

# **GM**

# **CAMARO**

**1982-1992**

## **Repair Guide**

This is an essential accessory for do-it-yourself automotive repair. Each vehicle-specific guide includes detailed information and graphics to help you get your car or truck back on the road. Included in most guides: step-by-step instructions with detailed photographs and drawings, wiring diagrams, specification charts and repair tips.

- 1. Body & Trim**
- 2. Brakes**
- 3. Chassis Electrical**
- 4. Drive Train**
- 5. Engine & Engine Overhaul**
- 6. Engine Controls**
- 7. Engine Performance and Tune-up**
- 8. Fuel System**
- 9. General Information & Maintenance**
- 10. Suspension & Steering**

Covers all U.S. and Canadian models of GM Camaro 1982-1992.

## BODY & TRIM

### EXTERIOR

### DOORS

### REMOVAL & INSTALLATION

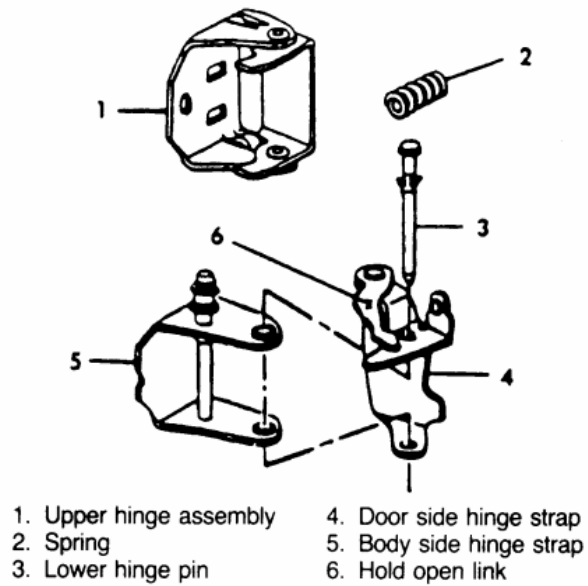


Fig. 1: Door hinge

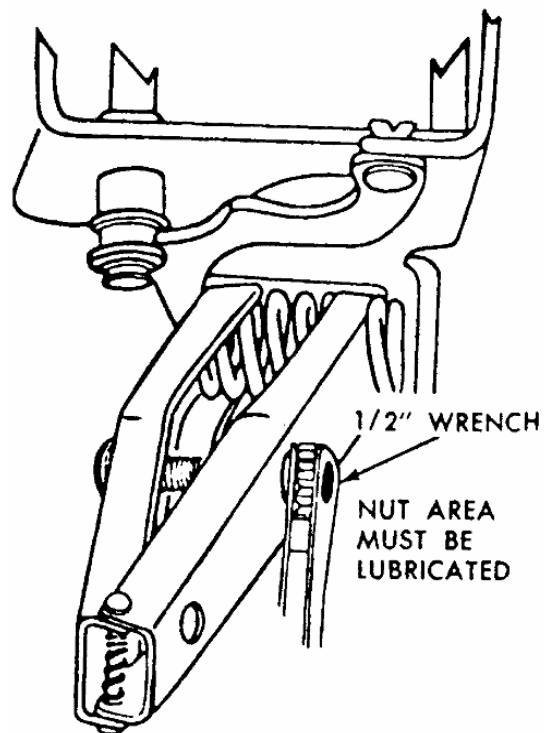


Fig. 2: Removing the door hinge spring

