

BODY & TRIM

EXTERIOR

DOORS

REMOVAL & INSTALLATION

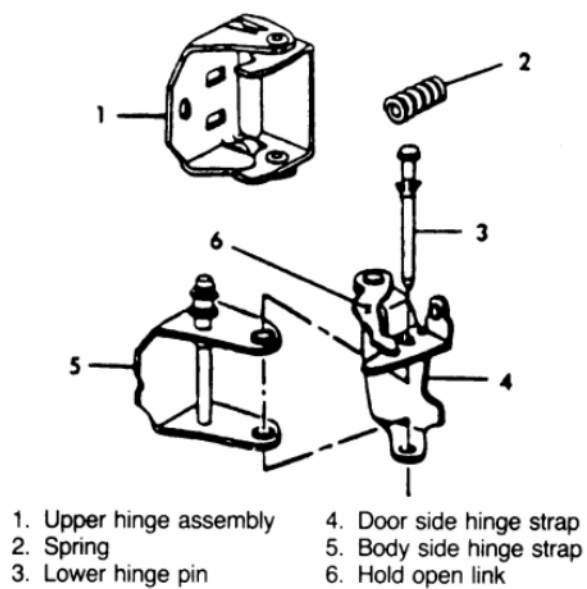


Fig. 1: Door hinge

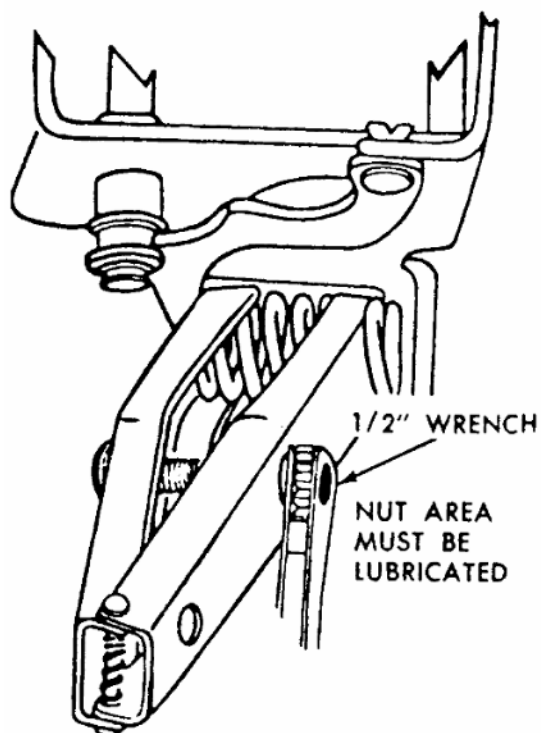


Fig. 2: Removing the door hinge spring

1. On doors that are equipped with power operated components, do the following:
 - Remove the door trim panel and inner panel water deflector.
 - Disconnect the wire harness from all components in the door.
 - Remove the rubber conduit from the door, then remove the wire harness from the door through the conduit access hole.
2. Tape the area (on the door pillar and body pillar) above the lower hinge with cloth backed body tape.

CAUTION - Before performing the following step, cover the spring with a shop cloth or rag to prevent the spring from flying and possibly causing personal injury or damage.

3. Insert a long, flat-blade screwdriver under the pivot point of the hold-open link and over the top of the spring. The screwdriver should be positioned so as not to apply pressure to the hold-open link. Cover the spring with a shop cloth or rag and lift the screwdriver to disengage the spring. The spring can also be removed by using tool J-36604 (or equivalent) door hinge spring compressor tool.

The tool is stamped right side and left side. The tool stamped left side is used to service the right-hand hinge spring and vise-a-versa for the tool stamped right side.

4. With the aid of a helper to support the door, remove the lower hinge pin using a soft-headed hammer and locking type pliers. The helper can aid the hinge pin removal by raising and lowering the rear of the door.
5. Insert a bolt into the hole of the lower hinge to maintain the door attachment during upper hinge removal.
6. Using a 13mm socket, remove the upper hinge bolts from the pillar. Remove the bolt from the lower hinge and remove the door from the body.

To install:

7. Replace the hinge pin clip.
8. With the aid of a helper, position the door and insert the bolt in the hole of the lower hinge.
9. Bolt the upper hinge to the body. The lower hinge pin is installed with the pointed end down.
10. Remove the screw from the lower hinge and install the lower hinge pin. The use of tool J-36604 or equivalent is recommended for installing the hinge spring.

If the spring is installed before installing the lower hinge pin, damage to the hinge bushings may result.

11. If the spring was removed using a screwdriver, install the spring as follows:

- Place the spring in tool J-36604 or equivalent.
- Place the tool and spring in a bench vise.
- Compress the tool in the vise and install the bolt until the spring is fully compressed.
- Remove the tool (with the compressed spring) from the vise and install in the proper position in the door lower hinge. A slot in one jaw fits over the hold-open link. The hole on the other jaw fits over the bubble.
- Remove the bolt from the tool to install the spring.
- Remove the tool from the door hinge (tool will fall out in three pieces). Cycle the door to check the spring operation.

12. Remove the tape from the door and the body pillars.

13. On doors with power operated components:

- Install the wire harness to the door through the conduit access hole, then install the rubber conduit to the door.
- Connect wire harness to all components in the door.
- Install the inner panel water deflector and door trim panel.

HOOD

REMOVAL & INSTALLATION

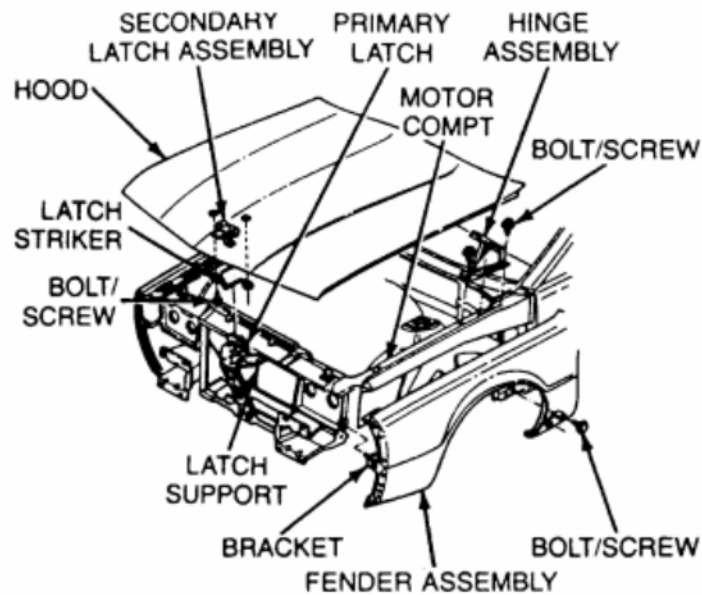


Fig. 1: Front end sheet metal

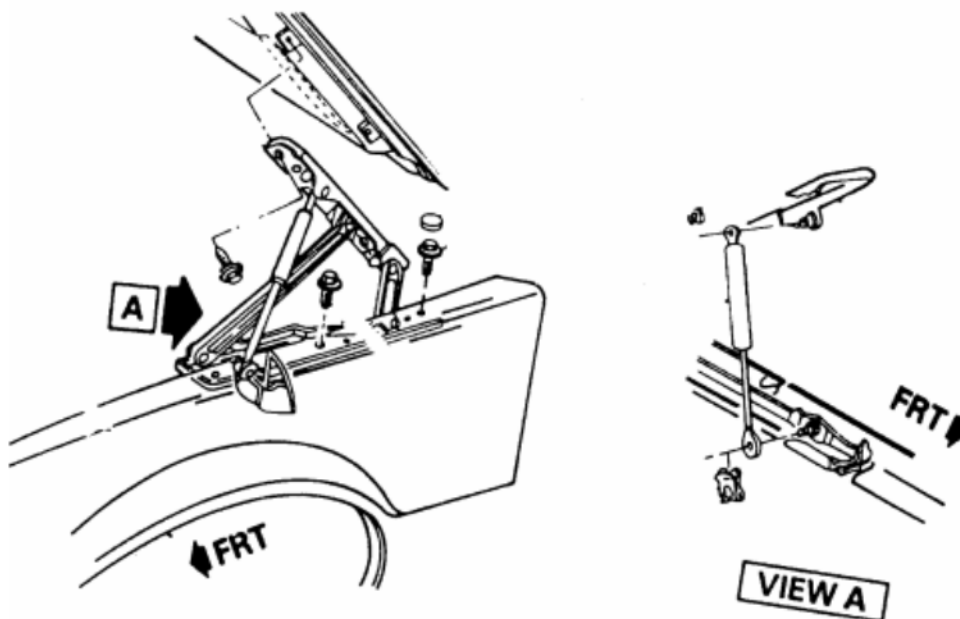


Fig. 2: Hood removal

1. Open the hood and mark the position of the hood hinge assembly-to-hood by a scribe, chalk or paint.
2. Remove the hood attaching bolts that are towards the front of the hood.
3. Slowly loosen the remaining hood attaching bolts.
4. With the aid of a helper, remove the bolts and remove the hood. Place the hood on a protected surface.

5. Position the hood
6. over the hood hinge assembly with the aid of a helper and install the hood attaching bolts finger tight.
7. Align the hood to the matchmarks made earlier and tighten the hood attaching bolts.
8. Close the hood and check align.

ALIGNMENT

1. Hood
2. Fender
3. Front end fascia

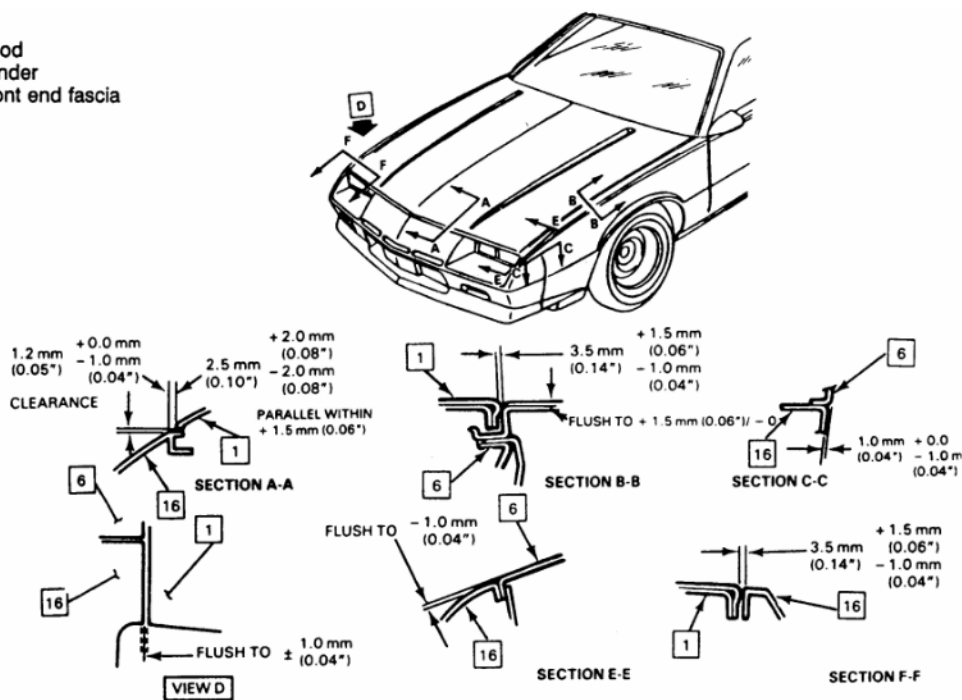


Fig. 3: Hood alignment

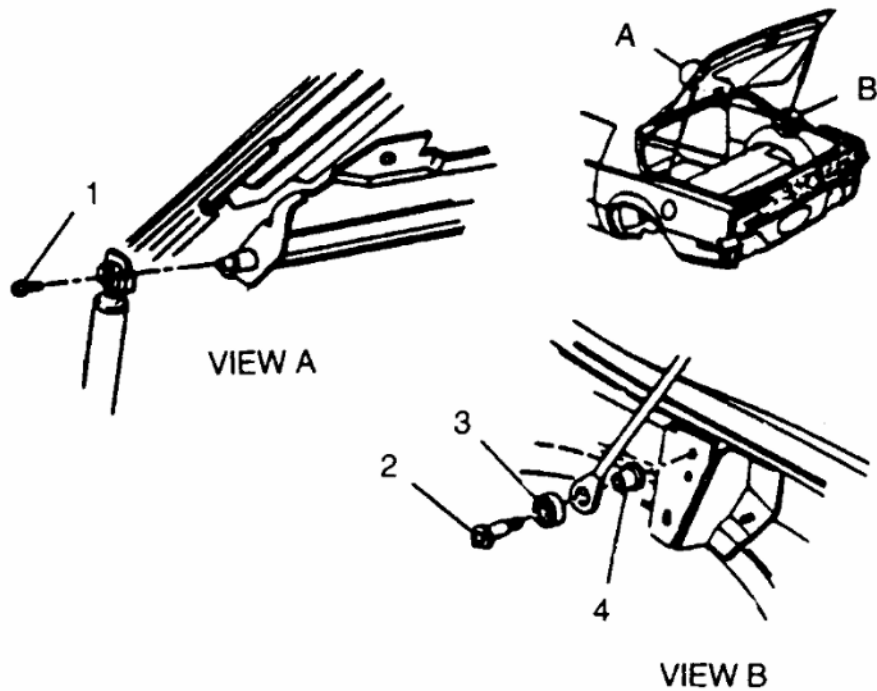
Slotted holes are provided at all hood hinge attaching points for proper adjustment - both vertically and fore-and-aft. Vertical adjustments at the front may be made by adjusting the rubber bumpers up and down.

To adjust the hood fore-and-aft move the hood forward or rearward until the hood clearances are equal and as specified in the illustration. If the hood is not properly coming into adjustment then the body panels may also need to be adjusted. To achieve the best results set the hood to any existing marks and make adjustments one at a time.

REAR COMPARTMENT LIFT WINDOW
REMOVAL & INSTALLATION



Fig. 1: Rear hatch hinge



1. Bolt—gas support to rear compartment lift window
2. Bolt—gas support to body
3. Spacer
4. Bushing

Fig. 2: Hatch strut removal

1. Prop the lid open and place a protective covering along the edges of the rear compartment opening to prevent any damage to the painted surfaces.
2. Use a 13mm socket to remove the nuts holding the glass to the hinge.

CAUTION - Do not attempt to remove or loosen the gas support assembly attachments with the lid in any position other than fully open as personal injury may result.

3. While a helper supports the glass, disengage the gas supports from the lift window assembly and disconnect the harness connector for the electric grid defogger, if equipped.
4. With the aid of a helper, remove the lift window assembly from the body and place it on a protected surface.
5. Position the lift window assembly to the body with the aid of a helper. Install the attaching bolts and torque to 11 ft. lbs. (16 Nm).

CAUTION - Do not over tighten the glass-to-hinge bolts as it could cause the glass to break resulting in personal injury! Always wear safety glasses during this operation

6. Connect the harness connector for the electric grid defogger, if equipped, and connect the gas supports to the lift window assembly.
7. Lower the lid and check alignment.

