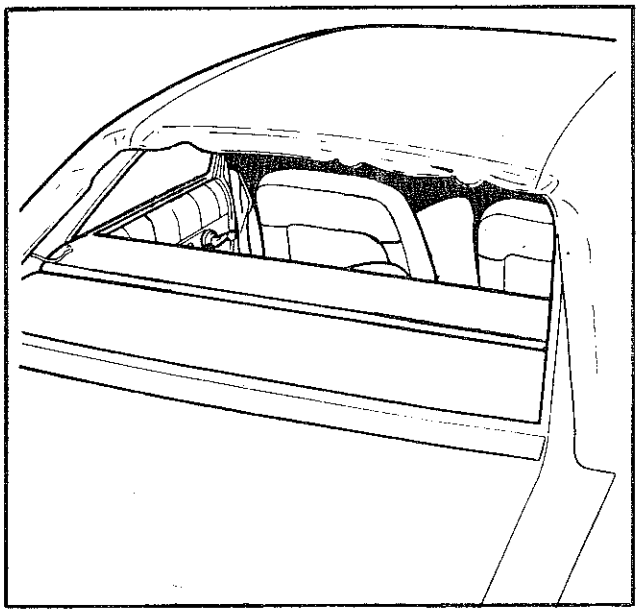


Fig. 4—Positioning cover at rear

(6) When the cover is correctly positioned, fold one half back over the other half (Fig. 5) ready for application of adhesive.
(Fig. 5) ready for application of adhesive.

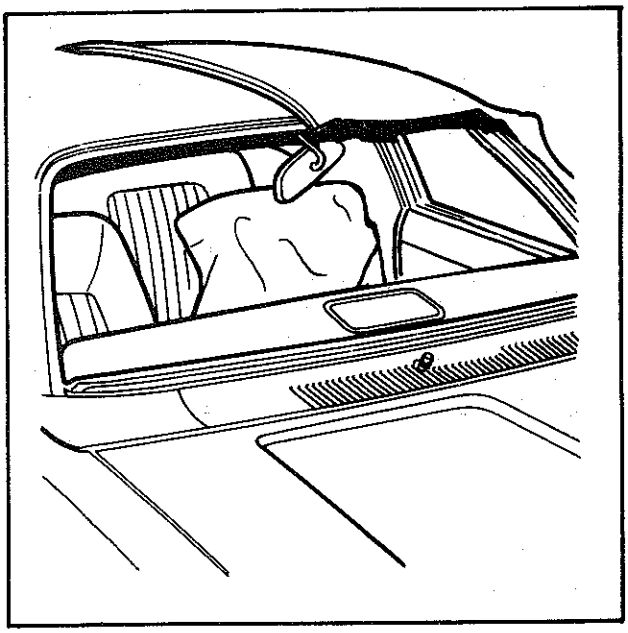


Fig. 5—Positioning for adhesive application

(7) Spray exposed roof panel and fabric side of vinyl with neoprene adhesive.

NOTE: Avoid contaminating the cover decorative surface with adhesive.

(8) When the adhesive becomes tacky approx. 5 to 15 mins.) but not wet when touched with a finger, carefully adhere vinyl covering (Fig. 6).

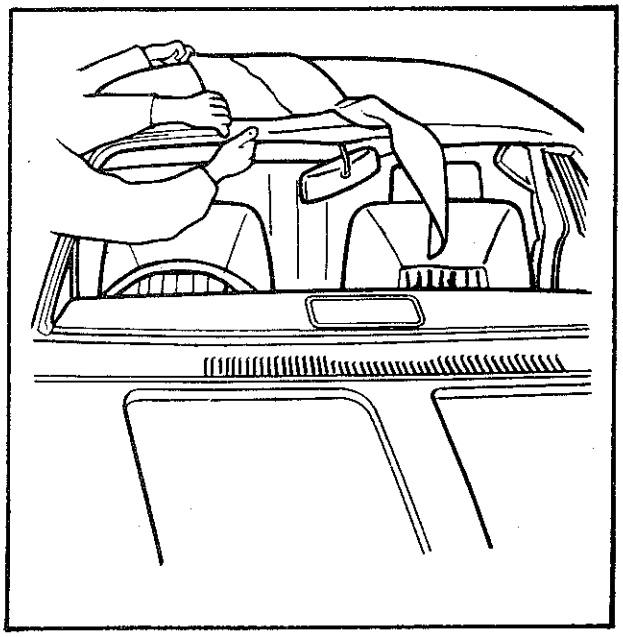


Fig. 6—Adhering vinyl cover to roof panel

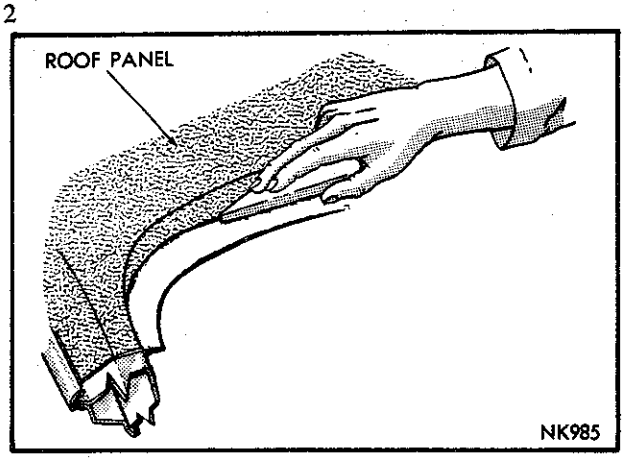


Fig. 7—Positioning cover in window reveal (typical)

(9) Using a new paint roller, pressurise the cover to the roof panel, working from the centre out toward the drain troughs.
(10) Press the cover into the windshield and rear window reveals using a dull pointed fibre tool.
(11) Repeat steps (7) to (10) for opposite side.
(12) Position the cover to the roof panel extension, making certain all wrinkles are removed. Starting at top centre, secure cover to rear window reveal.
(13) Trim the fabric at the base of the winshield reveal half way between upper and lower edges of pillar moulding and at the lower edge of the front pillars.

NOTE: Care must be taken during all trimming operations, to avoid damaging the paintwork, this will reduce the possibility of corrosion.

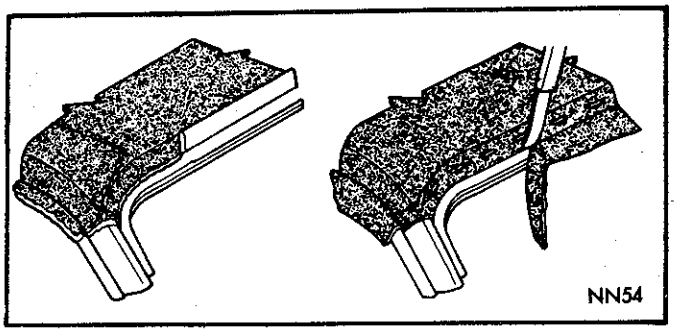


Fig. 8—Trimming and sealing covers at windows

(14) Using a dull pointed tool, press cover into full length of drip gutter to achieve maximum contact.
(15) Grasp the outboard edge of cover and, while pulling material outward and down, use the upper edge of drain trough flange as a break-over for draping the cover onto the outboard drain trough flange face.

NOTE: Care must be taken to avoid dislodging the cover previously applied to the base of the drip gutter.

(16) Press material against drain trough flange face for the full length of outboard sides of roof cover.

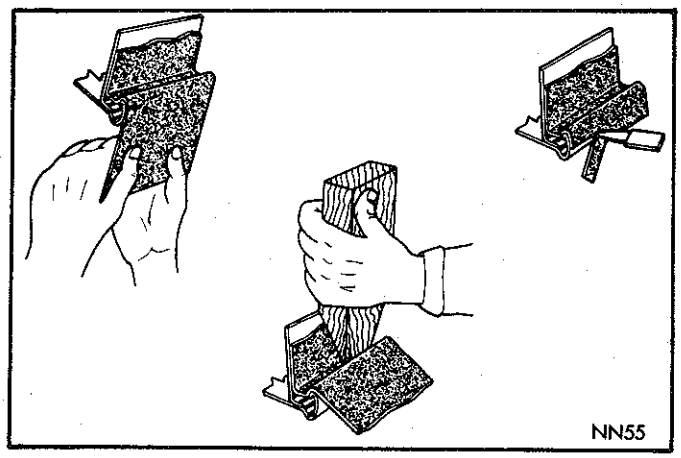


Fig. 9—Positioning cover at drain trough

(17) Trim excess material hanging below drain trough about 3 mm (1/8") above lower edge of the flange (Fig. 9).

NOTE: Care must be taken to avoid damaging the paintwork.

(18) Apply sealer over raw edge of trim cover at roof extension and refit moulding.

(19) Apply a bead of sealer to the edge of trimmed cover at front and rear windshield opening and blend upward to form a seal over the edge of the cover. (Refer Fig. 10).

(20) Apply sealer over raw edge of trimmed cover at base of front pillar and position moulding to gutter.

(21) Install windscreen and rear window mouldings.

(22) Install gutter mouldings and emblems.

(23) Remove the masking tape and masking paper.

Air Bubble Removal

(1) Place strips of masking tape over surface of bubble.

(2) Using a No. 19 hypodermic needle and suitable syringe, insert 3M Vinyl Trim Adhesive No. 8064, or equivalent into bubble area, ensuring that the hypodermic needle does not damage the paint under the vinyl cover.

NOTE: Extreme care must be used to avoid depositing any adhesive on the top surface of the vinyl cover.

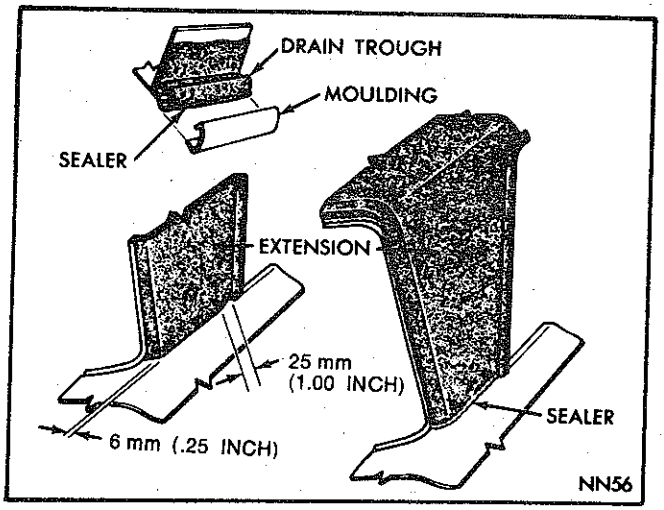


Fig. 10—Sealing cover at roof extension

The perforation must be made in centre of bubble, through masking tape and vinyl material. Approximately 0.5 ml of adhesive per 25 mm² (1 inch) should be used.

(3) Remove needle and work adhesive into affected area by pressing vinyl to roof carefully. This will also transfer some of adhesive to surface of vinyl cover.

(4) Allow cement to dry 5 minutes at room temperature.

(5) Heat bubble area with relatively low heat, 65 to 70°C (150 to 160°F) until bubble area begins to enlarge in circumference. Infra-red heat lamps provide a suitable source of heat.

(6) Remove heat source and allow to cool. A method of rapid cooling will be beneficial.

(7) Using a **dry** No. 19 hypodermic needle, puncture cover 4 times equally around outer circumference of bubble to provide an escape route for trapped solvent and air.

(8) After bubble collapses, press cover to metal surface, starting from one side of bubble and working toward opposite side until it conforms to metal surface and all raised areas disappear.

