1971 OPTIONS

RPO #	DESCRIPTION	QTY	RETAIL \$				
19437	Base Corvette Sport Coupe	14.680	\$5,496.00				
19467	Base Corvette Convertible	7,121	5,259.00				
	Custom Interior Trim	2.002	158.00				
A31	Power Windows	6,192	79.00				
A85	Custom Shoulder Belts (std with coupe)	0//	42.00				
C07	Auxilian Hardton (for convertible)	2.619	274.00				
C08	Vinyl Covering (for auxiliary hardtop)	832	63.00				
C50	Rear Window Detroster	1,350	42.00				
C60	Air Conditioning	11,481	459.00				
	Optional Rear Axle Hatto	2,353	13.00				
J50	Power Brakes	13,558	47.00				
LS5	454ci 365hp Engine	5,097	295.00				
LS6	454ci 425ho Engine	155	1,221.00				
LT1	250a: 220ba Engine	1.949	483.00				
M21	A-Speed Man Trans, close ratio	2,567	0.00				
M22	4-Speed Man Trans, close ratio, neavy of	жу 130	100.00				
M40	Turbo Hydra-Matic Automatic Transmission	10,060	0.00				
N37	Tilt-Telescopic Steering Column	8,130	54.3 0				
N40	Power Steering	17, 904	115.50				
P02	Deluxe Wheel Covers	3,007	63.00				
PT7	White Strine Tires, F70x15, nvlon	6,711	28.00				
PU9	White Letter Tires, F70x15, hylon	12,449	42.00				
T60	Heavy Duty Battery (std with LS5, LS6)	1,455	15.60				
UA6	Alarm System	۱ ۵۰۰۰ تا	31.00				
U69	AM-FM Radio	15,0/0	1/0.00				
U79	AM EM Padio stereo	3.431	283.00				
ZR1	Special Purpose LT1 Engine Package	ک	1,010.00				
ZR2	Special Purpose LS6 Engine Package	14	1,747.00				
A 350ci 270bb engine, 4-speed wide-ratio manual transmission, vinyl							
interior trim, and soft top (conv) or T-tops were included in the base price.							
The 7R1 included the LT1 engine, M22 transmission, neavy-duty power							
brakes transistor ignition, special aluminum radiator, and special springs.							
chacks and front and rear stabilizer bars (ZHTS nave appeared with and							
without rear stabilizers). ZR1s also had metal fan shrouds. RPOs A31,							

without rear stabilizers). ZR1s also had metal fan shrouds. RP C50, C60, N40, P02, UA6, U69 and U79 were not available with ZR1. • The ZR2 package was similar to ZR1, except ZR2 included RPO LS6, the

454ci, 425hp engine.

• Custom interior included leather seat trim, wood-grain accents and lower carpet trim on interior door panels, wood-grain accents on console, and special cut-pile carpeting.

•M40 was no cost with the base 350ci, 270hp engine, but cost \$100.35 with LS5 or LS6. It was not available with LT1, ZR1 or ZR2.

1971 COLORS

CODE					INTERIORS
905	Nevada Silver	1,177	Bk-W	Silver	Bk-Db-Dg-R
912	Sunflower Yellow	1.177	' Bk-W	Silver	Bk-Dg-S
972	Classic White	1.875	Bk-W	Silver	Bk-Db-Dg-R-S
973	Mille Miglia Red	2 180	Bk-W	Silver	Bk-R
976	Mulsanne Blue	2 465		Silver	Bk-Db
	Didente Dide	1 417		Silver	Bk-Db
979	Bridgenampton Blue	7.445		Silver	Bk-Da
983	Brands Hatch Green	3,445			
987	Ontario Orange	.2.269	Bk-W	Silver	Bk-Dg-S
988	Steel Cities Gray	. 1,591	Bk-W	Silver	Bk-S
989	War Ronnet Yellow	. 3.706	S Bk-W	Silver	Bk-Dg-S
		~L	aa aambinot	HODE WOFE	poccible

 Suggested interiors shown. Other combinations were possible. • Exterior color quantity total is 499 short of total production.

Interior Codes: std=Bk/V, 402=Bk/L, 407=R/V, 412=Db/V, 417=S/V, 420=S/L, 423=Dg/V.

Abbreviations: Bk=Black, Db=Dark Blue. Dg=Dark Green, L=Leather. R=Red, S=Saddle, V=Vinyl, W=White.



Fig. 47—Front Seat Back Shim Location

FRONT SEAT BACK PANEL

Removal and Installation (Fig. 47)

- Tilt seat back forward and remove (2) screws securing bottom of seat back panel to seat back frame.
- Pull bottom of seat back outward and lift panel upward to disengage panel from upper retainers; then remove panel from seat back.
- 3. To install seat back panel, reverse removal procedure.

SEAT BACK LOCK ASSEMBLY

Removal and Installation (Figs. 47, 48)

- 1. Remove front seat back panel, as previously described.
- IMPORTANT: If removing and reinstalling same lock assembly, install lock up screw at location shown in Figure 48.
- Remove lock assembly attaching screws and nuts and remove lock assembly from seat back.
- Remove lock strap-to-cushion frame attaching screws.
- 5. To install seat back lock assembly, reverse removal procedure. IMPORTANT: After all lock assembly attaching screws, including lock strap-to-cushion frame screws, have been tightened remove lock up screw at location shown in Figure 48.
- If requested, shims may be added to raise seat back angle 2°.
 - A shim must be added to either side of back cushion, under each bumper and a shim placed under the lock strap to cushion attachment in the center of the seat cushion.

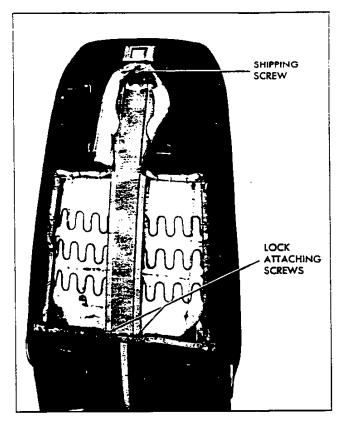


Fig. 48—Front Seat Back Lock Attachments

The shims are located in the glove box.

NOTE: Recheck seat back ability to lock after adding the shims.

BODY MOUNTING

The torque of all body mounting bolts should be checked periodically as an aid to preventing annoying squeaks and rattles. All bolts should be torqued 40 to 50 ft. lb.

BODY REPAIRS

GENERAL INSTRUCTIONS

The following gives information necessary for repair of collision damage and performance of general maintenance on Corvette bodies. Included here is information dealing with availability of repair panels, general installation procedures for installing panels and repairing damage to the body.

Repair of fiber glass reinforced plastic bodies can be a relatively easy matter if precautions are observed. In cases where welding must be done on steel parts which are installed on body, do not allow flame or weld-

ing heat to come into direct contact with plastic body panels. The general area around the welding operation should be protected with wet asbestos or any other like method (several thicknesses of aluminum foll makes an excellent heat shield if out of the way of direct flame).

Straightening of steel parts while still in body must be done with care. When applying hydraulic jacks or like equipment which operates by exerting force, bear in

Fig. 49-Front Body Construction

- 1. Panel—Hood
- 2. Panel—Access Door 3. Panel—Grille
- 4. Bonding Strip-Front Fender
- Upper to Lower
 5. Panel—Front Fender Lower Rear
- 6. Reinforcement—Front Fender 7. Reinforcement—Front Fender
- Bonding Strip—Front Fender Lower Front to Rear
 Panel—Radiator Grille Lower

mind that the part being used to brace the stationary end cowl and sill areas with care.

Tracing line of damaging force and checking body carefully for broken bonds and cracks before, during and after repairs will pay off repeatedly.