ADJUSTMENT

The rear compartment lift window assembly height, fore and aft and side adjustments are controlled at the hinge-to-body location. This area of the body has oversize hinge attaching holes in addition to the hinge-to-body spacers. Adjustments at the hinge location must be made with the gas supports disengaged. Additional height adjustment can also be made at the lower panel by adjusting the rubber bumpers. Bolts holding hinge-to-body should be tightened to 15-20 ft. lbs. (20-28 Nm).

BUMPERS

REMOVAL & INSTALLATION

FRONT FASCIA

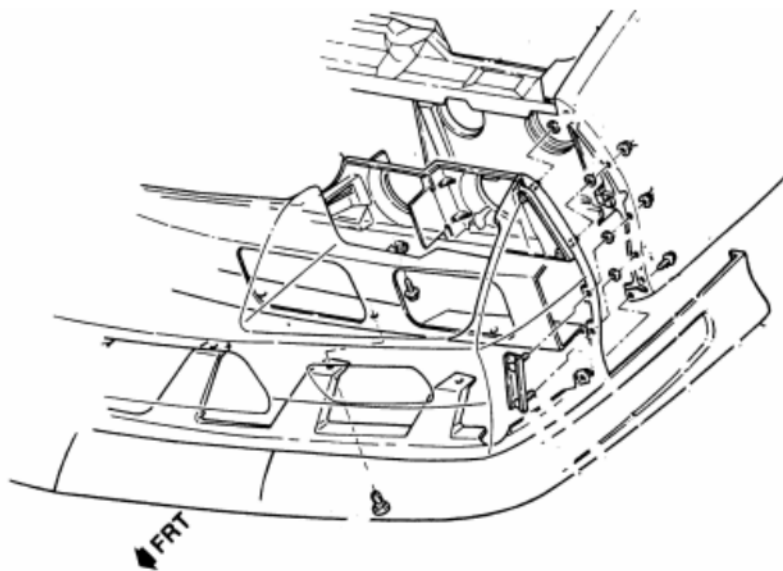


Fig. 1: Front bumper fascia

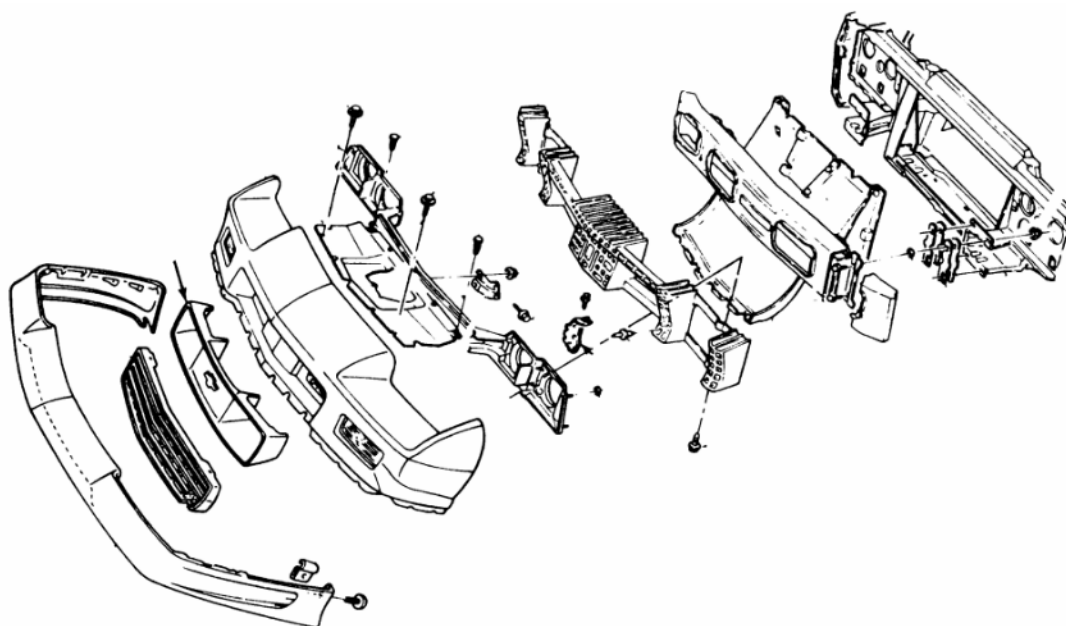


Fig. 2: Front bumper removal

1. Disconnect the negative battery cable.
2. Remove the air cleaner assembly, as required.
3. Remove bumper filler panel.
4. Remove the fascia center bracket at the front end panel reinforcement.
5. Disconnect all electrical equipment, such as headlamps, turn signals, horns, fog lamps, etc.
6. Raise and safely support the vehicle.
7. Remove the front bumper fascia extension.
8. Remove the bolts from the bumper impact bar and radiator lower air baffle, if equipped.
9. Remove the push-on retainers attaching the bumper fascia to the bumper impact bar.
10. Lower the vehicle and remove the bolts attaching the outer brackets to the front end inner structure.
11. With the aid of an assistant, remove the fascia carefully as not to scratch or damage the assembly.

To install:

12. With the aid of an assistant, install the fascia carefully as not to scratch or damage the assembly.
13. Raise and safely support the vehicle.
14. Install the bolts attaching the outer brackets to the front end inner structure. Torque the bolts to 84 inch lbs. (9.5 Nm).
15. Install the push-on retainers attaching the bumper fascia to the bumper impact bar.
16. Install the bolts at the bumper impact bar and radiator lower air baffle, if equipped.
17. Install the front bumper fascia extension.

18. Connect all electrical equipment, such as headlamps, turn signals, horns, fog lamps, etc.
19. Install the fascia center bracket at the front end panel reinforcement.
20. Install bumper filler panel.
21. Install the air cleaner assembly, as required.
22. Connect the negative battery cable.

REAR

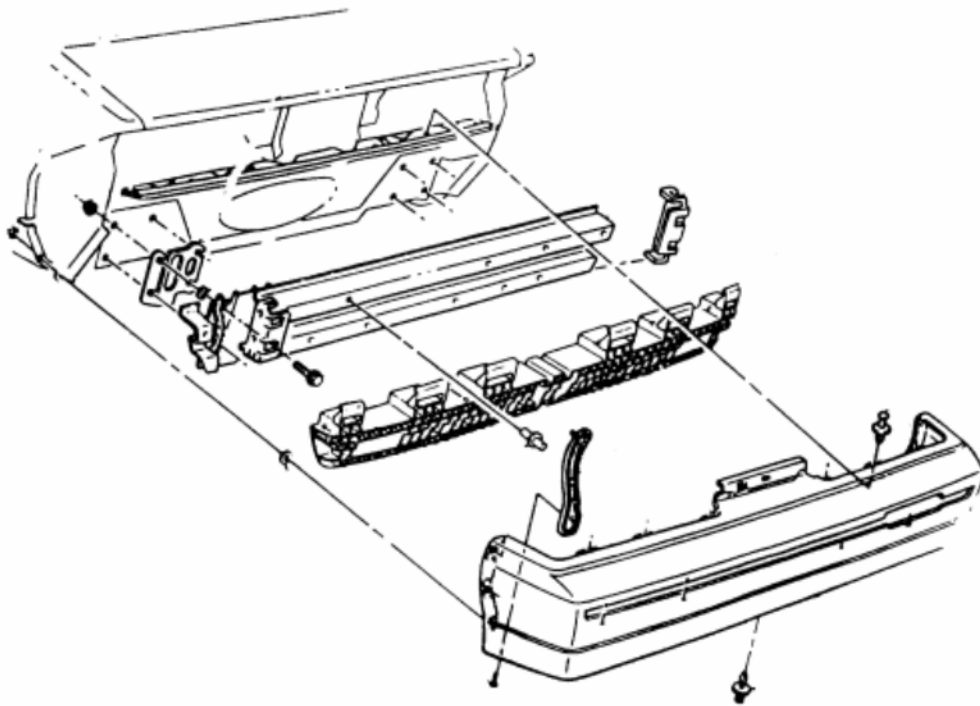


Fig. 3: Rear bumper removal

1. Disconnect the negative battery cable.
2. Open the rear compartment hatch.
3. Remove the rear left, right and center trim panel.
4. Remove the spare tire assembly.
5. Remove the left and right side tail lamps.
6. Remove the license plate bolts and bracket.
7. Remove the right and left side fascia nuts.
8. Remove the push-on retainers and lower screws.
9. With the aid of an assistant, remove the rear fascia.

To install:

10. With the aid of an assistant, install the rear fascia.
11. Install the push-on retainers and lower screws.
12. Install the right and left side fascia nuts.
13. Install the license plate bolts and bracket.
14. Install the left and right side tail lamps.

15. Install the spare tire assembly.
16. Install the rear left, right and center trim panel.
17. Close the rear compartment hatch.
18. Connect the negative battery cable.

OUTSIDE MIRRORS

REMOVAL & INSTALLATION

STANDARD MIRRORS

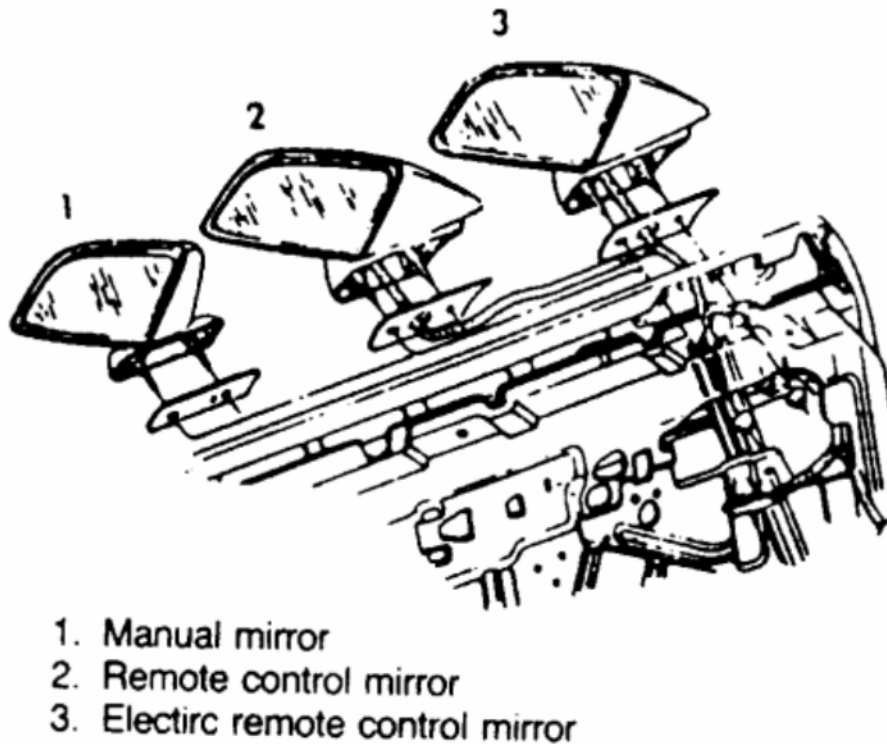


Fig. 1: Outside mirrors

1. Remove the door trim panel and detach inner panel water deflector enough to gain access to the mirror retainer nuts.
2. Remove the attaching nuts from the mirror base studs and remove the mirror assembly from the door.
3. Position the mirror onto the door making sure the mirror gasket is properly aligned on the door outer panel.
4. Install the attaching nuts to the mirror base studs and tighten.
5. Install the inner panel water deflector and door trim panel.

REMOTE CONTROL MIRRORS

1. Remove the mirror remote control bezel and door trim panel. Detach the inner panel water deflector enough to expose the mirror and cable assembly from the door.

2. Remove the mirror base-to-door outer panel stud nuts, remove the cable from the clip and remove the mirror and cable assembly from the door.
3. Position the mirror onto the door making sure the mirror gasket is properly aligned on the door outer panel.
4. Install the cable onto the clip and install the mirror base-to-door outer panel stud nuts. Torque to 72 inch lbs. (8 Nm).
5. Install the inner panel water deflector and door trim panel.
6. Install the mirror remote control bezel.

POWER OPERATED MIRRORS

Disconnect the negative battery terminal and, from the door trim panel side, remove the remote control mirror bezel, release and remove the door panel.

1. Disconnect wire harness connection from the remote mirror electrical switch.
2. Peel back water deflector enough to detach the harness from the retaining tabs in the door.
3. Remove the mirror base-to-door stud nuts and lift mirror housing and harness assembly from the door.

To install:

5. feed the mirror harness through the door along with the mirror assembly. Install the mirror base-to-door stud nuts and tighten.
6. Connect the mirror wire harness and install the water deflector.
7. Connect the wire harness connection to the remote mirror electrical switch.
8. Install the door panel and install the remote control mirror bezel.
9. Connect the negative battery terminal.

FENDERS

REMOVAL & INSTALLATION

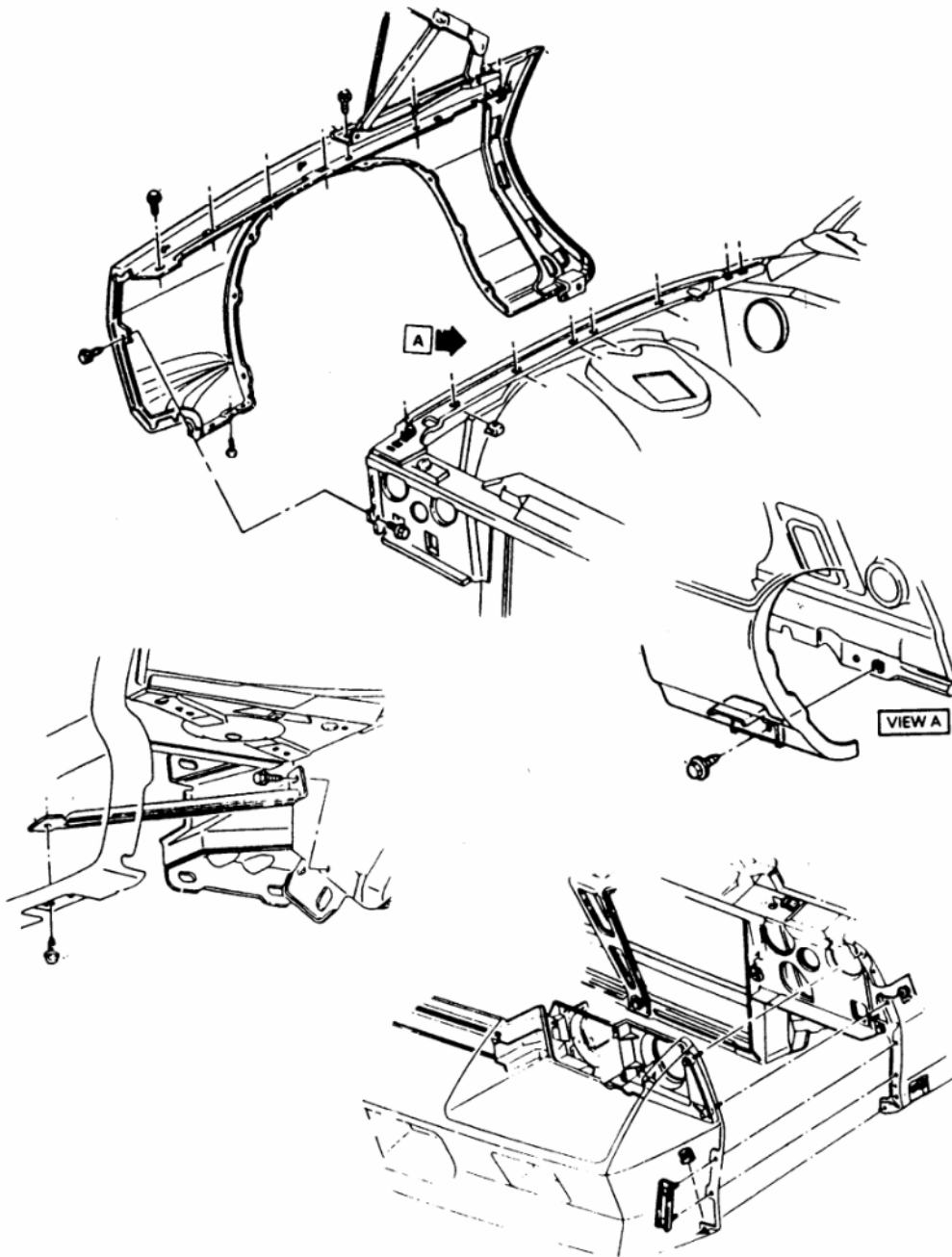


Fig. 1: Fender removal

1. Disconnect the negative battery cable.
2. Remove the hood.
3. Raise and safely support the vehicle.
4. Remove the lower fender bolts and inner wheel house panel.
5. Remove the rocker panel molding.
6. Remove the lower front end panel deflector-to-fender bolts.
7. Remove the bolt from the support brace.