(9) Keep vehicle away from hot sunlight and other direct heat sources.

(10) Examine cover after a period for re-appearance of bubbles.

SECTION 6 — SEALING

GENERAL INFORMATION

To help save time, the most widely used methods of finding vehicle body leaks are described.

In addition to describing testing procedures, there are also included a number of suggestions for pin pointing and fixing water, dust and air leaks. These service hints are of a general nature, but common sense will suggest their application to specific cases.

Wind noise is the sound produced by air velocity or turbulence to the extent that it is objectionable inside the vehicle. Wind noise and its cause varies from one vehicle to another even within a given body style. What may be true on one body is not necessarily true on another.

PURPOSE OF SEALERS

Sealers are used to close openings in the body metal structure to prevent water, dust, noise and fumes from entering the body, and to prevent air from escaping from the body. In order to accomplish this purpose they must be used in the locations, and in the manner described in Figure 1.

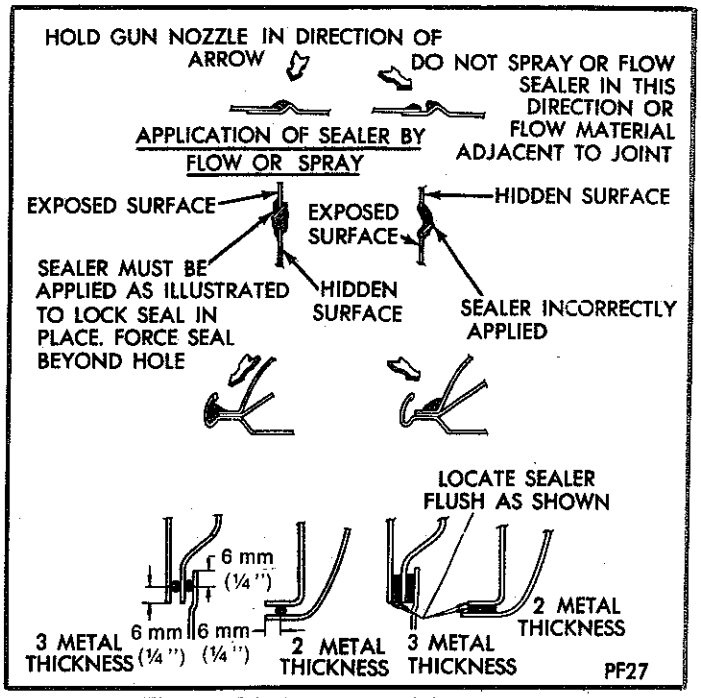


Fig. 1—Method of applying sealer

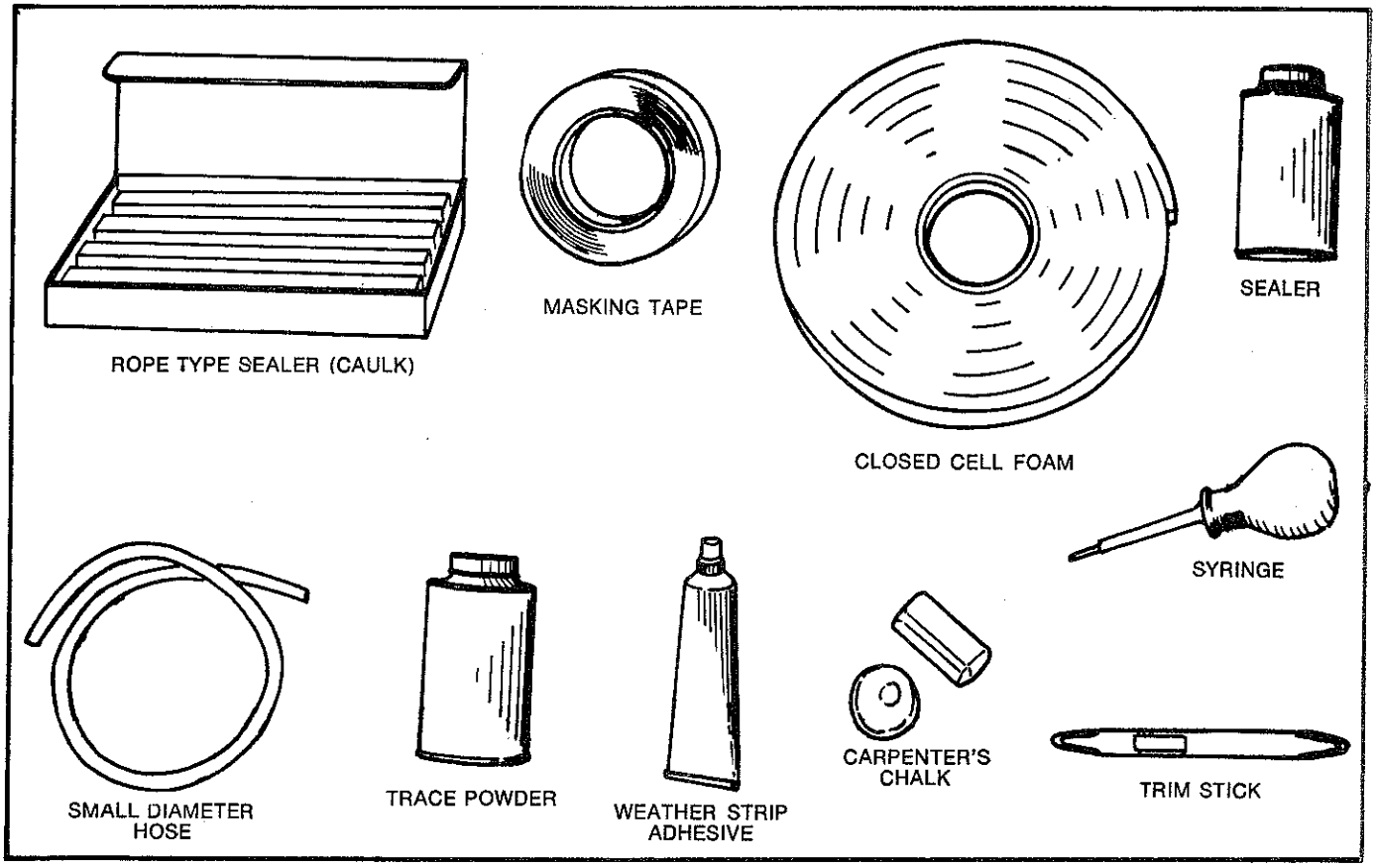


Fig. 2—Diagnosis and repair material (typical)

Careful consideration has been given to all sealing problems. The importance of sealing becomes obvious when it is realized that a vehicle in motion creates a vacuum on the exterior, along the side glass and with the cowl vents open or the heater or air conditioning operating, the interior of the body is pressurised. This causes air to be forced from the vehicle where openings exist, creating an objectionable noise.

WIND NOISE — AIR LEAK SEALING AND DIAGNOSIS MATERIAL

There are many ways to cure a leak or noise situation. The materials shown are the basic materials that should be used to cure the leak or noise area (refer Fig. 2).

SERVICE PROCEDURES

WATER AND DUST LEAK TESTING

Preliminary Inspection

Before testing, look over the general area where the water or dust seems to be coming in. Check for things which are obviously wrong, like weatherstrips that have come loose, are torn of badly distorted. Look for gaps or holes at body joints or corners which should be closed up or sealed.

Traces of rust can be a sign of an open body seam, even though the opening is not visible. A small crack hidden by poor solder bonding at body joints. Partial adhesion or air holes in sealing materials at body seams can also account for some leaks.

In some cases a water leak point can be located by examining the door opening surfaces, especially after the vehicle has been driven in wet weather. Look at the dried road splash around the areas outside the weatherstrip contact line. If the weatherstrips sealing properly, there will not be any trace of splash inside the contact line.

Alignment

When inspecting for visible defects be sure to check the alignment of the door to see how well it fits in the opening. If the door is not lined up properly, or the lock striker needs resetting, the weatherstrip may not be able to make a good seal.

Where the door is properly fitted and aligned, the weatherstrip compresses when the door is fully closed. This compression allows the weatherstrip edge to make firm even contact around the door opening so it can seal without being crushed.

Don't try to compensate for poor door alignment by moving the striker inward. Such an adjustment may stop a leak temporarily, but it will also cause the weatherstrip to bottom out. With repeated crushing the strip will lose its resiliency and eventually break down.

As with doors, checking for the obvious also applies to the decklid weatherstrip. Here again, proper alignment and closing are the basic requirements for good weatherstrip sealing, especially where a vehicle has had body repairs.

WATER LEAK TEST

Water testing for body leaks is simple to do and will help locate most leak points quickly. It also provides a proof-test of work after being fixed.

Other tests can be used for checking door and decklid weatherstrip sealing. However, water testings the only practical way to check for leaks around the windshield and rear window, at inner door panel watershields and at body joints or seams.

Water Hose Adjustment

Only a small stream of water is needed to find a leak. If too much pressure is used the water can force past even a good-fitting weatherstrip. It can also splash over the suspected area, creating difficulty in finding the leak source.

The actual test is easy. Remove the hose spray nozzle (where equipped) and hold the pressure down to get the proper stream. The water will gush when its turned on, so point the nozzle away from the test area to prevent over-wetting.

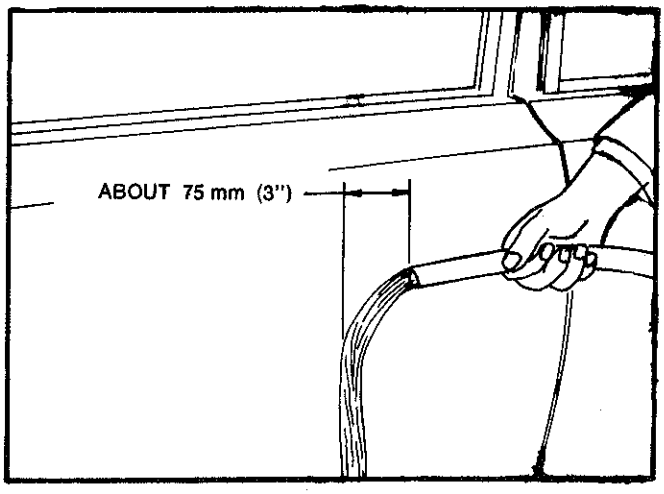


Fig. 3—Adjusting water pressure

Windshield and Rear Window Leakage and Repair

Start water hose test (Fig. 4), commencing at the lower corners, slowly move up the sides across the top, noting the position of the leakage area. Having detected the leak, remove the appropriate moulding and reseal the glass using Thioflex One (available from Expandite) on original equipment screens, or sealer Pt. No. 4061797 (available from Chrysler Dealers) on refitted screens.

NOTE: Original equipment can be identified from inside the vehicle by the material finish of the sealer. Original screen sealer has a smooth finish.

Water Testing Doors

When ready to test, have an assistant sit in the vehicle and watch for water coming in as the hose is worked around gap at door edge on the outside.

Start the check at lower edge of the door (Fig. 5) and then work upward. If water testing it begun at the top, the run-off will wet the untested area and can make a leak hard to find.