Small cracks and faults in bonds and panels will usually grow larger if left unattended.

of tool must be able to withstand such usage and that fiber glass parts, though tougher than steel, will not yield

or "take a set" as with steel parts, so they cannot be "straightened". If poor alignment exists due to collision or other physical damage, check steel reinforcements in

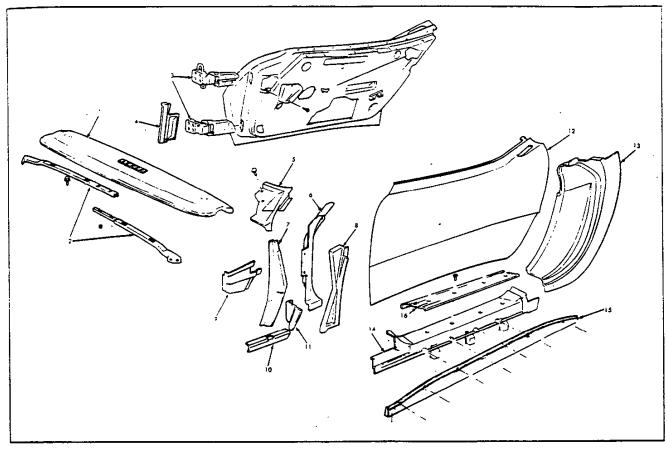


Fig. 50-Center Body Construction

- 1. Pad-Instrument Panel
- 2. Reinforcement-Instrument Panel
- 3. Door Hinge Assembly
- Panel-Plenum Side Extension
- 5. Bonding Strip-Lower Outer Windshield
- 6. Pillar-Body Hinge 7. Plenum Side Panel
- 8. Dash Extension Panel
- 9. Sill Inboard Extension
- 10. Plenum Side Panel Extension
- 11. Filler Panel

set cream.

- 12. Panel—Side Door Outer
- 13. Pillar Assembly—Door Lock
- 14. Door Sill
- 15. Molding
- 16. Sill Plate

REPAIR PANELS

Body repair panels are illustrated in Figures 49 through 52. Those shown are typical of panels which are available through Chevrolet parts sources. Procedures which may be used for installing panels are explained in the following paragraphs.

Figure 53 illustrates various bonds which will be encountered during repair procedures.

PRECAUTIONS

Creams are available to protect the skin from a condition known as occupational, or contact dermatitis. This common type of dermatitis is not contagious. Improved resin formulas in the approved kits have almost eliminated skin irritation. Cream is supplied with the kit for persons who may have a tendency toward skin irritation from the resins or dust.

The application of these creams is recommended whenever the Resin materials are used. Generally the cream is not required when the plastic (epoxy) solder kit is being used. Directions for using the cream is as follows: 1. a. Wash hands clean. Dry thoroughly.

- b. Squeeze about 1/2 inch (or 1/2 teaspoonful) of #71 cream into palm of hand.
- c. Spread evenly and lightly until cream disappears. Work cream into cuticle, between fingers and around wrists.
- d. Apply second coat, repeating Steps b and c. e. Hold hands briefly under cold running water to
- 2. Remove resin mixture from hands as soon as possible and imperatively before mixture starts to gel. This can be observed by the action of the material being used. Resin may be removed with lacquer thinner by washing in soap and water.
- 3. Respirators are recommended when grinding. Also some minor skin irritation from glass and powdered cured resin may be evident. Washing in cold water will help to minimize.
- 4. Use a belt sander with a vacuum attachment for dust control whenever possible.
- 5. Resin mixtures may produce toxic fumes and should be used in well ventilated areas.
- 6. Be careful not to get any resin material on clothing.
- 7. Use the right materials for the job. It is important to use the approved kits because other materials

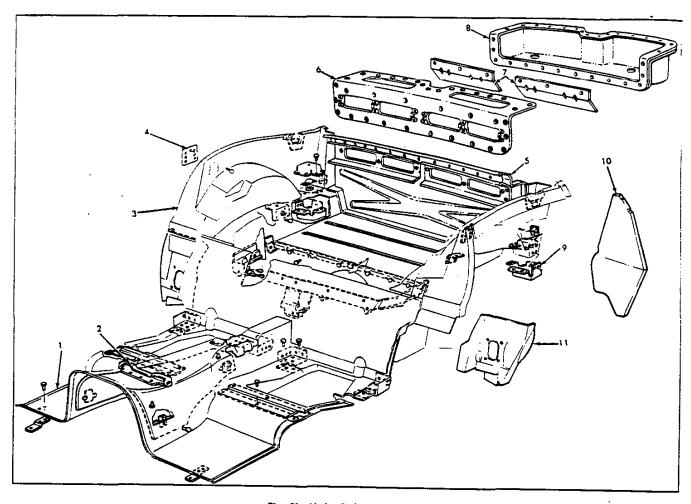


Fig. 51-Under Body Construction

- 1. Panel Underbody
- 2. Support Console
- Panel Wheel Housing Closing — Right Hand
- 4. Lid Lock Striker Anchor
- 5. Center Panel
- 6. Reinforcement
- 7. Baffie
- available may not meet the required engineering and safety standards.
- 8. Keep materials, utensils and work area clean and dry. These repairs involve chemical reactions, and dirt or moisture may upset the chemical balances and produce unsatisfactory results.
- 9. Before starting repair operations, look for hidden damage by applying force around the damaged area, looking for hairline cracks and other breakage. Check for minor damage at other points in the vehicle such as around exhaust pipes, grille, headlamps and points of wear. Early repair of minor damage may prevent major repair later.

PLASTIC SOLDER KIT

The Plastic (Epoxy) Solder Repair Kit is used for minor repairs on the Corvette body. These materials will produce an easy, quick and lasting repair in the case of small cracks, surface imperfections and small holes.

1. Use paint remover or power sander, and remove finish from damaged area. Carefully inspect for other areas requiring repairs.

- 8. Plenum Reinforcement-Folding Top Hinge Support (19467)
- 10. Reinforcement-Body Bolt
- 11. Shield—Rear Quarter
- 2. Mix the materials (fig. 54).
- 3. Apply the epoxy solder using a putty knife or rubber squeegee, Figure 55. Work the material into the repair and build the material up to the desired contour. For deep filling and on vertical surfaces, several layers may be used, each about 1/2" thick.
- 4. Finish the repair by grinding, sanding and painting in the usual manner, Figure 56.

RESIN REPAIR

The Resin Repair for major repairs, consists of resin, hardener, filler, fiberglass cloth, protecting creams and mixing utensils. Repairs such as torn panels and separated joints require the adhesive qualities of the resin and the reinforcing qualities of the glass fibers. Steel to fiber glass separations are connected together with epoxy solder after first cleaning out old

The following procedure is basic for repairing any plastic (fiberglass component or panel).