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

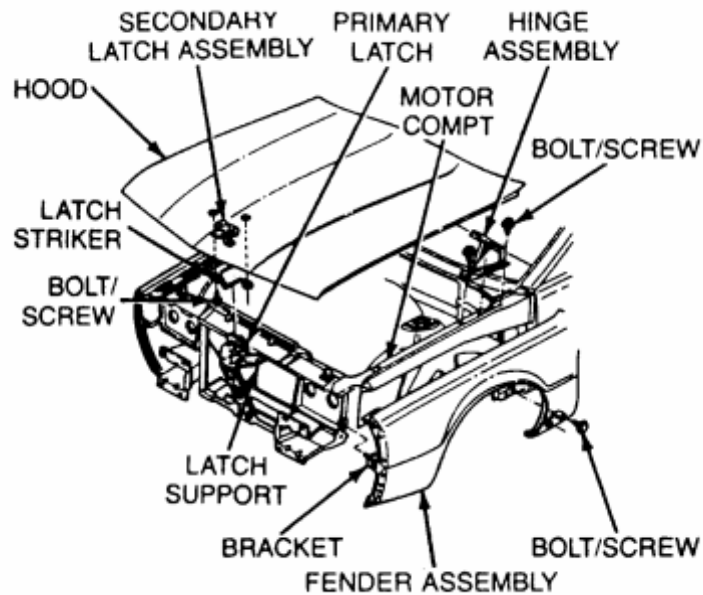


Fig. 1: Front end sheet metal

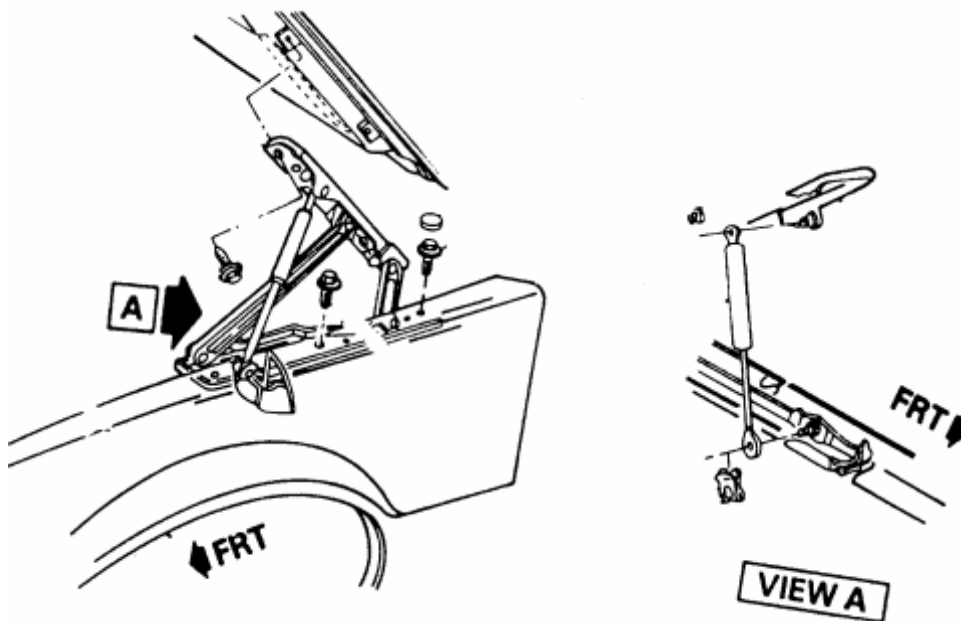


Fig. 2: Hood removal

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

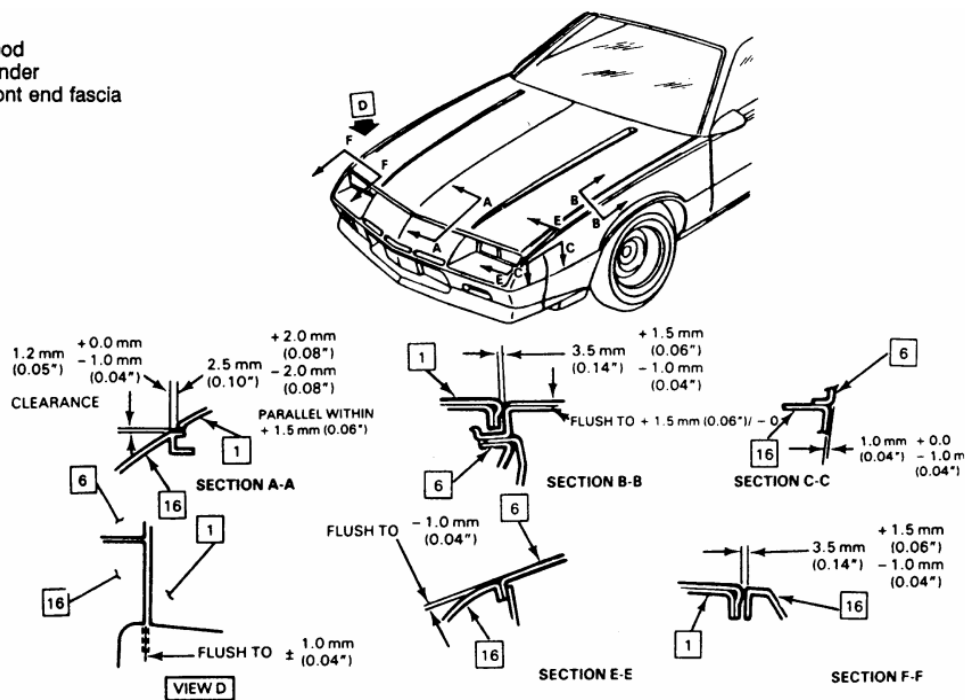


Fig. 3: Hood alignment

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

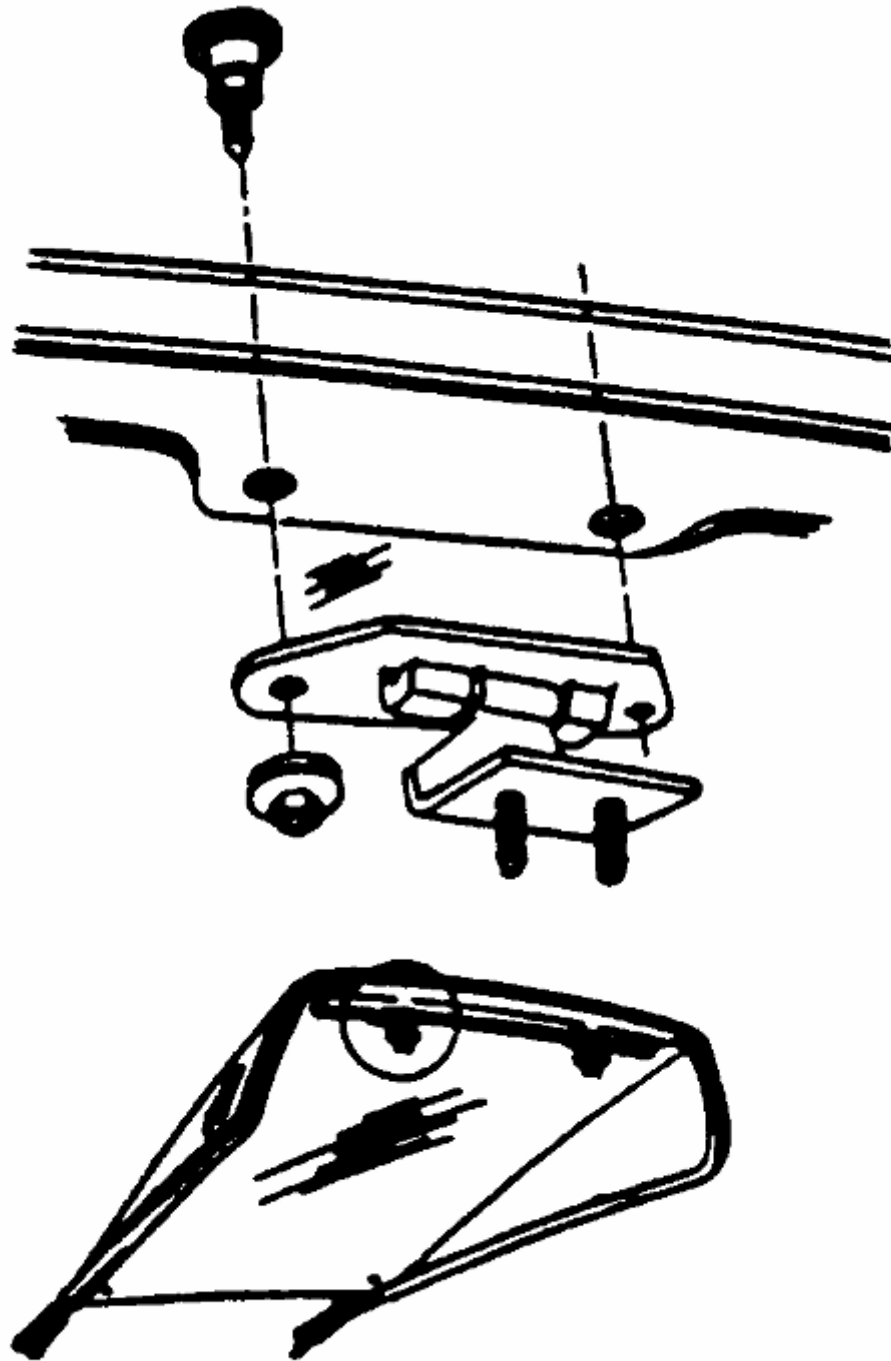
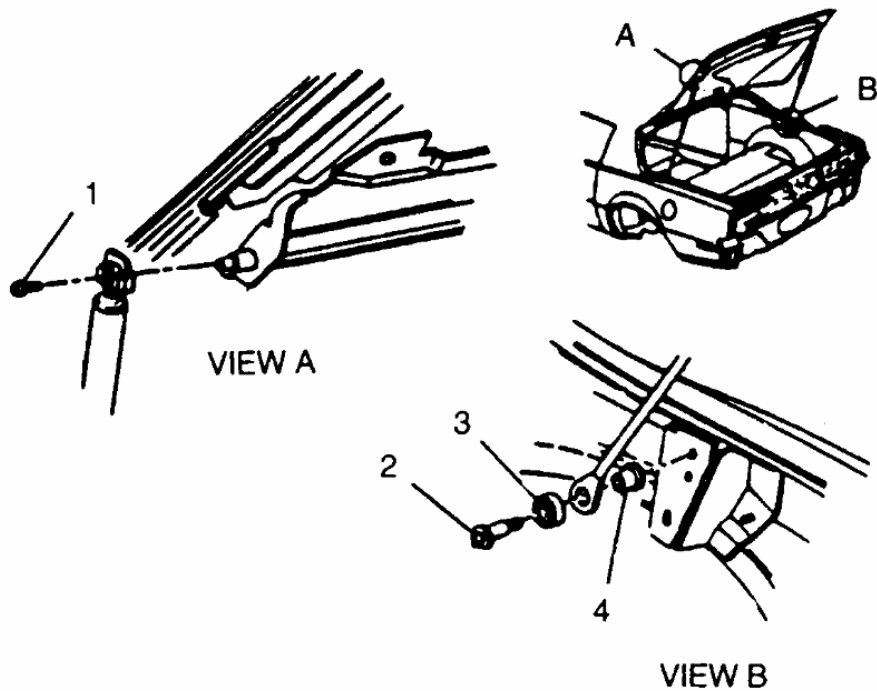


