

Chapter 11 Body

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1 General information

During the years 1984 through 1986 the 300ZX was available in two basic body styles: the 2-seater coupe and the 2+2 style.

The 300ZX is constructed with a unitized body, in which the body is designed to provide vehicle rigidity so that a separate frame is not necessary.

Certain body panels which are particularly vulnerable to accident damage can be replaced by unbolting them and installing replacement parts. These panels include the fenders, inner fender skirts, grille front apron, headlamp case, hood and hatch.

2 Body — general maintenance

1 The condition of your vehicle's bodywork is of considerable importance, as it is on this that the resale value will mainly depend. It is much more difficult to repair neglected bodywork than mechanical components. The hidden portions of the body, such as the wheel arches, the underframe and the engine compartment, are equally important, although obviously not requiring such frequent attention as the immediately visible paint.

2 Once a year or every 12,000 miles it is a good idea to have the underside of the body steam cleaned. All traces of dirt and oil will be removed and the underside can then be inspected carefully for rust, damaged hydraulic lines, frayed electrical wiring and similar trouble areas. The front suspension should be greased on completion of this job.

3 At the same time, clean the engine and the engine compartment either using a steam cleaner or a water-soluble cleaner.

4 The wheel arches and fender skirts should be given particular attention, as undercoating can easily come away here and stones and dirt thrown up from the wheels can soon cause the paint to chip and flake, and so allow rust to set in. If rust is found, clean down to the bare metal and apply an anti-rust paint.

5 Use a mild detergent and soft sponge to wash the exterior of the car and rinse immediately with clear water. Owners who live in coastal regions and where salt or chemicals are used on the roads should wash the finish often to prevent damage to the finish. Do not wash the car in direct sunlight or when the metal is warm. To remove road tar, insects

or tree sap use a tar remover rather than a knife or sharp object, which could scratch the surface.

6 A coat of wax or polish may be your best protection against the elements. Use a good grade of polish or wax suitable for a high-quality synthetic finish. Do not use a wax or polish which contains large amounts of abrasives, as these will scratch the finish.

7 Bright metal parts can be protected with wax or a chrome preservative. During winter months or in coastal regions apply a heavier coating or, if necessary, use a non-corrosive compound such as petroleum jelly for protection. Do not use abrasive cleaners, strong detergents or materials such as steel wool on chrome or anodized aluminium parts, as these may damage the protective coating and cause discoloration or deterioration.

8 Interior surfaces can be wiped clean with a damp cloth or with cleaners specifically designed for car interior fabrics. Carefully read the manufacturer's instructions and test any commercial cleaners on an inconspicuous area first. The carpet should be vacuumed regularly and can be covered with mats.

9 Cleaning the mechanical parts of the car serves two functions. First, it focuses your attention on parts which may be starting to fail, allowing you to fix or replace them before they cause problems. Second, it is much more pleasant to work on parts which are clean. You will still get dirty on major repair jobs, but it will be less extreme. Large areas, such as the firewall and inner fender panels, should be brushed with detergent, allowed to soak for about 15 minutes and then carefully rinsed clean. Cover ignition and carburetor parts with plastic to prevent moisture from penetrating these critical components.

3 Vinyl trim — maintenance

Under no circumstances try to clean any external vinyl trim or roof covering with detergents, caustic soap or petroleum based cleaners. Plain soap and water is all that is required, with a soft brush to clean dirt that may be ingrained. Wash the covering as frequently as the rest of the vehicle.

After cleaning, application of a high quality rubber and vinyl protectant will help prevent oxidation and cracking. This protectant can also be applied to all interior and exterior vinyl components, as well as to vacuum lines and rubber hoses, which often fail as a result of chemical degradation.

4 Upholstery — maintenance

1 Every three months remove the carpets or mats and clean the interior of the vehicle (more frequently if necessary). Vacuum the upholstery and carpets to remove loose dirt and dust.

2 If the upholstery is soiled, apply upholstery cleaner with a damp sponge and wipe it off with a clean, dry cloth.

5 Body damage — minor repair

Refer to the color photo sequence on pages 242 and 243

Repair of minor scratches

If the scratch is superficial, and does not penetrate to the metal of the body, repair is simple. Lightly rub the area of the scratch with a fine rubbing compound to remove loose paint from the scratch and to clear the surrounding paint of wax buildup. Rinse the area with clean water.

Apply touch-up paint to the scratch, using a small brush. Continue to apply thin layers of paint until the surface of the paint in the scratch is level with the surrounding paint. Allow the new paint at least two weeks to harden, then blend it into the surrounding paint by rubbing with a very fine rubbing compound. Finally, apply a coat of wax to the scratch area.

Where the scratch has penetrated the paint and exposed the metal of the body, causing the metal to rust, a different repair technique is required. Remove any loose rust from the bottom of the scratch with a pocket knife, then apply rust inhibiting paint to prevent the formation of rust in the future. Using a rubber or nylon applicator, coat the scratched area with glaze type filler. If required, this filler can be mixed with thinner to provide a very thin paste, which is ideal for filling narrow scratches. Before the glaze filler in the scratch hardens, wrap a piece of smooth cotton cloth around the tip of a finger. Dip the cloth in thinner and then quickly wipe it along the surface of the scratch. This will ensure that the surface of the filler is slightly hollowed. The scratch can now be painted over as described earlier in this section.

Repair of dents

When denting of the vehicle's body has taken place, the first task is to pull the dent out until the affected area nearly attains its original shape. There is little point in trying to restore the original shape completely, as the metal in the damaged area will have stretched on impact and cannot be reshaped fully to its original contours. It is better to bring the level of the dent up to a point which is about 1/8-inch below the level of the surrounding metal. In cases where the dent is very shallow, it is not worth trying to pull it out at all.

If the underside of the dent is accessible, it can be hammered out gently from behind using a mallet with a wooden or plastic head. While doing this, hold a block of wood firmly against the metal to absorb the hammer blows and prevent a large area of the metal from being stretched.

If the dent is in a section of the body which has double layers, or some other factor making it inaccessible from behind, a different technique is in order. Drill several small holes through the metal inside the damaged area, particularly in the deeper sections. Screw long self-tapping screws into the holes just enough for them to get a good grip in the metal. Now the dent can be pulled out by pulling on the heads of the screws with locking pliers.

The next stage of repair is the removal of paint from the damaged area and from an inch or so of the surrounding metal. This is accomplished most easily by using a wire brush or sanding disk in a drill motor, although it can be done just as effectively by hand with sandpaper. To complete the preparation for filling, score the surface of the bare metal with a screwdriver or the tang of a file (or drill small holes in the affected area). This will provide a very good grip for the filler material. To complete the repair, see the Section on filling and painting.

Repair of rust holes or gashes

Remove all paint from the affected area and from an inch or so of the surrounding metal using a sanding disk or wire brush mounted in a drill motor. If these are not available, a few sheets of sandpaper will

do the job as effectively. With the paint removed, you will be able to determine the severity of the corrosion and therefore decide whether to replace the whole panel, if possible, or repair the affected area. New body panels are not as expensive as most people think and it is often quicker to install a new panel than to attempt to repair large damaged areas.

Remove all trim pieces from the affected area (except those which will act as a guide to the original shape of the damaged body such as headlamp, shells etc.). Using metal snips or a hacksaw blade, remove all loose metal and any other metal that is badly affected by rust. Hammer the edges of the hole inwards to create a slight depression for the filler material.

Wire brush the affected area to remove the powdery rust from the surface of the metal. If the back of the rusted area is accessible, treat it with rust-inhibiting paint.

Before filling can be done it will be necessary to block the hole in some way. This can be accomplished with sheet metal riveted or screwed into place, or by stuffing the hole with wire mesh. Once the hole is blocked off, the affected area can be filled and painted.

Filling and painting

Many types of body fillers are available, but generally speaking, body repair kits which contain filler paste and a tube of resin hardener are best suited for this type of repair work. A wide, flexible plastic or nylon applicator will be necessary for imparting a smooth and contoured finish to the surface of the filler material.

Mix up a small amount of filler on a clean piece of wood or cardboard (use the hardener sparingly). Follow the instructions on the package, otherwise the filler will set incorrectly.

Using the applicator, apply the filler paste to the prepared area. Draw the applicator across the surface of the filler to achieve the desired contour and to level the filler surface. As soon as a contour that approximates the original one is achieved, stop working the paste. If you continue, the paste will begin to stick to the applicator. Continue to add thin layers of filler paste at 20 minute intervals until the level of the filler is just above the surrounding metal.

Once the filler has hardened the excess can be removed using a body file. From then on, progressively finer grades of sandpaper should be used, starting with a 180-grit paper and finishing with 600-grit wet-or-dry paper. Always wrap the sandpaper around a flat rubber or wooden block, otherwise the surface of the filler will not be completely flat. During the sanding of the filler surface, the wet-or-dry paper should be periodically rinsed in water. This will ensure that a very smooth finish is produced in the final stage.

At this point, the repair area should be surrounded by a ring of base metal, which in turn should be encircled by the finely feathered edge of the good paint. Rinse the repair area with clean water until all of the dust produced by the sand operation is gone.

Spray the entire area with a light coat of primer. This will reveal any imperfections in the surface of the filler. Repair these imperfections with fresh filler paste or glaze filler and once more smooth the surface with sandpaper. Repeat this spray-and-repair procedure until you are satisfied that the surface of the filler and the feathered edge of the paint are perfect. Rinse the areas with clean water and allow it to dry completely.

The repair area is now ready for painting. Paint spraying must be carried out in a warm, dry, windless and dustfree atmosphere. These conditions can be created if you have access to a large indoor working area, but if you are forced to work in the open, you will have to pick the day very carefully. If you are working indoors, dousing the floor in the work area with water will help settle dust which would otherwise be in the air. If the repair area is confined to one body panel mask off the surrounding panels. This will help to minimize the effects of a slight mismatch in paint color. Trim pieces such as chrome strips, door handles, etc., will also need to be masked off or removed. Use masking tape and several thicknesses of newspaper for the masking operations.

Before spraying, shake the paint can thoroughly, then spray a test area until the spray painting technique is mastered. Cover the repair area with a thick coat of primer. The thickness should be built up using several thin layers of primer rather than one thick one. After the primer has dried, use 600-grit wet-or-dry sandpaper, rub down the surface of the primer until it is very smooth. While doing this, the work area should be thoroughly rinsed with water and the wet-or-dry sandpaper periodically rinsed as well. Allow the primer to dry before spraying additional coats.

Spray on the top coat, again building up the thickness by using several thin layers of paint. Begin spraying in the center of the repair area and then, using a circular motion, work out until the whole repair area and about two inches of the surrounding original paint is covered. Remove all masking material 10 to 15 minutes after spraying on the final coat of paint. Allow the new paint at least two weeks to harden, then, using a very fine rubbing compound, blend the edges of the new paint into the existing paint. Finally, apply a coat of wax.

6 Body repair — major damage

- 1 Major damage must be repaired by an auto body/frame repair shop with the necessary welding and hydraulic straightening equipment.
- 2 If the damage has been serious, it is vital that the unibody structure be checked for correct alignment, as the handling of the vehicle will be affected. Other problems, such as excessive tire wear and wear in the transmission and steering, may also occur.

7 Hinge and locks — maintenance

Every 3000 miles or three months, the door, hood and rear hatch hinges should be lubricated with a few drops of oil and the locks treated with dry graphite lubricant. The door and rear hatch striker plates should be given a thin coat of grease to reduce wear and ensure free movement.

8 Hood — removal and installation

Refer to illustration 8.2

- 1 Use blankets or fender covers to protect the fenders from scratches during removal.
- 2 Use paint or scratch an alignment mark (see illustration) to outline the hinges in relation to the hood. This will greatly aid alignment when reinstalling.
- 3 Have an assistant support the hood while you remove the bolts securing the hydraulic stays to the hood.
- 4 Remove the hinge-to-hood bolts on both sides of the hood.
- 5 Carefully lift the hood from the vehicle.
- 6 Installation is the reverse of the removal procedure, noting the alignment marks made during removal.

9 Hood — raising while servicing the engine

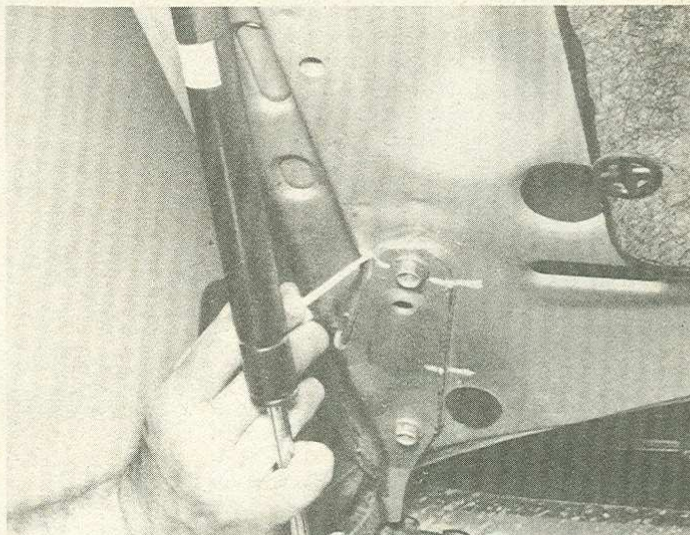
Refer to illustration 9.2

- 1 The hood may not have to be removed when servicing the vehicle and desiring extra head room. The hood is designed so that it may be opened further than normal during servicing procedures. Have an assistant hold the hood up while you remove the two bolts securing the hood hydraulic stays.
- 2 Raise the hood up farther and replace the bolts in the holes located below the two regular attachment holes (see illustration). **Caution:** Do not attempt to shut the hood with the stays in the raised position. The hood could be damaged.
- 3 After servicing of the vehicle is complete, have an assistant support the hood while you remove the hydraulic stay bolts. Have the assistant lower the hood until the bolts again fit into their original locations.