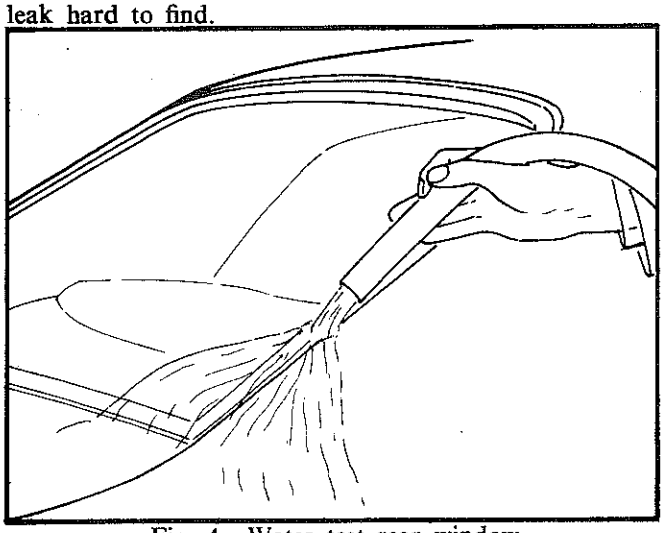


Fig. 4—Water test rear window

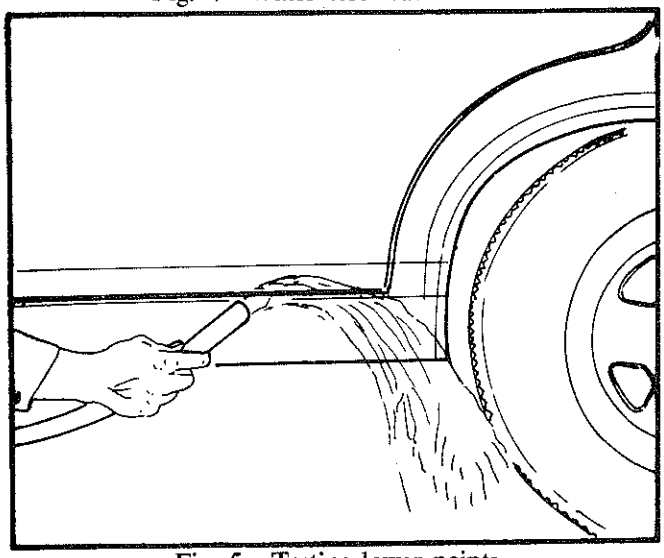


Fig. 5—Testing lower points

If the weatherstrip doesn't seal properly it's easy to see where the water comes in at the door edge. Mark the leak points with chalk or tape so you can find them when the door is open.

Since there may be more than one leak, correct any leaks you find in lower areas before you test higher.

If the water test shows the weatherstrip is sealing correctly, run water along the side glass at the belt line weatherstrips (Fig. 6) and check the inside trim panels for dampness, especially at the bottom. This water normally runs out of the door drain holes, however, the inside trim panel can get soaked if the plastic water/dust shield under the trim is torn, missing or not properly installed.

If a watershield is removed for any reason, its top and side edges must be repostitioned (indefinitely tacky adhesive applied where necessary) to the metal door panel in the original location. The loose edge or flap at the bottom of the shield must be tucked into the slot in the door panel before it is retaped (refer Section 1 this Group).

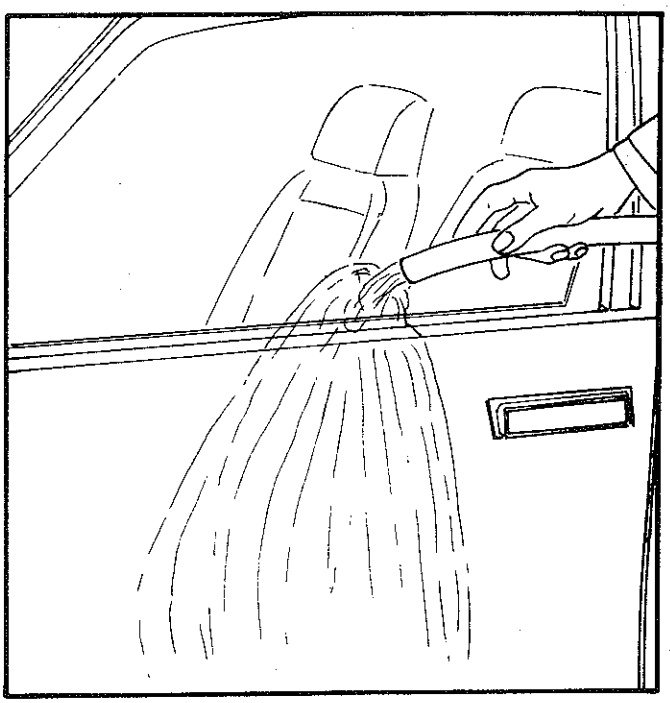


Fig. 6—Belt line test

The bottom shield flap directs water splash to the drains away from the inside trim panel.

LUGGAGE COMPARTMENT LEAKAGE

(1) First check to see if the decklid is flush with the surrounding metal surfaces.

(2) Open the decklid and examine the weatherstrip flange for distortion. Check weatherstrip for splits or improper alignment, correct as necessary. Water test as shown in Fig. 7.

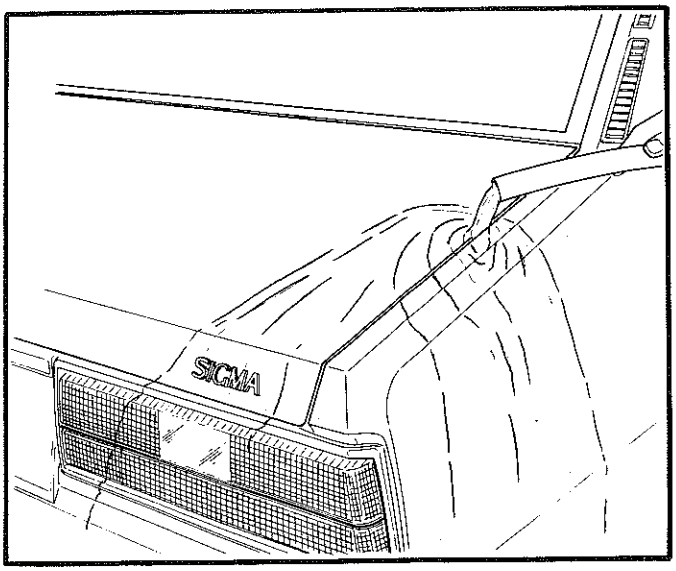


Fig. 7—Decklid water test

(3) If seams or pin holes are the cause of leakage, repair with an air-dry vinyl sealer or equivalent and touch up paint.

(4) If the rear quarter panel or deck-lid lower panel areas are the cause of leakage, check for loose or missing retaining nuts, if necessary, remove nuts and apply a small quantity of rope caulking type sealer to the studs and refit nuts.

(5) If leakage is not found in any of the preceding areas check the remaining panels, seams and rear window for leakage.

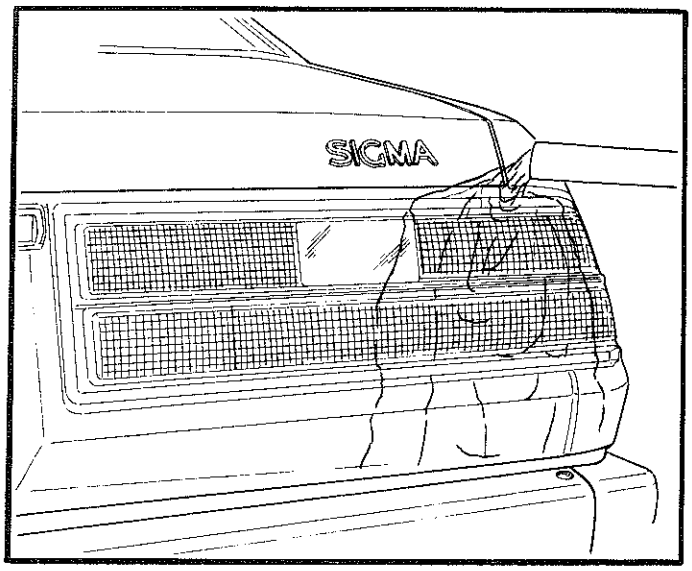


Fig. 8—Tail light water test

TAIL LIGHT TESTING

Whilst applying the water stream to the tail light, watch inside the luggage compartment for signs of leakage around the bulb holder body cutout seal. Make sure there is no water inside the tail light assembly.

Ensure the lower clearance area of the rear quarter panel extension housing is free from mud or obstructions, which if left, could cause corrosion inside the enclosure.

COWL TESTING

The water test can also be used to check for leaks in the front or cowl area of the body. Direct the flow of water through cowl air inlet grille with the hose outlet facing the rear of the vehicle (Fig. 9).

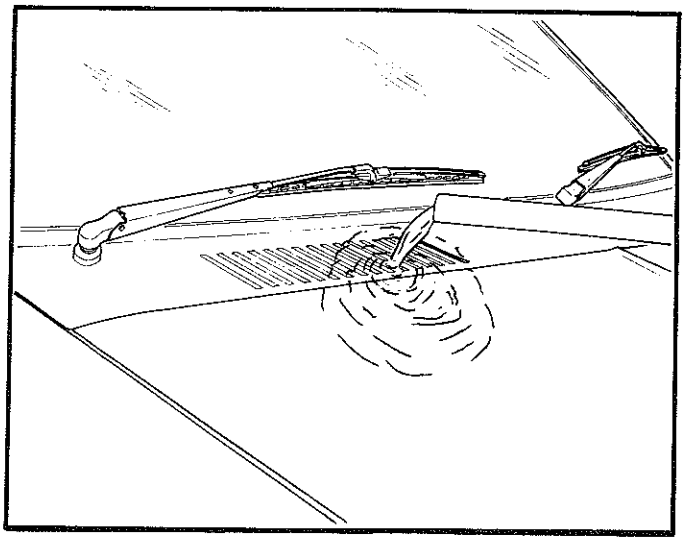


Fig. 9—Water testing cowl

Raise the engine hood and flow water over the body seams and joints in the cowl structure (Fig. 10).

Make sure the radio antenna lead-in grommet is in place, and pay close attention to body seams in the sides of the cowl section which are hidden by the fenders.

When checking for leaks in the cowl area, you may have to remove inside trim panels at the front and sides to see where the water is coming in.

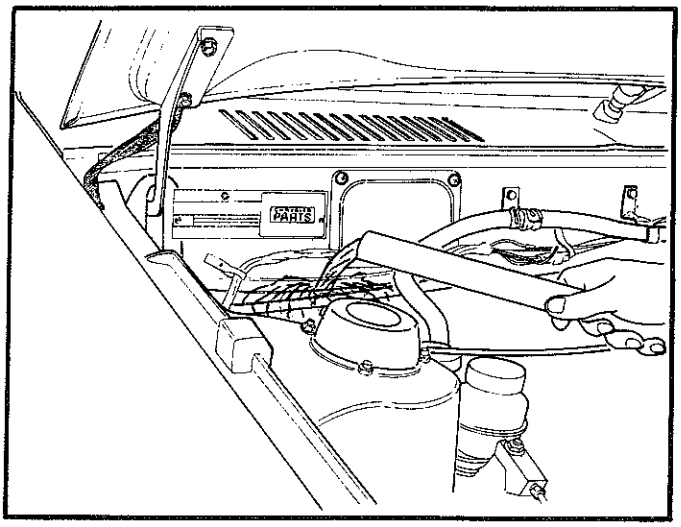


Fig. 10—Water testing cowl (engine hood raised)

FLOOR PAN TESTING

A common result of body leaks is soaked underfelt and or carpet and it's not unusual to find that the water is getting in through the floor pan or some other low point in the body. However, it is possible for water to enter higher up and run down to soak the floor covering.

Since a soaked floor covering should be removed for drying, its a good way to start the check. Removal of the floor covering necessitates the removal of step plates, seats and console (where fitted) etc., this gives a clear field for action. Check body seam sealing and plugs in the floor pan.

