

FOCUS

XJ-S

**COUPE AND CONVERTIBLE
BODY ENHANCEMENT**





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XJ-S

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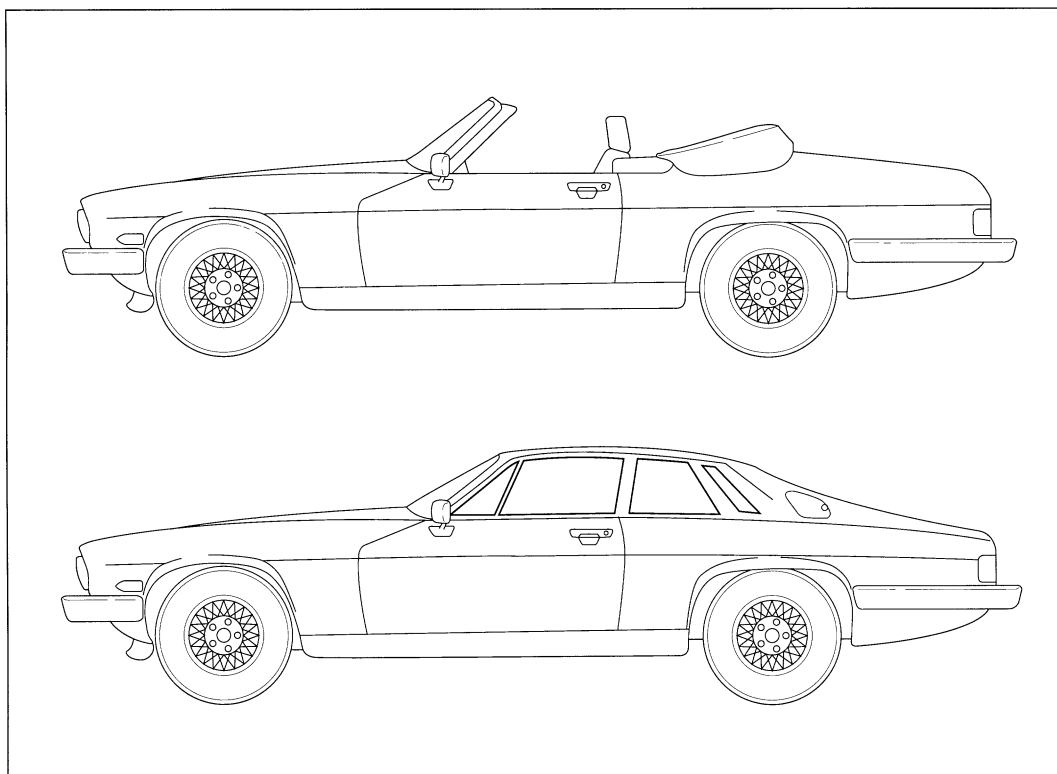
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INTRODUCTION

The XJ-S Coupe and Convertible body structures and components are produced by a combination of factory automation and hand craftsmanship. To ensure that a good quality fit can be achieved, doors, windows, hoods, and other access closings are provided with a certain degree of adjustability.

In-service adjustments and repair operations may be required to rectify damage, eliminate wind noise or water leaks, and correct inaccuracies in visual appearance. This FOCUS book is to be used as a source document for all current XJ-S Coupe and Convertible body wind noise, water leak, and adjustment information and techniques.

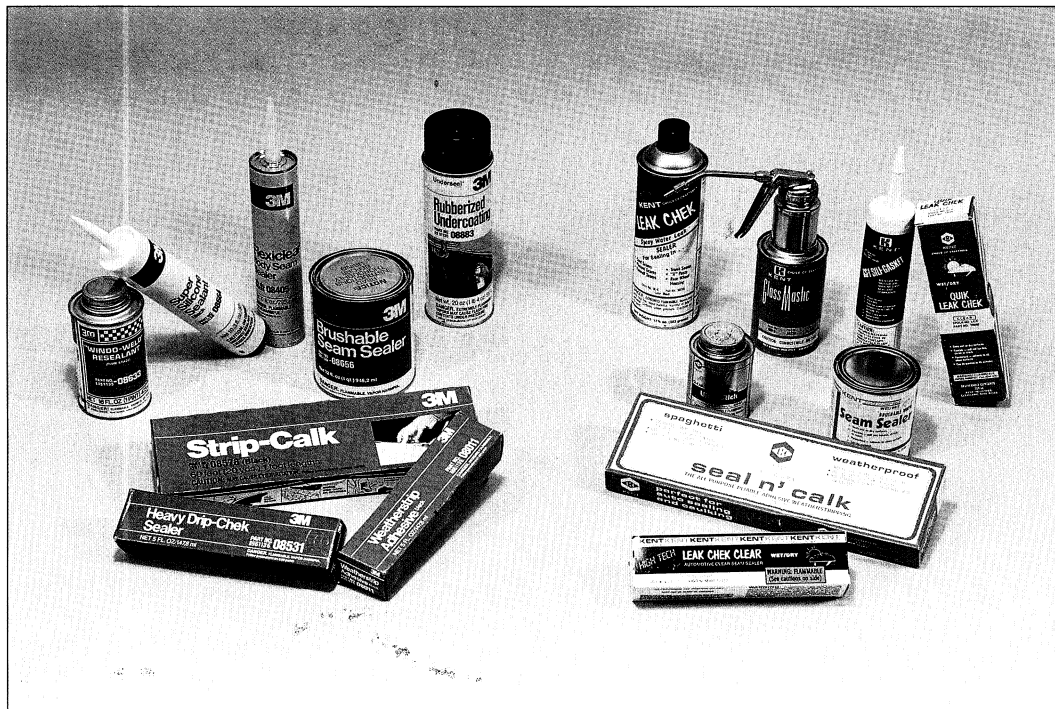


⚠ WARNING: THE OPERATIONS AND PROCEDURES CONTAINED IN THIS PUBLICATION ARE INTENDED FOR USE BY PROFESSIONAL TECHNICIANS WITH KNOWLEDGE OF JAGUAR VEHICLE SYSTEMS. ALL NECESSARY SAFETY PRECAUTIONS MUST BE TAKEN WHEN SERVICING OR HANDLING COMPONENTS AND SYSTEMS THAT HAVE THE POTENTIAL FOR CAUSING BODILY INJURY OR DEATH.

INTRODUCTION

SEALING AND ADHESIVE MATERIALS

Successful results of the procedures contained in this publication require the use of specific sealing and adhesive materials. These are manufactured by 3M and Kent Industries, and are available locally.



MATERIALS SPECIFICATIONS

TEXT CODE	3M	PART NO	KENT	PART NO
A	HEAVY DRIP CHECK [TUBE]	08633	LEAK CHECK [TUBE]	10200
B*	WINDOW WELD SEALER	08513	GLASS MASTIC	10220
C	BRUSH ON SEALER	08656	SEAM SEALER [BRUSH]	10120
D	STRIP CALK	08578	SEAL-N-CALK	10315
E	BLACK RTV SILICONE	08664	SILI-GASKET	10025
F	RUBBERIZED UNDERCOAT	08883	LEAK CHECK [SPRAY]	50265
G	BODY SEAM SEALER	08405	LEAK CHECK [CLEAR]	10500
H	WEATHERSTRIP ADHESIVE	08011	ULTRA STICK	10140

The procedures requiring sealant or adhesive use the TEXT CODE to identify the correct material.

* Requires applicator gun: 3M 08994, Kent 90010.

SILL DRAINS

The five sill drains on each side of the car allow water to drain from the internal structure of the body. These should be periodically checked and cleared of any obstruction [FIG 1]. Water ingress into the floor area can occur if the drains are obstructed.

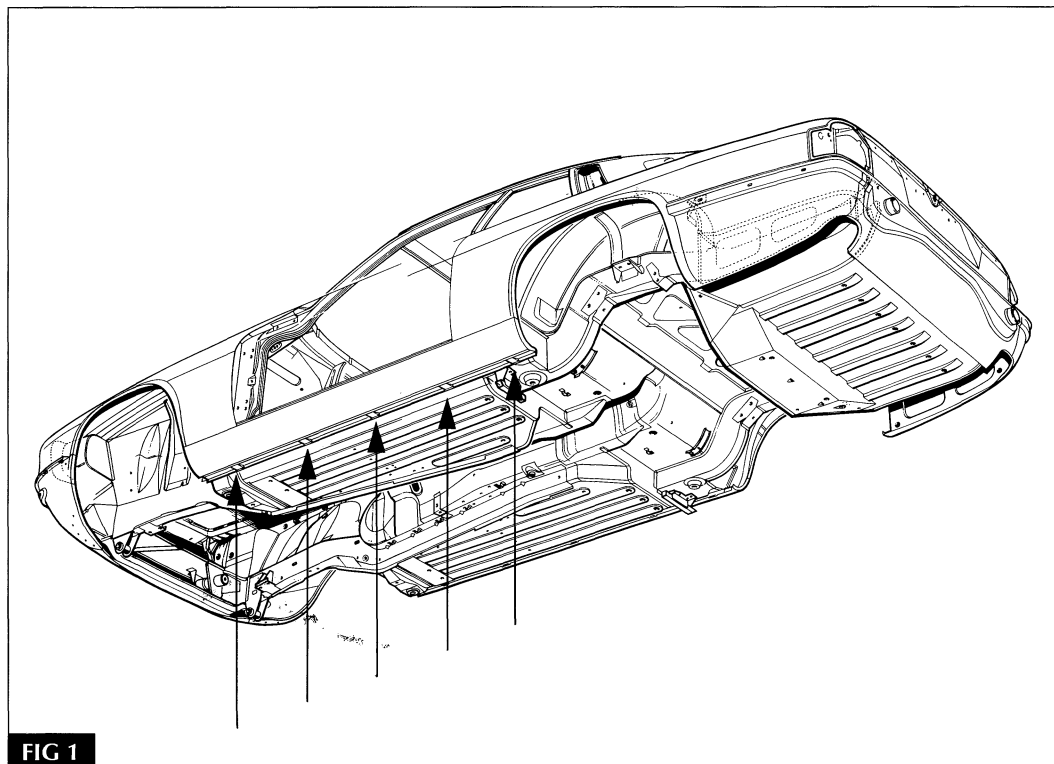
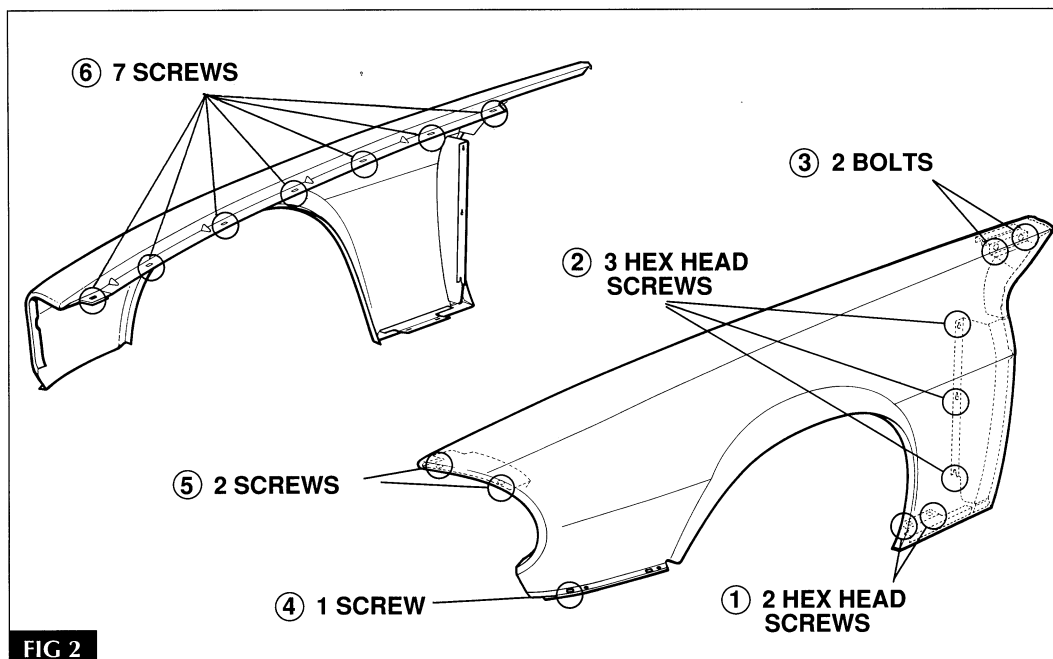


FIG 1

"A" POST AND FRONT FENDER

Water ingress at the "A" post can occur if the front fender and the body structure has poor sealing and/or the drains are obstructed. The area requiring attention can only be accessed by removing the front fender as follows:

- 1 Protect the forward twelve inches of the door with a suitable cover.
- 2 Remove the road wheel.
- 3 Remove the stone guard panel.
- 4 Remove the coolant catch tank [if removing the left fender].
- 5 Remove the headlight trim.
- 6 Remove the front bumper.
- 7 Remove the spoiler under tray.
- 8 Remove the spoiler.
- 9 Remove the fender inner panels; front upper and lower.
- 10 Remove the headlight assembly.
- 11 Remove the lower grill assembly.
- 12 Remove the fender attaching hardware in sequence [FIG 2].
- 13 Carefully break the fender away from the sealant and undercoating and remove the fender. The lower front fender must be handled carefully as it is brazed to the main panel.

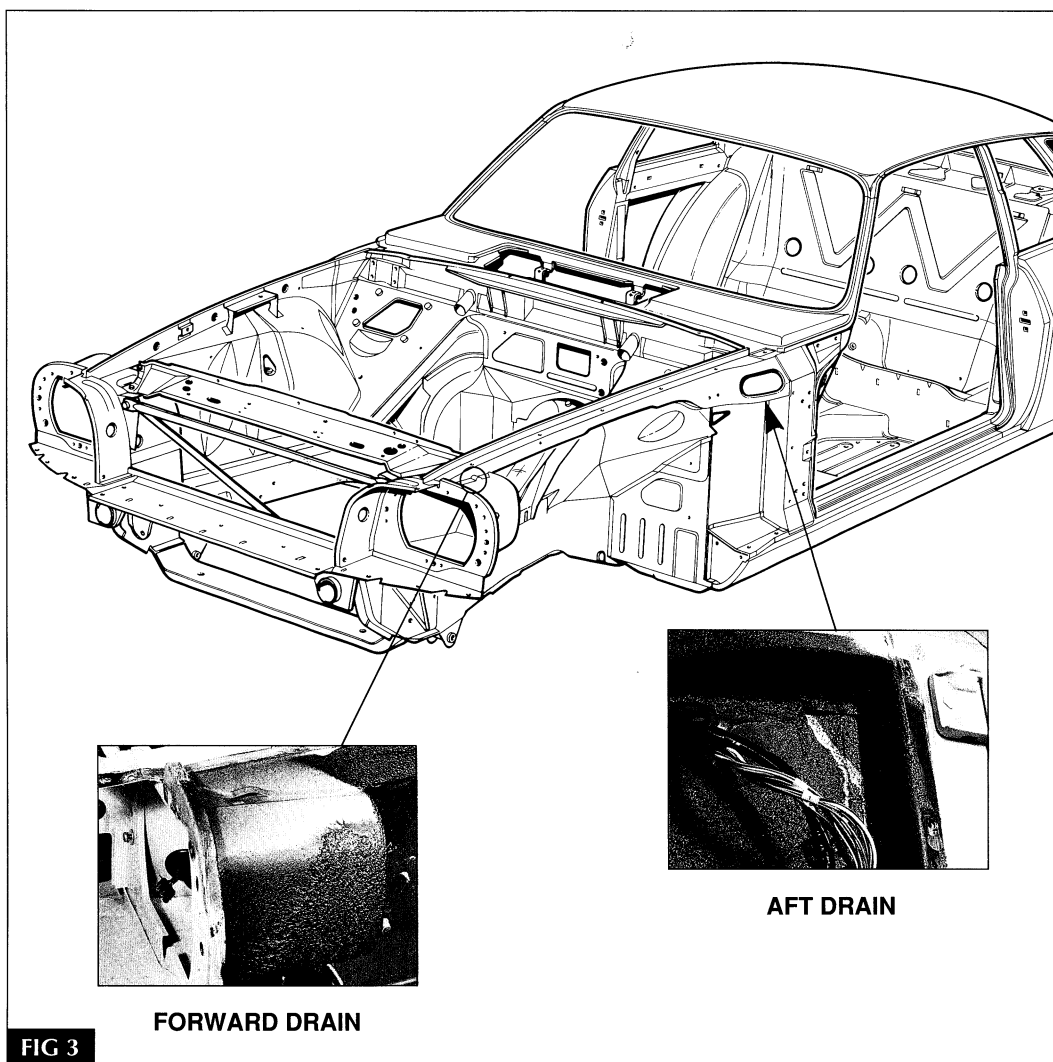


CAUTION: BE SURE TO PROTECT THE DOOR FROM DAMAGE WHEN REMOVING THE FENDER.

SEALING AND REASSEMBLY

Surface Preparation

Remove the sealant from all fender flanges and the corresponding areas on the body. Remove the angle bracket that supports the upper portion of the fender and remove the sealant from both surfaces. Try to remove only the sealant while retaining the original electro-coat primer surface. Remove any rust at the fender mating surfaces and on the "A" post structure with a wire brush. After removing the sealant and rust, refinish all bare metal before proceeding further. Apply a coat of primer to all exposed surfaces and an additional top coat of body color on visible surfaces.



Drains

Two drains are provided on the upper longitudinal box section; one forward, one aft [FIG 3]. Remove any obstruction and ensure that they are completely open.

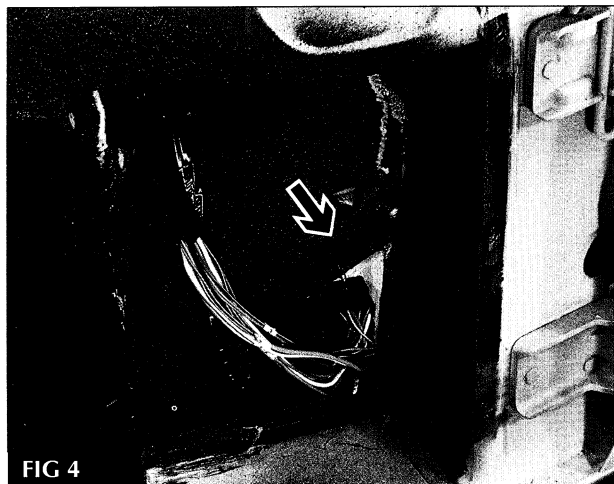
BODY

"A" post and front fender

SEALING AND REASSEMBLY

Deflector

Ensure that the deflector for the bulkhead electrical connectors is in place [FIG 4].



Box Section Plug

Ensure that the 3/8 in. hole in the box section is covered by a rubber plug BD 30541/1 [FIG 5] and sealed with SEALANT A.



"A" Post and Fender Mating Surface Sealing

The following areas should be sealed to prevent water ingress:

- Apply SEALANT A to the body joint between the windshield panel and the "A" post [A, FIG 6].
- Apply SEALANT A to the exposed flange joints at the rear of the hood opening [B, FIG 6].
- Apply SEALANT A to the panel joints between the "A" post, the rocker panel, and the inner fender [C, FIG 6].
- Apply undercoat material to the front of the rocker panel [D, FIG 6].
- Before installing the fender, apply SEALANT A to the upper fender mating surface along the inboard edge of the fender and around the screw holes [E, FIG 6]. Also apply SEALANT A between the angle bracket and the "A" post [F, FIG 6].

When reinstalling the fender, apply SEALANT A to the threads of the seven upper fender screws, the two angle bracket bolts, the three rear screws, and the two rocker panel screws; refer to FIG 2, page 4.