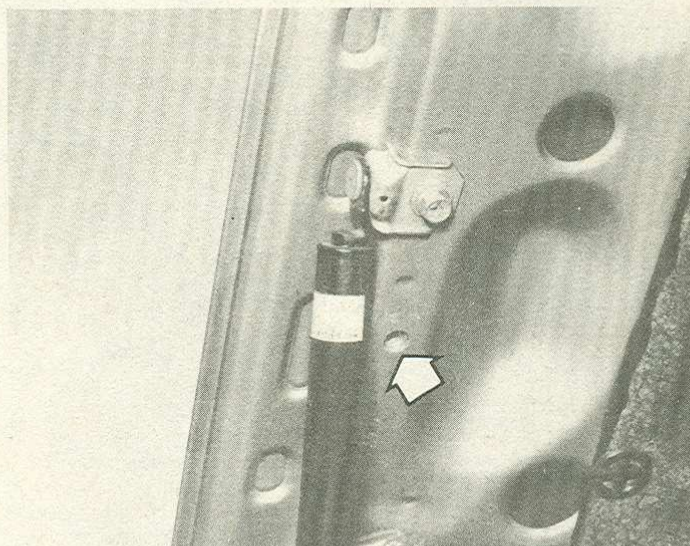
10 Hood latch release cable — removal and installation

Refer to illustrations 10.2, 10.3a, 10.3b, 10.3c, 10.5, 10.7 and 10.8

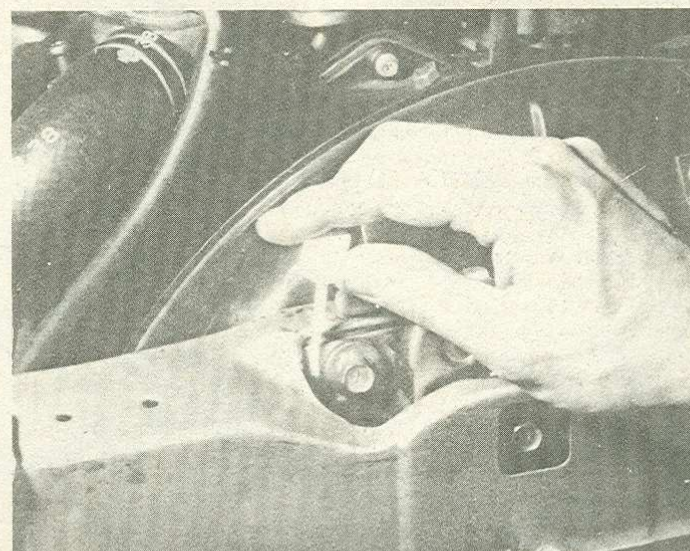
- 1 The hood latch is an assembly that includes the pull handle, control cable and housing.
- 2 To remove the cable, raise the hood and mark the location of the hood latch in relation to the front crossmember (see illustration).



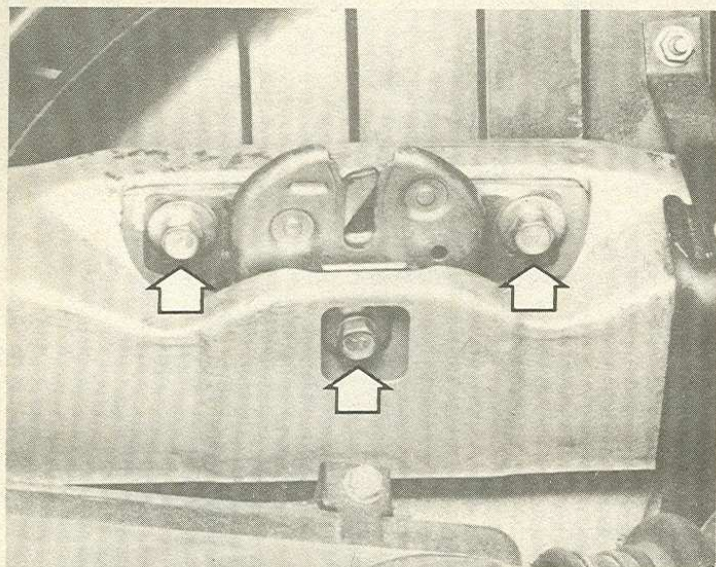
8.2 Mark the hood to hinge relationship before removing the hood hydraulic stay and hinge-to-hood bolts



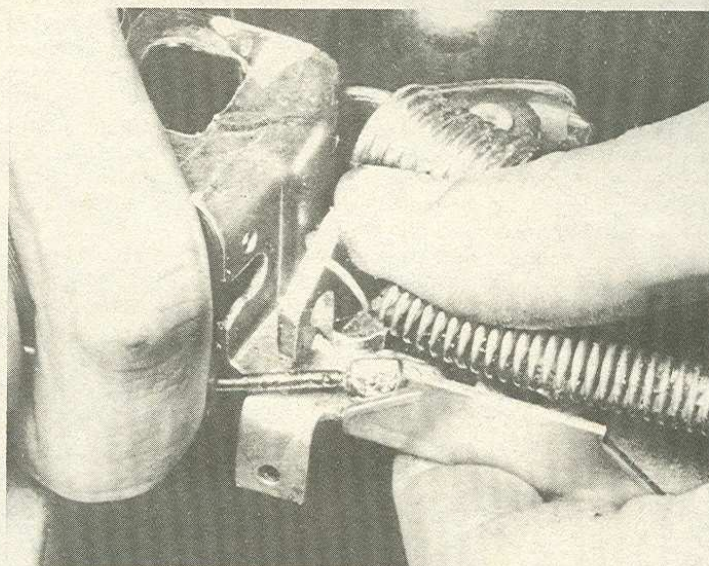
9.2 Remove the hydraulic stay bolts, then have an assistant raise the hood higher and install the stay bolts in the holes (arrow) provided



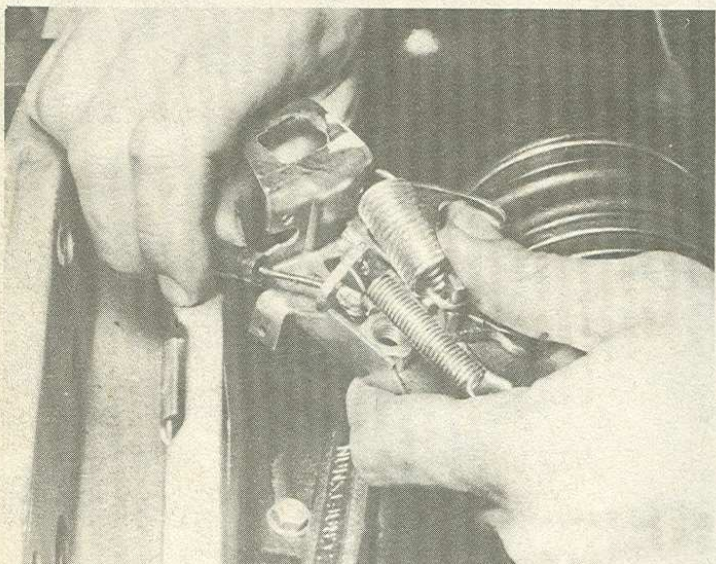
10.2 Mark the relationship of the latch to the crossmember



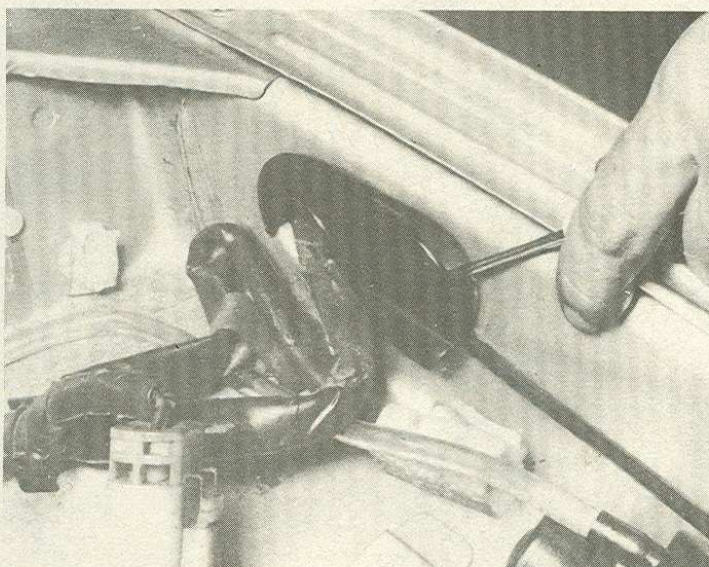
10.3a Remove the retaining bolts (arrows) securing the latch to the crossmember



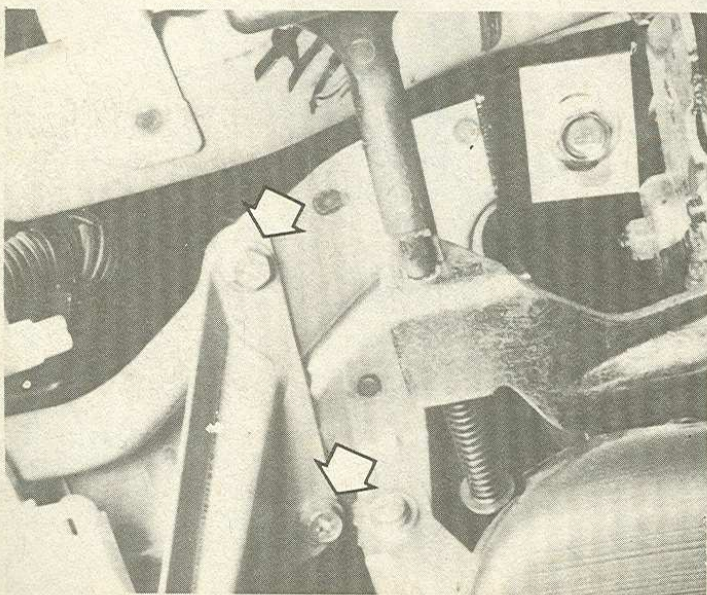
10.3b Press the lever with your thumb and remove the cable end from the lever



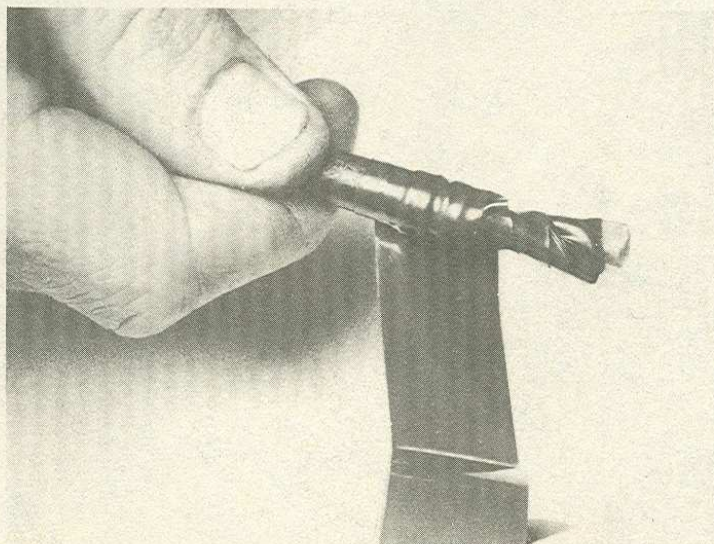
10.3c Hold the latch in one hand and pull the cable housing from the latch



10.5 Pry the plastic cable cover from the fender panel



10.7 Remove the hood latch release handle bolts



10.8 Attach a strong piece of line to the cable end and tape the connection to keep it from snagging when being fed through the fender

- 3 Remove the bolts securing the latch to the crossmember (see illustration). Lift the latch out of the recess in the crossmember, and while holding the release lever back with your thumb work the cable end from the latch (see illustration). Pull the cable housing from the latch (see illustration).
- 4 Working towards the fender, remove the cable from the plastic retaining clips.
- 5 Pry the plastic cable cover from the fender panel (see illustration).
- 6 Remove the lower dash trim panel to gain access to the hood latch release handle and securing bolts.
- 7 Working under the dash, remove the cable assembly by removing the two retaining bolts (see illustration).
- 8 Before pulling the cable through the fender and dash, attach a strong piece of line to the end of the cable and tape the connection to prevent snags while pulling the cable out (see illustration).
- 9 From the driver's compartment pull the cable through the dash.
- 10 Disconnect the cable from the guide line.
- 11 Connect the guide line to the new cable and tape the connection.
- 12 Gently pull the guide line, feeding the new cable through the dash and fender.
- 13 Once the cable is pulled completely through the fender, install the

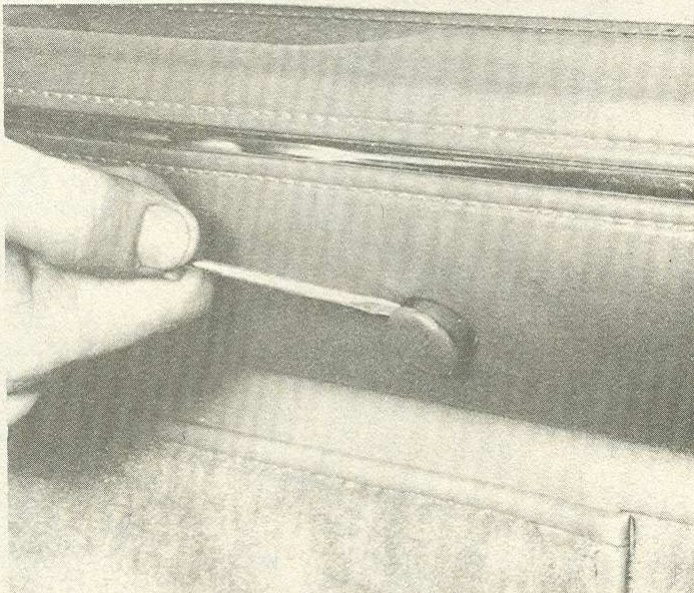
cable into its retaining clips and install the plastic cover in the fender panel.

- 14 Insert the cable end into the hood latch by pushing back on the actuating lever and inserting the cable end into its retaining recess on the latch.
- 15 Install the latch and align it with the mark made during removal.

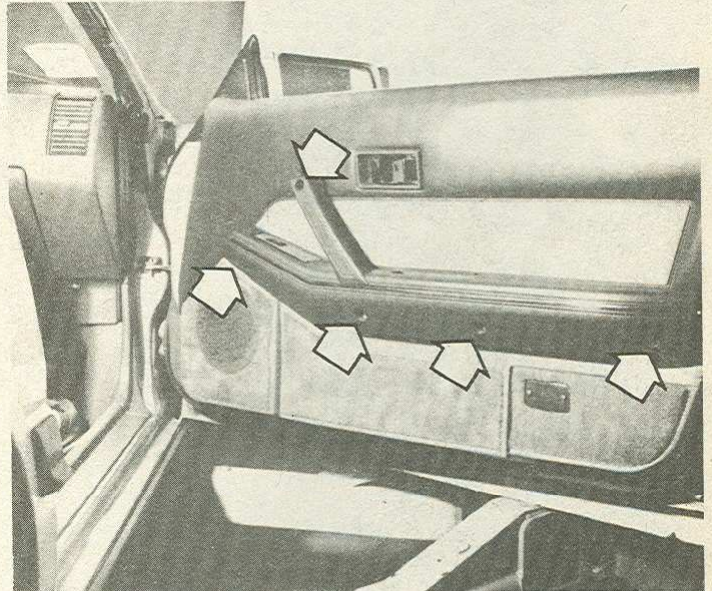
11 Door panel trim — removal and installation

Refer to illustrations 11.1, 11.2, 11.3, 11.4, 11.5, 11.6 and 11.7

- 1 Use a small screwdriver to pry out the arm rest retaining screw covers (see illustration).
- 2 Use a screwdriver to remove the arm rest retaining screws (see illustration).
- 3 Disconnect power window electrical connector by pressing down on the connector retaining tab and pulling the connector apart (see illustration).
- 4 Use a screwdriver to remove the screw attaching the door handle plastic cover (see illustration).