8. Remove the front end bumper fascia-to-fender nuts and screws.
9. Remove the hood hinge-to-fender bolts.
10. Disconnect all electrical connections from horn, turn signal lamps, etc.
11. Remove the fender by sliding rearward and outward, at rear, with the aid of an assistant. Place an old blanket over the fender as to avoid scratches or dents.

To install:

12. Install the fender with the aid of an assistant. Place an old blanket over the fender as to avoid scratches or dents.
13. Connect all electrical connections to the horn, turn signal lamps, etc.
14. Install the hood hinge-to-fender bolts.
15. Install the front end bumper fascia-to-fender nuts and screws.
16. Install the bolt at the support brace.
17. Install the lower front end panel deflector-to-fender bolts.
18. Install the rocker panel molding.
19. Install the lower fender bolts and inner wheel house panel.
20. Install the hood.
21. Disconnect the negative battery cable. Align the fender and hood as necessary, placing existing shims in original positions.

CONVERTIBLE TOP

TOP REPLACEMENT

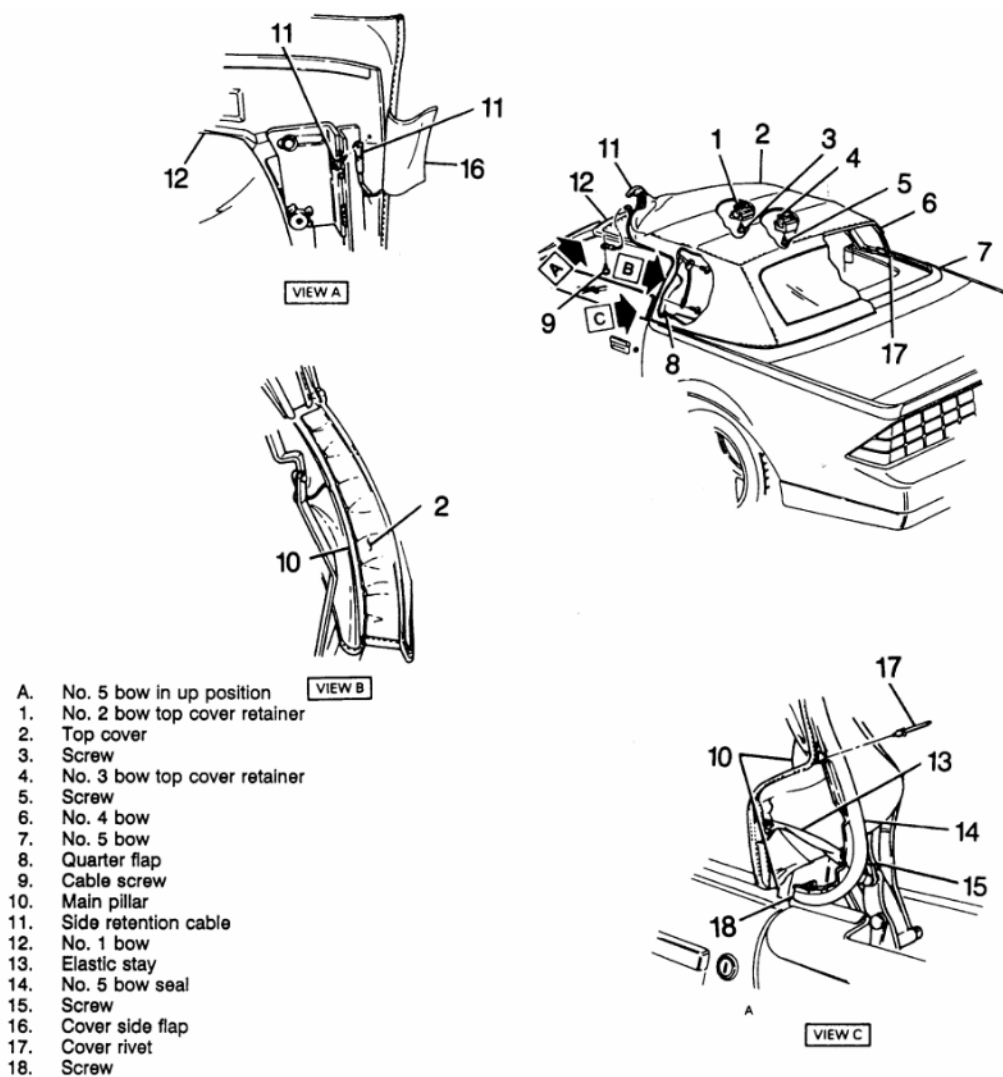
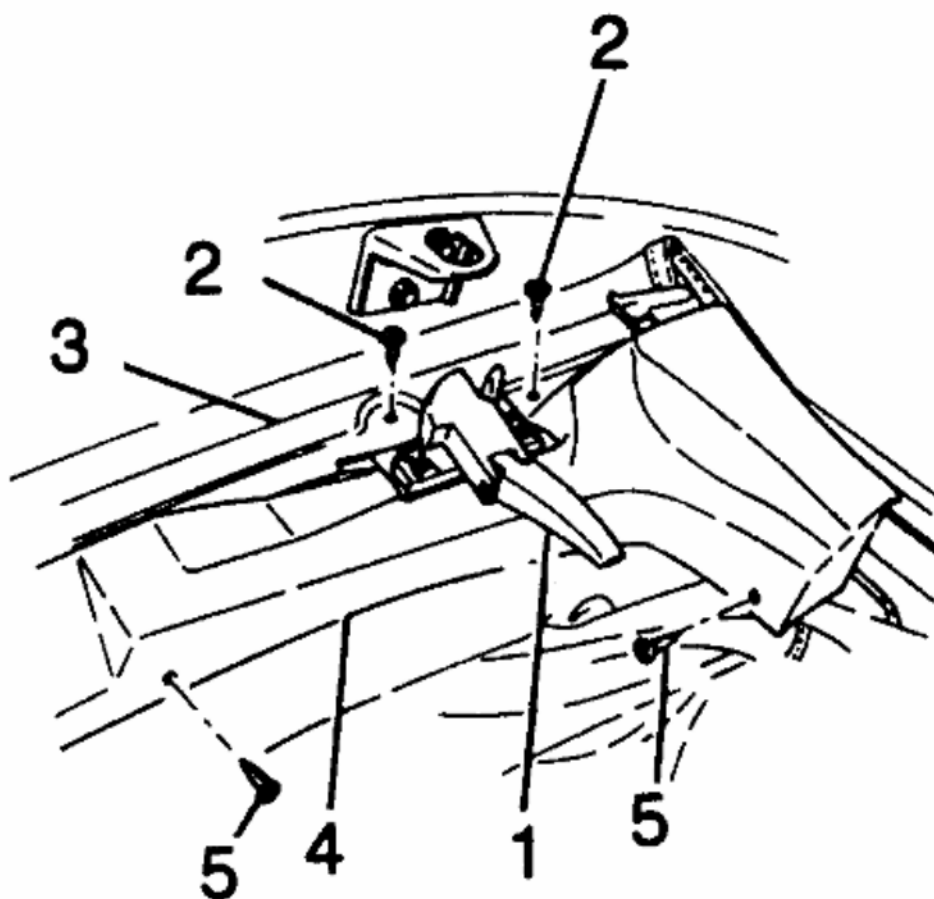


Fig. 1: Convertible top parts



- 1. Latch handle
- 2. Screw
- 3. Retainer
- 4. No. 1 bow garnish molding
- 5. Screw