SEALING AND REASSEMBLY

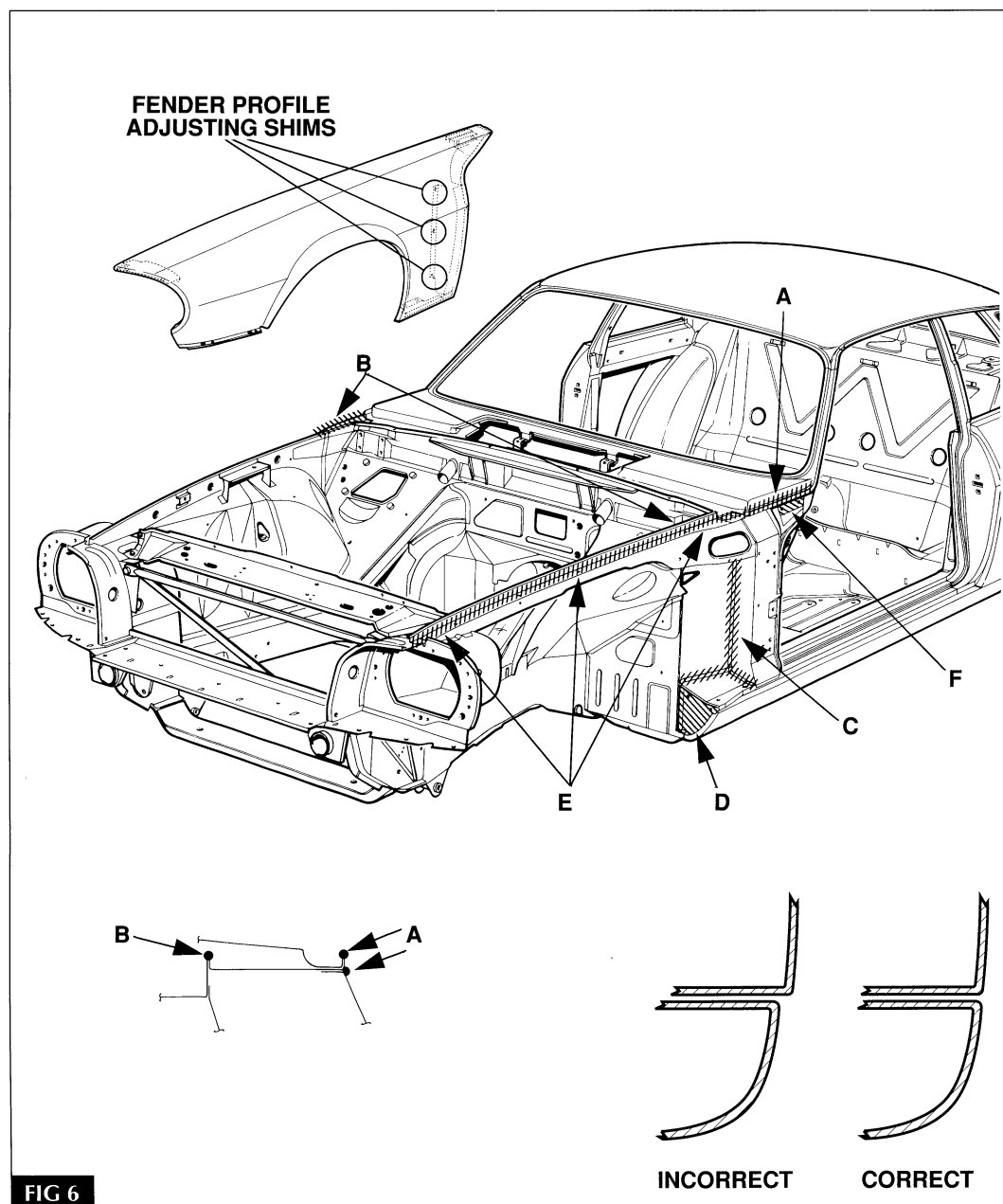


FIG 6

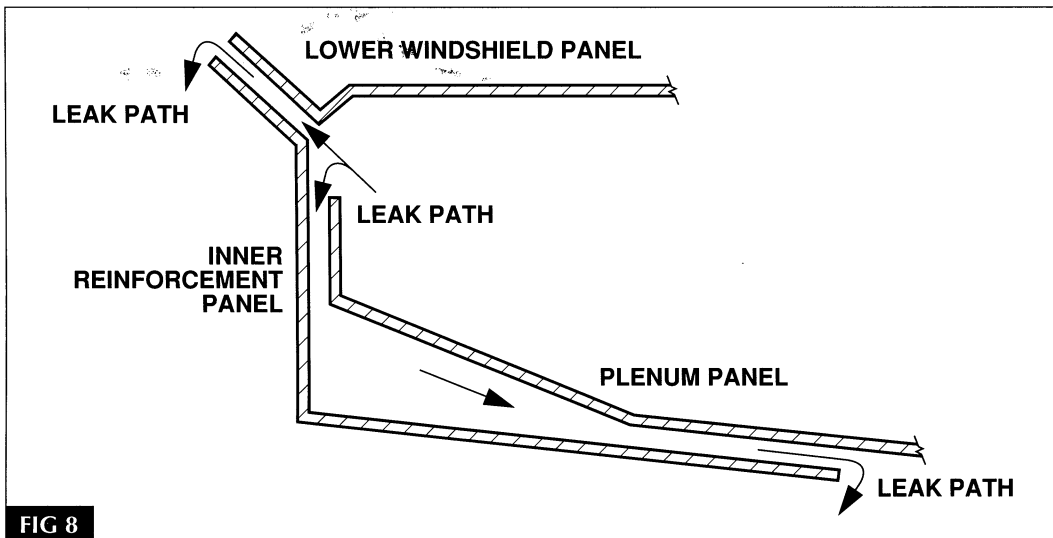
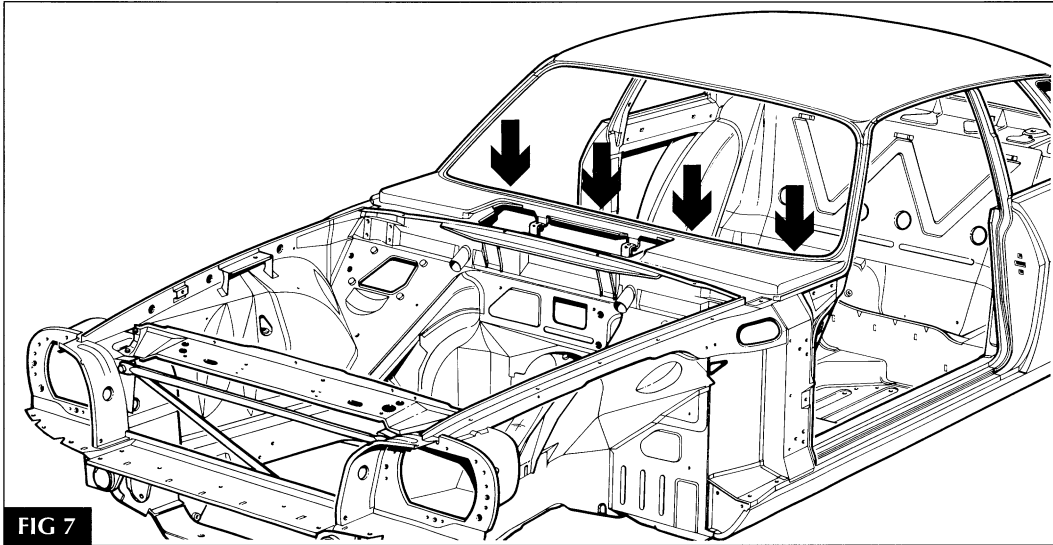
Fender Adjustment

If the door[s] require adjustment, it is recommended that door adjustment be accomplished first and the fender adjusted if necessary during installation. Refer to page 16 for door adjustment. In order to match the profile of the fender to the door, it may be necessary to place shims between the fender and the "A" post at the three rear screws. Fabricate 1/16 in. shims for this purpose [FIG 6]. To avoid stone chipping of the fender edge, ensure that the fender to rocker panel profile is matched as shown [FIG 6].

When the doors are adjusted, the hinges, shims, and hinge hardware should be sealed; refer to page 19. If the hood stops require adjustment, the stop threads should be sealed; refer to page 26.

PLENUM AND WINDSHIELD FLANGE

Water ingress into the car that drips in the footwells occurs from inadequate sealing of the plenum and the lower windshield flange in the areas indicated in FIG 7. Water travels from the plenum through the spot welded seams of the plenum panel and the windshield flange [FIG 8].

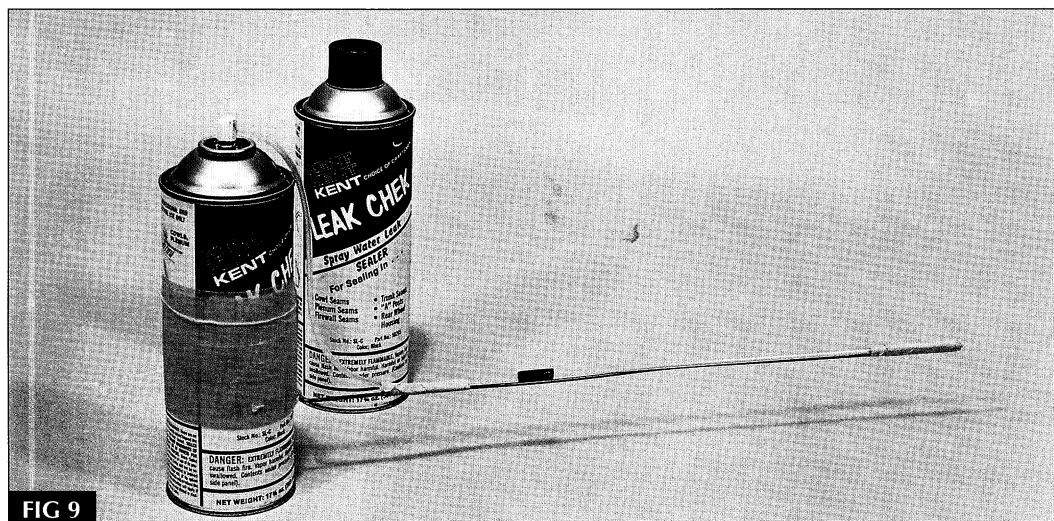
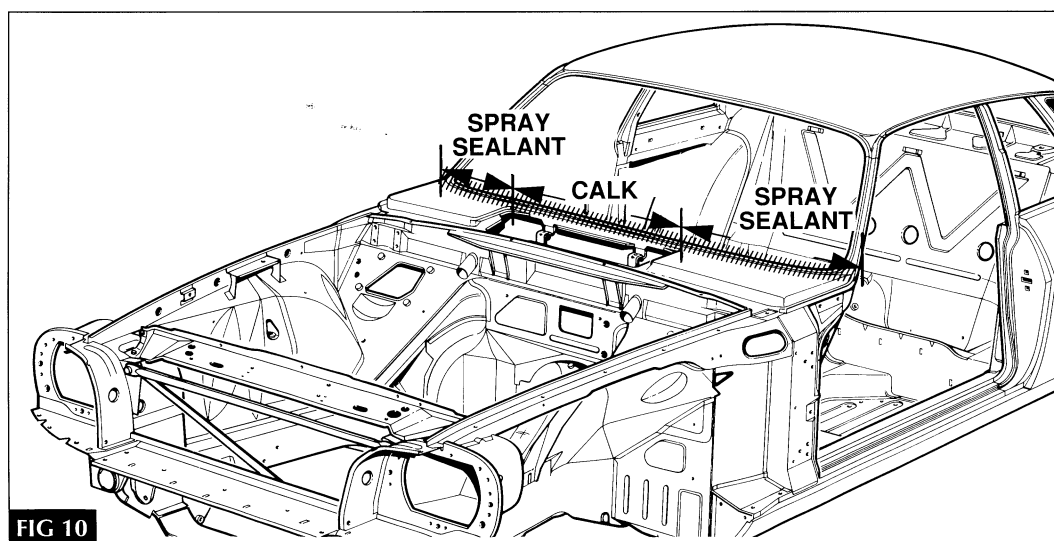


The problem area is accessed and prepared as follows:

- Remove the windshield wipers.
- Remove the plenum grille and windshield wiper motor assembly.
- Identify the seams illustrated in FIG 8. Use an inspection light in the areas on either side of the plenum grille area.
- Clean the seam areas to allow strong sealant adhesion.
- Mask the entire area around the plenum opening to prevent damage from sealant over spray.

SEALING AND REASSEMBLY

Sealing the seams in the areas on either side of the plenum grille area [FIG 10] requires the use of a spray sealant [SEALANT F]. A special applicator is fabricated from two extension tubes, vacuum hose, soft 1/8 wire or rod, and duct tape [FIG 9].

**FIG 9****FIG 10**

Shape the supporting rod to assist in application of the sealant. Bend it to the right for right side application and to the left for left side application. Starting at the outside, aim the applicator at the windshield flange seam and apply a heavy coat working inward toward the center of the car. The sealant will spread and seal both the windshield flange and the plenum panel seams. Stop spraying at the baffle. Repeat for the opposite side. Allow the sealant to dry at least one hour, then apply a second coat.

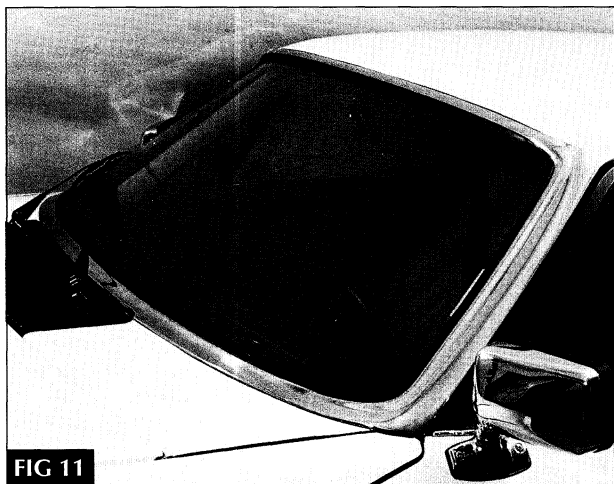
The seams in the plenum grille area [FIG 10] are sealed with calk [SEALANT D]. Apply with a plastic spatula.

After allowing sufficient drying time, water test the area. Repeat the sealing procedure as necessary. Remove the masking and reinstall the windshield wiper motor and grille assembly, and the wipers.

WINDSHIELD

If water leaks occur around the windshield [FIG 11], it is necessary to remove the windshield as described in the service manual and proceed as follows:

- 1 Mask the area adjacent to the windshield opening.
- 2 Remove the existing sealant from the windshield, the windshield flange, and the seal. Replace the seal if it is damaged.
- 3 Apply a bead of SEALANT B to the flange groove of the seal [FIG 12] and install the seal on the flange.
- 4 Apply a bead of SEALANT B to the glass groove of the seal [FIG 12].
- 5 Place a high strength string in the glass groove of the seal. The ends should terminate at the bottom center of the windshield and cross to cover the entire perimeter of the glass. The string ends must remain outside the windshield during installation.
- 6 Fit the windshield bottom into the seal and press down to completely seat the bottom edge while pressing the glass on the outside of the seal in the remaining areas. Slowly pull the ends of the string out to bring the seal lip over the glass around the entire perimeter of the windshield. If necessary, use a plastic tool to carefully ease the seal over the glass.
- 7 Apply a bead of SEALANT B on the outside of the windshield between the seal and the glass.
- 8 Install the lock lace; install the finishers; install the windshield wiper motor, plenum grille, and wiper arms. Remove any excess sealant with solvent.

**FIG 11****FIG 12****SEAL CROSS-SECTION**

REAR WINDOW

If water leaks occur around the rear window [FIG 13], it is necessary to remove the window as described in the service manual and proceed as follows:

- 1 Remove the left and right cantrail trim.
- 2 Bend down the two headliner tangs and lower the headliner about one inch.
- 3 Remove the existing sealant from the window, the window flange, and the seal. Replace the seal if it is damaged.
- 4 Apply a bead of SEALANT B to the glass groove of the seal [FIG 14] and install the seal on the window.
- 5 Install the upper and lower finishers on the seal. Do not install the corner finishers.
- 6 Apply a bead of SEALANT B to the flange groove of the seal [FIG 14].
- 7 Place a high strength string in the flange groove of the seal. The ends should terminate at the bottom center of the window and cross to cover the entire perimeter of the window. The string ends must remain inside the window during installation.
- 8 Fit the window bottom onto the flange and press down to completely seat the bottom edge while pressing the glass on the flange in the remaining areas. Slowly pull the ends of the string in to bring the seal lip over the flange around the entire perimeter of the window. If necessary, use a plastic tool to carefully ease the seal over the flange.
- 9 Install the corner finishers.
- 10 Apply a bead of SEALANT B between the body and the seal.
- 11 Reconnect the heating element wires and reinstall the interior trim.

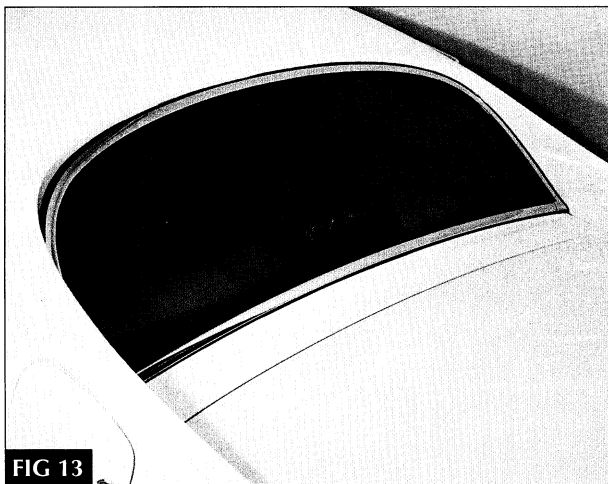


FIG 13



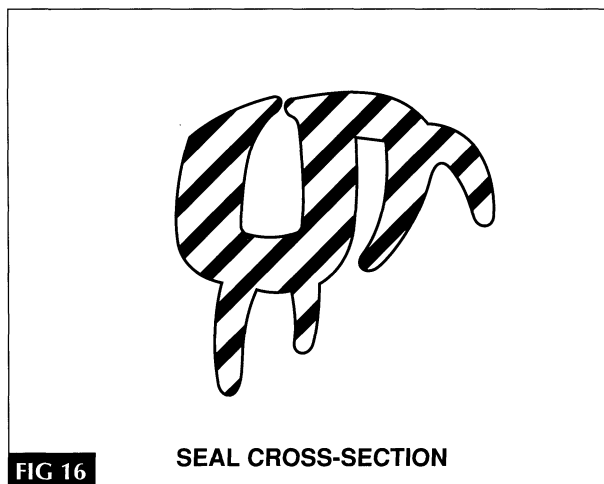
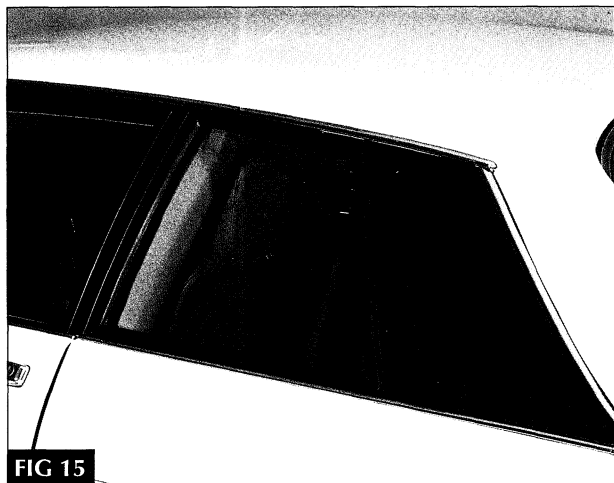
FIG 14

SEAL CROSS-SECTION

QUARTER WINDOW

If water leaks occur around the rear quarter window [FIG 15], it is necessary to remove the window as described in the service manual and proceed as follows:

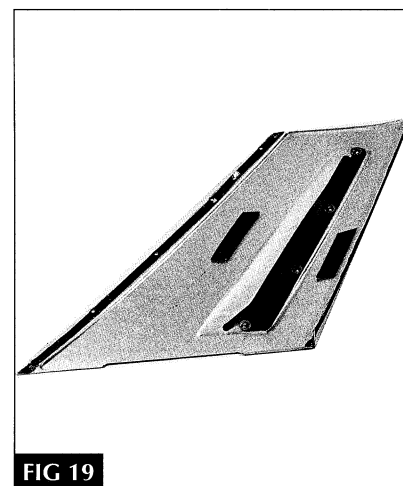
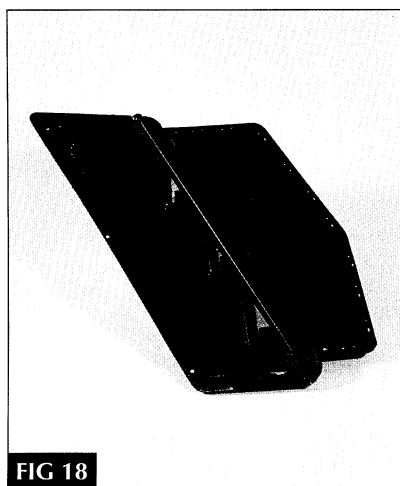
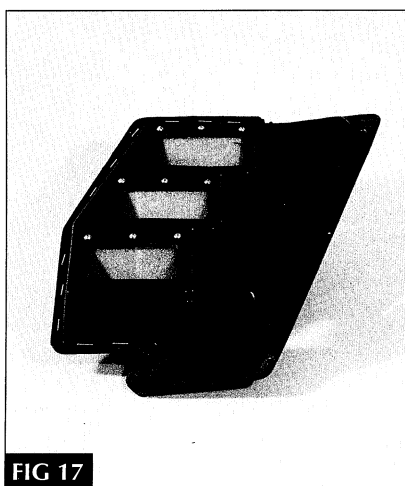
- 1 Remove the existing sealant from the window, the window flange, and the seal. Replace the seal if it is damaged.
- 2 Apply a bead of SEALANT B to the glass groove of the seal [FIG 16] and install the seal on the window.
- 3 Apply a bead of SEALANT B to the flange groove of the seal and to the flange [FIG 16].
- 4 Place a high strength string in the flange groove of the seal. The ends should terminate at the bottom center of the window and cross to cover the entire perimeter of the window. The string ends must remain inside the window during installation.
- 5 Fit the window rear vertical side onto the flange and press rearward to completely seat the rear edge while pressing the glass on the flange in the remaining areas. Slowly pull the ends of the string in to bring the seal lip over the flange around the entire perimeter of the window. Do not allow the string to contact the interior trim. If necessary, use a plastic tool to carefully ease the seal over the flange.
- 6 Reinstall the interior trim.