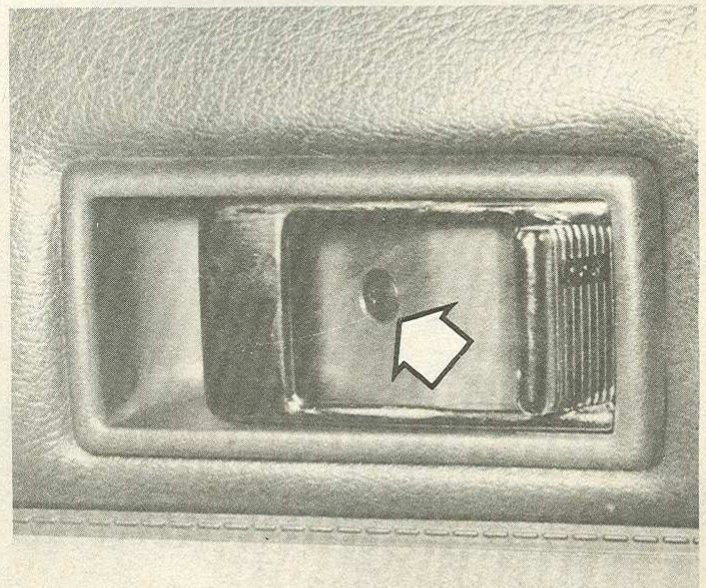
11.1 Pry out the arm rest retaining screw covers to gain access to the screws



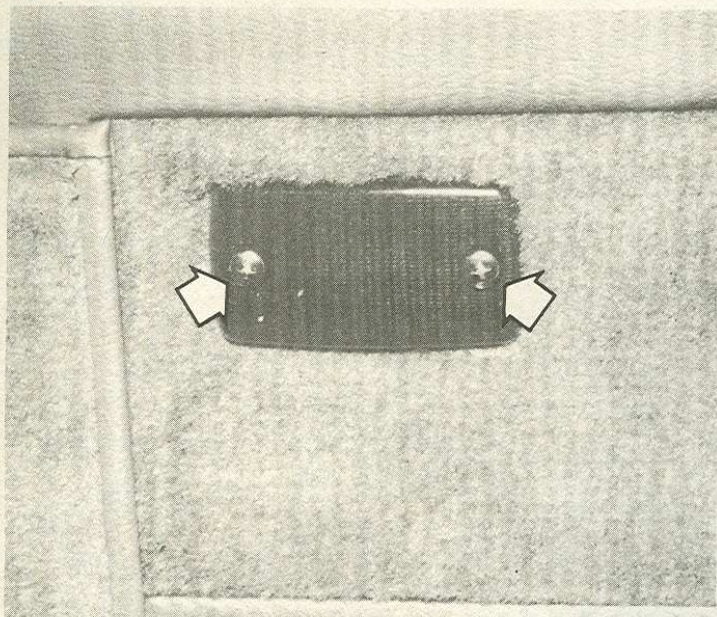
11.2 Remove the screws (arrows) attaching the arm rest to the door



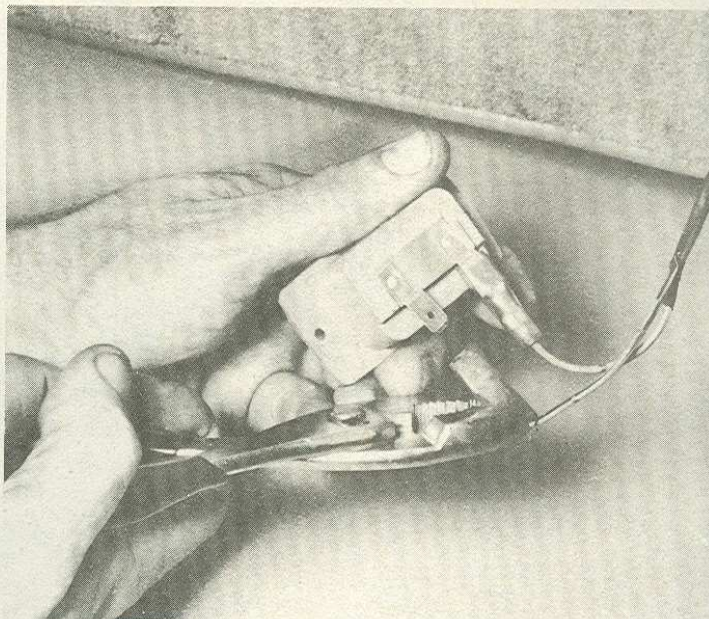
11.3 Disconnect the power window electrical connector



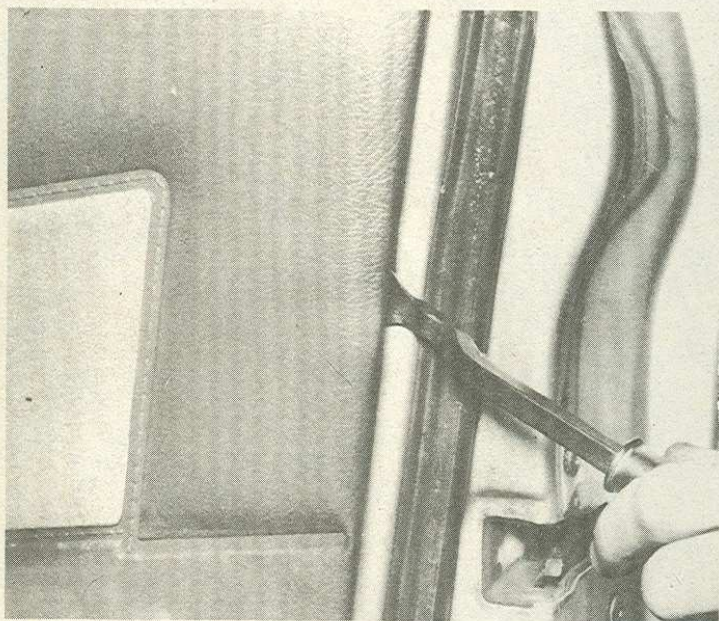
11.4 Use a screwdriver to remove the door handle retainer plastic cover



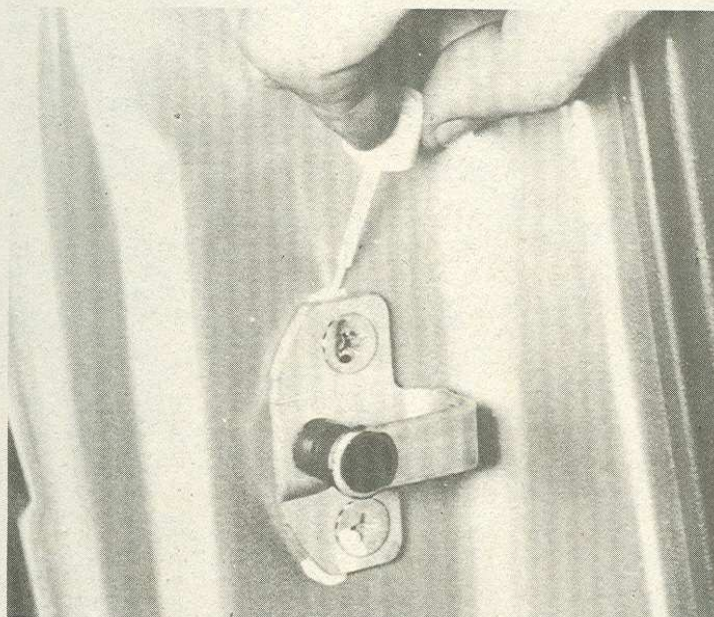
11.5 Remove the screws (arrows) holding the door safety light lens to the door



11.6 Unplug the electrical connectors from the the safety light switch



11.7 Pry the panel away from the door, being careful not to pull the plastic panel fasteners through the panel



12.1 Mark the alignment of the striker to the door before removing it

5 Use a screwdriver to remove the two screws attaching the door safety light lens to the door (see illustration).

6 Disconnect the electrical connectors from the safety light (see illustration).

7 Using a flat screwdriver or a panel removal tool, pry the panel away from the door, being careful not to pull the plastic panel fasteners through the panel (see illustration).

8 Remove the panel by sliding the panel away from the vehicle while lifting it up from the door.

9 Install the panel by pulling the electrical harnesses through their proper openings in the panel and sliding the inner most part of the panel into the rubber recess and aligning the panel fasteners. Press the fasteners into the door.

10 Connect the safety light electrical connectors.

11 Install the safety light lens.

12 Install the door handle release plastic cover.

13 Hold the arm rest next to the panel and connect the power window electrical connector.

14 Place the arm rest onto the panel and secure with the five attaching screws.

15 Insert the arm rest retaining screw covers and press them in firmly.

12 Door latch striker — removal and installation

Refer to illustration 12.1

1 Make an alignment mark to show the relation of the striker to the door jamb to facilitate proper installation (see illustration).

2 Remove the two retaining screws.

3 Installation is the reverse of the removal procedure. Align the striker with the mark made during removal.

13 Door latch — removal and installation

Refer to illustrations 13.2 and 13.3

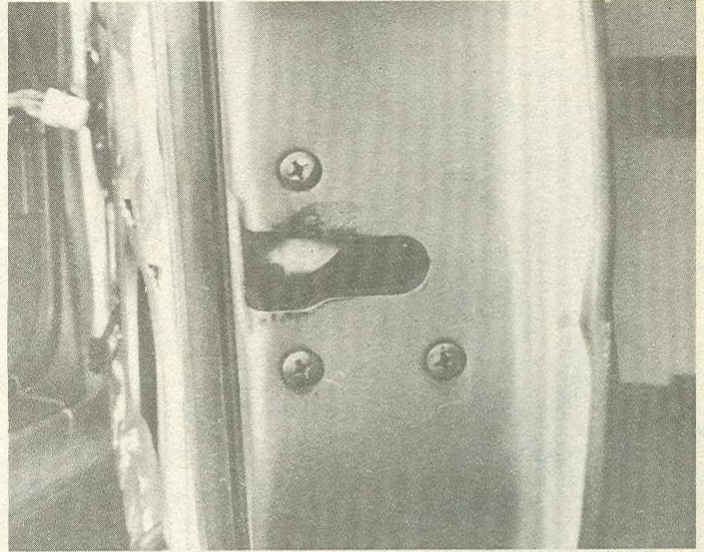
1 Remove the door trim panel (Section 11).

2 Disconnect the door latch control rods by pressing down on the yellow plastic fasteners, releasing the fastener from the rod (see illustration). Remove the rod by pulling it out of the fastener.

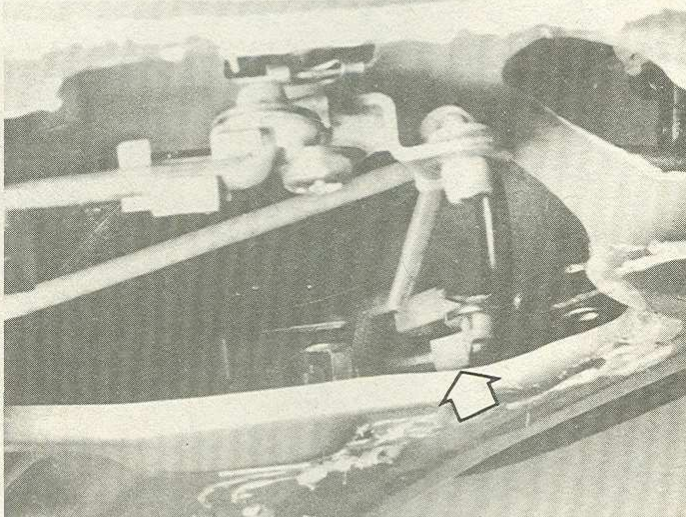
3 Remove the latch-to-door screws (see illustration) and work the latch from the door.



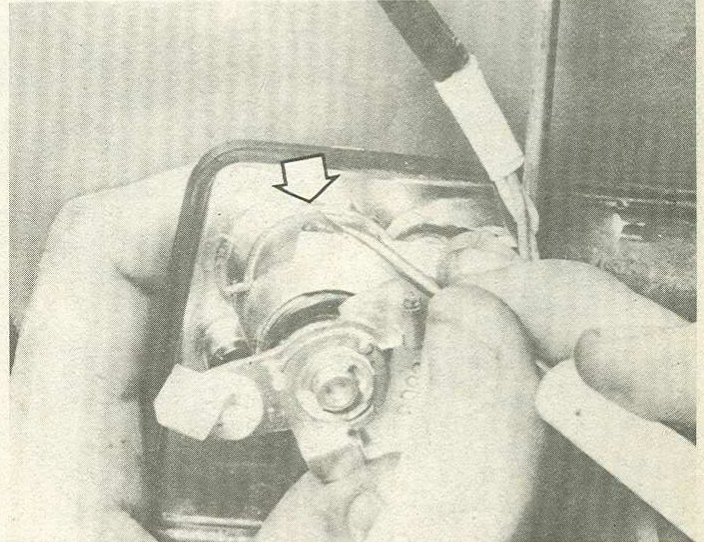
13.2 Press down on the yellow plastic fasteners (arrows) to release the rods



13.3 Remove the screws attaching the door latch to the door



14.5 Use a long screwdriver to press down on the yellow plastic fastener (arrow) to release the rod from the latch actuator



14.6 Pry the key cylinder retaining clip (arrow) up to release the cylinder lock

4 Install the latch by working it up through the inside of the door and placing it in the recess on the door end. Secure it with the three screws.

5 Connect the door latch control rods by pressing the ends of the rods into the yellow fasteners and securing it by turning the fastener up and snapping it to the rod.