It's usually not practical to water-test for floor pan or wheel housing leaks unless a special underbody water spray arrangement is available and all mounting holes are effectively sealed.

As an alternative, the best way to locate these leak points is to look for rusty seam edges or other traces of leaks after the seats and floor coverings are removed. Traces of mud are an indication that water is coming in from below.

BODY SEAM SEALING

When inspecting body seams or joints for leaks don't assume that a generous coating of sealant automatically means a water tight seal. It only takes a small bubble of trapped air to cause a pin hole which can let water and dust in. In time, even a small leak can undermine heavy sealant applications. For a long term fix, it's safer to clean off and reseal any doubtful spots in the sealant.

CHALK TESTING

Weatherstrips

Another weatherstrip leak check that's widely used is the chalk test. This test is easy and it's dry. Simply open the door and rub soft carpenter's chalk on the sealing surface of the weatherstrip (Fig. 11) all the way around. Blue chalk shows up best on light-coloured body paint, and white does the job for dark colours. If carpenter's chalk is not available, ask for soft chalk at an art supply store. Ordinary blackboard chalk doesn't go on as easily and may not leave a good contact mark.

With the chalk applied, close the door in the normal manner and then reopen it. The chalk should transfer to the door surface contacted by the weatherstrip edge in a continuous, unbroken line if the seal is satisfactory.

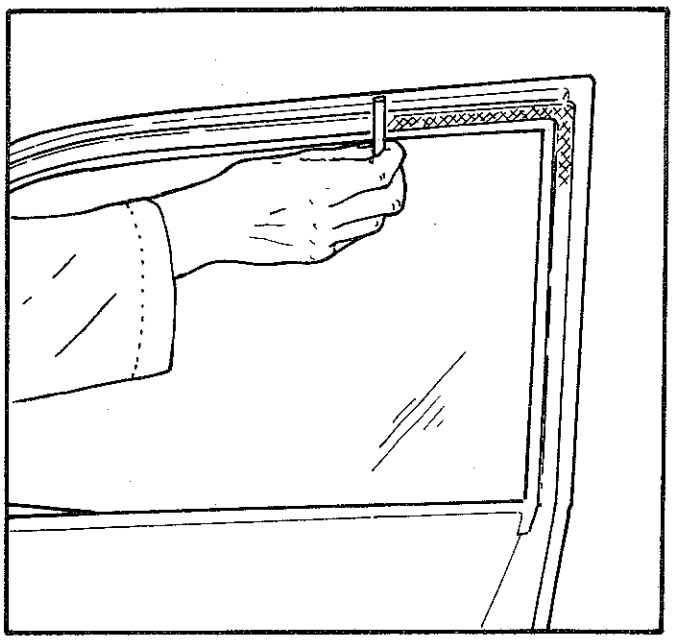


Fig. 11—Chalk application

Wax Test

Should it be difficult to get a good chalk transfer, coat the door with a thin film of body wax where it is contacted by the weatherstrip. The wax will pick up chalk and leave a distinct imprint. The wax also removes chalk from the weatherstrip at the contact line so in effect, there is a double check. If rechalking is needed to get a more distinct transfer, it will be necessary to wipe off any wax which has transferred to the weatherstrip so the chalk can leave a good mark.

Corrections

Where the chalk test shows **low spots** at door joints or other places around the door, it will be necessary to build up these low points to get a good seal. Level any low spots with plastic body filler, smooth and repaint repaired area.

The chalk test will also show up **high spots** on the door contact surface. These may be lumps of solder, weld or seam overlaps. In either case, the raised places must be finished smooth and repainted.

Where **gaps** of sizeable length show up on the chalk test it may be necessary to pack the weathertsrip slightly so it can make a good contact seal.

Deck Lid

The chalk test also works well on deck lid weatherstrips. However, just like doors, their alignment must be correct before any leak test will mean something.

POWDER TESTING

White powder can also be used for leak testing around weatherstrips. Just like with chalk, the powder test is simple. All that's needed is the powder and a syringe to blow it in around the door, decklid or tail gate edges. Use white trace powder available from body sealing suppliers, or any fine dusting powder which will cling to painted body surfaces.

Application

Blow the powder between the weatherstrip and the edge of the door or decklid. If the powder leaves an unbroken line outside the weatherstrip, the seal is good.

If the test shows traces of powder inside the weatherstrip, or on its contact surface, the strip is not sealing properly at these points. The powder test sometimes shows up causes of leaks which are not easy to spot with water or chalk tests. After testing with powder or chalk, be sure to clean up the test area.

WIND NOISE LEAK TESTING

Leaks which cause wind noises inside the vehicle seldom produce damage or the mess possible with water or dust leaks. However, a persistant wind noise can be very irritating.

Outgoing Air

Most wind noise is caused by air leaking out of the vehicle. When doors and windows are closed, and the cowl air inlet open, heater or air conditioning on, forward motion of the vehicle pressurizes the interior, and a vacuum is created on the outside at the side windows. In fact, with the air inlet open, air can enter faster than it can leave, so pressure builds up inside, especially at high speeds.

Weatherstrip Seals

If the weatherstrips seal properly, pressurizing the interior will not cause troublesome wind noises. However, any seal which does not make good contact can let the pressurized air force its way out in an area causing objectionable noise.

Turbulence

Turbulence outside the vehicle. This noise can be caused by loose mouldings, mouldings with protruding ends, gaps between trim mouldings and rubber sealing strips. Loose grilles, open bolt holes, roof cracks and radio antennas have also caused whistling sounds when the wind has passed over them.

Correction

Use tape to close off or change the shape of suspected areas when hunting for the source of turbulence noise. Correction can be made if tape application changes the sound.

Road-Test for Wind Noise Leaks

As with water and dust leak testing, diagnosis of the wind noise leaks should begin with a quick inspection for the obvious. Check weatherstrip condition, door and glass alignment. Look for poor fitting mouldings, and open holes or gaps. If all these are in order, the next step is a road test to locate the leak.

Road-Test Where It's Quiet

Try to make the road test in a low-traffic, open area where the vehicle can be driven up to cruising speeds. This will enable checking the effect of driving into and away from the wind and also whether the noise changes when the wind is on opposite sides of the vehicle.

Preparation

To begin the test, push the antenna down as far as it will go and close the doors and windows correctly. Make sure the radio and blower motors are shut off so they won't interfere with the test. Move heater control lever (A) to position "2" (inlet air vents open) so body pressure can build up and start test run.

Inlet Air Vents Open — Outgoing Air

If the noise only occurs when the vents are open, the sound is probably caused by outgoing air. This kind of noise may also vary as the vehicle speeds up or slows down.

Inlet Air Vents Closed — Incoming Air

Where the noise starts when the vents are closed, the noise is usually caused by air coming into the vehicle, the noise will be loudest on the windy side. An air draft may be felt if the leak is large.

No Change—Turbulence

When opening and closing the face level vents does not affect the noise, it's probably caused by turbulence somewhere outside the vehicle and may be hard to find.

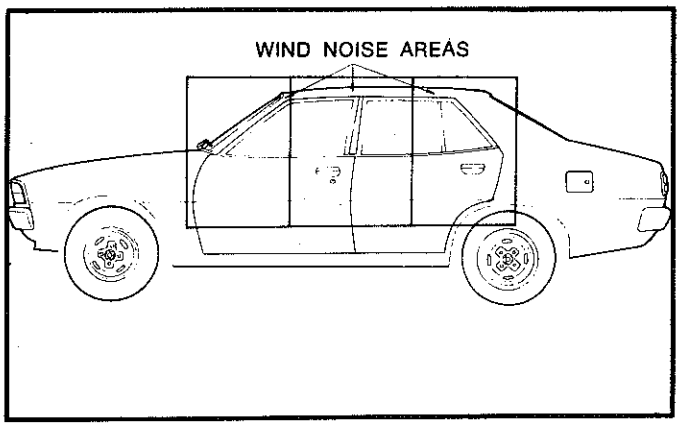


Fig. 12—Most disturbing wind noise area (typical)

Most Disturbing Level

Most causes of wind noise can be found in the upper areas of the vehicle sides, down to about 300 mm (12") below the belt line, or across the windshield (Fig. 12).

Listen Method

In some cases of wind leak noise around the windows, it may be possible to find the source by using a length of small-diameter hose as a noise pickup. Simply move the free end of the hose around the suspected area and listen for the sound at the other end.

BODY SEALING TIPS

A combination of common sense and application of testing procedures should help locate most body leaks quickly. However, experience shows that leaks in certain areas are sometimes related to specific conditions which can be corrected without the need of testing. Here again, visual inspection should be the first step, but the evidence may not be as obvious as an open hole or improperly fitted weatherstrip.

Drip Gutter

Look for voids or pin holes in the drip gutter sealant (Fig. 13). Air bubbles trapped under the seal bead can rise to the top and form a hole which will admit water. If water gets under the sealant, it can enter the roof area at a body seam and soak the headlining.

Moulding and Screw Holes

In some cases water may be found leaking past a loose moulding retainer screw, or through small holes at the windshield or rear window body joints. These leaks can be found by flowing on water and then applying air pressure to the areas.

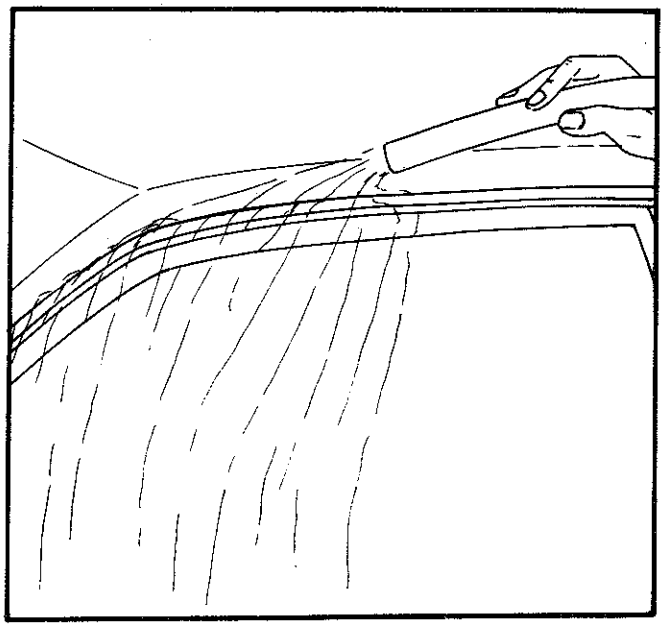


Fig. 13—Drip gutter inspection

Weatherstrips

Door and decklid weatherstrips should only be cemented at the joint ends. They are attached to the door or decklid opening flange by means of a dry friction push fit.

Cleaning

As a final step in any body sealing job, make sure to clean up the glass weatherstrips, or other places which have been cemented or sealed.