Fig. 1: Rear hatch hinge





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**

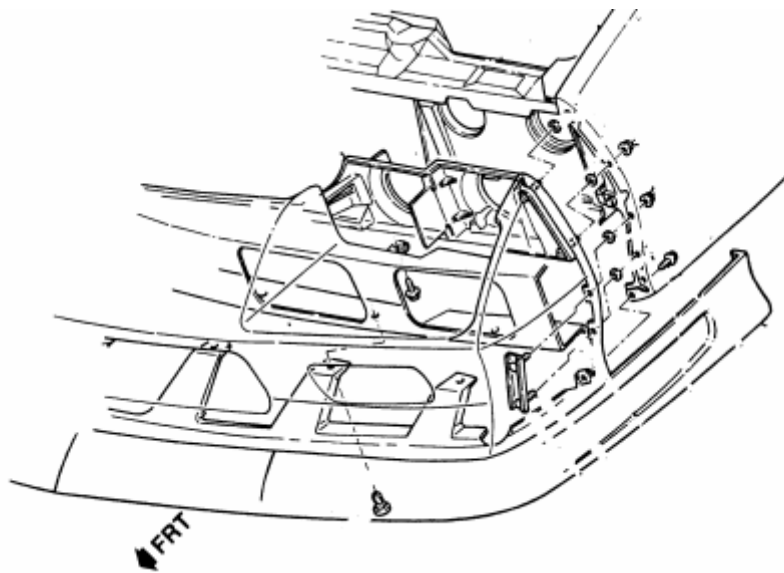


Fig. 1: Front bumper fascia

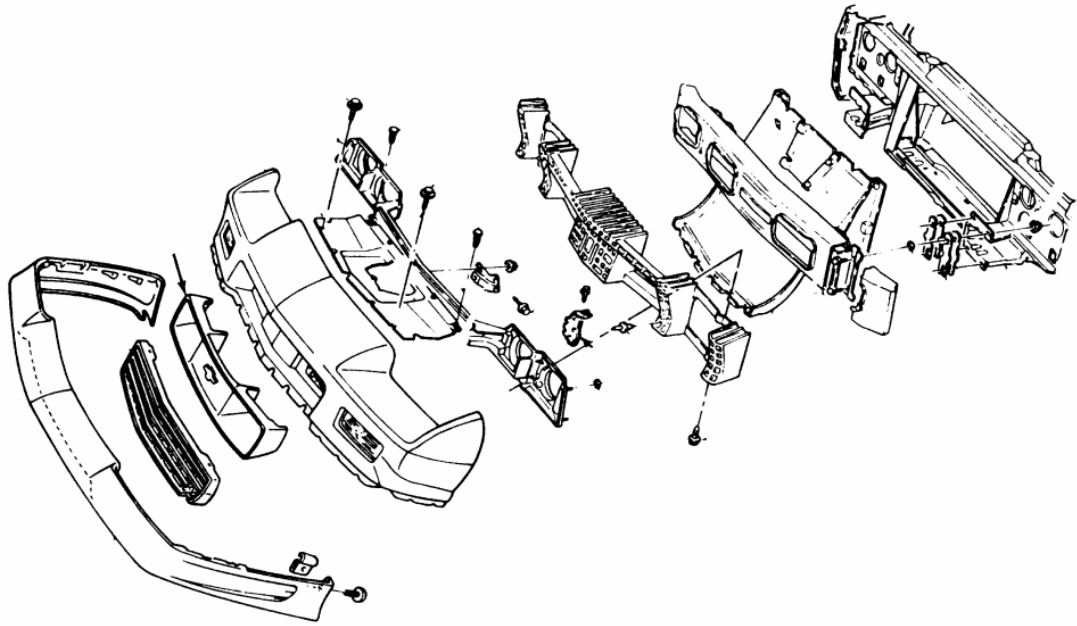


Fig. 2: Front bumper removal

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

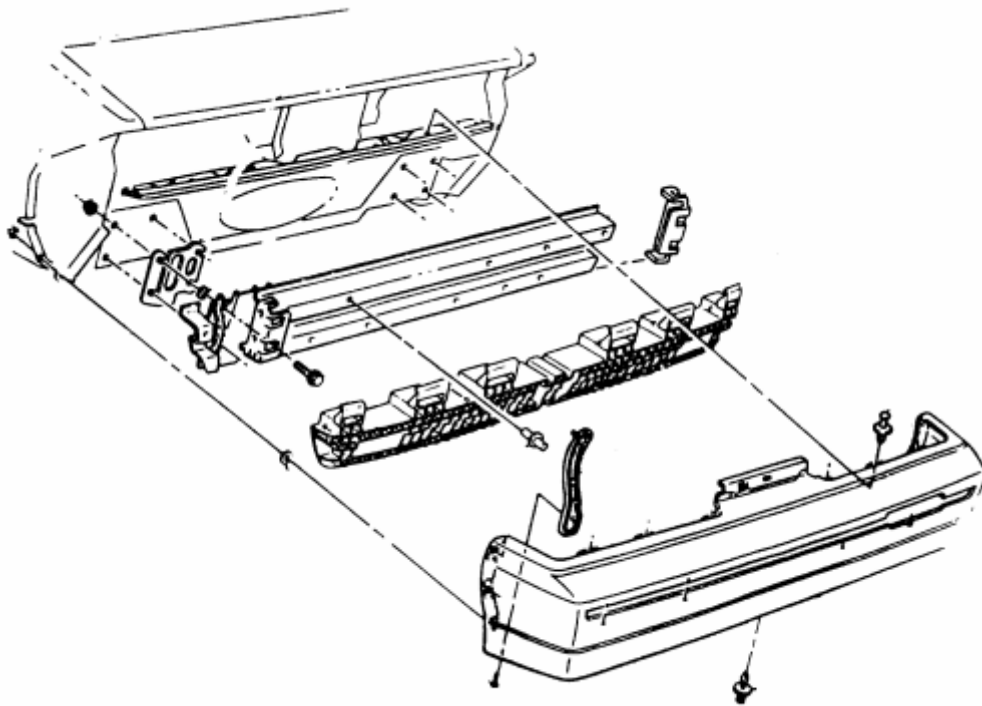


Fig. 3: Rear bumper removal

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:

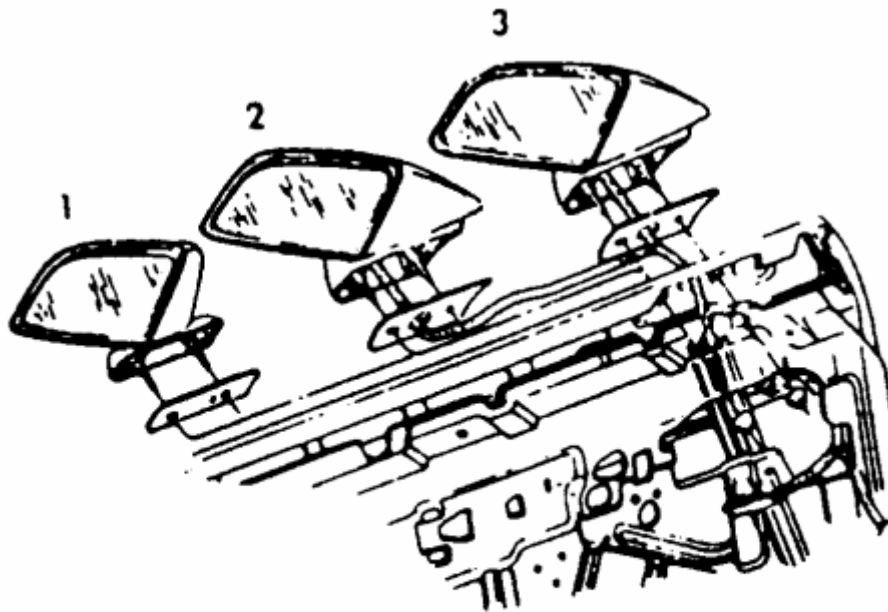
10. With the aid of an assistant, install the rear fascia.
11. Install the push-on retainers and lower screws.
12. Install the right and left side fascia nuts.
13. Install the license plate bolts and bracket.
14. Install the left and right side tail lamps.