"D" POST AIR EXTRACTOR

If water leaks occur around the "D" post air extractor, it is necessary to remove the assembly for resealing as follows:

- 1 Remove the quarter window as described in the service manual.
- 2 From inside the trunk, remove the corner finisher nut and washers, then remove the corner finisher.
- 3 Carefully pry the vertical finisher off the four snap fasteners.
- 4 Carefully drill out the nine outer trim panel pop rivets. Retain the finisher fasteners and washers for installation. Remove the trim panel.
- 5 Carefully drill out the six vent panel pop rivets and remove the assembly. Any holes that have broken through the corner of the "D" post should be sealed with SEALANT E. Register the vent panel on the body. Carefully drill new holes adjacent to the existing broken-through holes.
- 6 Remove the existing sealant from the trim and vent panels, and the body opening.
- 7 Ensure that all the vent flaps [FIG's 17,18] are in good condition and seal correctly.
- 8 Apply a bead of SEALANT B to the body opening.
- 9 Install the vent panel assembly with 1/8 in. pop rivets. Cover the pop rivet heads with SEALANT B.
- 10 Install the trim panel [FIG 19] and finishers in reverse order.



FRONT BULKHEAD CLOSINGS

Brake Pedal Box

Water ingress can occur at the brake pedal box [FIG 20] if the gasket is displaced or damaged. If this occurs, replace the gasket. Ensure that the body panel is flat and clean. Remove any existing sealant. When installing the new gasket, apply a light coat of non-hardening gasket sealant to both surfaces.

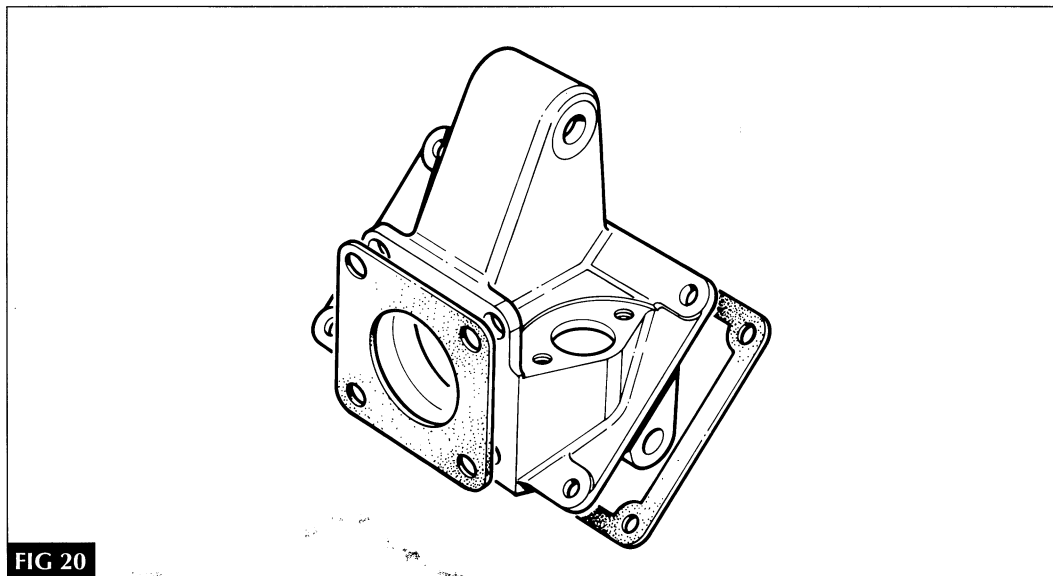


FIG 20

Right Closing Panel

The right closing panel [FIG 21] can also leak. This should be sealed in the same manner as the brake pedal box. Additionally, ensure that the grommets in the panel are not damaged and sealed correctly.

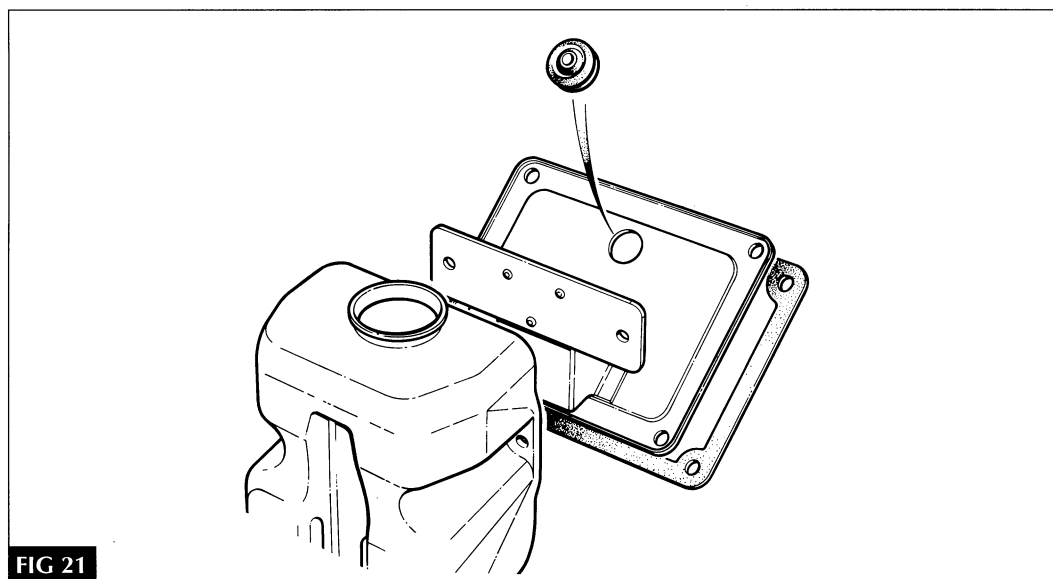


FIG 21

DOOR SEALS

The door seals can allow water ingress as well as wind noise if they are damaged or distorted. If a problem in this area arises, be sure to consider the door adjustment as well. An over compressed or distorted door seal at the "A" post requires door adjustment to eliminate; refer to page 16.

SEAL CHANNEL

The channel that retains the seal must not be damaged or distorted. Correct any damage before seal installation. Check that the channel is sealed to the body correctly [FIG 22]. This is particularly important at the "A" post and windshield post. Seal the channel to the body as necessary with body filler and refinish with the body paint color.

SEAL INSTALLATION

When installing the seal, use the following sequence: Start at A, then move to B and C. Return to A, then move to D, E, and C [FIG 22]. Do not stretch the seal while installing. Use a soap and water solution to aid seal installation.

NOTE: If the door requires adjustment due to seal over compression or distortion, do not install the seal at this time. Refer to page 16.

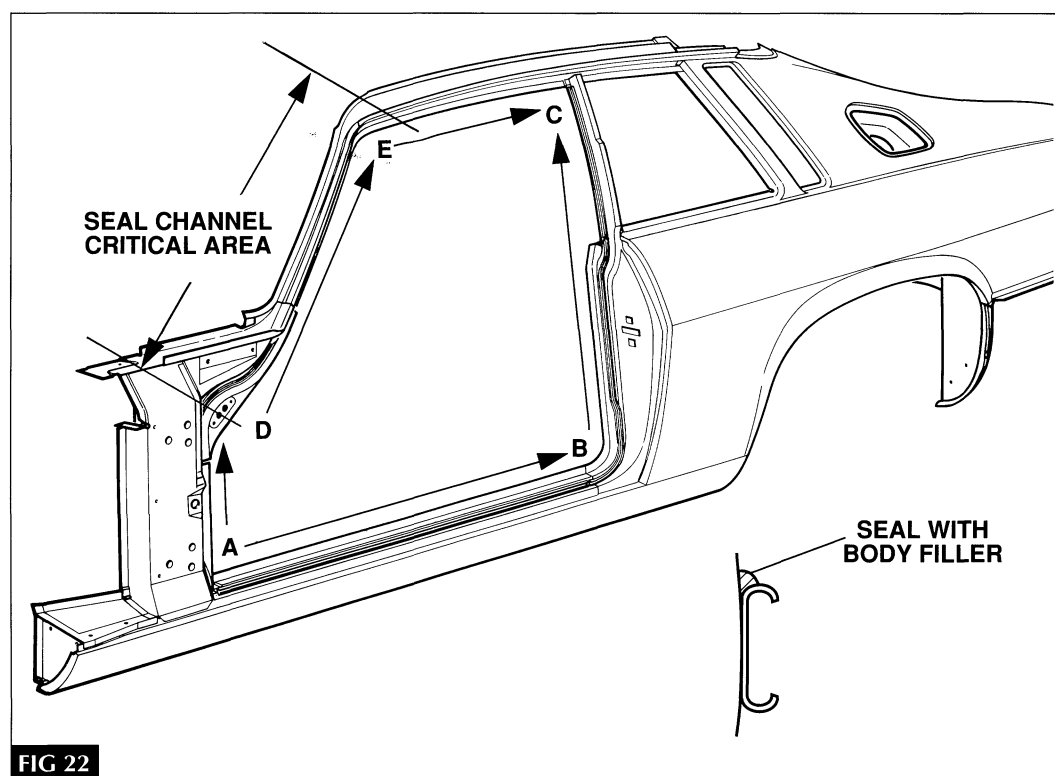


FIG 22

DOOR ADJUSTMENT

Before door adjustment is attempted, the following points should be considered:

During assembly, the door is first adjusted to match the profile of the rear fender and the rocker panel. The door seal spacing is set to nominal clearances to minimize over compression. The front fender is then installed and aligned to the door profile. The fender is adjusted by placing shims between the fender and the "A" post at the rear hardware [FIG 23]. Refer to fender installation, pages 4-6.

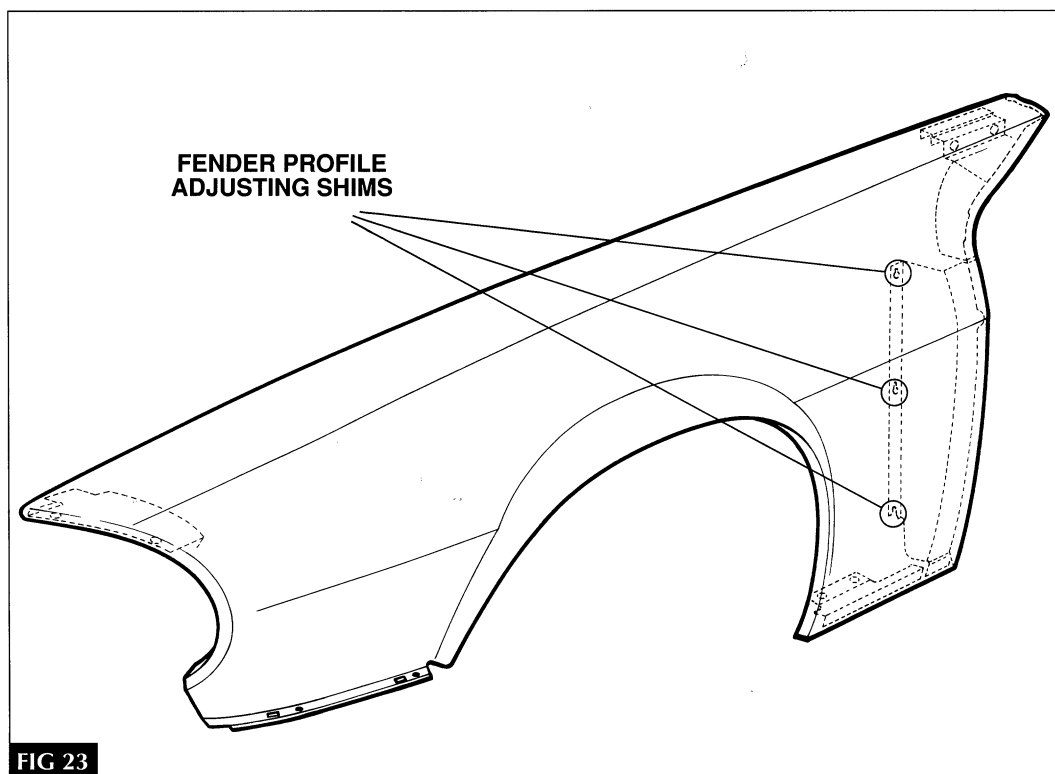


FIG 23

SEAL CLEARANCE

If door seal over compression or distortion is the problem being resolved, the seal clearances should be checked to determine the amount of adjustment required. This is accomplished by taking measurements with modelling clay [FIG 24, 25]. Make up blocks of clay and place them at the points shown in FIG 26. Smear the contact surfaces on the door with oil to prevent the clay from sticking. Close the door fully; then open. Measure and record the thickness of each clay block to determine the seal clearances. These dimensions will determine the necessary door movement required to achieve a constant door seal nominal clearance consistent with satisfactory surface profiling.

Door Seal Nominal Clearance:

0.60 in. \pm 0.03 in. IN / OUT

0.31 in. \pm 0.03 in. SIDE / SIDE

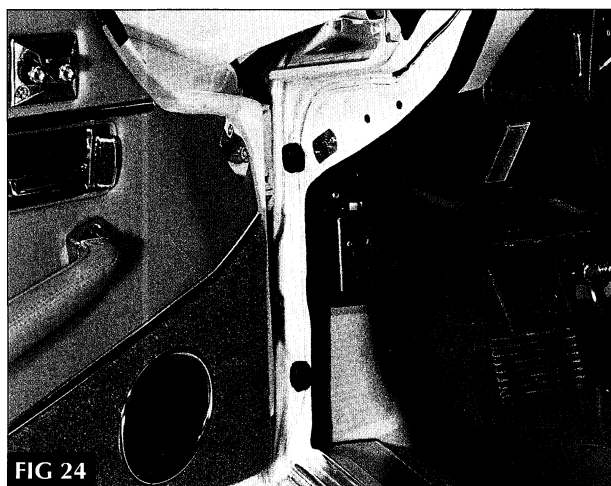


FIG 24

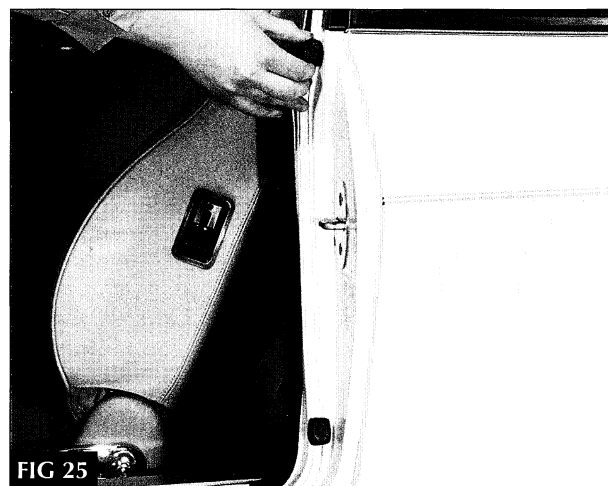


FIG 25

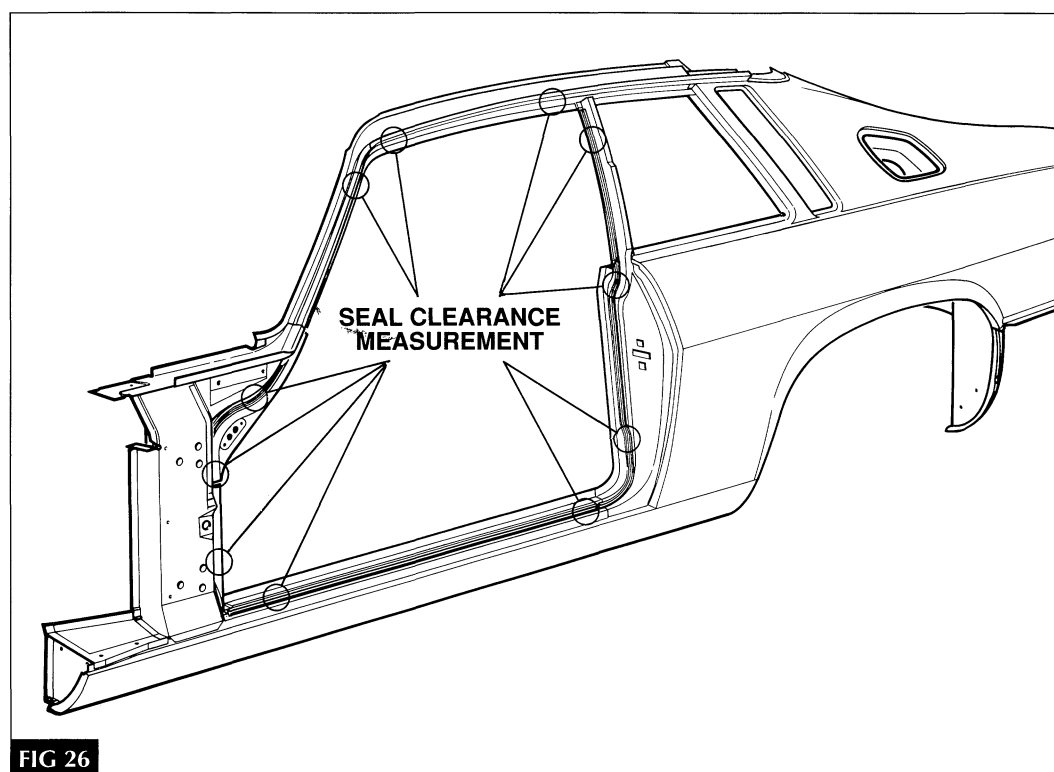
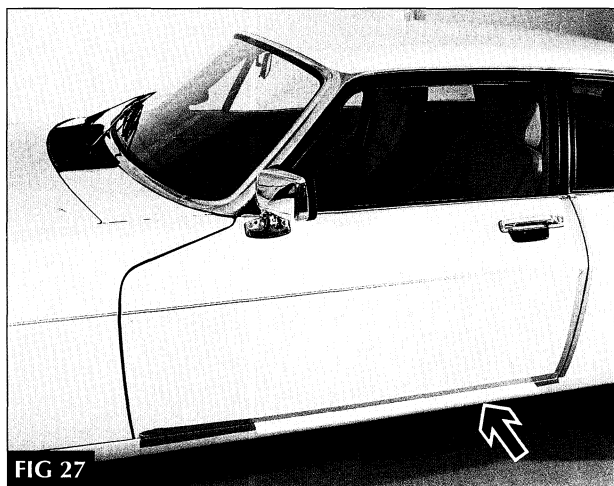


FIG 26

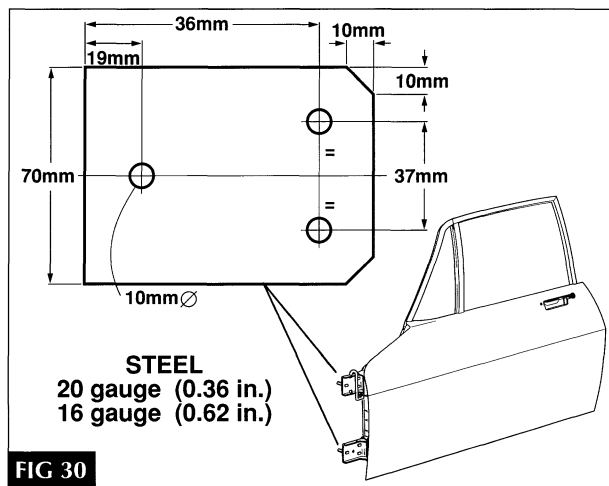
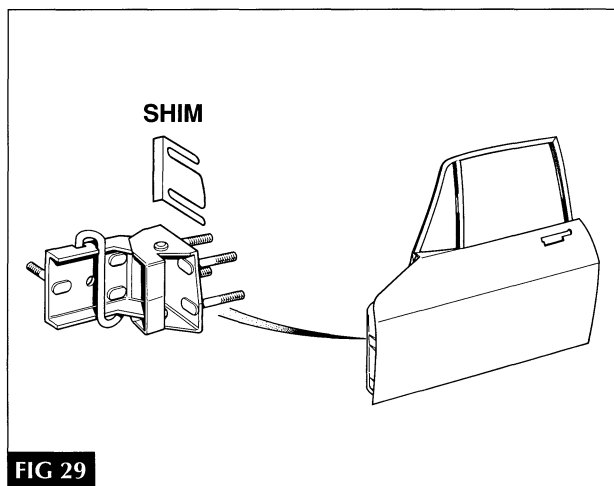
DOOR AND BODY PROTECTION

Before starting the adjustment procedure, apply duct tape to the bottom and rear edge of the door and the door opening. Place a 3/16 in. shim on the rocker panel to support the door while making vertical and horizontal adjustments [FIG 27]. When door support is necessary, use a block of soft wood between a jack and the door positioned at the center of the door [FIG 28].