6 Install the door trim.

14 Door lock cylinder — removal and installation

Refer to illustrations 14.5, 14.6 and 14.7

1 Remove the door trim panel (Section 11).

2 If equipped, disconnect the cylinder lock electrical connector.

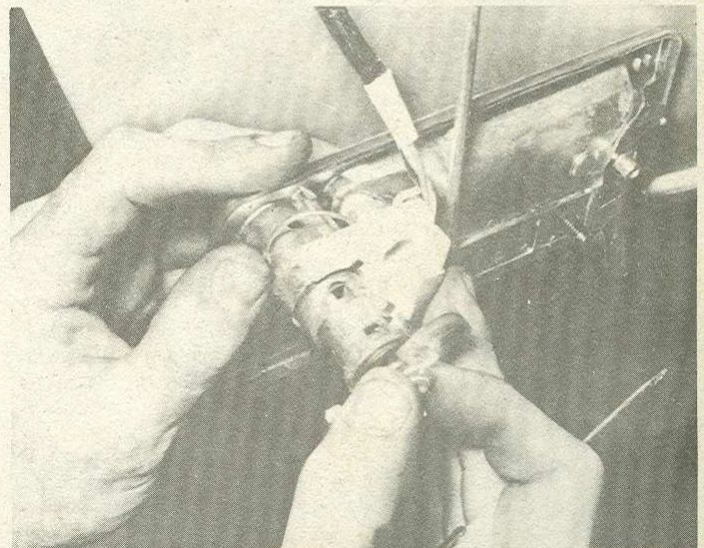
3 Remove the two nuts securing the door handle assembly to the door.

4 Pull the anti-theft shield away from the door handle.

5 Use a screwdriver to disconnect the cylinder lock-to-latch actuating lever operating rod by pushing down on the yellow plastic rod fastener (see illustration) and pull the rod end from the latch actuator.

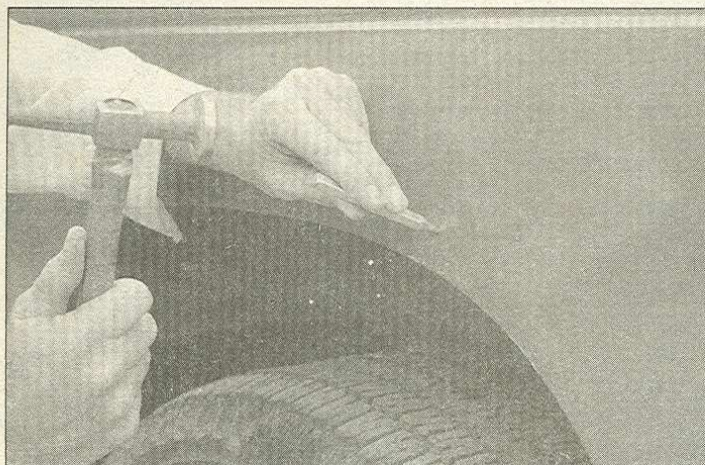
6 Lift the handle out of the door and pry the key cylinder retaining clip (see illustration) up to release the cylinder lock.

7 Pull the cylinder lock from the cylinder lock housing (see illustration).

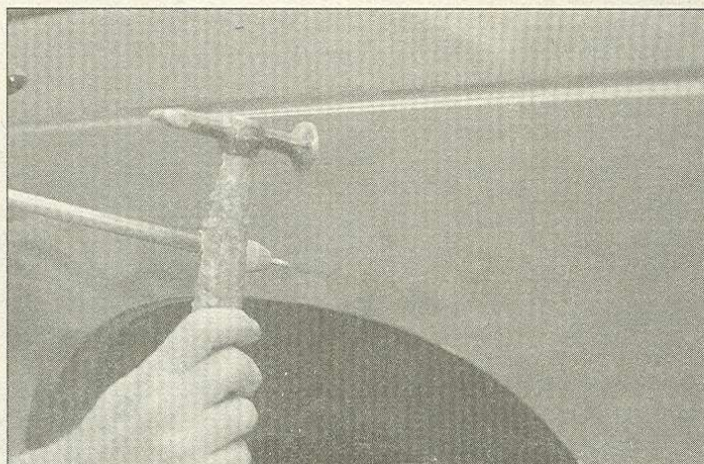


14.7 The cylinder lock can now be pulled from the housing

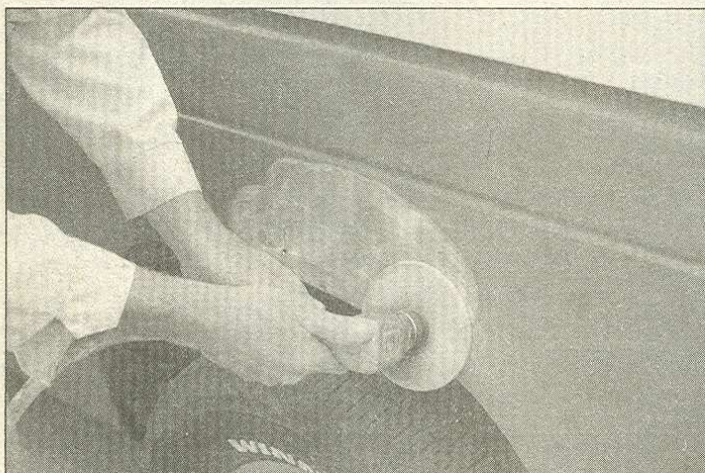
These photos illustrate a method of repairing simple dents. They are intended to supplement *Body repair - minor damage* in this Chapter and should not be used as the sole instructions for body repair on these vehicles.



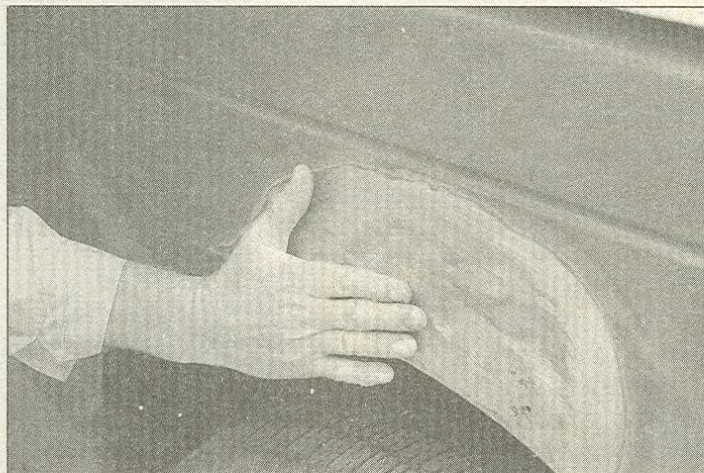
1 If you can't access the backside of the body panel to hammer out the dent, pull it out with a slide-hammer-type dent puller. In the deepest portion of the dent or along the crease line, drill or punch hole(s) at least one inch apart . . .



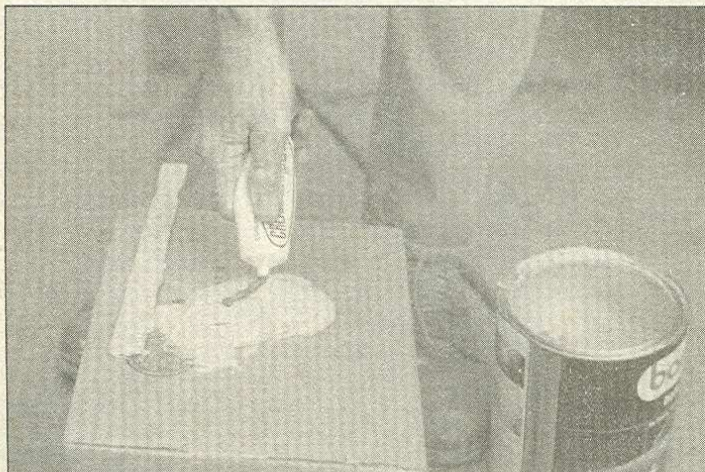
2 . . . then screw the slide-hammer into the hole and operate it. Tap with a hammer near the edge of the dent to help 'pop' the metal back to its original shape. When you're finished, the dent area should be close to its original contour and about 1/8-inch below the surface of the surrounding metal



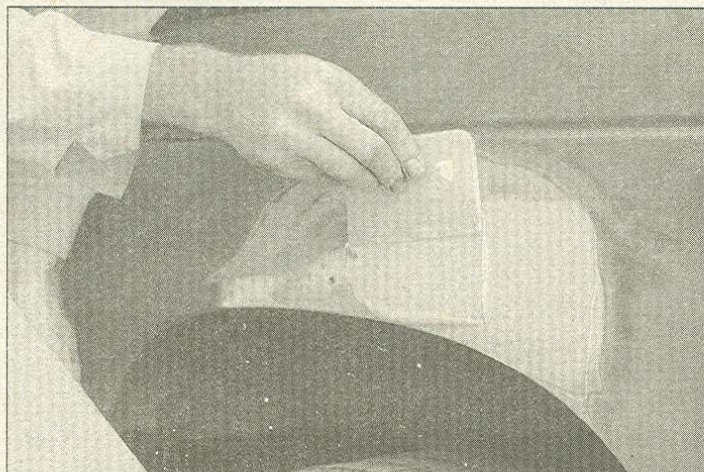
3 Using coarse-grit sandpaper, remove the paint down to the bare metal. Hand sanding works fine, but the disc sander shown here makes the job faster. Use finer (about 320-grit) sandpaper to feather-edge the paint at least one inch around the dent area



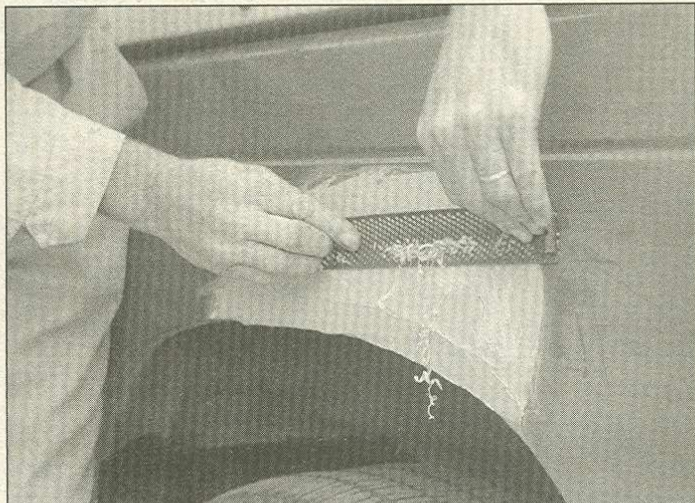
4 When the paint is removed, touch will probably be more helpful than sight for telling if the metal is straight. Hammer down the high spots or raise the low spots as necessary. Clean the repair area with wax/silicone remover



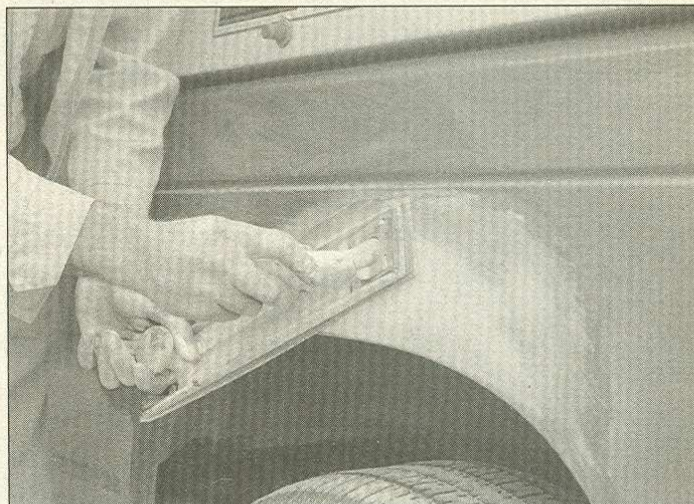
5 Following label instructions, mix up a batch of plastic filler and hardener. The ratio of filler to hardener is critical, and, if you mix it incorrectly, it will either not cure properly or cure too quickly (you won't have time to file and sand it into shape)



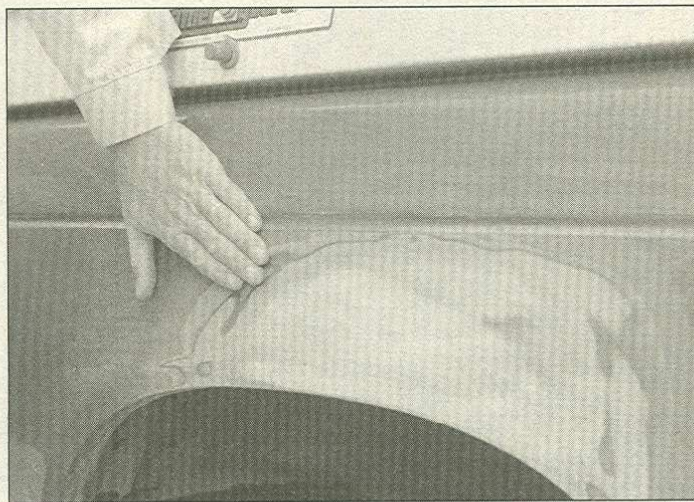
6 Working quickly so the filler doesn't harden, use a plastic applicator to press the body filler firmly into the metal, assuring it bonds completely. Work the filler until it matches the original contour and is slightly above the surrounding metal



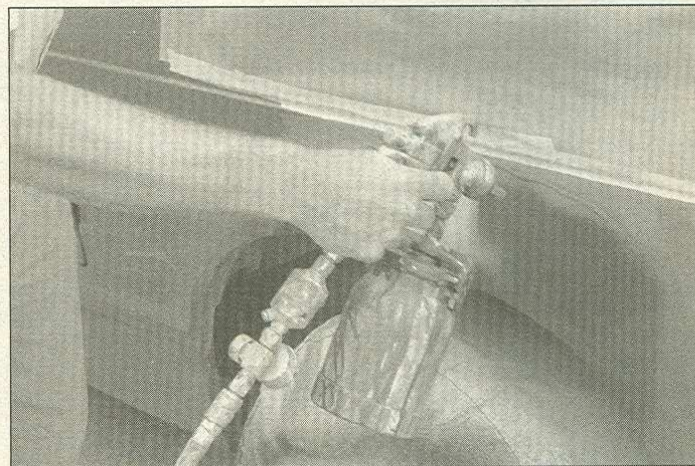
7 Let the filler harden until you can just dent it with your fingernail. Use a body file or Surform tool (shown here) to roughen the filler