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



1. Manual mirror
2. Remote control mirror
3. Electric remote control mirror

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

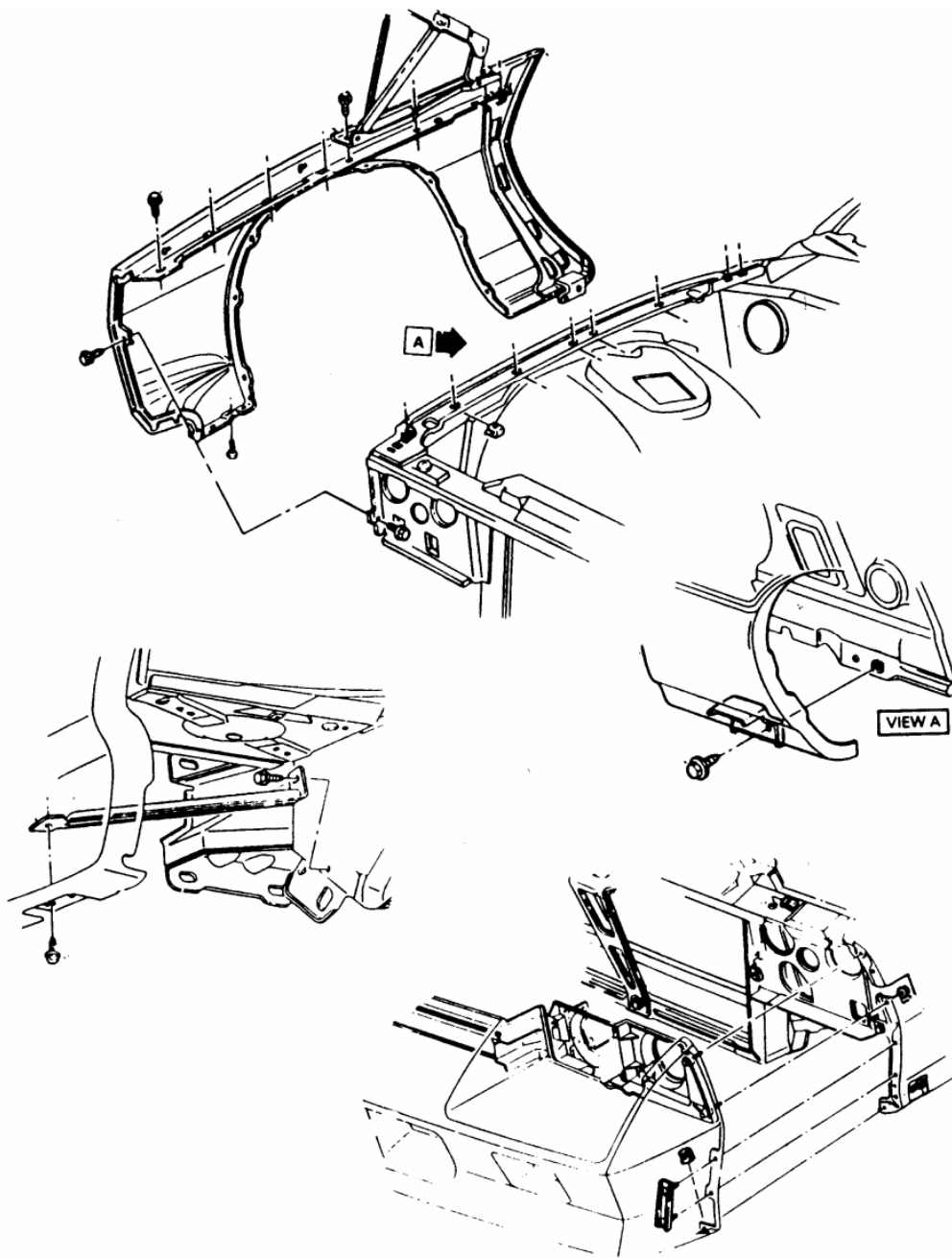


Fig. 1: Fender removal

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

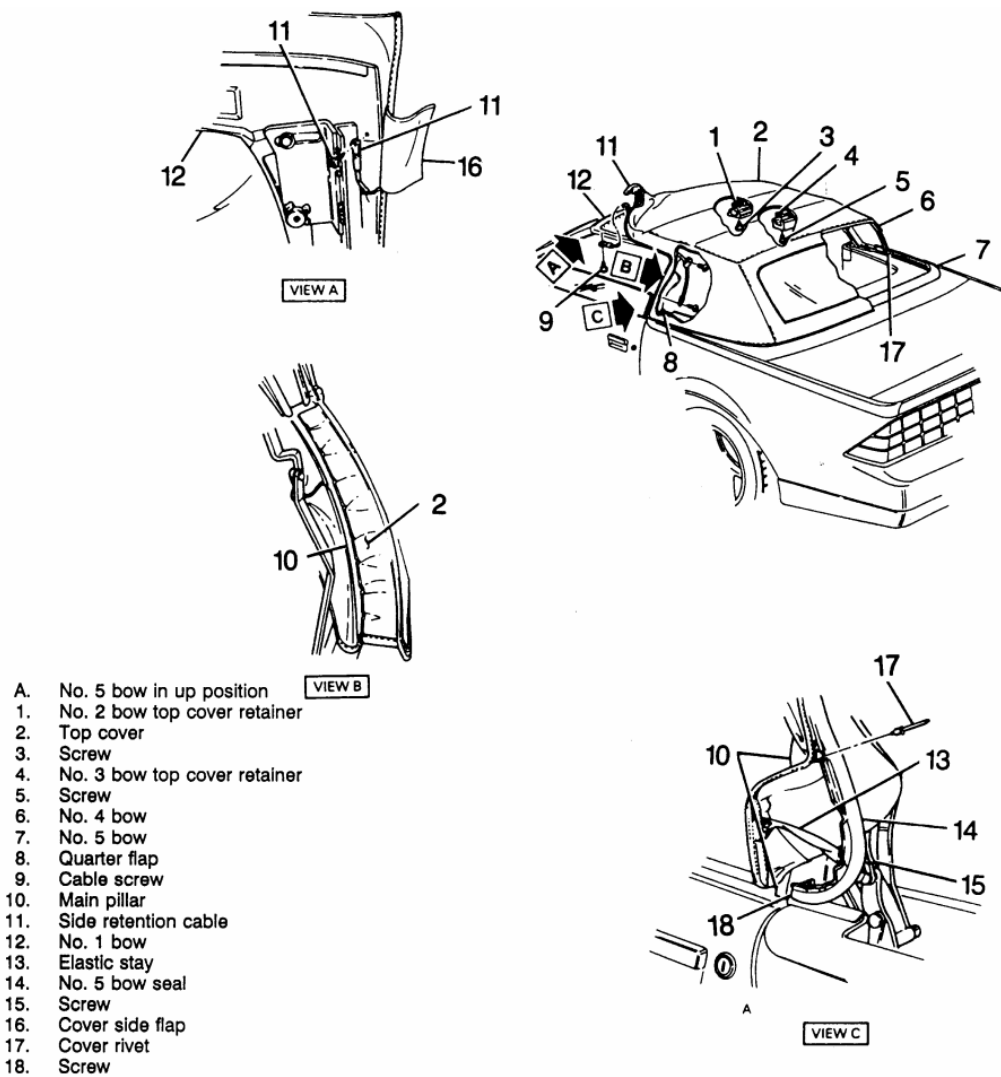
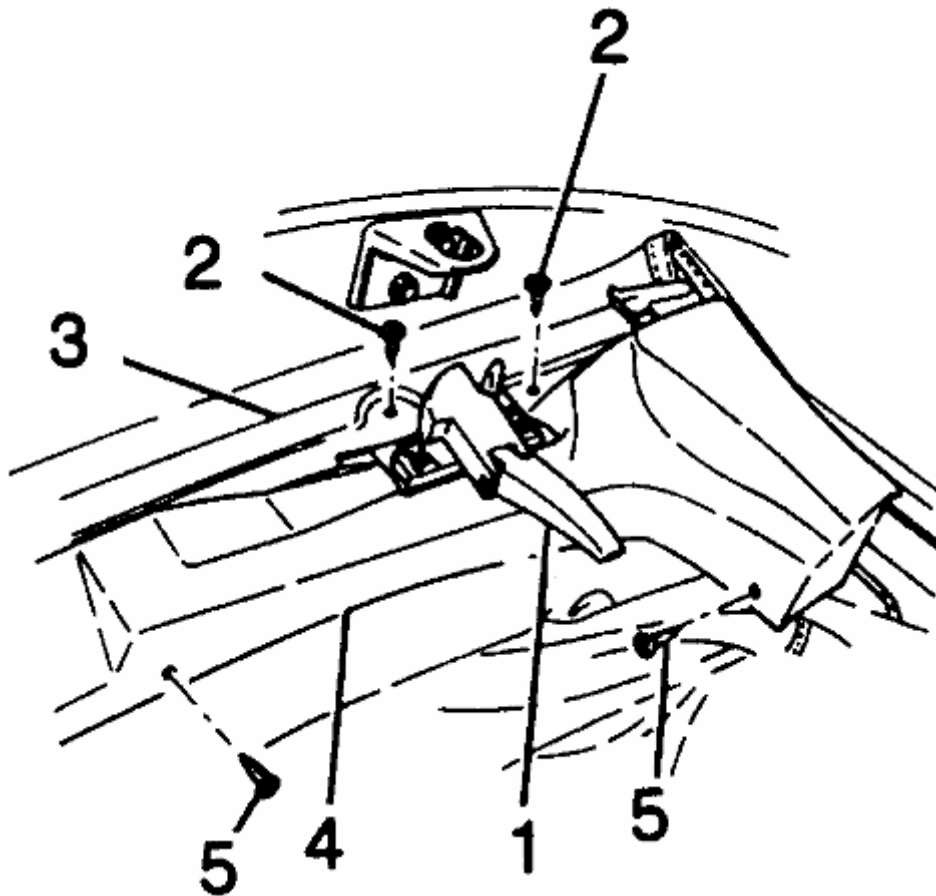