**ADJUSTMENT SEQUENCE**

The sequence and method for door adjustment is as follows:

- **Vertical and horizontal** Move the door in the hinge hardware slots [hinge to "A" post]. Additionally, shims RTC 1676/82 [FIG 29] can be placed between the upper hinge and the door.
- **In / out at the door front edge** Move the door in the hinge hardware slots [hinge to door]. Additionally, fabricated steel shims [FIG 30] can be placed between the hinges and the "A" post. Use 20 gauge [0.36 in.] for fine adjustment and 16 gauge [0.62 in.] for coarse adjustment.
- **In / out at the door rear edge** Adjust striker.



ADJUSTMENT PROCEDURE

- 1 Remove the striker plate and retain the striker with wire.
- 2 For access to the hinge hardware, remove the under dash panel, the "A" post kick panel, and the door interior panel.
- 3 Adjust the door vertically to match the door to the top of the front and rear quarter panels while maintaining an even gap at the rocker panel.

Adjust the door horizontally to match the gaps at the front and rear of the door.

Install shims RTC 1676 [right door] and RTC 1682 [left door] as necessary and tighten the hinge hardware.

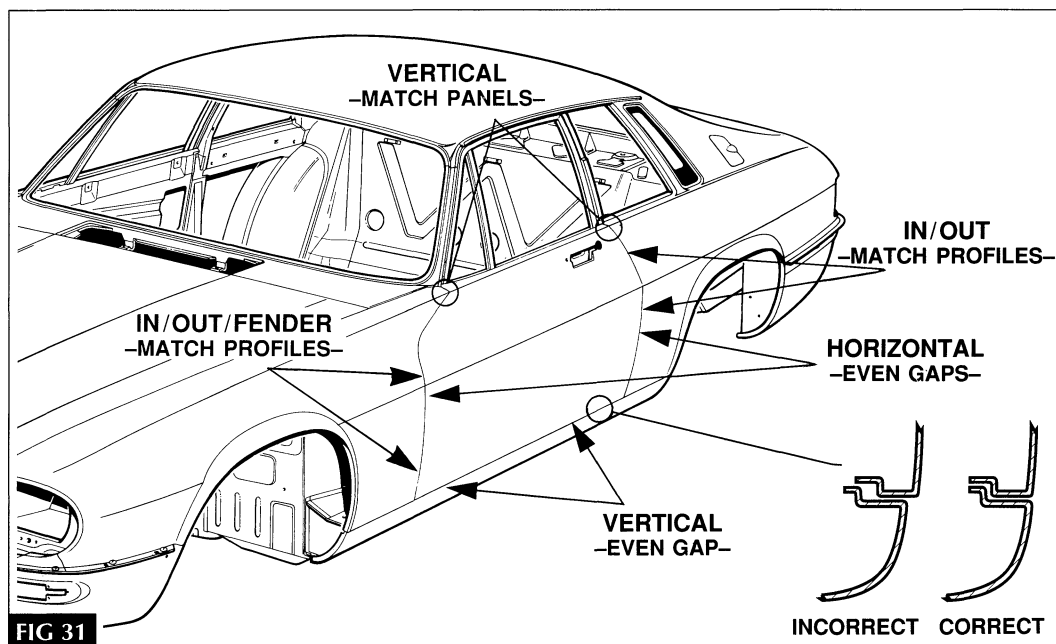
- 4 Loosen the hinge to door hardware and move the front of the door in or out to match the front fender profile while maintaining [as best as possible], an even door seal nominal clearance; refer to page 16. To prevent stone chipping, ensure that the lower edge of the door does not protrude past the profile of the rocker panel [FIG 31].

If necessary, install fabricated shims [FIG 30] between the hinge[s] and the "A" post.

Tighten the hinge hardware.

The front fender has limited adjustment to provide a satisfactory profile; refer to page 7.

- 5 Reassemble the striker and adjust the striker to match the door and the rear quarter panel profiles while maintaining [as best as possible], the nominal door seal clearance; refer to page 16.
- 6 Seal the hinges and hardware at the "A" post with SEALANT A.



LOCK ADJUSTMENT [SOLENOID]

The door lock adjustment procedure involves the movement and setting of many components. FIG's 32 and 33 identify these components.

ADJUSTMENT PROCEDURE:

- 1 Remove the door interior panel.
- 2 For access to the lock mechanism, remove the window rear guide channel.
- 3 Open the door and set the striker catch to the closed position. Set the lock flap to the lock position.
- 4 Disconnect the four pin connector at the solenoid and loosen the two solenoid mounting bolts.
- 5 Adjust the length of the lower rod until the lock flap just reaches the full lock position.
- 6 Set the lock flap to the unlock position and disconnect the upper rod at the inside lock mechanism.
- 7 Adjust the vertical release rod so that the mechanism just contacts the release peg.
- 8 Reconnect the upper rod and adjust it's length until the striker catch releases with one half the total movement of the interior handle.
- 9 Reset the striker catch to the closed position and check the operation of the lock flap when the door key is turned.
- 10 With the door key turned fully clockwise, move the solenoid to it's full forward position. Mark this position. With the door key turned fully counter clockwise, move the solenoid to it's full rearward position. Mark this position.
- 11 Release the door key and locate the solenoid at the center of the two marks. Tighten the two mounting bolts. Reconnect the connector.
- 12 Release the striker catch and check the operation of the interior and exterior door handles and locks.
- 13 Reinstall the window rear guide channel. Adjust the channel; refer to page 23.
- 14 Lubricate the linkages with light grease. Lubricate the nylon catch with light machine oil.
- 15 Reinstall the door interior panel.

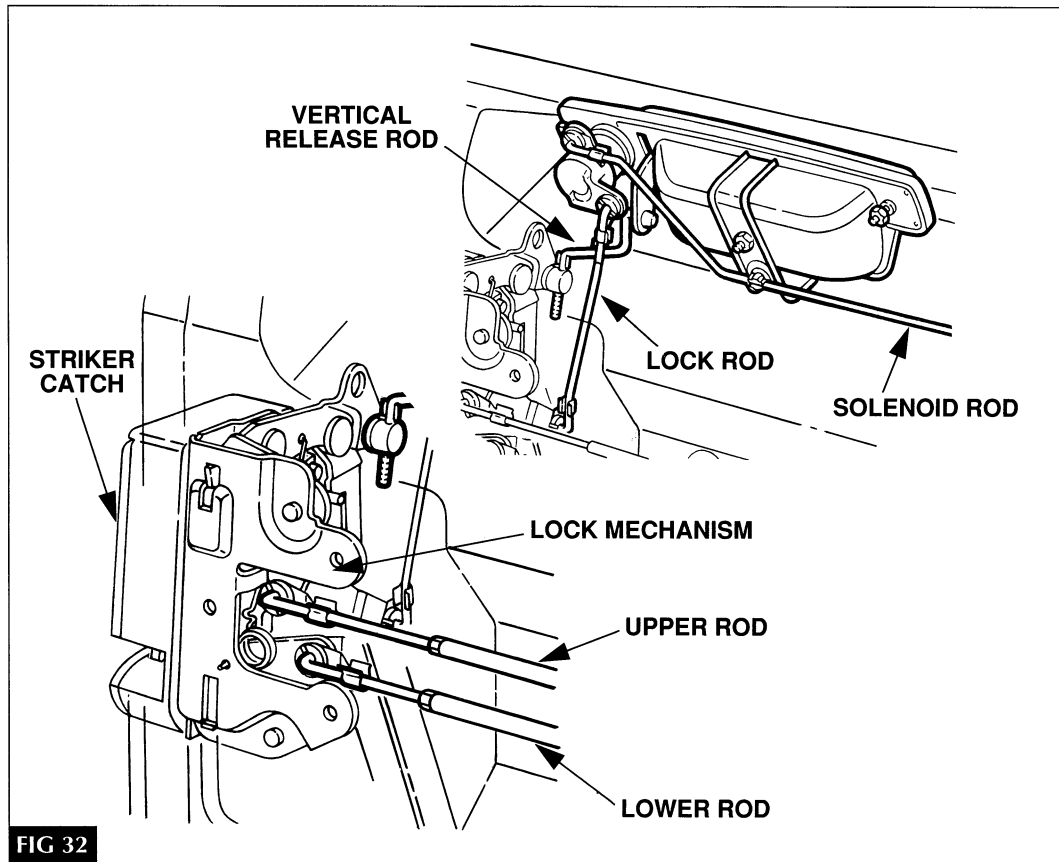


FIG 32

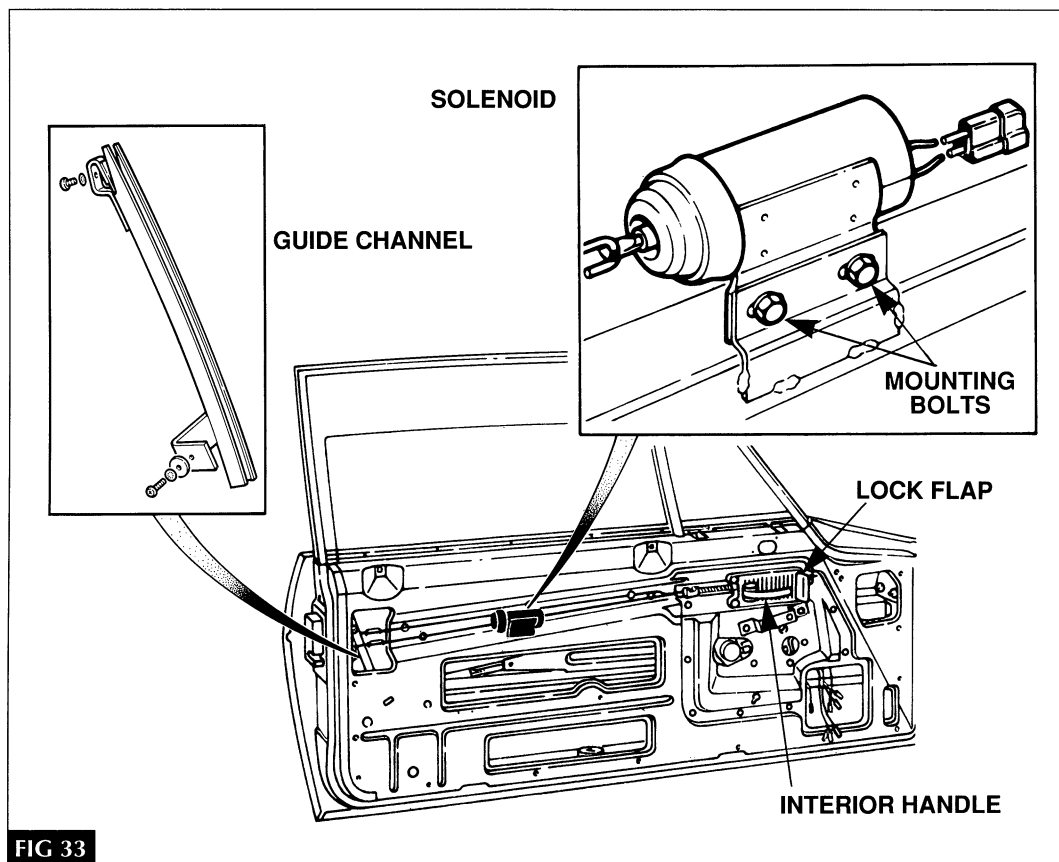


FIG 33

LOCK ADJUSTMENT [MOTORIZED]

The door lock mechanism and rods are identical to the solenoid actuated system.

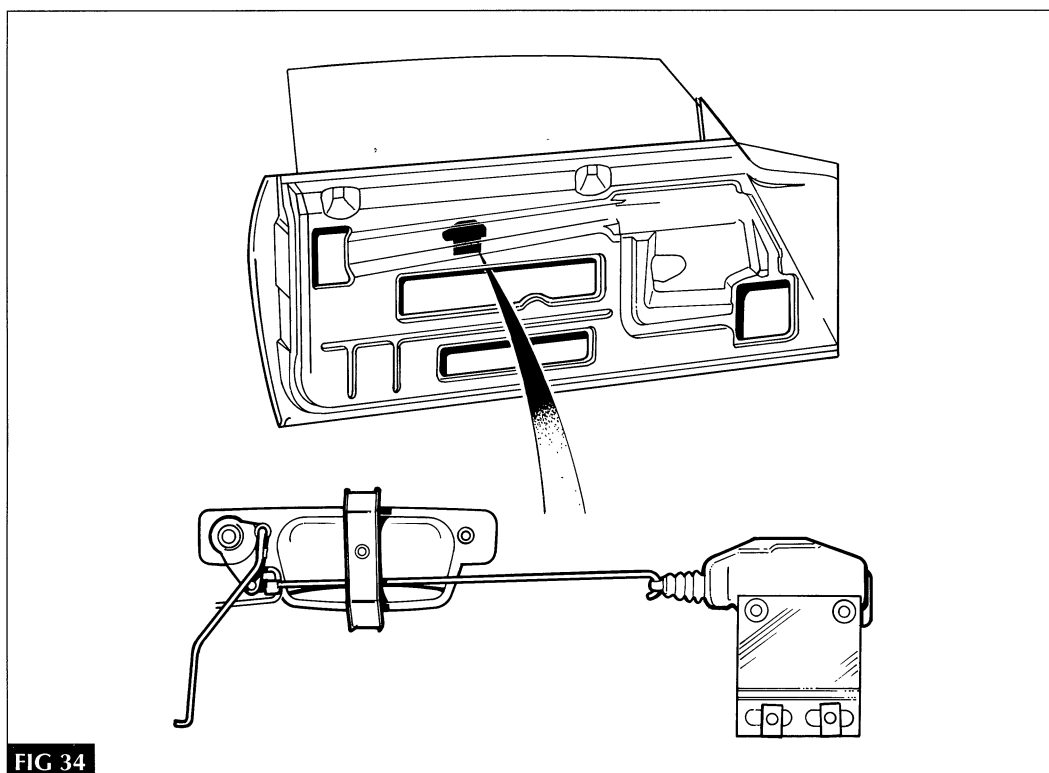
ADJUSTMENT PROCEDURE

Complete the adjustment procedure through step 9, page 20. Then proceed as follows:

- 1 Reset the striker catch to the closed position to allow the locking mechanism to operate.
- 2 Connect an ohmmeter between the yellow/orange and black/pink pins of the actuator connector [actuator side]. The ohmmeter should indicate zero.
- 3 Move the lock flap toward the lock position and adjust the actuator [FIG 34] so that the ohmmeter indicates continuity just as the flap passes the mid point of it's travel.

Move the flap back to the unlock position; the ohmmeter should move to zero just as the flap passes back through the mid position.

- 4 When the correct adjustment is achieved, tighten the mounting bolts.
- 5 Reconnect the actuator connector and complete steps 12–15, page 20.

**FIG 34**

WINDOW ADJUSTMENT

Adjustment is necessary to correct for slow operation, binding, and tight or loose fitting glass. The window cycle time should be a maximum of five seconds up or down. If the window frame has the old style fiber board packers installed, they should be removed and replaced with the new style rubber window channel BCC 6292.

ADJUSTMENT PROCEDURE

- 1 Remove the interior door panel and raise the window completely.
- 2 Loosen the top and bottom rear guide channel hardware.
- 3 Push up on the guide channel [FIG 35] and tighten the top screw.
- 4 Lower the window completely and move the bottom of the guide channel into light contact with the glass. Tighten the bottom screw.
- 5 Lightly lubricate the window channels with Teflon "Super Lube" or graphite "Lock Ease".
- 6 Check the window cycle time. Be sure to consider the battery charge state and the mechanical condition of the window regulator.