Fig. 2: No.1 bow parts

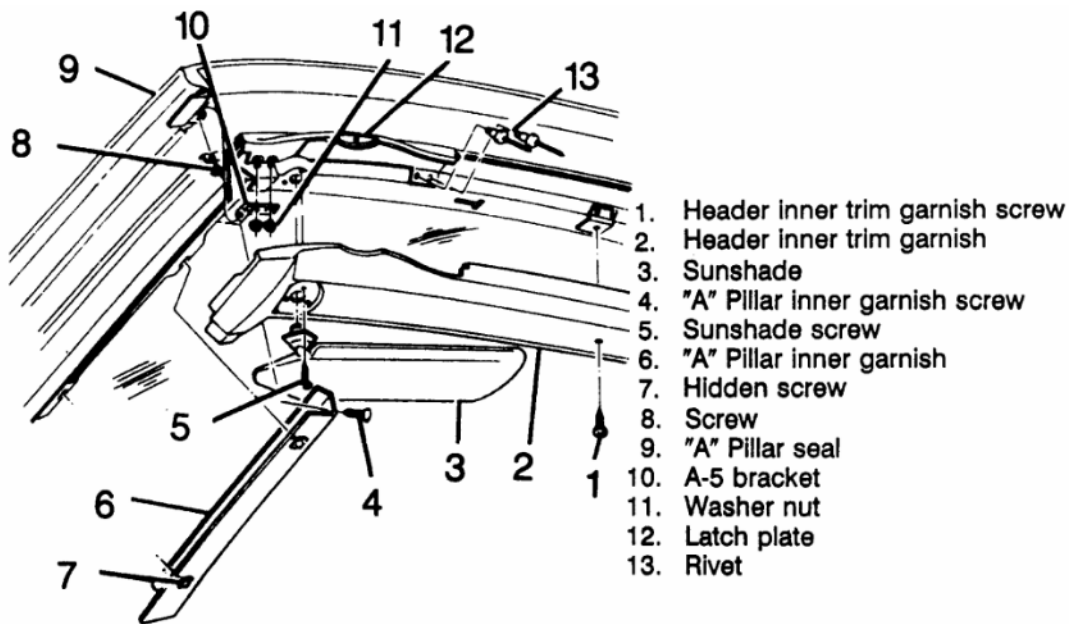


Fig. 3: Garnish and latch plates

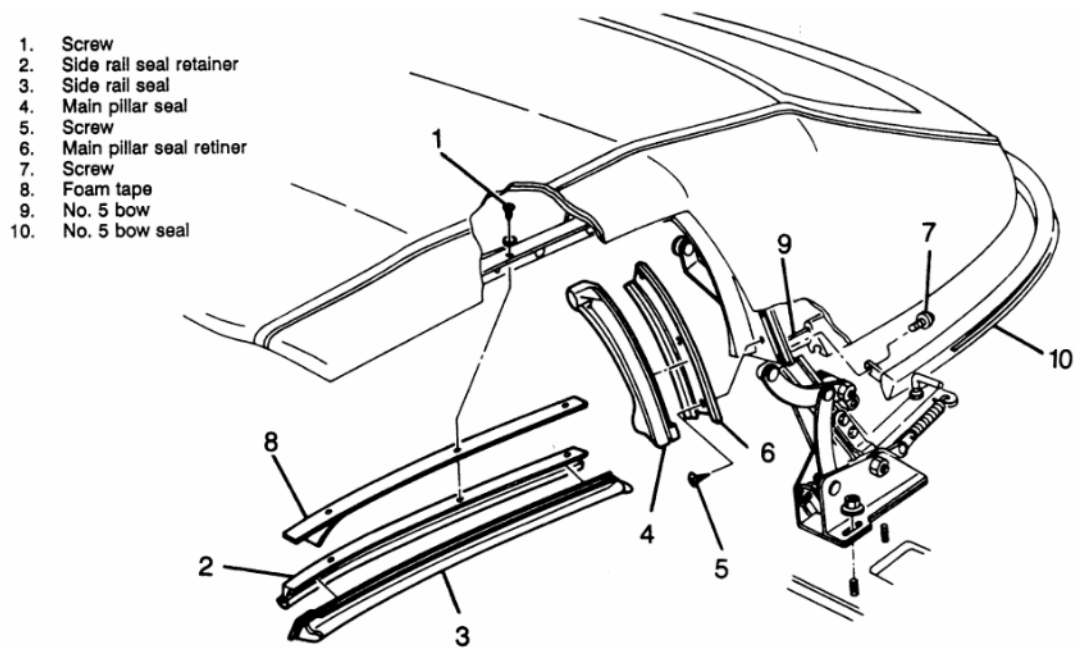


Fig. 4: Seals and retainers

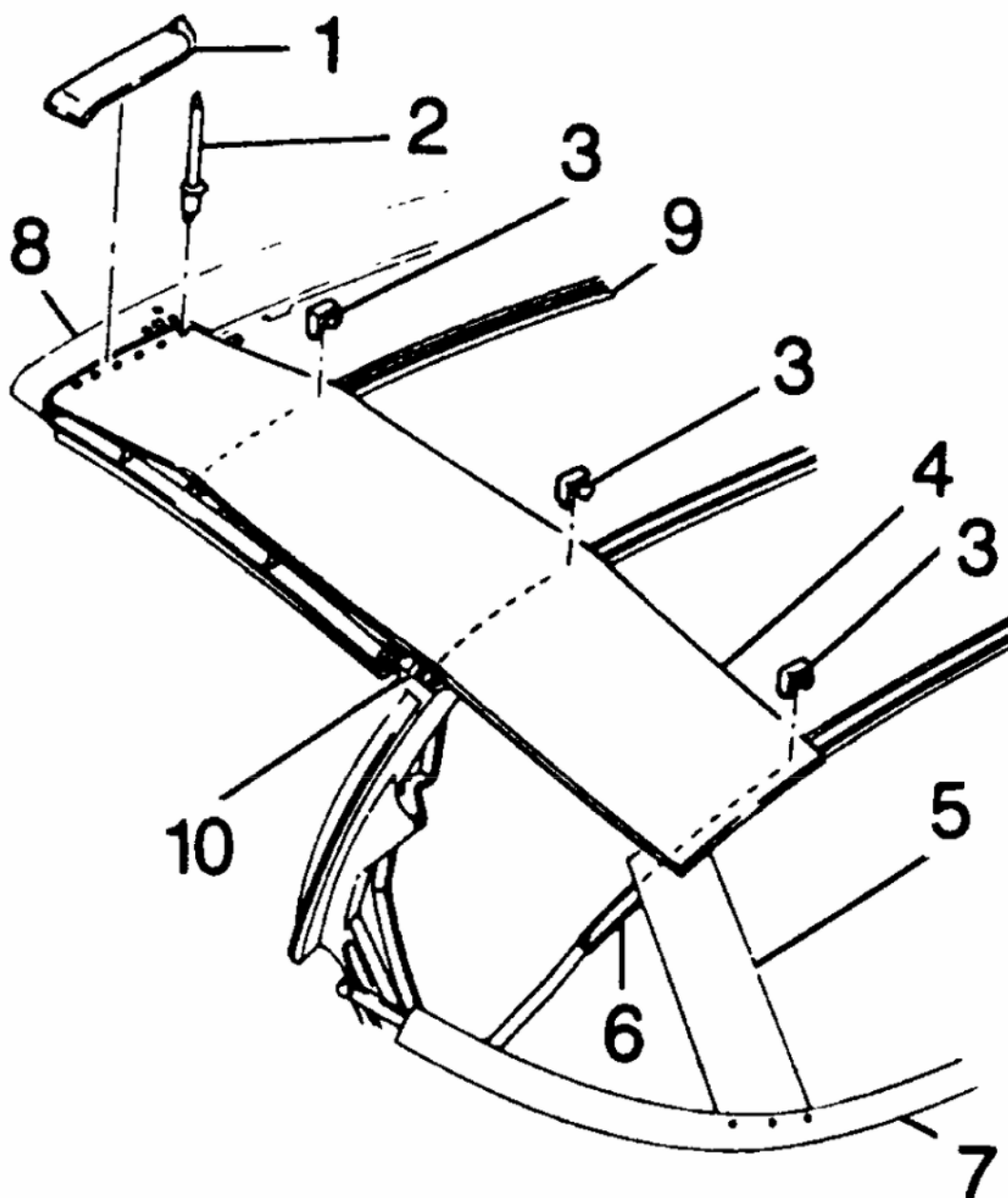


Fig. 5: Side stay pad

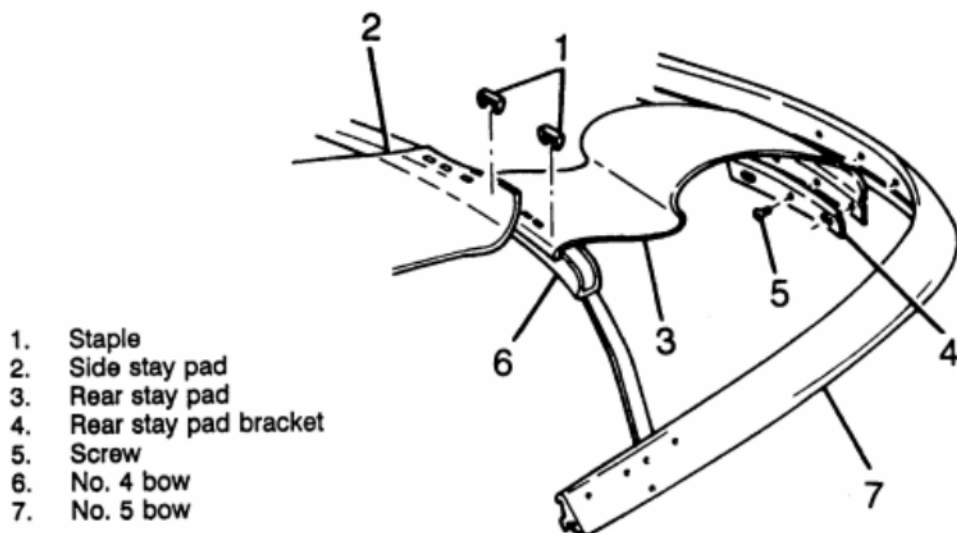


Fig. 6: Rear stay pad

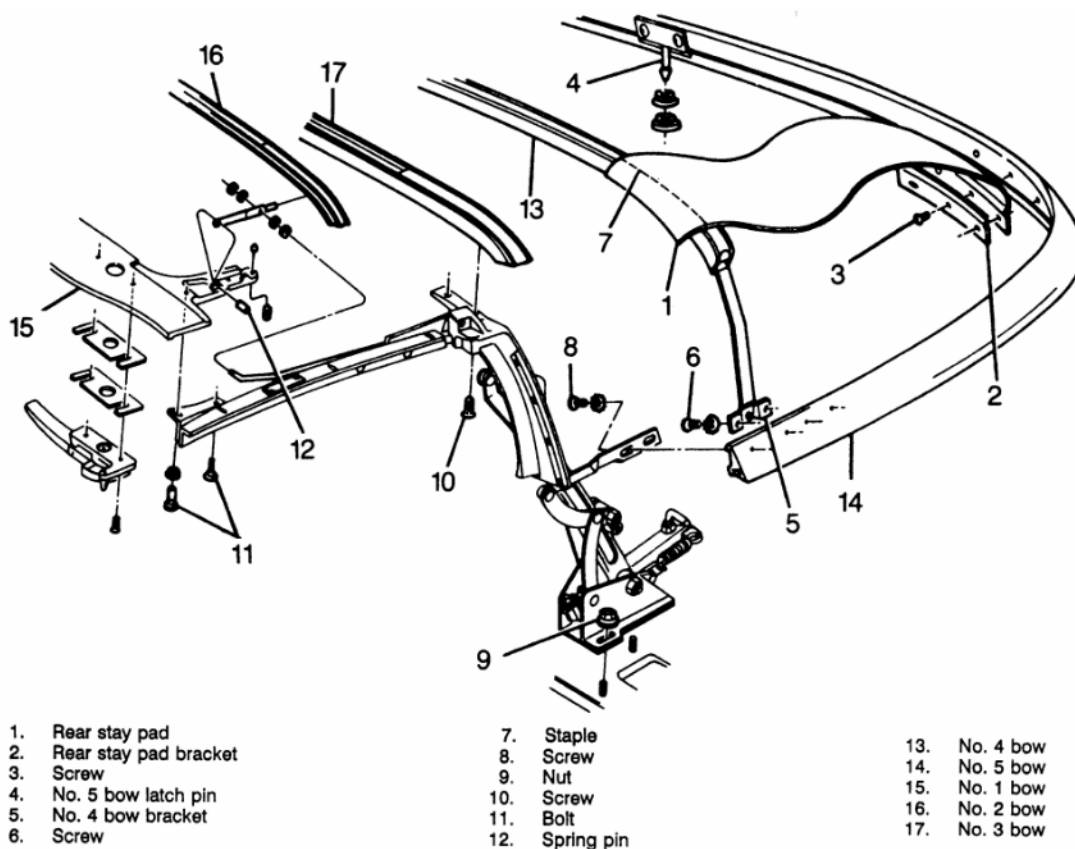


Fig. 7: Convertible top installation

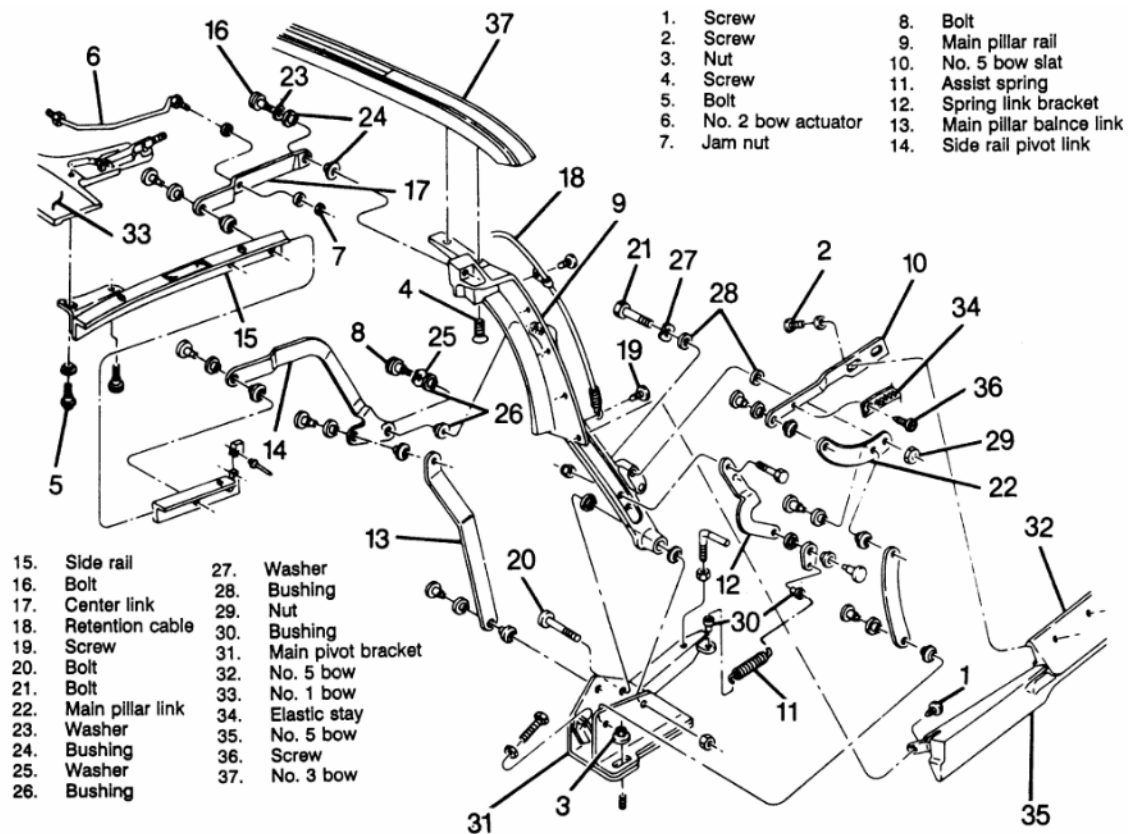


Fig. 8: Main pillar rail components

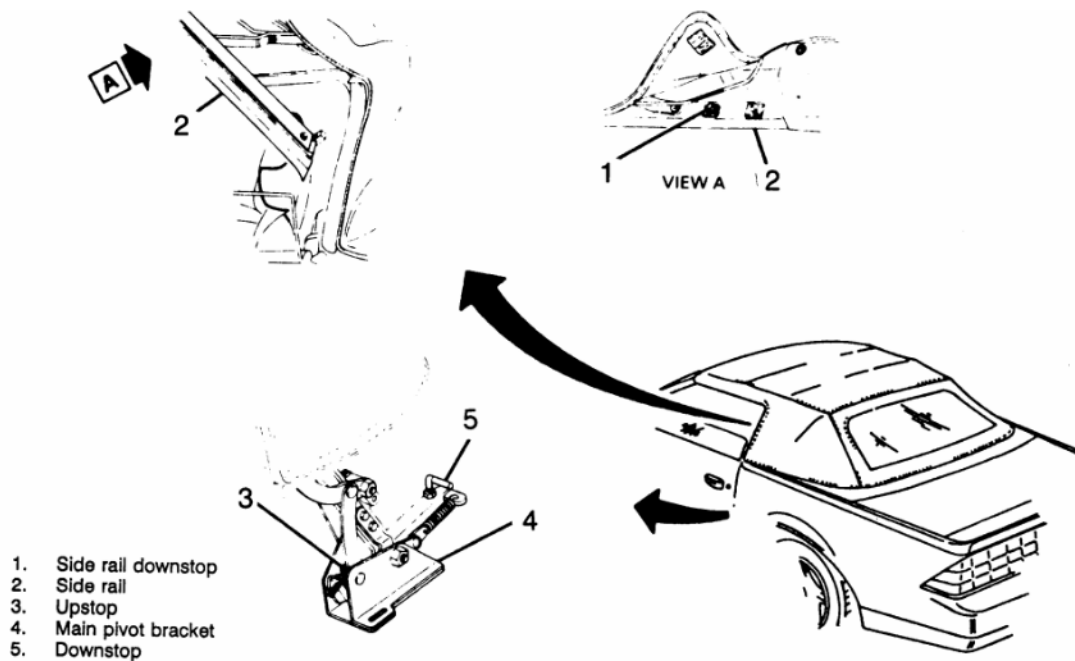


Fig. 9: Upstop and downstop adjustment locations

1. Disconnect the negative battery cable.
2. Remove the side rails and retainers.
3. Remove the main pillar seals and retainers.

4. Remove the No. 1 bow garnish molding and retainer.
5. Remove the top from the No. 1 bow by applying heat with a heat gun to the approximately 1 in. (25mm) from the adhesive backed bow.
6. Remove the cable screws.
7. Remove the headliner from the No. 2 and 3 bows.

It is not necessary to remove the headliner from the No. 1 bow with the top folded enough to allow access to the retainer screws.

8. Remove the screws from the underside of the Nos. 2 and 3 top cover retainers.
9. Remove the No. 2 and 3 bow top cover from the pockets in the top cover.
10. Separate the outer quarter flaps from the main pillar post, once again using the heat gun as necessary to loosen the adhesive.
11. Remove the side retention cables.
12. Remove screws.
13. Remove the elastic stays, folding the top rearward.
14. Remove the No. 5 bow seal.
15. Remove the black covered rivets from the No. 5 bow using an $\frac{1}{8}$ in. (3mm) drill bit.
16. Remove the top cover from No. 5 bow, using heat as required to loosen the adhesive.
17. Remove the convertible top cover from the vehicle.

To install:

Use 3M® adhesive No. 8046 or equivalent on cover attaching surfaces where noted.

18. Install the cover on the vehicle. Slide the retention cables through the listing pockets and check cable ends for proper locations.
19. Square the top to the frame; check for evenness of quarter flap positions to the main pillar rail. Fold the top cover to the windshield header.
20. Apply adhesive to the No. 5 bow and top, raise the No. 5 bow to the full vertical position.

Glue $\frac{1}{2}$ of the top cover to the No. 5 bow first, then lower the bow and check for evenness. The length of the material overhanging should be uniform. Repeat the procedure, if necessary. Trim the excess fabric from the No. 5 bow evenly at the seal channel to allow attachment of the seal later.

21. Install new $\frac{1}{8}$ in. (3mm) by $\frac{3}{16}$ in. (5mm) black aluminum rivets as shown in illustration.
22. Lower and latch the tonneau cover and No. 5 bow. Raise the No. 1 bow off the header and install the cable screws.
23. Install the No. 5 bow seal.
24. Connect the elastic stays inside of No. 5 bow seal-to-link arms. Install the screws.
25. Lower the No. 5 bow. Fold the inner quarter flaps inside of main pillar rails. Fold the outer quarter flaps around the outside of the main pillar rails to the

- forward edge using adhesive on the flaps and rails. Ensure seams are aligned evenly on both rails. Trim excess material.
26. Raise No. 5 bow. Raise the tonneau panel and lower No. 5 bow. Slide the No. 2 and 3 bow top cover retainers into listing pockets and align screw holes. Install the screws to the underside of No. 2 and 3 bows.
 27. Install the headliner to No. 2 and 3 bows.
 28. Latch the top to the windshield header and pull the top cover straight forward at the seams over the No. 1 bow to desired fullness. While maintaining tension on the top cover over the No. 1 bow, make a pencil mark on the outer surface along the forward edge of the No. 1 bow.
 29. Unlatch the top from the windshield header and lower the top halfway. Pull the top cover $\frac{1}{4}$ in. (6mm) past the reference mark over the No. 1 bow and attach it to the No. 1 bow, first attaching cover side flaps. Fold the side flaps around the bow using adhesive on both the cover and bow surfaces. Fold the top cover over the No. 1 bow along the edge and over the cover side flap, once again using adhesive. Lower the top and check for proper tension, if more is needed, repeat the procedure. Trim off excess material.
 30. Install all moldings, pillar seals, side seals and retainers. Replace dried out, deteriorated or cracked seals to prevent air and water leaks.
 31. Adjust the top upstops and downstops, as required.