1. Look for hidden damage. Apply force by hand around the damaged area.

CHEVROLET CHASSIS SERVICE MANUAL

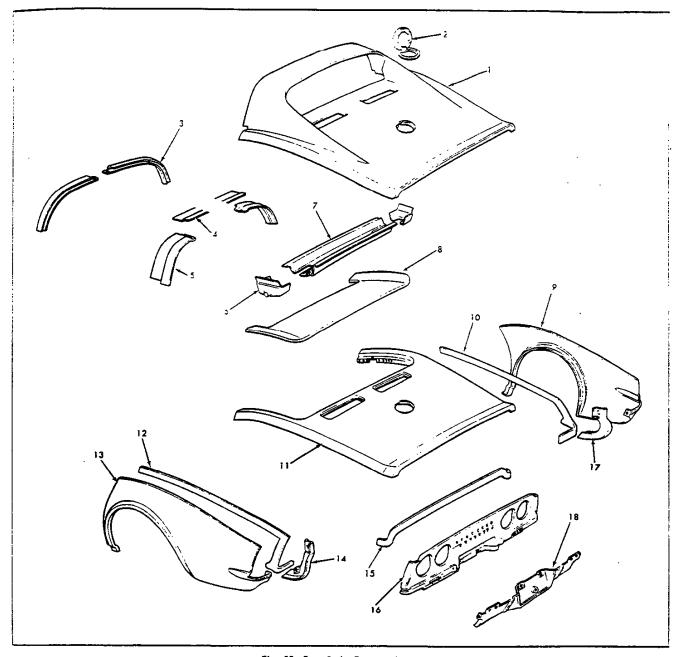


Fig. 52-Rear Body Construction

- 1. Panel—Body Rear Upper 2. Bezel—Fuel Tank
- Filler Door 3. Reinforcement Roof-
- Right Hand 4. Panel-Rear Roof Inner
- Center—Left Hand
- 5. Panel —Rear Roof Inner Rear—Left Hand
- 6. Extension—Body Rear

- Upper Panel
 7. Support—Body Rear Upper Panel
 8. Lid—Folding Top Compartment
 9. Panel—Rear Quarter— Right Hand
- 10. Banding Strip—Body Rear Upper Panel to Quarter Panel-Right Hand
- 11. Panel-Body Rear Upper
- 12. Bonding Strip-Body
- Rear Upper Panel 13. Panel—Rear Quarter— Left Hand
- Bonding Strip-Body Lower Panel to Quarter Panel-Left Hand
- 15. Bonding Strip-Body Rear Upper
- 16. Body Rear Lower Panel 17. Shield—Rear Quarter Splash
- 18. Panel—Rear Filler

2. Use paint remover and remove finish from around damage area. Inspect area again for signs of other damage.

3. Grind or file the damaged area to form a "V" at

the broken or cracked portion. Side of "V" should have a shallow pitch for maximum bonding surface. A belt sander with a vacuum attachment will minimize the dust problem, Figure 57.

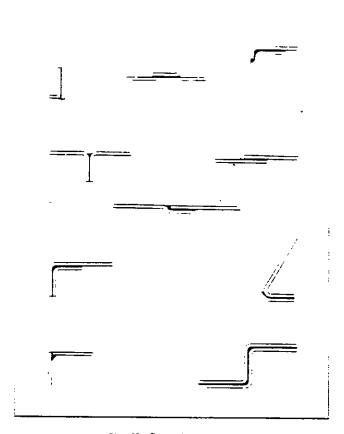


Fig. 53—Typical Body Bonds

- 4. If rear of damage is accessible, use a button-type repair. Clean back of area to permit the use of laminate (resin-saturated glass-cloth) on both sides of damaged area.
- 5. Cut fiberglass cloth to size. Make certain a minimum of five layers is cut for the average repair.
- 5. Mix resin and hardener, 1 part hardener to 4 parts resin. Add filler to the mix to give the mix body and reduce the "runniness" of the material.



Fig. 54—Mixing Plastic (Epoxy) Solder Material



Fig. 55-Applying Plastic Solder

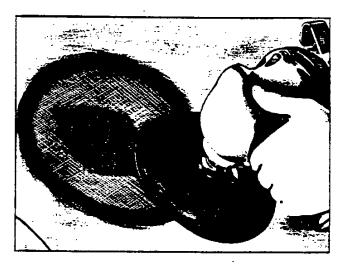


Fig. 56—Finishing Plastic Solder Repair

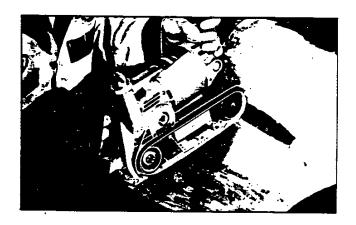


Fig. 57—Grind "V" at Damaged Area



Fig. 58—Applying Resin Mixture to Fiberglass

CAUTION: Cleanliness is most important. Be certain all containers are dry and clean and the resin and hardener cans are kept closed when not in use. Do not use waxed cups for mixing and do not allow resin to enter hardener can or vice versa.

- Saturate layers of fiberglass (fir. 58). Place laminate over damage area. Smooth out wrinkles, and make sure general contour of area is maintained. Figure 59.
- Apply heat to repair area. Heat lamps are recommended, used at least 12" away from repair. Allow 15 to 20 minutes curing time. Trim repair to shape at gel stage.
- After the repair is cured, grind, file or sand to contour. Files other than body files may be more suitable. A belt sander with a vacuum cleaner attachment will minimize the dust problem. Feather edge and finish sand.

NOTE: After Resin Repair, small pits or irregularities may appear in finished surface. Imperfections should be repaired using the Plastic (Epoxy) Solder Repair Kit.

SPECIFIC REPAIRS

Scratched Panels, Spot Refinishing

In many instances, a scratched panel will involve only



Fig. 59—Applying Laminate to Body

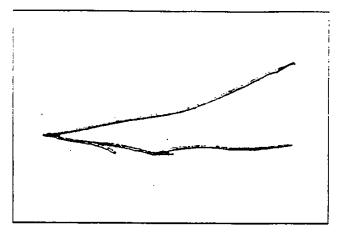


Fig. 60—Typicai Scratchea Panel

a paint refinishing job. Figure 60 shows the top of a fender panel which has been scratched through to the plastic.

- Remove all paint down to the plastic from the area surrounding- the scratch with Lacquer Removing Solvent.
- Featheredge the repair area with No. 220 wet or dry sandpaper and finish block sand with No. 320 wet or dry paper, Figure 61.

CAUTION: Do not sand too deeply into fiber-glass mat. Should it be necessary to cut fairly deep into the glass mat use the repair procedure suggested for dents and pits in plastic panels.

- Clean up repair area using Prep-Sol or equivalent, then finish the clean-up with a tack rag.
- Protect surrounding panels by masking before performing paint refinishing operations. Use only nonstaining type masking tapes on Corvette plastic body.
- 5. Refinish panel as described in paint refinishing portion of this manual.

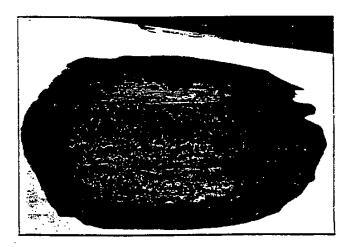


Fig. 61—Repair Area Finish Sanded

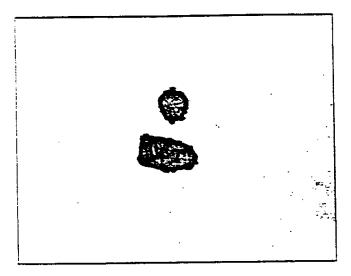


Fig. 62-Typical Pitted Panel

Dents or Pits in Panels, Cracks in Glaze Coat

Figure 62 shows a panel which has received a heavy glancing blow, resulting in an indentation or large pit in the panel. The following procedure is advised for a repair of this type of damage. Cracks in the glaze or finish coat of plastic and paint may also use this procedure.

NOTE: This repair may be used wherever the damage is not extensive and the plastic is not pierced, but the damage area does require a plastic build-up.

- Remove paint down to the plastic from area surrounding the damage with Lacquer Removing Solvent, or its equivalent.
- Scuff area surrounding damaged area to provide a good bonding surface.
- Clean up work area with Prep-Sol then use tack rag for finish clean-up.

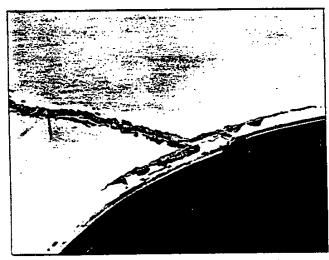


Fig. 63-Typical Cracked Panel

- 4. Use the Plastic Solder Repair (previously described) to fill the imperfections.
- Feather-sand damaged area with No. 220 sandpaper and finish sand with No. 320.
- 6. Prepare repair area for paint refinishing operation.