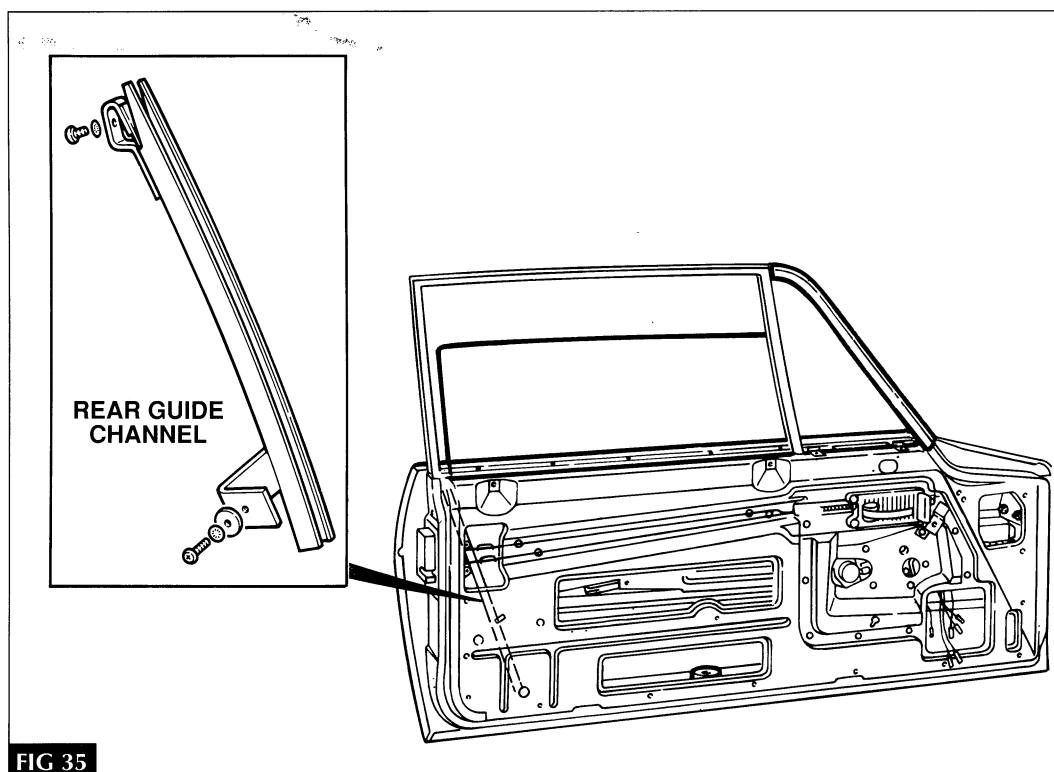
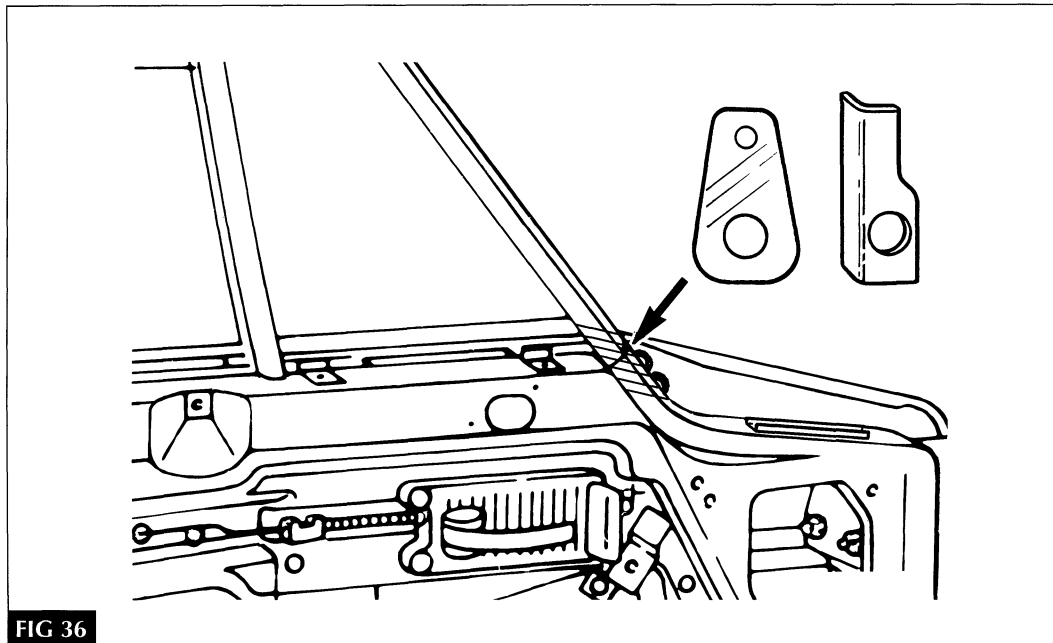


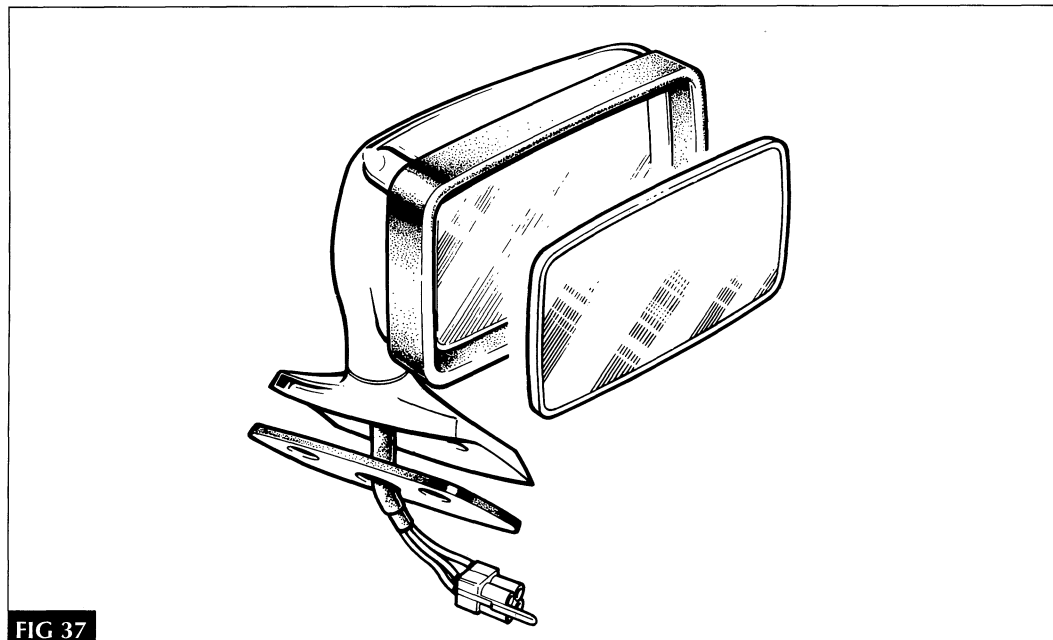
FIG 35

WINDOW FRAME MODIFICATION

The old style pear shaped window frame seals may allow water leaks. If the window frames have the pear shaped seals [FIG 36] and water leaks occur, replace these with the new design seals BBC 5534, right and BBC 5535, left [FIG 36]. Install the new seals with a coating of ADHESIVE H.

**FIG 36****DOOR MIRRORS**

The mirror gasket [FIG 37] can become damaged or displaced allowing water to enter the door. Ensure that the gasket is in good condition and is seated correctly.

**FIG 37**

HOOD ADJUSTMENT

During adjustment, the hood can be stabilized by placing four wooden wedges between the hood and the fenders [two per side]. Protect the finish with duct tape applied to the fender and the hood [FIG 38]. Fabricate the wedges per the dimensions in FIG 39.

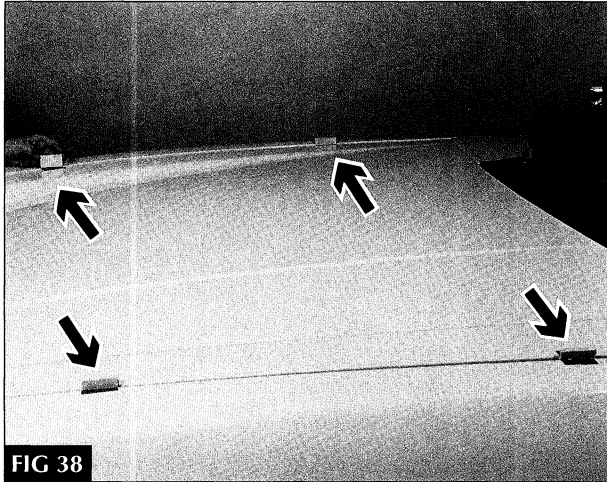


FIG 38

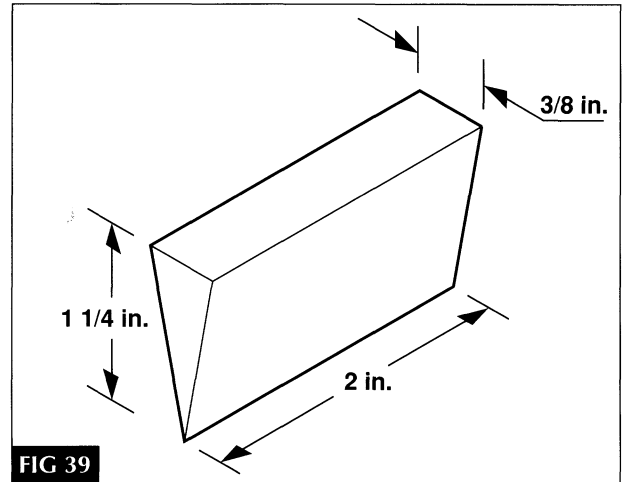


FIG 39

Before starting adjustment, complete the following:

- 1 Check that the rear engine compartment seal is installed correctly on the body flange [FIG 40]. It should be completely seated and have no distortions.
- 2 Remove both hood catch pins [FIG 41].
- 3 Remove the two hood gas struts.
- 4 Move the hood latch lever to the closed position.
- 5 Remove the front upper grille for access to the hinge bolts.

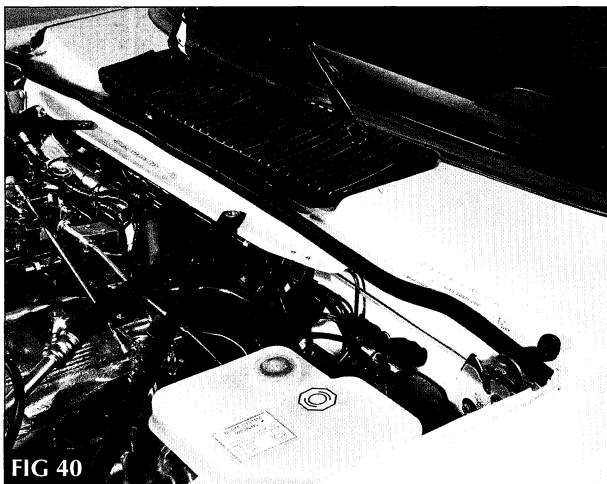


FIG 40

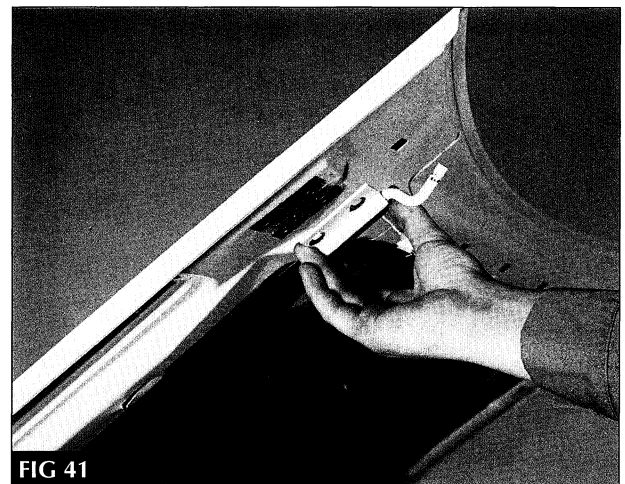
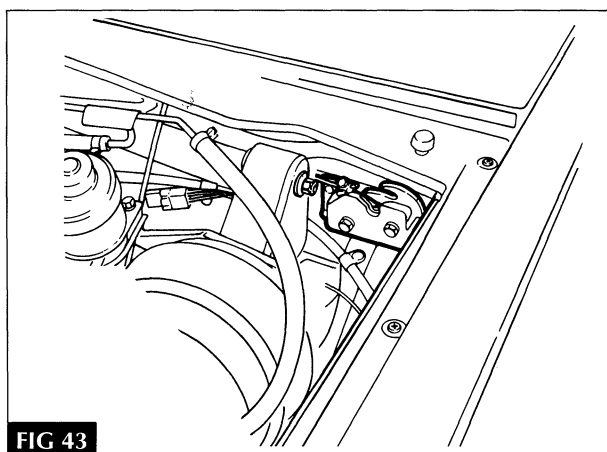
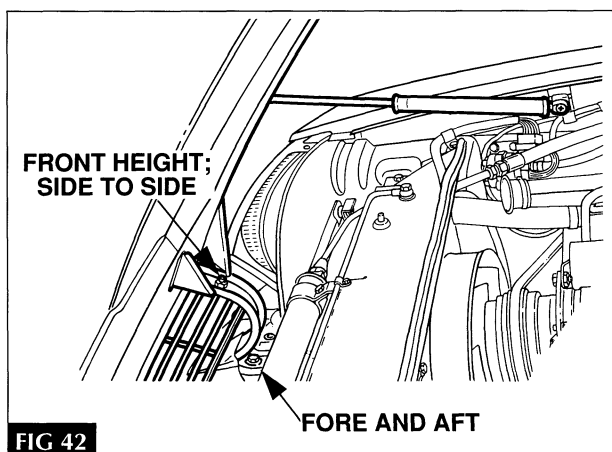


FIG 41

ADJUSTMENT SEQUENCE

The sequence and method for hood adjustment is as follows:

- **Front height and side to side** Position the hood on the hinge upper hardware slots [FIG 42].
- **Fore and aft** Position the hood and hinge on the body slots [FIG 42].
- **Rear height** Position the hood catches [FIG 43].
- **Latch operation** Adjust the cables.



ADJUSTMENT PROCEDURE

- 1 Adjust the two rear stops to set the hood rear edge height to match the fenders and the lower windshield panel [FIG 44].
- 2 Place the four wood wedges [FIG 38, PAGE 25] and adjust the front height and the side to side positioning by loosening the hood to hinge bolts [FIG 45]. Tighten the bolts when the hood is set.
- 3 Adjust the fore and aft positioning by loosening the hinge to body bolts [FIG 46]. Tighten the bolts when the hood is set.
- 4 Reinstall the hood catch pins [FIG 41] ensuring that they align with the catches.
- 5 Lower the two rear stops [FIG 44] so that they do not touch the hood.
- 6 Adjust the rear catches to raise or lower the rear edge of the hood as necessary by loosening the four mounting screws for each catch [FIG 48]. It may be necessary to remove the engine compartment seals to enable the hood to rest on the catches for adjustment.
- 7 Recheck the alignment of the catch pins and adjust as necessary.
- 8 Adjust the rear stops to just touch the hood when closed. Seal the threads with SEALANT A.
- 9 Disconnect the side to side release cable [FIG 48].
- 10 With the hood open, move the latch lever to the closed position.
- 11 Adjust the length of the main cable at the latch lever [FIG 47] so that the catch closes completely.
- 12 Reconnect the side to side cable and adjust the length so that the right catch closes completely.
- 13 Lightly lubricate the latches and the latch lever with engine oil.

hood adjustment

HOOD

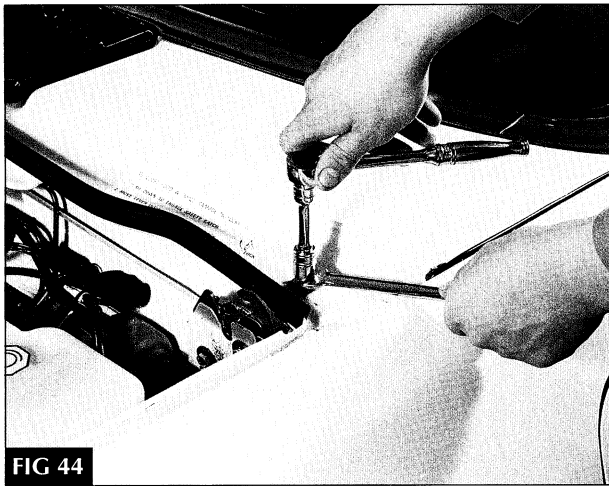


FIG 44

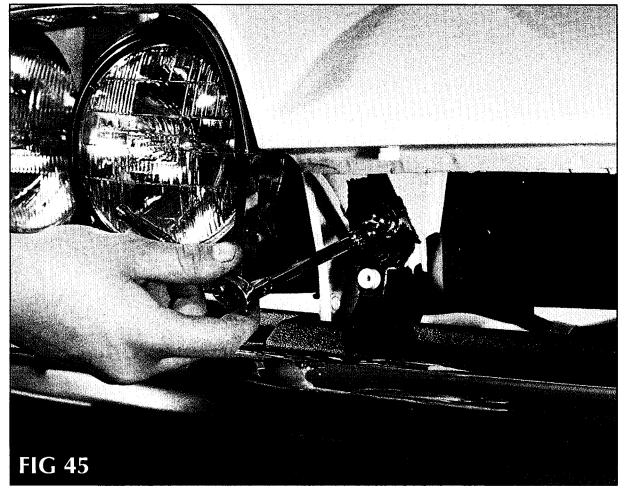


FIG 45



FIG 46

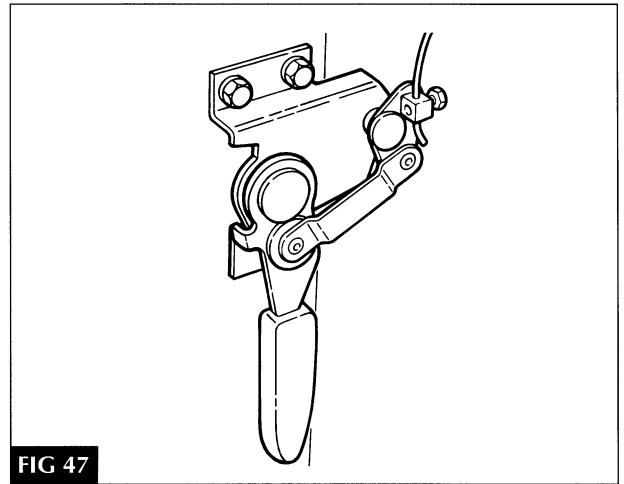


FIG 47

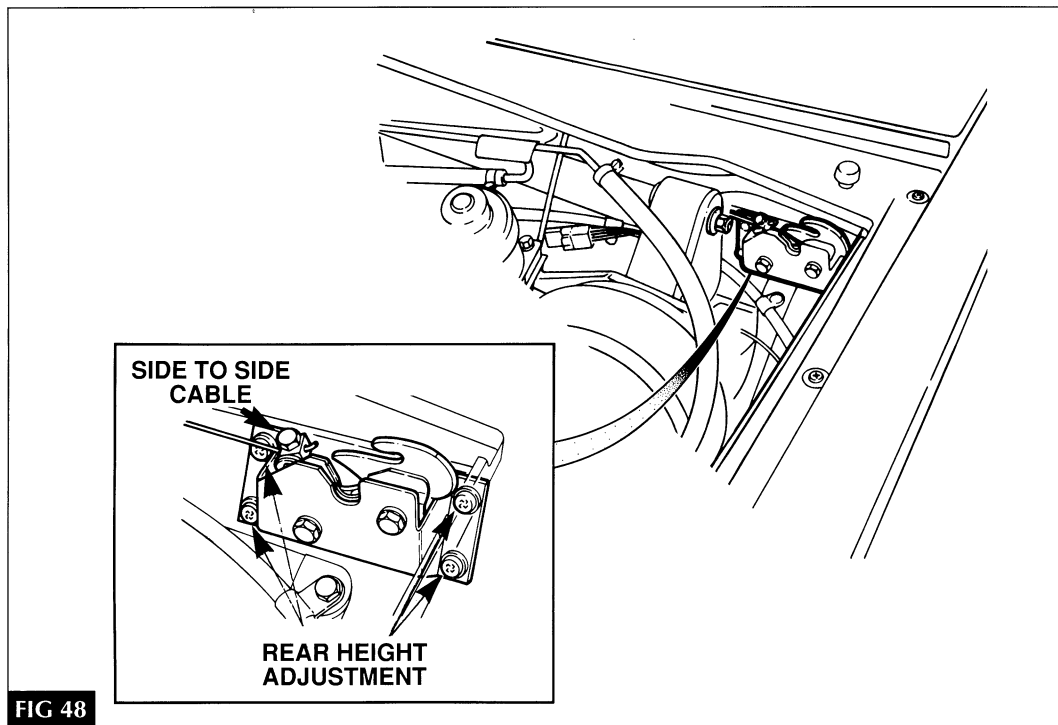


FIG 48

TRUNK LID ADJUSTMENT

The trunk lid adjustment requires the aid of an assistant inside the trunk to loosen and tighten the hinge bolts while the exterior panel is being positioned. The lid is best stabilized during adjustment by placing wood wedges between the lid and the fenders [FIG 49]. Refer to FIG 39, page 25 for wedge information.

Before adjustment, ensure that the trunk seal is in good condition and installed correctly; refer to page 30.