ADJUSTMENT

UPSTOP

The upstops may be adjusted to obtain proper alignment between the top latch guide pins and the windshield header receivers.

1. Lower the top. Loosen the upstop jam nut and turn screw clockwise.
2. Raise and latch the top.
3. Raise No. 5 bow to the full vertical position.
4. Turn the upstops counterclockwise until they contact the linkage.
5. Unlatch and lower the top. Tighten the upstop jam nut while holding the upstop from turning.
6. Raise the top and inspect the alignment of the top latch guide pins to the header receivers.

DOWNSTOP

The downstops can be adjusted for proper clearance between the main rail and No. 4 bow when the top is lowered completely. The downstops have right angle bends and face outward.

1. Raise and latch the top.
2. Loosen the downstops nuts and adjust as required.
3. Tighten the downstop nuts while holding downstops in position.
4. Lower the top and inspect the clearance between the main rail and the No. 4 bow. Also inspect the clearance of the tonneau panel.

INTERIOR

INSTRUMENT PANEL AND PAD

REMOVAL & INSTALLATION

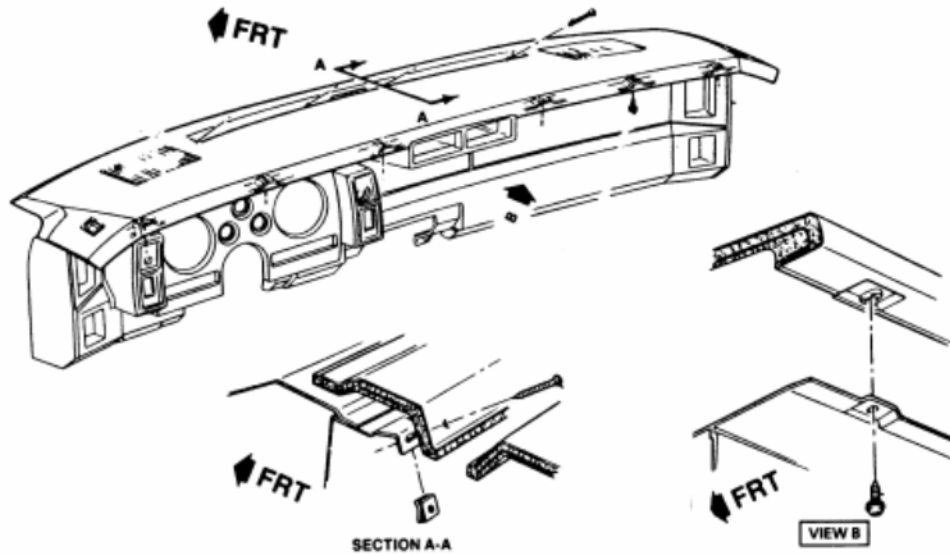


Fig. 1: Instrument panel pad

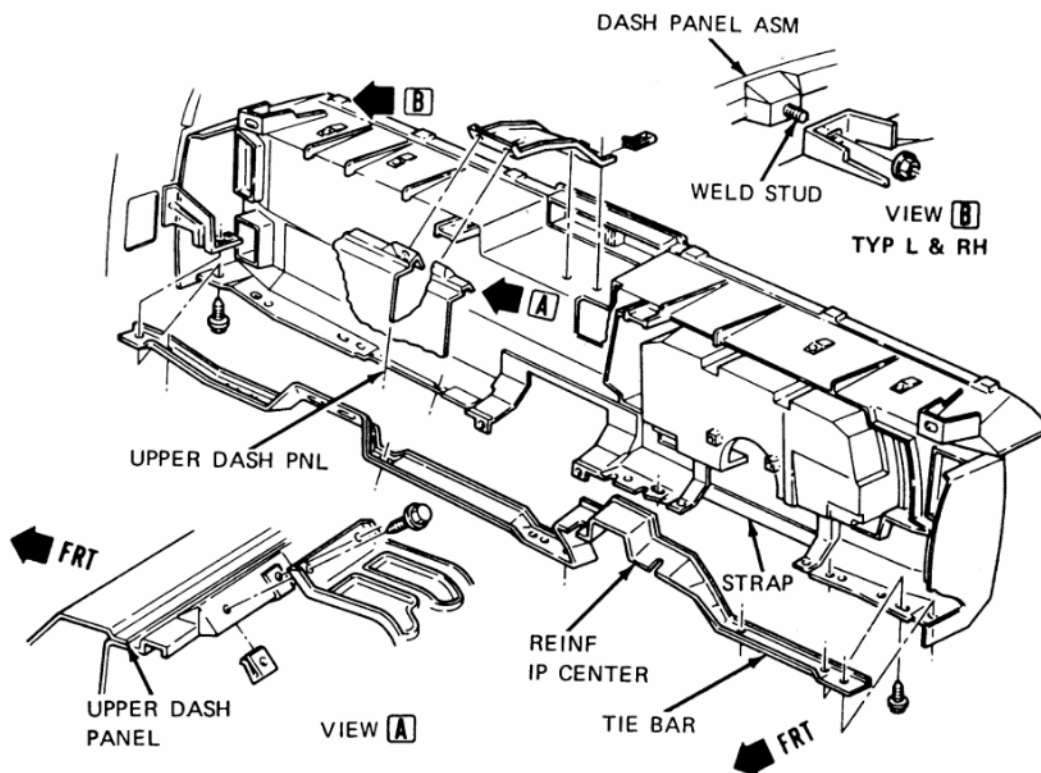


Fig. 2: 1982-90 instrument panel

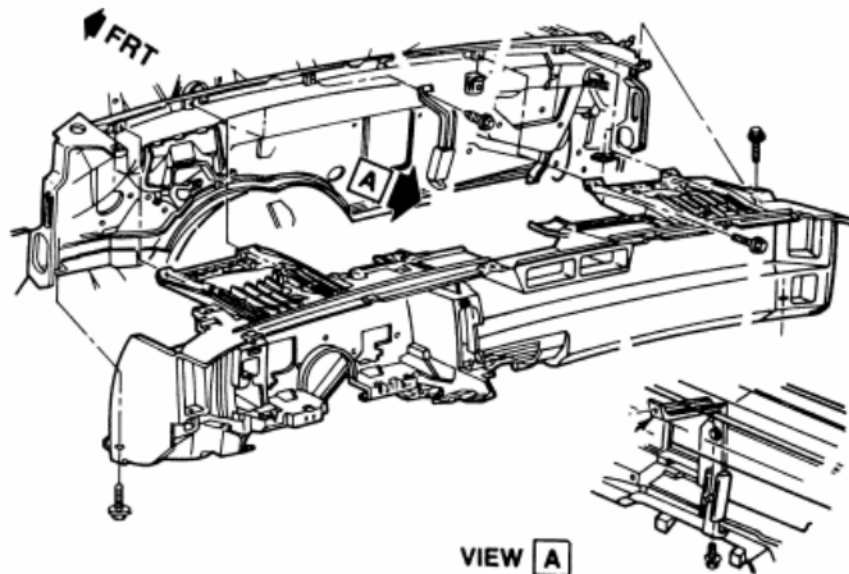


Fig. 3: 1991-92 instrument panel

CAUTION - The 1991-92 vehicles are equipped with an Air Bag system. Proper disarming of the system is necessary before proceeding with any disassembly or repairs to the steering column, dash or electrical system or possible deployment of the air bag might occur. Refer to Suspension & Steering for disarming procedure.

1. Properly disable the SIR air bag system, if equipped. Disconnect the negative battery cable.
2. Remove the center console.
3. Remove the screws attaching the instrument panel pad to the instrument panel.
4. Remove the daytime running light sensor electrical connector, if equipped.
5. Remove the instrument panel pad.
6. Remove the instrument panel sound insulators.
7. Remove the knee bolster and bracket.
8. Remove the instrument panel cluster.
9. Remove the steering column retaining nuts and lower the column.
10. Remove the upper and lower instrument panel to cowl screws.
11. Disconnect and remove the electrical harness at the cowl connector and under dash panel.
12. Remove the instrument panel assembly.

To install:

13. Install the instrument panel assembly.
14. Install the electrical harness at the cowl connector and under dash panel.
15. Install the upper and lower instrument panel to cowl screws.
16. Install the steering column retaining nuts.
17. Install the instrument panel cluster.
18. Install the knee bolster and bracket.

19. Install the instrument panel sound insulators.
20. Install the instrument panel pad.
21. Install the daytime running light sensor electrical connector, if equipped.
22. Install the screws attaching the instrument panel pad to the instrument panel.
23. Install the center console.
24. Properly arm the SIR air bag system, if equipped. Disconnect the negative battery cable.

DOOR PANELS

REMOVAL & INSTALLATION

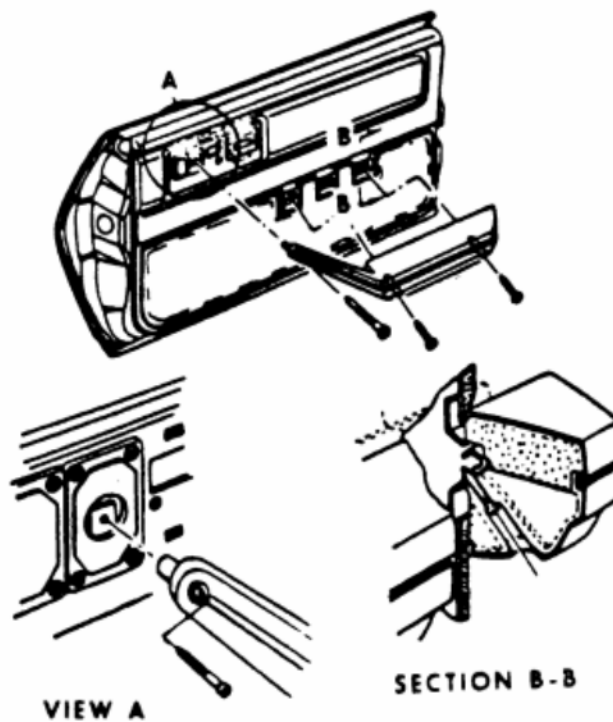


Fig. 1: Armrest and pull handle

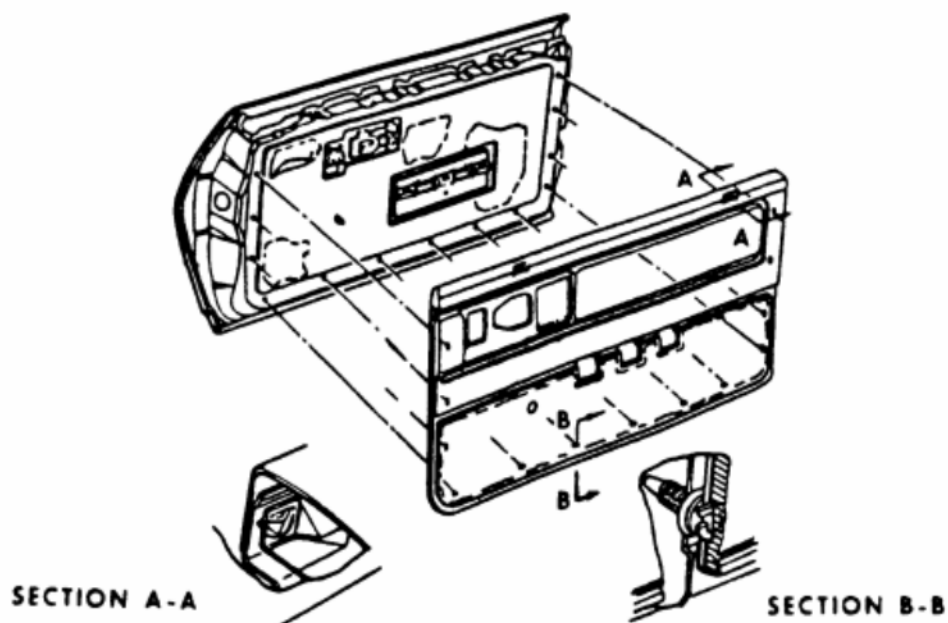


Fig. 2: Door trim panel

The one-piece trim hangs over the door inner panel across the top and is secured by clips down the sides and across the bottom. It is retained by screws located in the areas of the armrest and pull handle assembly.

1. Remove all the door inside handles.
2. Remove the door inside locking rod knob.
3. Remove the screws inserted through the door armrest and pull the handle assembly into the door inner panel or armrest hanger support bracket.
4. On models with remote control mirror assemblies, remove the control plate from the bezel on the trim pad and remove the control from the plate.
5. On models with power door lock controls located in the door trim panel, disconnect the wire harnesses at the switch assemblies.
6. Remove the remote control handle bezel screws.
7. Remove the screws used to hold the armrest to the inner panel.
8. Remove the screws and plastic retainers from the perimeter of the door trim panel using tool BT-7323A or equivalent and a screwdriver. To remove the trim panel, push the trim upward and outboard to disengage from the door inner panel at the beltline.
9. On models with a water deflector held in place by fasteners, use tool BT-7323A or equivalent to remove the fasteners and water deflector.

To install:

10. To install the water deflector, locate the fasteners in the holes in the door inner panel and press in place. Replace all tape which may have been applied to assist in holding the water deflector in place.
11. Before installing the door trim panel, make certain that all the trim retainers are installed securely to the panel and are not damaged. Where required, replace damaged retainers. Start the retainer flange into $\frac{1}{4}$ in. (6mm) cutout

- attachment hole in the trim panel, rotate the retainer until the flange is engaged fully.
12. Connect all electrical components where present.
 13. To install the door trim panel, locate the top of the assembly over the upper flange of the door inner panel, inserting the door handle through the handle slot in the panel and press down on the trim panel to engage the upper retaining clips.
 14. Position the trim panel to the door inner panel so the trim retainers are aligned with the attaching holes in the panel and tap the retainers into the holes with the palm of hand or a clean rubber mallet.
 15. Install the screws used to hold the armrest to the inner panel.
 16. Install the remote control handle bezel screws.
 17. On models with power door lock controls located in the door trim panel, connect the wire harnesses at the switch assemblies.
 18. On models with remote control mirror assemblies, install the control to the plate. Install the control plate to the bezel on the trim pad.
 19. Install the handle assembly and install the screws inserted through the door armrest.
 20. Install the door inside locking rod knob.
 21. Install all the door inside handles.