Cracked Paneis

NOTE: For best results, temperature should be at least 70°-75°F.

- In the case of a cracked panel, such as shown in Figure 63, cut along the break line with a hacksaw blade and remove broken portion of the panel.
- Remove the paint down to the plastic from both portions of the panel with a Lacquer Remover or equivalent.
- 3. Remove dirt and deadener thoroughly, back approximately 2 to 3 inches from the fracture, on the under side of both portions of the panel. Also, remove paint and scuff area clean to provide a good bonding surface.
- 4. Remove all cracked and fractured material along the break. Bevel the attaching edges of the panels at approximately a 30° angle with a file or grinder and scuff plastic surfaces along edges of break.

NOTE: Mask surrounding panels using a non-staining masking tape.

- Use "C" clamps to align panel portions allowing approximately 1/8" between the panels or as necessary to provide proper alignment of panels, Figure 64.
- Cut two pieces of woven glass fiber cloth for backup of sufficient size to overlap the fracture by approximately two inches.
- Clean up repair area with Prep-Sol, then use tack rag for finish cleanup.
- 8. Use the Resin Repair Procedure previously described.

NOTE: In some cases it may be advantageous to provide additional reinforcements along a fracture. This may be accomplished by placing glass cloth strips in the panel break before applying the plastic mixture.

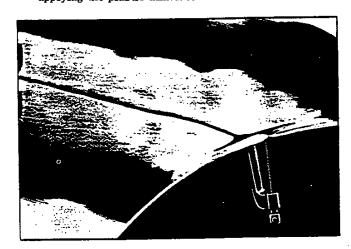


Fig. 64—Cracked Panel Preparation

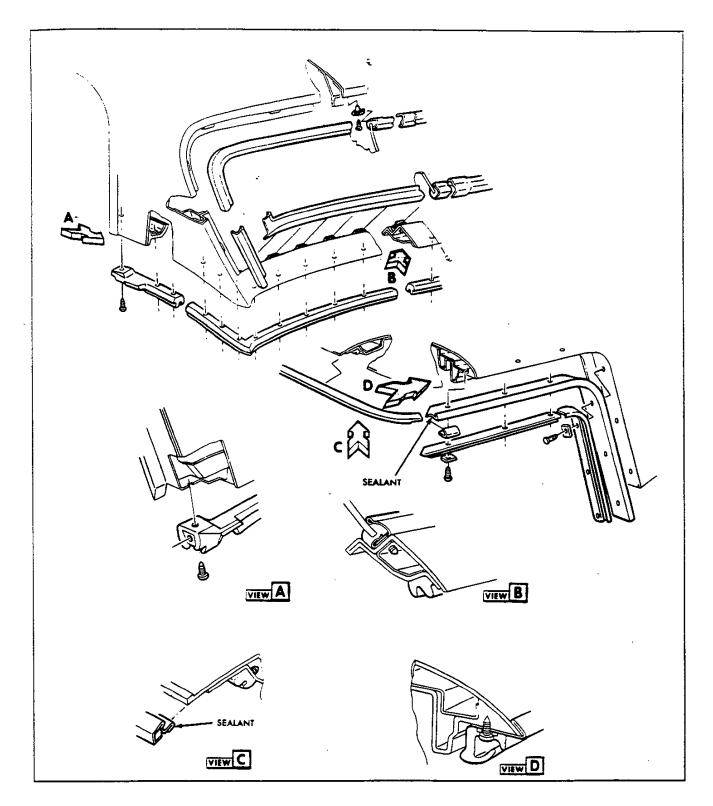


Fig. 65—Molding and Weatherstrip (Convertible Hardtop)

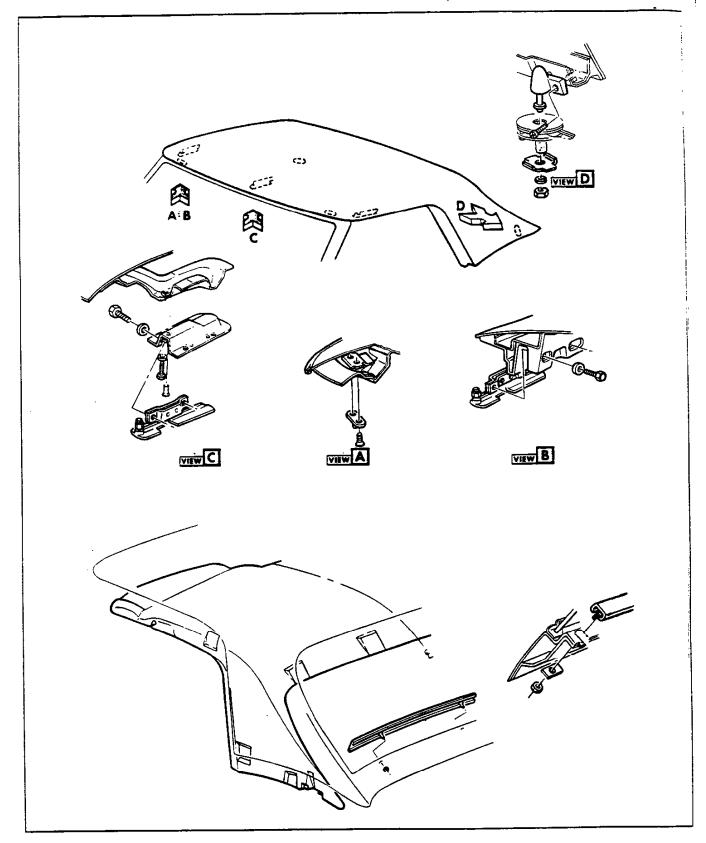


Fig. 66—Top Attachments and Headlining (Convertible Hardtop)

Fractured Paneis

Sometimes damage will occur to panels where the underside is inaccessible of for reasons of panel contour it is impractical to use back plies of fiberglass cloth. The following repair operations are typical of this type of damage.

- Prepare the damaged area by grinding or filing all cracked and splintered material away from the fracture.
- Bevel the edge of the fracture at approximately a 20° angle.
- Remove paint from area surrounding fracture with Lacquer Solvent, or its equivalent.
- Scuff surface to provide a good bonding surface.
 Then, clean up area with Prep-Sol and wipe dry.
- Protect adjacent panels by masking, use non-staining masking tape.
- 6. Cut a strip of fiberglass cloth of sufficient size, so the fracture will be lapped from 1 to 2 inches on all sides.
- 7. Prepare plastic mixture in an unwaxed paper cup. (See Resin Repair procedure.)
- Impregnate glass fiber cloth by brushing or dipping in plastic mixture. Squeeze excess mixture from cloth.

NOTE: Avoid over-rich plastic areas in the glass cloth, as the strength of the patch is directly proportional to the glass content of the patch.

- Position plastic impregnated fiberglass over the fracture on the exterior of the panel, lap the break by 1 to 2 inches, and depress into fracture.
- Carefully work excess plastic out of woven glass by sponging from the center of the break outward.

NOTE: Hold woven glass in place until plastic resin "gels" with Saranwrap or some similar material.

- Trim excess or loose strands of fiberglass from patch.
- 12. If low spots exist, prepare another plastic mixture of resin and hardener and mix thoroughly. To this mixture add short fibers cut from glass cloth to give the mixture a putty-like consistency.
- 13. Liberally apply the plastic mixture with a spatula to fracture and surrounding area. Deposit enough material build-up to allow for filing and sanding operations.
- 14. Allow the patch to harden.
- 15. File or grind patch to match the general contour of the panel. Exercise care when performing these operations to avoid gouging the patch or surrounding panel.
- 16. Use epoxy plastic solder as necessary to fill any imperfections.
- 17. Allow fill to harden, then sand finish preparatory to paint operation.