ADJUSTMENT SEQUENCE

The sequence and method for trunk lid adjustment is as follows:

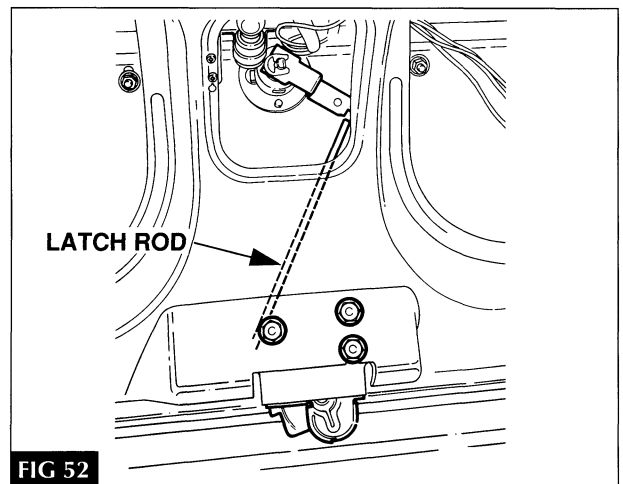
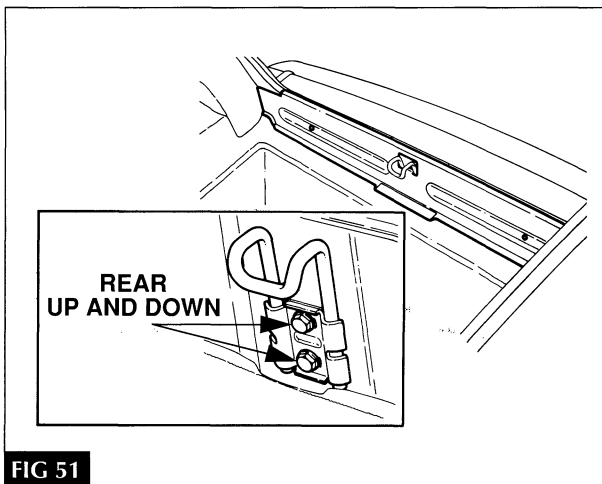
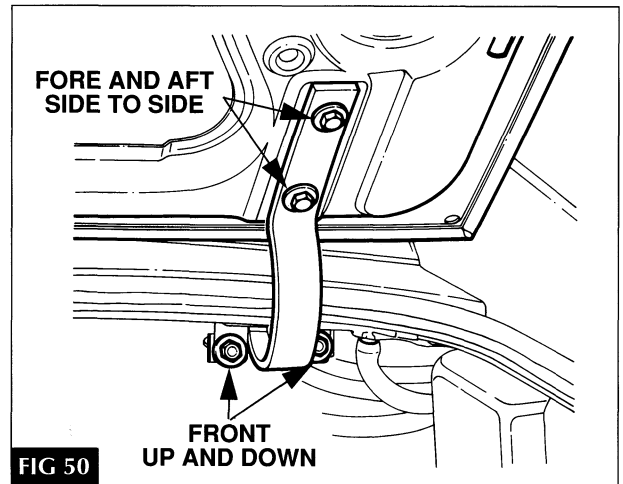
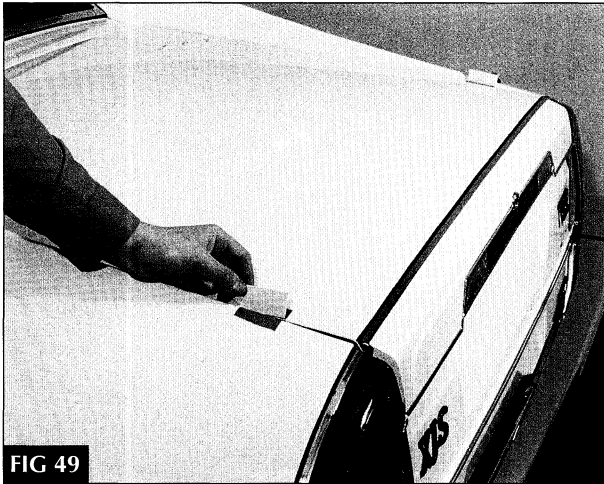
- **Fore and aft, and side to side** Position the trunk lid on the trunk to hinge hardware slots [FIG 50].
- **Front up and down** Position the trunk lid on the hinge to body hardware slots [FIG 50].
- **Rear up and down** Adjust the striker [FIG 51].
- **Latch operation** Adjust the latch rod [FIG 52].

ADJUSTMENT PROCEDURE

- 1 Loosen the trunk to hinge bolts [FIG 50].
With the assistant in the trunk, carefully close the lid and position the lid fore and aft, and side to side with the aid of the wedges. Have the assistant tighten the bolts when the lid is set.
- 2 Have the assistant loosen the hinge to body bolts [FIG 50].
Position the lid front edge to match the body panel. Have the assistant tighten the bolts when the height is set.
- 3 Adjust the striker [FIG 51] to set the rear height and closing effort.
- 4 Position the latch rod in one of the available holes [FIG 52] so that the latch releases at approximately one half of the latch lever travel.

trunk lid adjustment

TRUNK



TRUNK SEALING

Water leaks into the trunk can occur if the seals are damaged or displaced, the drains are obstructed, or the body and fender structure has poor sealing. If water leaks occur in the trunk, all of the areas identified in this section should be considered as possible entry points.

Trunk Opening Seal

Ensure that the seal [FIG 53] is in good condition and seated completely on the body flange. The body flange is contoured to the trunk lid at the rear.



FIG 53

Left Drain

Ensure that the drain [FIG 54] from the fuel filler opening and the left trunk channel is in good condition, installed correctly, and free from obstructions.

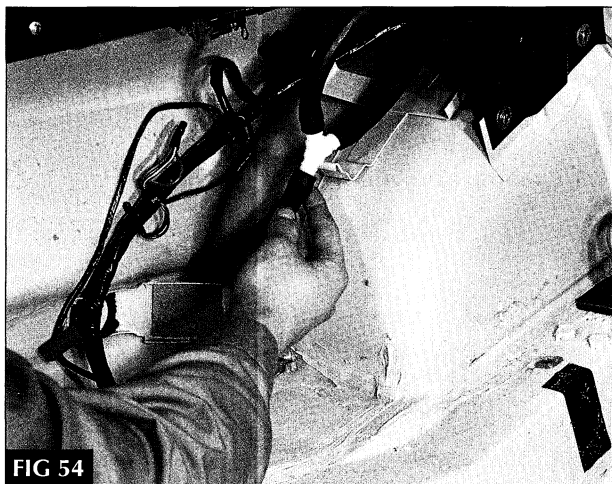


FIG 54

Right Drain

Ensure that the right drain [FIG 55] is in good condition, installed correctly, and free from obstructions.



FIG 55

Side Bumper Holes

The three side bumper holes [FIG 56] can allow water leakage if the washers are positioned incorrectly and the sealant deteriorates. If this occurs, replace the old style oval washers with round washers and install seals CAC 4756 between the bumper and the fender. Seal the holes with SEALANT A during reassembly.



FIG 56

Fender Plug

Just below each tail light is a 3/8 in. hole. These should be covered by rubber plug BD 30541/1 and sealed with SEALANT A [FIG 57].

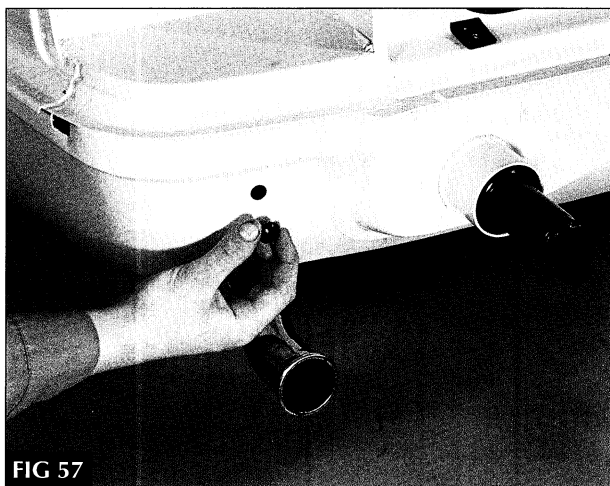


FIG 57

Tail Light Housing Gasket

Ensure that the gasket is in good condition and seals completely to the body [FIG 58]. When installing the tail light, apply SEALANT A at the mounting studs.

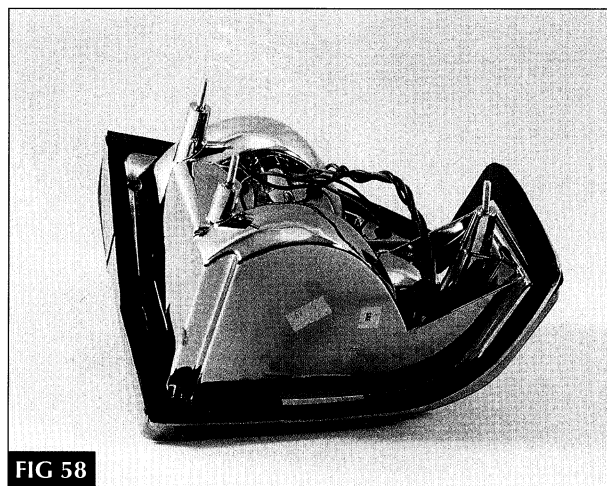
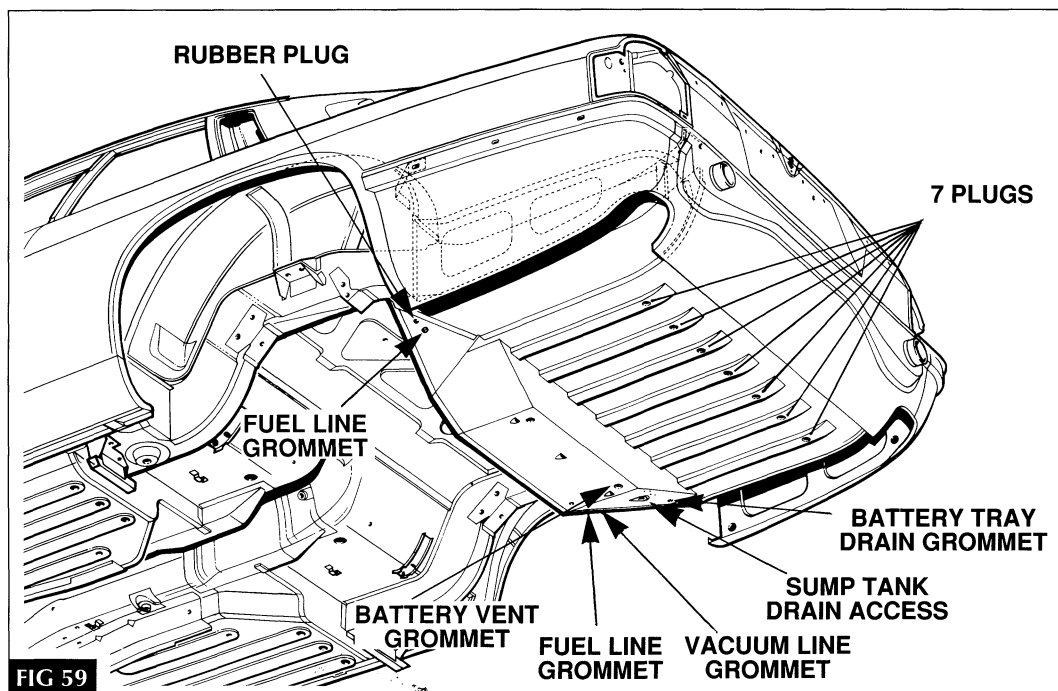


FIG 58

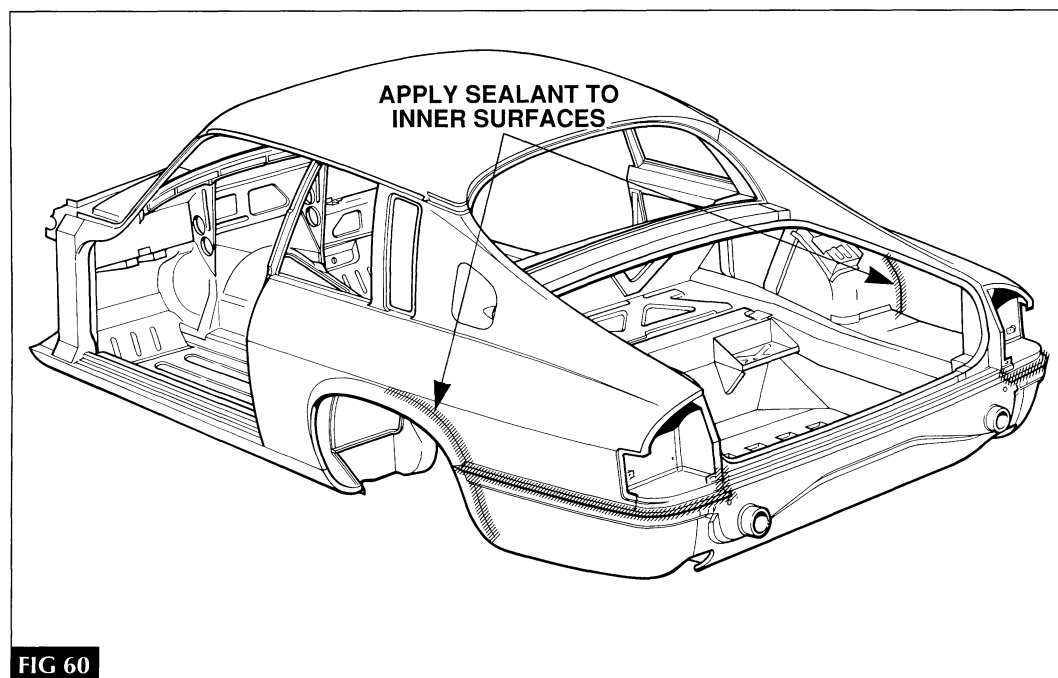
Trunk Floor Seals and Plugs

Inspect the condition and fit of the seals, grommets, and plugs [FIG 59]. If poor sealing is evident, remove and clean the seal, grommet, or plug[s] and the body opening. Replace or reinstall using SEALANT A.



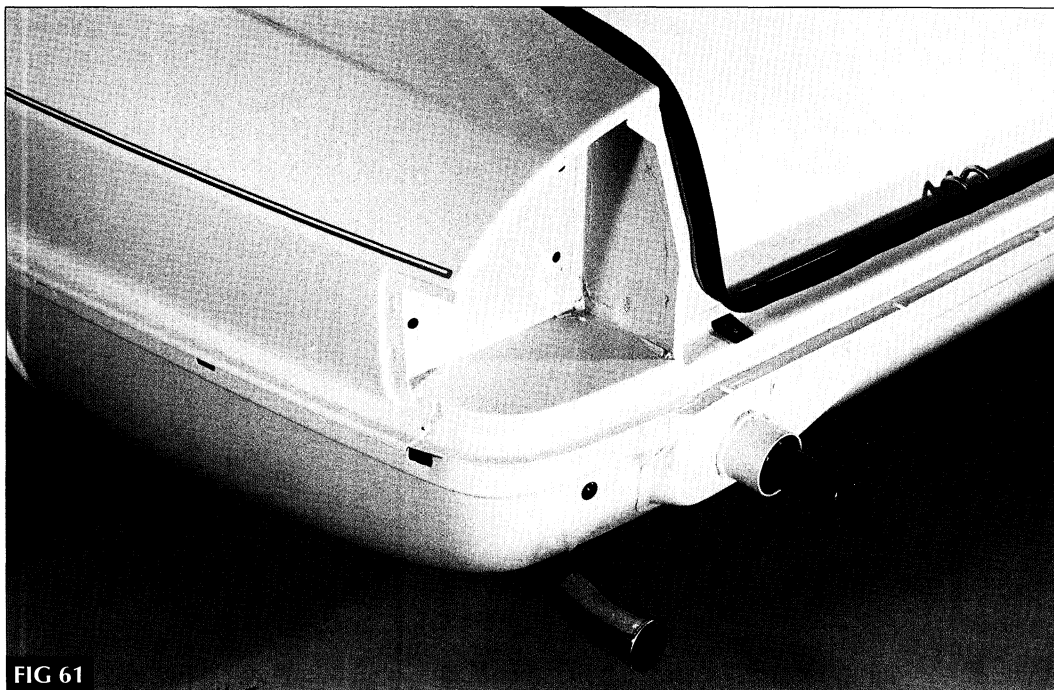
Rear Fender Sealing

Certain seams at the rear fender are prone to leakage. Apply SEALANT C to the inner surface of the upper to lower fender joints at the area indicated [FIG 60]. Also apply SEALANT C to the wheel arch-to-fender seam on the inner surface [FIG 60].

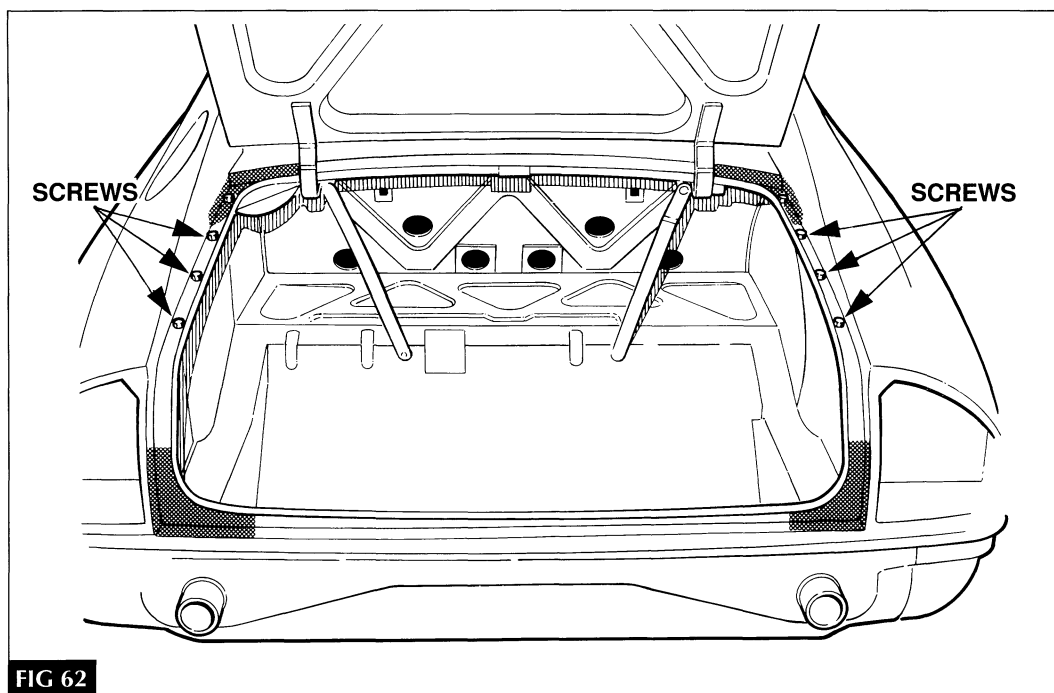


Tail Light Cavity

The sealant used in this area can become hard and allow leakage. Remove any loose sealant and reseal the joints with SEALANT A [FIG 61].

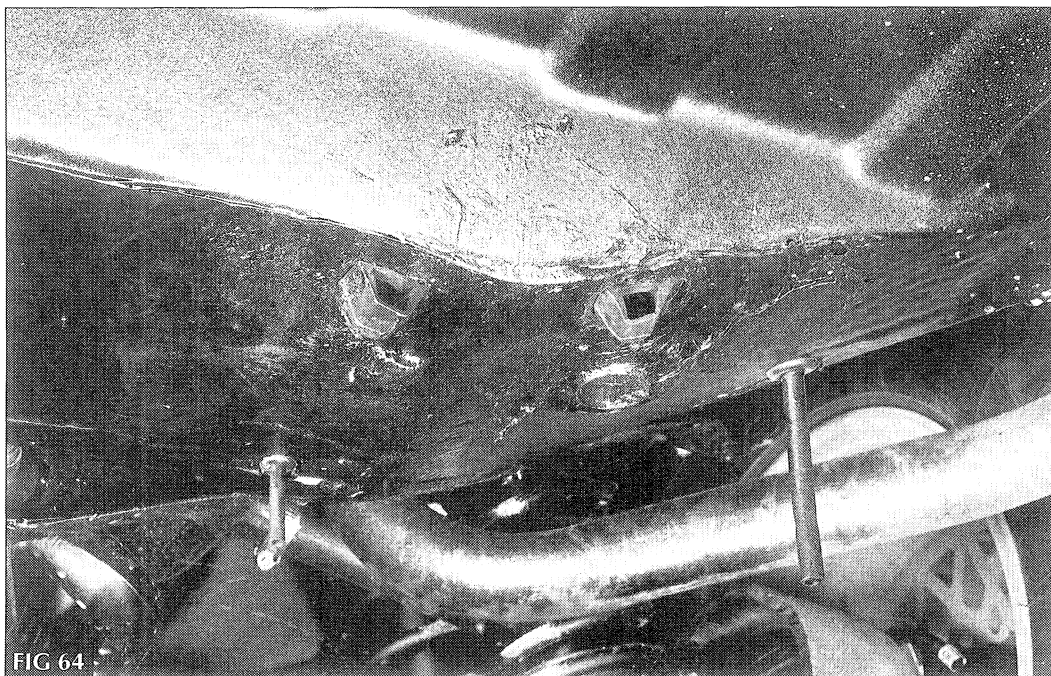
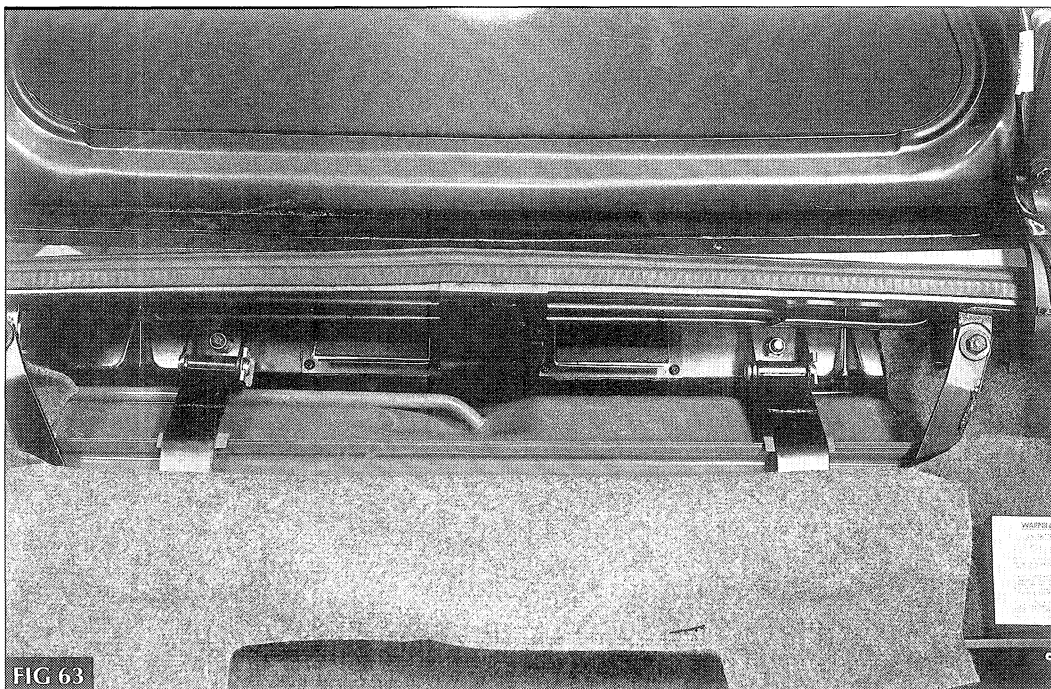
**FIG 61****Trunk Channel Screws**

Early vehicles [up to approximately VIN 129050] have three screws on each side of the trunk opening [FIG 62]. These should be removed and the body holes cleaned. Mix SEALANT G with the body color paint and reinstall the screws with this mixture.