SECTION 7 — REFINISHING PROCEDURE

SPECIFICATIONS

EXTERIOR PAINT COLOURS

LOCAL PRODUCTION VEHICLES

Colour	Paint Code	Berger Acrylic Enamel Number	Berger Acrylic Repair Lacquer Number
Alpine White	WA	Berg 4301	HL 5564
Augusta Green Metallic	DB	Berg 6007	HH 5608
Amarante Red	RQ	Berg 4743	HJ 5280
Caramel Metallic	TR	Berg 6006	HH 5589
Chestnut Metallic	CD	Berg 4739 Berg 6012	HH 5795
Chianti Red	RU	Berg 6019	HH 5669
Crystal Turquoise Metallic	QC	Berg 4350	HJ 5853
Dove Silver Metallic	SG	Berg 4918 Berg 6001	HH 5358
Ebony Black	XA	Berg 6013	HL 5131
Ensign Blue Metallic	BY	Berg 6015	HH 5659
Flame Orange	PF	Berg 6018	HH 5666
Frost Blue Metallic	EA	Berg 6014	HH 5650
Frost Green Metallic	GT	Berg 4785	HJ 5511
Harvest Gold	YS	Berg 4881	HJ 5629
Impact Orange	PB	Berg 4603	HK 5602
Light Cashmere	LD	Berg 6005	HH 5591
Lemon Twist	YT	Berg 4632	HK 5743
Medium Blue Metallic	EB	Berg 6029	HH 5092
Medium Cashmere	LF	Berg 6032	HH 5938
Moonstone Metallic	LC	Berg 4851	HJ 5854
Russet	CH	Berg 6017	HH 5664
Sienna Metallic	CC	Berg 4718	HH 5223
Spinnaker White	WH	Berg 6000	HH 5560
Stellar Blue Metallic	BZ	Berg 4742	HJ 5279
Sundance Yellow	YM	Berg 4750	HJ 5288
Sunstone	PG	Berg 6016	HH 5663
Teal Green Metallic	DC	Berg 6010	HH 5626
Topaz Gold Metallic	YQ	Berg 4722	HJ 5225
Tiger Yellow	YY	Berg 6030	HH 5933

IMPORTED VEHICLES

Colour	Paint Code Aust.	Paint Code Japan	Berger Acrylic Repair Lacquer Number
Boulogne Green	GZ	G78	HH 5290
Galaxy Silver Metallic	SE	H93	HH 5296
Jamaica Blue Metallic	BP	B22	HH 5015
Jannu Yellow	YR	Y90	HH 5556
Pearl White	WD	W61	HH 5018
Spitfire Orange	PE	O73	HH 5755
Victoria Brown Metallic	TL	C63	HH 5016

INTERIOR PAINT COLOURS

Colour	Trim Code as Stamped on Compliance/Data Plate	Spartan Supercryl Repair Lacquer Number
SE Luggage Compartment		
— Saturn Black	———	138-6314
— Low Gloss Medium Grey	———	138-00318

SPECIFICATIONS CONT.

MISCELLANEOUS PAINT COLOURS

Component	Colour	Berger Acrylic Repair Lacquer Number
Door 'A' Frame (Sport Pack Models)	Semi Gloss Black	HM 5814
Wheel Rim	Argent Silver Metallic	HM 5405

All Chrysler built vehicles are painted and oven baked with three coats of acrylic enamel. An acrylic lacquer to match the exterior colour of the vehicles can be obtained from Berger Paints outlets throughout Australia. When ordering lacquer it is necessary to identify the colour/s concerned from the vehicle Compliance/Data plate and then establish the repair Laquer number from the preceding specifications. Due to natural ageing and loss of original colour of paint surfaces as the result of exposure to varying weather conditions and other environmental factors, etc., it may be necessary to 'colour match' the new laquer to the colour of the adjacent painted surfaces.

Repair lacquers for interior colours are available from Spartan Paints outlets throughout Australia. When ordering laquer, quote the vehicle type and the vehicle trim code, this information is available from the vehicle Compliance/ Data plate.

Proper safety equipment must always be used and work should be carried out in a well ventilated area.

DEFINITIONS OF TECHNICAL TERMS

Coat—Single

This means one coat overlapping to give complete coverage.

Coat—Double

A double coat means to first spray a single coat with vertical strokes and then across with horizontal strokes, or viceversa. Two single coats applied in the same direction may also be used.

Drying

Drying or hardening of a film goes through several stages. **First** is known as "dust-free" and is the time required for a film to reach the condition where, if any dust settles on it, dust will not become imbedded, but may be wiped off after film has hardened. **Second** stage is known as "tack-free" and is the time required for a film to reach the condition where it may be touched with light pressure of finger. **Third** is "hard-dry" and is the time required for film to become thoroughly hard so that it may be rubbed and polished.

Feather-Edging

This is tapering of edges of a finish so that when a finger is passed over it no break will be felt. Feather-edging is usually done with water and sandpaper on a sanding block. This term applies to the sanding of a defect in the prime or colour coat.

Ferrous and Non-Ferrous Metals

Ferrous metals are those which are made from iron (steel). Non-ferrous metals are those which are not made from iron or do not present an iron (steel) surface, such as aluminium, aluminium alloys, brass, copper and magnesium.

Flash Time

This is the time required for an applied coat of paint to lose most of its solvent.

Mist Coat

This is a coat of thinner to which may be added a small amount of retarder and applied as a final coat to increase flow and lustre of lacquer-type finishes.

Priming

The function of a primer is to act as a surfacer for the finished colour coat. It also forms a bond between the metal surface and the colour coat.

A glazing putty is used for filling in small inperfections which are too deep to be taken care of by surfacer coats. It may be applied either before or after the last coat of primer surfacer.

Reducers

Reducers are mixtures of volatile liquids used to reduce alkyd and synthetic primers and enamels to the proper consistency for application.

Sanding Block

As a rule a sanding block is a flexible rubber block, to which sandpaper may be fastened. It offers a good grip for the operator.

Wherever possible sanding should be done with a block as it distributes the pressures and gives a more uniform surface.

Surfacing

The function of a surfacer is to prepare a smooth surface for the colour coats.

Tack Rag

This is a piece of cheesecloth that has been dipped in thin, non-drying varnish and then wrung out. It is kept in a container so that varnish will not harden but will remain tacky. Tack rag is used to wipe off a surface to remove dust and lint.

Thinners

Thinners are mixtures of volatile liquids used to thin lacquer type finishing materials to proper consistency for application.

Undercoats

All products used to prepare the surface to receive colour coats are classified as undercoats, such as primers, surfacers, putties, primer surfacers and sealers.

PAINT REPAIRS ON GALVANIZED METALS

To perform paint repairs on galvanised steel surfaces, care must be exercised when preparing bare galvanised surface to properly accept primer surfacer and finish paint. Do not use short cut methods nor inter mixing of materials.

Metal Preparation

(1) Thoroughly sand affected area to remove all corrosion products from exposed metal surface while carefully feathering all paint edges.

(2) Wire brush or steel wool entire metal surface and remove all grease or oil, with wax and grease remover.

(3) Treat bare metal panel with a conditioner according to label directions.

(4) Rinse with clean water and blow off with compressed air.

Refinishing

(1) Apply one light coat of zinc chromate primer and as soon as thinner flashes off and within 30 minutes, apply a coat of acrylic sealer.

(2) Apply primer surfacer.

(3) Sand when dry using No. 300 grit wet or dry paper, and proceed with application of finish coats according to paint manufacturers recommendations.

RUST PROTECTION

Prior to applying any paint to the sheet metal clean the area to be repainted.

Eliminate all fingerprints, chemically treat all bare metal.

This conditions the exposed metal to resist rust.

BUFFING AND POLISHING

Minor imperfections in paint finish normally can be removed by sanding, buffing and polishing. Following procedure should be used when working on these minor conditions:

(1) Wet sand by hand affected area using No. 600 paper which has been soaked in mineral spirits. **Caution should be used not to rub too hard over any of the affected areas or on ridges.**

(2) Remove sand sludge.

(3) Tack off area with a clean, soft cloth.

(4) Buff entire area using a fine buffing compound.

REFINISHING

Preparation Acrylic System — Over Old Acrylic

(1) Remove outside accessories, mouldings and bumper bars (if necessary).

(2) Remove silicone polish, wax, or any other surface contamination with wax and grease remover.

A chemically clean surface allows for effective sanding and assures adhesion of the undercoats and finish colour.

(3) Sand old finish. This operation removes surface deterioration, feathers out scratches, nicks, stone bruises, or any other minor imperfections. Water sand with No. 360 grit paper, or its equivalent, and remove all sanding sludge.

(4) Blow off entire vehicle, using high pressure air to eliminate dirt or dust from blowing out on to surface as paint is applied.

(5) Mask off areas not to be painted. If a complete colour change is being made, mask off interior parts adjacent to door openings to prevent paint spray from soiling interior trim and upholstering.

(6) Reclean entire area to be painted with wax and grease remover, eliminating fingerprints.

(7) Chemically treat bare metal with metal conditioner, following label directions.

Priming the Surface

This operation is the backbone or foundation for finish colour. It primes metal to insure adhesion and fills minor surface imperfections.

(1) Apply lacquer primer surfacer.

(2) To expedite repairs to other surface imperfections, use putties.

(3) Sand undercoats. Water sand with No. 400 paper, or finer paper (or its equivalent) if other sanding methods or systems are employed), and remove sanding sludge.

(4) Respray with primer surfacer, an area that may have been sanded through to bare metal in step 3.

(5) Resand undercoat with No. 400 or finer paper, or equivalent.

(6) When colour is being changed, wash door jambs and door opening areas.

(7) Remove overspray from exterior and reclean entire surface with wax and grease remover.

(8) Tack rag entire surface to remove lint and dust.

(9) Apply approved acrylic lacquer colours (Four to six double coats).

Care must be exercised when selecting paint for refinishing acrylic metallics, to select the proper paint code.

(10) When colour coat has sufficiently dried, compound and polish.

SPOT REPAIRS

The procedures for making spot repairs with acrylic lacquer are the same as for complete panel refinishing with the following exceptions:

Sealer Coats

The use of a sealer is not practical where a spot repair is demanded, as it is difficult to spray sealer without leaving an edge. If care is taken in preparation of surface, a satisfactory repair is possible by sanding the original finish about 50 or 75 mm (2 or 3") beyond area where acrylic lacquer will be applied. Apply lacquer directly on sanded original finish, being careful not to overlap colour on unsanded enamel.

Application of Colour Coats

Metallic colour can appear to vary in richness. Variation can be described as:

A closed pattern that appears lighter with fine metallic dispersion.

An open pattern that appears richer with metallic flakes less noticeable.

A closed pattern is best matched by reducing acrylic lacquer colour 150% with acrylic lacquer thinner.

An open pattern is achieved by lowering air pressure to 150 to 200 kPa (20-30 lbs.) at gun, reducing acrylic lacquer colour 100% with a blend of acrylic lacquer thinner and all purpose retarder.

Compounding Colour Coats

Compound sanded area that extends around refinish lacquer and then compound lacquer, blending it into enamel. **Hard surface of acrylic enamel will permit compounding without leaving scratches.**

PAINT BAKE OVEN TREATMENT

(with Textured Grilles)

To avoid warpage, all models with textured grilles and bezels should be covered with paper or other material to shield grille assembly from heat before vehicle enters paint bake ovens, or to be completely removed from vehicle. This also applies where heat lamps are used.

FIBRE GLASS FINISHES

Fibre glass should be treated much the same as body steel; however, it is a non-corrosive material and does not require chemical conditioners.

Replacement or new panels may contain silicone oils on the surface due to the manufacturing process used. These oils must be removed from the surface, to prevent cratering of the freshly painted surface.

Fibre Glass Surface Preparation

NOTE: Under most repairs situations when working with fibre glass, the working area should be well ventilated, and consideration should be given to protective clothing. Respiratory masks and safety glasses should also be worn.

The procedure does not represent a complete fibre glass repair, but does reflect the basic steps to be taken in the repair.

(1) In a well ventilated area, using alcohol, wash new moulded parts liberally with a clean cloth.

(2) Thoroughly clean the surface with wax and grease remover.

(3) Using respiratory mask and safety glasses, sand the exposed fibre glass with 220 to 280 grit paper by hand or 80D to 120 gritt paper with power sander.

Do not sand down to glass fibres used to re-enforce the plastic. There is generally sufficient surface material thickness to allow thorough sanding for finish.