Panel Replacement

To install a replacement panel, the following method may be used. Various repair panels are available for service. See Repair Panels in general instructions at beginning of this section. These complete panels may be used or sections may be cut to accommodate the type of repair necessary. The panels should be fitted in and all attaching parts installed to insure proper alignment.

To replace panel, proceed as follows:

- Cut out damaged panel with a hacksaw blade and thoroughly remove all dirt and paint from the underside of the old panel or panels for a distance of approximately 2 to 3 inches back from the attaching line.
- Remove the paint from the finish side, for a distance of 2 to 3 inches on the panel adjacent to the replacement panel location with lacquer solvent or equivalent.
- 3. Scuff the surface on both the replacement panel and adjacent panel for a distance of 2 to 3 inches back from the attaching line and wipe clean.
- 4. Bevel all attaching edges at approximately 30° across the entire thickness of the plastic so a single "V" butt joint will be formed on the finish surface when the pieces are joined. If the replacement panel does not fit closely to the break, reshape to suit.
- 5. Cut two backup pieces of woven glass fiber cloth to run the entire length of the joint or shorter lengths of fiber cloth may be lapped over entire length of joint, also cut wide enough to lap the junction line on either side by two or three inches.
- Prepare a sufficient amount of liquid plastic in an un-waxed paper cup by mixing resin with hardener (See Resin Repair procedure).
- 7. Align replacement panel, then clamp panel in place to form a closed "V" butt joint at the panel junction. When panel cannot be clamped, use 3/16" bolts with large washer on inner and outer of panel to hold panels in alignment or use straps and sheet metal screws.
- Impregnate backup plies of woven glass cloth with prepared plastic mixture by dipping or brushing.
 Remove excess plastic from cloth by squeezing.
- Place impregnated backup plies on underside of panels. If necessary, hold backup plies in place with paper until plastic "gels."
- 10. Prepare another plastic mixture of resin and hardener and mix thoroughly. To this mixture add cut glass fiber (1/2" lengths) until mixture has a puttylike consistency, or utilize glass cloth.
- 11. Fill "V" groove with reinforced plastic material or saturated glass cloth. Build up surrounding area with sufficient material to allow for finish operations.
- 12. Allow patch to harden.
- File or sand (#80-D sandpaper) to general panel contour.
- 14. Allow plastic fill to harden, then sand, preparatory to paint operations.

HARD TOP

CARE AND STORAGE

The outside painted finish of the hard top should be cleaned in the same manner as the rest of the body. The inside headlining should be cleaned as outlined under Cleaning Soft Trim.

When hard top is not in use, it should be stored indoors where it can be kept clean and dry. If stored for a long period of time, keep covered to prevent dirt from settling on headlining and outside surface.

REAR WINDOW

Refer to Figures 65 and 66 for parts identification.

Removal

- Remove hard top from vehicle and place protective covering over headlining.
- Mark position of right-hand upper reveal molding end (fig. 67) and pry out from retaining clips. Repeat for left-hand and lower molding assemblies.
- Remove lower (inside) garnish molding by removing four (4) nuts from fixed studs and carefully pulling molding outward.
- Follow Steps 8 through 13 as outlined in the section entitled FRONT END--WINDSHIELD for removal of glass.

Installation

- Position replacement glass in opening and carefully check relationship of glass to flange completely around opening. Overlap of glass should be equal with a minimum overlap of 3/16 inches.
- Where necessary, place shims under lower spaces to obtain required overlap of glass to upper and lower flanges.
- After proper alignment is attained, mark position on glass and top surface with grease pencil.
- Follow Steps 16-22 in the section entitled FRONT END--WINDSHIELD for installation of glass.
- Press glass lightly to set caulking to window opening flanges. Paddle material where necessary to ensure proper seal.
- 6. Water test immediately using a cold water spray. If water leaks are encountered, use flat bladed screw driver or splint, and from the inside, paddle caulking material into point of leakage.

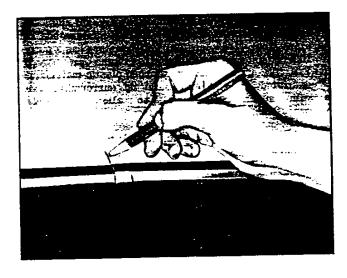


Fig. 67—Marking Molding Position

CAUTION: Do not run a neavy stream of water directly on cauling material while the material is still sort.

 Install previously removed moldings in reverse order of removal.

TOP ATTACHMENTS

Figure 66 illustrates location and installation of guides and lock mechanisms. With headlining removed as outlined in this section, to adjust left and right hand locks fore and aft, mark original position, loosen two (2) mounting bolts, and move in desired direction. Make certain that lock is engaged in serrations before tighten ing mounting screws.

Up-and-down adjustment is performed by turning hexagonal latch bolts clockwise and counter-clockwise respectively. Header guide pins and rear pin housings are retained by mounting screws located at flanges. Center trim plate is removed by first removing center lock, and then four (4) retaining screws.

HEADLININGS

The headlining assembly is secured to the top by plastic fasteners located around the periphery of the hard top inner panel. The headlining is removed by carefully disengaging fasteners by prying outward with fingers on flat-bladed instrument. After removal from plastic top, the headlining can be disassembled into three parts by removing retaining nuts at inside surface of headlining. For installation, make certain to align headlining to top before engaging plastic fasteners.

WEATHERSTRIP AND DRIP MOLDING

As shown in Figure 65, door window weatherstrip and drip molding are retained by screws to top assembly. Side outer and rear outer weatherstrip are mounted to body at ends by screw and around periphery by special plastic retaining clips. Weatherstrip is replaced by removing two (2) screws and carefully pulling outward at clip location.

Inner forward weatherstrip is replaced by removing mounting screws and disengaging special clips along length of weatherstrip. All drip molding must have pumpable sealer on underside and adhesive applied to weatherstrips.

VINYL COVERING

Removal

- 1. Remove weatherstrip assemblies.
- 2. Remove reveal moldings.
- Prior to removing fabric cover, application of heat to cemented areas will permit easier loosening of cemented edges.

CAUTION: Apply heat by lamps held 18" (minimum) from fabric only until fabric is warm. If lamps are held too close, or fabric cover is heated over 200°F, the fabric may loose its grain, blister, or become very shiny.

Loosen cemented edges of fabric roof cover.

Installation

1. Wipe roof panel with a Xylol solvent such as 3M

Adhesive cleaner or equivalent. Remove or smooth out excess old cement. Apply solvent and allow to soak before rubbing.

- 2. Where possible, install new cover at room temperature (approximately 72°) to permit easier fitting and removing of wrinkles from the cover assembly.
- removing of wrinkles from the cover assembly.

 3. Determine center line of roof panel by marking center points on front of hard top and back window spening. Fold cover lengthwise. Law cover on roof panel. Determine overhang (approximately 1").
- Apply natrile non-staining vanvi tram adhesive (such as 3M Vinyl Trim Adhesive) to the roof panel adjacent to center line of fabric roof cover.
- 5. Application of nitrile vinyl trim cement should be as thin as possible. An excessive amount of cement may result in trapped solvents (blisters) between fabric cover and roof panel. A monair roller should be used for thin adhesive application.

NOTE: If nitrile non-staining cement is not available, neoprene type non-staining weather-strip cement (3M weatherstrip cement or equivalent) may be used.

6. Apply cement to entire fabric roof cover.

NOTE: Allow approximately 15 minutes for cement to dry.