**FIG 62**

TRUNK VENTILATION

To provide additional trunk ventilation in vehicles prior to VIN 142987, carry out the following modifications: Remove the original trim panel and replace it with vented panel BDC 4024 PA [FIG 63]. This increases air flow from the passenger compartment to the the trunk. Trunk air extraction is increased by the installation of two additional vented grommets BD 46778 in the floor [FIG 64]. Be certain that the grommets are installed with the vents facing rearward. Details of the installation are covered in Technical Bulletin Section: 76, No:18, January, 1988.



CONVERTIBLE TOP

The doors, windows, and top seals of the convertible [FIG 65] are adjustable to allow for optimum sealing from wind and weather. In order to obtain this optimum sealing, all adjustable components must be positioned in sequence. Therefore, if a problem arises, successful correction can only be achieved if the entire adjustment procedure is carried out from start to finish.

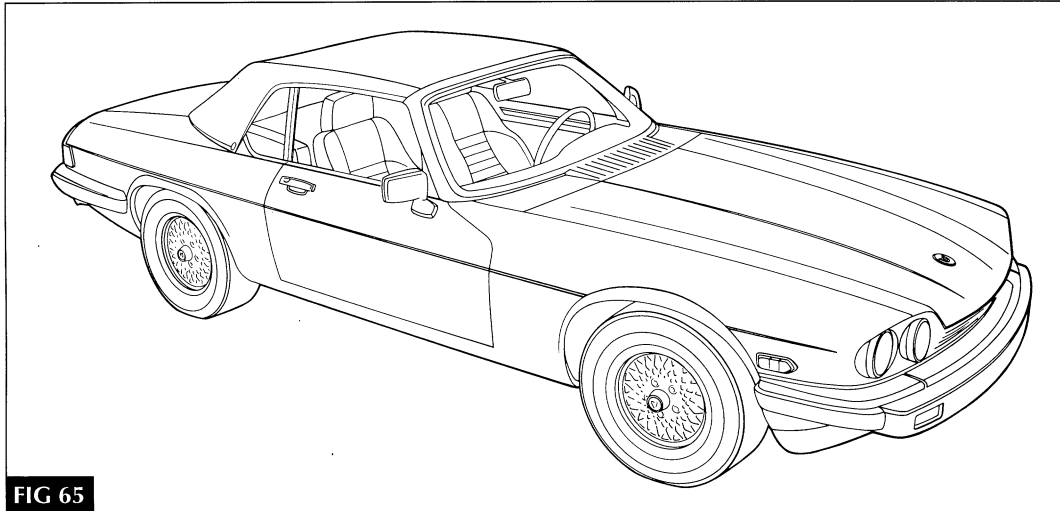


FIG 65

SEAL OPERATION

The seals used between the convertible top, the "A" post, and the windows are designed to form to a "sealed" position when the doors and windows are closed. All the adjustments are aimed at achieving the "sealed" position uniformly along the edge of the glass. FIG 66 illustrates correct and incorrect seal operation.

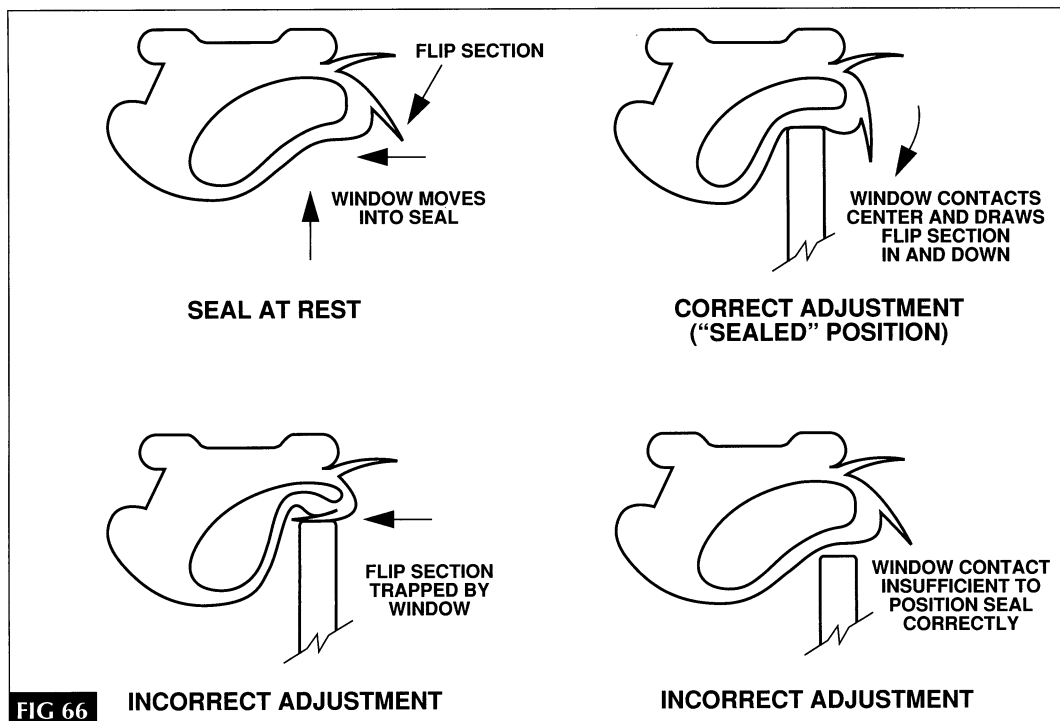


FIG 66

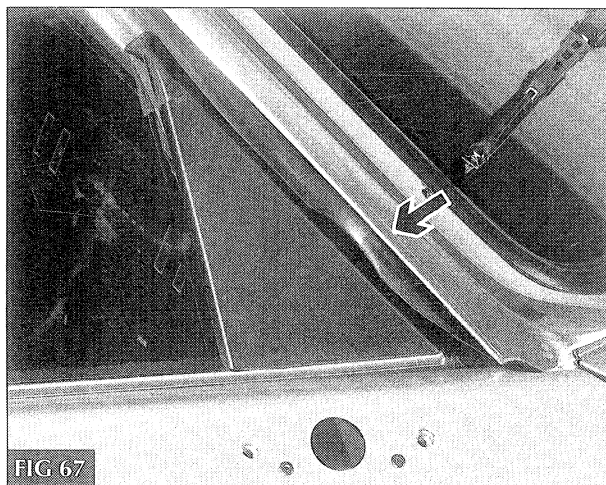
INCORRECT ADJUSTMENT

INCORRECT ADJUSTMENT

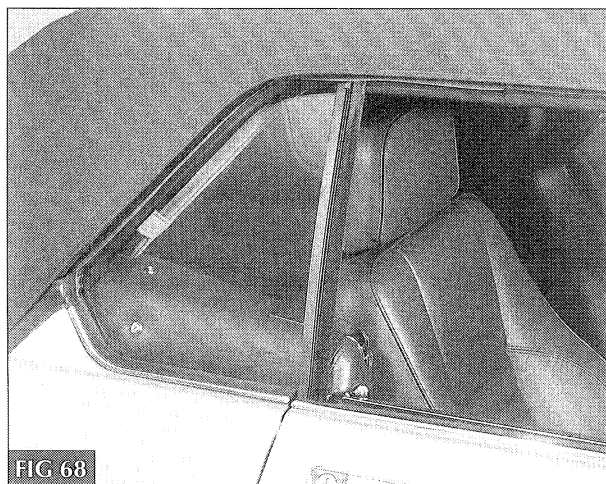
INSPECTION

Before any adjustment is made, all seals should be checked for damage and deformation.

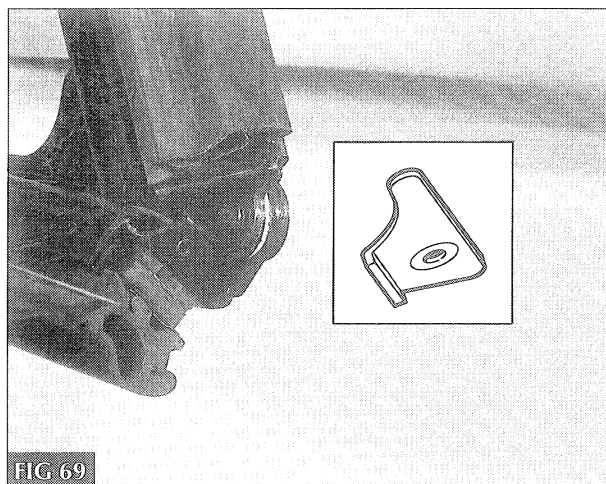
Check the top to window seals for "trapped" flip sections [FIG 67]. If the seal has a permanent deformity, replace the seal at step 2, page 38.



Check the quarter window to door window seals [FIG 68] for security. Replace loose or damaged seals at step 2, page 38.



Check that the top rail packers [FIG 69] are in place and not damaged. Replace as necessary.



ADJUSTMENT

ADJUSTMENT SEQUENCE

The sequence and method for door adjustment is as follows:

- **Doors** Adjust the doors, locks, and latches.
- **Convertible top closing** Adjust the top latches.
- **Determine required adjustment** Measurements and alignment.
- **Door windows to top and "A" post** Adjust the door windows.
- **Quarter windows to door windows and top** Adjust quarter windows.

Doors

Adjust the doors, locks, and latches with the door windows [FIG 70] completely down. Refer to the information and procedures pages 16–22.

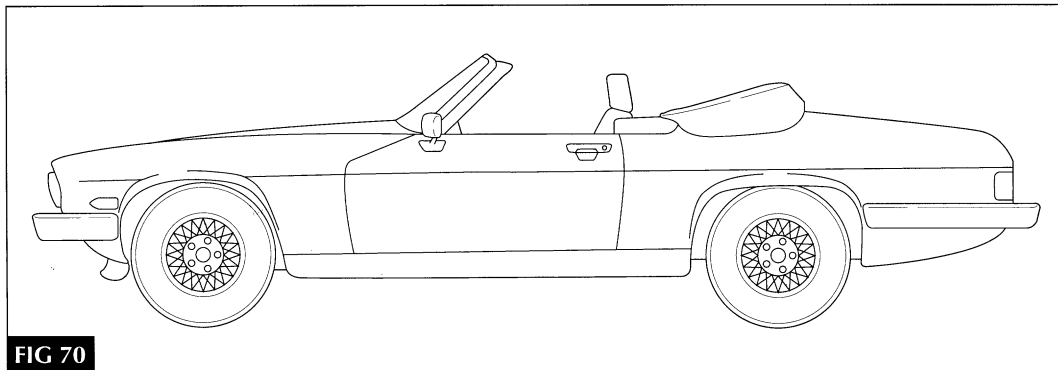


FIG 70

Convertible Top Closing

The top should be held tightly against its seal when the latch handles are closed. The handles should operate smoothly and easily. Adjust the threaded "J" hooks [FIG 71] to achieve these conditions.

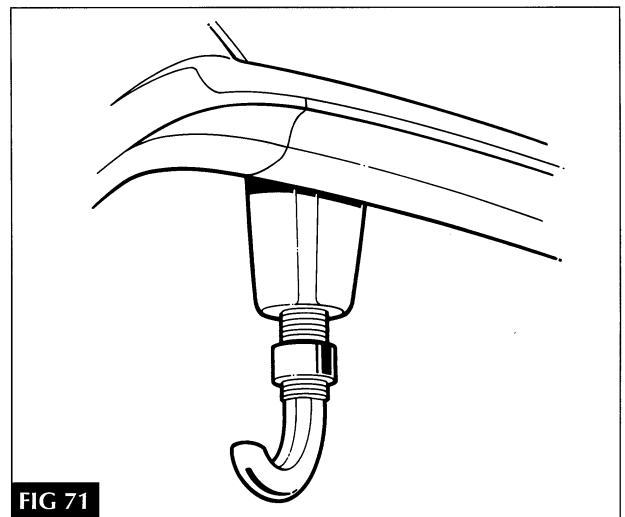


FIG 71

NOTE: During adjustment, the top should remain up. The photographs and illustrations shown here are used for clarity.

Determine Required Adjustments

Adjusting the door and quarter windows to a nominal seal gap dimension and in/out alignment will ensure that the top to window seals form to the “sealed” position [FIG 72] when the windows and doors are closed.

The nominal seal gap dimension is 11.5 to 12 mm [FIG 77]. The correct in/out alignment occurs when the outside top edge of the window aligns with the inside of the seal channel outer edge [FIG 77]. Determine the required adjustments as follows:



FIG 72

- 1 Lower the quarter windows. These can be operated independently of the top by turning the hydraulic pump valve to MANUAL [FIG 73].
- 2 Remove all the top to window seals, four each side. Note that the “A” post seal is bonded to the door seal where they connect. Exercise care when separating the “A” post and door seals.
- 3 Centralize all the seal channels in their screw slots. If the slots are misaligned, centralize the channels on the end screws only [FIG 74].
- 4 Raise both front windows completely.
- 5 Use a metric metal rule to measure the gap between the edge of the windows and the raised section of the seal channel [FIG 75]. Measure the gap in four places; at the front and back along the top edge, and at the top and bottom along the “A” post edge [FIG 76]. Be sure to measure the gap to the raised section of the seal channels [FIG 77]. Record the dimensions.
- 6 Use the rule to check the in/out alignment over the entire seal area on both sides of the car.

The window(s) will require adjustment *vertically* to achieve the nominal seal gap dimension at the top, and *horizontally* to achieve the nominal seal gap dimension at the “A” post.

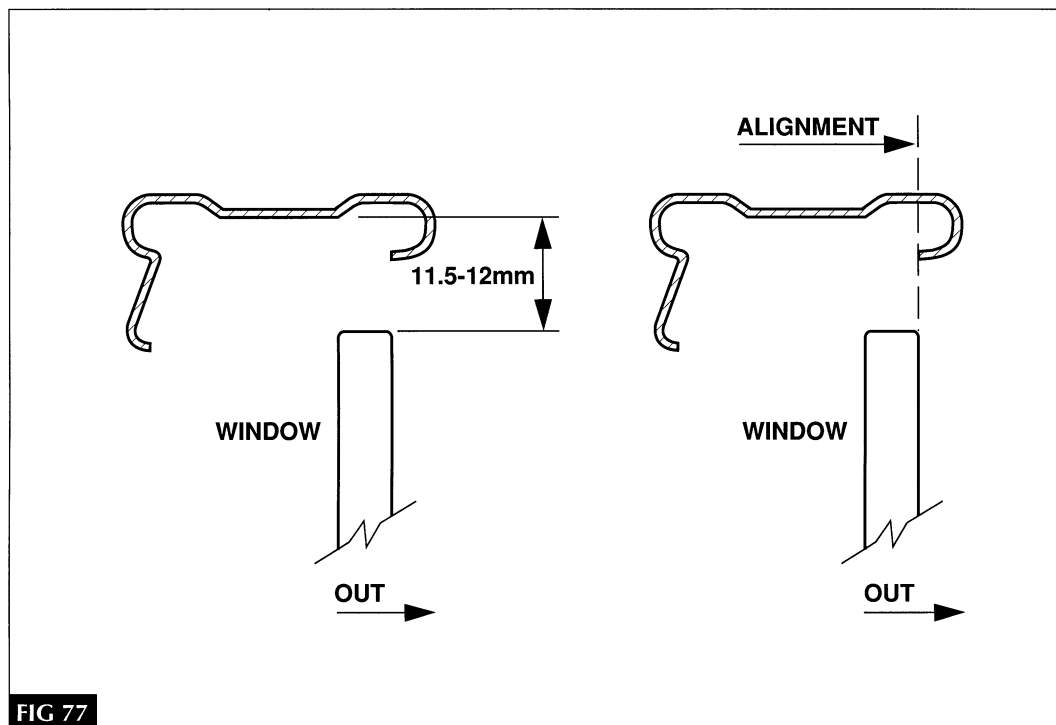
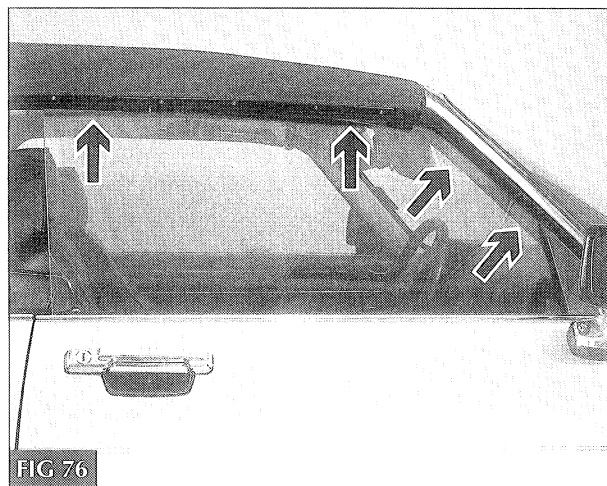
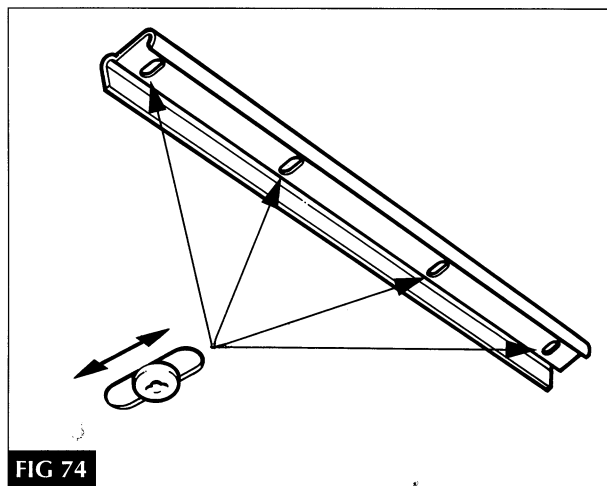
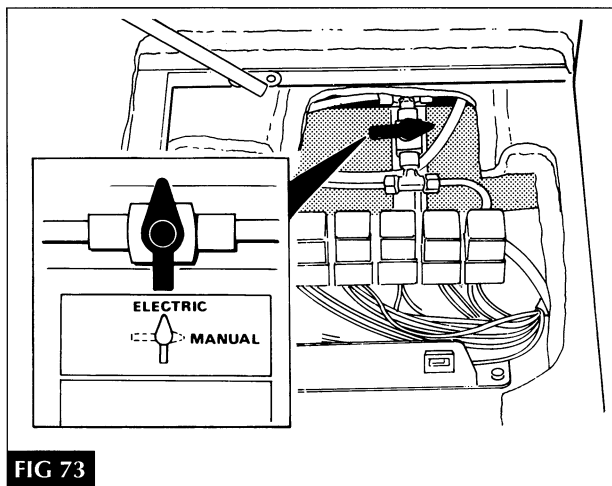
The window(s) will require adjustment *laterally* to achieve the correct in/out alignment.