(4) Blow off sanding dust.

(5) Re-clean surface and wipe dry with clean rags.

(6) If there are joints to be filled or the sanding operation exposes air pockets or glass strands, glaze a coat of body filler over the entire surface.

(7) Allow to cure, sand and re-clean.

(8) Apply primer or surfacer as directed.

(9) Allow to dry and sand smooth with fine sandpaper to minimize sand scratches.

(10) Blow surface off with air and tack rag the surface.

(11) If enamel top coats are to be used a synthetic primer surfacer is also recommended.

(12) Apply colour coats as recommended, by manufacturer.

SECTION 8 — BODY ALIGNMENT AND REPAIR

GENERAL INFORMATION

With unitised body construction, it is advisable to check body alignment in the event of extensive collosion damage.

The reinforced box sections of the front lower structure and strut mountings in the fender splash shields ahead of the cowl are of vital concern. These areas ahead of the cowl panel carry the front suspension load and support the engine. The box sections of the body are also of vital concern. The door pillars, sills, roof rails, rear window and windshield headers provide added strength to assist the lower body reinforcing members.

Welded Body Panels and Sub-Assemblies

Removal

When repairing collision damage it may be found advisable to replace the damaged panels.

Proper installation of these units will maintain the structural strength and alignment of the entire vehicle. Separation of the damaged panels may be accomplished by drilling or by cutting the spot welds with a chisel. Welded seams may be separated with a cutting torch or grinder.

In the event of severe collision damage, the adjoining body sections may be mis-aligned. These adjoining sections should be re-aligned before removing the damaged panels.

Installation

When replacing large panels requiring long welds, care should be taken to prevent distortion due to excessive heat. Spot weld the panel at the centre of the joint and tack weld toward each end, alternatively tack welding approximately 300 mm (12") apart. Wet asbestos putty surrounding the weld will prevent heat distortion. Make certain that sufficient welds are applied to maintain original strength.

Body Alignment

Body alignment may be checked accurately by the following method.

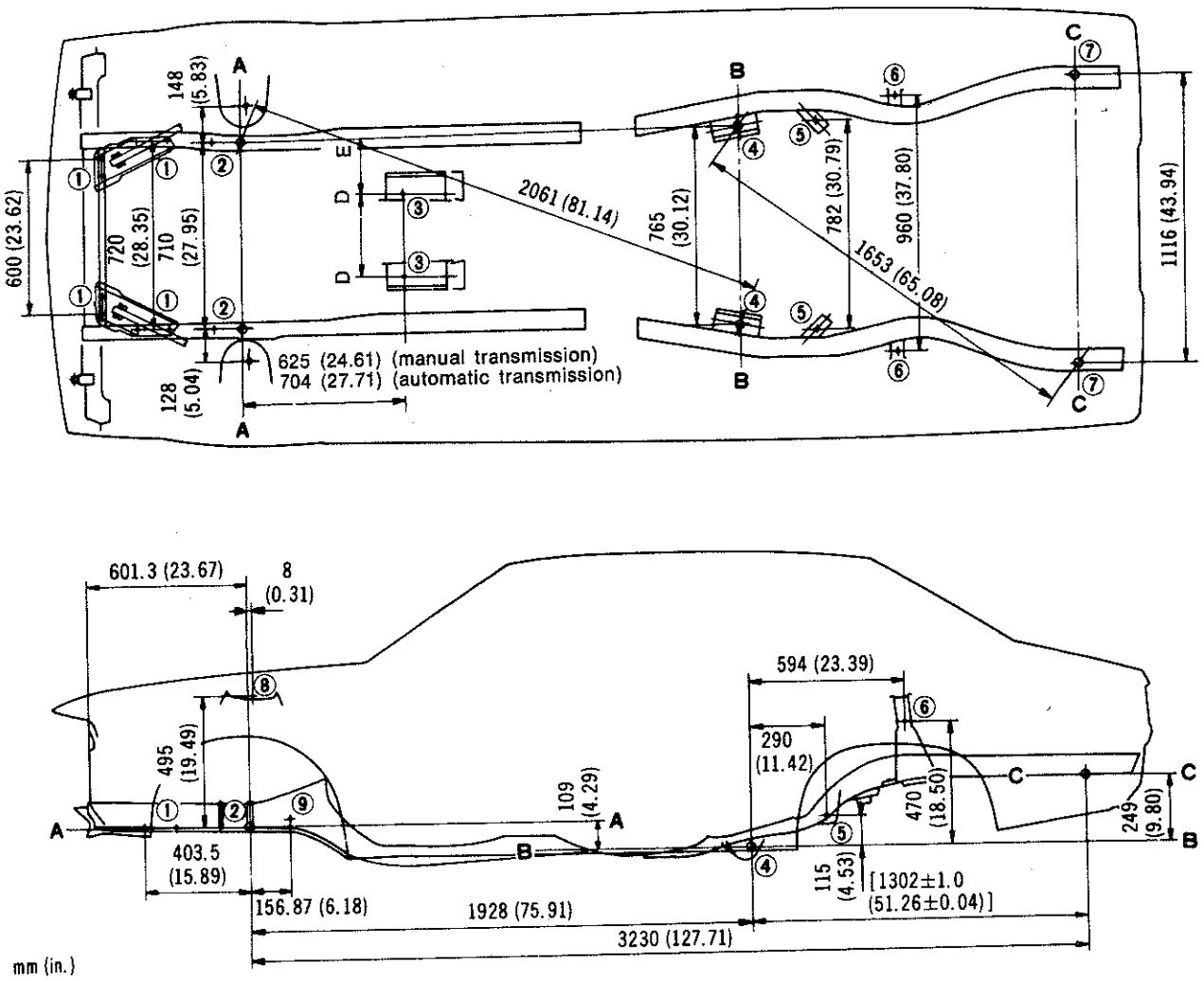
(1) Elevate the vehicle to a level position over a clean, smooth floor.

(2) Place the line of a plumb-bob on point A (refer appropriate figure) with the plumb-bob just contacting the floor. Mark the plumb-bob contact point on the floor. Repeat the process at points B and C on both sides of the body. Snap a chalk line between points as illustrated.

(3) Compare dimensions with those illustrated (refer appropriate figure). All point to point connections should be within 6 mm (¼").

NOTE: Care should be taken that all diagonals compared represent corresponding check points.

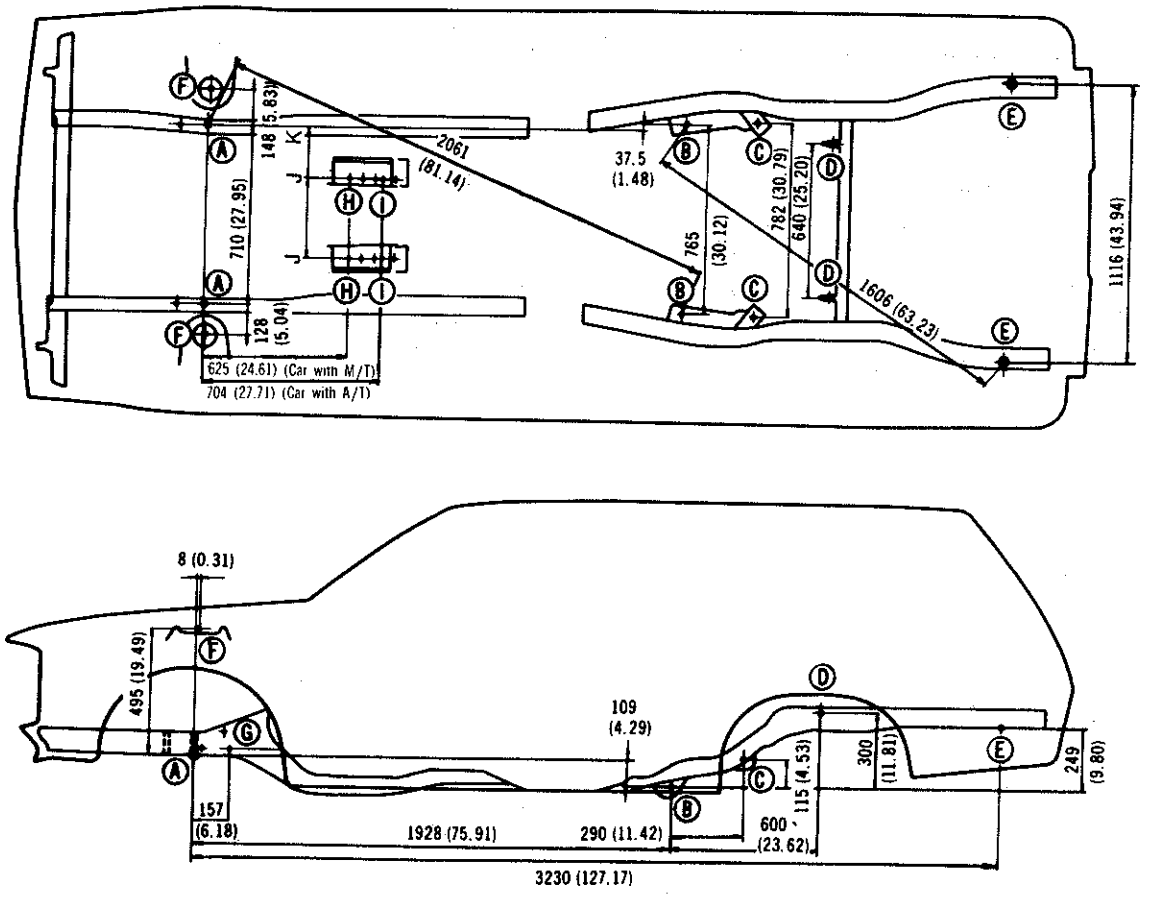
(4) Upper body alignment may be checked by diagonal measurements from various points of the door opening sills to the roof rail of the opposite side of the body. Equal dimensions of these check points made at both sides of the vehicle. All dimensions must be measured at the welded joints of the body to ensure uniform measurements.