HEADLINER

REMOVAL & INSTALLATION

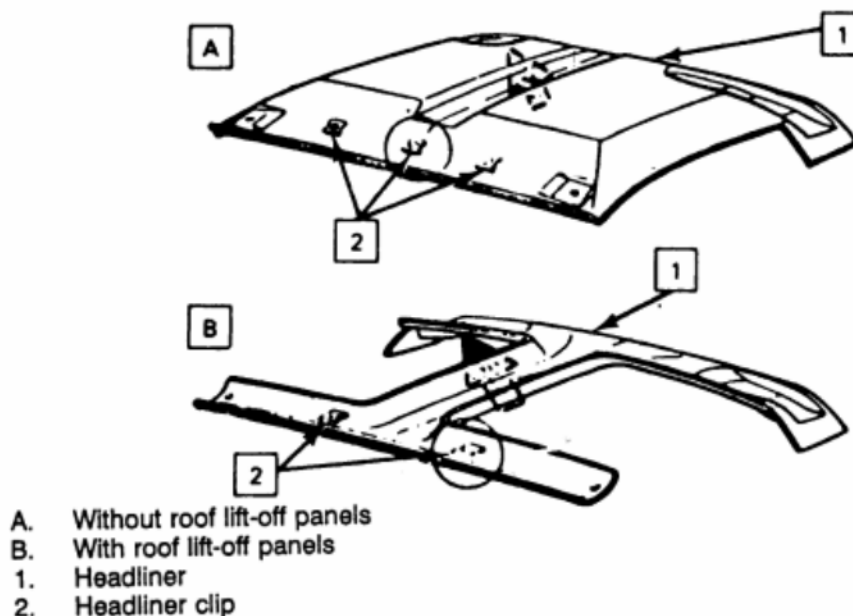


Fig. 1: Headliner installation

1. Disconnect the negative battery cable.
2. Remove the dome lamp and sunshade.
3. Remove the coat hooks and seat belt escutcheon, by unsnapping from the headliner.
4. Remove the rear window opening molding.

5. Remove the rear quarter interior trim panels, body lock pillar panels and windshield side upper moldings.
6. Remove the headliner retaining clips and remove the headliner.
7. Installation is the reverse of the removal procedure.

DOOR LOCKS

REMOVAL & INSTALLATION

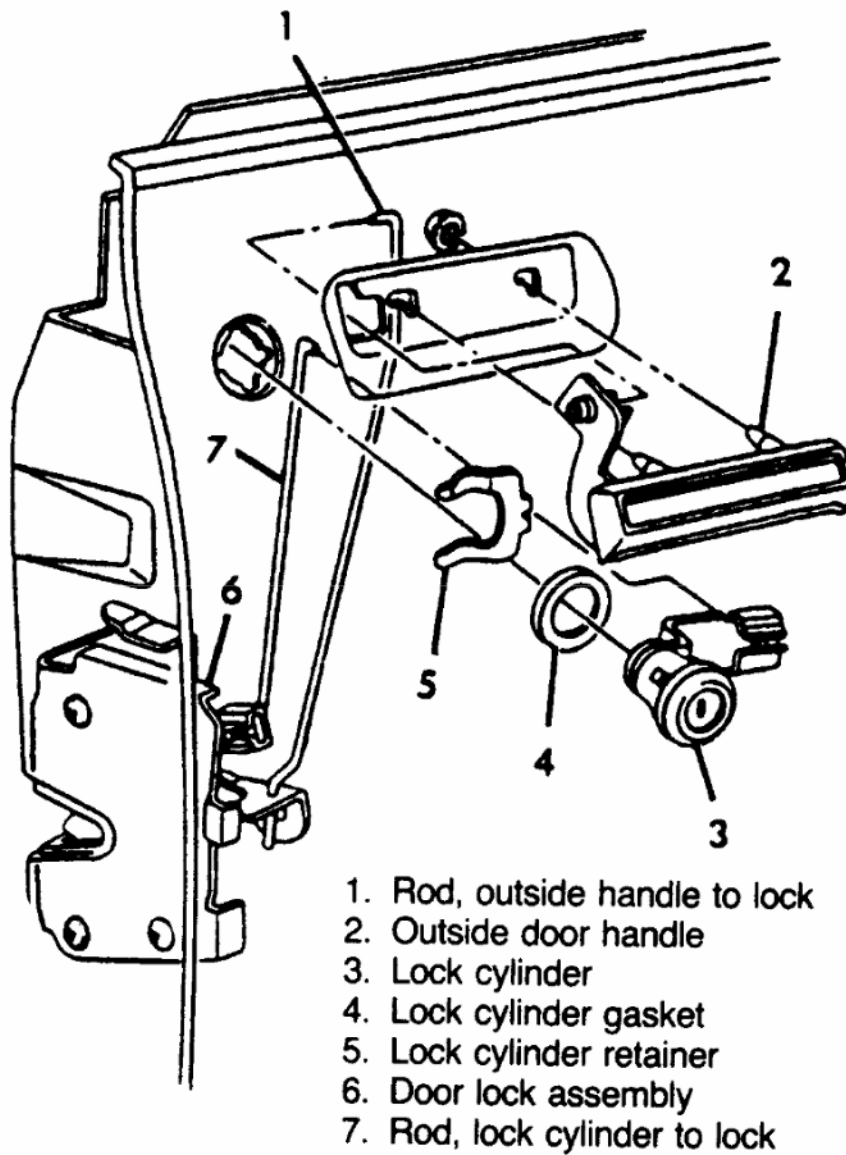


Fig. 1: Outside door handle

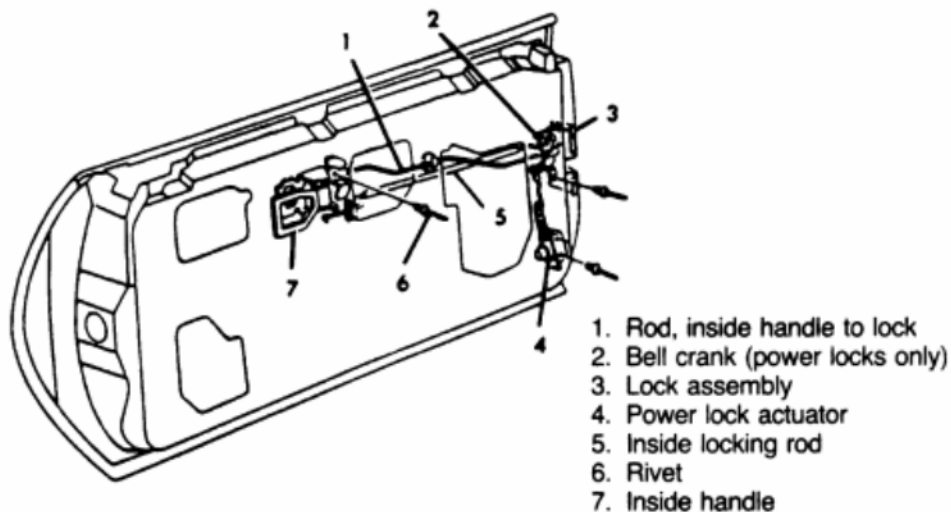


Fig. 2: Door lock linkage

1. Raise the door window. Remove the door trim panel and detach the inner panel water deflector enough to expose the access hole.
2. Disengage the lock cylinder to the lock rod at the cylinder.

CAUTION - If removing the lock cylinder retainer by hand, wear gloves to prevent personal injury.

3. With a screwdriver or similar tool, slide the lock cylinder retainer forward until it disengages. The retainer can also be removed by hand by grasping anti-theft shield at the top of the retainer and rotating until disengaged. Remove the lock cylinder from the door.
4. Lubricate the cylinder with the proper lubricant.
5. Position the cylinder into place and rotate it until the cylinder engages. Install the cylinder retainer.
6. Engage the lock cylinder to lock rod at the cylinder.
7. Install the inner panel water deflector and door trim panel.

POWER DOOR LOCK ACTUATOR
REMOVAL & INSTALLATION

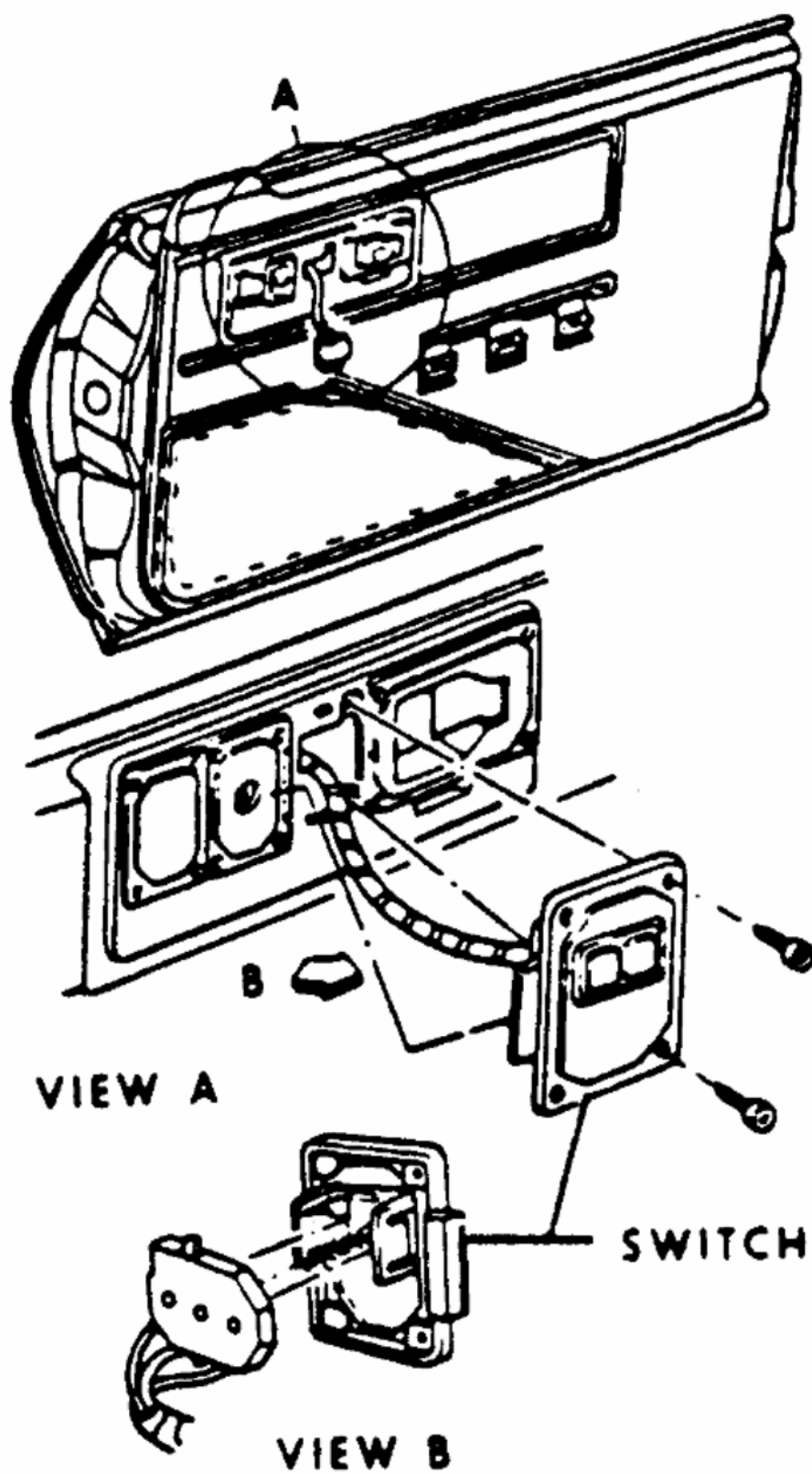


Fig. 1: Door lock switch

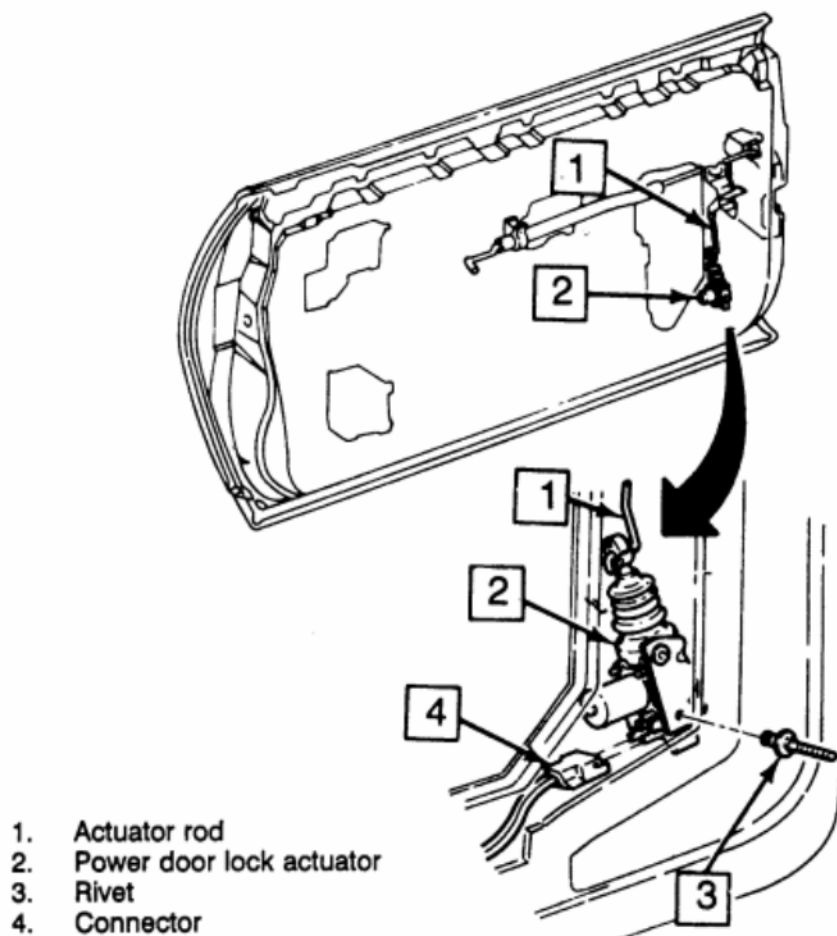


Fig. 2: Door lock actuator

1. Disconnect the negative battery cable. Remove the door panel.
2. Raise the window fully. Disconnect the electrical connector from the actuator.
3. Drive the rivet center pins out using a $\frac{1}{8}$ in. (3mm) punch and hammer, then using a $\frac{1}{4}$ in. (6mm) drill bit, remove the rivet head.
4. Remove the actuator rod and remove the door lock actuator.
5. Installation is the reverse of the removal procedure.