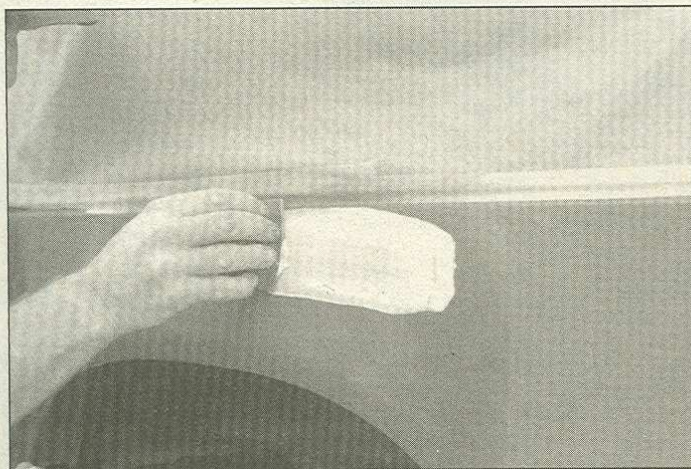
8 Use coarse-grit sandpaper and a sanding board or block to work the filler down until it's smooth and even. Work down to finer grits of sandpaper - always using a board or block - ending up with 360 or 400 grit



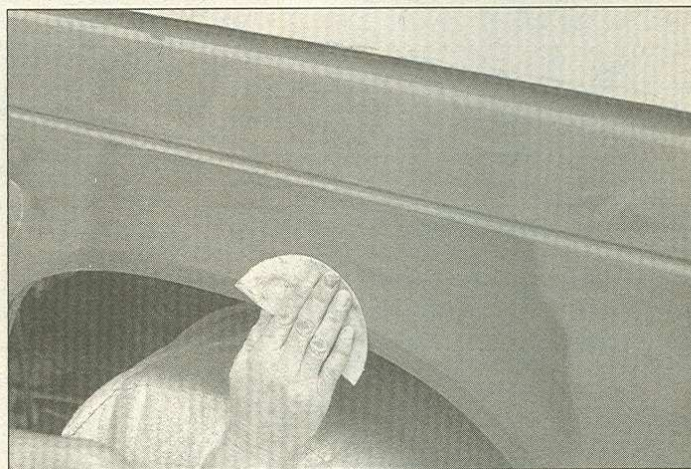
9 You shouldn't be able to feel any ridge at the transition from the filler to the bare metal or from the bare metal to the old paint. As soon as the repair is flat and uniform, remove the dust and mask off the adjacent panels or trim pieces



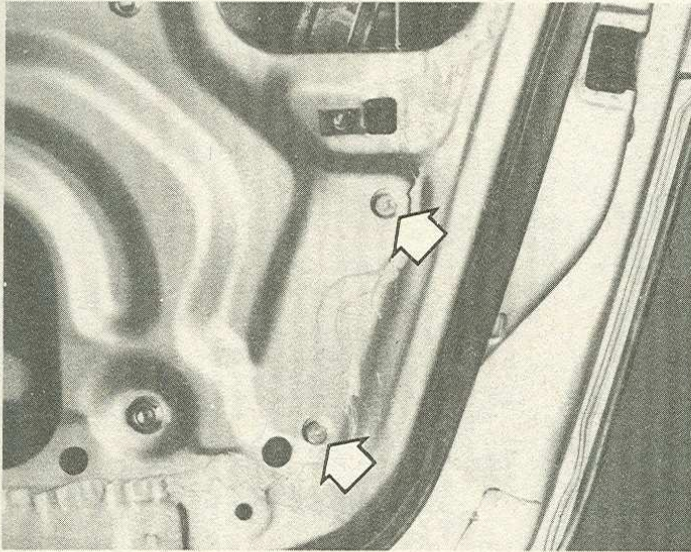
10 Apply several layers of primer to the area. Don't spray the primer on too heavy, so it sags or runs, and make sure each coat is dry before you spray on the next one. A professional-type spray gun is being used here, but aerosol spray primer is available inexpensively from auto parts stores



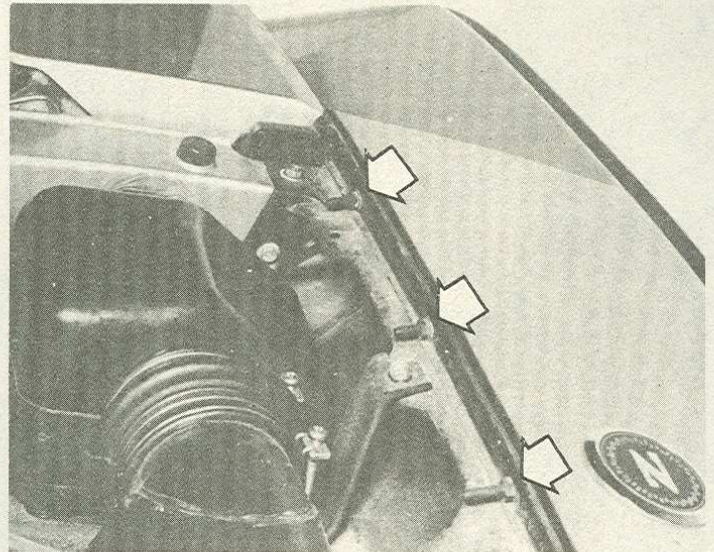
11 The primer will help reveal imperfections or scratches. Fill these with glazing compound. Follow the label instructions and sand it with 360 or 400-grit sandpaper until it's smooth. Repeat the glazing, sanding and respraying until the primer reveals a perfectly smooth surface



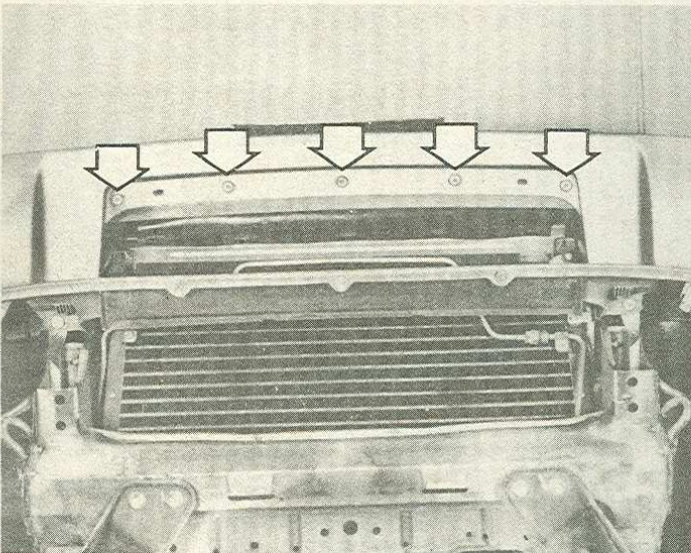
12 Finish sand the primer with very fine sandpaper (400 or 600-grit) to remove the primer overspray. Clean the area with water and allow it to dry. Use a tack rag to remove any dust, then apply the finish coat. Don't attempt to rub out or wax the repair area until the paint has dried completely (at least two weeks)



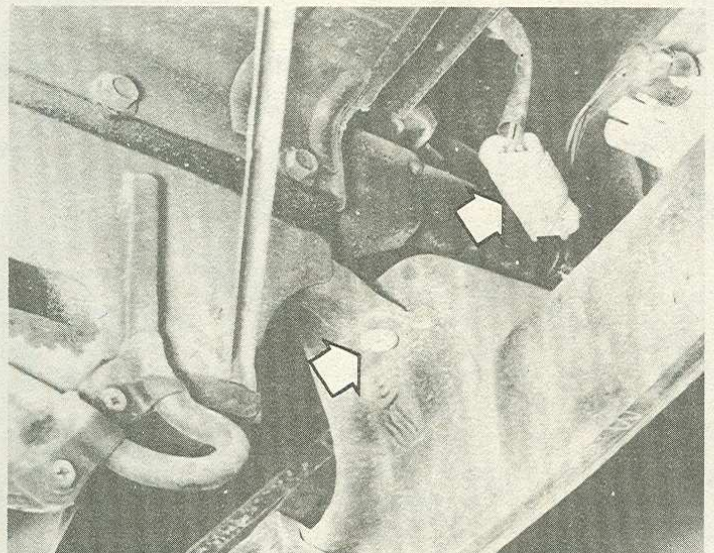
15.3 Remove the electric door lock bolts (arrows)



16.2 Remove the top apron bolts (left three bolts shown, three more on the right side)



16.3 From underneath the apron remove the screws attaching the bottom of the apron to the bumper (arrows)



16.4 Disconnect the turn signal (arrow) and remove the screw located close to the bracket (arrow) on both sides of the vehicle

- 8 Install the cylinder lock into the housing and secure by pressing down on the key cylinder retaining clip.
- 9 Insert the handle into the door, making sure the door latch control rod slides into its actuating arm.
- 10 Connect the cylinder lock-to-latch operating lever and secure it by turning the yellow plastic fastener up and snapping it to the rod.
- 11 Install the anti-theft shield on the door handle.
- 12 Install and tighten the two handle retaining nuts.
- 13 Check the lock and door handle for proper operation.
- 14 Install the door trim panel.

15 Electric door lock actuating solenoid — removal and installation

Refer to illustration 15.3

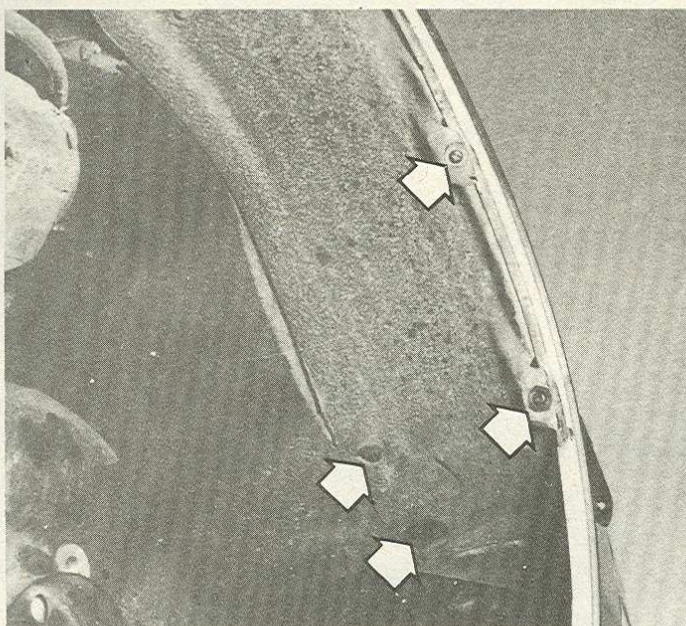
- 1 Remove the door trim panel (Section 11).
- 2 Disconnect the door lock actuating rod by disconnecting the yellow plastic fastener. Press down on the fastener to release it from the rod then pull the rod end out of the fastener.
- 3 Remove the bolts securing the electric door lock to the door (see illustration).

- 4 Remove the solenoid and follow the electrical wire harness to the connector and disconnect the connector.
- 5 Install the solenoid by connecting the electrical connector and installing the solenoid inside the door.
- 6 Install and tighten the bolts securing the electrical door lock to the door.
- 7 Connect the door lock actuating rod by inserting the end of the rod into the yellow fastener attached to the actuating lever. Turn the end of the fastener up and snap the fastener onto the rod.
- 8 Check the electric door lock solenoid for proper operation.
- 9 Install the door trim panel.

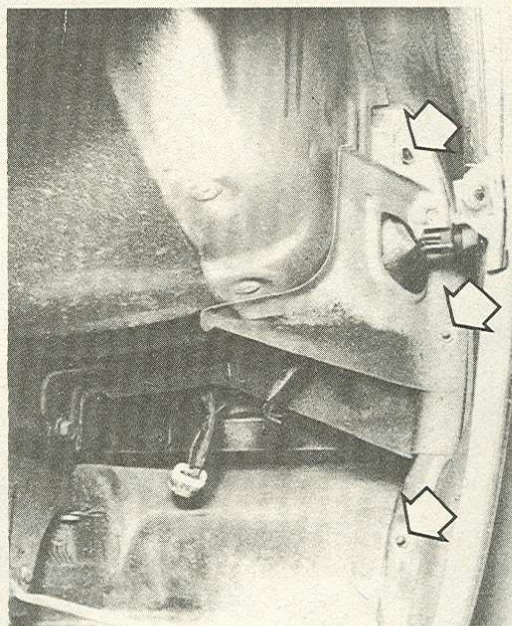
16 Front apron — removal and installation

Refer to illustrations 16.2, 16.3, 16.4, 16.5 and 16.6

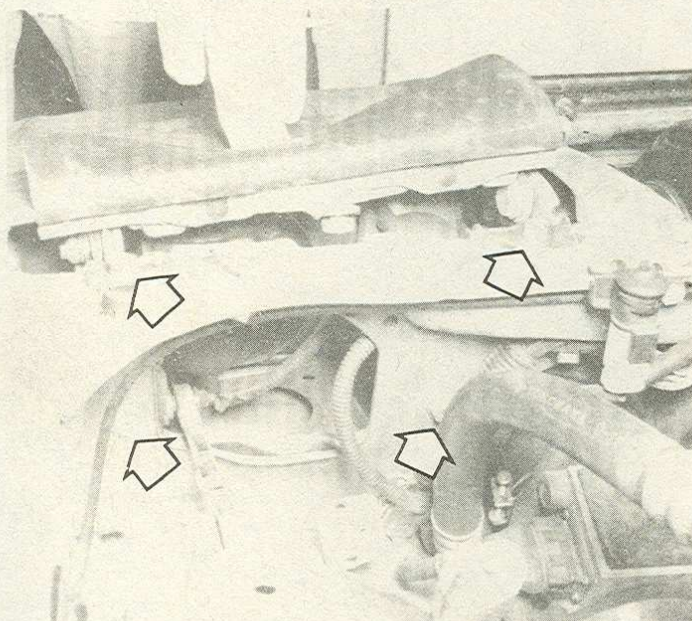
- 1 Raise the hood.
- 2 Remove the bolts (see illustration) securing the top of the apron to the body.
- 3 From underneath the apron, remove the screws attaching the bottom of the apron to the bumper (see illustration).
- 4 Disconnect the turn signal electrical connector and remove the



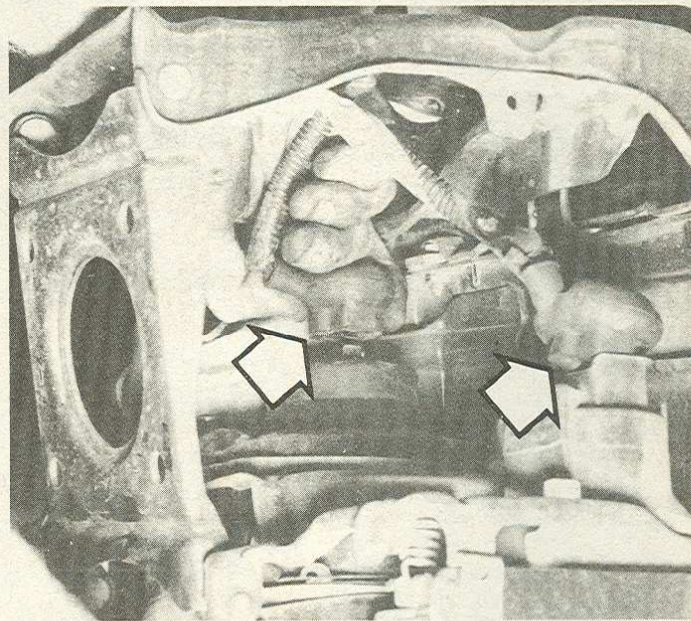
16.5 Remove the inner splash shield lower four screws



16.6 Remove the nuts retaining the apron to the fender (arrows)



17.2 Remove the headlight case bracket bolts (arrows)



17.4 Reach inside the headlight case and disconnect the headlight electrical connectors (arrows)

screw close to it (see illustration) attaching the bottom of the apron to the frame bracket. Do this on both sides of the vehicle.