Note: Standard positions
A-A Sub-frame attaching bolt (rear) centre
B-B Lower control arm attaching bolt centre
C-C Rear frame loose hole
D-D Automatic Transmission 340 (13.38)
D-D Manual Transmission up to KI28 307 (12.09)
D-D Manual Transmission after KI28 340 (13.38)
D-E Automatic Transmission 175 (6.88)
D-E Manual Transmission up to KI28 208 (8.19)
D-E Manual Transmission after KI28 175 (6.88)

1 Brake reaction rod bracket
2 Sub-frame
3 Engine mount rear
4 Control arm (lower)
5 Control arm (upper)
6 Shock absorber
7 Rear frame loose hole
8 Strut support
9 Steering gear nousing

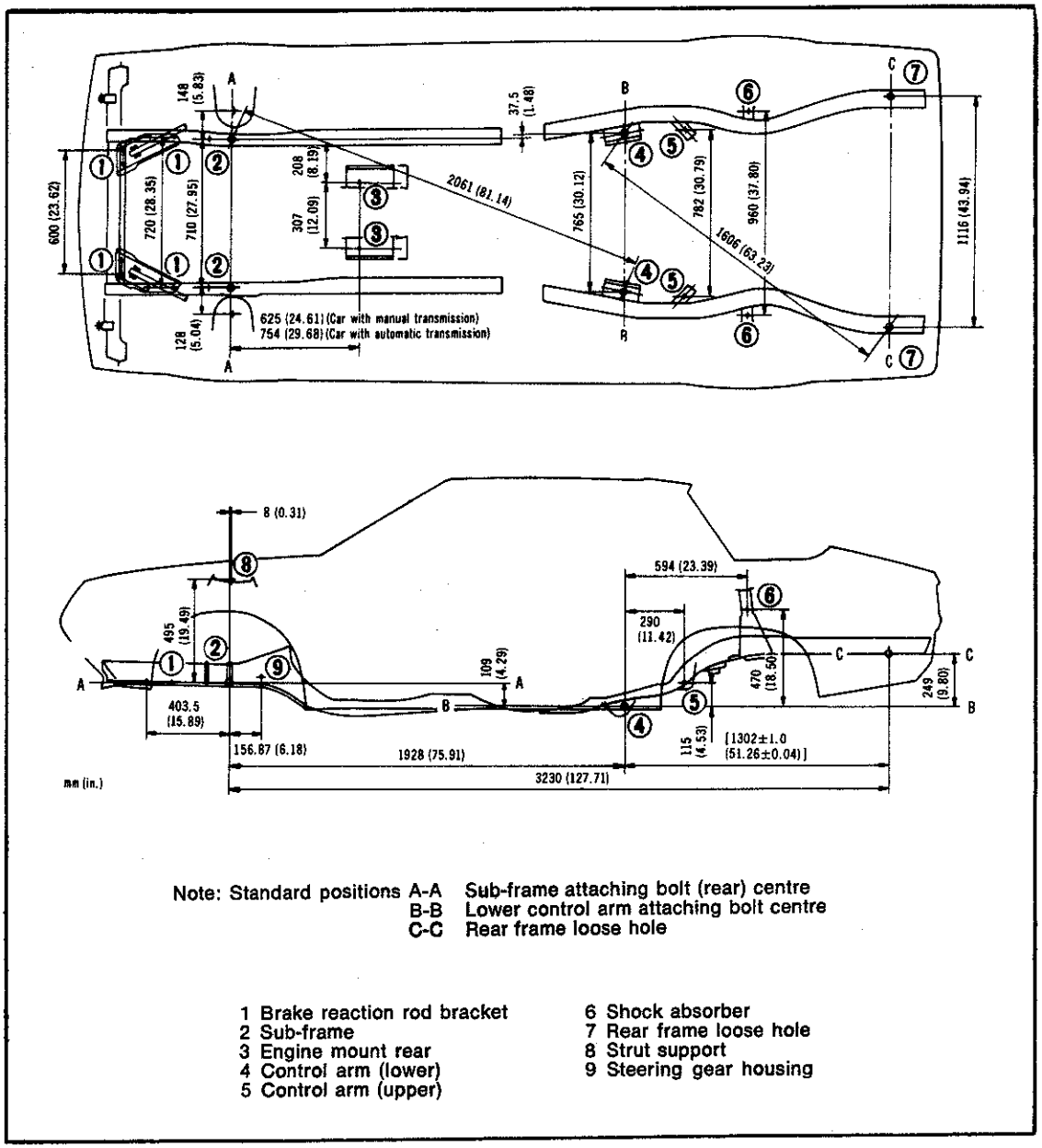
Fig. 1—Body alignment (sedan models)



mm (in.)

Note: Standard Positions
A-A Sub-frame attaching bolt (rear) centre
B-B Lower control arm attaching bolt centre
C-C Upper control arm attaching bolt centre
D-D Upper shock absorber attaching bolt centre
E-E Rear frame loose hole
F-F Front suspension strut support
A-G Steering gear housing
J-J Automatic Transmission 340 (13.38)
J-J Manual Transmission up to KI28 307 (12.09)
J-J Manual Transmission after KI28 340 (13.38)
J-K Automatic Transmission 175 (6.88)
J-K Manual Transmission up to KI28 208 (8.19)
J-K Manual Transmission after KI28 175 (6.88)

Fig. 2—Body alignment (wagon models)



Note: Standard positions A-A Sub-frame attaching bolt (rear) centre
B-B Lower control arm attaching bolt centre
C-C Rear frame loose hole

1 Brake reaction rod bracket
2 Sub-frame
3 Engine mount rear
4 Control arm (lower)
5 Control arm (upper)
6 Shock absorber
7 Rear frame loose hole
8 Strut support
9 Steering gear housing

Fig. 3—Body alignment (two door models)

SECTION 9 — BODY DECALS

BODY DECALS

General Information

The decals as purchased consist of three parts:

Decal. The coloured surface which is adhesive backed.

Backing Paper. This protects the adhesive side of the decal. All large sections are pre-cut in strips and are held together with masking tape.

Protective Tape. This protects the coloured surface of the decal and must not be removed (unless specified) until after the decal has been applied (slicked) to the vehicle, it also controls the stretch of the decal. When the decal is completely slicked and all air bubbles removed, the tape can be removed by pulling it back evenly over itself.

NOTE: If a water/detergent mix is used during application, the tape should not be removed for ½ to 1 hour after application. This helps to prevent the decal lifting.

Decal Removal

Removal of the old decal can be accomplished without damage to the paint by first heating the decal with a strip type radiator or hair drier and removing the decal from the body, the adhesive will remain on the body panel. Remove the adhesive by liberally soaking it (for approximately five minutes) with Mineral Turpentine.

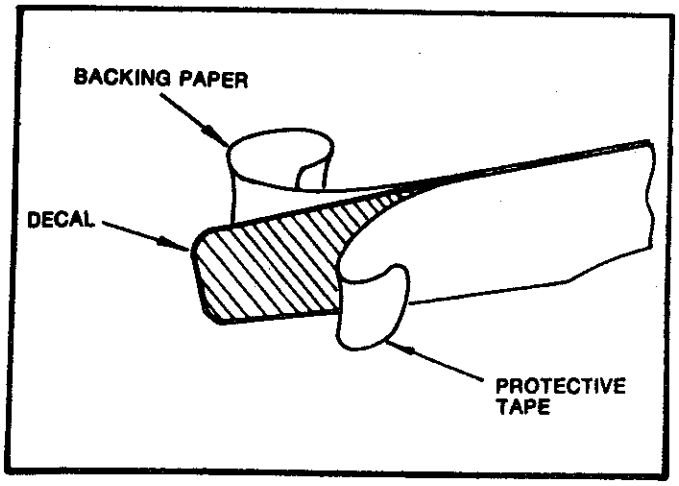


Fig. 1—Decal components

Decal Application

Prior to applying the decals, the body panels must be thoroughly cleaned and if necessary any nibs or dirt in the paint should be removed using 220 grit dry sand paper. Where a water/detergent mix is used, the mixture should be sufficient to obtain a film which just clings to the body surface, approximately one teaspoon detergent to 4,5 litres (1.0 gal.) of water. (A biodegradable liquid detergent is recommended).

The plastic applicator (slick) and low friction sleeve (used over the slick) are obtainable from the 3M company under Tool Numbers P.A.-1 and S.A.-1.

NOTE: Check all decals for size, position and damage prior to commencement of application.

(1) Lay the decal on a clean flat surface backing side up and remove the backing in a smooth motion. It is mandatory to remove the backing from the film, never the film from the backing, as possible decal stretching or breakage may occur.

(2) Apply a light coating of water/detergent mix to the body panel with a sponge.

(3) Position the decal under the body protection moulding with the protective tape against the moulding. The protective tape will space the decal away from the moulding at the required spacing margin.

(4) To ensure a good adhesive contact, use a plastic or rubber applicator to smooth the decal from the centre outwards, removing air bubbles, water and wrinkles.

(5) Remove the protective tape by pulling it back over itself in a smooth motion ensuring the decal is not lifted from the body panel.

(6) Inspect each area for blistering due to trapped water or air. All blisters must be worked out with the applicator or punctured with a sharp needle or pin and then smoothed until the decal adheres to the body surface.

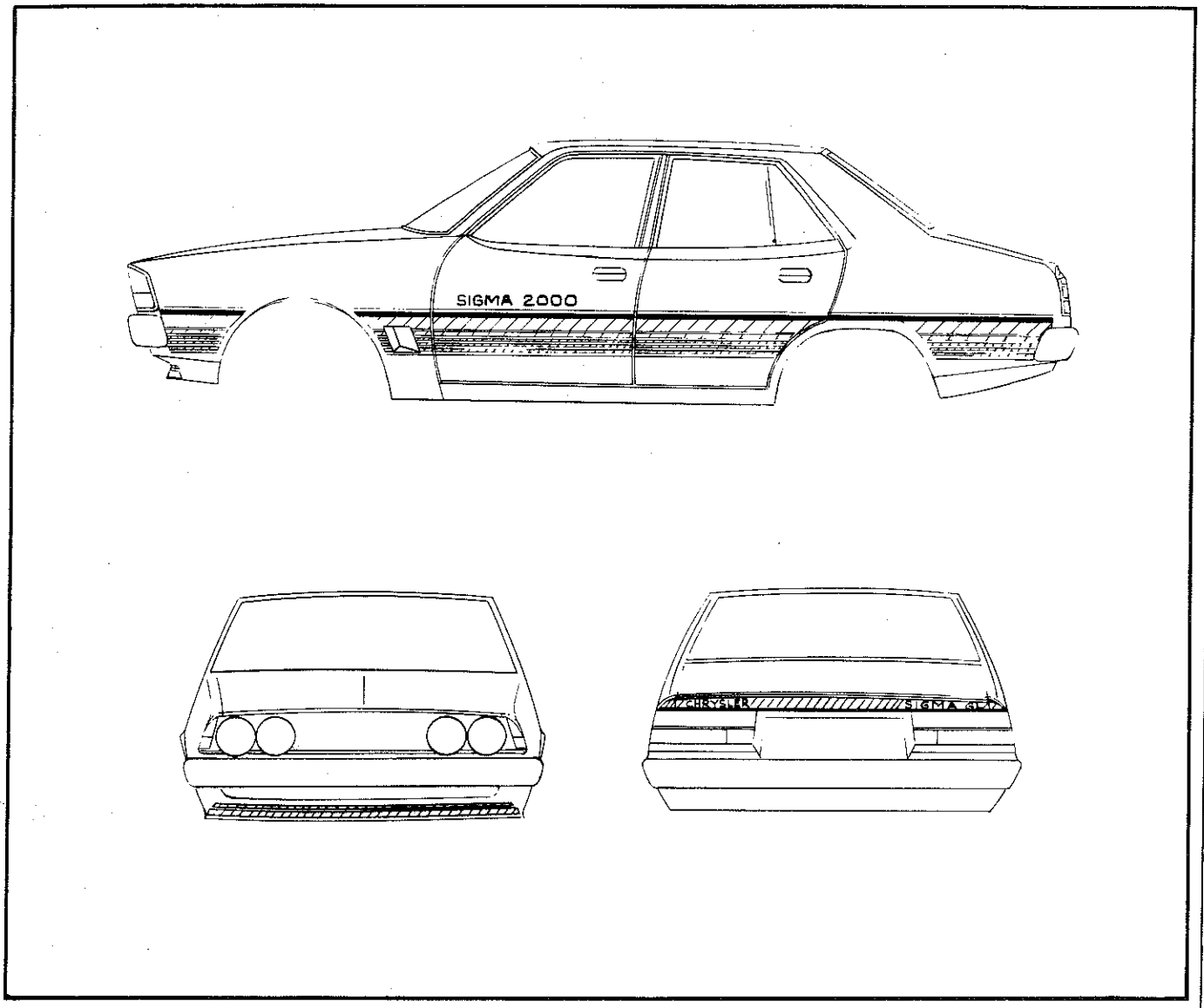


Fig. 2—Decal locations (sport pack shown)

SECTION 10 — BODY PROTECTIVE MOULDINGS

PROTECTIVE MOULDINGS

Removal

Removal of the protective mouldings can be accomplished without damage to the paintwork or body panel by heating the moulding with an infra-red light bank, radiator or hair dryer.