REAR LIFTGATE PULL-DOWN UNIT

REMOVAL & INSTALLATION

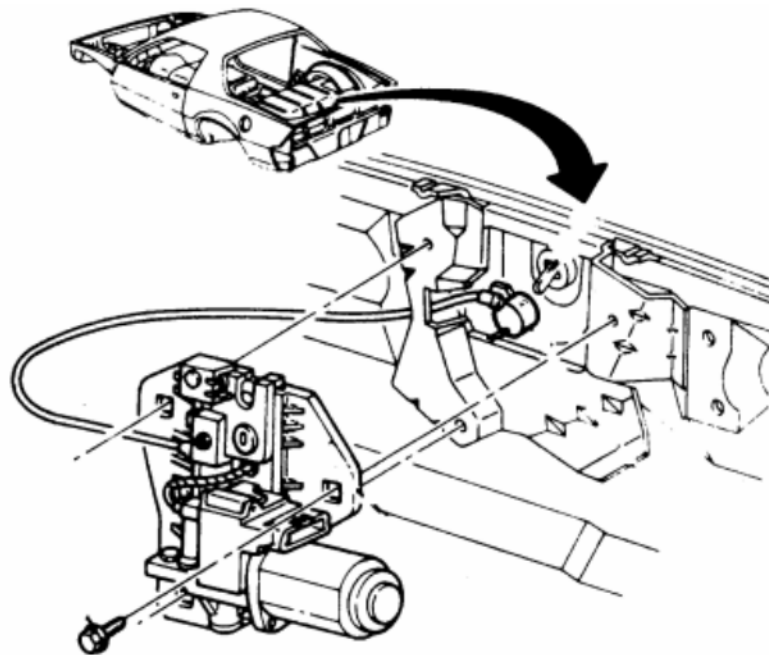


Fig. 1: Pull-down lock unit

1. Open the rear hatch. Disconnect the negative battery cable.
2. Remove the rear trim panel. Disconnect the electrical connector and remove the attaching screws.
3. Disconnect the unit lock cable connection from the lock cylinder.
4. Remove the unit.
5. Installation is the reverse of the removal procedure. Torque the screws to 18 ft. lbs. (24 Nm).

ADJUSTMENT

Adjust the unit as necessary for proper lock striker engagement.

DOOR WINDOW

REMOVAL & INSTALLATION

1. Remove the door trim panel and the inner panel water deflector.
2. Raise the window to the half-up position.
3. Punch out the center pins of the glass to sash channel attaching rivets.
4. Remove the rear guide channel through the rear access hole.
5. Remove the up stop.
6. Using a $\frac{1}{4}$ in. (6mm) drill bit, drill out the attaching rivets on sash channel.
7. Raise the glass to remove from the sash channel and remove the glass from the door.

To install:

8. Remove the drilled out rivets and shavings from the door.
9. Check the rivet bushings and retainers on the glass for damage. If necessary, remove the bushings using a flat-bladed tool covered with a cloth body tape. Install by snapping rivet retainer into the bushing.
10. Lower the glass into the door and position on the sash channel so the holes in the sash line up with the holes in the bushings and retainers.
11. Using rivet tool J-29022 or equivalent, install $\frac{1}{4}$ in. (6mm) peel type rivet (part No. 20184399 or equivalent) to retain the glass to sash channel.
12. Install the rear guide channel.
13. Install the front up stop to support on the inner panel.
14. Before installing the trim parts, check the window operation for performance and fit to roof rail weatherstrip.
15. Install the inner panel water deflector and the door trim panel.

WINDOW REGULATOR AND REGULATOR MOTOR

REMOVAL & INSTALLATION

1. Door glass
2. Lower sash channel
3. Rear guide channel
4. Inner panel cam channel
5. Window regulator
6. Filler assembly
7. Guide stabilizer
8. Support—front up stop

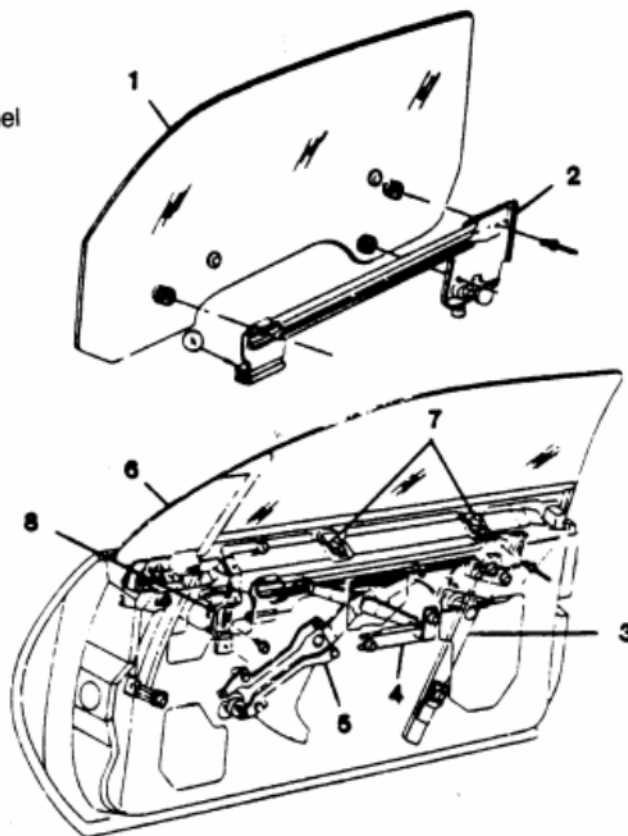


Fig. 1: Door glass and regulator

1. Remove the door trim panel and inner panel water deflector.

2. Raise the window to half-up position and hold in place by inserting a rubber wedge door stops at the front and rear of the window between window and inner panel.
3. Remove the rear guide channel and inner panel cam channel.
4. Punch out the center pins of the regulator rivets; then drill out the rivets using a $\frac{1}{4}$ in. (6mm) drill bit.
5. Move the regulator rearward and disconnect wire harness from the motor (if equipped). Disengage the roller on the regulator lift arm from glass sash channel.
6. Remove the regulator through the rear access hole.

CAUTION - If electric motor removal from the regulator is required, the sector gear must be locked in position. The regulator lift arm is under tension from the counterbalance spring and could cause personal injury if the sector gear is not locked in position.

7. Drill a hole through the regulator sector gear and backplate and install a bolt and nut to lock the sector gear in position.
8. Using a $\frac{3}{16}$ in. (5mm) drill bit, drill out the motor attaching rivets and remove the motor from the regulator.

To install:

9. To install the motor to the regulator, use a rivet tool J-29022 or equivalent, and install $\frac{3}{16}$ in. (5mm) rivets or $\frac{3}{16}$ in. (5mm) nuts and bolts. Remove bolt and nut used to secure the sector gear in position.
10. Place the regulator through the rear access hole into the door inner panel. If electric regulator is being installed, connect the wire connector to motor prior to installing the regulator to the inner panel.
11. Locate the lift arm roller into the glass sash channel.
12. Using rivet tool J-29022 or equivalent, rivet the regulator to the inner panel of the door using $\frac{1}{4}$ in. (6mm) $\frac{1}{2}$ in. (13mm) aluminum peel type rivets (part No. 9436175 or equivalent). If rivet tool is not available, use the following nut and bolt method:
 - a. Install U-clips on the regulator at the attaching locations. Be sure to install the clips with clinch nuts on the outboard side of the regulator.
 - b. Locate the regulator in the door inner panel. If the electric regulator is being installed, connect the wire connector to the regulator motor.
 - c. Locate the lift arm roller in the glass sash channel.
 - d. Align the regulator with clinch nuts to holes in the inner panel.
 - e. Attach the regulator (and motor) to the door inner panel with $\frac{1}{4}$ -20 x $\frac{1}{2}$ in. screws (part No. 9419723 or equivalent) into $\frac{1}{4}$ in. (6mm) nuts with integral washers. Tighten the screw to 90-125 inch lbs. (10-14 Nm) torque.
13. Install the inner panel cam channel and rear guide channel.
14. Remove the rubber wedge door stops at the front and rear of the window between window and inner panel.
15. Install the inner panel water deflector and the door trim panel.

WINDSHIELD AND FIXED GLASS

REMOVAL & INSTALLATION

If your windshield, or other fixed window, is cracked or chipped, you may decide to replace it with a new one yourself. However, there are two main reasons why replacement windshields and other window glass should be installed only by a professional automotive glass technician: safety and cost.

The most important reason a professional should install automotive glass is for safety. The glass in the vehicle, especially the windshield, is designed with safety in mind in case of a collision. The windshield is specially manufactured from two panes of specially-tempered glass with a thin layer of transparent plastic between them. This construction allows the glass to "give" in the event that a part of your body hits the windshield during the collision, and prevents the glass from shattering, which could cause lacerations, blinding and other harm to passengers of the vehicle. The other fixed windows are designed to be tempered so that if they break during a collision, they shatter in such a way that there are no large pointed glass pieces. The professional automotive glass technician knows how to install the glass in a vehicle so that it will function optimally during a collision. Without the proper experience, knowledge and tools, installing a piece of automotive glass yourself could lead to additional harm if an accident should ever occur.

Cost is also a factor when deciding to install automotive glass yourself. Performing this could cost you much more than a professional may charge for the same job. Since the windshield is designed to break under stress, an often life saving characteristic, windshields tend to break VERY easily when an inexperienced person attempts to install one. Do-it-yourselfers buying two, three or even four windshields from a salvage yard because they have broken them during installation are common stories. Also, since the automotive glass is designed to prevent the outside elements from entering your vehicle, improper installation can lead to water and air leaks. Annoying whining noises at highway speeds from air leaks or inside body panel rusting from water leaks can add to your stress level and subtract from your wallet. After buying two or three windshields, installing them and ending up with a leak that produces a noise while driving and water damage during rainstorms, the cost of having a professional do it correctly the first time may be much more alluring. The editors of this repair guide, therefore, advise that you have a professional automotive glass technician service any broken glass on your vehicle.

WINDSHIELD CHIP REPAIR

Check with your state and local authorities on the laws for state safety inspection. Some states or municipalities may not allow chip repair as a viable option for correcting stone damage to your windshield.

Although severely cracked or damaged windshields must be replaced, there is something that you can do to prolong or even prevent the need for replacement of a chipped windshield. There are many companies which offer windshield chip

repair products, such as Loctite's Bullseye™ windshield repair kit. These kits usually consist of a syringe, pedestal and a sealing adhesive. The syringe is mounted on the pedestal and is used to create a vacuum which pulls the plastic layer against the glass. This helps make the chip transparent. The adhesive is then injected which seals the chip and helps to prevent further stress cracks from developing

Always follow the specific manufacturer's instructions.



Fig. 1: Small chips on your windshield can be fixed with an aftermarket repair kit, such as the one from Loctite



Fig. 2: Most kits use a self-stick applicator and syringe to inject the adhesive into the chip or crack

INSIDE REAR VIEW MIRROR

INSTALLATION

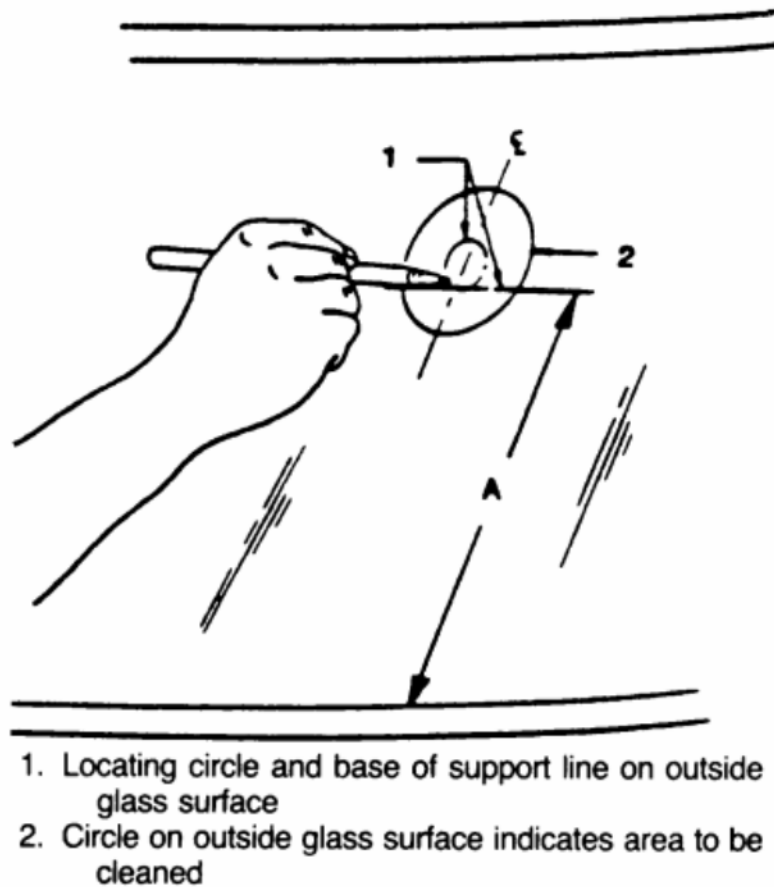


Fig. 1: Locating the bonded area on the windshield

The rear view mirror is attached to a support which is secured to the windshield glass. This support is installed by the glass supplier using a plastic-polyvinyl butyl adhesive.

Service replacement windshield glass has the mirror support bonded to the glass assembly. To install a detached mirror support or install a new part, the following items are needed:

- Part No. 1052369, Loctite® Minute-Bond Adhesive 312 two component pack or equivalent
- Original mirror support (prepared per Steps 4 and 5 of the installation procedure) or replacement rear view mirror support
- Wax marking pencil or crayon
- Rubbing alcohol
- Clean paper towels
- Fine grit emery cloth or sandpaper (No. 320 or No. 360)
- Clean toothpick
- Six-lobed socket bit.

1. Determine the rear view mirror support position on the windshield. Support is to be located at the center of the glass $27\frac{1}{8}$ in. (69cm) from the base of the glass to the base of the support.
2. Mark the location on the outside of the glass with wax pencil or crayon. Make a larger diameter circle around the mirror support circle on the outside of the glass surface.
3. On the inside of the glass surface, clean the large circle with a paper towel and domestic scouring cleanser, glass cleaning solution or polishing compound. Rub until the area is completely clean and dry. When dry, clean the area with an alcohol saturated paper towel to remove any traces of scouring powder or cleaning solution from this area.
4. With a piece of fine grit (No. 320 or No. 360) emery cloth or sandpaper, sand the bonding surface of the new rear view mirror support or factory installed support. If original rear view mirror support is to be reused, all traces of the factory installed adhesive must be removed prior to reinstallation.
5. Wipe the sanded mirror support with a clean paper towel saturated with alcohol and allow it to dry.
6. Follow the directions on the manufacturer's kit to prepare the rear view mirror support prior to installation on the glass.
7. Properly position the support to its premarked location, with rounded end pointed upward, press the support against the glass for 30-60 seconds, exerting steady pressure against the glass. After five minutes, any excess adhesive may be removed with an alcohol moistened paper towel or glass cleaning solution.
8. Install the mirror.

SEATS

REMOVAL & INSTALLATION

1. Operate the seat to the full-forward position. If a six-way power seat is operable, operate the seat to the full-forward and up positions. Where necessary to gain access to the adjuster-to-floor pan attaching nuts, remove the adjuster rear foot covers and/or carpet retainers.
2. Remove the track covers where necessary; then remove the adjuster-to-floor pan rear attaching nuts. Operate the seat to the full-rearward position. Remove the adjuster front foot covers; then remove the adjuster-to-floor pan front attaching nuts.
3. Remove the seat assembly from the car.
4. Check that both seat adjusters are parallel and in phase with each other.
5. Install the adjuster-to-floor pan attaching nuts by moving the seat forward and rearward and torque nuts to 15-21 ft. lbs. (20-28 Nm).
6. Check the operation of the seat assembly to full limits of travel.