5 Remove the lowest four inner splash shield screws (see illustration). **Note:** It will make this job easier if you raise the front of the vehicle, support it on jackstands and remove the front wheels.

6 Remove the apron to fender mounting nuts on each side of the apron (see illustration). Lift the apron from the vehicle.

7 Install the apron by inserting the apron mounting studs through their respective mounting holes in the fender and install the nuts.

8 Install the inner splash shield and secure it with the four screws.

9 Connect the turn signal electrical connectors and install the apron lower mounting screws.

10 Install the five screws attaching the bottom of the apron to the bumper.

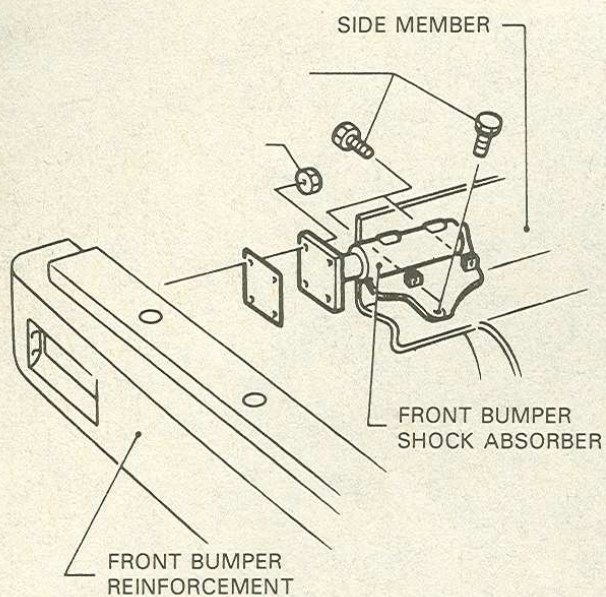
11 If removed, replace the wheels and remove the jackstands before lowering the vehicle.

12 Install the six bolts securing the top of the apron to the body.

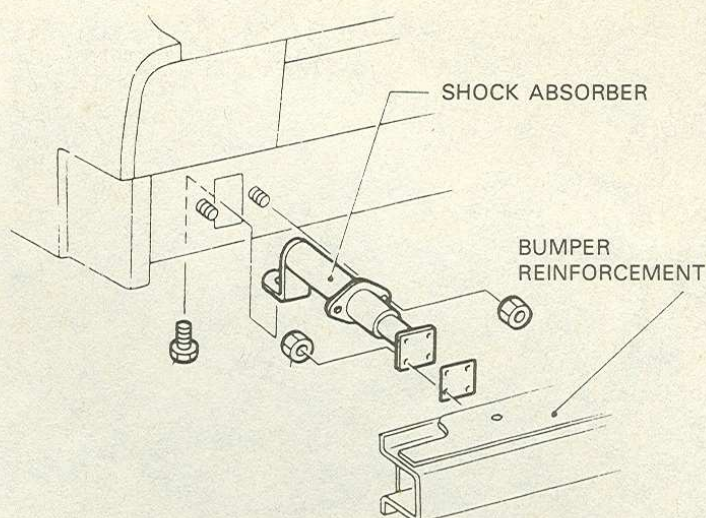
17 Headlight case — removal and installation

Refer to illustrations 17.2 and 17.4

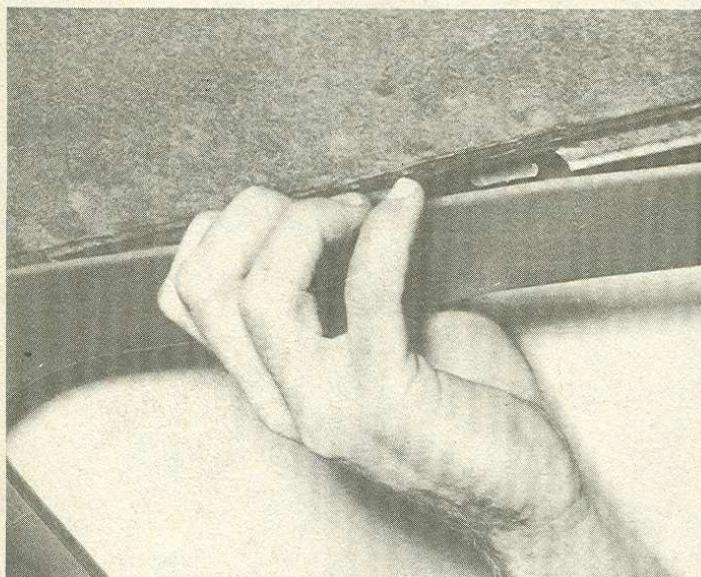
- 1 Remove the headlight motor (Chapter 12).
- 2 Remove the headlight case bracket bolts (see illustration).
- 3 Lift the headlight case up and disconnect the wire harness retaining clips.
- 4 Disconnect the two electrical connectors by pulling them from the lights (see illustration). Lift the case out.
- 5 Install the headlight box by connecting the two light electrical connectors.
- 6 Place the headlight case into the apron cavity, making sure the motor adjusting rod goes through the crossmember opening. Secure the box with the four bracket bolts.
- 7 Install and adjust the headlight motor.



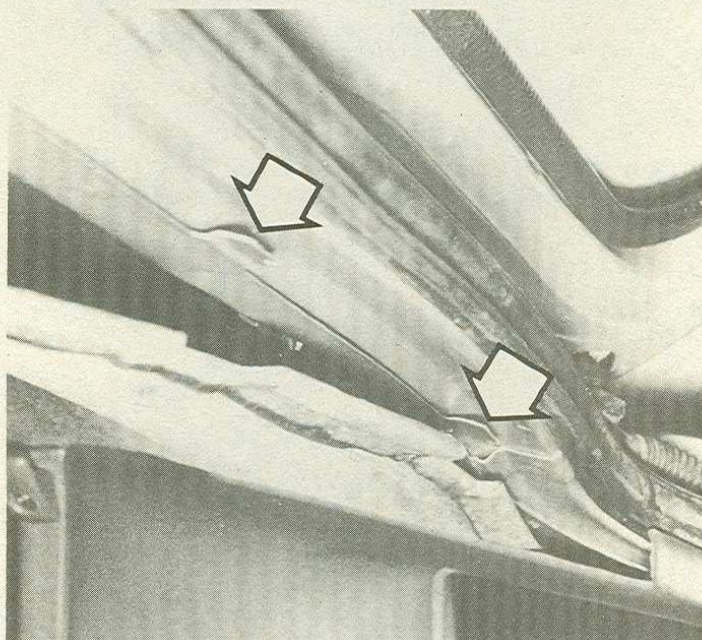
18.1a The front bumper energy absorber will compress upon a five mph impact and return to its original position after impact



18.1b The rear bumper absorber is capable of handling 5 mph impacts



19.3a Pull the headliner trim piece rearward to release the spring type clip retainers



19.3b Spring type clips hold the headliner trim piece in place

18 Bumpers and energy absorbers — general information

Refer to illustrations 18.1a and 18.1b

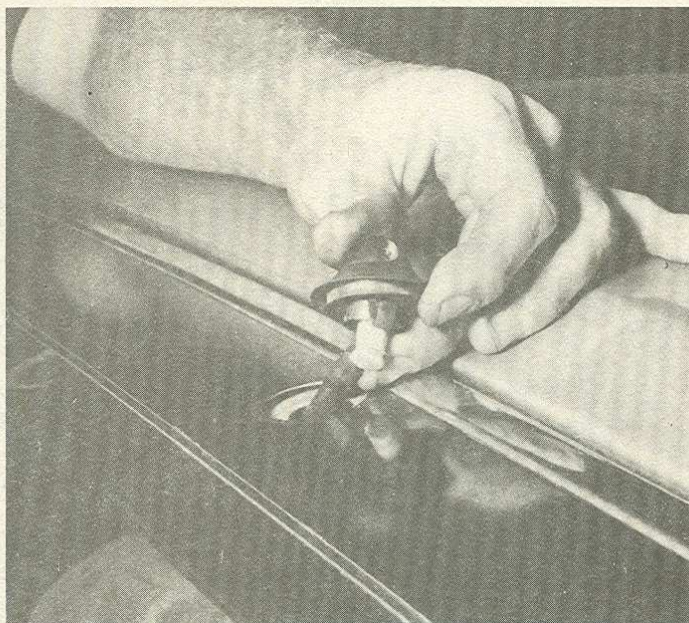
- 1 Both the front and rear bumpers are equipped with gas/hydraulic energy absorbers (see illustrations) designed to withstand a collision into a fixed barrier at up to five mph without damage.
- 2 After any collision, the energy absorbers should be inspected. If obvious physical damage or leaking oil is evident, the unit should be replaced. These absorbers are not designed to be disassembled and, if defective, should be replaced as a unit.
- 3 Due to the gas contained in the units, never apply heat to an energy absorber or weld in its vicinity.

19 Rear hatch — removal, installation and adjustment

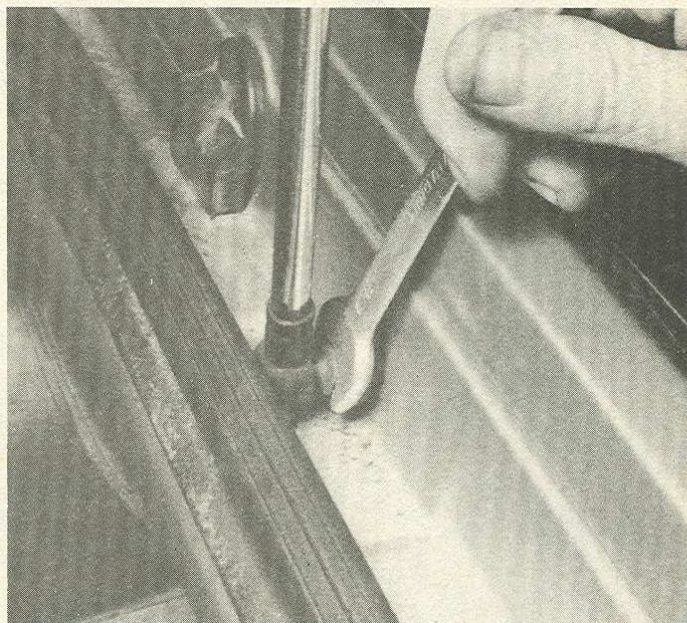
Refer to illustrations 19.3a, 19.3b, 19.7, 19.9, 19.10 and 19.17

- 1 Before opening the hatch, note alignment of the hatch in relation to the body on all four sides.

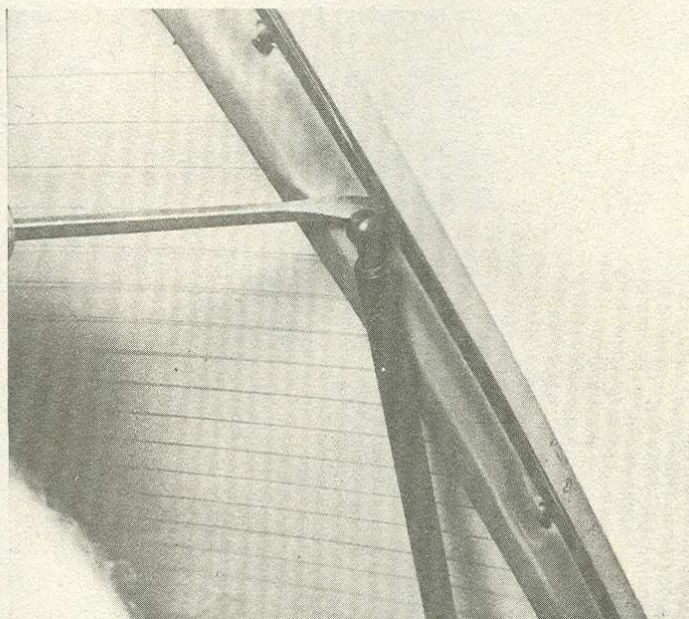
- 2 Open the hatch.
- 3 Sitting inside the luggage compartment facing the front of the vehicle, grasp the rear headliner trim piece (see illustration) and pull backwards to release the five spring type retaining clips (see illustration) attaching the trim piece to the body.
- 4 Remove the lower hatch trim panel.
- 5 Disconnect the three electrical connectors inside the bottom of the hatch and release the wiring harness from the plastic retaining clips.
- 6 Attach a strong piece of line to the wiring harness and tape the connection. Pull the harness through the hatch from the body side (top), leave a few feet of line exposed at each end. As a precaution, tape the ends of the guide line to the hatch to keep the line from falling out.
- 7 Use a small screwdriver to pry up on the washer nozzle to release it from the exterior trim piece (see illustration).
- 8 Disconnect the nozzle from the rubber hose and attach a strong piece of line to the rubber feed hose and tape the connection. Pull the hose through the hatch from the body side. Leave a few feet of line exposed at each end. As a precaution, tape the ends of the guide line to the hatch to keep the line from falling out.
- 9 Use a piece of wood to support the hatch and remove the lower



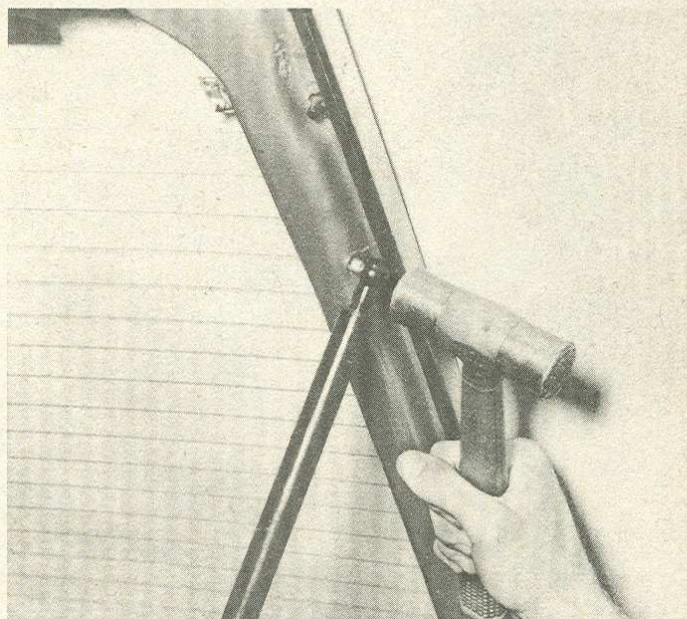
19.7 The rear window washer nozzle can be pried out of its hatch recess to disconnect the fluid feed hose



19.9 The bottom of the hydraulic stay can be screwed out



19.10 Use a screwdriver to pop the stay off of the ball



19.17 Use a soft face hammer to knock the hydraulic stay back onto the ball

attaching bolt securing the hydraulic stay (see illustration).