Remove the moulding with special tool (E23M6) or other suitable means by levering the moulding away from the panel at one end and working along the moulding until it is free from the panel. Refer Fig. 1.

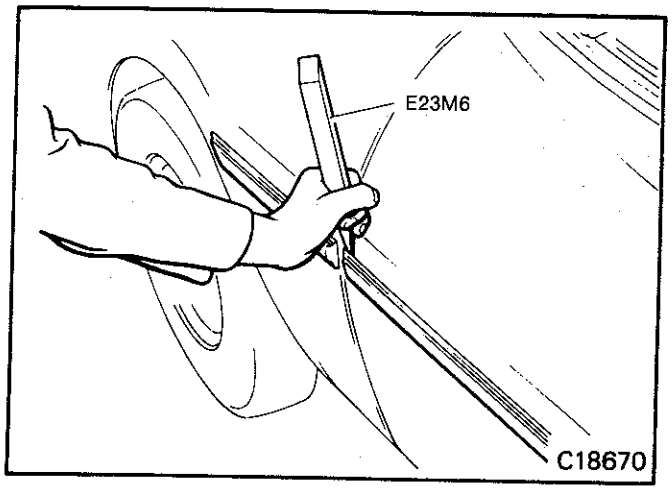


Fig. 1—Removing the side moulding

Installation (Sedan and Wagon)

(1) Clean the body panels with a suitable solvent to remove any old adhesive, dust or grease.

(2) With the aid of an infra-red light bank, radiator or hair dryer, warm the mouldings and body panels to a temperature of 20-55°C (68-131°F).

(3) Place the moulding with the backing paper attached on the body panel in the correct location, refer Fig. 2.

(4) Check the moulding for correct length and shape.

(5) Remove the backing paper and align one end of the moulding with the lower body feature line.

(6) Carefully apply the moulding to the body panel with light hand pressure.

(7) After ensuring that the moulding is located in the correct position, apply an approximate 7 kg (15 lb.) force by using a roller — special tool (MB990743) or other suitable means to ensure correct adhesion of the moulding. Refer Fig. 3.

(8) Apply hand pressure to the moulding ends, as the roller may tend to lift the ends of the moulding.

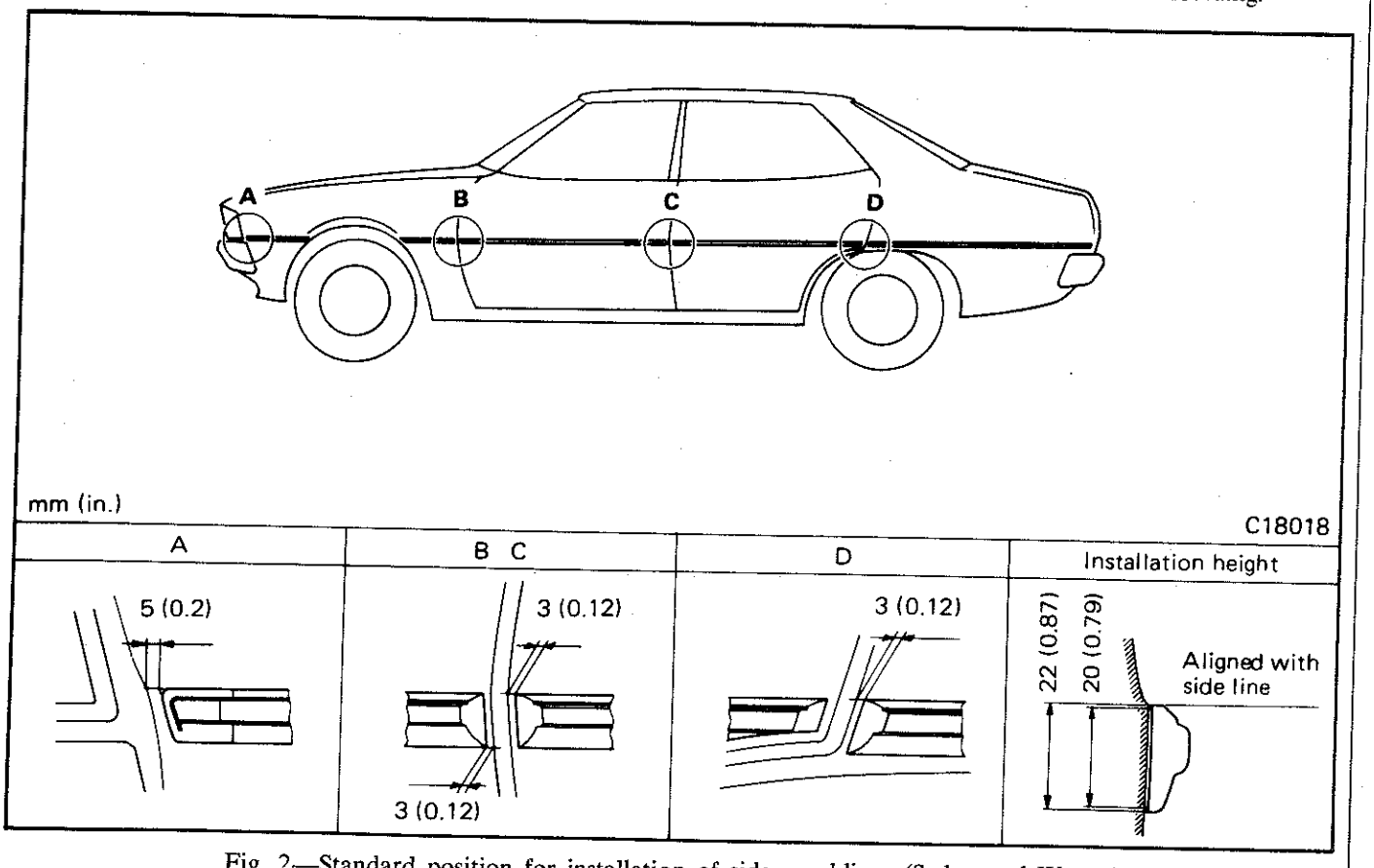


Fig. 2—Standard position for installation of side mouldings (Sedan and Wagon)

Installation (Two Door)

Install as previously described, taking note of the following:

(1) Spot mark the body side panels with a soft lead pencil 25 mm (1") down from the lower body feature line.

(2) Apply a length of masking tape above the pencil mark on the front panel (near bumper bar) and stretch the tape along the entire length of the body side panels, carefully aligning the pencil marks as the tape is being applied.

(3) Apply the moulding as previously described by aligning the top edge of the moulding with the lower edge of the masking tape.

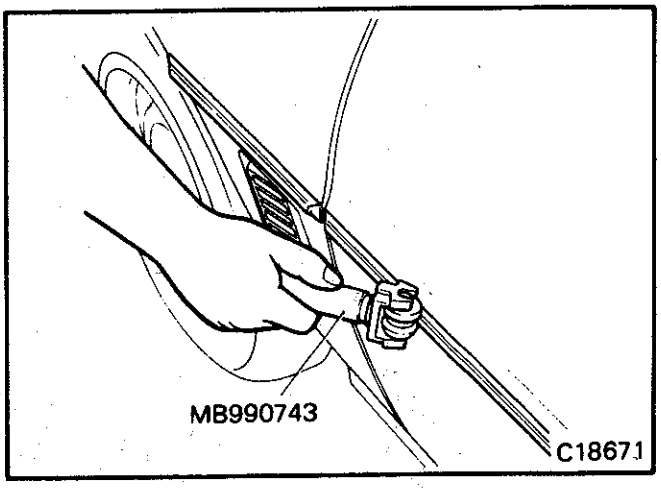


Fig. 3—Installing the side moulding

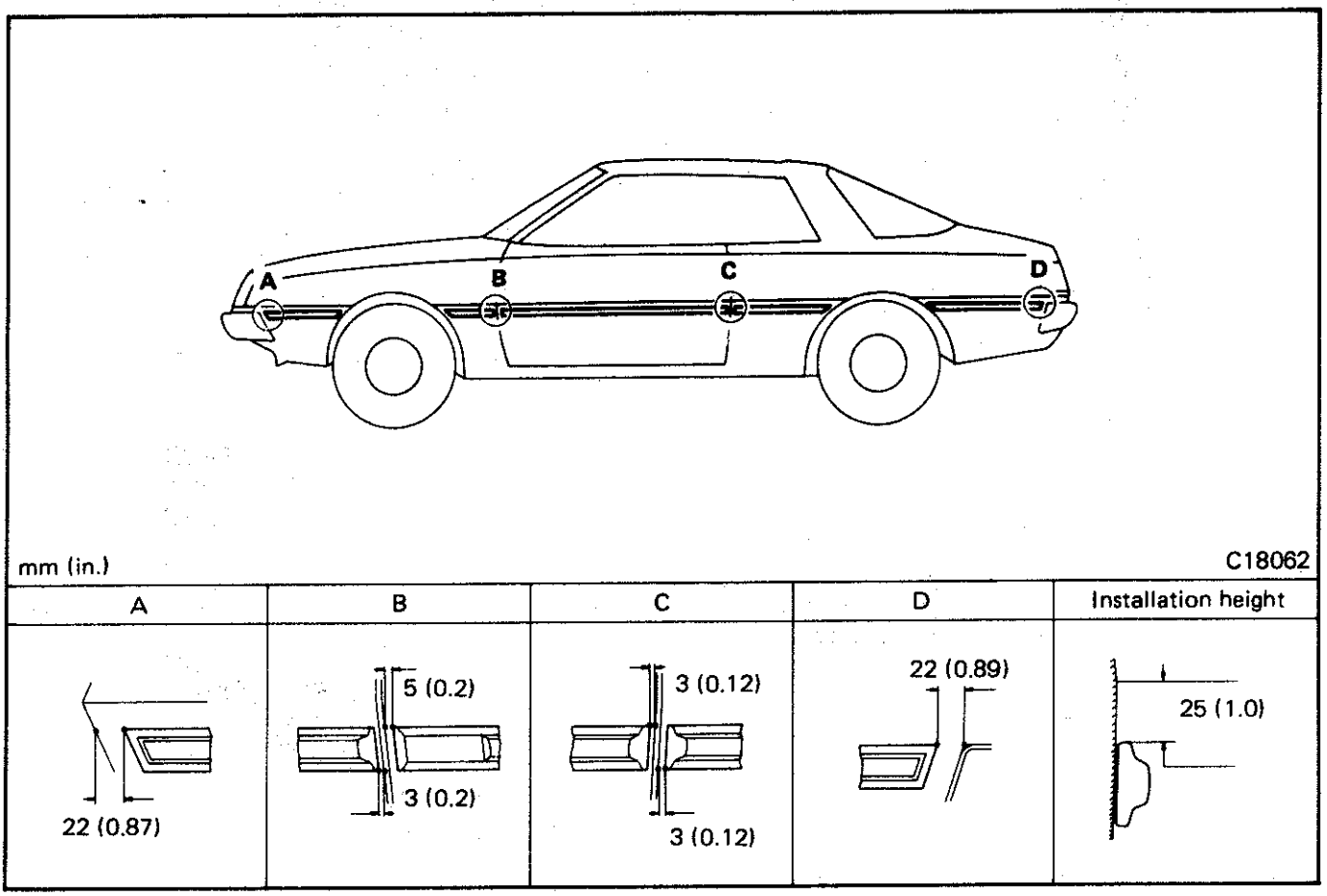


Fig. 4—Standard position for installation of side moulding (Two Door)