SEAT BELT SYSTEM

REMOVAL & INSTALLATION

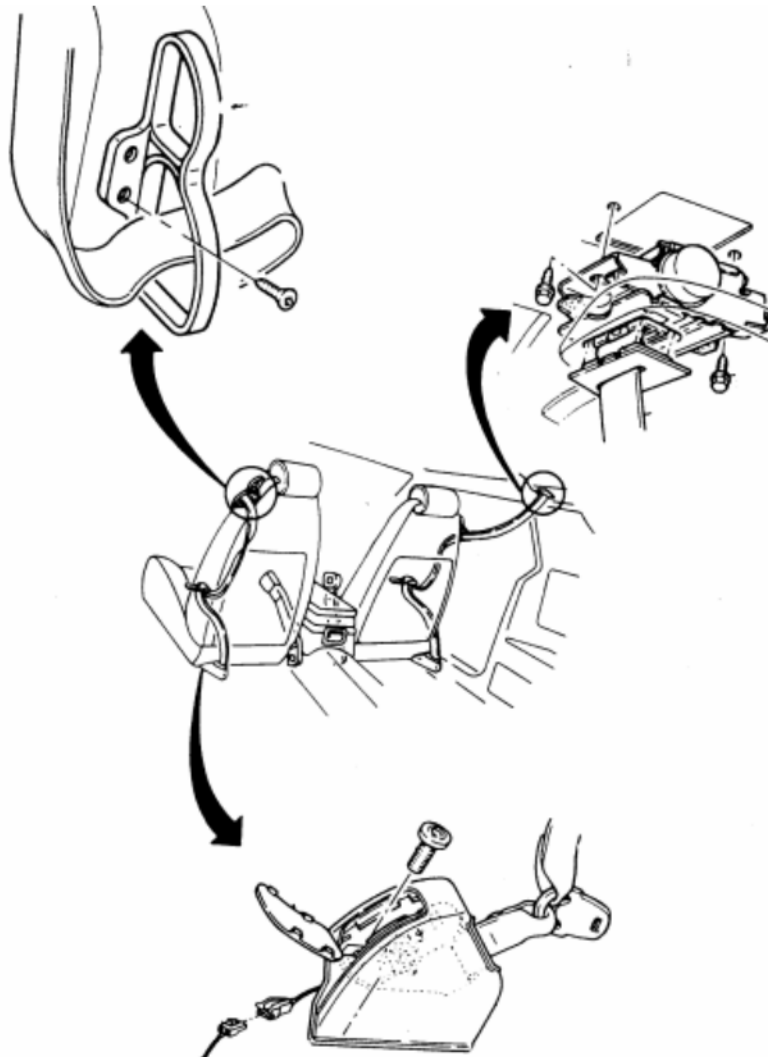


Fig. 1: Front seat belt - coupe

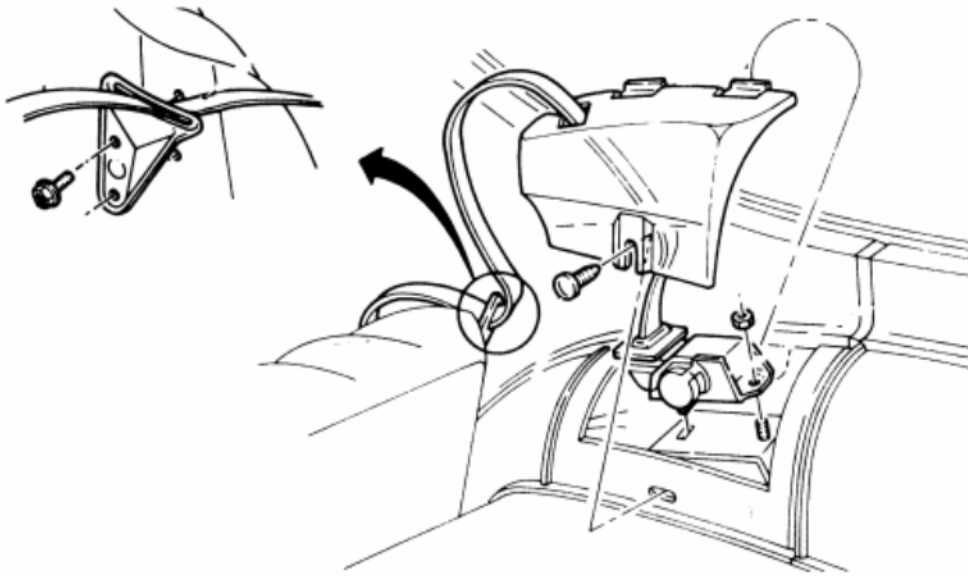


Fig. 2: Rear seat belt - coupe

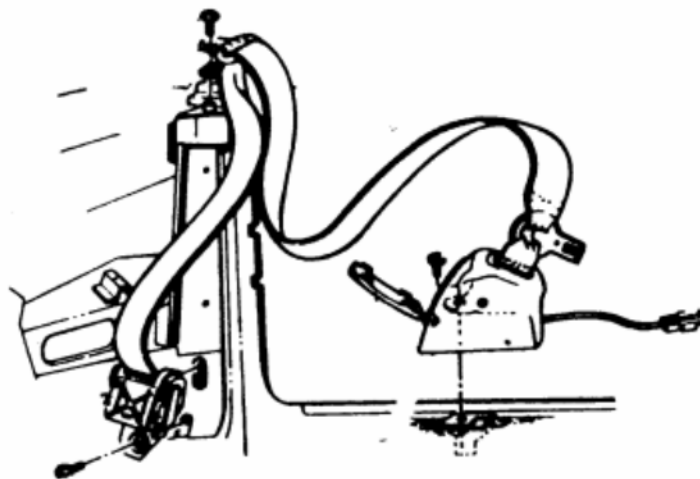


Fig. 3: Front seat belt - convertible

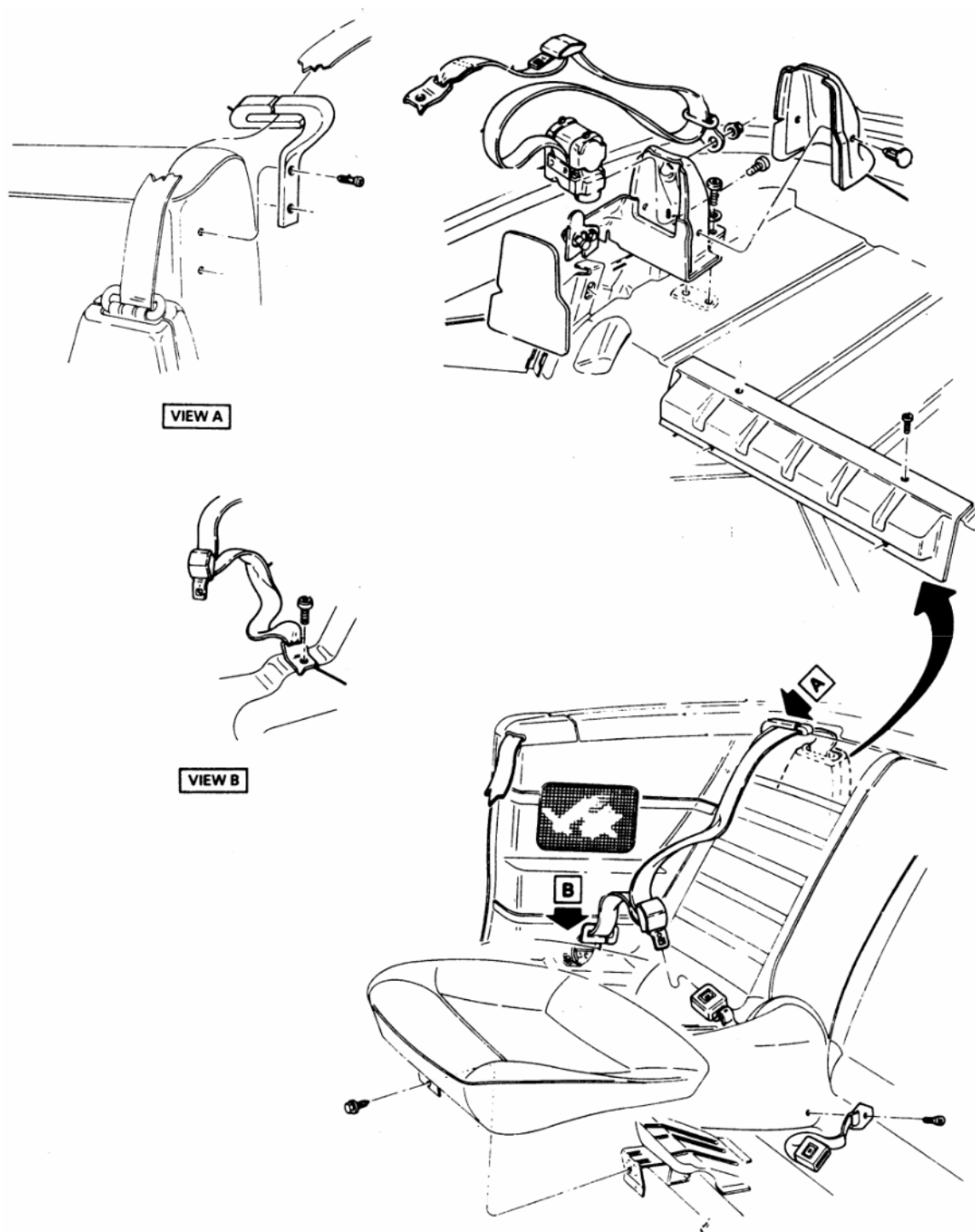


Fig. 4: Rear seat belt - convertible

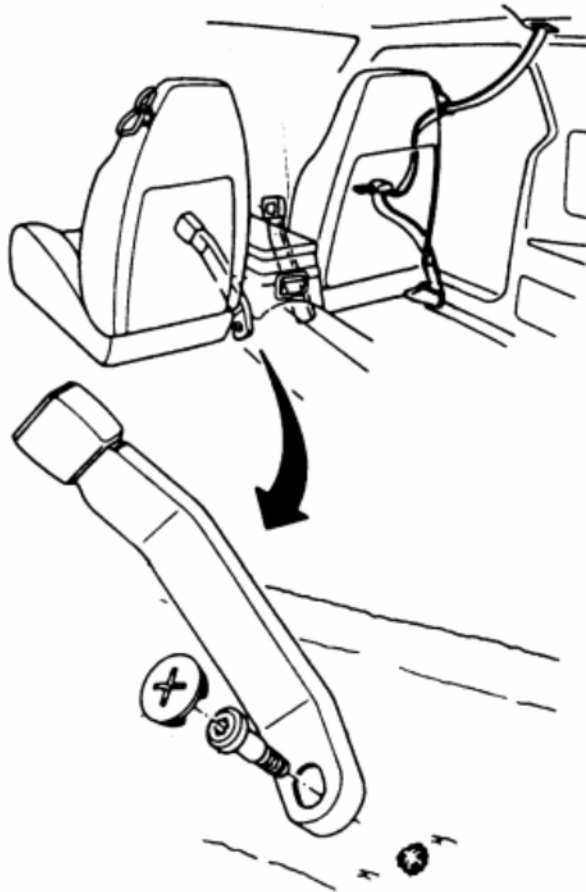


Fig. 5: Seat belt attachment

1. Remove the cover from the anchor plate.
2. Remove the attaching bolt, anchor plate and washer from the door pillar.
3. Remove the bolt cover from the rear of the retractor assembly.
4. Remove the bolt retaining the retractor to the floor panel and remove the retractor.
5. Remove the buckle assembly from the floor panel.
6. Remove the cap which conceals the buckle assembly bolt and remove the bolt.
7. Remove the seat belt warning wire from the drivers side buckle and remove the buckle assembly from the vehicle.
8. Installation is the reverse of removal. Tighten all bolts to 31 ft. lbs. (43 Nm).

POWER SEAT MOTOR

REMOVAL & INSTALLATION

1. Remove the front seat assembly and place upside down on a clean protected surface.
2. Disconnect the motor feed wires from the motors.
3. Remove the nut securing the front of the motor support bracket to the inboard adjuster and withdraw the assembly from the adjuster and the gearnut drives.
4. Disconnect the drive cables from the motors and complete removal of the support bracket with the motor attached.

5. Grind off the peened over end(s) of the grommet assembly securing the motor to the support and separate the motor(s) as required from the support.

To install:

6. Drill out the top end of the grommet assembly using a $\frac{3}{16}$ in. (5mm) drill.
7. Install the grommet assembly to the motor support bracket and secure the motor to the grommet using $\frac{3}{16}$ in. (5mm) rivet.
8. Install the support bracket with the motor attached and connect the drive cables to the motors.
9. Install the support bracket nuts securing the front of the motor support bracket to the inboard adjuster.
10. Connect the motor feed wires to the motors.
11. Install the front seat assembly.

How to Remove Stains from Fabric Interior

For best results, spots and stains should be removed as soon as possible. Never use gasoline, lacquer thinner, acetone, nail polish remover or bleach. Use a 3' x 3" piece of cheesecloth. Squeeze most of the liquid from the fabric and wipe the stained fabric from the outside of the stain toward the center with a lifting motion. Turn the cheesecloth as soon as one side becomes soiled. When using water to remove a stain, be sure to wash the entire section after the spot has been removed to avoid water stains. Encrusted spots can be broken up with a dull knife and vacuumed before removing the stain.

Type of Stain	How to Remove It
Surface spots	Brush the spots out with a small hand brush or use a commercial preparation such as K2R to lift the stain.
Mildew	Clean around the mildew with warm suds. Rinse in cold water and soak the mildew area in a solution of 1 part table salt and 2 parts water. Wash with upholstery cleaner.
Water stains	Water stains in fabric materials can be removed with a solution made from 1 cup of table salt dissolved in 1 quart of water. Vigorously scrub the solution into the stain and rinse with clear water. Water stains in nylon or other synthetic fabrics should be removed with a commercial type spot remover.
Chewing gum, tar, crayons, shoe polish (greasy stains)	Do not use a cleaner that will soften gum or tar. Harden the deposit with an ice cube and scrape away as much as possible with a dull knife. Moisten the remainder with cleaning fluid and scrub clean.
Ice cream, candy	Most candy has a sugar base and can be removed with a cloth wrung out in warm water. Oily candy, after cleaning with warm water, should be cleaned with upholstery cleaner. Rinse with warm water and clean the remainder with cleaning fluid.
Wine, alcohol, egg, milk, soft drink (non-greasy stains)	Do not use soap. Scrub the stain with a cloth wrung out in warm water. Remove the remainder with cleaning fluid.
Grease, oil, lipstick, butter and related stains	Use a spot remover to avoid leaving a ring. Work from the outside of the stain to the center and dry with a clean cloth when the spot is gone.
Headliners (cloth)	Mix a solution of warm water and foam upholstery cleaner to give thick suds. Use only foam—liquid may streak or spot. Clean the entire headliner in one operation using a circular motion with a natural sponge.
Headliner (vinyl)	Use a vinyl cleaner with a sponge and wipe clean with a dry cloth.
Seats and door panels	Mix 1 pint upholstery cleaner in 1 gallon of water. Do not soak the fabric around the buttons.
Leather or vinyl fabric	Use a multi-purpose cleaner full strength and a stiff brush. Let stand 2 minutes and scrub thoroughly. Wipe with a clean, soft rag.
Nylon or synthetic fabrics	For normal stains, use the same procedures you would for washing cloth upholstery. If the fabric is extremely dirty, use a multi-purpose cleaner full strength with a stiff scrub brush. Scrub thoroughly in all directions and wipe with a cotton towel or soft rag.

Fig. 1