CAUTION: ONLY THE COMBINATION OF THE NOMINAL GAP DIMENSION AND THE WINDOW EDGE ALIGNMENT [FIG 77] WILL ENSURE CORRECT SEAL OPERATION.

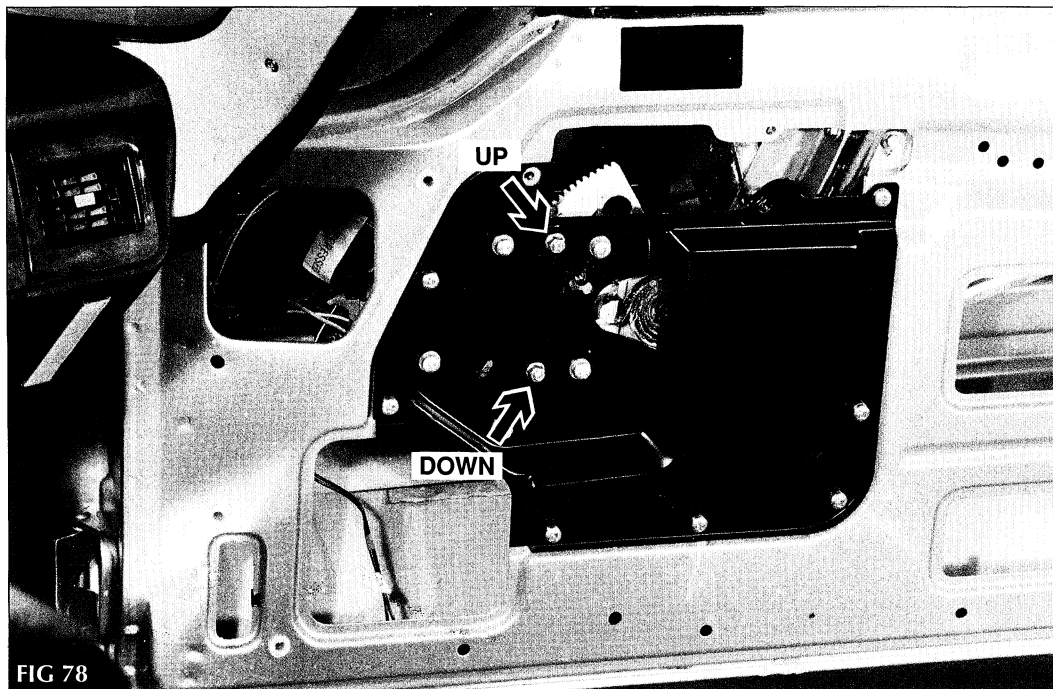
adjustment

CONVERTIBLE TOP

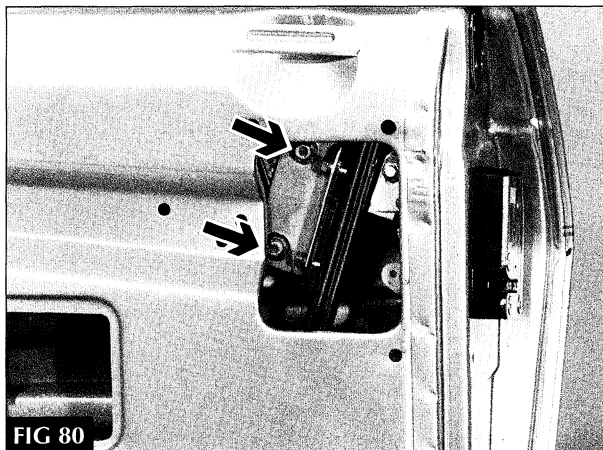
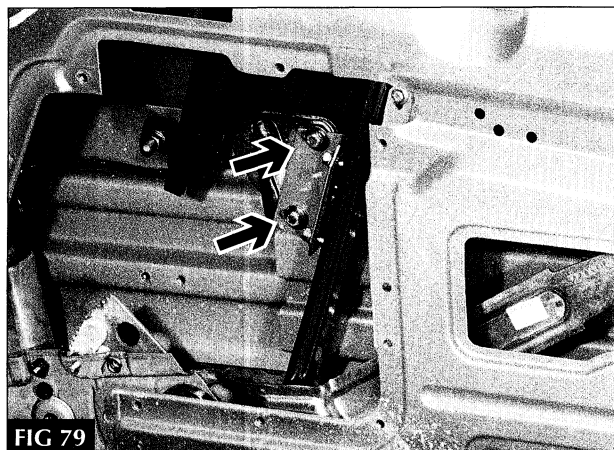


Adjust the Door Windows Up / Down

Remove the door interior panels and adjust the window up stop [FIG 78] to obtain the 11.5–12 mm nominal gap dimension [FIG 77, page 39] between the windows and the top. Loosen the lock nut and turn the eccentric with a screwdriver. If required, adjust the window down stop so that the window stops below the door line.

**Adjust the Door Windows Fore / Aft**

Loosen the two window to regulator bracket bolts at the front bracket [FIG 79] and at the rear bracket [FIG 80]. Slide the window fore or aft to obtain the 11.5–12 mm nominal gap dimension [FIG 77, page 39] between the windows and the “A” post. The cheater plate also serves as the window front guide channel; therefore, as necessary, adjust the cheater plate [FIG 82] fore or aft to match the window movement. Loosen the two upper mounting nuts, one of the lower channel nuts, and carefully disconnect the rubber gasket to allow movement.



Adjust the Door Windows In / Out

Loosen the two regulator bracket to guide channel bolts at the rear bracket [FIG 81] and adjust the rear of the window in or out as necessary to obtain the nominal alignment [FIG 77, page 39]. Repeat this step at the front regulator bracket [FIG 82]. As necessary, adjust the front guide channel. Loosen both channel adjusting nuts completely [FIG 82] and cycle the window several times. Ensure that the window does not bind in the channel and tighten the nuts in this position.



FIG 81



FIG 82

QUARTER WINDOW ADJUSTERS

The three quarter window adjusters [FIG 83] allow for adjustment fore and aft, and in and out. Fore and aft is adjusted by loosening the lock nuts and sliding the window as required [FIG 84]. In and out is adjusted by loosening the lock nuts and turning the studs as required [FIG 84]. Exercise caution to position the lock washer and adjuster correctly before tightening the lock nut. Up and down is adjusted by the top limit adjuster [FIG 83].

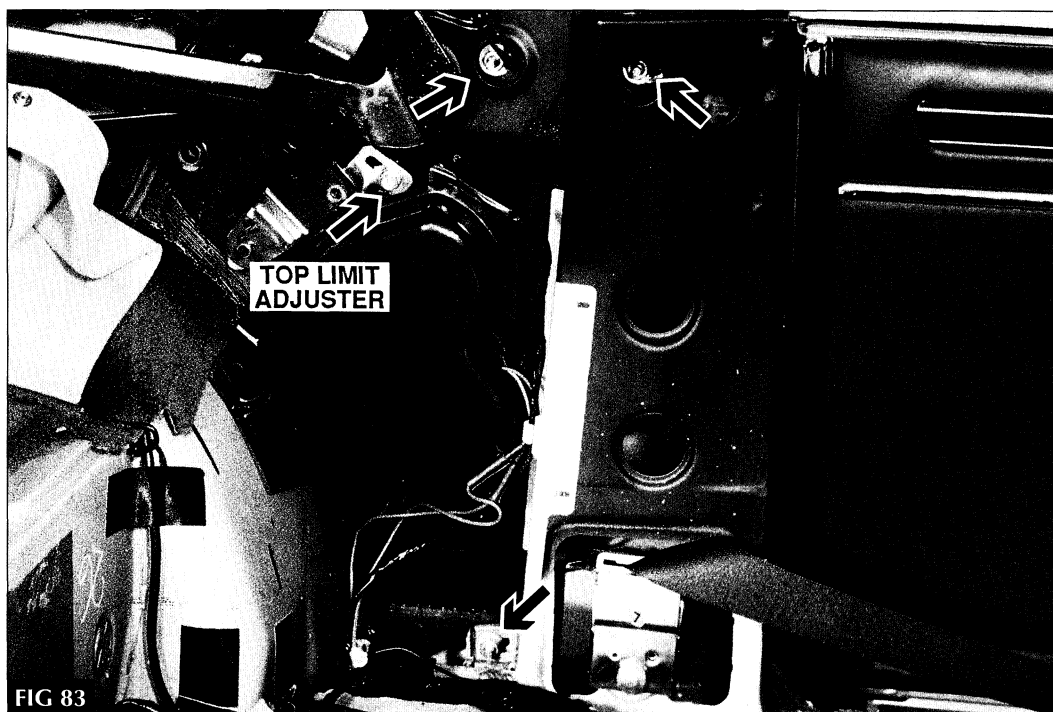


FIG 83

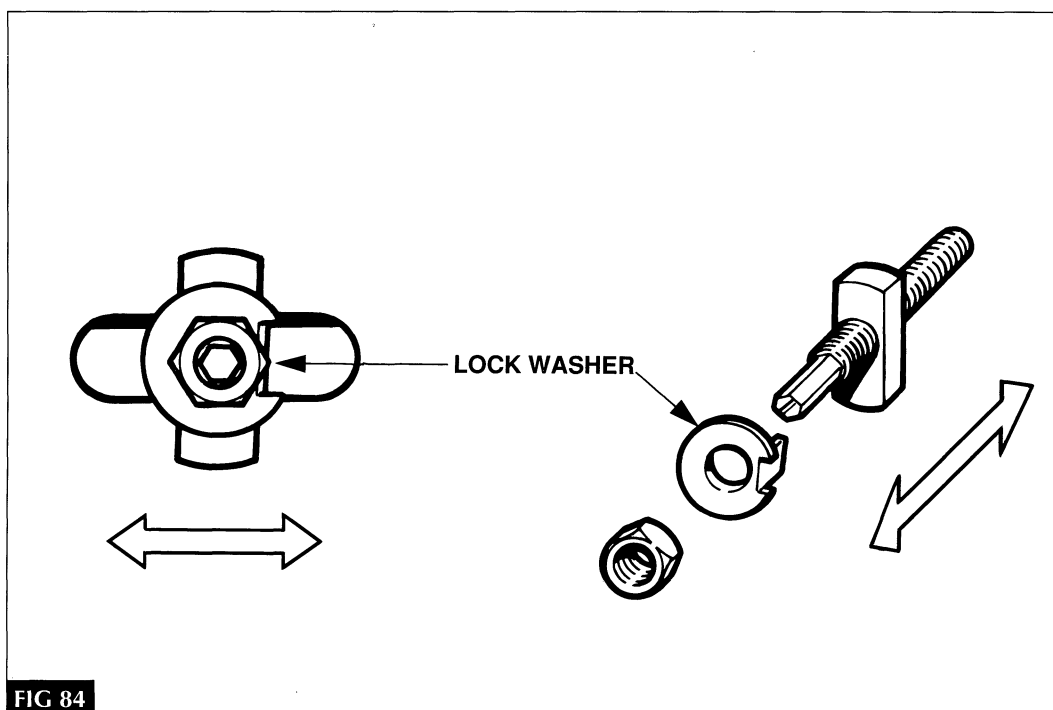


FIG 84

Quarter Window Initial Adjustment

Using only the upper forward adjuster, adjust the quarter windows so that the seal is tight against the door window at the bottom [FIG 85].

Adjust the Quarter Windows Fore / Aft

Loosen all three adjuster lock nuts and slide the window fore or aft to obtain a uniform gap of 2–4 mm between the quarter window seal shoulder and the door window [FIG 86]. A minimum gap of 2 mm is required. Tighten the lock nuts.

Adjust the Quarter Windows In / Out

Loosen the lock nut and turn the lower adjuster to move the top of the window in or out to obtain the nominal alignment with the seal channel [FIG 77, page 39]. Tighten the lock nut. Loosen the lock nut and turn the rear adjuster to move the rear of the window in or out to obtain the nominal alignment with the seal channel [FIG 77, page 39]. Tighten the lock nut.

Adjust the Quarter Windows Up / Down

Lower the convertible top and raise the quarter windows by switching to manual override [FIG 73, page 39]. Adjust the height of the window in the full up position by loosening the lock bolt on the top limit adjuster [FIG 83] and sliding the bolt fore or aft. Sliding the bolt forward decreases the window height; sliding the bolt rearward increases the window height. Tighten the lock bolt when the top of the quarter window is even with the top of the door window [FIG 87]. Cycle the quarter windows several times and re-check the top alignment. Readjust if necessary.

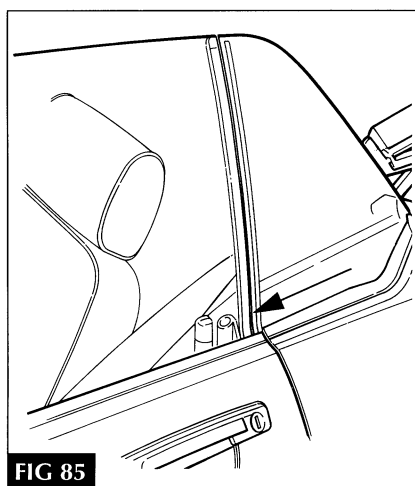


FIG 85

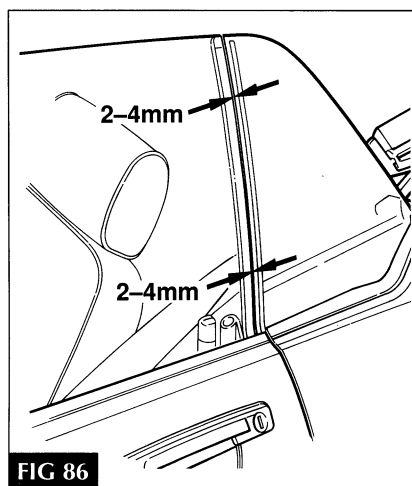


FIG 86

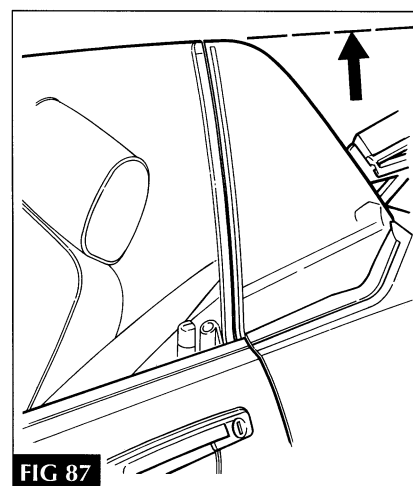


FIG 87

Quarter Window Final Check

Open the doors and raise all the windows completely. Slowly close the doors while observing the door window contact with the quarter window seal. When the top of the door window contacts the quarter window seal, the gap at the bottom of the seal should not exceed 12 mm. If this is exceeded, turn the lower adjuster to move the top of the window in and re-check the contact.

Install the Seals

Install the two "A" post seals using ADHESIVE H to bond the seals to the door seals. Install the remaining three seals on each side starting at the front and working rearward. Position the seals so that they contact lightly at each end [FIG 88].

Close the doors and check the seals at the cheater plates [FIG 89]. If the seal flip section(s) are trapped, carefully trim the flip section with a sharp blade just enough to allow clearance.

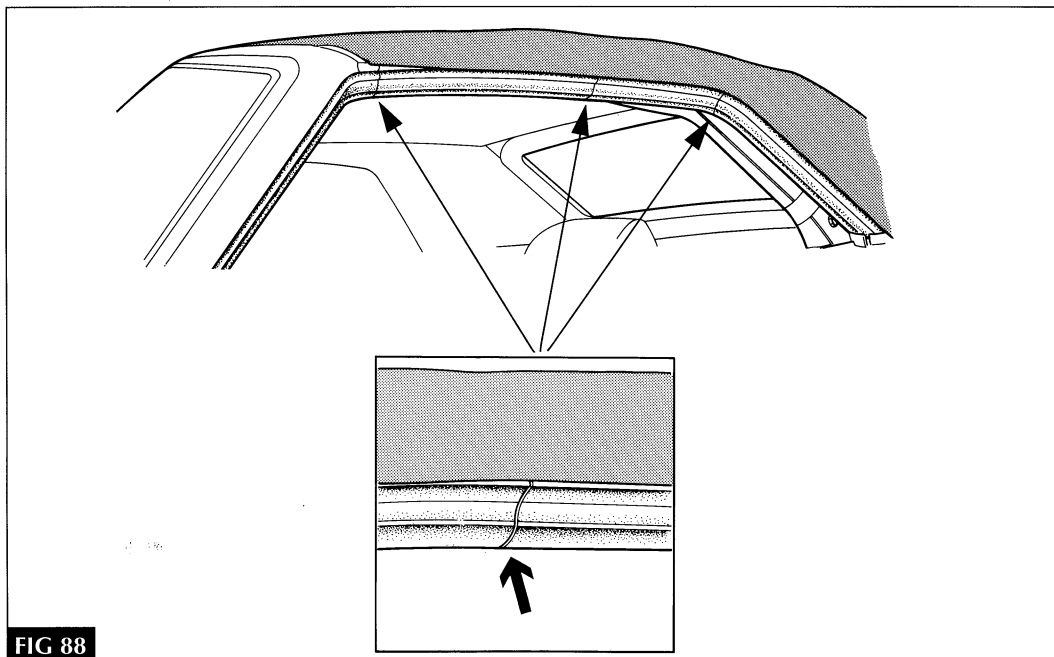


FIG 88

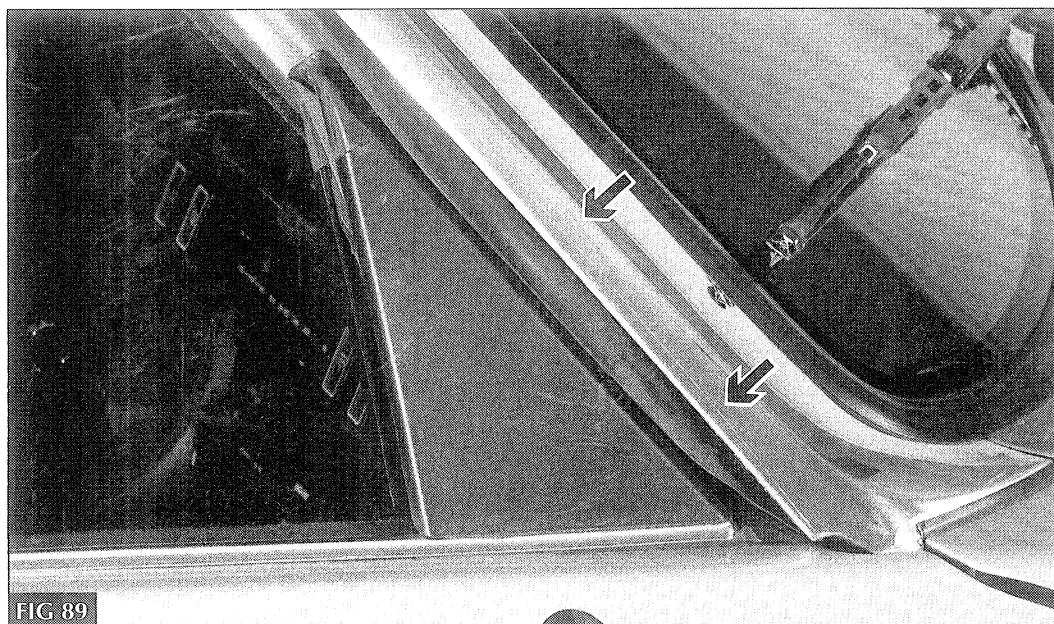


FIG 89

Check the seal operation along the top and down the "A" post to the cheater plate. If the seal(s) are trapped or do not form to the "sealed" position, the door window UP adjustment should be lowered by 1 mm.



NOTES

A large rectangular area for writing notes, bounded by a thin black line. The area is currently blank.



NOTES





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