- Fold vinvl cover back to contact adhesive on roof panel. Vinvl cover seam must be parallel to centerline of vehicle.
- 8. Repeat above steps for opposite side of roof.
- Use suitable spatula or roller to remove wrinkles and/or bubbles from vinyl cover.
- 10. Trim excess vinyl around entire top to provide a minimum of 1/2" flange which will be cemented to substructure of removable hardtop with adhesive.
- 11. Peinstall reveal moldings and weatherstrips.

Vinyl Roof Cover Repairs

Certain types of fabric roof cover discrepancies can successfully be repaired without replacing or removing the cover.

Scuffs or Small Cuts Near Exterior Moldings

If a small cut is present, an attempt should be made to cement the loose ends prior to performing the following:

- Obtain a scrap piece of fabric roof cover material, or material from a hidden area <u>directly</u> on complaint car (such as under reveal moldings).
- Using an electric wood burning needle or low heat soldering gun, scrape off an appropriate amount of vinvl from scrap piece of material or from hidden area and immediately apply to scuffed or cut area on car.

CAUTION: Be certain low heat is maintained to prevent discoloration of cover.

 Carefully blend applied vinyl to fabric roof cover, utilizing electric needle or soldering gun.

Wrinkles, Blisters and Bubbles

1. Pierce each wrinkle, blister and bubble on fabric

- roof cover with a snall needle.
- 2. Completely saturate a <u>clean</u> shop towel with water and wring out.
- 3. Apply cloth to wrinkle or blistered area.
- Apply a home type laundry from over shop towel using back and forth strokes until towel is dry. (If from has heat control settings, control should be set to "wool".)

CAUTION: Do not continue to use iron after towel has become dry as excess neat may cause permanent damage to vinvi root cover.

- Remove towel and inspect area. If slight wrinkles or blisters are still present, perform the following steps:
- Using a syringe and hypodermic needle filled with clear water, inject sufficient water into wrinkle or bubble to dampen fabric backing.
- 7. Repeat Steps 2 through 4.

FOLDING TOP

CARE OF THE FOLDING TOP

To avoid water stains, mildew, or possible shrinkage of the top material, do not keep the top folded for extended periods of time if it is damp or water soaked. Permit top to dry out in a raised position before stowing. Also avoid pasting advertising stickers, gummed labels or masking tape on the plastic back window. In addition to being difficult to remove, the adhesive on these stickers may also be injurious to the plastic composition of the window.

Care of Rear Window

The large plastic rear window in the folding top will remain in good condition for the life of the top if given proper care. Due to the texture of the plastic window, it is susceptible to scratches and abrasions; therefore, when cleaning the window, follow the steps outlined below.

- To remove superficial dust, do not use a dry cloth.
 Use a soft cotton cloth moistened with water and
 wipe cross-wise of the window.
- 2. To wash the rear window, use cold or tepid (not hot) water and a mild neutral soap suds. After washing, rinse with clear water and wipe with a slightly moistened clean soft cloth. A high quality plastic window cleaner is available from Chevrolet parts sources.

CAUTION: Never use solvents such as alcohol or volatile cleaning agents on the plastic window. These liquids may have a deteriorating effect on the plastic and if spilled, may spot the painted finish on the rear body panels directly below the rear window.

 When removing frost, snow or ice from the plastic window, DO NOT USE A SCRAPPER. In an emergency, warm water may be used. Use care that the warm water does not contact the glass windows or windshield.

ADJUSTMENTS

To correct variations in the top fit, adjustments are

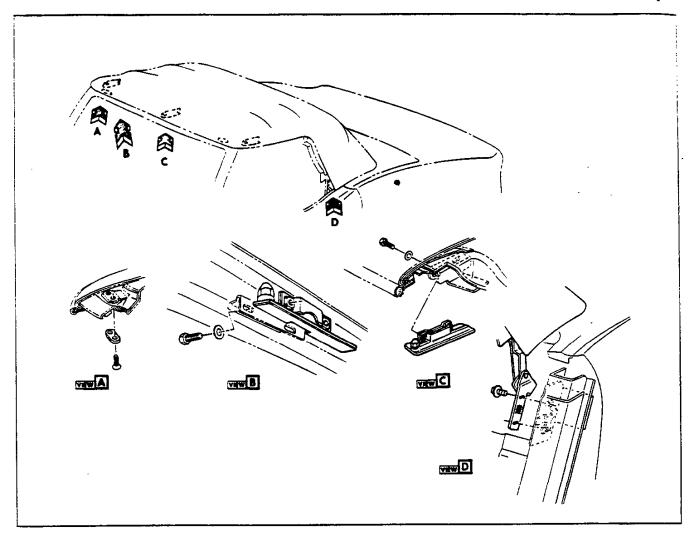


Fig. 68-Folding Top Adjustments

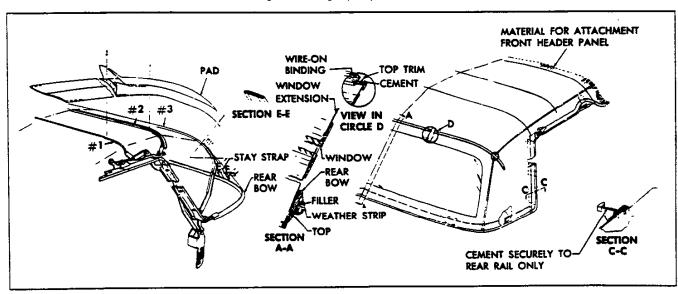


Fig. 69-Folding Top Trim Installation

made at three locations shown in Figure 68. A combination of adjustments may be necessary to correct any even problem, including door and window adjustments which are covered elsewhere in this section.

The folding top adjustments are:

Header

After removing header trim panel, header assembly may be moved fore and aft when the two clamping screws are loosened. This will correct such conditions as header latch guide pin alignment with the holes in the windshield upper frame. Indications of misalignment are loose top trim when top is up and locked, and excessive effort required to engage header locks. Note that it will be necessary to remove side roof rail weatherstrip to gain access to header outer clamping screw. Refer to Weatherstrip portion of this section.

Hinge

The hinges may be moved up and down and fore and aft to the limit of the slotted holes in hinge plate and body. To gain access to hinge, remove rigid plastic trim as explained in Interior Trim portion of this section. Repositioning hinge will correct conditions such as poor top fit at upper and rear edge of windows; faulty fore and aft engagements of rear bow hold-down pins in lock assemblies and loose or over-tight top rear panel when top is raised and properly locked in position.

Rear Bow Hold-Down Locks

Fore and aft adjustment is provided by slotted holes in lock housing. Turning of locating pins adjusts force that holds seal to folding top lid. The hold-down pins may be moved to left or right to center top on body in raised position; thus correcting poor alignment at windows and difficult entry of pins in locks.

TOP ASSEMBLY REMOVAL AND INSTALLATION

The entire top assembly (frame with trim attached) may be removed from vehicle as follows:

- Raise top, but do not engage header or rear bow locks.
- Remove rigid plastic trim as outlined in Interior Trim portion of this section.
- Mark installed position of hinge by scribing outline of hinge plate on lock pillar surface.
- 4. Remove two screws retaining each hinge to lock pillar and remove top assembly from vehicle.
- When installing top assembly, carefully match hinge plate with scribed marks on body lock pillar and install screws. If necessary, proceed as outlined under Top Adjustments.

TOP TRIM AND REAR WINDOW ASSEMBLY

The following information deals with removal and installation of the folding top trim and window assembly complete. Figure 69 may be referred to for parts identifications. Lettered sections (i.e. Section A-A) referred to in the instructions may also be found in Figure 77. Note that the sections are illustrated as they would appear if the parts were cut through on the lettered lines

on the top assembly and the cut surface exposed. Arrows indicate direction in which you would have to look in order to see the view snown.

Before old trim assembly is removed, top should be thoroughly adjusted as outlined in this section. As loose parts are removed such as stay straps and pads, their installed positions should be marked as an aid to installation of replacements.