10 If removing only the stay, place the free end of the stay up near the hatch and use a screwdriver (see illustration) to pry the socket from the ball.

11 To remove the hatch, hold down on the headliner to expose the hatch hinge retaining nuts and use a ratchet and socket to remove the nuts.

12 Have an assistant help remove the hatch by lifting straight up to release the hinge bolts from the body mountings. Disconnect the guide line from the hatch.

13 Install the hatch with the help from an assistant. Insert the hinge bolts into the body mountings and loosely install the nuts.

14 Attach the guide line to the wiring harness and tape the connection. **Note:** *Spray the harness with silicone spray to reduce drag on the harness.*

15 Repeat Step 14 to install the rear washer hose and connect the hose to the spray nozzle.

16 Install the spray nozzle by pressing it into the recess on the outside

of the hatch.

17 Install and tighten the bottom hydraulic stay securing bolt. If the top was removed, use a soft face hammer to carefully force it onto the ball (see illustration).

18 Carefully lower the hatch until it latches. From the rear of the vehicle note the hatch alignment at all four corners and adjust by moving the hatch until it is squarely placed on the body.

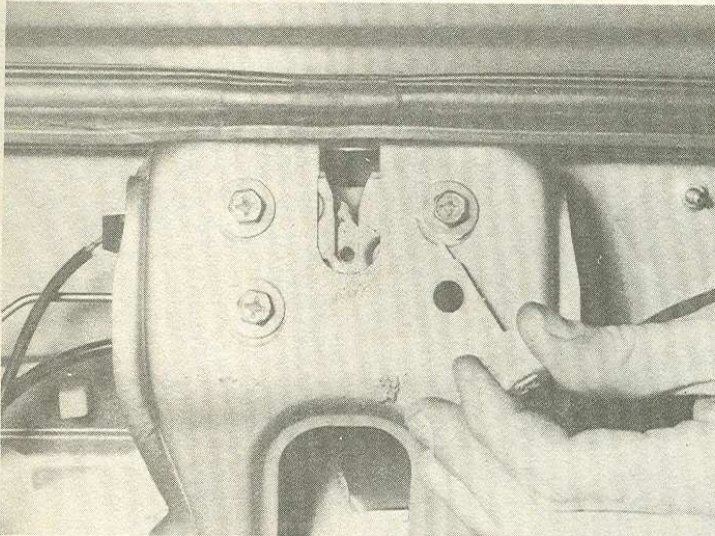
19 From inside the vehicle, without disturbing the hatch alignment, tighten the hinge nuts.

20 Install the trim pieces.

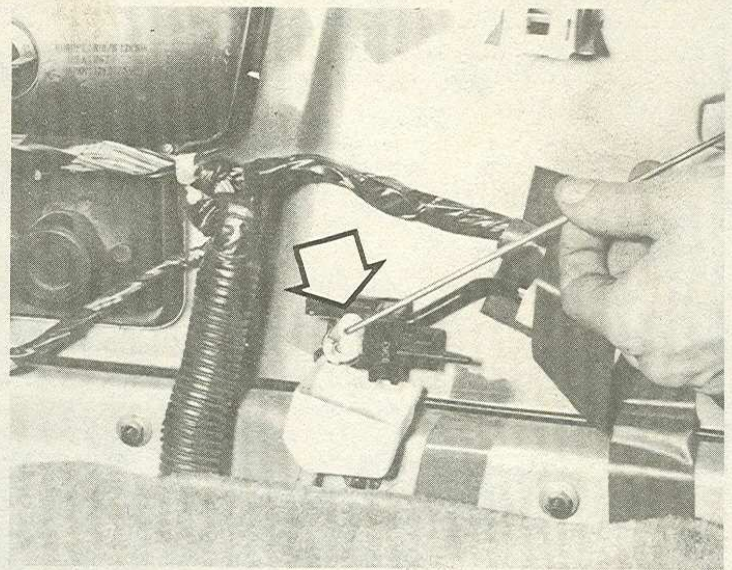
20 Rear hatch latch — removal and installation

Refer to illustrations 20.3, 20.4 and 20.6

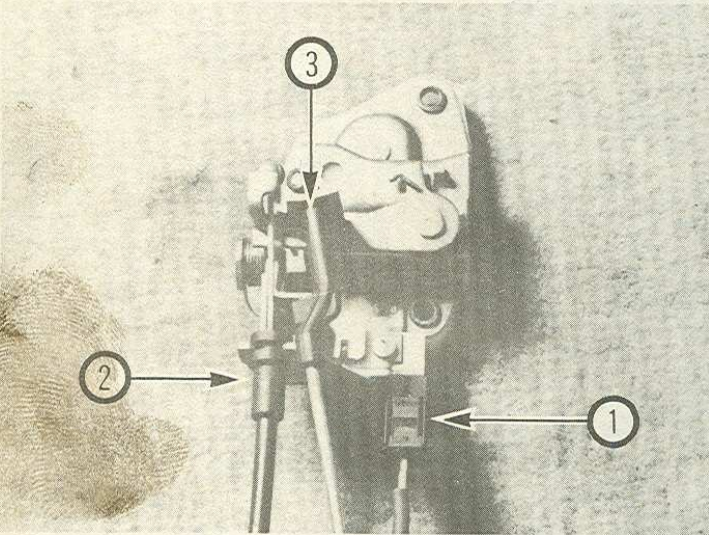
- 1 Open the hatch.
- 2 Remove the rear interior trim panel to expose the rear hatch latch.



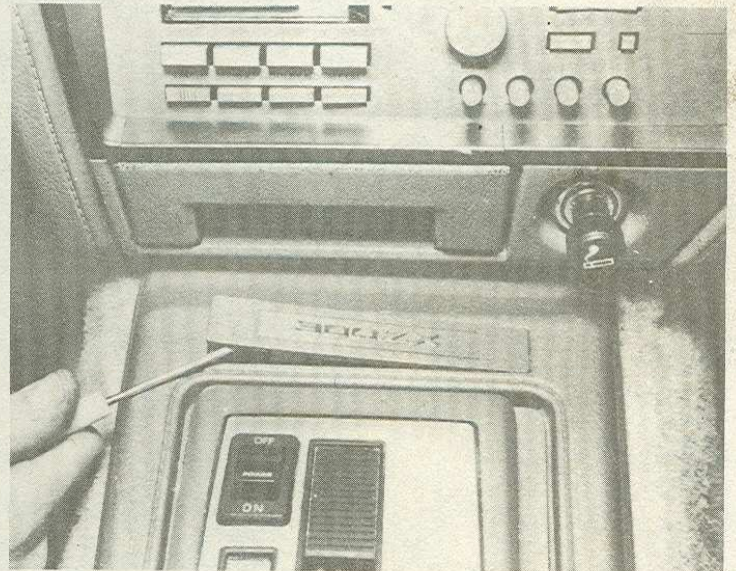
20.3 Before removing the latch, mark its position in relation of the body



20.4 Press down on the white fastener (arrow) to release the rod, then pull the end of the rod from the fastener/actuating lever

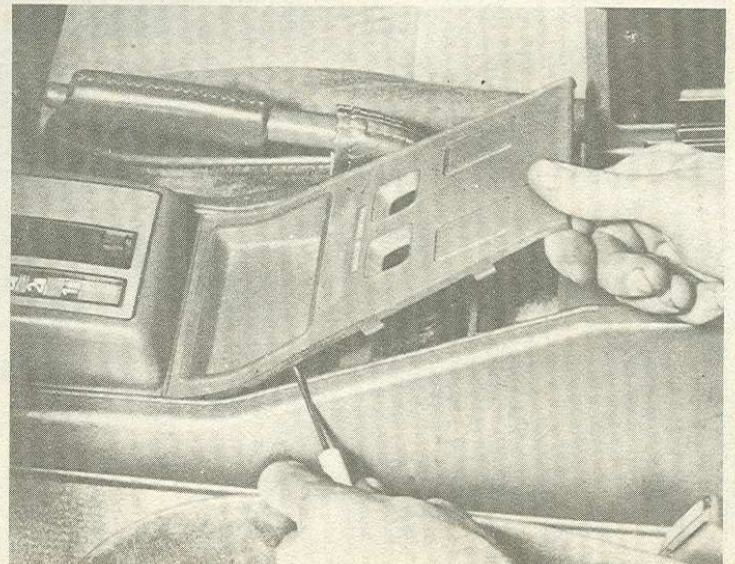


20.6 Disconnect the latch by unplugging the electrical connector (1), removing the cable housing from the latch recess (2) and disconnecting the cable end. Turn the actuating rod sideways until the end (3) can be removed from the latch



21.1 Pry the emblem on the front of the console up to remove it

- 3 Using a marker, mark the position of the latch by outlining the relationship of the latch bolts to the body (see illustration).
- 4 Disconnect the cylinder lock actuating rod at the cylinder lock by pressing down on the white plastic fastener to release the rod, then pull the end of the rod from the fastener/actuating lever (see illustration).
- 5 Remove the three latch mounting bolts and work the latch out of the body.
- 6 Disconnect the electrical connector (see illustration).
- 7 Lift the cable end from its retaining recess and pry the cable housing from the latch.
- 8 Lift the cylinder lock actuating rod and turn the rod until the rod can be removed from the latch.
- 9 Install the cable end into the retaining recess on the latch and press the cable housing onto the latch. Place the end of the cylinder lock actuating rod in the latch actuator and turn it to secure it to the latch. Connect the electrical connector.
- 10 Place the latch into position and loosely install the latch bolts. Connect the actuating rod to the cylinder lock and fasten it with the plastic fastener.
- 11 Align the latch retaining bolts with the marks made during removal and tighten the bolts.
- 12 Check the operation of the latch and adjust if necessary by loosening the retaining bolts and moving the latch into correct alignment.
- 13 Install the rear trim piece.



21.2 Pry up the switch cover plate

21 Console — removal and installation

Refer to illustration 21.1 and 21.2

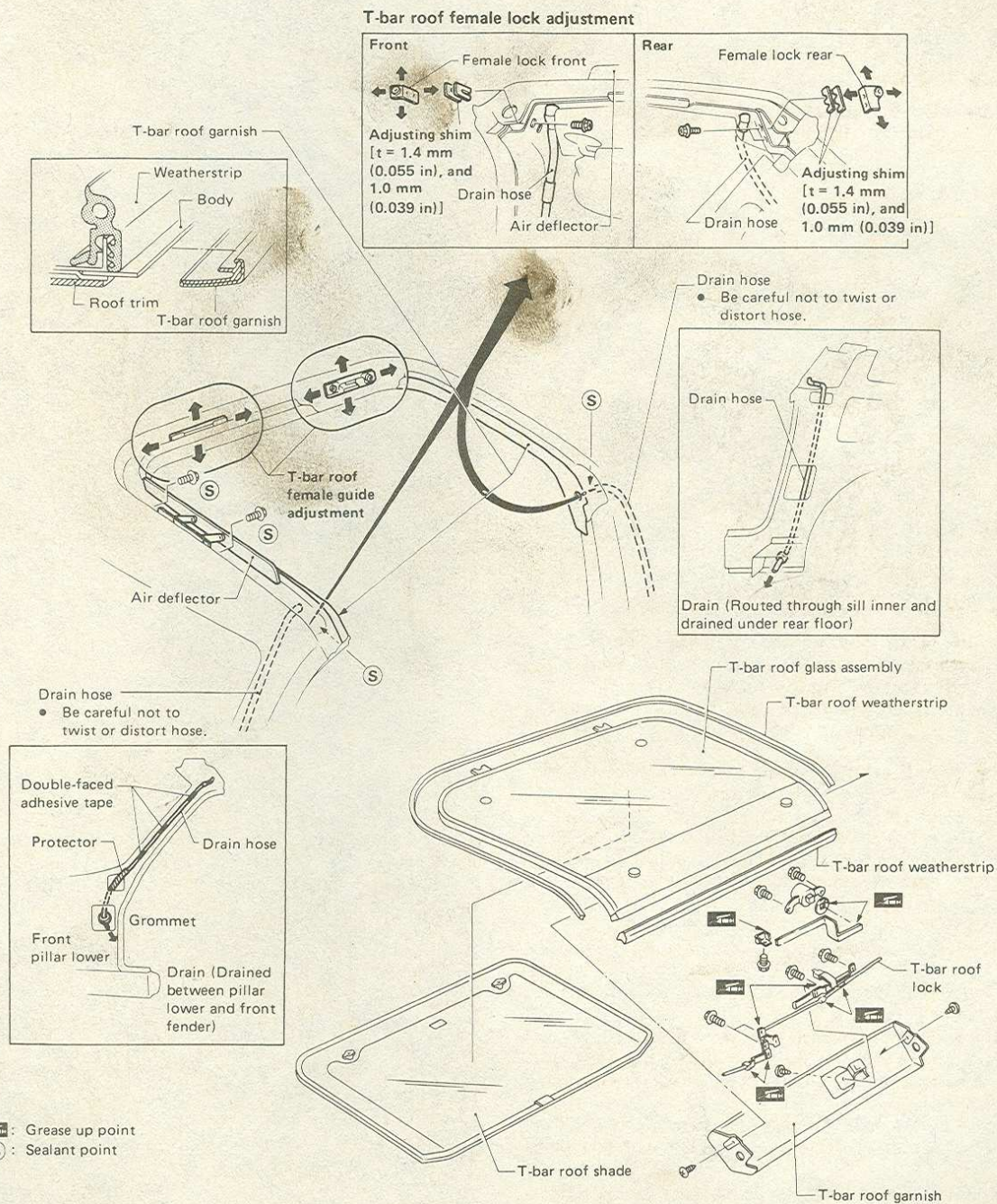
- 1 Use a small screwdriver to pry up the 300ZX emblem at the front of the console (see illustration).
- 2 Open the console compartment lid and use a small screwdriver to pry up on the switch cover plate, which is held in place in eight places (see illustration).
- 3 Use a screwdriver to remove the console retainers. Two of the screws are located in the front, one at the back of the shifter and three inside the compartment.
- 4 Raise the console. Note and disconnect any electrical connectors.