Fig. 1: Convertible top parts



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

Fig. 2: No.1 bow parts

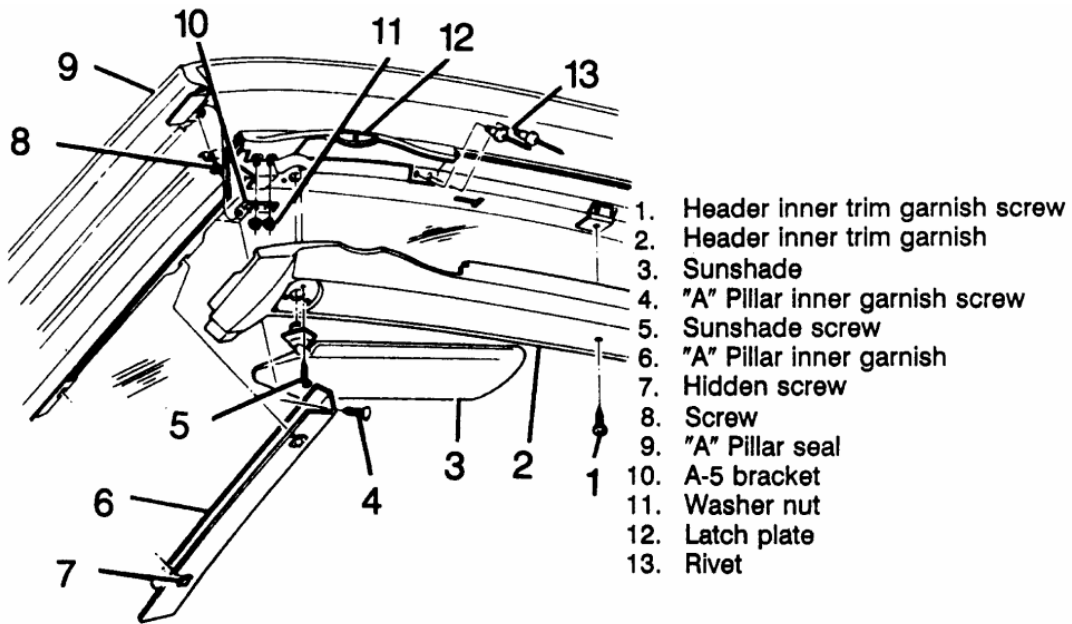


Fig. 3: Garnish and latch plates

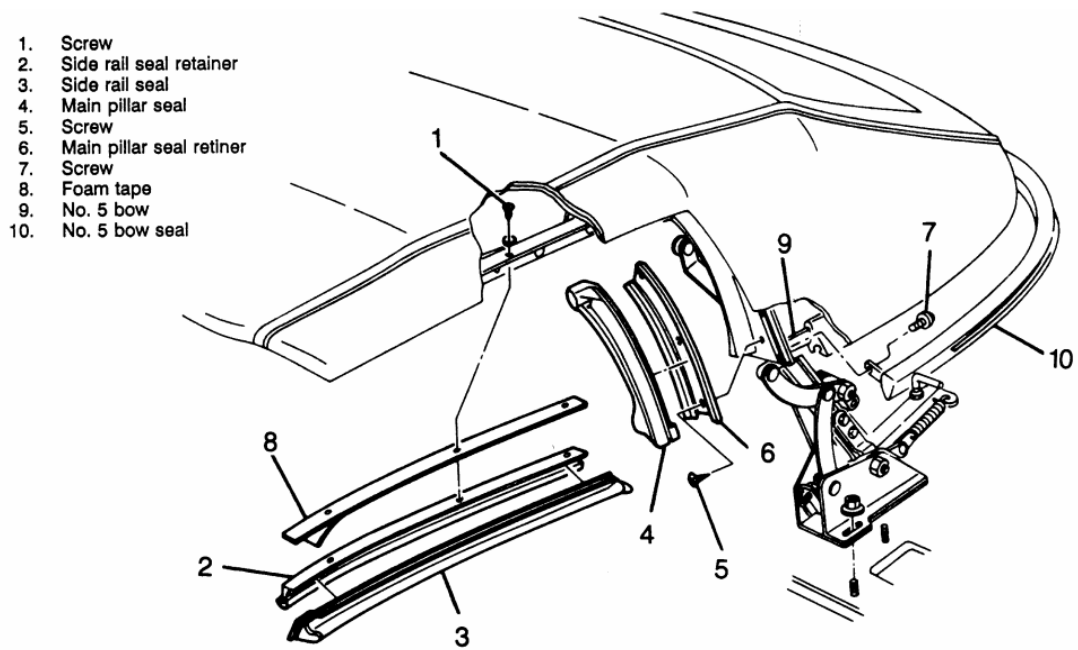
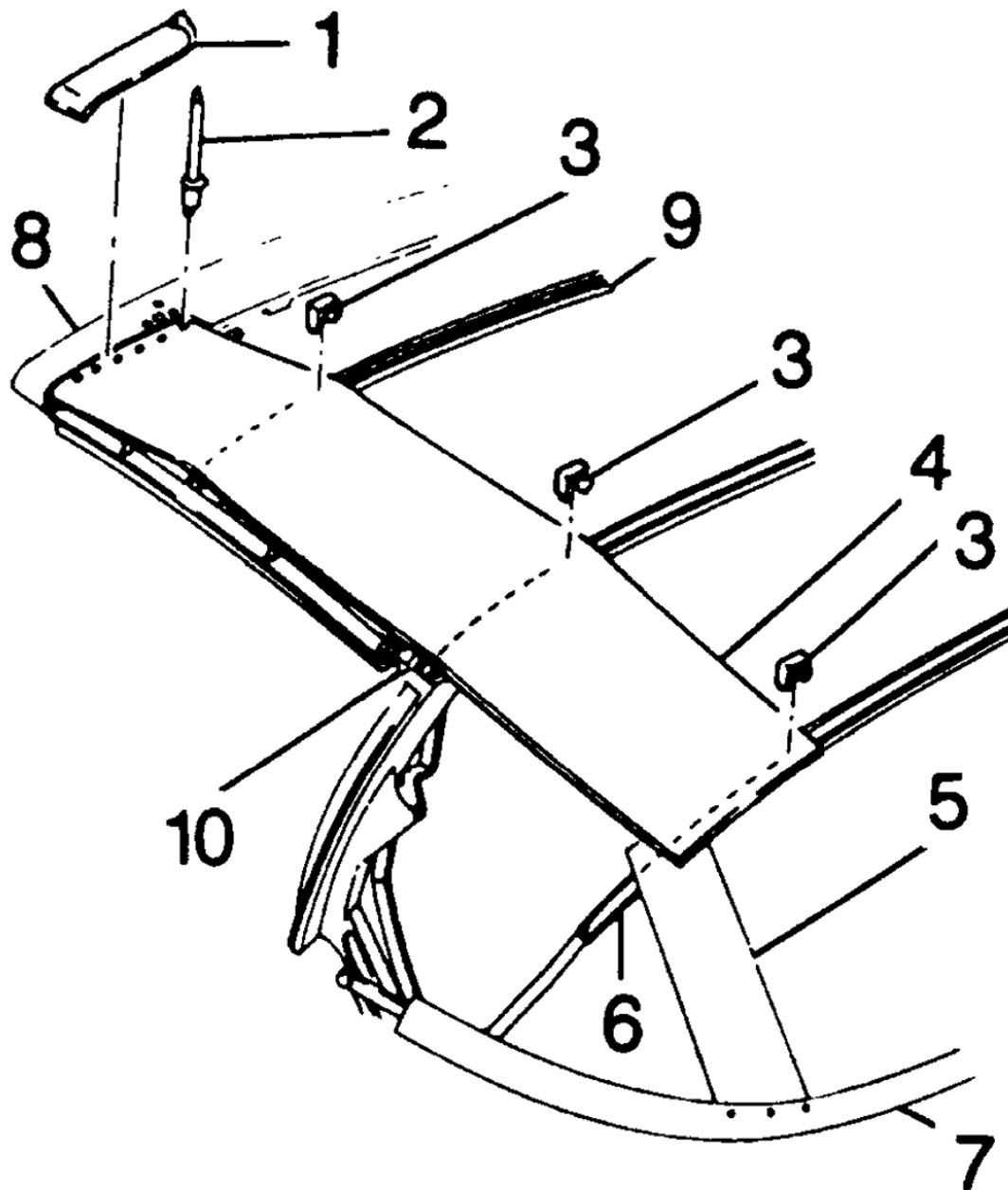


Fig. 4: Seals and retainers



- |    |               |     |           |
|----|---------------|-----|-----------|
| 1. | Tape          | 6.  | No. 4 bow |
| 2. | Rivet         | 7.  | No. 5 bow |
| 3. | Staple        | 8.  | No. 1 bow |
| 4. | Side stay pad | 9.  | No. 2 bow |
| 5. | Rear stay pad | 10. | No. 3 bow |

Fig. 5: Side stay pad