Removal

- Remove rear side rail window sealing weatherstriphas explained further on in this section; also remove screws from ends of header inner weatherstrip.
 Note, however, that it is not necessary to remove header weatherstrip entirely and that header striphmust be in place during final installation procedures of top trim so that correct tension of installed trim is achieved.
- Remove tacks securing top and header outer weatherstrip to header (fig. 70).
- Remove screw securing trim hold cable and spring assembly to header.
- Pull cemented trim from rear side rail (Section C-C).
- Remove end caps from wire-on binding; remove tacks securing binding to #3 bow (View F.). See frame and linkage portion for bow identification.
- 6. Remove staples securing trim to #3 bow.
- 7. Remove tacks securing upper ends of stay straps to #3 bow. Pads may be removed at this time, if desired. Mark position of pads and straps on head and #3 bow before removal.
- Disconnect rear bow from top frame assembly. Two screws retain at each side Figure 71.
- Remove trim-rear bow assembly from vehicle to clean work bench or table.
- 10. Remove plastic filler from rear bow weatherstrip and pull weatherstrip and trim from rear bow. Section A-A shows installed position of these components. Refer also to Figure 72.

Installation

- Find and mark center of header, #3 bow, rear bow and leading and trailing edges of top trim. Align these marks during installation and recheck their alignment from time to time while installation is in progress, especially during tacking or stapling.
- Assemble top trim and weatherstrip to rear bow, referring to Section A-A and Figure 72. Note that filler strip locks this assembly together and goes in last. Align center marks.
- If new pads are required, install at this time, aligning with marks made when old pads were removed.
 Figure 73 shows pad construction; Figure 74 shows pad installed.
- Install top trim-rear bow assembly on top frame with four screws removed at disassembly.
- Lock down rear bow in desired "top up" position.
 Pull up stay straps and staple or tack to #3 bow (fig. 75).
- Using a piece of mechanics wire, fish trim hold down cable assembly through top pocket and secure spring cable assembly to header with a screw.
- 7. Pull leading edge of trim up to header and align

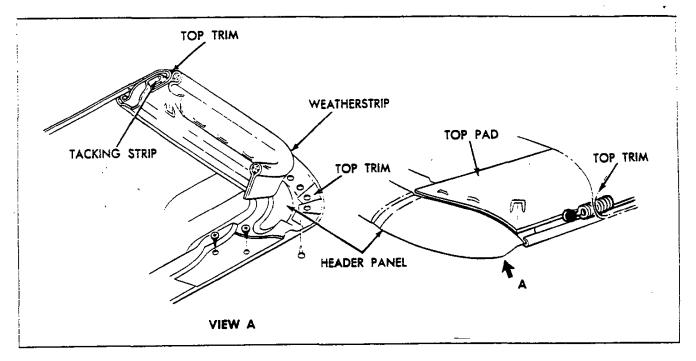


Fig. 70-Trim at Header

- center marks. Smooth out fabric and clamp, tack or staple temporarily to header.
- 8. Draw window extension up to #3 bow, aligning centering marks. Turn an ample amount of fabric under and tack to #3 bow. Apply neoprene trim cement, GM Part =3695016 or equivalent, to area shown in View D of Figure 69. Follow directions on package.
- Draw roof portion of trim over #3 bow, align marks and tack on staple.
- Trim off excess material and install wire-on binding as shown in Figure 76 and View D of Figure 69. Install binding caps.
- 11. Remove temporary clamps or fastenings holding trim to header.



Fig. 71—Rear Bow Retaining Screws

- With header locked down, pull trim assembly up tight and mark for final installation.
- 13. Apply trim cement to header and rear side rail.
- 14. Release header from windshield. Tack or staple trim to header (fig. 70).
- 15. Apply trim to rear side frame, previously cemented.

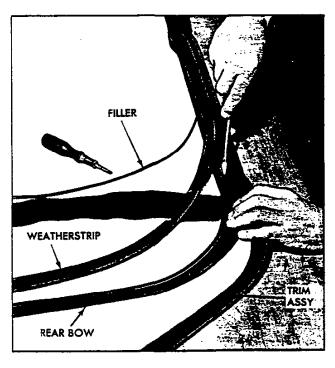
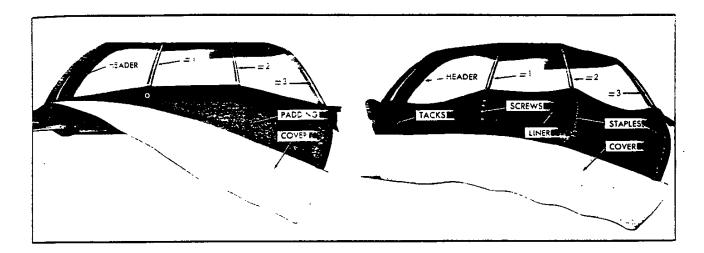


Fig. 72—Installing Trim and Weatherstrip to Rear Bow



Eig. 73—Pad Construction

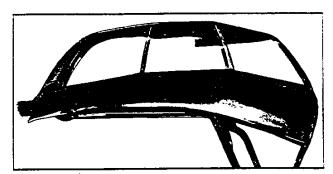


Fig. 74—Pad Installed

- 16. Install weatherstrips which were removed at disassembly and install retaining screws in neader weatherstrip.
- 17. Install header trim panel.
- Make any adjustments necessary, following instructions listed under Folding Top—Adjustments.

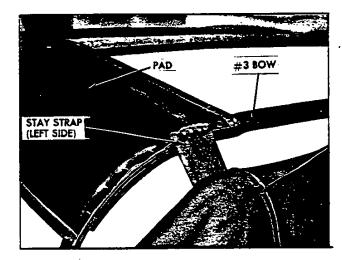


Fig. 75—Installing Stay Strap

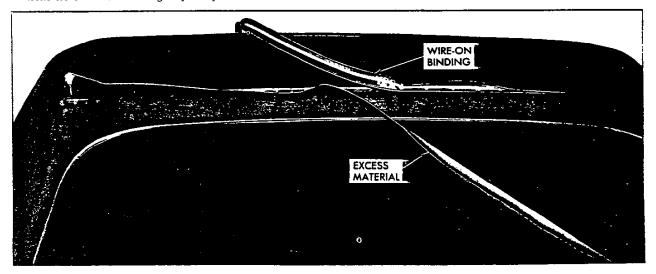


Fig. 76-Installing Binding

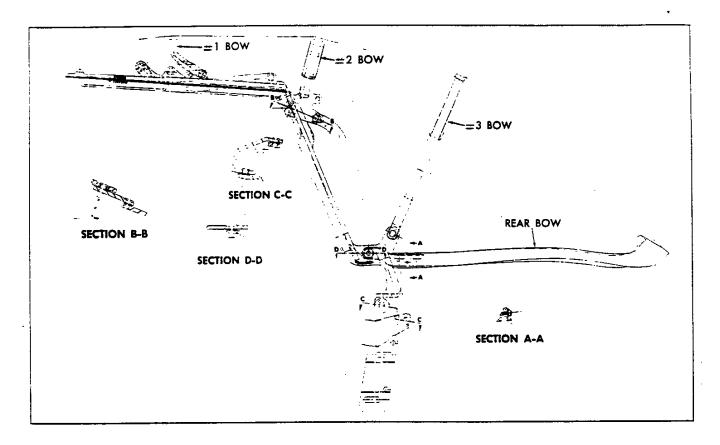


Fig. 77-Top Frame and Linkage

FRAME AND LINKAGE

Figure 77 illustrates construction features of the folding top frame and linkage. Various cross sections in Figure 77 show the pivoting joints and their assembly.