- 5 Install by placing the console in position and connecting electrical connectors.
- 6 Install the console retainers.
- 7 Install the switch cover and snap it in place by pressing down.
- 8 Install the 300ZX emblem by snapping it in place.

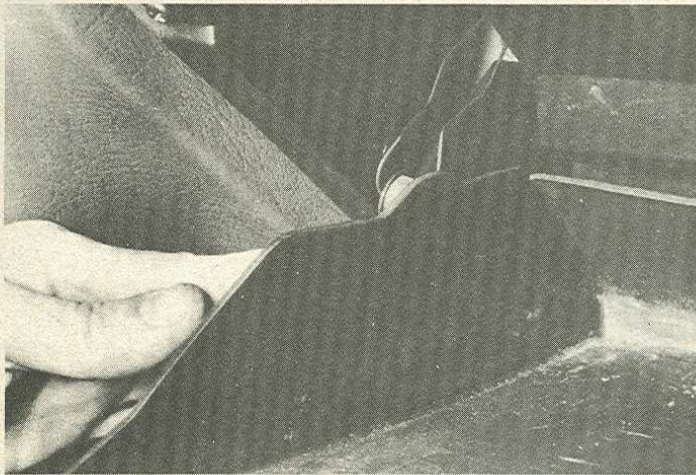
22 T-bar roof — general description

Refer to illustration 22.1

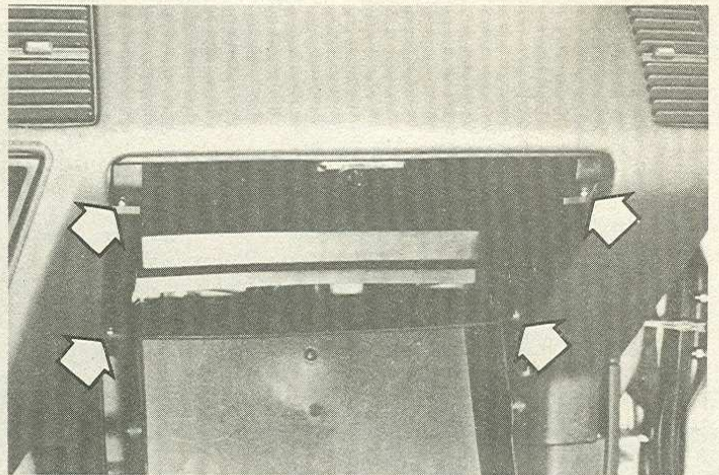
- 1 The T-bar roof (see illustration) is made of glass and should be handled with care.



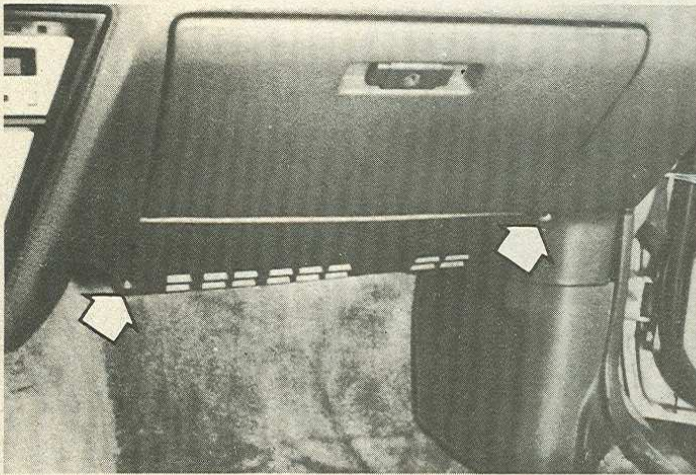
22.1 T-bar roof components



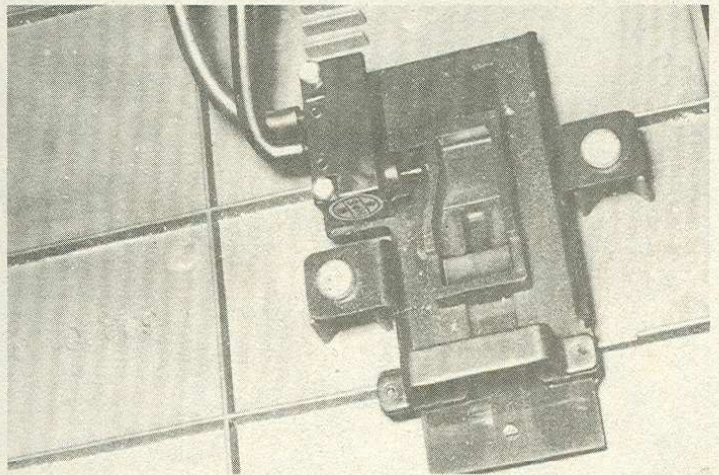
23.1 Press in the sides of the glove box to release the stops



23.2 To remove the glove box, remove the Phillips head screws (arrows)



23.5 Remove the Phillips head screws to remove the passenger side lower trim panel



23.13 Disconnect the vacuum lines to free the panel

- 2 If necessary apply sealant to portions susceptible to water leakage.
- 3 The side molding, sash, lock basement and the glass of the T-bar roof constitute one unit which cannot be disassembled.
- 4 Latch adjustments can be made by loosening the fasteners and moving the latch into position, then securing the fasteners.
- 5 Apply a thin coat of grease to the areas indicated in illustration 22.1.

23 Interior trim — removal and installation

Refer to illustrations 23.1, 23.2, 23.5, 23.13, 23.19, 23.22, 23.25, 23.30 and 23.34

Glove box

- 1 Open the glove box and press the sides inward to release the stops on the outside of the box (see illustration).
- 2 Remove the four Phillips head screws (see illustration) and remove the glove box from the dash.
- 3 Install the box by placing it into the dash cavity and securing it with the four retaining screws.
- 4 Squeeze the sides of the glove box and push up to press it into place.

Passenger side lower trim panel

- 5 Remove the two Phillips head screws and lift the panel off (see illustration).
- 6 Disconnect the convenience light by twisting and pulling the connector from the back of the light.
- 7 Reverse the removal procedure for installation.

Passenger side lower dash panel

- 8 Remove the Phillips head screw retaining the kick panel to the body.
- 9 Turn the plastic fastener located on the lower right corner a quarter turn to release it and lift the kick panel off.
- 10 Reverse the removal procedure for installation.

Driver side lower dash panel

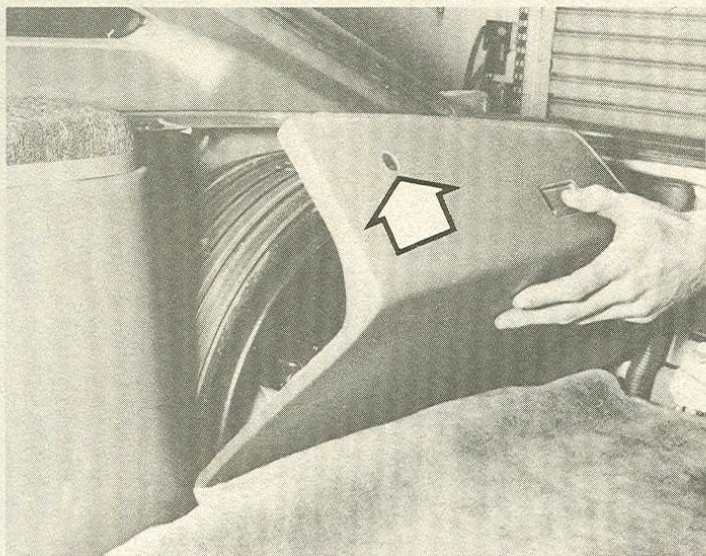
- 11 Remove the three Phillips head screws, one on top near steering column and the other two on each corner of the panel, then lower the panel.
- 12 Disconnect the convenience light by twisting the light connector and pulling it from the light.
- 13 Remove the two vacuum hoses by pulling them from the nipples (see illustration).
- 14 Reverse the removal procedure for installation.

Rear luggage compartment trim panel

- 15 Turn the four plastic fasteners a quarter turn and pull the fasteners out. Unscrew the one knob head fastener, located on the top passenger side of the panel, by turning it counterclockwise.
- 16 Lean the trim piece forward and remove it from the vehicle.
- 17 Reverse the removal procedure for installation. Make sure all fasteners are locked in place.

Spare tire cover

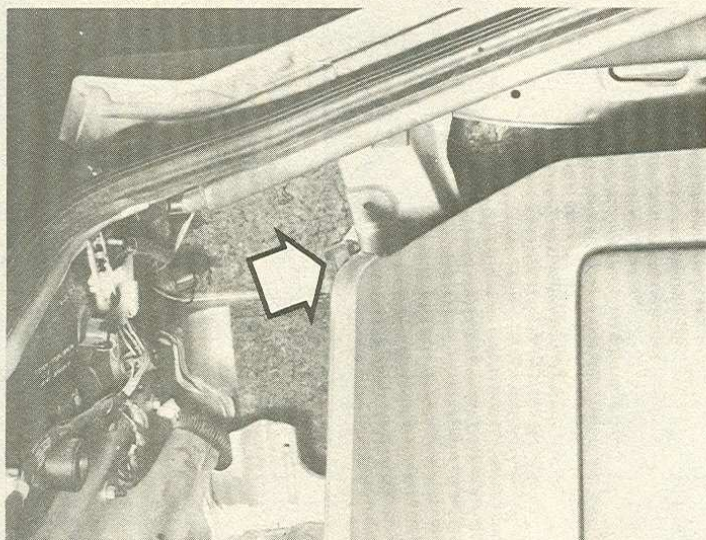
- 18 Remove the rear luggage compartment trim panel.
- 19 Unscrew the knob fastener located on the top left corner of the panel by turning it counterclockwise. Lift out the panel (see illustration).
- 20 Reverse the removal procedure for installation.



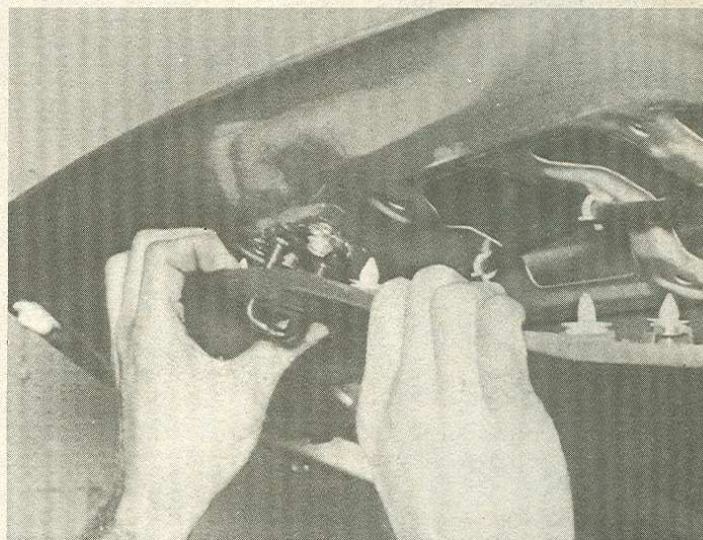
23.19 With the knob head fastener removed (arrow) tilt the panel forward and lift it out



23.22 Remove the tool kit to get at the panel fasteners



23.25 Arrow shows the raised tang that has to be inserted first during installation



23.30 Remove the hatch trim piece by prying down on it to release the pop-out type fasteners

Rear left trim piece

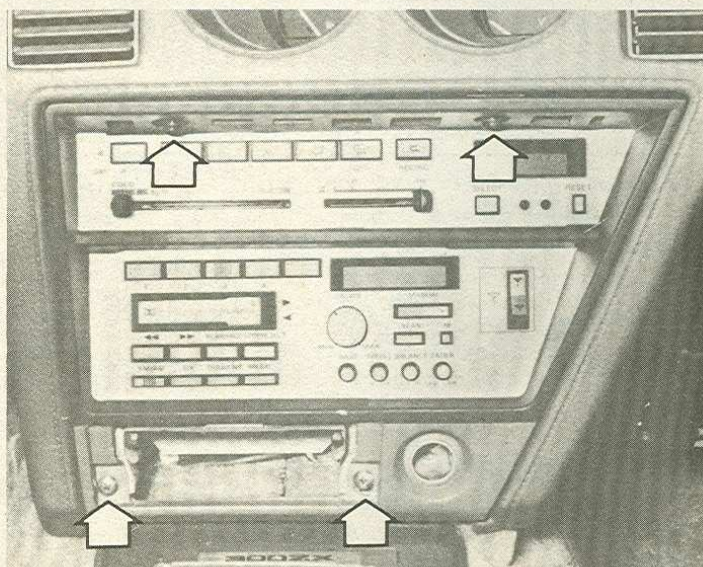
- 21 Remove the rear luggage compartment trim panel.
- 22 Fold back the carpet and lift out the tool kit (see illustration).
- 23 Remove the two trim piece retaining screws.
- 24 Lift the trim piece out from the bottom to release it from the three top plastic fasteners.
- 25 Install the trim piece by inserting the end with the raised tang (see illustration) first.
- 26 Install the two retaining screws.
- 27 Set the tool kit into position and lay the carpet over it.
- 28 Install the rear luggage compartment trim panel.

Rear hatch trim piece

- 29 Open the rear hatch.
- 30 Grasp the lower hatch trim panel and pull it down to release the nine plastic pop-out fasteners (see illustration).
- 31 Install the trim piece by matching the plastic fasteners to their holes, then press the trim piece into position.

Control panel trim piece

- 32 Remove the ash tray.
- 33 Pull the cigarette lighter from its retaining socket.
- 34 Remove the trim piece Phillips head screws (see illustration).
- 35 Pull the trim piece forward.



23.34 Remove the trim piece by removing the Phillips head screws (arrows)