If an operation is being performed which requires removal of folding top trim, follow directions in this section. The entire frame assembly may be removed and replaced as a unit. Follow instructions for Folding Top Trim and Rear Window Assembly and Top Assembly—Removal and Installation.

The pivoting joints should be lubricated with light machine oil once a year. Apply oil sparingly so as not to stain top trim.

WEATHERSTRIP

Side Rail Weatherstrip

Figure 78 illustrates installation of side rail weatherstrip which acts to seal window opening. The weatherstrip is held in place by loose screws which are part of the weatherstrip assembly, and by neoprene base cement which is applied between weatherstrip and side rail surface.

When replacing weatherstrip remove all rust, old cement and foreign material from the surfaces to be cemented, to assure successful bonding. Use only good

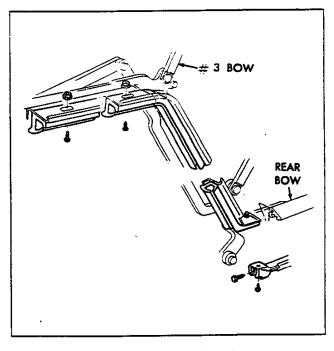


Fig. 78—Side Rail Weatherstrip

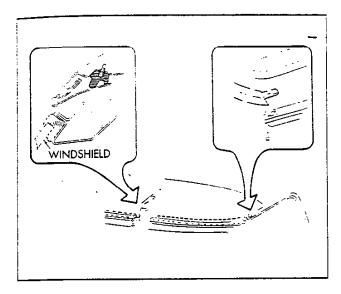


Fig. 79-Header Weatherstrip

quality neoprene cement suitable for weatherstrip application.

Header Weatherstrip

Weatherstrip assembly is retained to the header panel by a combination of studs, and special fasteners as shown in Figure 79 along with neoprene base weatherstrip cement.

SPORT COUPE MODEL 19437

ROOF PANEL ADJUSTMENT (Fig. 80)

Each roof panel is adjusted in relationship to the other

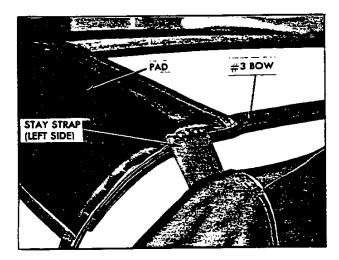


Fig. 80-Roof Panel Alignments

and to the header and roof crossover.

Roof panel inner edges are spaced parallel 1/16" to 3 '16". The rear edges of the roof panel are spaced 1/8" to 1/4" side to side. The outboard edge of the roof panel to header spacing is determined by the triangular headed pin fastened to the roof crossover. The back edge of the triangular headed pin should measure 1/4" from the plate it screws into.

All latches and adjustments must be loose before starting the roof panel alignments. The only shimming possible is at the center guides.

Adjustment Procedure

- Remove roof panel and place upside down on a clean soft surface.
- Remove screw from each side of headlining panel and gently pry headlining loose from plastic retainers.
- Loosen screws on underside of roof panel at forward (b) and center guides (c).
- 4. Repeat steps 1-3 for opposite roof panel.
- Check dimension of triangular pin (a) on header panel at outer edges of the roof panel attachment locations. Refer to View A.
- Reinstall roof panels and observe spacing. The roof halves should meet within 1/16"-3/16" in the center (dimension A) and within 1/8"-1/4" to the header (dimension B).

NOTE: Contour of roof is controlled by shims (d) (no more than 4). It should be noted that the fewer shims used at this location, the more compression on the seating gasket.

 Once dimensions A and B have been obtained by manipulating each roof panel with respect to one another and the header, tighten the screws securing the center and forward guides in the roof panels.

NOTE: If compression at the lock locations is needed, adjust bolts (e) accordingly. If point of contact of latch bolt needs adjustment loosen bolts (f) and move latch assemblies fore or aft as necessary.

- Align headlining with a 3/16" gap all around and push headlining panels upward with firm palm pressure at nylon retainers.
- Remove panels, make sure all nylon fasteners are engaged and reinstall headlining screws.
- 10. Reinstall roof panels on vehicle.

Weatherstrip Replacement (Fig. 81)

- Remove roof panel and place upside down on soft clean surface.
- 2. Remove screw on each side of headliner panel.
- Pry headliner loose from nylon retainers at eight (8) locations. Remove headliner.
- 4. Pry out plastic buttons retaining weatherstrip to roof panel.
- 5. Clean old sealer off roof.
- Apply sealer to roof panel along the entire outline of the roof panel where the weatherstrip is to lie.
- Install new weatherstrip at screw attachment end engaging all plastic retainers. Push down along strip to uniformly spread the sealer.
- Secure weatherstrip to roof panel with four (4) screws.

- 9. Reinstall headliner panel.
- 10. Reinstall roof panel.

INTERIOR QUARTER PANEL TRIM REMOVAL (Fig. 82)

- 1. Remove rear window.
- Gently pry off back window lower garnish molding (f) by pulling lower edge forward, then after unhooking nylon fasteners, lift up.
- Remove (right or left) rear roof trim panel latch cover (a) secured by screws.
- 4. Remove (right or left) rear roof trim panel (b).
- Remove (right or left) quarter trim panel secured by screws.

NOTE: Four (4) screws retaining forward lip of interior quarter trim panel are removed and installed from inside door jamb.

Install interior trim and rear window in the reverse order of removal.

CENTER ROOF REINFORCEMENT TRIM REMOVAL (Fig. 77)

- Remove both rear roof trim panel latch covers
 (a)-2 screws each.
- 2. Remove rear window.
- 3. Remove both rear roof panels (b) secured by screws.
- Remove left and right sun visor assemblies. Remove windshield upper garnish molding (c) secured by screws.
- Remove center roof trim screws. Pull assembly
 (d) downward to release the attachment stud (e).
- Install interior trim in the reverse order of removal, then install rear window.

STORAGE TRAY

The storage tray which provides a means of storing rear window assembly when removed from vehicle, is replaced by removing hinge screws at rear body panel. The latch is adjusted by bending for proper engagement.

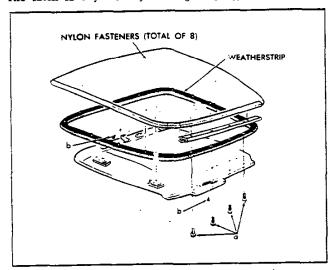


Fig. 81—Roof Panel Weatherstrips

REAR WINDOW

Glass Replacement

To replace rear window glass, the following procedure is recommended,

- Remove rear window assembly from vehicle and place on bench.
- Remove lower frame member from old glass and frame assembly.
- Remove glass from upper frame member and clean out sealer by carefully scraping from groove around entire perimeter of frame.
- Apply bead of caulking material (polysulfide or equivalent) around slot of both frame components.
- 5. Insert replacement glass into curved frame member.
- Assemble frame by aligning lower member with glass.
- Clean excess caulking material from surface of glass.

Adjustment

The locks and lower receiving plates which determine the holding force are adjusted to the extent of slotted mounting holes to attain an even, adequate seal.

Weatherstrip

The weatherstrip between the rear window assembly and rear body opening is replaced by cementing to rear inner body surface around opening. The weatherstrip is then screwed in place.

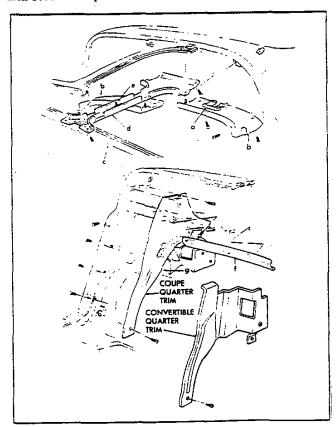


Fig. 82—Interior Quarter Trim